9 Fire and ambulance services

CONTENTS

Attachment tables

Attachment tables are identified in references throughout this chapter by a '9A' prefix (for example, table 9A.1). A full list of attachment tables is provided at the end of this chapter, and the attachment tables are available from the Review website at www.pc.gov.au/gsp.

Emergency management aims to reduce the level of risk to the community of emergencies occurring, reduce the adverse effects of emergency events, and improve the level and perception of safety in the community (sector overview D). This chapter reports on government services for fire events and emergency ambulance services (pre-hospital care, treatment and transport). Information regarding the policy context, scope, profile, social and economic factors, and

objectives of the emergency management sector (and related data) are included in the Emergency management sector overview (sector overview D).

Major improvements in reporting on fire and ambulance services in this edition include:

- ten year time series are presented for 14 fire event measures and 11 ambulance service measures (previously five years were reported)
- a 30 year time series is presented for 'fire event deaths' to place the impact of emergency events in historical context
- data quality information (DQI) are available for the first time for the fire events indicators confinement to room/object of origin and residential structures with smoke alarms
- DQI are available for the first time for the ambulance events indicators ambulance response locations, satisfaction with ambulance service organisations, and workforce by age group.

For this Report, performance reporting on road crash rescue has been discontinued. An overview of the involvement of emergency services at road crash rescue events and the impact of road traffic deaths is provided in the Emergency management sector overview. Data on the number of road crash rescue incidents attended to by emergency service organisations is provided as context to the fire incidents indicator reported in this chapter.

9.1 Profile of emergency services for fire events

Fire events overview

A fire event is an incident that is reported to a fire service organisation and requires a response. Fire events include (but are not limited to):

- structure fires (that is, fires inside a building or structure), regardless of whether there is damage to the structure
- landscape fires, including bushfires and grass fires, regardless of the size of the area burnt
- other fires, including vehicle and other mobile property fires, and outside rubbish fires.

Roles and responsibilities

Fire service organisations are the primary agencies involved in providing emergency management services for fire events. The role of fire service organisations varies but commonly includes prevention/mitigation, preparedness, response and recovery activities/services for each jurisdiction (see the Emergency management sector overview, table DA.2). The full range of activities include:

- developing building fire safety codes and inspecting fire safety equipment and practices
- training and educating the community to achieve community awareness and behavioural change in relation to fire and road safety issues
- assisting individuals and communities to prepare for bushfires and other hazards
- responding to structure, bush, vehicle and other fires
- providing rural land management advice on the role and use of fire
- providing road crash rescue and other rescue services
- managing hazardous material incidents
- administering legislation relating to fire safety, hazardous materials facilities and hazard mitigation
- investigating fire cause and origin
- wide ranging industry research activities
- a number of specialist rescue capabilities, including Urban Search and Rescue
- providing emergency medical services such as Community First Responder
- counter-terrorist preparedness work with police agencies and consequence management relating to a terrorist attack.

While governance arrangements differ across jurisdictions, separate urban and rural fire service organisations deliver fire services in most jurisdictions (table 9A.1). Land management agencies typically also provide fire services within designated areas. However, currently only NSW, Victoria, WA and Tasmania are able to report fire activity for land management agencies, and financial information relating to these agencies is limited to Victoria. Jurisdictions with more than one fire authority can separate services in different ways — for example, NSW separates fire services based on service function and geographic area, whereas Victoria separates fire services by geographic area only.

Fire service organisations work closely with other government departments and agencies which may also have responsibilities in the case of fire events. These

include ambulance service organisations, State/Territory Emergency Services, police services, and community services (see the Emergency management sector overview — attachment, table DA.1).

Some jurisdictions have particular arrangements for the provision of fire services in Indigenous communities. (For more information on fire services in Indigenous communities see SCRGSP 2009, p. 11.35.)

Funding

Total funding of the fire service organisations covered in this chapter was nearly $3.4 billion in 2011-12. Real funding to fire service organisations grew, on average, 5.3 per cent annually over the period 2007-08 to 2011-12. Within this period there are fluctuations for individual jurisdictions resulting from expenditure related to specific major emergencies (table 9.1).

Table 9.1 **Real funding of fire service organisations (2011-12 dollars) ($ million)[a, b]**

	NSW[c]	*Vic*[c]	*Qld*	*WA*[c]	*SA*	*Tas*	*ACT*	*NT*	*Aust*
2007-08	876.8	867.8	413.5	265.5	189.5	65.1	55.5	21.9	2 755.5
2008-09	969.7	1 309.0	436.0	252.2	189.8	65.6	55.0	26.1	3 303.4
2009-10	987.3	1 022.3	481.7	267.8	184.9	73.8	56.4	27.8	3 101.9
2010-11	973.9	1 018.1	497.8	402.4	169.1	66.0	50.2	29.9	3 207.4
2011-12	954.8	1 166.7	503.6	409.9	179.0	68.3	64.5	36.3	3 383.1

[a] Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Recent volatility in the GDP deflator series affects annual movements of real expenditure. See the Statistical appendix (section A.5) for details. [b] Figures vary from year to year as a result of abnormal expenditure related to the response to specific major emergencies. [c] NSW: From 2009-10 data include funding for the Department of Environment, Climate Change and Water. Vic: Increase in 2008-09 is due to emergency funding arising from the Black Saturday Bushfires. WA: DFES provides a wide range of emergency services under an integrated management structure.

Source: State and Territory governments (unpublished); table 9A.2.

Fire levies were the primary source of funding in all jurisdictions except the ACT and the NT, where Territory governments were the largest source of funds. Governments usually provide the legislative framework for the imposition of fire levies. In 2011-12, fire levies were raised from levies on property owners or, in some jurisdictions, from levies on both insurance companies and property owners (table 9A.2). In addition to relying on funded resources, all states and territories rely on volunteer firefighters, who make a significant contribution to community safety.

Data on the resources allocated by all emergency service organisations to manage fire events is currently unavailable although, work is underway to improve data for future reports. The descriptive information provided below on funding, incidents

and human resources relate to fire service organisations only. More information on fire service organisation funding and expenditure can be found in section 9.3.

Human resources

Human resources refers to any person delivering a firefighting or firefighting-related service, or managing the delivery of this service, including:

- firefighters (qualified paid and volunteer firefighters)
- support personnel (any paid person or volunteer directly supporting operational providers, including administrative, technical and communications personnel).

Nationally, 17 854 full time equivalent (FTE) paid personnel were employed by fire service organisations in 2011-12, of which 76 per cent were paid firefighters. A large number of volunteer firefighters (211 898 people) also participated in the delivery of fire services in 2011-12 (table 9A.3).

Fires incidents

Various urban and rural fire service organisations operate within jurisdictions (table 9A.1). The focus of the chapter is the government services addressing emergency fire events. Nationally, fire service organisations attended a total of 99 841 fire incidents (table 9A.12).

9.2 Framework of performance indicators for fire events

Figure 9.1 presents the performance indicator framework for fire events, based on the general framework for all emergency events (see the Emergency management sector overview box D.3) and governments' objectives for emergency services for fire events (box 9.1). Definitions of all indicators are provided in section 9.9.

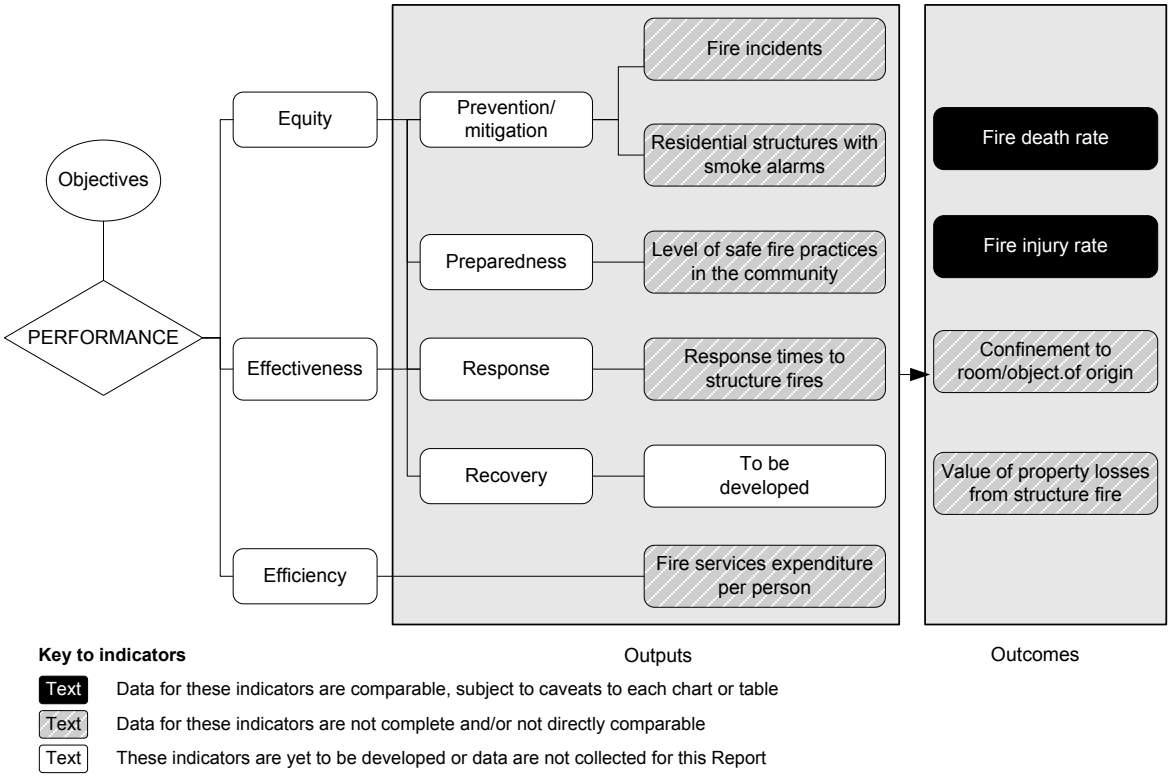
Box 9.1 Objectives for emergency services for fire events

Emergency services for fire events aim to build fire resilient communities that work together to understand and manage the fire risks that they confront. Emergency management services provide highly effective, efficient and accessible services that:

- reduce the adverse effects of fire events on the community (including people, property, infrastructure, economy and environment)
- contribute to the management of fire risks to the community
- enhance public safety.

The performance indicator framework provides information on equity, efficiency and effectiveness and distinguishes the outputs and outcomes of emergency services for fire events (figure 9.1). To reflect the activities of the emergency management sector, performance reporting also reflects the prevention/mitigation, preparedness, response and recovery framework (sector overview D). The performance indicator framework shows which data are comparable in the 2013 Report. For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6).

Figure 9.1 Fire events performance indicator framework



The Report's statistical appendix contains data that may assist in interpreting the performance indicators presented in this chapter. These data cover a range of demographic and geographic characteristics, including age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (including Indigenous and ethnic status) (appendix A).

Data quality information (DQI) is being progressively introduced for all indicators in the Report. The purpose of DQI is to provide structured and consistent information about quality aspects of data used to report on performance indicators. DQI in this Report cover the seven dimensions in the ABS' data quality framework (institutional environment, relevance, timeliness, accuracy, coherence, accessibility and interpretability) in addition to dimensions that define and describe performance indicators in a consistent manner, and note key data gaps and issues identified by the Steering Committee. All DQI for the 2013 Report can be found at www.pc.gov.au/gsp/reports/rogs/2013.

Performance information is reported for a number of indicators. These results might have been influenced by factors such as differences in climatic and weather conditions, the socio-demographic and topographic composition of jurisdictions, property values and dwelling construction types. Importantly, jurisdictions also have diverse legislative fire protection requirements.

Results need to be interpreted with care because data might have been derived from small samples (for example, jurisdictions' fire safety measures surveys) or may be highly variable as a result of relatively small populations (as in Tasmania, the ACT and the NT).

The role of volunteers also needs to be considered when interpreting some indicators (such as fire service organisation expenditure per person). Volunteer personnel provide a substantial proportion of fire services (and emergency services more generally). While costs such as the training and equipment associated with volunteers are included in the cost of fire service provision, the labour costs of providing fire services would be much greater without volunteers (assuming these functions were still performed).

Information has not been reported for all fire events in each jurisdiction consistently over time. Reported results sometimes exclude rural fire events, so performance data are not always directly comparable across jurisdictions. Fire service organisations are cooperating to improve the standards for the collection of fire events data, which is evident by the inclusion of rural fire service organisations data by more jurisdictions in recent years. Improvements in data comparability are expected in future reports.

9.3 Key performance indicator results for fire events

Outputs

Outputs are the services delivered (while outcomes are the impact of these services on the status of an individual or group) (see chapter 1, section 1.5).

Equity and effectiveness — prevention/mitigation

Equity and effectiveness indicators are linked for fire events. The equity dimension of prevention/mitigation indicators relates to whether specific parts of the community with special needs or difficulties in accessing government services benefit from fire services' activities. This chapter currently provides data on services provided in remote locations, but not other special needs groups. The effectiveness dimension of prevention/mitigation indicators relates to fire service organisations' ability to prevent fires and mitigate fire damage.

All jurisdictions undertake a range of fire risk prevention/mitigation activities to assist households, commercial businesses, and communities prepare for the risk of fire (table 9A.20). To assist, jurisdictions have implemented bushfire risk management strategies, community awareness and education programs and smoke alarm legislation (table 9A.21).

Fire incidents

'Fire incidents' is an indicator of governments' objective to manage the risk of fires by preventing/reducing the number of structure, landscape and other fires (box 9.2).

Box 9.2 **Fire incidents**

'Fire incidents' is defined as the number of events that are reported to a fire service and require a response. Measures are provided for:

- fire incidents attended by fire service organisations per 100 000 people
- accidental residential structure fires reported to fire service organisations per 100 000 households
- ignition factors for structure fires
- fire service organisations and land management agencies reported total landscape (bush and grass) fire incidents.

Measures of 'non-fire' incidents and false alarms incidents attended to by fire service organisations is provided as contextual information relating to the broader activities of fire service organisations.

A low or decreasing number of fire incidents suggests the greater is the likelihood that the adverse effects of fire will be avoided or reduced.

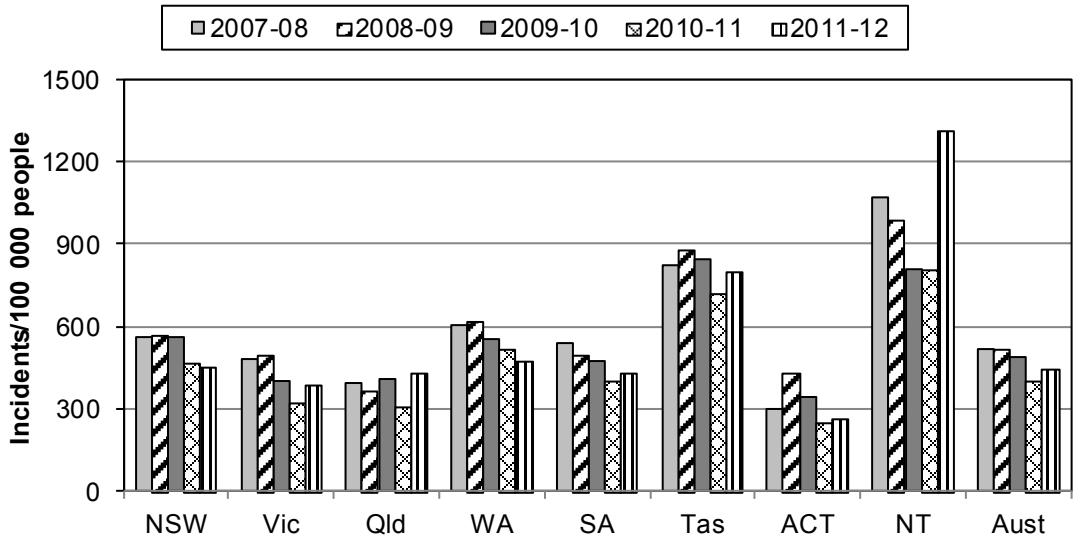
Data reported for this indicator are not directly comparable.

Data quality information for this indicator is under development.

Fire incidents — Incidents attended by fire service organisations per 100 000 people

Nationally, 444 fire incidents per 100 000 people were attended in 2011-12, an increase from the rate of 402 in 2010-11 (figure 9.2).

Figure 9.2 **Fire incidents attended by fire service organisations per 100 000 people**[a, b, c, d, e, f, g]



[a] Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population. Flooding and wet weather in 2010-11 resulted in a lower than anticipated number of landscape fires. [b] WA: Data include reported turnouts by career and volunteer services for all areas of the State. [c] Tas: Data include all fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09. [d] ACT: Includes data for urban and rural fire service organisations. [e] NT: The high number of incidents per 100 000 people can be attributed to deliberately lit fires and the large number of grass fires in northern Australia that are caused by the annual growth of vegetation following the wet season. [f] The average for Australia excludes rural fire service data for some years as per the jurisdictions' caveats. [g] Historical rates in this figure may differ from those in previous reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December).

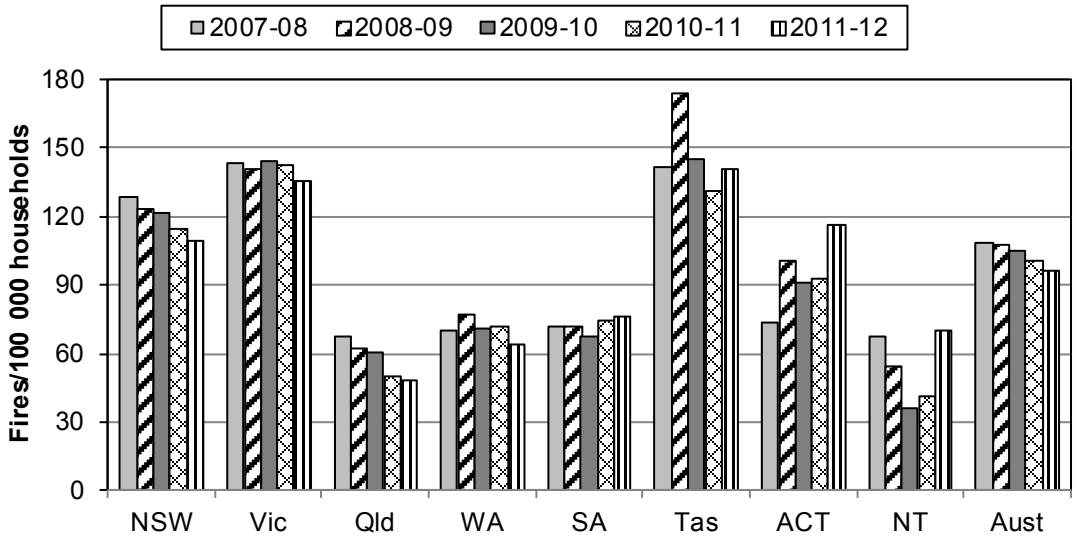
Source: State and Territory governments (unpublished); table 9A.13.

Fire incidents — Accidental residential structure fires reported to fire service organisations per 100 000 households

The rate of accidental residential structure fires per 100 000 households should be interpreted with caution because the data are not directly comparable across jurisdictions. In particular, rates are affected by differences in the practice of fire service personnel in each jurisdiction, who determine and classify accidental structure fires from structure fires resulting from other causes.

The national rate has been declining over the five year period, although rates for jurisdictions show some variability over the period (figure 9.3).

Figure 9.3 **Accidental residential structure fires reported to fire service organisations[a, b, c, d, e,]**



[a] Rates may not be entirely comparable. The numerator (accidental residential structure fires) is affected by the number of fires where the cause has been determined and classified by fire service personnel. Data for the denominator are derived from ABS Australian Demographic Statistics Household projection series to estimate the number of households at the financial year midpoint. For example, household data for the 2010-11 financial year are the average of total households as at 30 June 2010 and as at 30 June 2011. [b] Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population. [c] WA: Data include reported turnouts by career and volunteer services. [d] Tas: Data include all fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09. [e] NT: Data are for NT Fire and Rescue Service permanent fire stations only.

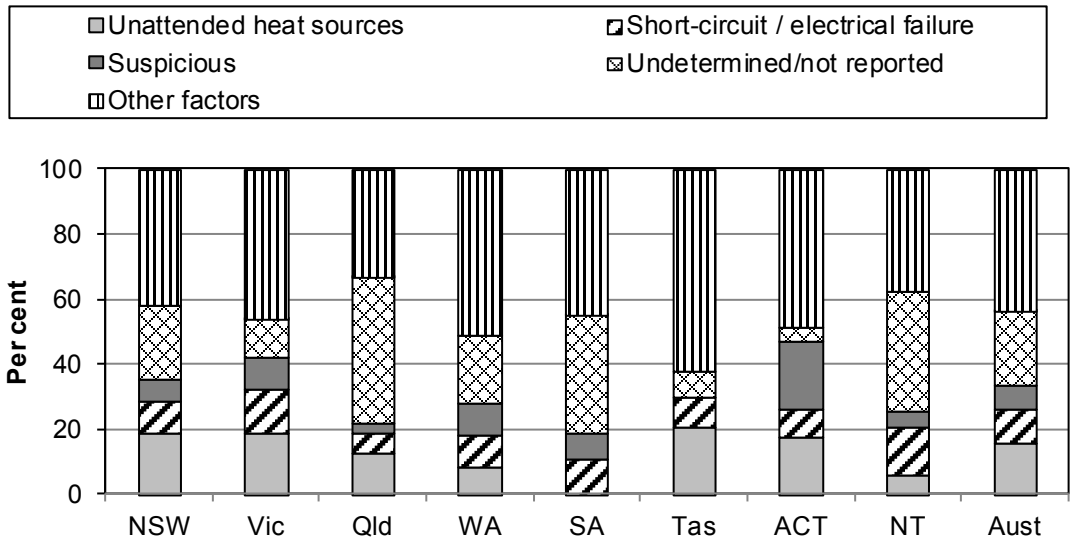
Source: ABS (2012) *Australian Demographic Statistics* Table 20 Projected number of households, states and territories, Cat. no. 3101.0; State and Territory governments (unpublished); table 9A.14.

Fire incidents — Ignition factor for structure fires

Fire cause identification assists fire service organisations and other emergency management stakeholders to formulate fire prevention, community safety and public education programs. Cause identification also helps formulate legislation and standards, and is used to assist in recovery through the provision of information to facilitate insurance claims and settlements.

The most prevalent ignition factors causing structure fires varies across jurisdictions (figure 9.4 and table 9A.16).

Figure 9.4 **Ignition factors for structure fires, 2011-12**



a Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population. **b** SA: Ignition by unattended heat source is not available for SA.

Data source: State and Territory governments; table 9A.16.

Nationally in 2011-12, the ignition factor for 23.2 per cent of structure fires was 'undetermined or not reported'. For structure fires where the cause of ignition could be determined, the most commonly reported factors reported were:

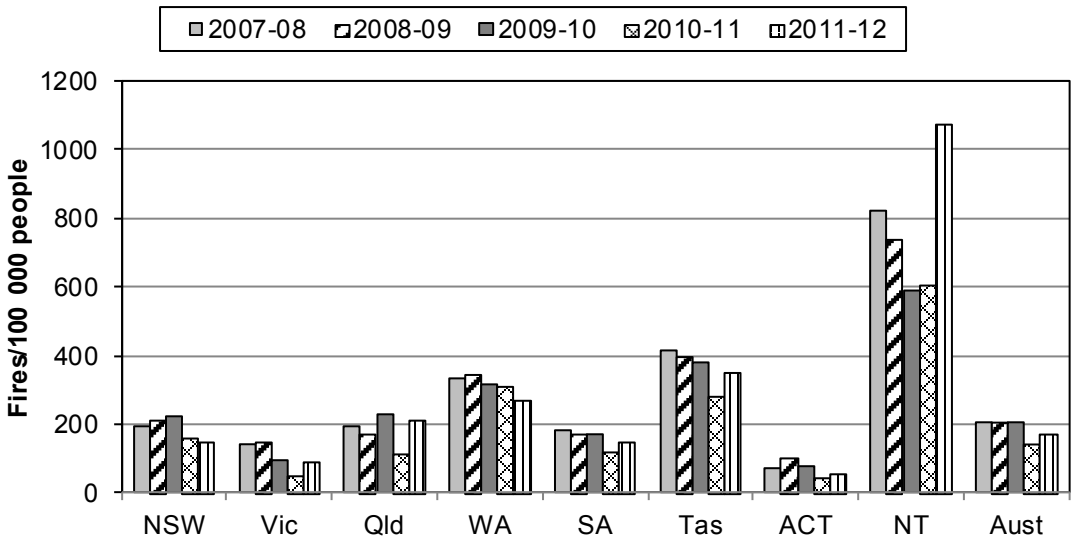
- unattended heat sources (15.4 per cent)
- short-circuit, ground fault and other electrical failure (10.6 per cent)
- suspicious (7.3 per cent) (table 9A.16).

Fire incidents — Reported number of landscape fire incidents

Landscape fire incidents include all vegetation fires (such as bushfires or grassfires), irrespective of the size of the area burnt and can vary substantially in their impact on fire resources, the community and longer term consequences. The number and severity of landscape fires is influenced by many factors, including environmental factors such as weather and climate, with the majority of landscape fires triggered by human activity (AIC 2008).

Nationally, 37 985 landscape (bush and grass) fire incidents were reported by fire service organisations and land management agencies in 2011-12, a rate of 169 fires per 100 000 people, or 4.9 per 100 000 hectares (figure 9.5 and table 9A.15).

Figure 9.5 **Fire service organisations and land management agencies reported total landscape (bush and grass) fire incidents per 100 000 people**[a, b, c, d, e, f, g, h]



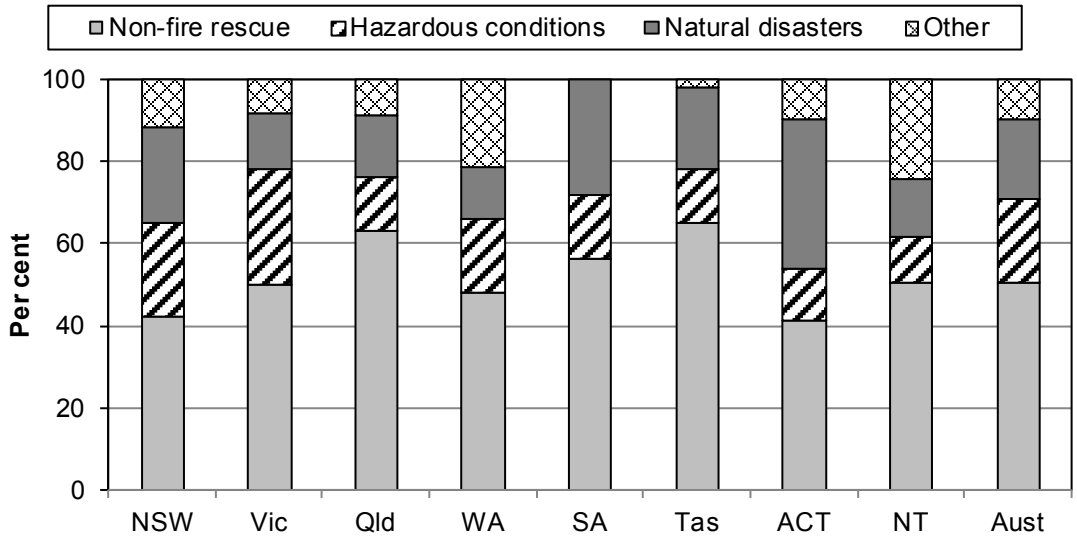
[a] These data may be different to those reported elsewhere because they reflect responses from fire service organisations and, where stated, land management agencies. [b] NSW: Data include fires from the NSW Department of Environment and Climate Change, the NSW Rural Fire Service and Fire and Rescue NSW for all bush and grass fires regardless of size of area burnt. [c] Vic: Data include incidents from the Department of Sustainability and Environment. Black Saturday (Victorian fires 2009) is treated as a single landscape fire event in 2008-09. [d] Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. Flooding and wet weather in 2010-11 resulted in a lower than anticipated number of landscape fires. [e] WA: Data include landscape fires reported by the Department of Environment and Conservation as a lead agency, with 629 fires recorded for 2010-11. [f] Tas: Data include all vegetation fires, regardless of size, from all fire brigades (full time and volunteer) and land management agencies. Due to industrial action 90 incident reports are incomplete in 2008-09. [g] ACT: A 51 per cent decrease in landscape fires during 2007-08 corresponds with a milder fire season than the previous year. This number is in line with prior years. [h] NT: Excludes data from Bushfires NT and some NT Fire and Rescue Service volunteer brigades.

Source: State and Territory governments (unpublished); table 9A.15.

Non-fire incidents

Fire service organisations provide services for a range of non-fire emergency events. In 2011-12, attendance at other emergencies and incidents accounted for 54.3 per cent of total incidents (excluding false alarms) (figure 9.6).

Figure 9.6 **Non-fire incidents attended to by fire service organisations (excluding false alarms), 2011-12[a]**



a These data report the type of incident that reflects the most serious situation as determined by operational personnel after arriving at the scene and not the incident type relayed by the communication centre.

Source: State and Territory governments; table 9A.12.

Non-fire incidents — Non-fire rescue including road crash rescue

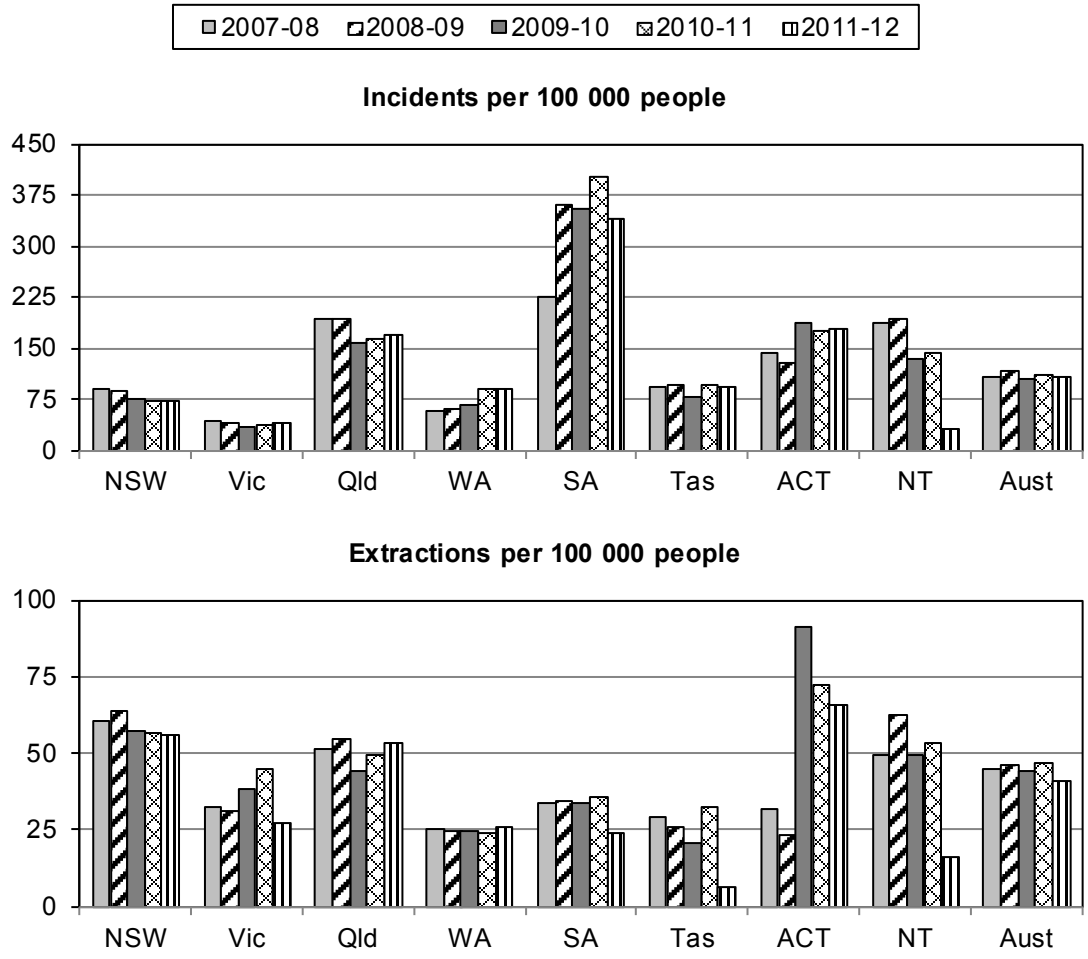
Fire service organisations attended 59 784 incidents at which they are called upon to locate, provide initial medical care, and remove entrapped persons from damaged structures (including road vehicles) and other environments in a safe and expeditious manner (table 9A.12).

A large number of these incidents involved road crash rescue at which emergency service organisations aim to reduce death and injury and the personal suffering and economic costs of road crashes. These rescue services are provided by a diverse range of emergency service organisations (including fire service organisations) (sector overview D — attachment, table DA.1).

Nationally, fire service and STES organisations attended 24 186 road crash rescue incidents in 2011-12, or 107.6 incidents per 100 000 people (table 9A.18). While responding to road crash rescue incidents, emergency service organisations performed 9265 extractions in 2011-12, or 41.2 extractions per 100 000 people (table 9A.19 and figure 9.7).

Further information on government services for road safety are available in the Emergency management sector overview (sector overview D).

Figure 9.7 Reported road crash rescue incidents and extrications[a, b, c, d, e, f]



[a] Vic: A higher number of extrications has been observed for 2009-10 due to incidents involving a greater number of vehicles. [b] Qld: The decrease in QFRS attendance at traffic incidents in 2009-10 and 2010-11 can be attributed to the revised road crash rescue protocols implemented in September 2009 to reduce unnecessary attendance by the QFRS at mobile property crashes. Revised road crash rescue response protocols were again implemented on 18 October 2011, as part of ongoing service delivery review for QFRS attendance at mobile property crashes. Flooding and wet weather in 2010-11 also resulted in a lower than anticipated number of road rescue incidents and extrications. Data for 2009-10 and 2010-11 has been revised. [d] WA: Data excludes extrications performed by State Emergency Services volunteers. [e] Tas: Data include responses by fire services, ambulance services and SES. [e] NT: The Northern Territory Fire and Rescue Service is currently examining its data reporting and inputting processes to ensure accurate reporting in line with the counting rules as defined in the data dictionary. Inconsistencies in data input in this reporting period has resulted in a significant reduction in the number of road crash incidents and extractions. The figure for 2011-12 is likely to indicate a considerable under-reporting. [f] Historical rates in this figure may differ from those in previous reports. Population data are revised using Final Rebased Estimated ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December).

Source: State and Territory governments (unpublished); tables 9A.18-9A.19.

Non-fire incidents — Calls to floods, storm and tempest and other natural disasters

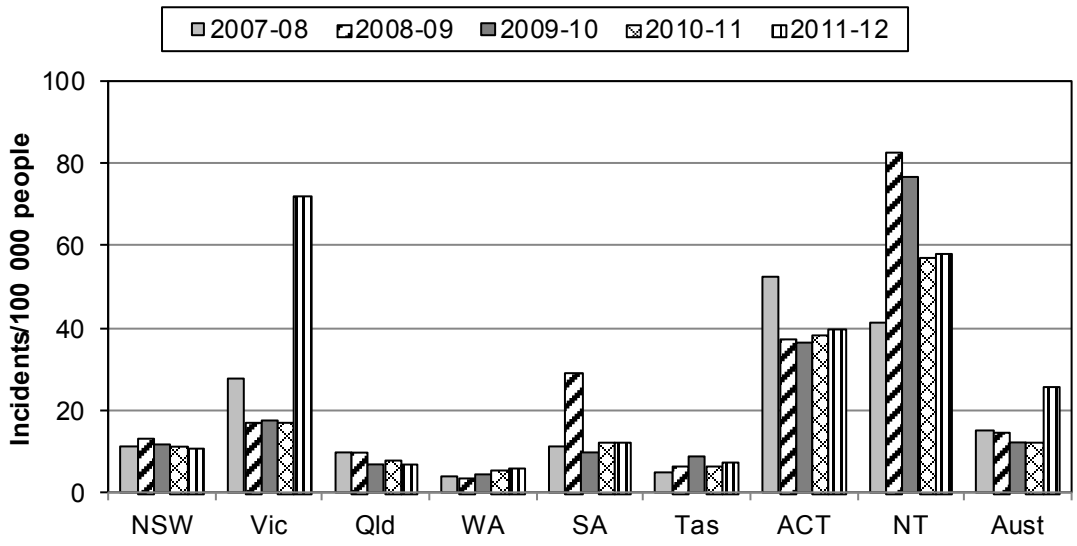
In coordination with other emergency services, fire service organisations responded to 23 149 incidents where an actual or imminent natural disaster, endangered or threatened to endanger life, property or the environment (table 9A.12).

Further information on government services in the event of natural disasters are available in the Emergency management sector overview (sector overview D).

Non-fire incidents — Hazardous materials incidents

Fire service organisations attended 23 842 incidents where materials that have hazardous properties must be controlled or contained (table 9A.12). Of these, 5734 incidents (or 25.5 incidents per 100 000 households) were categorised as having the potential to endanger, damage or destroy the health or safety of people, their property or the environment on or beyond the incident site (figure 9.8). Hazardous materials include paints, solvents, pharmaceuticals, chemicals (such as, industrial, farm household chemicals), explosives, gases, fuels, acids, and many others.

Figure 9.8 **Number of hazardous materials incidents attended to by fire service organisations, per 100 000 people[a, b, c, d]**



[a] Data represent incidents attended by FSOs. FSOs may not be notified of all hazardous materials incidents occurring in the community. [b] Coding of hazardous materials incidents is based on the judgment of the reporting fire officer shortly after the time of the incident. Some coding of incidents may be inaccurate due to the information available at the time of reporting. [c] Changes to hazardous materials incident reporting were accepted and ratified by the AFAC SIMSG in November 2005 for implementation from July 2006. However, each fire service may have implemented these changes at different times, with implementation complete in the 2009-10 year. [d] Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures.

Source: State and Territory governments (unpublished); table 9A.17.

Fire/non-fire incidents — False alarms

A significant proportion of calls for assistance across all jurisdictions are found, upon investigation, to be false alarms. Fire service organisations are required by legislation to respond to all calls. An incident cannot be deemed to be a false report until the fire service organisation has responded and investigated the site.

System initiated and malicious false calls accounted for 124 936 incidents attended to by fire service organisations nationally, or 33.1 per cent of all incidents in 2011-12. Most incidents found to be false alarms by fire service organisations are a result of system initiated false alarms (table 9A.12). On average each fire alarm system in Australia generates 2.8 false alarms per year (AFAC unpublished).

Contemporary fire alarm systems are an integral part of the built environment and have a significant role in the protection of life and property. However, attending unwanted false alarms has social and economic impacts (AFAC 2012):

- Repeated unwanted alarms can foster a culture of complacency from building occupants towards the operation of their fire alarm system, adversely affecting community fire safety.
- Community costs arise from lost working time and alarm attendance charges.
- Fire appliances can be delayed in responding to an emergency as a result of having to deal with unwanted fire alarms.

Residential structures with smoke alarms

'Residential structures with smoke alarms' is an indicator of governments' objective to reduce the adverse effects of fire on the community through prevention/ mitigation measures (box 9.3).

Box 9.3 **Residential structures with smoke alarms**

'Proportion of residential structures with smoke alarms' is defined as the number of households with a smoke alarm installed, divided by the total number of households.

High or increasing numbers of households with a smoke alarm installed, increases the likelihood that the adverse effects of fire will be avoided or reduced.

Data reported for this indicator are not directly comparable.

Data quality information for this indicator is at www.pc.gov.au/gsp/reports/rogs/2013.

All jurisdictions have mandated the introduction of smoke detectors into residential structures. Nationally consistent data for all jurisdictions are not available. However, recent Queensland and WA survey data indicate that 94.7 per cent and 92.0 per cent of households, respectively, had an installed smoke alarm/detector in 2011-12, an increase from below 80 per cent a decade ago (table 9A.23).

Fire service organisations have also implemented policies encouraging households to regularly test their smoke detector/alarm to ensure that they are operational. In 2011-12, 87.0 per cent of households in Queensland had a smoke alarm that had been tested in the previous 12 months (table 9A.23).

Equity and effectiveness — preparedness

The equity dimension of preparedness indicators relates to whether specific parts of the community with special needs or difficulties in accessing government services benefit from fire services' activities — this chapter provides data on services provided in remote locations, but not other special needs groups. The effectiveness dimension of preparedness indicators relates to fire service organisations' ability to prepare, and assist the community to prepare, for fire events.

Level of safe fire practices in the community

'Level of safe fire practices in the community' is an indicator of governments' objective to reduce the adverse effects of fires on the community and manage the risk of fires (box 9.4).

Box 9.4 **Level of safe fire practices in the community**

'Level of safe fire practices in the community' is defined by the measure:

- *Households with fire safety measures*, defined as the number of households with household fire safety measures installed or prevention procedures followed, divided by the total number of households.

  The higher the proportion of households with a fire safety measure installed or prevention measure followed, the less likely fires will occur or cause excessive damage.

  This indicator does not provide information on the degree to which practices under consideration contribute to fire prevention and mitigation.

Data quality information for this indicator is under development.

The most recent cross-sectional, nationally consistent data available for households with fire safety measures are for four jurisdictions on a variety of safety precautions (NSW, Victoria, Queensland and the ACT), for October 2007 (table 9A.22). Results indicate that across the four jurisdictions between 13.3 and 19.7 per cent of households have a written or rehearsed emergency plan (ABS 2008a).

Some jurisdictions have also conducted their own surveys of household fire safety measures installed or preparedness procedures followed. These surveys have focused on local priorities.

Equity and effectiveness — response

The equity dimension of response indicators relates to whether specific parts of the community with special needs or difficulties in accessing government services benefit from fire services' activities — this chapter provides data on services provided in remote locations, but not other special needs groups. The effectiveness dimension of response indicators relates to fire service organisations' ability to respond to and suppress fires.

Response times to structure fires

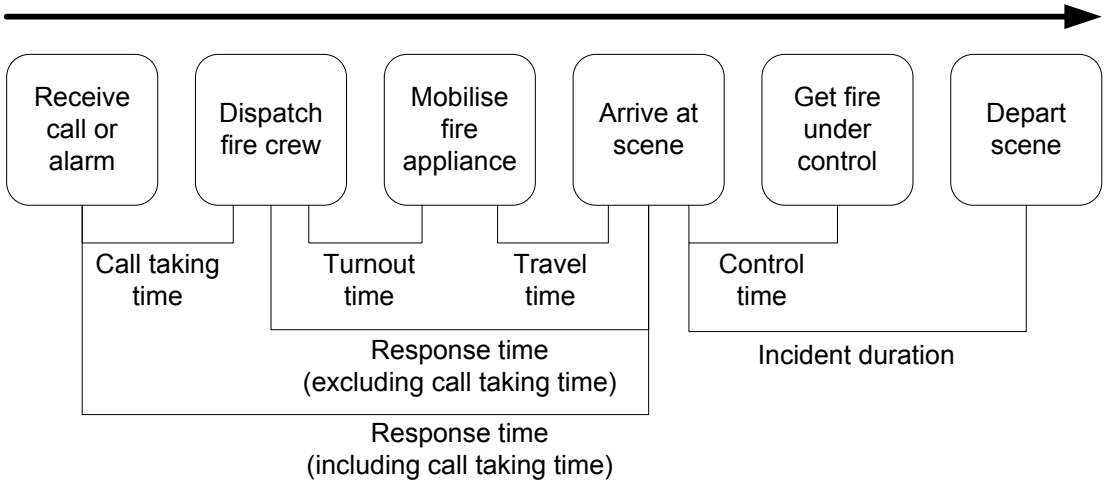
'Response times to structure fires' is an indicator of governments' objective to reduce the adverse effects of fire on the community through timely response activities (box 9.5).

Box 9.5 **Response times to structure fires**

'Response times to structure fires' (as illustrated below) is defined as the time taken between the arrival of the first fire crew appliance at the scene of a structure fire and:

- *the initial receipt of the call at the communications centre*. Response time (*including* call taking time) reflects the jurisdiction's overall responsiveness to the notification of a structure fire event
- *the dispatch of the responding fire crew*. Response time (*excluding* call taking time) reflects service organisations' responsiveness to the notification of a structure fire event.

Response times are calculated at the 50th and 90th percentile — the time within which 50 per cent and 90 per cent of the first responding fire appliances arrive at the scene of a structure fire, respectively.



Response time measures are provided state-wide and by remoteness area. Percentile calculations are based on emergency responses to structure fire incidents and include responses by both permanent and volunteer brigades (unless otherwise noted).

Shorter response times suggest the adverse effects on the community of emergencies requiring fire services are reduced.

Data reported for this indicator are not directly comparable.

Data quality information for this indicator is at www.pc.gov.au/gsp/reports/rogs/2013.

Response times need to be interpreted with caution because the data are not directly comparable across jurisdictions. There are many factors that influence response times including:

- land area, and population size and density — data calculated on a state-wide basis for some jurisdictions represent responses to urban, rural and remote areas, while others include urban centres only

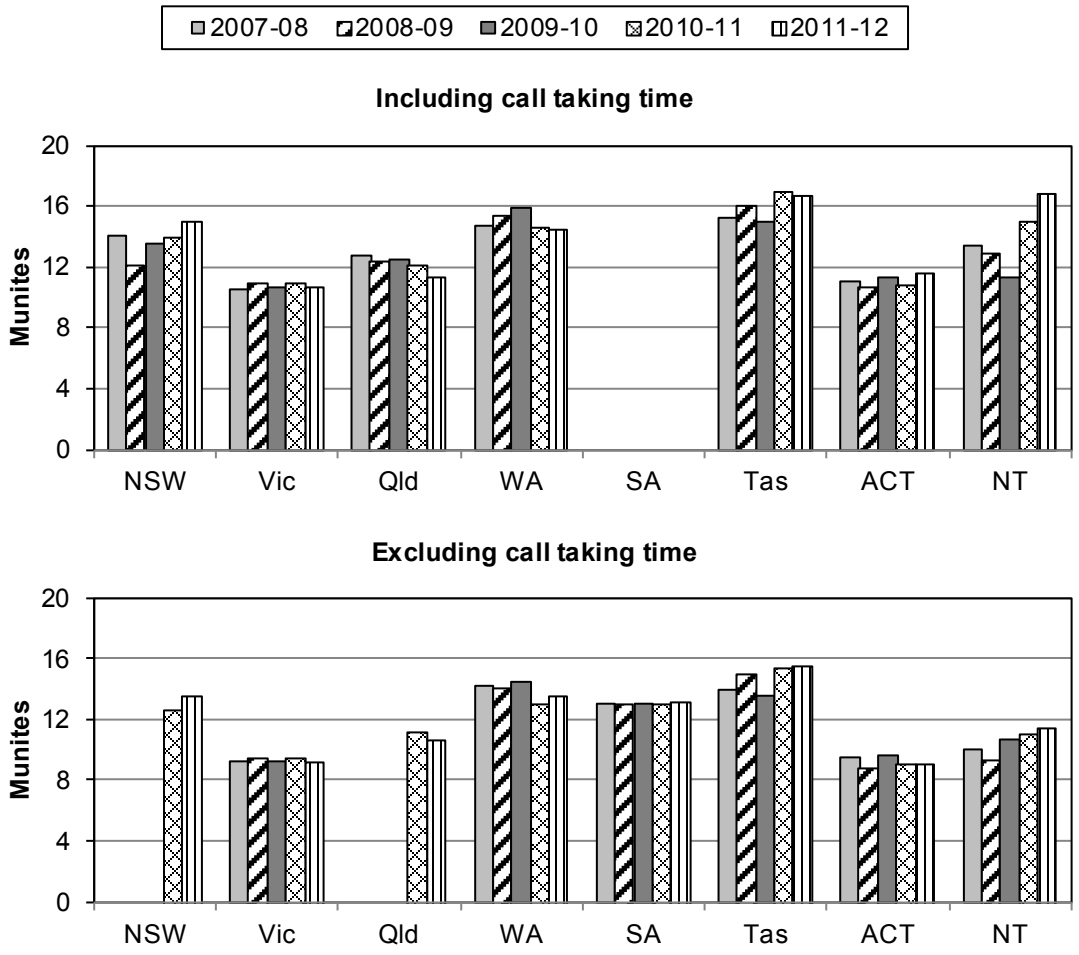
- the dispersion of the population (particularly rural/urban population proportions), topography, road/transport infrastructure and traffic densities
- crewing configurations, response systems and processes, and travel distances — for example, some jurisdictions include responses from volunteer stations (often in rural areas) where turnout times are generally longer because volunteers are on call as distinct from being on duty.

In addition, reported response times can be affected by data collection systems. Jurisdictions use a combination of computer aided dispatch (CAD) and manual systems. The majority of data are retrieved from CAD systems, with manual systems providing approximately 10 per cent of data across all jurisdictions (table 9A.44, Fire and ambulance services data quality information).

The time within which 50 per cent and 90 per cent of the first responding fire appliances arrive at the scene of a structure fire (the response time at the 50th percentile and 90th percentile respectively) varies across jurisdictions (figure 9.9 and tables 9A.24–9A.26).

Response times can be segmented into remoteness areas based on the ABS Australian Standard Geographical Classification (figure 9.10 and tables 9A.24–9A.26).

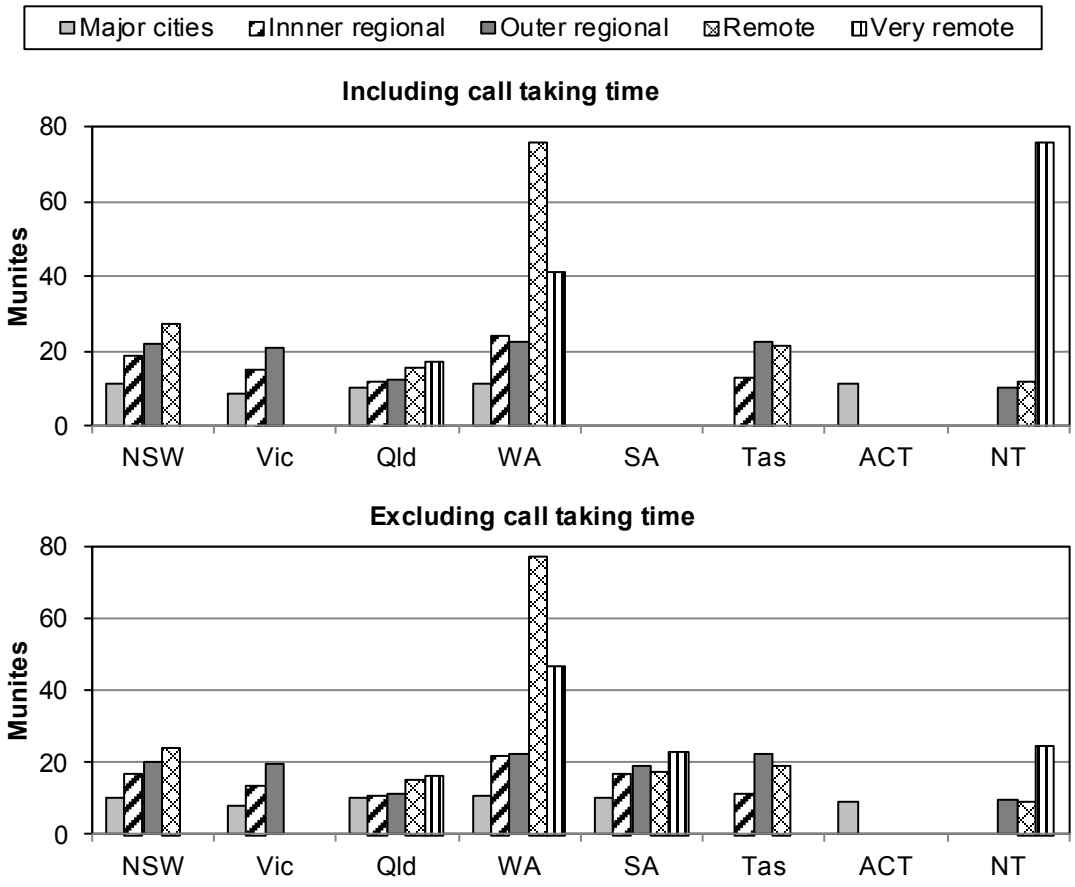
Figure 9.9 Response times to structure fires, state-wide, 90th percentile[a, b, c, d, e, f, g]



[a] Percentile calculations are based on emergency responses to structure fire incidents and include responses by both permanent and volunteer brigades (unless otherwise noted in jurisdictions' caveats). Different methods of calculating percentiles may affect results. Data in this table are not directly comparable (this chapter provides data on services provided in remote locations) [b] NSW: Data excluding call taking time are not available prior to 2010-11. [c] Qld: Data excluding call taking time are not available prior to 2010-11. Structure fires within the Urban Levy Boundary are included. Excluded are calls where QFRS experienced delays due to either extreme weather conditions or where the initial response was by another agency or brigade. Only primary exposure incidents are included. Incidents that could not be identified by remoteness category have been included in the statewide calculations only. [d] WA: Data include both career and volunteer responses where response was provided under emergency conditions (lights and sirens). Incidents where response time information is incomplete are excluded from response time calculations. Response time for major cities, regional and remote areas are impacted by volunteer data that, particularly in remote areas of the state, are affected by significant travel time to incidents. [e] SA: Data including call taking time are not available. Incomplete data are excluded from percentile calculations. Excludes response times of 12 hours or more. [f] Tas: Due to industrial action 90 incident reports are incomplete in 2008-09. [g] NT: Fire and Rescue Services respond to structure fires outside gazetted Emergency Response Areas in the NT when required impacting on some response times.

Source: State and Territory governments (unpublished); table 9A.25 and 9A.26.

Figure 9.10 **Response times to structure fires, by remoteness area, 2011-12, 90th percentile** [a, b, c, d, e, f]



[a] Differences between jurisdictions in definitions of response times, geography, personnel mix, and system type (manual or CAD), affect the comparability of response times data. For some jurisdictions, some remoteness areas do not exist or data are not available. Data with incomplete time details are excluded from percentile calculations. [b] Vic: There are no very remote areas in Victoria. Remote structure fires are rolled into the outer regional classification due to the low numbers of events. Excludes: calls attended under NRC, late notifications, calls with Event Create time stamp blank. [c] Qld: Data excluding call taking time are not available prior to 2010-11. Structure fires within the Urban Levy Boundary are included. Excluded are calls where QFRS experienced delays due to either extreme weather conditions or where the initial response was by another agency or brigade. Only primary exposure incidents are included. Incidents that could not be identified by remoteness category have been included in the statewide calculations only. [d] WA: Data include both career and volunteer responses where the response was provided under emergency conditions (lights and sirens). Incidents where response time information is incomplete are excluded from response time calculations. Response times for major cities, regional and remote areas are impacted by volunteer data that, particularly in remote areas of the State, are affected by significant travel time to incidents. [e] SA: Data including call taking time are not available. The CFS and the MFS do not have geocoded data. Incomplete data are excluded from percentile calculations. Excludes response times of 12 hours or more. The high percentile results for the 'very remote' category is due to the small number of reported fires, with some fires having a response time of 1 to 3 hours. [f] NT: Fire and Rescue Services respond to structure fires outside gazetted Emergency Response Areas in the NT when required impacting on some response times. The Northern Territory Fire and Rescue Service is currently examining its data reporting and inputting processes to ensure accurate reporting in line with the counting rules as defined in the data dictionary. Inconsistencies in data input in this reporting period has resulted in a significant increase in the times reported for responses to structure fires by remoteness of area (90th percentile). The figure for 2011-12 is likely to indicate a considerable exaggeration of times. Changes to the data reporting and inputting processes over the coming months will see this issue rectified by the next report.

Source: State and Territory governments (unpublished); tables 9A.25 and 9A.26.

Equity and effectiveness — recovery

The equity dimension of recovery indicators relates to whether specific parts of the community with special needs or difficulties in accessing government services benefit from recovery strategies, services and activities — this chapter provides data on services provided in remote locations, but not other special needs groups. The effectiveness dimension of recovery indicators relates to community restoration, and to communities' and fire service organisations' ability to return to a state of preparedness (box 9.6).

Box 9.6 Performance indicators — recovery

There are two elements to recovery: supporting communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic, ecological and physical wellbeing following a fire event, and return of communities and fire service organisations to a state of preparedness after experiencing a fire event.

Recovery indicators are identified as a key development area for future reports.

Efficiency

Fire service organisations' expenditure per person

'Fire service organisations' expenditure per person' is a proxy indicator of the efficiency of governments in delivering emergency management services (box 9.7).

Box 9.7 Fire service organisations' expenditure per person

'Fire service organisations' expenditure per person' is defined as total fire service organisation expenditure per person in the population.

All else being equal, lower expenditure per person represents greater efficiency. However, efficiency data are difficult to interpret. While high or increasing expenditure per person may reflect deteriorating efficiency, it may also reflect changes in aspects of the service (such as improved response) or the characteristics of fire events (such as more challenging fires). Similarly, low or declining expenditure per person may reflect improving efficiency or lower quality responses or less challenging fires.

Expenditure per person is employed as a proxy for efficiency. Expenditure per fire is not used as a proxy for fire service organisation efficiency because an organisation that applies more resources to the prevention and preparedness components to reduce the number of fire incidents could erroneously appear to be less efficient.

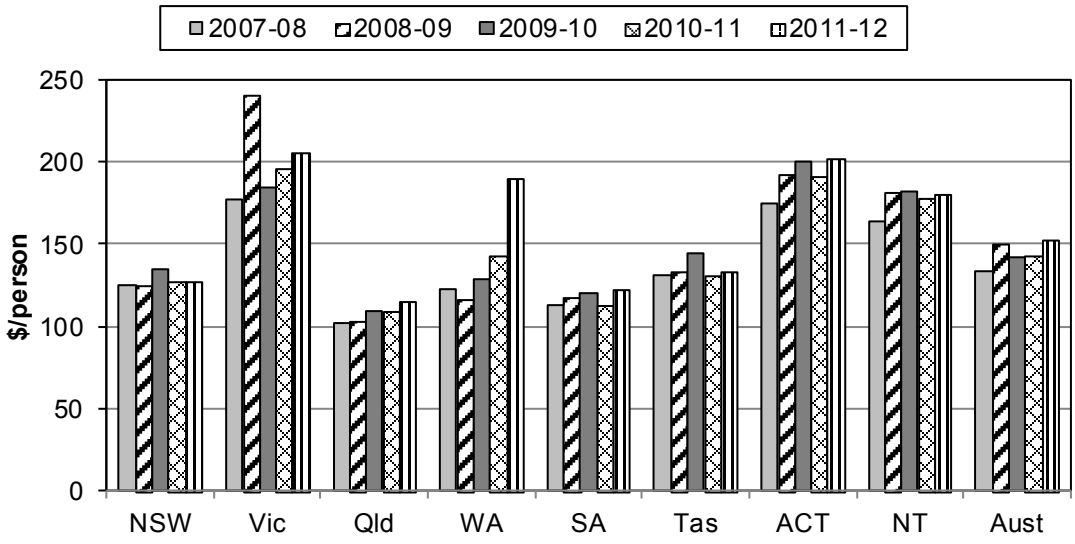
Data reported for this indicator are not directly comparable.

Data quality information for this indicator is under development.

Both government of funding fire service organisations and the total expenditure of fire service organisations are reported, because revenue from fire levies is significant for a number of jurisdictions.

Nationally, the total expenditure of fire service organisations per person in 2011-12 was $152 (table 9A.27–9A.28 and figure 9.11).

Figure 9.11 **Fire service organisations expenditure per person (2011-12 dollars)[a, b, c, d, e]**



[a] Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Recent volatility in the GDP deflator series affects annual movements of real expenditure. See the Statistical appendix (section A.5) for details. Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Totals may not sum as a result of rounding. Data exclude the user cost of capital associated with land, interest on borrowings and payroll tax. Total fire expenditure includes levies on insurance companies and property owners, user charges, fundraising and donations and indirect revenue. [b] Historical rates in this figure may differ from those in previous reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). [c] 2008-09 data include a significant increase in expenditure due to emergency funding arising from the Black Saturday Bushfires. [d] WA: DFES provides a wide range of emergency services under an integrated management structure. Data cannot be segregated by service and include SES and volunteer marine services as well as fire. Data for the Department of Environment and Conservation are not included. [e] Qld: Expenditure in 2009-10 included costs of $6.8 million associated with the Natural Disaster Relief and Recovery Arrangements declared bushfire event in September-October 2009.

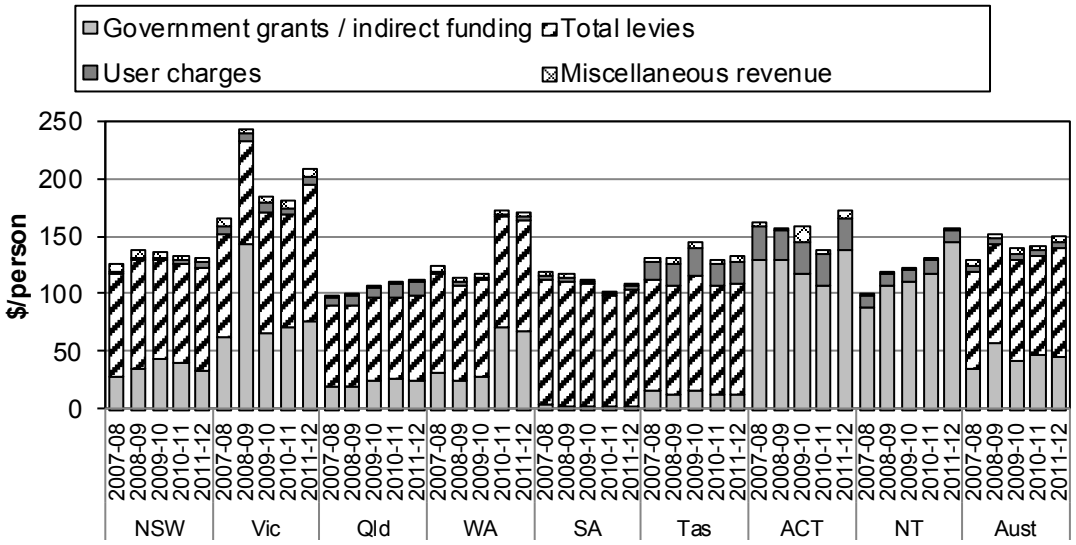
Source: State and Territory governments (unpublished); table 9A.28.

The proportions of funding sources varied across jurisdictions (figure 9.12).

- Nationally, total government grants and indirect government funding of fire service organisations per person in 2011-12 was $45.75 (30.4 per cent of total funding for fire service organisations, a decrease from 32.5 per cent in 2010-11).

- Levies per person in 2011-12 averaged $93.78 nationally. Fire levies were raised from levies on property owners or, in some jurisdictions, from levies on both insurance companies and property owners.
- Relatively minor contributions are raised from user charges and miscellaneous revenue (table 9A.29).

Figure 9.12 **Fire service organisation funding per person, 2011-12**



Source: State and Territory governments (unpublished); table 9A.29.

Outcomes

Outcomes are the impact of services on the status of an individual or group (while outputs are the services delivered) (chapter 1, section 1.5). Caution should be exercised in interpreting data for some indicators, given the significant fluctuations from year to year, particularly for jurisdictions with relatively small populations.

Fire death rate

'Fire death rate' is an indicator of governments' objective to minimise the adverse effects of fire events on the community and enhance public safety (box 9.8).

Box 9.8 **Fire death rate**

'Fire death rate' is defined by two measures:

- *Annual fire deaths per million people*, all deaths whose underlying cause of death is fire related to smoke, fire and flames, including all (structure and landscape) fires — as recorded in *Causes of Death, Australia* (ABS 2012).

  Fire deaths are identified from cause of death information supplied by the medical practitioner certifying the death or by a Coroner. Fire deaths are reported by year of registration of death at State and Territory Registrars of Births, Deaths and Marriages.

- *Landscape fire deaths per million people*, deaths resulting from a landscape fires (such as bushfires) only (excluding self-harm deaths).

  As separate landscape death data are not available from ABS, these data are sourced from the Australasian Fire and Emergency Service Authorities Council Landscape Fire Deaths database. Data are sourced from media reports, agency reports, PerilAus from Risk Frontiers and records in the National Coroners' Information System.

The landscape fire death rate and the annual fire death rate are different. The scope and definition of the two measures differ according to:

- Fire type — the scope of the landscape fire death rate is landscape fires only (such as bushfires).
- Location of death — the landscape fire death rate records the location of death according to the location of the fire (not residential address of the victim).
- Cause of death — the annual fire death rate includes only deaths primarily caused due to smoke, fire and flames. The landscape fire death rate includes all deaths that may have resulted from the landscape fire, but whose primary cause may be related to other factors (such as the onset of a stress related coronary death or from attempting to flee fire — for example a road crash accident).

A low or decreasing fire death rate represents a better outcome.

Data reported for these indicators are comparable.

Data quality information for this indicator is at www.pc.gov.au/gsp/reports/rogs/2013.

Fire death rate — Annual fire death rate

The annual fire death rate was 4.1 deaths per million people in 2010 (92 fire deaths) down from 12.3 deaths per million people in 2009 (which includes deaths related to the Black Saturday Victorian bushfires (figure 9.13). Exposure to smoke, fire and flames accounted for 58 deaths, primarily. Intentional self-harm by smoke, fire and

flames accounted for 17 deaths and 1 death was due to assault by smoke, fire and flames. The remaining fire deaths were of undetermined intent (table 9A.5).

Annual fire death rates need to be interpreted with caution as they can be particularly volatile over time, because of the small number of fire deaths and the influence of large irregular fire events, such as the Black Saturday Victorian bushfires (box 9.9).

Box 9.9 **Recent history of Australian bushfires**

Bushfire can be considered an environmental factor that has been a part of the Australian landscape for millions of years. Rather than a threat or risk, the biodiversity of Australian fauna and flora have evolved with fire and come to depend on it for their survival (CSIRO 2012).

Bushfires are most common over the savannas of tropical Australia, where some parts of the land burn on an annual basis.

The southern parts of Australia, where the majority of the population resides, are susceptible to large bushfires that threaten life and property.

- Perth Hill Bushfires (WA) — In February 2011, 71 homes were destroyed and an estimated 39 homes damaged by two major fires that affected metropolitan Perth. Approximately 1540 hectares were burned, 517 families were evacuated and at least 12 people were hospitalised. The insured cost was $35 million.
- Black Saturday Bushfires (Vic) — In February 2009, the 'Black Saturday' fires caused 173 deaths and caused many injuries, burnt 430 000 hectares of land (including 51 towns, 78 communities) destroying homes, businesses, schools and kindergartens. The insured cost was greater than $1 billion.
- Eyre Peninsula (SA) — In January 2005 a fire started in the Lower Eyre Peninsula. Nine people died in these fires and more than 110 people were injured. Approximately 82 000 ha were burnt, 79 houses were destroyed and 26 homes extensively damaged. The insured cost was $41 million.

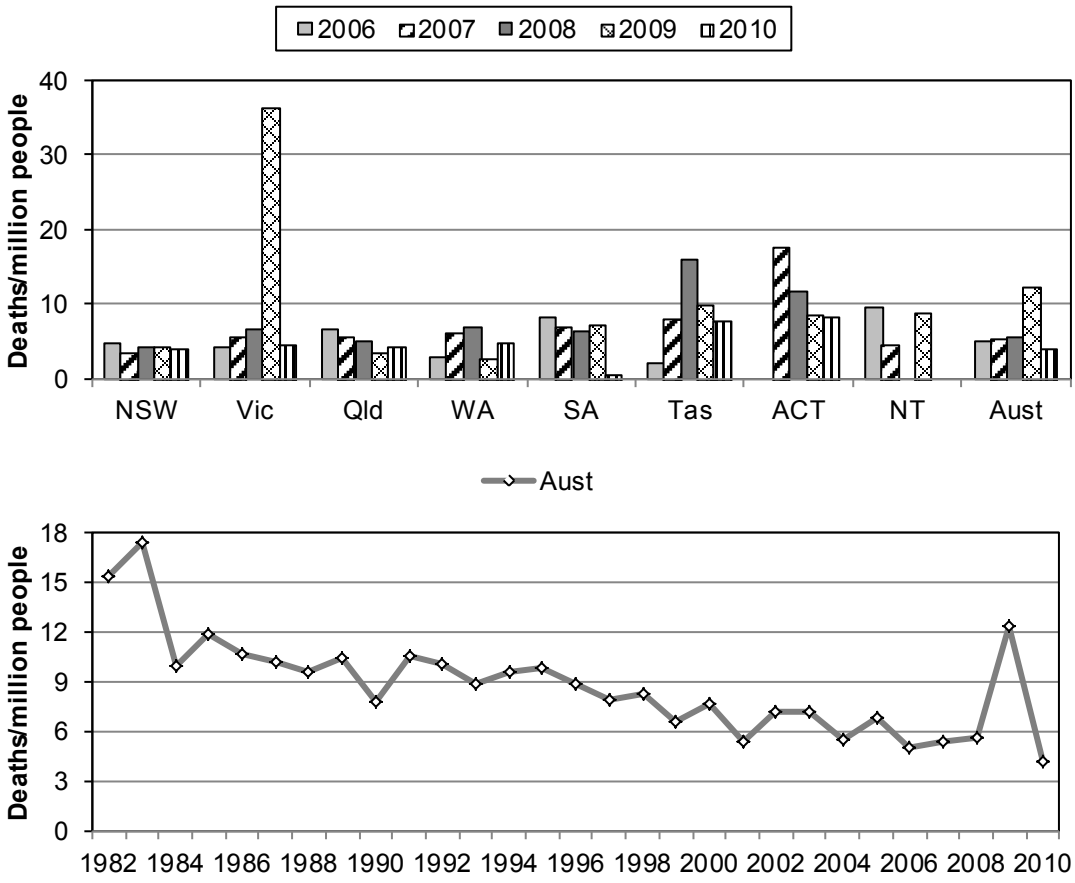
Fire services across Australia strive to establish fire management regimes that take a systematic approach to risk management and identify the assets and potential consequences of wildfires, and possible impacts of mitigation and management options.

Source: CSIRO (2012), Australian Government (2012), ABS (2012)

One method to overcome data volatility is to present fire death rates as three-year averages. Three-year average fire death rates are reported in the data attachment tables for each jurisdiction (table 9A.4). Alternatively, annual death rates can be viewed over a longer time series to help identify any underlying trends. In the ten

years from 1982–91 the average deaths per million people was 11.4. In the most recent decade (2001–10), the average deaths per million people was 6.4.

Figure 9.13 **Annual fire death rate**[a, b, c, d, e, f, g, h]



[a] Data for 2009 are preliminary and subject to a revisions process. See *Causes of Death, Australia* (Cat. no. 3303.0) Technical Note: Causes of Death Revisions. Data for 2008 have been subject to revisions. Cells in this table have been randomly adjusted to avoid the release of confidential data. [b] Fire deaths are coded according to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire death codes X00-X09 plus X76, X97 and Y26. Fire deaths data are reported by the State or Territory of the deceased's usual residence, and by the year the death was registered. [c] The small number of deaths means it is difficult to establish patterns and provide detailed analysis. [d] Australian totals includes Other Territories. [e] Significant increases in the number of deaths of undetermined intent in 2007 relate to a change in ABS coding practice. ABS advises that the number of deaths attributed to undetermined intent codes for the 2007 reference year is expected to decrease as data are revised. [f] Total fire deaths are unpublished data from the ABS. Totals have been adjusted separately to the component cells and revised totals are not necessarily the sum of the component cells. [g] The Black Saturday Victorian bushfires occurred in February 2009. The large number of deaths resulting from this event has a significant impact on the time series of the total fire death rate. [h] Historical population data in this table may differ from those in previous reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census for which data are available is 2006). Calendar year population estimates are the midpoint estimate of the relevant calendar year (i.e. as at 30 June).

Source: ABS (various years) *Causes of Death, Australia*, Cat. no. 3303.0 (unpublished); table 9A.4.

Fire death rate — Landscape fire death rate

The landscape fire death rate is punctuated by large, irregular events (table 9.2) (such as the Black Saturday fires).

Nationally, relatively few deaths are related to landscape fires annually (usually less than 0.3 deaths per million people). However, the Black Saturday 2009 Victorian Bushfires accounted for 173 deaths (box 9.9). To assist in identifying underlying trends in the annual landscape fire death series, a 30 year time series is provided in table 9A.6.

Table 9.2 **Landscape fire death rate, per million people[a, b, c]**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
2007-08	–	0.4	–	1.4	0.6	–	–	4.6	0.3
2008-09	0.1	32.6	–	–	–	–	–	–	8.1
2009-10	0.1	0.2	–	–	–	–	–	–	0.1
2010-11	0.3	–	–	0.4	–	–	–	–	0.1
2011-12	–	0.2	0.2	–	–	–	–	–	0.1

a The small number of deaths means it is difficult to establish patterns and provide detailed analysis. **b** Population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 Dec). **c** The landscape fire death rate and the total fire death rate in table 9A.4 and 9A.5 are different. The scope and definition of the two measures differ according to fire type (landscape fire death rate is landscape fires only), cause of death (the landscape fire death rate includes deaths that may have resulted from the landscape fire, but whose primary cause may be related to other factors) and location of death (the landscape fire death rate records the location of death according to the location of the fire). – Nil or rounded to zero.

Source: Australasian Fire and Emergency Service Authorities Council (unpublished); table 9A.6.

Fire injury rate

'Fire injury rate' is an indicator of governments' objective to minimise the adverse effects of fire events on the community and enhance public safety and is measured by the annual fire hospitalisation rate (box 9.10).

Box 9.10 **Annual fire injury rate**

'Annual fire injury rate' is defined as the number of fire injuries per 100 000 people.

A lower fire injury rate represents a better outcome.

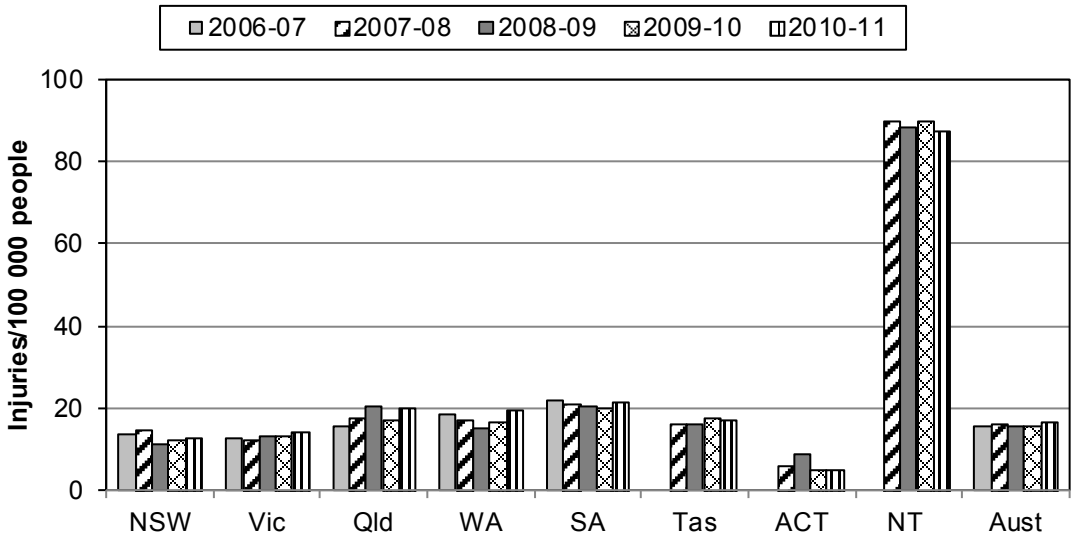
Fire injuries are represented by hospital admissions (excluding emergency department non-admitted casualties) and are reported by the State or Territory where the admission occurs. A person injured by fire may be treated more than once, and in more than one State or Territory. Deaths from fire injuries after hospitalisation have been removed from the fire injuries data for the time series because these are counted in the fire death rate.

Data reported for this indicator are comparable.

Data quality information for this indicator is under development.

Nationally in 2010-11, there were 3691 hospital admissions due to fire injury (table 9A.7) and the rate per 100 000 people was 16.4 (figure 9.14).

Figure 9.14 **Annual fire hospitalisation rate**[a, b, c, d]



[a] Fire injuries are coded to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire injury codes X00-X09 plus X76, X97 and Y26. Fire injuries are reported by the State or Territory where the injury is treated. Excludes secondary fires resulting from explosions, transport incidents, and emergency department non-admitted casualties. [b] Tas, ACT and NT: data for reference years 2005-06 to 2006-07 are not available. For the period 2005-06 to 2007-08, the average is calculated on only one year of data for these jurisdictions, and two years of data for the period 2006-07 to 2008-09. [c] Historical rates in this figure may differ from those in previous reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). [d] Tas, ACT and NT data for reference year 2006-07 are 'not published'.

Source: Australian Institute of Health and Welfare (AIHW), *National Hospital Morbidity Database* (unpublished); table 9A.7.

Fire hospitalisation rates need to be interpreted with caution because of the small number of fire injuries. One method to overcome data volatility is to present fire hospitalisation rates as three-year averages. Three-year average fire hospitalisation rates are reported in the data attachment tables for each jurisdiction (table 9A.7).

Confinement to room/object of origin

'Confinement to room/object of origin' is an indicator of governments' objective to reduce the adverse effects of fire emergency events on the community through a combination of its prevention/mitigation, preparedness, and response (box 9.11).

Box 9.11 **Confinement to room/object of origin**

'Confinement to room/object of origin' is defined by two measures:

- *Proportion of building fires confined to room of origin* — A building fire is a fire that has caused some damage to a building structure (such as a house). Confinement of building fires to room of origin is a measure of the proportion of building fires confined to the room in which the fire originated.

  Confinement of building fires to room of origin is reflective of the response strategies of the fire services to extinguish structure fires before they cause extensive building damage. It also reflects of the community's overall mitigation and preparedness strategies such as constructing buildings that are fire resistant, installing and maintaining operational smoke alarms, and other fire safety practises.

- *Proportion of building and other structure fires confined to room/object of origin* — Other structure fires are fires within a building structure (such as fires confined to rubbish bins, burnt foodstuffs and fires confined to cooking equipment) that require a fire service response. Confinement of building and other structure fires to object, part room and room of origin is a measure of the both the proportion of building fires and other structure fires confined to the room and/or object from which the fire originated.

  Other structure fires confined to object of origin is reflective of the community's overall mitigation and preparedness strategies such as constructing 'objects' (such as electronic appliances, cooking equipment, and chimneys) that are fire resistant. It is also reflective of the community's response abilities to contain a fire by having working fire alarms, fire extinguishers and/or fire blankets.

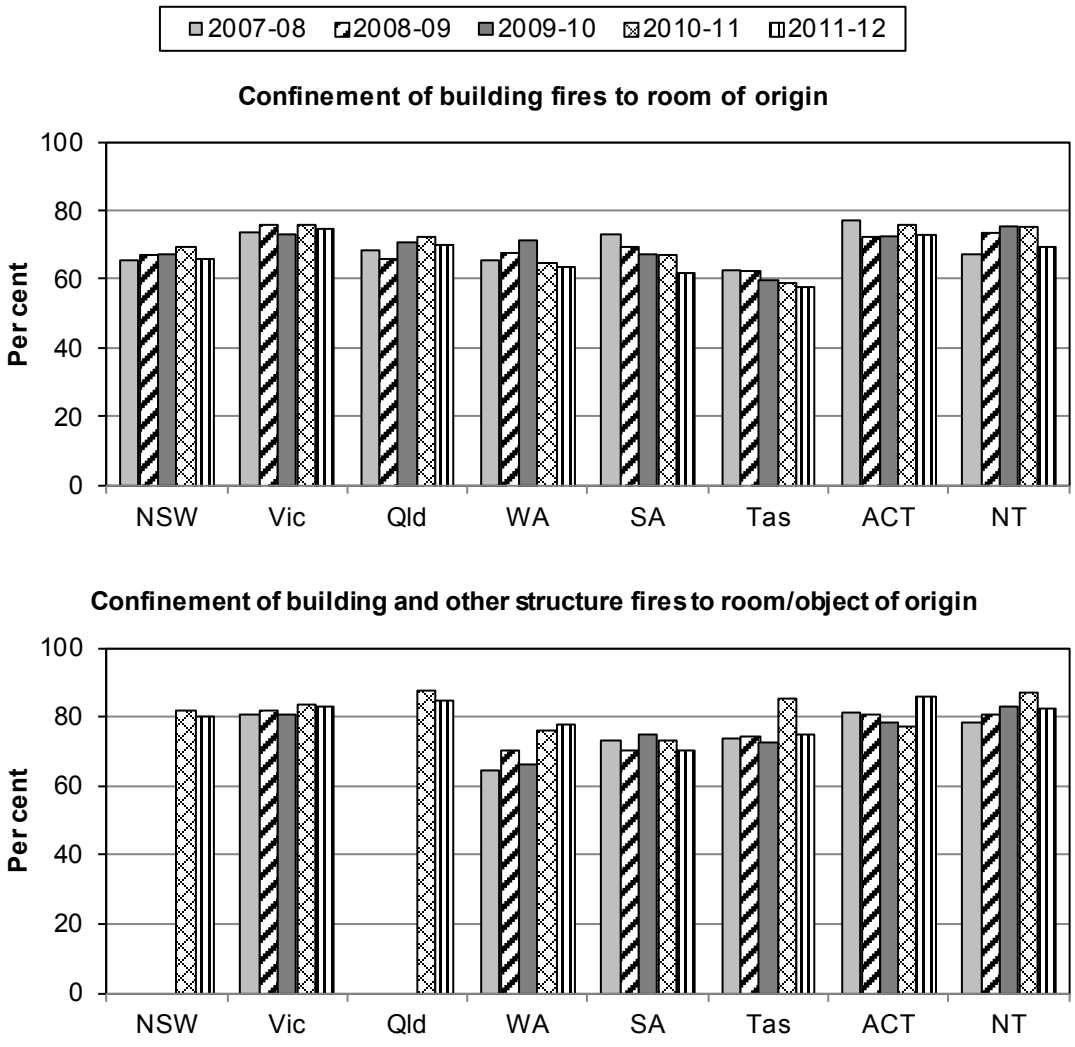
A high or increasing proportion of structure fires confined to the object or room of origin is more desirable.

Data reported for this indicator are not directly comparable.

Data quality information for this indicator is at www.pc.gov.au/gsp/reports/rogs/2013.

The proportion of fires, from all ignition types, confined to the object or room of origin varies across jurisdictions, and within jurisdictions over time (figure 9.15).

Figure 9.15 **Structure fires confined to the room/object of origin**[a, b, c, d, e]



[a] NSW: Data for other structure fires confined to object of origin are not available prior to 2010-11. [b] Qld: Data for other structure fires confined to object of origin are not available prior to 2010-11. Structure fires within the Urban Levy Boundary are included. Excluded are non-emergency calls and those where QFRS experienced delays due to either extreme weather conditions or where the initial response was by another agency or brigade. [c] WA: Total confinement percentages include fires confined but not classified as either accidental or suspicious. [d] SA: Data include MFS, but exclude the CFS as they do not routinely collect the source data. Data for confinement of other structure fires to object of origin are not available in 2006-07 and exclude incendiary incidents prior to 2010-11. [e] Tas: Data are for all fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09.

Source: State and Territory governments (unpublished); tables 9A.8 and 9A.9.

In all jurisdictions, the proportion of incendiary and suspicious structure fires confined to the object or room of origin was less than for accidental structure fires.

Rates are relatively stable over the 5 years to 2011-12 (table 9A.8, 9A.9). However, trends in individual jurisdictions' rates have varied.

Value of asset losses from structure fire

'Value of asset losses from structure fire' (box 9.12) is an indicator of the effect of fire on property. These data are expressed in real terms.

Box 9.12 **Value of asset losses from structure fire**

'Value of asset losses from structure fire' is measured as the estimated monetary value of the damage to property and contents caused by the fire and fire-fighting operations. It does not include land value.

Structure fires are those fires in housing and other buildings.

Value of asset losses from structure fire is defined in two ways:

- *Median dollar losses from structure fire* is the median dollar losses from structure fire (a fire in a house or other building. The median is the middle number in a sequence and is regarded as a more appropriate measure of 'typical' losses than the average (or mean) loss.
- *Property losses from structure fire per person* is defined as the property loss from structure fire (a fire in housing or other building) per person.

Lower or decreasing dollar losses represent a better outcome.

Data reported for this indicator are not directly comparable.

Data quality information for this indicator is under development.

Value of asset losses need to be interpreted with caution because the data are not directly comparable across jurisdictions. There are many factors that influence asset losses including:

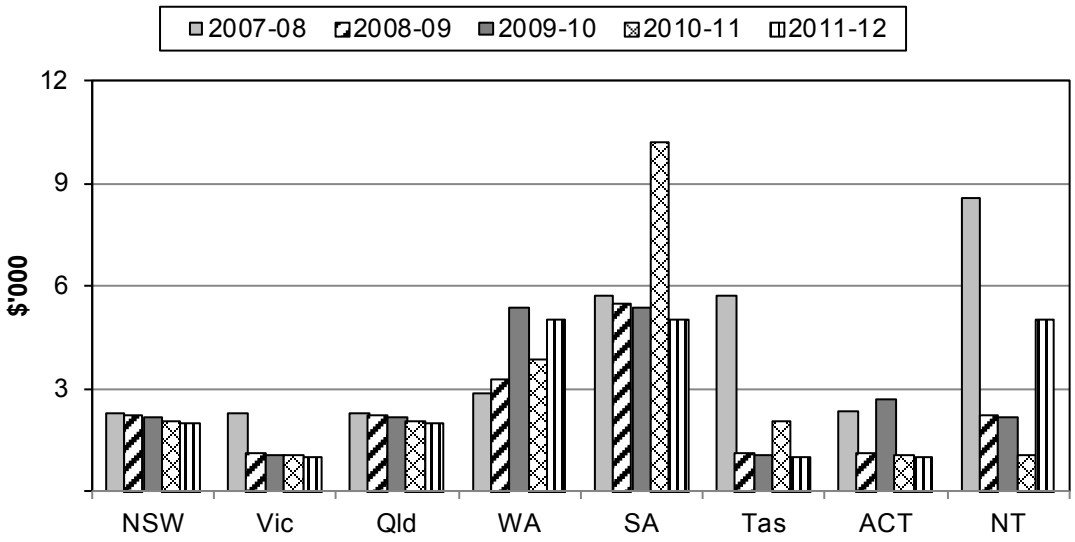
- these data have not been adjusted for jurisdictional differences in the costs and values of various types of building
- the method of valuing property loss from fire varies across jurisdictions.

In addition, the value of asset loss estimates exclude losses from landscape fires, such as the 2009 Victorian Bushfires and the 2011 Perth Hills fires.

Median dollar loss per structure fire

In real terms, the median dollar loss varies across jurisdictions and over time (figure 9.16).

Figure 9.16 **Median dollar loss per structure fire (2011-12 dollars)[a, b, c, d, e, f, g]**



a Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Recent volatility in the GDP deflator series affects annual movements of real expenditure. See the Statistical appendix (section A.5) for details. Estimates are not validated by the insurance industry, or adjusted for interstate valuation differences. **b** NSW: Some structure fires resulted in direct dollar loss in excess of $1 million each. In 2007-08 there were 19 structure fires at $1+ million each with four at $5+ million each and one of $100 million. **c** Vic: 2008-09 data do not include loss arising from the Black Saturday Bushfires in 2009. **d** Qld: Accurate identification of incidents attended by QFRS rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. The 2010-11 and 2011-12 results are based on the values over the previous five years due to a systems issue. It is anticipated that this issue will be resolved during 2012-13. **e** WA: Dollar losses are based on estimated values provided by firefighters. **f** SA: In 2011-12 there was a large petrochemical fire which accounted for $10 million loss. In 2008-09 two fires accounted for 35 per cent of reported dollar loss. **g** Tas: Data are for all fire brigades, both full-time and volunteer. Property loss does not include losses as a result of vegetation fires. Due to industrial action 90 incident reports are incomplete in 2008-09.

Source: State and Territory governments (unpublished); table 9A.10.

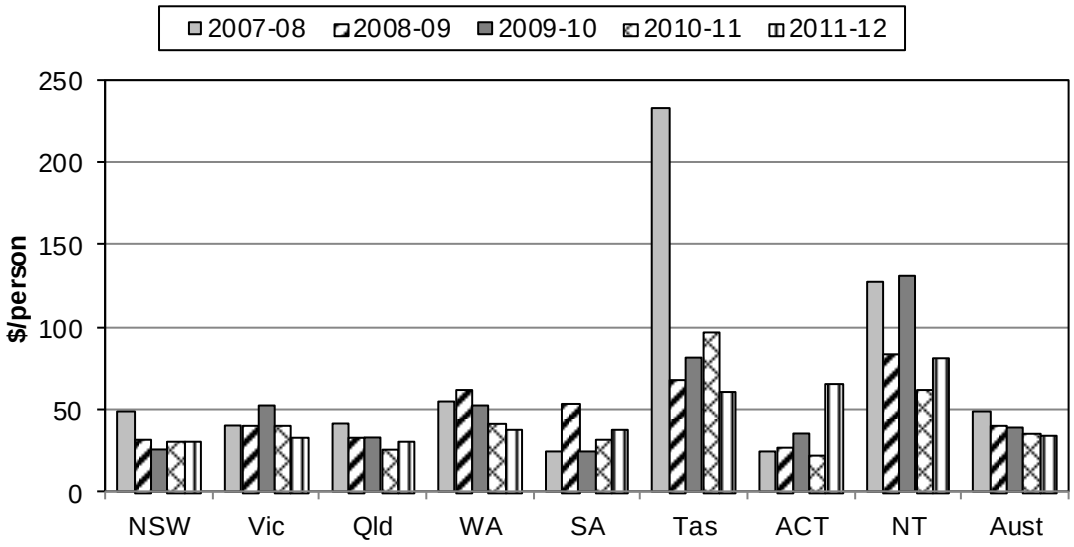
Property loss per person

The property loss per person (expressed in real terms) has fluctuated over time in all jurisdictions (figure 9.17).

Data for the three year average property loss per person are also available in the attachment tables (table 9A.11).

This page has changed since the Report release in January 2013. See errata at www.pc.gov.au/gsp/reports/rogs/2013/errata.

Figure 9.17 **Property loss from structure fire per person (2011-12 dollars)[a, b, c, d, e, f, g, h, i, j]**



a Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Recent volatility in the GDP deflator series affects annual movements of real expenditure. See the Statistical appendix (section A.5) for details. Estimates are not validated by the insurance industry, or adjusted for interstate valuation differences. **b** Historical rates in this table may differ from those in previous reports, as historical population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December). **c** NSW: Some structure fires resulted in direct dollar loss in excess of $1 million each. In 2007-08 there were 19 structure fires at $1+ million each with four at $5+ million each and one of $100 million. **d** Vic: 2008-09 data do not include loss arising from the Black Saturday Bushfires in 2009. During 2010-11 there were 15 structure fires with significant dollar losses ($1 million and above) totalling $31.2 million. **e** Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population. 2010-11 data are understated due to a systems issue. It is anticipated that this issue will be resolved during 2012-13. **f** WA: Dollar losses are based on estimated values provided by firefighters. **g** SA: In 2011-12 there was a large petrochemical fire which accounted for $10 million loss. In 2008-09 two fires accounted for 35 per cent of reported dollar loss. **h** Tas: Data are for all fire brigades, both full time and volunteer. For 2007-08, data include two significant fires where the property loss was $60 million and $20 million respectively. Property loss does not include losses as a result of vegetation fires. Due to industrial action 90 incident reports are incomplete in 2008-09. **i** Tas, ACT and NT: Due to small population sizes, rates in these jurisdictions may be affected significantly by single large-loss events. **j** Average for Australia excludes rural fire service data for some years as per the jurisdictions' caveats.

Source: State and Territory governments (unpublished); table 9A.11.

9.4 Profile of emergency services for ambulance events

This section provides information on the performance of emergency service organisations in providing services for ambulance events and in preparing the community to respond to emergencies. Ambulance events are incidents that result in demand for ambulance services to respond, including: emergency and non-emergency pre-hospital and out-of-hospital patient care; transport; inter-hospital patient transport; specialised rescue services; ambulance services to multi-casualty events; and capacity building for emergencies.

Ambulance service organisations

Ambulance service organisations are the primary agencies involved in providing services for ambulance events. In a limited number of cases, other organisations provide services such as medical transport for emergencies (Emergency management sector overview — table DA.1). The descriptive information provided below on funding, incidents and human resources are for ambulance service organisations only. Ambulance assets are reported in table 9A.35.

State and Territory governments provide ambulance services in most jurisdictions. In WA and the NT, St John Ambulance is under contract to the respective governments as the primary provider of ambulance services (box 9.13). Across jurisdictions the role of ambulance service organisations serves as an integral part of the health system. Services generally include:

- providing emergency and non-emergency pre-hospital and out-of-hospital patient care and transport
- undertaking inter-hospital patient transport including the movement of critical patients
- conducting specialised rescue services
- preparing for and providing capacity for the ambulance component of multi-casualty events
- enhancing the community's capacity to respond to emergencies.

Funding responsibilities of State and Territory governments include ambulance services and, jointly with the Australian Government, emergency responses, including responding to public emergencies and support for emergency air retrieval (COAG 2009).

There are fixed and rotary wing (helicopter) ambulance services in all jurisdictions. In most jurisdictions these services are provided by the ambulance service organisations through various contractual arrangements. In WA, SA, Queensland and the NT, all or most of the funding of air ambulance services is external to the ambulance service organisations.

Box 9.13 Relationships of primary ambulance response and management organisations to government

NSW	*Ambulance Service of NSW* — a division of the Ministry of Health reporting to the Minister for Health.
Vic	*Ambulance Victoria* — a separate statutory body reporting to the Minister for Health.
Qld	*Queensland Ambulance Service* — a division of the Department of Community Safety, reporting to the Director-General, who reports to the Minister for Police and Community Safety.
WA	*St John Ambulance* — an incorporated not-for-profit organisation under contract to the WA Government.
SA	*SA Ambulance Service* — an incorporated entity under the SA Health Care Act.
Tas	*Ambulance Tasmania* — a statutory service of the Department of Health and Human Services.
ACT	*ACT Ambulance Service* — one of four operational services that comprise the ACT Emergency Services Agency, Justice and Community Safety Directorate (the other operational services are the ACT Fire and Rescue, ACT Rural Fire Service and ACT State Emergency Service). The Department reports to the ACT Minister for Police and Emergency Services.
NT	*St John Ambulance* — an incorporated not-for-profit organisation under contract to the NT Government.

Source: State and Territory governments (unpublished).

Revenue

Total revenue of ambulance service organisations covered in this chapter was approximately $2.4 billion in 2011-12 (table 9.3). Nationally, revenue increased each year from 2007-08 to 2011-12 (in real terms), with an average annual growth rate of 4.9 per cent.

Ambulance service organisations are funded by a variety of sources, with non-government sources making a significant contribution.

The primary sources of revenue across all jurisdictions in 2011-12 were grants from State and Territory governments, transport fees (from public hospitals, private citizens and insurance) and other revenue (subscriptions, donations and miscellaneous revenue) (table 9A.30).

Table 9.3 **Revenue of ambulance service organisations (2011-12 dollars) ($ million)[a, b]**

	NSW	*Vic*	*Qld*	*WA*	*SA*[c]	*Tas*	*ACT*	*NT*	*Aust*
2007-08	621.0	534.9	468.4	135.9	157.5	38.0	24.4	22.6	2 002.6
2008-09	671.0	556.1	501.3	131.4	193.9	47.1	25.2	24.0	2 149.9
2009-10	703.4	583.0	529.2	146.1	194.3	54.9	25.0	20.3	2 256.3
2010-11	686.6	586.1	551.7	176.2	200.6	55.1	28.5	22.4	2 307.2
2011-12	715.3	609.6	572.1	209.3	207.3	56.0	35.8	23.5	2 428.9

[a] Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Recent volatility in the GDP deflator series affects annual movements of real expenditure. See the Statistical appendix (section A.5) for details. Due to differences in definitions and counting rules, data reported may differ from data in agency annual reports and other sources. [b] Totals may not sum due to rounding. [c] SA: For the 2012 Report 2010-11 ambulance financial and workforce data were not available due to reporting system issues. This was rectified for the 2013 Report.

Source: State and Territory governments (unpublished); table 9A.30.

Demand for ambulance services

Incidents

For ambulance services an incident is an event that results in one or more responses by an ambulance service. Ambulance service organisations prioritise incidents as:

- emergency — immediate response under lights and sirens required
- urgent — undelayed response required without lights and sirens
- non-emergency — non-urgent response required
- casualty room attendance.

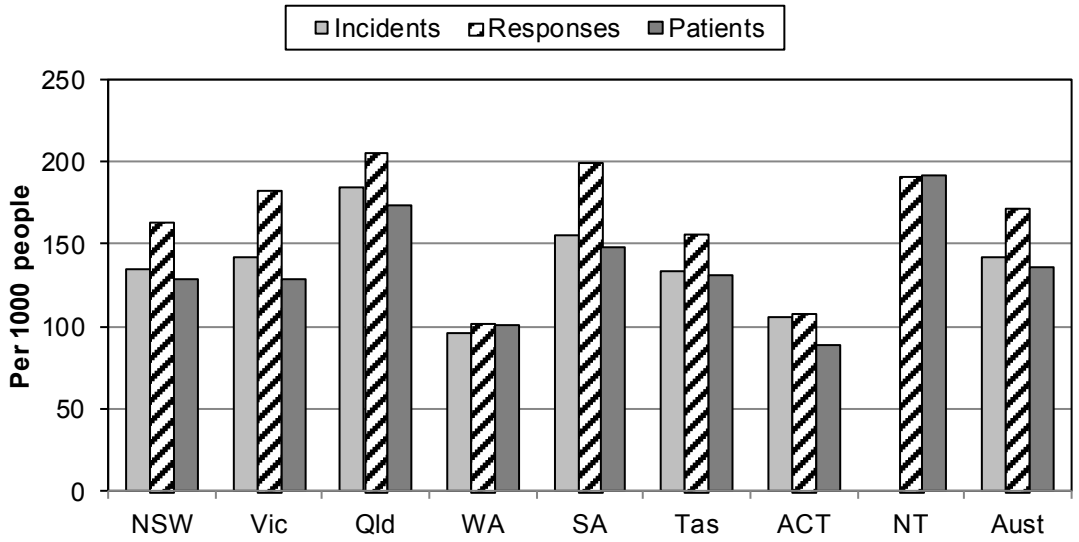
Nationally, ambulance service organisations attended 3.2 million incidents in 2011-12 (table 9A.31). Most of these were emergency incidents (44.0 per cent). Ambulance service organisations also attended a large number of urgent incidents (23.3 per cent) and non-emergency incidents (32.5 per cent).

Ambulance incidents, responses and patients per 1000 people

The numbers of incidents, responses and patients are interrelated. Multiple responses/vehicles may be sent to a single incident, and there can be more than one patient per incident. There can also be responses to incidents that do not have people requiring treatment and/or transport.

Nationally, there were 172 responses per 1000 people and 136 patients per 1000 people, in 2011-12 (figure 9.18).

Figure 9.18 **Reported ambulance incidents, responses and patients, 2011-12**[a, b, c, d, e, f]



[a] An incident is an event that results in a demand for ambulance resources to respond. An ambulance response is a vehicle or vehicles sent to an incident. There can be multiple responses/vehicles sent to a single incident. A patient is someone assessed, treated or transported by the ambulance service. [b] Vic: Incidents and responses are for road ambulances only. [c] WA: reports the incident and response figures that resulted in patients being attended to or transported. [d] NT: A response is counted as an incident. Data for incidents are not available and are not included in the rate for Australia. [e] Aust: Data for incidents excludes NT. [f] Historical rates in this figure may differ from those in previous reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December).

Source: State and Territory governments (unpublished); table 9A.31.

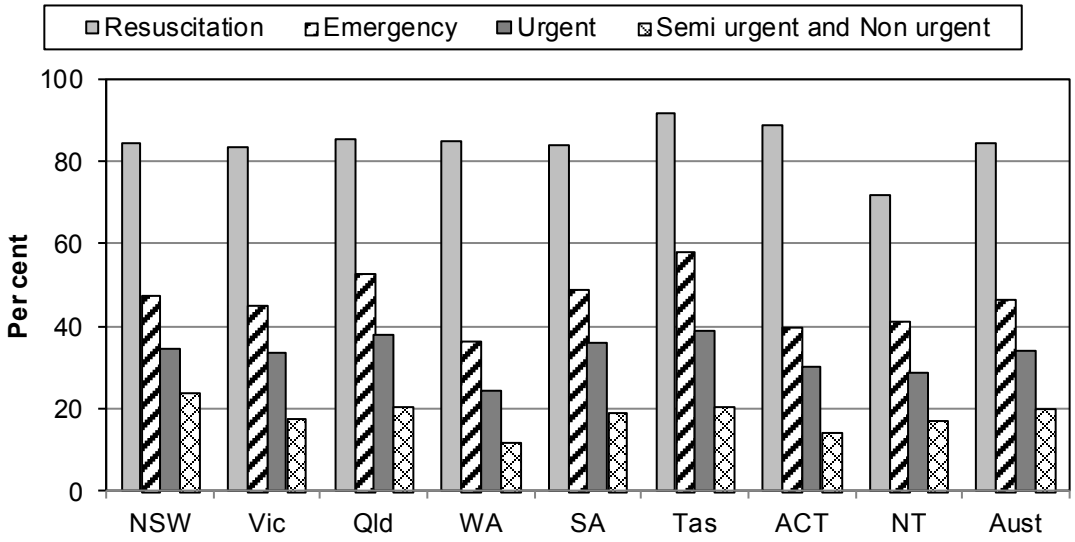
Emergency department triage category by ambulance transport rate

Emergency department presentation rates and demand for ambulance services are closely linked. The majority of people who are acutely ill or injured and need to attend a hospital emergency department will call the ambulance service to provide immediate pre-hospital care and then take them to hospital.

The Emergency Department National Triage Scale category allocates priority to a patient on *arrival* at the emergency department. (The triage category assigned by emergency departments may be differ to the priority originally assigned by ambulance service organisations.) It is a measure of how acutely ill the patient is on arrival at the hospital, ranging from 'Resuscitation' (for a patient in immediate need of attention) to 'Non urgent' (for patients who have a presenting condition that indicates they can safely wait for 2 hours to see a doctor) (chapter 10, box 10.4).

Nationally, in 2011-12, 84.6 per cent of emergency department patients in triage category 'Resuscitation' and 46.7 per cent of 'Emergency' patients arrived by ambulance, air ambulance or helicopter rescue services. For all triage categories, 24.0 per cent of patients arrived by ambulance, air ambulance or helicopter rescue services (figure 9.19).

Figure 9.19 **Emergency department patients who arrived by ambulance, air ambulance or helicopter rescue services, by triage category 2011-12 (per cent)[a]**



[a] Data represent the 78 per cent of emergency department presentations for which patient-level data were available. Data include all presentations.

Source: AIHW (2012) *Australian Hospital Statistics 2011-12: emergency department care*, Health services series. Cat. no. HSE 126; table 9A.32.

Aero-medical arrangements in Australia

Arrangements for air ambulance or aero-medical services vary throughout Australia. Some of these arrangements involve services provided entirely by State and Territory ambulance services or by sub-contractors to these services, while others are provided completely externally to the State ambulance services. Some arrangements involve a mix of the two, where external organisations provide aircraft and/or air crew while ambulance service organisations provide paramedics to staff the air ambulances. The result is that the revenue (funding) and expenditure for air ambulance services are included in ambulance reports from some jurisdictions while in other jurisdictions none of these costs are included.

The Australian Government also provides some capital and recurrent funding for aero-medical service provision through the Royal Flying Doctor Service, mainly for

primary health services to rural and remote communities. In some jurisdictions, these same aircraft are used to transfer patients requiring higher level care.

It is not possible for ambulance service organisations to provide full activity and financial data for air ambulance services in Australia. The Council of Ambulance Authorities (CAA) has tried to identify, as comprehensively as possible, air ambulance services provided by ambulance service organisations directly, or by other service providers such as the Royal Flying Doctor Service. In doing so, the CAA has counted the total number of aircraft available in each jurisdiction during 2011-12, and the component of expenditure that is funded through ambulance service expenditure (that is, the expenditure figures do not represent total expenditure, only that component funded through ambulance services) (table 9.4).

Table 9.4 **Aero medical resources and expenditure, 2011-12[a, b, c, d]**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Operated by State Ambulance Service									
Fixed wing	4	4	–	–	–	1	–	–	9
Helicopter	5	5	–	–	–	–	–	–	10
Operated by other service providers									
Fixed wing	1	–	14	13	7	–	–	–	35
Helicopter	5	–	12	3	3	1	1	–	25
Total aircraft	15	9	26	16	10	2	1	–	79
Expenditure ($'000)	90 899	64 387	–	1 226	9 000	3 863	592	600	170 567

a These figures do not represent the total air ambulance medical expenditure for jurisdictions, but only that funded through ambulance services and reported as part of the total ambulance service expenditure. **b** Qld: The fixed wing network comprises of a total of 14 aircraft, which is made up of 11 primary response aircraft that are solely responsible for patient retrieval and transfers, and three traditional based aircraft that are utilised when not being used for day clinics. In addition, there are three spare aircraft to support the fixed wing network. The helicopter network comprises of a total of 12 helicopters, which is supported by nine spare helicopters. **c** WA, SA and NT: Fixed wing services are provided by the Royal Flying Doctor Service (RFDS). In addition, AMS, a NT Government operated aero medical service, operates in the 'top end' of the NT. **d** Tas: Aircraft and pilot are provided by the RFDS under contract, aero medical crew are provided by the State. – Nil or rounded to zero. na Not available.

Source: Council of Ambulance Authorities (CAA) (unpublished); table 9A.37.

Human resources

Data on human resources are reported by operational status on a full time equivalent (FTE) basis for salaried personnel and a head count basis for volunteers. Human resources include any person involved in delivering and/or managing the delivery of ambulance services, including:

- ambulance operatives (including patient transport officers, students and base level ambulance officers, qualified ambulance officers, other clinical personnel and communications operatives)
- operational and corporate support personnel (including management, operational planners and coordinators, education and training personnel, corporate support personnel, non-operative communications and technical personnel)
- remunerated and non-remunerated volunteers and ambulance community first responders. Ambulance community first responders are a type of volunteer that provide an emergency response (with no transport capacity) and first aid care before ambulance arrival.

Nationally, 14 788 FTE salaried personnel were involved in the delivery of ambulance services in 2011-12. The majority of salaried ambulance personnel in 2011-12 were ambulance operatives (81.8 per cent) (table 9A.33).

Nationally, over 6012 volunteer personnel (comprising 5355 operatives and 657 support personnel) participated in the delivery of ambulance services in 2011-12. The proportion of volunteer personnel and the nature of their role varied across jurisdictions. Given the decentralised structure of its ambulance service operations, WA has a relatively higher number of volunteer operational and corporate support personnel (table 9A.33).

Nationally, there were 1670 ambulance community first responders in 2011-12 (table 9A.33). In some locations the first responder service is provided by another emergency service agency, for example, a fire service.

9.5 Framework of performance indicators for ambulance events

Performance can be defined in terms of how well a service meets its objectives, given its operating environment. Performance indicators focus on outcomes and/or outputs aimed at meeting common, agreed objectives. The Steering Committee has identified four objectives of ambulance services for the purposes of this Report (box 9.14).

Box 9.14 **Objectives for emergency services for ambulance events**

Government involvement in ambulance service is aimed at providing pre-hospital and out-of-hospital care and patient transport services, that:

- are high quality, timely, and meet clients' needs through delivery of coordinated and responsive health care
- are equitable and accessible
- are effectively, efficiently and sustainably delivered
- reduce the adverse effects of emergency events on the community by providing specialised medical care in emergency situations.

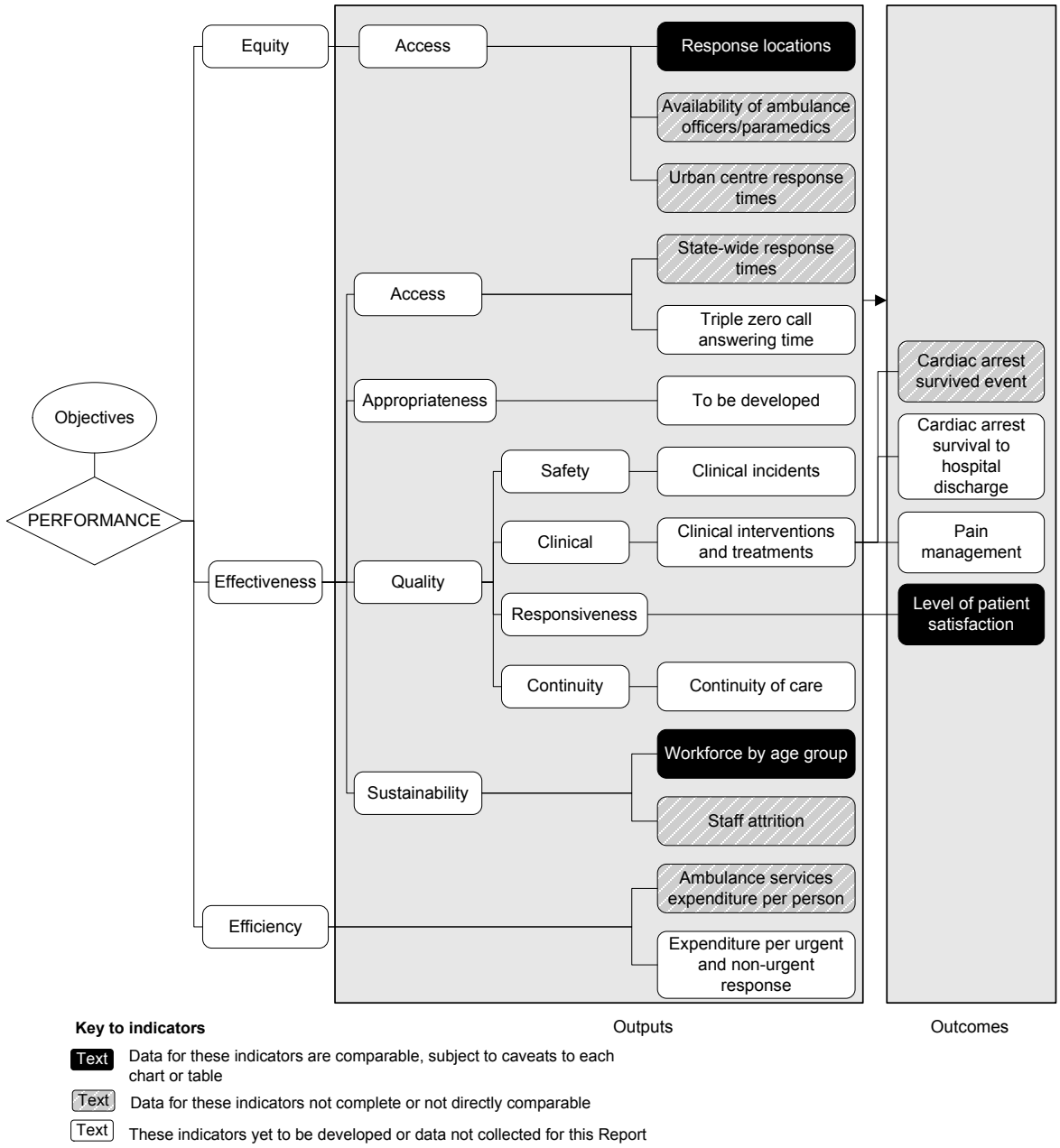
Ambulance services also contribute to managing community risks and enhancing public safety through various measures including fostering public education in first aid.

The performance indicator framework provides information on equity, efficiency and effectiveness, and distinguishes the outputs and outcomes of ambulance services (figure 9.20). This framework is based on the general framework for the health section of the 2013 Report and shows which data are comparable in the Report. For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6). Definitions of all indicators are provided in section 9.9.

Data quality information (DQI) is being progressively introduced for all indicators in the Report. The purpose of DQI is to provide structured and consistent information about quality aspects of data used to report on performance indicators. DQI in this Report cover the seven dimensions in the ABS' data quality framework (institutional environment, relevance, timeliness, accuracy, coherence, accessibility and interpretability) in addition to dimensions that define and describe performance indicators in a consistent manner, and note key data gaps and issues identified by the Steering Committee. All DQI for the 2013 Report can be found at www.pc.gov.au/gsp/reports/rogs/2013.

Caution should be exercised in making comparisons between the ambulance service organisations because of differences in geography, population dispersal and service delivery models. The Report's Statistical Appendix contains demographic and socioeconomic data that may assist in interpreting the performance indicators presented in this section.

Figure 9.20 **Ambulance events performance indicator framework**



9.6 Key performance indicator results for ambulance events

Outputs

Outputs are the services delivered (while outcomes are the impact of these services on the status of an individual or group) (see chapter 1, section 1.5).

Equity — access

Equity of access indicators measure access to services by groups in the community who may have special needs — this chapter provides data on services provided in remote locations, but not other special needs groups.

Response locations

'Response locations' is an indicator of governments' objective of providing accessible emergency ambulance services to communities (box 9.15).

Box 9.15 **Response locations**

'Response locations' is defined as the number of paid (or salaried), mixed and volunteer response locations per 100 000 people. Locations are primary ambulance response locations where paid, volunteer or a mix of paid and volunteer ambulance operatives are responding in an ambulance vehicle and providing pre-hospital care.

Higher or increasing numbers of paid, mixed and/or volunteer response locations, after adjusting for population, suggests better ambulance service response capacity.

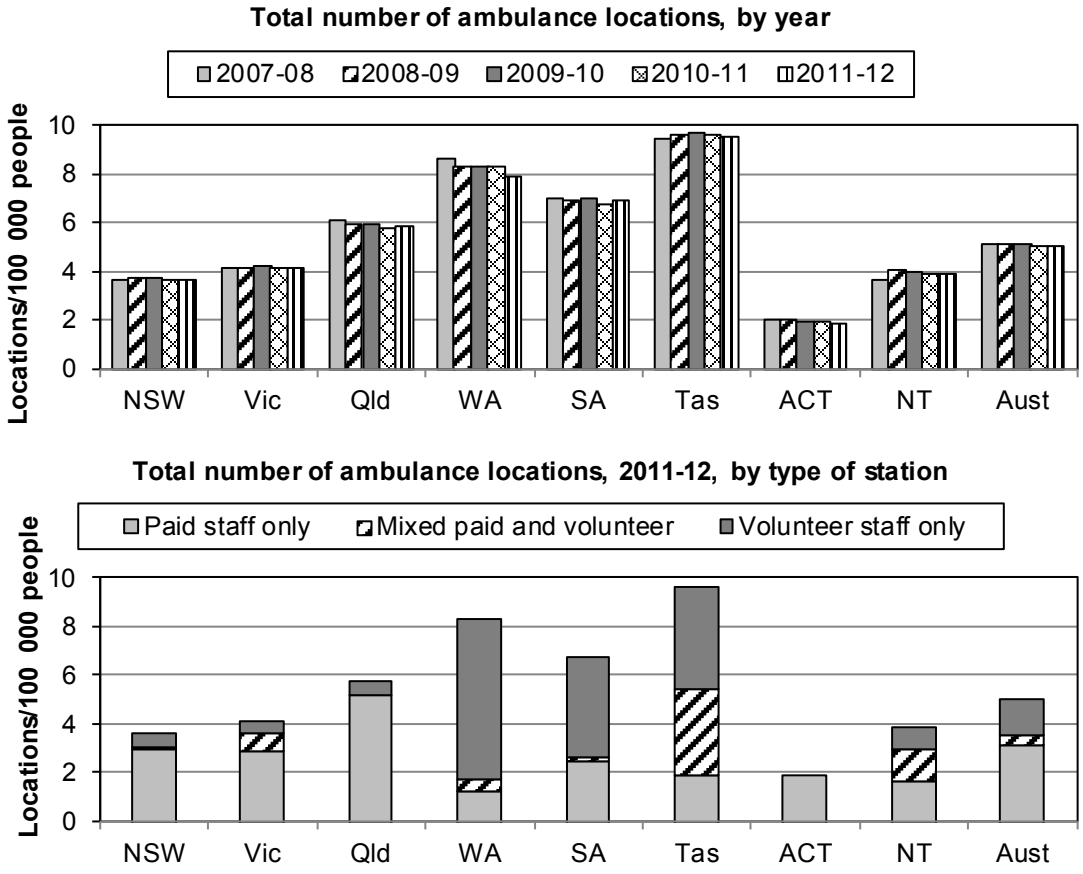
This indicator complements the 'availability of paramedics' indicator, as some jurisdictions' ambulance workforce comprises a large proportion of volunteers, particularly in rural and remote locations. This indicator also helps explain variation in expenditure for ambulance services across jurisdictions. For example, in some jurisdictions, smaller rural areas are serviced by paid ambulance personnel whereas in others, there may be a mix of paid and volunteer personnel or wholly volunteer personnel. Service delivery strategies have a significant impact on cost and help explain differentials in expenditure per person between jurisdictions.

Data reported for these indicators are comparable.

Data quality information for this indicator is at www.pc.gov.au/gsp/reports/rogs/2013.

In 2011-12, the number of salaried, mixed and volunteer response locations per 100 000 people varied across jurisdictions (table 9A.36 and figure 9.21).

Figure 9.21 **Number of paid, mixed and volunteer response locations, per 100 000 people**[a, b, c, d]



[a] Historical rates in this figure may differ from those in previous reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). [b] Some jurisdictions do not satisfy the criteria for all the staffing categories. [c] Response locations data for 2007-08 and subsequent years reflect changes in the new data definition, which does not include first responder locations. [d] ACT: There are no mixed or volunteer only response locations in the ACT.

Source: State and Territory governments (unpublished); table 9A.36.

Availability of ambulance officers/paramedics

'Availability of ambulance officers/paramedics' is another indicator of governments' objective of providing equitable and accessible ambulance services to communities (box 9.16).

Box 9.16 **Availability of ambulance officers/paramedics**

'Availability of ambulance officers/paramedics' is defined as the number of full time equivalent ambulance officers/paramedics per 100 000 people. Ambulance officers/paramedics includes student and base level ambulance officers and qualified ambulance officers but excludes patient transport officers.

High or increasing availability of ambulance officers/paramedics per 100 000 people (indicating high or increasing ambulance service availability) is desirable.

The role of paramedics is expanding to provide primary health care, improve emergency response capabilities and strengthen community healthcare collaborations in rural and remote communities (Stirling et al. 2007). Many rural and remote communities do not have access to adequate health care due, in part, to the difficulty of recruiting and retaining health professionals. Paramedics provide some of these communities with extended access to health service delivery. Expanding roles are also developing in metropolitan areas as a response to overstretched emergency departments where paramedics can continue caring for patients on arrival at hospital.

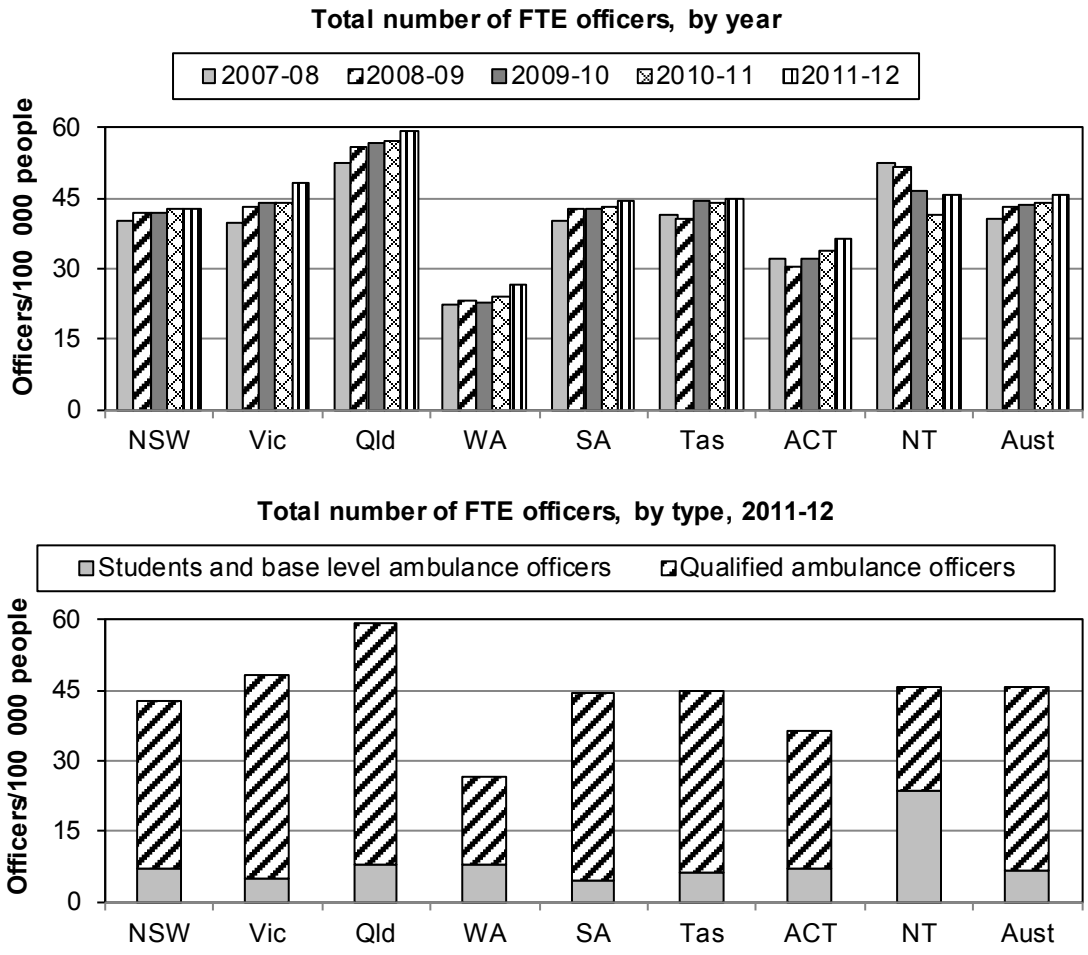
This indicator needs to be interpreted with care because ambulance responses in some jurisdictions, particularly in rural and remote locations, are predominantly provided by volunteers. Therefore the results reported may indicate a lower level of access for these jurisdictions. However, this indicator is complemented by the response locations indicator, which identifies jurisdictions that provide an ambulance response utilising volunteers. The higher the proportion of paramedics in a jurisdiction the higher the cost of service provision. In small rural areas which have low frequency of medical emergencies it is very costly to provide paramedic personnel and it also raises issues with skills maintenance for paramedics when the caseload they are exposed to is low.

Data for this indicator are not directly comparable.

Data quality information for this indicator is under development.

Nationally, there were 45.9 FTE ambulance officers (including student and base level officers) per 100 000 people in 2011-12, which varied across jurisdictions (table 9A.33 and figure 9.22).

Figure 9.22 **Number of full time equivalent ambulance officers**[a, b, c]



[a] Data relate to paid staff only. [b] Historical rates in this figure may differ from those in previous reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). [c] SA and Aust: 2010-11 ambulance financial and workforce data have been revised as data not available for the 2012 Report due to reporting system issues.

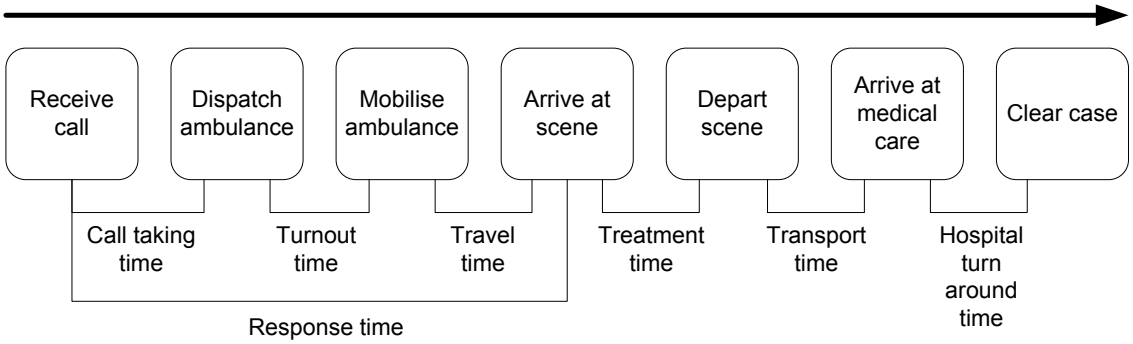
Source: State and Territory governments (unpublished); table 9A.33.

Response times

'Response times' are indicators of governments' objective of providing equitable, accessible and effective ambulance services to communities (box 9.17).

Box 9.17 **Response times**

'Response times' (as illustrated below) is defined as the time taken between the arrival of the first responding ambulance resource at the scene of an emergency in code 1 situations and the initial receipt of the call for an emergency ambulance at the communications centre.



Response times are calculated at the 50th and 90th percentile — the time within which 50 per cent and 90 per cent of the first responding ambulance resources arrive at the scene of an emergency in code 1 situations, respectively.

Emergency responses are categorised by an assessment of the severity of the medical problem:

- code 1 — responses to potentially life threatening situations using warning devices
- code 2 — responses to acutely ill patients (not in life threatening situations) where attendance is necessary but no warning devices are used.

Short or reducing response times suggest the adverse effects on patients and the community of emergencies requiring ambulance services are reduced.

Data quality information for this indicator is under development.

Response time data need to be interpreted with care, because performance is not directly comparable across jurisdictions. There are many factors that influence response times including:

- land area, and population size and density — data calculated on a state-wide basis for some jurisdictions represent responses to urban, rural and remote areas, while others include urban centres only
- the dispersion of the population (particularly rural/urban population proportions), topography, road/transport infrastructure and traffic densities
- crewing configurations, response systems and processes, and travel distances — for example, some jurisdictions include responses from volunteer stations (often in rural areas) where turnout times are generally longer because volunteers are on call as distinct from being on duty.

Although definitions of response times are consistent, not all jurisdictions have systems in place to capture all components of response time for all cases, from the time of the call to arrival at the scene. Differences across jurisdictions in definitions of geography, personnel mix, and system type for capturing data, affect the comparability of response times data.

Urban centre response times

'Urban centre response times' is an indicator of governments' objective of providing equitable and accessible ambulance services to communities (box 9.18).

Box 9.18 **Urban centre response times**

'Urban centre response times' is the response time, as defined in box 9.17. Urban centre response times are currently measured by the response times within each jurisdictions' capital city — boundaries based on the ABS Urban Centres Localities structure. Capital cities are Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart, Canberra and Darwin.

Short or reducing response times suggest the adverse effects on patients and the community of emergencies requiring ambulance services are reduced.

Population density across Australian capital cities varies considerably and this can impact on response time performance. This indicator might be further developed to report data for urban centres with populations of 50 000 and above in future reports.

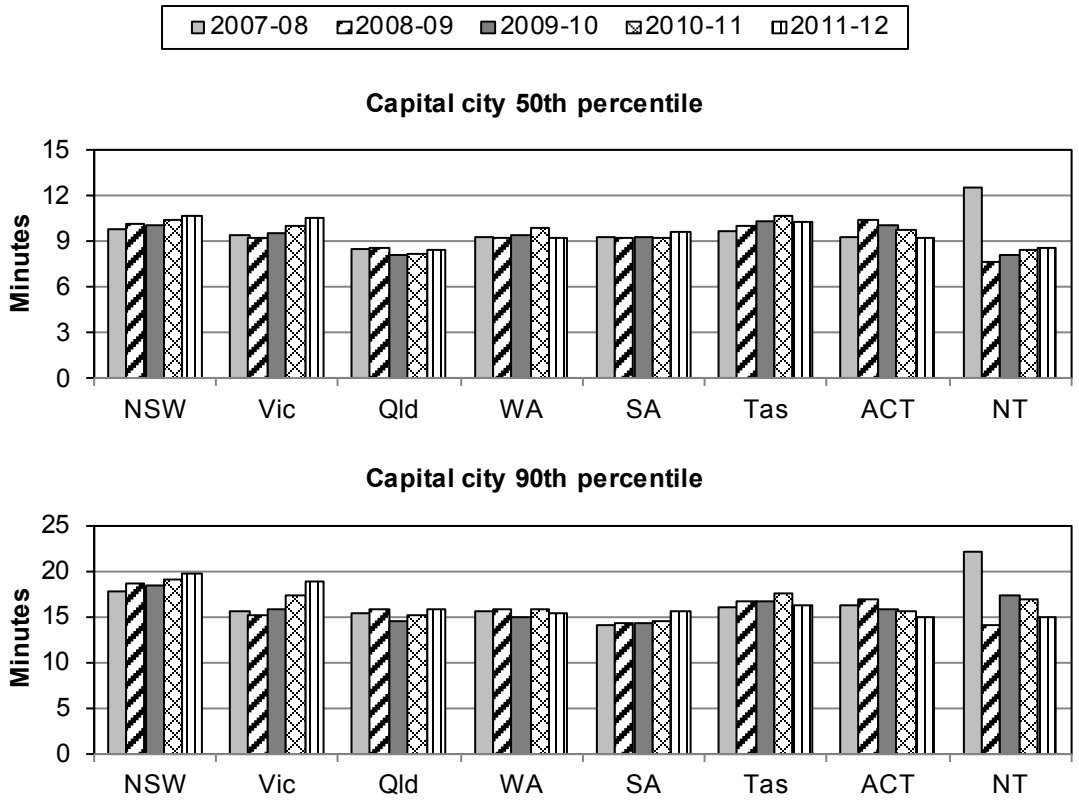
Data for this indicator are not directly comparable.

Data quality information for this indicator is under development.

In 2011-12, the time within which 50 per cent of the capital city first responding ambulance resources arrived at the scene of an emergency in code 1 situations ranged across jurisdictions from 8.5 to 10.7 minutes (table 9A.40). The time within which 90 per cent of the capital city first responding ambulance resources arrived at the scene of an emergency in code 1 situations ranged from 14.8 to 19.7 minutes across jurisdictions (table 9A.40).

Capital city response times within most jurisdictions remained steady between 2007-08 and 2011-12 (figure 9.23).

Figure 9.23 **Ambulance response times, capital city**[a, b, c]



[a] Response times commence from the following time points: Victoria, SA and Tasmania first key stroke; NSW, Queensland and WA transfer to dispatch; and the NT crew dispatched. In 2007-08 the ACT response times commence from the first key stroke, whereas, in 2006-07 response times commenced from incident creation. Therefore, ACT data across years are not directly comparable. Capital city response times are calculated using urban centre boundaries based on the ABS Urban Centres Localities structure. Response times for NSW and SA do not strictly adhere to the urban centre boundaries. [b] Vic: Prior to 2007-08, data were sourced from Patient Care Records completed by paramedics; from 2007-08 metropolitan data were sourced from CAD system and not directly comparable with previous years. [c] Qld: Casualty room attendances are not included in response count and, therefore, are not reflected in response times data. Response time calculations for percentiles for both Capital city and state-wide were sourced from the CAD system.

Source: ABS (2008 and unpublished) *Statistical Geography: Volume 3 — Australian Standard Geographical Classification (ASGC) Urban Centres Localities, 2006,* Cat. no. 2909.0, Canberra; State and Territory governments (unpublished); table 9A.40.

Effectiveness — access

Effectiveness of access indicators measure how well the outputs of a service achieve the stated objective(s) of that service in a timely and affordable manner to the community.

State-wide response times

'State-wide response times' is an indicator of governments' objective of providing accessible and effective ambulance services to communities (box 9.19).

Box 9.19 State-wide response times

'State-wide response times' is the response time, as defined in box 9.17, for state-wide responses.

Short or reducing response times suggest the adverse effects on patients and the community of emergencies requiring ambulance services are reduced.

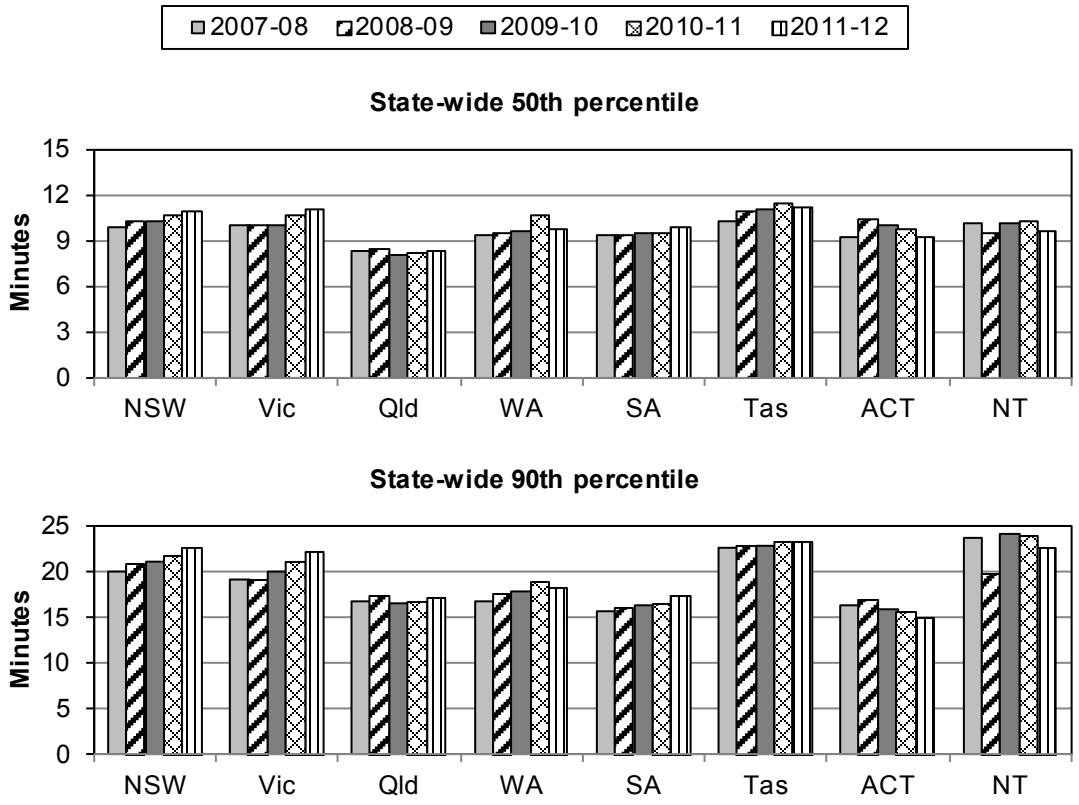
Data for this indicator are not directly comparable.

Data quality information for this indicator is under development.

In 2011-12, the time within which 50 per cent of the state-wide first responding ambulance resources arrived at the scene of an emergency in code 1 situations ranged across jurisdictions from 8.3 to 11.2 minutes (table 9A.40). The time within which 90 per cent of the state-wide first responding ambulance resources arrived at the scene of an emergency in code 1 situations ranged from 14.8 to 23.1 minutes (table 9A.40).

State-wide response times within most jurisdictions remained relatively steady between 2007-08 and 2011-12 (figure 9.24). Some jurisdictions' data indicate increases in response times over this 5 year period (table 9A.40).

Figure 9.24 **Ambulance response times, state-wide**[a, b, c]



[a] Response times commence from the following time points: Victoria, SA and Tasmania first key stroke; NSW, Queensland and WA transfer to dispatch; and the NT crew dispatched. Capital city response times are calculated using urban centre boundaries based on the ABS Urban Centres Localities structure. Response times for NSW and SA do not strictly adhere to the urban centre boundaries. [b] Vic: Prior to 2007-08, data were sourced from Patient Care Records completed by paramedics; from 2007-08 metropolitan data were sourced from CAD system and not directly comparable with previous years. [c] Qld: Casualty room attendances are not included in response count and, therefore, are not reflected in response times data. Response time calculations for percentiles for both Capital city and state-wide were sourced from the CAD system.

Source: State and Territory governments (unpublished); table 9A.40.

Triple zero call answering time

'Triple zero call answering time' has been identified for development as an indicator of governments' objective of providing accessible and effective ambulance services to the community (box 9.20).

Box 9.20 **Triple zero call answering time**

'Triple zero call answering time' is yet to be defined.

This indicator has been identified for development (through the CAA) and reporting in future.

Effectiveness — appropriateness

Appropriateness indicators measure governments' objective to deliver ambulance services that meet clients' needs (box 9.21).

Box 9.21 Performance indicator — appropriateness

'Appropriateness' indicators measure how well services meet clients' needs.

Appropriateness has been identified as a key area for development in future reports.

Effectiveness — quality — safety

Quality indicators reflect the extent to which a service is suited to its purpose and conforms to specifications where specific aspects of quality can be measured against.

Safety is the avoidance, or reduction to acceptable levels, of actual or potential harm from ambulance services. Safety has been identified as a key area for development in future reports.

Clinical incidents

'Clinical incidents' has been identified as an overarching indicator of governments' objective to deliver safe ambulance services to the community (box 9.22).

Box 9.22 Clinical incidents

'Clinical incidents' are broadly defined as adverse events that occur because of ambulance service system failure, which result in death or serious harm to a patient.

Clinical incidents will incorporate a wider range of categories than sentinel events. (A sentinel event is an adverse event that occurs because of health system and process deficiencies and which results in the death of, or serious harm to, a patient.)

This indicator has been identified for development (through the CAA and in accordance with national health-wide reporting standards) and reporting in future.

Effectiveness — quality — clinical

Clinical indicators measure the effectiveness and quality of clinical interventions and treatments. Clinical indicators have been identified as a key area for development in future reports.

Clinical interventions and treatments

'Clinical interventions and treatments' has been identified as an overarching indicator of governments' objective to meet clients' needs through delivery of quality ambulance services (box 9.23).

Box 9.23 Clinical interventions and treatments

'Clinical interventions and treatments' is yet to be defined.

In the short to medium term, the clinical dimension is likely to provide indicators of service outputs and outcomes. In the longer term additional clinical measures might include indicators of the effectiveness of ambulance services interventions and treatments.

Current development work is focused on an indicator of 'cardiac arrest survival to hospital discharge' in the short term and, in the medium term, an indicator of 'pain management' (in the ambulance events outcomes section).

This indicator has been identified for development (through the CAA) and reporting in future.

The indicator 'cardiac arrest survived event rate' reported in the outcomes section of this chapter has strong links to clinical interventions and treatments.

Effectiveness — quality — responsiveness

Responsiveness is the provision of services that are client orientated and respectful of clients' dignity, autonomy, confidentiality, amenity, choices, and social and cultural needs.

The indicator 'patient satisfaction' reported in the outcomes section of this chapter has strong links to responsiveness.

Effectiveness — quality — continuity

Continuity is the provision of uninterrupted, timely, coordinated healthcare, interventions and actions across programs, practitioners and organisations. The Steering Committee has identified continuity as a key area for development in future reports.

Continuity of care

'Continuity of care' is an indicator of governments' objective to meet clients' needs through delivery of coordinated health care, including ambulance services (box 9.24).

Box 9.24 **Continuity of care**

'Continuity of care' has been broadly defined as transporting the right patient to the right hospital. Some ambulance services are using secondary triage strategies where patients with particular conditions (for example, cardiac and stroke) are transported directly to the hospital or specialised centre where the best treatment for their needs can be provided, rather than transported to the closest hospital where those services might not be available.

This indicator has been identified for development (through the CAA) and reporting in future.

Effectiveness — sustainability

Sustainability is the capacity to provide infrastructure (that is, workforce, facilities, and equipment) into the future, be innovative and respond to emerging needs of the community.

Workforce by age group

'Workforce by age group' is an indicator of governments' objective to deliver sustainable ambulance services (box 9.25).

Box 9.25 **Workforce by age group**

'Workforce by age group' is defined as the age profile of the workforce, measured by the proportion of the operational workforce in 10 year age brackets (under 30, 30–39, 40–49, 50–59 and 60 and over).

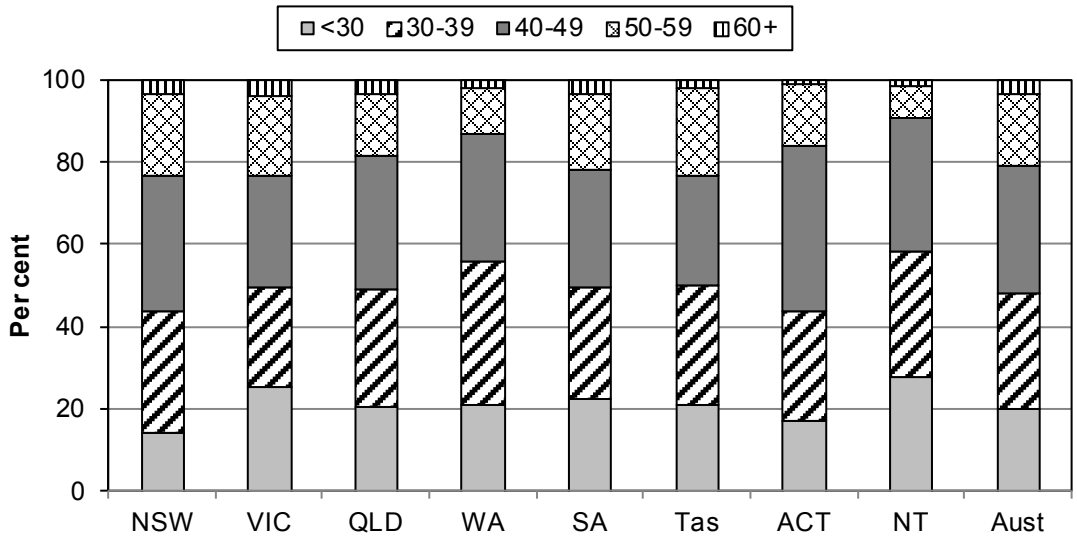
A low or decreasing proportion of the workforce who are in the younger age groups and/or a high or increasing proportion who are closer to retirement, the more likely sustainability problems are to arise in the coming decade as the older age group starts to retire.

Data reported for these indicators are comparable.

Data quality information for this indicator is at www.pc.gov.au/gsp/reports/rogs/2013.

The age profile of the ambulance workforce for each jurisdiction is shown in figure 9.25. Nationally in 2011-12, around 78.8 per cent of the ambulance workforce were aged under 50 a decrease from 81.0 in 2007-08 (table 9A.34).

Figure 9.25 **Ambulance workforce, by age group, 2011-12**



Source: State and Territory governments (unpublished), table 9A.34.

Staff attrition

'Staff attrition' is an indicator of governments' objective to deliver sustainable ambulance services (box 9.26).

Box 9.26 **Staff attrition**

'Staff attrition' is defined as level of attrition in the operational workforce. It is calculated as the number of FTE employees who exit the organisation as a proportion of the number of FTE employees. It is based on staff FTE defined as operational positions where paramedic qualifications are either essential or desirable to the role.

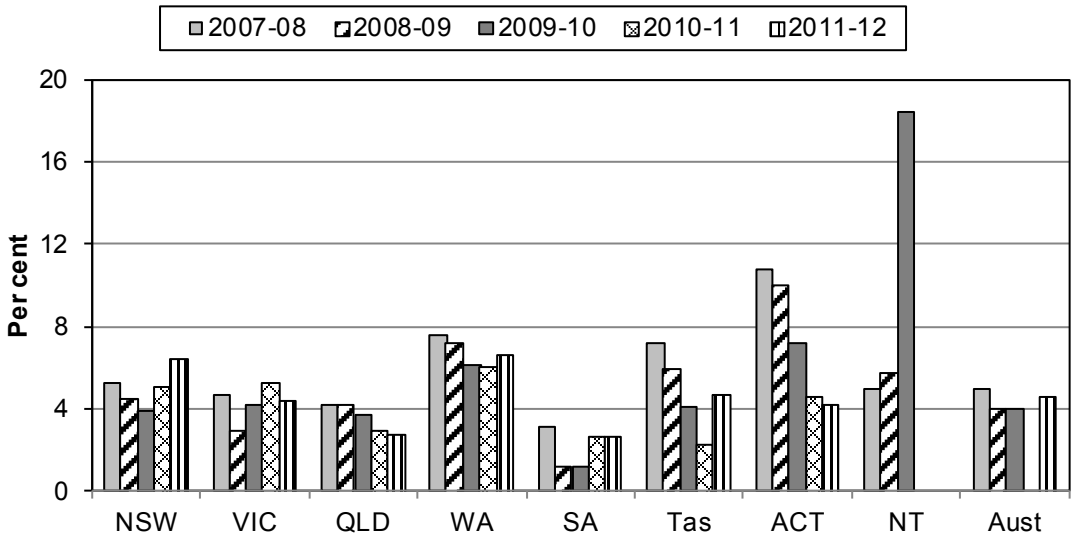
Low or decreasing levels of staff attrition are desirable.

Data for this indicator are not directly comparable.

Data quality information for this indicator is under development.

The proportion of attrition in the ambulance workforce for each jurisdiction is shown in figure 9.26. Across jurisdictions, the staff attrition rate was between 2.6 per cent and 6.5 per cent in 2011-12.

Figure 9.26 **Ambulance staff attrition**[a, b]



a SA and Aust: 2010-11 ambulance financial and workforce data have been revised as data not available for the 2012 Report due to reporting system issues.

Source: State and Territory governments (unpublished), table 9A.34.

Efficiency

Care needs to be taken when comparing efficiency data across jurisdictions because there are differences in the reporting of a range of cost items and funding arrangements (funding policies and taxing regimes). Some jurisdictions, for example, have a greater proportion of government funding relative to levies compared with other jurisdictions. Also, differences in geographic size, terrain, climate, and population dispersal may affect costs of infrastructure and numbers of service delivery locations per person.

Ambulance service organisation's expenditure per person

'Ambulance service organisations' expenditure per person' is an indicator of governments' objective to deliver efficient ambulance services (box 9.27).

Box 9.27 **Ambulance service expenditure per person**

'Ambulance service organisations' expenditure per person' is defined as total ambulance service organisation expenditure per person in the population.

All else being equal, lower expenditure per person represents greater efficiency. However, efficiency data are difficult to interpret. While high or increasing expenditure per person may reflect deteriorating efficiency, it may also reflect changes in aspects of the service (such as improved response) or the characteristics of events requiring ambulance service response fire events (such as more serious para-medical challenges). Similarly, low or declining expenditure per person may reflect improving efficiency or lower quality responses or less challenging cases.

Expenditure per person is employed as a proxy for efficiency. Expenditure per ambulance event is not used as a proxy for ambulance service organisation efficiency because an organisation that applies more resources to the prevention and preparedness components of community safety to reduce the demand for ambulance services could erroneously appear to be less efficient.

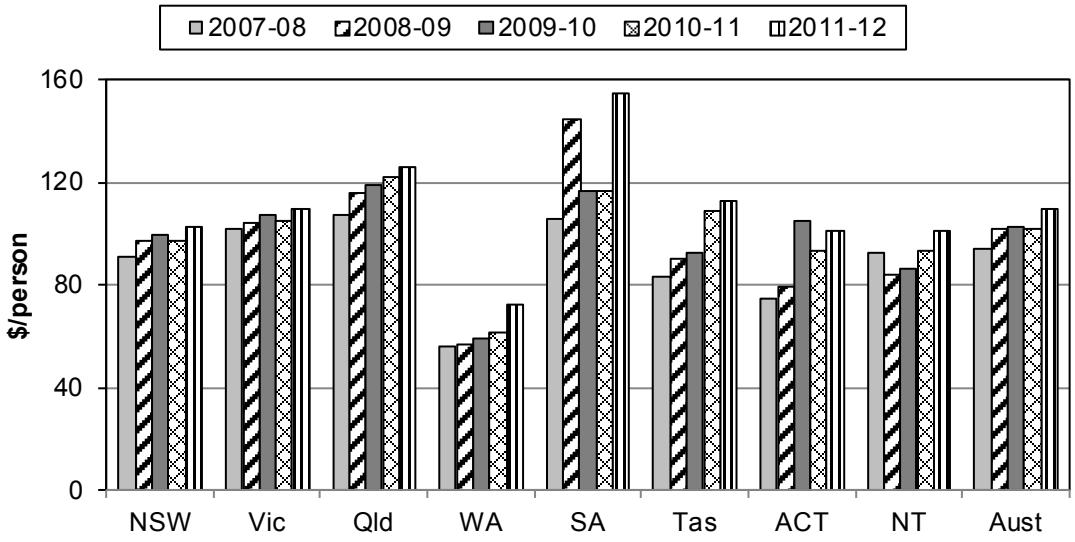
Data for this indicator are not directly comparable.

Data quality information for this indicator is under development.

Total cost of ambulance service organisations and the cost to government of funding ambulance service organisations are reported. Both are reported, because revenue from transport fees is significant for a number of jurisdictions.

Nationally, total expenditure on ambulance service organisations was $109.58 per person in 2011-12 (figure 9.27).

Figure 9.27 **Ambulance service organisations' expenditure per person (2011-12 dollars)[a, b, c, d, e]**



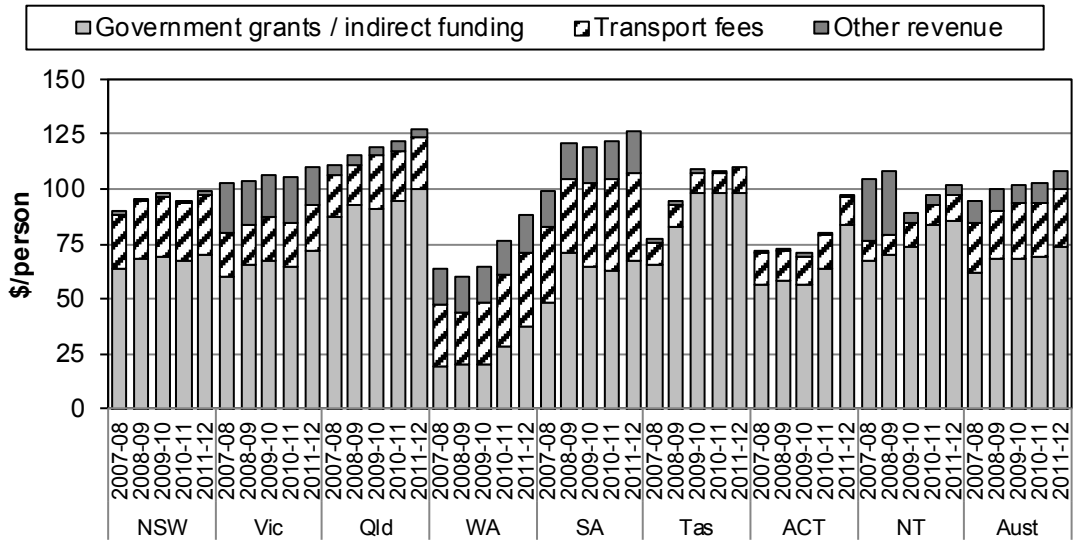
[a] Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Recent volatility in the GDP deflator series affects annual movements of real expenditure. See the Statistical appendix (section A.5) for details. [b] Historical rates in this figure may differ from those in previous reports. Population data are revised using Final Rebased ERP data following each Census of Population and Housing (the most recent census for which data are available is 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 December). [c] WA and NT: use a contracted service model for ambulance services. [d] SA: 2011-12 SA Ambulance Service results include some significant once-off items. There are two items involving calculations of net present value using the long term government bond rate as the long term discount rate. In 2012 that rate reduced significantly which caused increases in: (1) Long Service Leave Liability which was re-valued up by about $9 million. (2) the Defined Benefit Superannuation Fund liability which experienced an actuarial loss of about $24 million. The 2011-12 results also includes back-pay for an Enterprise Bargaining Agreement. The SAAS EB has a preserved commencement date and consequently once the EB is ratified some increases are backdated to end of the last agreement (31 December 2010). The 2011-12 results include a retrospective adjustment of approximately $4 million for the 6 months from January 2011 to June 2011. 2008-09 data reflect three significant events that year: (1) increase in wages (2) subsequent back pay paid to frontline paramedics as a result of the 'work value' case (from the 2007 enterprise bargaining agreement) reaching finalisation and (3) an increase in the number of frontline paramedics recruited. [e] SA and Aust: 2010-11 ambulance financial and workforce data have been revised as data not available for the 2012 Report due to reporting system issues.

Source: State and Territory governments (unpublished); table 9A.42.

The proportions of funding sources varied across jurisdictions (figure 9.28).

- Nationally, total government grants and indirect government funding of ambulance service organisations per person in 2011-12 was $73.61 (68.0 per cent of total funding for ambulance service organisations).
- Transport fees in 2011-12 averaged $25.70 per person.
- The remaining $8.72 funding per person was from other revenue (table 9A.43).

Figure 9.28 **Sources of ambulance service organisations' revenue per person, 2011-12**[a, b]



[a] SA and Aust: 2010 11 ambulance financial and workforce data have been revised as data not available for the 2012 Report due to reporting system issues. [b] Other revenue is equal to the sum of subscriptions, donations and miscellaneous revenue.

Source: State and Territory governments (unpublished); table 9A.43.

Expenditure per urgent and non-urgent response

'Expenditure per urgent and non-urgent response' has been identified for development as an indicator of governments' objective to deliver efficient ambulance services (box 9.28).

Box 9.28 **Expenditure per urgent and non-urgent response**

'Expenditure per urgent and non-urgent response' is yet to be defined.

This indicator has been identified for development (through the CAA) and reporting in future.

Outcomes

Outcomes are the impact of services on the status of an individual or group (while outputs are the services delivered) (see chapter 1, section 1.5).

Cardiac arrest survived event rate

'Cardiac arrest survived event rate' is an indicator of governments' objective to deliver effective ambulance services (box 9.29).

Box 9.29 **Cardiac arrest survived event rate**

'Cardiac arrest survived event rate' is defined by three measures as:

- the percentage of patients aged 16 years and over who:
  - were in out-of-hospital cardiac arrest (excluding paramedic witnessed)
  - where any chest compressions and/or defibrillation was undertaken by ambulance/Emergency Medical Services (EMS) personnel
  - have a return to spontaneous circulation (ROSC) on arrival at hospital.
- the percentage of patients aged 16 years and over who:
  - were in out-of-hospital cardiac arrest (excluding paramedic witnessed)
  - where the arrest rhythm on the first ECG assessment was either Ventricular Fibrillation or Ventricular Tachycardia (VF/VT)
  - have a return of spontaneous circulation (ROSC) on arrival at hospital.
- the percentage of patients aged 16 years and over who:
  - were in out-of-hospital cardiac arrest that occurred in the presence of ambulance paramedic or officer
  - have a return of spontaneous circulation (ROSC) on arrival at hospital.

For the out-of-hospital setting, a survived event means a sustained ROSC with spontaneous circulation (that is, the patient having a pulse) until administration and transfer of care to the medical staff at the receiving hospital (Jacobs, et al. 2004).

Patients in Ventricular Fibrillation (VF) or Ventricular Tachycardia (VT) are more likely to have better outcomes compared with other causes of cardiac arrest as these conditions are primarily correctable through defibrillation.

Paramedic witnessed cardiac arrests are included in the measures reported to show that cardiac arrests that are treated immediately by the paramedic have a better likelihood of survival due to this immediate and rapid intervention. This is substantially different to cardiac arrests occurring prior to the ambulance arriving where such increasing periods of treatment delay are known to negatively influence outcome.

A high or increasing cardiac arrest survived event rate is desirable.

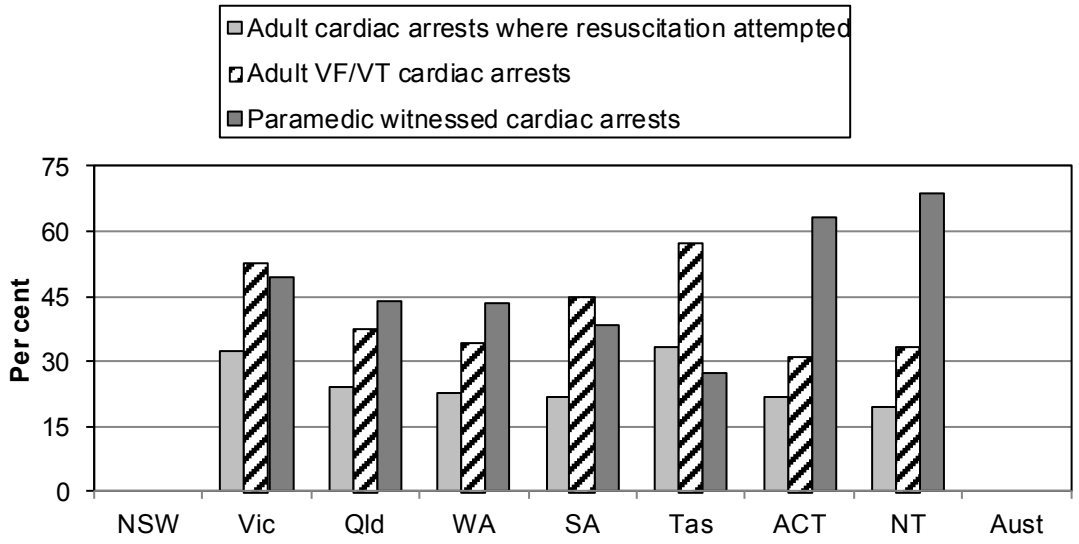
Data for this indicator are not directly comparable.

Data quality information for this indicator is under development.

The survival rate from out-of-hospital witnessed cardiac arrests varied across jurisdictions in 2011-12 (figure 9.29). Cardiac arrest data are not comparable across jurisdictions and the CAA is undertaking a review to improve data comparability

for this indicator. Available data on the further breakdown of this indicator are reported in attachment table 9A.38.

Figure 9.29 **Cardiac arrest survived event rate, 2011-12**[a, b, c, d, e]



[a] A 'survived event' is defined as the patient having return of spontaneous circulation (ROSC) on arrival to hospital (that is, the patient having a pulse). This is not the same as the patient surviving the cardiac arrest as having ROSC is only one factor that contributes to the overall likelihood of survival. [b] The measure 'adult cardiac arrests where resuscitation attempted' provides an overall indicator of outcome without specific consideration to other factors known to influence survival. [c] NSW: Data consistency issues mean that this measure is unable to be reported. NSW is awaiting the development of a national methodology for calculation of this measure prior to revising its internal processes. [d] Vic: Excludes patients with unknown rhythm on arrival at hospital. [e] Cardiac arrest data are not comparable between jurisdictions due to different methods of reporting. Data are only comparable between years for each individual jurisdiction (unless caveats say otherwise).

Source: State and Territory governments (unpublished); table 9A.38.

Across all jurisdictions, out of hospital cardiac survival rates have been improving. The mini-case study from Ambulance Victoria highlights some of the programs jurisdictions have introduced to help improve survival rates (box 9.30).

Box 9.30 **Mini case study: Ambulance Victoria — Improvements in Cardiac Arrest Outcomes**

Cardiovascular disease is the largest cause of premature death in Australia. Investing in strategies to improve cardiovascular health outcomes is one of the Australian Government's National Health Priority Areas (AIHW 2012). Nationally, survival from out-of-hospital cardiac arrest is less than 10 per cent, and access to early interventions offers the best chance of survival.

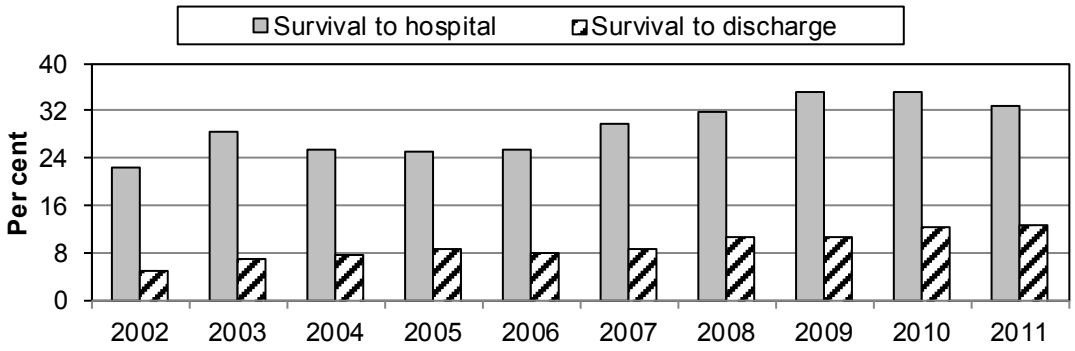
In Victoria, out-of-hospital cardiac arrest survival rates in both metropolitan and rural regions are significantly above internationally pooled rates (Sasson et. al. 2010). These

Continued next page

Box 9.30 **Continued**

have improved over the past decade (figure 1). In 2011, 32.8 per cent of patients survived to hospital and 13.2 per cent survived to hospital discharge. Patients with a presenting with a heartbeat (a rhythm of ventricular fibrillation/ ventricular tachycardia (VF/VT)) on arrival fair significantly better, with 52 per cent surviving to hospital and 28 per cent to hospital discharge (Victorian Government unpublished).

Figure 1: Statewide survival for adult out of hospital cardiac aetiology where emergency services attempted resuscitation



Throughout this period, Ambulance Victoria (AV) and partner agencies have sought to improve out of hospital cardiac arrest survival rates by providing an improved system of care and a range of early cardiac arrest treatment programs, supported by a sound statistical and research base.

Victorian Ambulance Cardiac Arrest Registry (VACAR)

The Victorian Ambulance Cardiac Arrest Registry (VACAR) (recently aided by VACIS — an integrated electronic patient information system) has established information dating back to 1999, for all patients in Victoria, who suffer cardiac arrest and receive an ambulance. VACAR is one of the largest statewide single service cardiac arrest registries in the world (n>60 000 patient episodes) (Sasson et. al. 2010).

VACAR has been used effectively by AV to; evaluate new approaches to treating patients (some highlighted below); inform strategy decisions; support epidemiological research; provide a baseline for clinical trials; and evaluate adherence to clinical practice guidelines and provide a quality feedback loop to paramedics and managers.

Modelling from the VACAR demonstrates that for every one-minute increase in response time, the odds of survival for cardiac arrest patients is reduced by 9 per cent (adjusted odds ratio 0.91 95 per cent CI (0.86-0.96)) (Fridman et al 2007). This has led AV to trial a range of early intervention programs to address cardiac arrest.

Emergency Medical Response

The Emergency Medical Response (EMR) Program has been fully operational since October 2001. The program involves the simultaneous dispatch of resources by both AV and the Metropolitan Fire Brigade to suspected cardiac arrest cases, with the aim of decreasing the response times and increasing their survival chances.

Continued next page

Box 9.30 **Continued**

Since the EMR program commenced there has been a clear positive impact on response times to cardiac arrest in metropolitan areas (Boyle et al. 2009). Recent modelling indicates that the 90th percentile response to EMR eligible events has reduced by more than one minute (Victorian Government unpublished).

For non-Metropolitan Fire Brigade regions, analysis of the first two years of a Country Fire Authority pilot has demonstrated a reduction of more than four minutes to the 90th percentile response time to EMR eligible events (Victorian Government unpublished).

Community Emergency Response Teams

Community Emergency Response Teams (CERTs) consist of ambulance volunteers who provide basic emergency care until the ambulance arrive. Operating within communities where the nearest ambulance branch is at a distance, CERTs are dispatched to an urgent job when an ambulance is also dispatched. There are 29 CERTs across Victoria with over 600 volunteers. Where CERTs have been established, AV data shows that they arrive first at 87 per cent of eligible cases, leading to a reduction of response times by an average of 10-15 minutes.

Public Access Defibrillation (PAD)

Twenty-four ambulance governed PAD sites have been implemented (including train stations, airports and busy tourist attractions). Infrastructure (Automatic External Defibrillators (AEDS)), training and insurance is provided by AV. A registry has also been established to track public automatic external defibrillators (AEDs) funded outside of AV (www.registermyaed.com.au).

Four Steps For Life CPR Awareness

Modelling from VACAR has shown that bystander CPR increases the probability of:

- ambulance paramedics finding cardiac arrest patients in VF/VT
- survival in VF/VT patients by 200 per cent (odds ratio 2.07 (95% CI 1.30 – 3.30) (Fridman et al 2007).

The 4 Steps for Life program was introduced in 2004. The program is a DVD based training program, initially aimed at the at-risk over-50 age group, but recently expanded to include Year 9 students (2010). The 4 Steps for Life program has also been extended to ethnic and regional communities, and to high-risk workplaces.

Source(s): AIHW (Australian Institute of Health and Welfare) 2012, *Health priority areas — Cardiovascular Health*, www.aihw.gov.au/cardiovascular-health-priority-area (accessed 1 October 2012); Sasson, Rogers, Dahl and Kellermann 2010, 'Predictors of Survival From Out-of-Hospital Cardiac Arrest', *Circulation: Cardiovascular Quality and Outcomes*, 2010;3(1):63-81; Fridman, M., Barnes, V. et al 2007, 'A model of survival following pre-hospital cardiac arrest based on the Victorian Ambulance Cardiac Arrest Register', *Resuscitation*, 75 (2), 311-322; Boyle, Bibbym Williams, Huggins, Morton, and Shugg 2009, 'A Review of the First Seven Years of the Metropolitan Fire Brigade Response to Cardiac Arrests', *Journal of Emergency Primary Health Care*, Vol 7, Issue 3, 2009.

Cardiac arrest survival to hospital discharge

'Cardiac arrest survival to hospital discharge' has been identified for development as an indicator of governments' objective to deliver effective ambulance services (box 9.31).

Box 9.31 Cardiac arrest survival to hospital discharge

'Cardiac arrest survival to hospital discharge' is yet to be defined.

A high or increasing survival rate is a desirable outcome.

This indicator has been identified for development (through the CAA) and reporting in future.

Pain management

'Pain management' has been identified for development as an indicator of governments' objective to deliver effective ambulance services (box 9.32).

Box 9.32 Pain management

'Pain management' is yet to be defined.

The indicator has been identified for development (through the CAA) and reporting in future.

Level of patient satisfaction

'Level of patient satisfaction' is an indicator of governments' objective to deliver responsive ambulance services (box 9.33).

Data were collected annually by jurisdictions in May each year, using the same core questionnaire, and collated by the CAA. The CAA survey obtained 4123 usable responses nationally from a randomly selected sample of emergency and urgent patients who were transported within two months of the sample date (table 9A.39).

Box 9.33 **Level of patient satisfaction**

'Level of patient satisfaction' is defined as the total number of patients who were either 'satisfied' or 'very satisfied' with ambulance services they had received in the previous 12 months, divided by the total number of patients that responded to the *National Patient Satisfaction Survey* (CAA 2011).

A higher level or increase in the proportion of patients who were either 'satisfied' or 'very satisfied' suggests greater success in meeting patient needs.

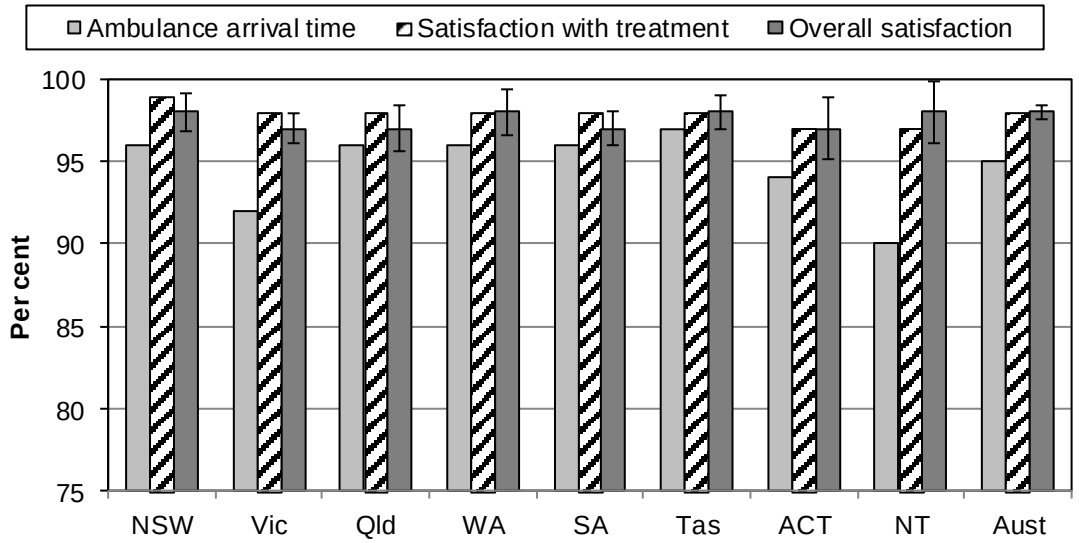
This indicator does not provide information on why some patients were not satisfied. It also does not provide information on the level of patient expectations.

Data for this indicator are comparable.

Data quality information for this indicator is at www.pc.gov.au/gsp/reports/rogs/2013.

The estimated overall satisfaction levels for ambulance patients were similar across all jurisdictions and all years (time series data are reported in table 9A.39). Standard errors for the 95 per cent confidence interval, available for 2009–2011 patient satisfaction data, indicate that there are no statistically significant differences across jurisdictions for overall patient satisfaction. Similarly, there are small differences across jurisdictions for particular aspects of the ambulance service (figure 9.30).

Figure 9.30 **Proportion of ambulance users who were satisfied or very satisfied with the ambulance service, 2011[a]**



a Based on a survey of people who used an ambulance service in the previous 12 months. Jurisdictions conducted the surveys at various times during each year. Standard errors for the 95 per cent confidence interval for overall patient satisfaction are included.

Source: CAA 2007–11 *National Patient Mailout Satisfaction Research*; table 9A.39.

9.7 Future directions in performance reporting

A number of developments are underway to improve the comparability and accuracy of data, and to expand the scope of reporting on emergency services. Performance indicators for fire and ambulance services are being improved with the assistance of the Australasian Fire and Emergency Service Authorities Council, the Australian Council of State Emergency Services and the CAA.

Fire events

Performance measures are currently being developed for the reporting of fires in the landscape. The long-term aim is to report annually on the measures for each relevant jurisdiction across Australia. The key landscape fire performance measures that have been agreed to in concept, subject to the availability of data, for inclusion in future editions of the Report are:

- landscape fire injuries per 100 000 people

and, subject to identification of appropriate denominators to facilitate comparative reporting:

- number of primary dwellings affected by landscape fire
- total number of hours by volunteers on landscape fire suppression.

The focus of current work is on developing agreed data definitions and identifying appropriate data sources.

Ambulance events

Ambulance event reporting continues to focus upon further developing the indicators introduced in the 2009 Report. This will entail continuing development and implementation of data collections for some indicators, and refining those indicators that already have data reported, with ongoing work to increase data completeness and comparability.

Other event types

Other event type services for which performance reporting has yet to be developed include: rescues (including road crash rescue); natural emergency events (other than landscape fires); emergency relief and recovery; and quarantine and disease control.

The EMWG are also developing descriptive data related to the involvement of emergency services at other event types as a part of the Emergency management sector overview (sector overview D).

COAG developments

The Australian, State and Territory governments have recognised that a national, coordinated and cooperative effort is needed to enhance Australia's capacity to withstand and recover from emergencies and disasters (COAG 2009). Accordingly, NEMC developed the *National Strategy for Disaster Resilience*, which COAG adopted on 13 February 2011(COAG 2011).

It is anticipated that work undertaken to achieve the COAG aspirations will lead to improvements in performance reporting for the emergency management sector (see the Emergency management sector overview).

Outcomes from review of Report on Government Services

The COAG endorsed recommendations (December 2009) of the review of the RoGS implemented during 2010 and 2011 are reflected in this Report. Further recommendations will be reflected in future reports.

9.8 Jurisdictions' comments

This section provides comments from each jurisdiction on the services covered in this chapter.

New South Wales Government comments

“NSW experienced a number of significant natural disasters including the January–March 2012 north western and southern NSW floods which covered 75 per cent of the State. These floods alone resulted in 93 Local Government areas receiving Natural Disaster Declarations. Recovery Centres were established at Moree, Wagga Wagga and Griffith and provided services to approximately 3300 people. Disaster Welfare Services administered over $1 million in Personal Hardship and Distress assistance for these floods and a total expenditure of $1.22 million in Personal Hardship and Distress across all events for 2011-12. Overall, $13.36 million was made available for disaster prevention and resilience projects through schemes including the Emergency Volunteer Support Scheme, Auxiliary Disaster Resilience Grants Scheme and the Bushfire Risk Management Grant Scheme.

The Ambulance Service of NSW (ASNSW) provided more than 1 180 000 emergency and non-emergency responses, an average of 3234 responses per day or a call for help every 26.7 seconds. The State Cardiac Reperfusion Program continued to be rolled out across the state. The service implemented standardised rostering processes to improve efficiency as well as rolling out the myShift website to provide a simpler and more transparent process for paramedics to request and allocate overtime for backfilling of shifts and shift swaps. Capital works enhancements included the arrival of two new Beechcraft KingAir 350s and the replacement of Batemans Bay, Byron Bay, Coonamble, Cessnock and Narrabri Ambulance stations.

The NSW Rural Fire Service attended 18 913 fires and other incidents with the Operations Customer Service Centre processing 47 859 calls. The service continued to expand its community risk management framework with over 138 000 hectares of land subject to hazard reduction activity. Property protection works were carried out for 276 050 properties, and 1165 hazard clearing activities were undertaken through the Assist Infirm, Disabled and Elderly Residents Program. The service also investigated 1947 bush fire hazard complaints and processed 5008 fire-prone development assessments.

Fire and Rescue NSW responded to 130 744 emergency incidents and delivered a range of prevention activities, visiting 11 419 homes to install smoke alarms or check batteries, conducting 2854 fire safety presentations to preschool and primary school children and conducting road safety demonstrations to 12 000 high school students. Online home fire safety audits were completed by 7381 people. This year the Community Fire Unit Program grew to 605 Units.

2011-12 required the NSW State Emergency Service to respond to 21 030 Requests for Assistance resulting in 493 112 volunteer hours to assist the community. This included over 400 flood rescue activations and over 3600 additional aviation support tasks. NSW was heavily effected with over 58 flood evacuation orders and over 100 Emergency Alert activations. 31 000 residents were supported as a result of being isolated.”

Victorian Government comments

“ Victoria is undergoing its biggest ever reform to the way it delivers a state-wide emergency management system.

Inquiries into recent disasters — the 2009 Victorian Bushfires Royal Commission and the Review of the 2010-11 Flood Warnings and Response — showed a need for an ‘all hazards, all agencies’ approach to emergency management.

To start the reform process, a Green Paper – Towards a More Disaster Resilient and Safer Victoria was released in September 2011. An Emergency Management White Paper, setting out reform plans is expected to be released late 2012.

In parallel, the Fire Services Commissioner developed Victoria’s first Fire Services Reform Action Plan, which builds on the 2009 Bushfires Royal Commission findings and recommendations. This plan is a rolling three-year program aimed at increasing the interoperability, resilience, capability and capacity of Victoria’s fire service agencies and their service delivery to the community.

In February and March of 2012, flooding affected 20 municipalities in the north-east of Victoria, damaging more than 1500 residential and 1300 agricultural properties. In addition, 13 bridges and 322 roads were impacted.

In response to the March 2012 floods, Ambulance Victoria (AV) assisted with an emergency evacuation of the Numurkah hospital and aged care facilities in the affected area. AV established a Temporary Urgent Care Centre and provided ongoing support to the Numurkah District Health Service.

During the year AV also completed the transition of its communications to the Emergency Services Telecommunications Authority delivering the capability to coordinate ambulance services on a state-wide basis. This is being further supported by the roll–out of satellite navigation equipment linked to the Computer Aided Dispatch system to all metropolitan based ambulances.

In addition, AV have expanded the electrocardiogram (ECG) capability of rural mobile intensive care ambulance units to ensure patients in rural Victoria with cardiac conditions receive appropriate hospital intervention more quickly.

The Office of the Emergency Services Commissioner manages the national telephone Emergency Alert system. This provides the ability to send voice messages to landline phones in a defined geographic area and text (SMS) messages to mobile phones based on the address information of the subscriber. In 2011-12, Emergency Alert was used 15 times in Victoria resulting in more than 33 000 intrusive warning messages being received.

The introduction of a location based capability on the Telstra network will further enhance Emergency Alert by allowing SMS messages to be sent to mobile phones based on their last known location, rather than based on the customer registered service address. A contract with Telstra — signed on 23 December 2011 — will provide this new capability from 1 December 2012. ”

Queensland Government comments

“ In early 2012, Queensland experienced wide spread flooding in the south west of the state, resulting in several towns being isolated. The Queensland Disaster Management Centre was activated to assist the community with evacuations, flood recovery and relief. In total, SES volunteers performed over 64 000 operational hours during 2011-12.

Front-line service delivery was boosted during 2011-12, with the relocation and opening of a new communications centre at the Emergency Services complex, providing Triple Zero (000) systems with a 24 hour, 7 day a week service. The Emergency Management Queensland (EMQ) Helicopter Rescue service also received a boost to its front-line operational capabilities with the opening of a new Emergency Management Queensland Helicopter Rescue Hangar in Brisbane.

Queensland continues to rebuild after flooding of historic proportions in December 2010 stretching into January 2011, followed by February's Tropical Cyclone Yasi in the state's north. The scale of the flooding disaster led to the establishment of the *Queensland Floods Commission of Inquiry*, which has now concluded. An interim report released in August 2011 covered matters associated with flood preparedness to enable key recommendations to be implemented before the 2011-12 wet season. A final report was delivered on 16 March 2012. The Queensland Government agreed to implement all recommendations and its formal response to the final report was tabled in Parliament on 7 June 2012.

On 1 July 2011, a levy paid through electricity accounts, which supported the Community Ambulance Cover (CAC), was abolished. Since then, Queensland residents have received ambulance services throughout Australia, free of charge. The Queensland Ambulance Service continues to provide timely ambulance response services to the community whilst experiencing increasing demand due to an ageing population and a rising incidence of chronic illness requiring access to emergency health services. Response times have remained stable, despite this growing demand. During 2011-12, eight ambulance stations were replaced, refurbished or redeveloped and one new ambulance station was completed.

The Queensland Fire and Rescue Service also continues to deliver timely services to the Queensland community. Both the 50th and 90th percentile response times have improved over recent years. During 2011-12, three replacement fire and rescue stations were completed, one station was redeveloped, and 33 new or replacement fire fighting appliances, comprising urban and rural, were completed.

The State's Rural Fire Service is undergoing a review of its future structure, functions and leadership. The review will involve consultation with rural fire volunteers across the State as well as key interest groups. The review is expected to be finalised in early 2013. ”

Western Australian Government comments

“During 2011-12 emergency service organisations within Western Australia have continued to implement recommendations from major bushfire inquiries. The State Government has provided increased resourcing to support the establishment of the Department of Fire and Emergency Services, which is more structurally and strategically aligned to meet the changing needs of the Western Australian community. The establishment of an Office of Bushfire Mitigation, within the new Department, will support improved preparedness to manage fuel loads and mitigate the impact of bushfire.

In late 2011, significant bushfires in the State's South West region burnt 3620 hectares, destroyed 45 houses, nine chalets and five large sheds, and partially destroyed three more homes. The multi-agency response was managed by the Department of Environment and Conservation, with assistance from career and volunteer firefighters and emergency management partners. Volunteers from the State Emergency Service (SES) and Volunteer Marine Rescue Services provided support in logistical roles and with evacuation of tourists and residents.

The SES was heavily involved in Western Australia's response to four cyclones this year. Tropical Cyclone Iggy in January 2012 and Tropical Cyclone Lua in March 2012 posed the most serious threats, however neither caused significant infrastructure damage.

Severe storms in June 2012 affected an area from Kalbarri, to Kalgoorlie in the east and Israelite Bay on the south coast, with the brunt of the weather felt from Perth to Bunbury. More than 650 SES volunteers answered in excess of 1500 calls for assistance between 7 and 12 June 2012. They were supported by fire service and other agencies' personnel. The storm damaged an electricity supply grid leaving more than 170 000 homes without power.

There has been a reported increase of 37.5 per cent emergency ambulance response and 6.9 per cent increase of non-emergency responses in WA during the 2011-12 financial year. A total of 221 382 patients were transported representing an increase of 12 per cent from the previous year.

Service resourcing has been increased this year with eight additional 24-hour ambulances covering the Perth metropolitan area and six additional day ambulances. The ambulance service is also supported by 27 patient transfer vehicles on weekdays and 11 during weekends. In the country regions across the State, volunteer sub-centres were supported by 14 community paramedics and additional ambulance paramedics in the career sub-centres.

More than 3000 volunteers continue to play important roles as ambulance operatives and through business support functions in ensuring delivery of ambulance services for rural and remote communities.”

South Australian Government comments

“

Fire and Emergency Services

The SA Government published a *Strategic Direction 2008-2014 Statement* for fire and emergency services that commits the sector to Community Engagement, Seamless Integration, Improved Communication, Building Partnerships, Improving Community Resilience and Being Accountable. To this end, several initiatives were undertaken during 2011-12 including:

- merging of several committees to form a Community Emergency Information Warning Systems (CEIWS) board, which ensures consistency for public warnings and efficiencies with integrated hardware and system
- implementing the Alerts SA project and website
- the transition to a new state-wide fire alarm monitoring system
- completion of the State Emergency Information Call Capability Centre (SEICCC) to manage the overflow of agency hotlines.

SA Ambulance Service (SAAS)

Highlights for 2011-12 included:

- answering 90 per cent of triple zero (000) calls in 10 seconds or less despite receiving more than 450 calls every day
- expanding the contingent of extended care paramedics to 36 and responding to 4706 incidents (up from 3545 last year), with 64.5 per cent resulting in emergency department avoidance (up from 58.5 per cent last year)
- acquiring a specialised MedSTAR Kids ambulance for improved service delivery to neonatal and paediatric patients
- opening three new ambulance stations (metropolitan and country)
- recruiting an additional 245 volunteers, meaning a total of 1437 across SA
- establishing a new clinical simulation laboratory for realistic simulation training in complex clinical, patient and operational scenarios.

Fire, emergency and ambulance service

Initiatives for 2012-13 include:

- continued implementation of the National Strategy for Disaster Resilience
- a State Emergency Management Framework requiring risk assessment consistent with the National Emergency Risk Assessment Guidelines
- roll-out and installation of mobile data terminals (interactive dispatch devices) in every frontline ambulance and response-capable vehicle
- based on the success of the extended care paramedic program in metropolitan Adelaide, development of an equivalent regional program.

”

Tasmanian Government comments

“Tasmania has a number of unique characteristics that influence the provision of emergency services throughout the State and affect response/turnout times and infrastructure costs. These characteristics include a small and dispersed population, diseconomies of scale, reliance on a network of dedicated volunteers in rural and remote areas and the State's rugged topography. Tasmania's two major urban centres have low population density compared to the large urban centres in other states.

Tasmania's data includes both urban and rural fire and ambulance service performance. As Tasmania has the highest percentage of all jurisdictions of its population in rural areas and the lowest proportion (33.2 per cent, compared to a national average of 88.4 per cent) in highly accessible areas, reliable comparisons of response performance to other jurisdictions are difficult.

Tasmania Fire Service (TFS) comprises four career brigades and 229 volunteer brigades that respond to fires in all metropolitan and rural areas. Tasmania reports all incidents attended by these brigades, and the TFS bears the full cost of funding both the operating and capital costs of its brigades.

TFS continues to deliver a broad range of educational and promotional programs to assist at-risk sectors of the community, prevent fires and minimise the impact of fires that occur. Figures including independent survey results indicate that fire-safety programs targeting at-risk households are particularly effective, with significant decreases in house fire rates over the last 10 years.

Tasmania's State Emergency Service (SES) continues to provide road crash rescue services outside the main metropolitan centres. SES comprises 35 volunteer units, 24 of which have road crash rescue as their primary role. These units are responsible to the 3 regional headquarters. This is in addition to the primary role of storm and flood and response and general assistance provided to all emergency services and local government.

TFS has responsibility for road crash rescue in and around metropolitan areas.

Ambulance Tasmania (AT) provides emergency ambulance care, medical retrieval services and a non-emergency patient transport service. In addition, AT provides fixed-wing and staff for helicopter aero-medical services.

Tasmania is currently one of two States that provide a free-of-charge ambulance service to the public and consequently there is a far greater reliance on government funding for ambulance services than in jurisdictions that are not government funded. The State Government has increased funding to improve services in both urban and rural areas.

Tasmania continues to enjoy a high level of ambulance patient satisfaction. This factor reflects positively on its ambulance personnel.”

Australian Capital Territory Government comments

“

The ACT Emergency Services Agency (ESA), which is part of the Justice and Community Safety Directorate, comprises the ACT Ambulance Service, ACT Fire and Rescue, ACT Rural Fire Service and the ACT State Emergency Service along with emergency management and support areas. It also incorporates the affiliated Snowy Hydro Southcare aero-medical service.

The ESA provides services across a broad geographic base to encompass the Bush Capital Planning Model. This geographic spread provides challenges to meet benchmark response standards and community expectation.

Over the past twelve months the ESA has continued to foster the ‘all hazards all agencies’ approach to delivering emergency services and emergency management for the ACT and surrounding region. The operational capability of the ESA was further improved or enhanced through the continued work of the following key projects:

- Amendments to the *Emergencies Act 2004* improved and refined existing arrangements for the management and coordination of emergency response in the ACT. These strengthen the ACT’s statutory arrangements to ensure enhanced operability of resources to provide the Canberra community with a strong and effective multi-agency response to future emergency events.
- Implementation of phase one of the ACT Emergency Services Agency Station Upgrade and Relocation Strategy commenced in 2011–12 with exhaustive due diligence work in identifying suitable sites for proposed new ambulance and fire stations in North Belconnen, South Belconnen and Tuggeranong areas.
- The opening of the new purpose built training facility at Hume which provides multi service training opportunities for ESA staff and volunteers.
- As part of its ongoing vehicle replacement program the ESA fleet was significantly enhanced with 18 new operational response vehicles and the redeployment of four all terrain (4 x 4) vehicles.
- The ESA launched a new website and social media accounts in September 2011 providing the community with a contemporary and technically advanced single source of truth for all emergency information in the Territory.

During 2011-12, the four services of the ESA provided in excess of 50 000 responses to incidents within the ACT as well as the deployment of ACT State Emergency Service teams to New South Wales to assist with flood response.

”

Northern Territory Government comments

“In 2011-12, the Northern Territory Fire and Rescue Service (NTFRS) continued its focus on fire prevention, preparedness, response and recovery in order to minimise the impact of fire and other emergencies on the people of the Northern Territory.

During the reporting period, new smoke alarm legislation was successfully implemented in the NT. The implementation included a community awareness campaign advising the community of their legal requirements for installation of photo-electric smoke alarms. The NT is the first jurisdiction to mandate this type of alarm.

The NTFRS continued to work closely with and provide assistance to Bushfires NT (BFNT), particularly during the extended period of bushfires in Central Australia from August to December 2011. This assistance of additional resources included career and volunteer firefighters and vehicles. A combination of two wet years in a row followed by the third driest weather period for May through to September 2011 contributed to high fuel load accumulation across the southern half of the Territory. A total of 34 fire ban days were declared where 8 days had Fire Danger Ratings (FDR) at or above the extreme level.

The 2011-12 Wet Season resulted in the development of Tropical Cyclone Grant on 25 December. The Category 2 Cyclone generated intense rain and flash flooding, damaging road infrastructure and disrupting rail services. The response involved resources from both NTFRS and the Northern Territory Emergency Service (NTES).

The NTES had a significant year including the establishment of three new facilities in Kalkaringi, Lajamanu and Yuendemu in addition to a multi-purpose facility in Gapuwiyak. The addition of these facilities has markedly improved the ability of NTES to not only recruit but to retain volunteers in these remote growth towns, providing vital emergency service capabilities such as road crash rescue and fire response.

During the reporting period, NTES continued to develop its capability to assist remote communities improve their resilience. Highlights include the provision of Indigenous language community service announcements and the build-up of volunteer units in the Territory Growth Towns. All Local Counter Disaster Plans were reviewed to include recovery arrangements. Regional Counter Disaster Plans were also developed.”

9.9 Definitions of key terms

Alarm notification not involving fire
Fire alarm notification due to the accidental operation of an alarm, the failure to notify fire services of an incorrect test by service personnel or a storm induced voltage surge.

All agencies
All agencies should be involved to some extent in emergency management. The context of emergency management for specific agencies varies and may include:

- ensuring the continuity of their business or service
- protecting their own interests and personnel
- protecting the community and environment from risks arising from the activities of the organisation
- protecting the community and environment from credible risks.

Emergency management measures may be referred to in a number of organisational and community contexts, including risk management, environmental management, occupational health and safety, quality management, and asset management.

All hazards
The all hazards approach concerns arrangements for managing the large range of possible effects of risks and emergencies. This concept is useful to the extent that a large range of risks can cause similar problems and such measures as warning, evacuation, medical services and community recovery will be required during and following emergencies. Many risks will, however, require specific response and recovery measures and will almost certainly require specific prevention and mitigation measures.

Ambulance community first responders
A type of volunteer that provide an emergency response (with no transport capacity) and first aid care before the ambulance arrival.

Ambulance service response times
The response time is defined as the time taken between the initial receipt of the call for an emergency ambulance and the ambulance's arrival at the scene of the emergency. Emergency responses are categorised by an assessment of the severity of the medical problem:

- code 1 — responses to potentially life threatening situations using warning devices
- code 2 — responses to acutely ill patients (not in life threatening situations) where attendance is necessary but no warning devices are used.

Response times are reported as percentiles in this report.

Ambulance expenditure
Includes salaries and payments in the nature of salaries to ambulance personnel, capital expenditure (such as depreciation and the user cost of capital) and other operating expenditure (such as running expenditure, contract expenditure, provision for losses and other recurrent expenditure). Excludes interest on borrowings.

Ambulance incident
An event that results in one or more responses by an ambulance service.

Ambulance non-government revenue
Includes revenue from subscription fees, transport fees, donations and other non-government revenue. Excludes funding revenue from Australian, State and local governments.

Ambulance patient
A person assessed, treated or transported by the ambulance service.

Ambulance personnel	Any person employed by the ambulance service provider who delivers an ambulance service, manages the delivery of this service or provides support for the delivery of this service. Includes salaried ambulance personnel, remunerated volunteer and nonremunerated volunteer ambulance personnel.
Ambulance response	A vehicle or vehicles sent to an incident. There may be multiple responses/vehicles sent to a single incident.
Ambulance services	Provide emergency and non-emergency pre-hospital and out-of-hospital patient care and transport, inter-hospital patient transport, specialised rescue services, ambulance services to multi-casualty events, and community capacity building to respond to emergencies.
Availability of ambulance officers/paramedics	The number of full time equivalent ambulance officers/paramedics per 100 000 people. Ambulance officers/paramedics includes student and base level ambulance officers and qualified ambulance officers but excludes patient transport officers.
Cardiac arrest survived event rate	For the out-of-hospital setting, survived event rate means sustained return of spontaneous circulation (ROSC) with spontaneous circulation until administration and transfer of care to the medical staff at the receiving hospital (Jacobs, et al. 2004)
Community first responder	See 'Ambulance community first responders'
Emergency ambulance response	An emergency ambulance response (code 1) to a pre-hospital medical incident or accident (an incident that is potentially life threatening) that necessitates the use of ambulance warning (lights and sirens) devices.
Events in which extrication(s) occurred	An event in which the assisted removal of a casualty occurs. An incident with multiple people extricated is counted the same as an incident with one person extricated.
Extrication	Assisted removal of a casualty.
False report	An incident in which the fire service responds to and investigates a site, and may restore a detection system.
Fire death	A fatality where fire is determined to be the underlying cause of death. This information is verified by coronial information.
Fire death rate	The number of fire deaths per 100 000 people in the total population.
Fire expenditure	Includes salaries and payments in the nature of salaries to fire personnel, capital expenditure (such as depreciation and the user cost of capital) and other operating expenditure (such as running expenditure, training expenditure, maintenance expenditure, communications expenditure, provision for losses and other recurrent expenditure). Excludes interest on borrowings.
Fire incident	A fire reported to a fire service that requires a response.
Fire injury	An injury resulting from or relating to a fire or flames, requiring admission to a public or private hospital. Excludes emergency department outpatients and injuries resulting in a fire death.
Fire injury rate	The number of fire injuries per 100 000 people in the total population.
Fire personnel	Any person employed by the fire service provider who delivers a firefighting or firefighting-related service, or manages the delivery of this service. Includes paid and volunteer firefighters and support personnel.

Fire safety measure

- Operational smoke alarm or detector
- Fire sprinkler system
- Safety switch or circuit breaker
- Fire extinguisher
- Fire blanket
- Fire evacuation plan
- External water supply
- The removal of an external fuel source
- External sprinkler
- Other fire safety measure.

Indirect revenue All revenue or funding received indirectly by the agency (for example, directly to Treasury or other such entity) that arises from the agency's actions.

Landscape fires Vegetation fires (for example, bush, grass, forest, orchard and harvest fires), regardless of the size of the area burnt.

Median dollar loss per structure fire The median (middle number in a given sequence) value of the structure loss (in $'000) per structure fire incident.

Non-urgent ambulance response A non-urgent response (code 3 and code 4) by required ambulance or patient transport services that does not necessitate the use of ambulance warning devices (lights and sirens).

Non-structure fire A fire outside a building or structure, including fires involving mobile properties (such as vehicles), a rubbish fire, a bushfire, grass fire or explosion.

Other incident An incident (other than fire) reported to a fire service that requires a response. This may include:

- overpressure ruptures (for example, steam or gas), explosions or excess heat (no combustion)
- rescues (for example, industrial accidents or vehicle accidents)
- hazardous conditions (for example, the escape of hazardous materials)
- salvages
- storms or extreme weather.

Percentiles

50^{th} / 90^{th} percentile ambulance service response times The time within which 50 per cent / 90 per cent of emergency (code 1) incidents are responded to by an ambulance

50^{th} / 90^{th} percentile fire service response times The time within which 50 per cent / 90 per cent of first fire resources respond.

Response locations (ambulance) The number of paid, mixed and volunteer response locations. Locations are primary ambulance response locations where salaried, volunteer or mixed ambulance operatives are responding in an ambulance vehicle and providing pre-hospital care.

Response time (fire services) The interval between the receipt of the call at the dispatch centre and the arrival of the vehicle at the scene (that is, when the vehicle is stationary and the handbrake is applied).

Road crash rescue An incident involving a motor vehicle and the presumption that assistance is required from emergency services organisations.

Staff attrition (ambulance)	The level of attrition in the operational workforce. It is calculated as the number of FTE employees who exit the organisation as a proportion of the number of FTE employees. It is based on staff FTE defined as 'operational positions where paramedic qualifications are either essential or desirable to the role'.
Structure fire	A fire inside a building or structure, whether or not there is damage to the structure.
Structure fire confined to object or room of origin	A fire where direct fire/flame is confined to the room of origin (that is, excludes landscape fire and vehicle fire in unconfined spaces). A room is an enclosed space, regardless of its dimensions or configuration. This category includes fires in residential and non-residential structures.
Urgent ambulance response	An urgent (code 2) undelayed response required (arrival desirable within 30 minutes) that does not necessitate the use of ambulance warning devices (lights and sirens).
User cost of capital	The opportunity cost of funds tied up in the capital used to deliver services. Calculated as 8 per cent of the current value of non current physical assets (including land, plant and equipment).
Volunteer (ambulance)	*Remunerated volunteer ambulance operatives:* all personnel who volunteer their availability, however are remunerated in part for provision of an ambulance response (with transport capability). *Non-remunerated volunteer ambulance operatives:* all personnel engaged on an unpaid casual basis who provide services generally on an on-call basis and are principally involved in the delivery of ambulance services. These staff may include categories on the same basis as permanent ambulance operatives (with transport capability). *Non remunerated volunteer operational and corporate support staff:* all personnel engaged on an unpaid casual basis who provide services generally on an on-call basis and are principally involved in the provision of support services. These staff may include categories on the same basis as permanent ambulance operatives.
Volunteer (fire)	*Volunteer firefighters:* staff of the fire service organisation, who deliver or manage a firefighting service directly to the community and who are formally trained and qualified to undertake firefighting duties but do not receive remuneration other than reimbursement of 'out of pocket expenses'. *Volunteer support staff:* all staff that are not remunerated of the fire service organisation, staff shared with other services, and umbrella department's staff. For fire service organisations, any staff that are not remunerated whose immediate client is the firefighter. These can be people in operational support roles provided they do not receive payment for their services other than reimbursement of 'out of pocket expenses'.
Volunteer (State/Territory Emergency Services)	Staff/volunteers of State/Territory Emergency Services organisations that do not receive payment for their services other than some reimbursement of 'out of pocket expenses'.
Workforce by age group	The age profile of the workforce, measured by the proportion of the operational workforce in 10 year age brackets (under 30, 30–39, 40–49, 50–59 and 60 and over).

9.10 List of attachment tables

Attachment tables are identified in references throughout this chapter by an '9A' prefix (for example, table 9A.3 is table 3). Attachment tables are provided on the Review website (www.pc.gov.au/gsp).

Fire events

Table 9A.1	Delivery and scope of activity of primary fire service organisations
Table 9A.2	Major sources of fire service organisations revenue (2011-12 dollars)
Table 9A.3	Fire service organisations human resources
Table 9A.4	Fire death rate
Table 9A.5	Fire deaths
Table 9A.6	Landscape fire deaths
Table 9A.7	Fire injuries
Table 9A.8	Confinement of building fires to room of origin (per cent)
Table 9A.9	Confinement of building and other structure fires to room/object of origin (per cent)
Table 9A.10	Median dollar loss per structure fire (2011-12 dollars)
Table 9A.11	Property loss from structure fire (2011-12 dollars per person)
Table 9A.12	Reported fires and other primary incidents attended to by fire service organisations (no.)
Table 9A.13	Fire incidents attended by fire service organisations (number per 100 000 people)
Table 9A.14	Accidental residential structure fires reported to fire service organisations per 100 000 households
Table 9A.15	Fire service organisations and land management agencies reported total landscape fires (bush and grass) incidents (no.) and rates
Table 9A.16	Ignition factors for structure fires
Table 9A.17	Hazardous materials incidents
Table 9A.18	Reported road crash rescue incidents (number)
Table 9A.19	Reported road crash rescue extrications (number)
Table 9A.20	Prevention activities of fire service organisations
Table 9A.21	Selected fire risk management/mitigation strategies
Table 9A.22	Household preparedness for emergencies, October 2007
Table 9A.23	Households with a smoke alarm or smoke detector installed
Table 9A.24	Number of structure fires, by remoteness area
Table 9A.25	Structure fire response times to structure fires, including call taking time, by remoteness area
Table 9A.26	Structure fire response times to structure fires, excluding call taking time, by remoteness area
Table 9A.27	Fire service organisations' costs ($'000) (2011-12 dollars)

9.11 References

ABS (Australian Bureau of Statistics) 2001, *Population Survey Monitor*, Cat. no. 4103.0, Canberra.

—— 2008a, *Household preparedness for emergencies,* Cat. no. 4818.0.55.001, Canberra.

—— 2008b, *Community preparedness for emergencies,* Cat. no. 4818.5, Canberra.

—— 2012, *Causes of Death Australia, 2010*, Cat. no. 3303.0, Canberra.

AFAC (Australasian Fire and Emergency Service Authorities Council) 2012 — *Unwanted False Alarm Technical Group*, www.afac.com.au/operate/areas/emergency/technical/ufatg (accessed September 2012).

AIC (Australian Institute of Criminology) 2008, *Bushfire Arson Bulletin No. 51.*

Australian Government 2012, *Attorney-General's Department Disasters Database*, www.disasters.ema.gov.au/ (accessed 10 October 2012).

CAA (Council of Ambulance Authorities) 2011, *Council of Ambulance Authorities Patient Satisfaction Survey 2012*, prepared by Ehrennerg-Bass Institute for Marketing Science, www.caa.net.au (accessed 1 October 2012).

COAG (Council of Australian Governments) 2011, *National Strategy for Disaster Resilience*, Australian Government, Council of Australian Governments, Canberra.

—— 2009, *National Disaster Resilience Statement*, Excerpt from Communiqué, Council of Australian Governments, Brisbane, 7 December.

CSIRO (Commonwealth Scientific and Industrial Research Organisation) 2012, *Bushfires in Australia*, www.csiro.au/en/Organisation-Structure/Divisions/Ecosystem-Sciences/BushfireInAustralia.aspx (accessed 1 October 2012).

Jacobs I, et al 2004, AHA Scientific Statement, *Cardiac Arrest and Cardiopulmonary Resuscitation Outcome Reports*, Update of the Utstein Templates for Resuscitation Registries, A Statement for Healthcare Professionals from a Task Force of the International Liaison Committee on Resuscitation (American Heart Association, European Resuscitation Council, Australian Resuscitation Council, New Zealand Resuscitation Council, Heart and Stroke Foundation of Canada, Inter American Heart Foundation, Resuscitation Councils of South Africa), circulation November 23, 2004, 110(21)c pp. 3385–97.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Overcoming Indigenous Disadvantage: Key Indicators 2009*, Productivity Commission, Canberra.

Stirling, C.M., O'Meara P., Pedler, D., Tourle, V., and Walker, J. 2007. *Engaging rural communities in health care through a paramedic expanded scope of practice.* Rural and Remote Health, 7: 839, www.rrh.org.au (accessed December 2007).

Victorian Bushfires Commission 2010, *2009 Victorian Bushfires Commission: Final Report*, by Commissioner Teague B., McLeod R., and Pascoe S., Parliament of Victoria, Melbourne.

Victorian Bushfire Reconstruction and Recovery Authority 2009, *100 Day Report*, State Government of Victoria, South Melbourne.

9A Fire and ambulance services — attachment

Definitions for the indicators and descriptors in this attachment are in section 9.9 of the chapter. Unsourced information was obtained from the Australian, State and Territory governments, with the assistance of the Australasian Fire and Emergency Service Authorities Council and the Council of Ambulance Authorities.

Data in this Report are examined by the Emergency Management Working Group, but have not been formally audited by the Secretariat.

Data reported in the attachment tables are the most accurate available at the time of data collection. Historical data may have been updated since the last edition of RoGS.

This file is available on the Review web page (www.pc.gov.au/gsp).

Attachment contents

Attachment contents

All jurisdictions — fire events

Table 9A.1 Delivery and scope of activity of primary fire service organisations

	Fire service organisations (a)
NSW	• *NSW Fire Brigades:* government department reports to the Minister for Emergency Services directly. • *NSW Rural Fire Service:* government department reports to the Minister for Emergency Services directly.
Vic	• *Metropolitan Fire and Emergency Services Board:* statutory authority reports to the Minister for Police and Emergency Services. • *Country Fire Authority:* statutory authority reports to the Minister for Police and Emergency Services. • *Department of Sustainability and Environment:* government department responsible for public lands. The Metropolitan Fire and Emergency Services Board provides urban fire services coverage from the Melbourne Central Business District through to the middle and outer suburbs. The Country Fire Authority provides urban and rural fire services coverage for all parts of Victoria other than the Melbourne Metropolitan Fire District and public lands. This includes outer metropolitan Melbourne and regional centres.
Qld	• *Queensland Fire and Rescue Service* — this service, incorporating the Rural Fire Service, is a division of the Department of Community Safety, reporting to the Director General, who reports to the Minister for Police and Community Safety.
WA	• *Department of Fire and Emergency Services (DFES)* : umbrella statutory authority reports to the Minister for Police and Emergency Services directly. As the primary fire and emergency service in WA, DFES includes the Fire and Rescue Career and Volunteer Service, Volunteer Bush Fire Service, Volunteer Emergency service Units and the Volunteer Marine Rescue Services in its Operational Division. Bush Fire Brigades are administered by local governments with fires in national parks and reserves the responsibility of the Department of Environment and Conservation.
SA	• *South Australian Metropolitan Fire Service* : body corporate reports to the SA Fire and Emergency Services Commission. • *South Australian Country Fire Service:* body corporate reports to the SA Fire and Emergency Services Commission.
Tas	• *Tasmania Fire Service:* operational arm of the State Fire Commission, reports to the Minister for Police and Emergency Management.
ACT	• *ACT Fire and Rescue* and *ACT Rural Fire Service:* services of the ACT Emergency Services Agency within the Justice and Community Safety Directorate, together report to the ACT Minister for Police and Emergency Services.
NT (d)	• *NT Fire and Rescue Service:* branch of the Department of Police, Fire and Emergency Services. The Director of Fire and Rescue Services and Emergency Services reports to the Chief Executive Officer for Police, Fire and Emergency Services, who reports to the Minister for Police, Fire and Emergency Services. • *Bushfires NT* — this is a division of the Department of Natural Resources Environment and the Arts (NEAT). The Chief Fire Control Officer reports to the CEO of NEAT who reports directly to the Minister. Bushfires NT is primarily a land management organisation and responds only to grass fires and bushfires on land outside the Fire and Rescue Service response areas. The NT statistics in this chapter do not apply to Bushfires NT unless stated.

(a) Excludes brigades employed by large scale public and private land managers; port, mining and other infrastructure brigades; and land management departments and brigades operating under Australian jurisdiction (for example, airport and defence installations). Urban FSOs: attend residential and commercial structure fires; incidents involving hazardous materials; and road crash incidents within major urban centres. Rural FSOs: attend local structure fires and other events outside major urban centres; rural non-structure fires (including crop, bushland and grassland fires on private property); and fires in national parks and State forests.

Source : State and Territory governments (unpublished).

Table 9A.2 Major sources of fire service organisations revenue (2011-12 dollars) (a), (b)

	NSW (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
2011-12					*$ million*				
Total government grants	238.2	416.4	113.8	161.0	3.3	6.1	51.1	33.6	1 023.5
Total levies	657.9	667.2	332.6	232.8	168.2	49.8	–	–	2 108.7
User charges	26.8	35.8	53.6	6.1	5.1	9.9	10.4	2.6	150.2
Miscellaneous revenue	32.0	42.1	3.6	10.0	2.3	2.5	3.1	0.1	95.6
Indirect government funding	–	5.1	–	–	–	–	–	na	5.1
Total	**954.8**	**1 166.7**	**503.6**	**409.9**	**179.0**	**68.3**	**64.5**	**36.3**	**3 383.1**
					Per cent				
Government grants									
Australian	0.6	0.4	1.0	2.0	1.9	2.0	–	na	0.8
State/Territory	13.7	32.1	21.6	36.9	–	7.0	79.2	92.7	25.3
Local	10.6	3.3	–	0.3	–	–	–	na	4.2
Levies									
On insurance companies	68.9	56.6	–	–	–	25.7	–	na	39.5
On property owners	0.1	0.6	66.0	56.8	94.0	47.2	–	na	22.9
User charges	2.8	3.1	10.6	1.5	2.9	14.4	16.1	7.0	4.4
Miscellaneous revenue	3.3	3.6	0.7	2.4	1.3	3.7	4.8	0.2	2.8
Indirect government funds	–	0.4	–	–	–	–	–	na	0.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2010-11					*$ million*				
Total government grants	286.4	389.0	122.1	165.8	3.2	6.2	38.7	27.2	1 038.6
Total levies	639.2	553.0	318.7	222.4	158.8	48.4	–	–	1 940.6
User charges	14.9	31.6	52.1	5.1	4.2	9.8	10.0	2.7	130.4
Miscellaneous revenue	33.3	40.4	4.8	9.1	2.8	1.5	1.6	0.1	93.7
Indirect government funding	–	4.1	–	–	–	–	–	–	4.1
Total	**973.9**	**1 018.1**	**497.8**	**402.4**	**169.1**	**66.0**	**50.2**	**29.9**	**3 207.4**
					Per cent				
Government grants									
Australian	0.1	0.8	1.7	1.8	1.9	1.9	–	–	0.9
State/Territory	19.0	33.9	22.8	39.1	–	7.4	76.9	90.8	27.2
Local	10.4	3.6	–	0.3	–	–	–	–	4.3
Levies									
On insurance companies	65.6	53.8	–	–	–	25.1	–	–	37.5
On property owners	0.1	0.5	64.0	55.3	93.9	48.3	–	–	23.0
User charges	1.5	3.1	10.5	1.3	2.5	14.9	19.8	9.0	4.1
Miscellaneous revenue	3.4	4.0	1.0	2.3	1.7	2.3	3.2	0.2	2.9
Indirect government funding	–	0.4	–	–	–	–	–	–	0.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 9A.2 Major sources of fire service organisations revenue (2011-12 dollars) (a), (b)

	NSW (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
2009-10					*$ million*				
Total government grants	307.3	358.1	110.3	62.5	3.8	7.8	42.0	25.3	917.1
Total levies	624.0	579.8	325.0	194.1	174.3	50.5	–	–	1 947.8
User charges	15.1	45.6	40.9	4.2	4.0	12.4	9.9	2.4	134.6
Miscellaneous revenue	40.8	33.0	5.5	6.9	2.8	3.2	4.5	0.1	96.7
Indirect government funding	–	5.7	–	–	–	–	–	–	5.7
Total	**987.3**	**1 022.3**	**481.7**	**267.8**	**184.9**	**73.8**	**56.4**	**27.8**	**3 101.9**
					Per cent				
Government grants									
Australian	–	0.4	1.3	4.1	2.0	1.2	–	0.5	0.8
State/Territory	21.9	31.0	21.6	18.9	–	9.3	74.5	90.4	24.6
Local	9.2	3.6	–	0.3	–	–	–	–	4.1
Levies									
On insurance companies	56.5	55.9	–	–	–	24.8	–	–	37.0
On property owners	6.7	0.9	67.5	72.5	94.3	43.6	–	–	25.8
User charges	1.5	4.5	8.5	1.6	2.2	16.8	17.6	8.8	4.3
Miscellaneous revenue	4.1	3.2	1.1	2.6	1.5	4.3	7.9	0.3	3.1
Indirect government funding	–	0.6	–	–	–	–	–	–	0.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2008-09					*$ million*				
Total government grants	240.7	757.2	85.7	54.9	4.1	5.9	43.9	23.7	1 216.1
Total levies	669.4	484.6	307.7	183.8	175.7	47.9	–	–	1 869.0
User charges	15.5	37.8	35.4	4.1	5.0	9.3	9.1	2.4	118.6
Miscellaneous revenue	44.1	17.4	7.2	9.4	5.1	2.5	1.0	0.0	86.6
Indirect government funding	–	12.0	–	–	–	–	1.0	–	13.1
Total	**969.7**	**1 309.0**	**436.0**	**252.2**	**189.8**	**65.6**	**55.0**	**26.1**	**3 303.4**
Government grants					*Per cent*				
Australian	–	0.3	1.1	2.2	2.1	1.0	1.5	1.2	0.6
State/Territory	18.1	54.8	18.5	19.2	–	8.0	78.3	89.5	33.1
Local	6.7	2.7	–	0.3	–	–	–	–	3.1
Levies									
On insurance companies	59.1	36.3	–	–	–	25.8	–	–	32.3
On property owners	9.9	0.7	70.6	72.9	92.5	47.2	–	–	24.3
User charges	1.6	2.9	8.1	1.6	2.7	14.3	16.5	9.2	3.6
Miscellaneous revenue	4.5	1.3	1.7	3.7	2.7	3.8	1.8	0.1	2.6
Indirect government funding	–	0.9	–	–	–	–	1.9	–	0.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 9A.2 **Major sources of fire service organisations revenue (2011-12 dollars) (a), (b)**

	NSW (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
2007-08					*$ million*				
Total government grants	189.9	329.3	79.8	66.0	5.6	7.8	44.5	19.3	742.4
Total levies	625.2	469.9	298.6	183.9	174.0	47.9	–	–	1 799.5
User charges	15.0	35.8	30.3	4.9	5.9	7.7	9.6	2.3	111.6
Miscellaneous revenue	46.6	32.7	4.8	10.6	3.9	1.7	1.3	0.4	102.0
Indirect government funding	–	–	–	–	–	–	–	–	–
Total	**876.8**	**867.8**	**413.5**	**265.5**	**189.5**	**65.1**	**55.5**	**21.9**	**2 755.5**
Government grants					*Per cent*				
Australian	–	0.4	1.4	2.6	3.0	2.2	–	7.8	0.9
State/Territory	13.3	33.3	17.9	20.8	–	9.8	80.3	80.3	21.9
Local	8.4	4.2	–	1.6	–	–	–	–	4.1
Levies									
On insurance companies	67.9	52.9	–	–	–	26.0	–	–	38.9
On property owners	3.4	1.3	72.2	69.3	91.8	47.5	–	–	26.4
User charges	1.7	4.1	7.3	1.9	3.1	11.9	17.4	10.3	4.0
Miscellaneous revenue	5.3	3.8	1.2	4.0	2.1	2.6	2.4	1.7	3.7
Indirect government funding	–	–	–	–	–	–	–	–	–
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2006-07					*$ million*				
Total government grants	273.8	505.6	74.7	78.4	1.1	8.9	42.7	23.0	1 008.3
Total levies	599.3	451.3	301.3	174.8	166.3	44.9	–	–	1 738.0
User charges	15.4	25.9	28.4	4.7	4.1	7.9	10.3	2.4	99.1
Miscellaneous revenue	38.0	81.6	6.9	14.7	3.8	2.1	7.0	1.0	155.2
Indirect government funding	–	–	–	–	–	–	0.2	–	0.2
Total	**926.5**	**1 064.4**	**411.3**	**272.5**	**175.3**	**63.9**	**60.3**	**26.4**	**3 000.8**
2005-06					*$ million*				
Total government grants	191.6	142.3	68.7	32.8	1.8	4.9	51.5	22.8	516.4
Total levies	593.3	442.4	299.5	131.7	167.1	45.6	–	–	1 679.6
User charges	15.7	23.1	22.7	2.9	2.7	7.7	10.4	2.4	87.4
Miscellaneous revenue	34.6	41.7	7.7	2.6	5.0	1.4	0.1	1.0	94.0
Indirect government funding	–	–	–	–	–	–	2.7	–	2.7
Total	**835.1**	**649.5**	**398.6**	**170.0**	**176.5**	**59.5**	**64.7**	**26.1**	**2 380.1**
2004-05					*$ million*				
Total government grants	198.4	137.0	65.6	20.1	0.1	7.6	44.9	22.2	496.0
Total levies	570.0	432.5	295.5	126.2	166.8	46.6	–	–	1 637.6

Table 9A.2 Major sources of fire service organisations revenue (2011-12 dollars) (a), (b)

	NSW (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
User charges	26.2	19.6	20.3	2.7	3.7	8.4	8.9	2.1	91.9
Miscellaneous revenue	22.8	31.1	7.9	2.5	3.9	2.4	0.2	0.5	71.4
Indirect government funding	–	–	–	–	–	–	3.0	–	3.0
Total	**817.4**	**620.1**	**389.3**	**151.5**	**174.6**	**65.0**	**57.1**	**24.8**	**2 299.9**
2003-04					*$ million*				
Total government grants	143.3	126.1	83.5	1.5	0.5	6.9	38.5	19.5	419.7
Total levies	579.4	413.5	291.5	152.5	166.2	47.3	–	–	1 650.3
User charges	25.1	22.0	22.0	1.8	3.5	8.8	5.3	1.9	90.4
Miscellaneous revenue	28.7	30.8	7.9	3.2	6.4	2.8	3.3	0.1	83.2
Indirect government funding	–	–	–	–	–	–	4.2	–	4.2
Total	**776.4**	**592.4**	**404.9**	**159.0**	**176.5**	**65.7**	**51.3**	**21.5**	**2 247.8**
2002-03					*$ million*				
Total government grants	167.9	133.1	83.8	51.3	0.1	8.3	35.7	19.5	499.7
Total levies	535.6	360.1	287.1	83.1	157.4	48.9	–	–	1 472.2
User charges	27.3	15.4	19.1	2.6	4.6	8.0	0.2	2.2	79.4
Miscellaneous revenue	170.7	22.7	10.2	3.2	6.3	2.2	0.2	0.1	215.7
Indirect government funding	1.2	–	–	–	–	–	3.9	–	5.1
Total	**902.8**	**531.4**	**400.2**	**140.2**	**168.4**	**67.4**	**40.0**	**21.8**	**2 272.1**

(a) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Totals may not sum as a result of rounding.

(b) Figures vary from year to year as a result of abnormal expenditure related to the response to specific major emergencies.

(c) Jurisdiction notes:

NSW: From 2009-10 data include funding for the Department of Environment, Climate Change and Water.

Vic: The proportions of principal funding contributions from State Governments, local governments and insurance companies are established in legislation. The actual proportions received may vary as a result of the level of income from user charges and other income sources.

From 2006-07 data include funding and expenditure for the Department of Sustainability and Environment (DSE).

2008-09 data include a significant increase in government grants due to emergency funding arising from the Black Saturday Bushfires.

Qld: The State Government grant for Queensland in 2002-03 and 2003-04 included funding for a 6 per cent equity return, equal to $15 million in 2002-03 and $17 million in 2003-04. However, a Whole of Government decision in 2004-05 eliminated the equity return expense performance management regime and related funding with effect from 1 July 2004. This has resulted in a reduction of $18 million in both revenues and expenses in 2004-05.

Table 9A.2 **Major sources of fire service organisations revenue (2011-12 dollars) (a), (b)**

	NSW (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*

WA: DFES provides a wide range of emergency services under an integrated management structure. From 2006-07 data are not segregated by service and include funding related to delivery of other emergency services including SES and volunteer marine rescue. Revenue also includes funding related to Wildfire Suppression and Western Australia Natural Disaster Relief and Recovery Arrangements. Fire levies include a property-based Emergency Services Levy (ESL) introduced in 2003. The ESL provides for the delivery of all emergency services except for volunteer marine rescue.

Data cannot be segregated by service and includes State Emergency Service and volunteer marine services as well as fire. Data for the Department of Environment and Conservation are not included.

ACT: In 2006-07 funding is included under miscellaneous revenue for the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.

The increase in 2005-06 is due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs.

na Not available. **–** Nil or rounded to zero.

Source : State and Territory Governments (unpublished); ABS 2012, *Australian National Accounts: National Income, Expenditure and Product, June 2012,* Cat. no. 5206.0, Canberra (table AA.51).

Table 9A.3 **Fire service organisations human resources (a)**

	Unit	*NSW* (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA* (c)	*Tas*	*ACT*	*NT* (c)	*Aust*
2011-12										
Personnel										
Firefighting personnel										
Permanent	FTE	3 498	3 202	2 262	1 123	889	275	351	202	11 802
Part time & other	FTE	499	998	202	–	140	–	–	12	1 851
Total	FTE	3 997	4 200	2 464	1 123	1 029	275	351	214	13 653
Support personnel	FTE	1 328	1 510	737	299	52	173	62	40	4 201
Total	FTE	**5 325**	**5 710**	**3 201**	**1 422**	**1 081**	**448**	**413**	**254**	**17 854**
Firefighting personnel (proportion of total)	%	**75.1**	**73.6**	**77.0**	**79.0**	**95.2**	**61.4**	**85.0**	**84.3**	**76.5**
Volunteers (b)	no.	**70 246**	**57 843**	**34 000**	**28 354**	**14 127**	**4 823**	**1 382**	**1 123**	**211 898**
2010-11										
Personnel										
Firefighting personnel										
Permanent	FTE	3 516	3 021	2 262	1 052	865	274	305	201	11 496
Part time & other	FTE	507	890	160	24	140	–	–	12	1 733
Total	FTE	4 023	3 911	2 422	1 076	1 005	274	305	213	13 229
Support personnel	FTE	1 321	1 526	777	332	45	190	78	47	4 316
Total	FTE	**5 344**	**5 437**	**3 199**	**1 408**	**1 050**	**464**	**383**	**260**	**17 545**
Firefighting personnel (proportion of total)	%	**75.3**	**71.9**	**75.7**	**76.4**	**95.7**	**59.1**	**79.6**	**81.9**	**75.4**
Volunteers (b)	no.	**77 410**	**58 063**	**34 000**	**28 922**	**14 583**	**4 777**	**1 233**	**777**	**219 765**
2009-10										
Personnel										
Firefighting personnel										
Permanent	FTE	3 498	2 864	2 215	1 003	873	280	294	198	11 225
Part time & other	FTE	515	1 181	158	25	147	–	–	9	2 035
Total	FTE	4 013	4 045	2 373	1 028	1 020	280	294	207	13 260
Support personnel	FTE	1 196	1 419	759	296	44	180	83	41	4 018
Total	FTE	**5 209**	**5 464**	**3 132**	**1 324**	**1 064**	**460**	**377**	**248**	**17 278**
Firefighting personnel (proportion of total)	%	**77.0**	**74.0**	**75.8**	**77.6**	**95.9**	**60.9**	**78.0**	**83.5**	**76.7**
Volunteers (b)	no.	**77 422**	**59 180**	**34 000**	**29 343**	**15 064**	**4 861**	**1 228**	**750**	**221 848**
2008-09										
Personnel										
Firefighting personnel										
Permanent	FTE	3 485	3 580	2 195	970	852	267	296	184	11 829
Part time & other	FTE	497	1 107	158	26	124	–	–	10	1 923
Total	FTE	3 982	4 687	2 353	996	976	267	296	194	13 752
Support personnel	FTE	1 088	1 593	726	308	47	193	84	43	4 082

Table 9A.3 **Fire service organisations human resources (a)**

	Unit	*NSW* (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA* (c)	*Tas*	*ACT*	*NT* (c)	*Aust*
Total	FTE	**5 070**	**6 280**	**3 079**	**1 304**	**1 023**	**460**	**380**	**237**	**17 833**
Firefighting personnel (proportion of total)	%	**78.5**	**74.6**	**76.4**	**76.4**	**95.4**	**58.0**	**77.9**	**81.9**	**77.1**
Volunteers (b)	no.	**75 436**	**58 943**	**34 000**	**27 249**	**15 415**	**4 859**	**1 230**	**540**	**217 672**
2007-08										
Personnel										
Firefighting personnel										
Permanent	FTE	3 443	3 340	2 193	919	813	296	276	176	11 456
Part time & other	FTE	483	845	165	54	125	–	53	10	1 735
Total	FTE	3 926	4 185	2 358	973	938	296	329	186	13 191
Support personnel	FTE	1 406	2 047	665	277	46	180	36	43	4 700
Total	FTE	**5 332**	**6 232**	**3 023**	**1 250**	**984**	**476**	**365**	**229**	**17 891**
Firefighting personnel (proportion of total)	%	**73.6**	**67.2**	**78.0**	**77.8**	**95.3**	**62.2**	**90.1**	**81.2**	**73.7**
Volunteers (b)	no.	**75 474**	**58 362**	**35 000**	**27 457**	**15 744**	**4 909**	**1 367**	**540**	**218 853**
2006-07										
Personnel										
Firefighting personnel										
Permanent	FTE	3 406	3 274	2 076	896	779	287	291	176	11 185
Part time & other	FTE	481	845	163	36	126	–	–	6	1 657
Total	FTE	3 887	4 119	2 239	932	905	287	291	182	12 842
Support personnel	FTE	996	2 008	732	278	40	170	81	41	4 346
Total	FTE	**4 883**	**6 127**	**2 971**	**1 210**	**945**	**457**	**372**	**223**	**17 188**
Firefighting personnel (proportion of total)	%	**79.6**	**67.2**	**75.4**	**77.0**	**95.8**	**62.8**	**78.2**	**81.6**	**74.7**
Volunteers (b)	no.	**76 302**	**59 509**	**36 000**	**27 305**	**15 517**	**4 978**	**1 261**	**550**	**221 422**
2005-06										
Personnel										
Firefighting personnel										
Permanent	FTE	3 312	3 307	2 056	870	773	280	289	176	11 063
Part time & other	FTE	479	616	165	36	93	–	–	6	1 395
Total	FTE	3 791	3 923	2 221	906	866	280	289	182	12 458
Support personnel	FTE	1 156	2 077	689	308	36	166	93	37	4 562
Total	FTE	**4 947**	**6 000**	**2 910**	**1 214**	**902**	**446**	**382**	**219**	**17 020**
Firefighting personnel (proportion of total)	%	**76.6**	**65.4**	**76.3**	**74.6**	**96.0**	**62.8**	**75.7**	**83.1**	**73.2**
Volunteers (b)	no.	**76 195**	**58 849**	**41 324**	**26 890**	**15 120**	**4 765**	**1 018**	**539**	**224 700**
2004-05										
Personnel										
Firefighting personnel										

Table 9A.3 **Fire service organisations human resources (a)**

	Unit	*NSW* (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA* (c)	*Tas*	*ACT*	*NT* (c)	*Aust*
Permanent	FTE	3 232	2 172	2 026	864	752	279	270	168	9 763
Part time & other	FTE	485	–	163	28	96	–	–	6	778
Total	FTE	3 717	2 172	2 189	892	848	279	270	174	10 541
Support personnel	FTE	977	859	620	304	28	159	88	30	3 065
Total	FTE	**4 694**	**3 031**	**2 809**	**1 196**	**876**	**438**	**358**	**204**	**13 606**
Firefighting personnel (proportion of total)	%	**79.2**	**71.7**	**77.9**	**74.6**	**96.8**	**63.7**	**75.5**	**85.3**	**77.5**
Volunteers (b)	no.	**75 443**	**58 662**	**44 648**	**28 319**	**15 569**	**4 668**	**1 062**	**551**	**228 922**
2003-04										
Personnel										
Firefighting personnel										
Permanent	FTE	3 225	2 010	1 930	860	752	282	229	174	9 462
Part time & other	FTE	522	18	156	12	90	–	–	6	–
Total	FTE	3 747	2 028	2 086	872	842	282	229	180	9 462
Support personnel	FTE	967	976	618	303	30	151	102	34	3 181
Total	FTE	**4 714**	**3 004**	**2 704**	**1 175**	**872**	**433**	**331**	**214**	**12 643**
Firefighting personnel (proportion of total)	%	**79.5**	**67.5**	**77.1**	**74.2**	**96.6**	**65.1**	**69.2**	**84.1**	**74.8**
Volunteers (b)	no.	**74 556**	**58 583**	**44 286**	**22 328**	**15 693**	**4 766**	**810**	**521**	**221 543**
2002-03										
Personnel										
Firefighting personnel										
Permanent	FTE	3 210	1 908	1 936	815	725	276	235	168	9 273
Part time & other	FTE	522	28	160	12	87	–	–	6	815
Total	FTE	3 732	1 936	2 096	827	812	276	235	174	10 088
Support personnel	FTE	894	948	567	285	29	146	82	20	2 971
Total	FTE	**4 626**	**2 884**	**2 663**	**1 112**	**841**	**422**	**317**	**194**	**13 058**
Firefighting personnel (proportion of total)	%	**80.7**	**67.1**	**78.7**	**74.4**	**96.6**	**65.4**	**74.1**	**89.7**	**77.3**
Volunteers (b)	no.	**68 676**	**58 000**	**46 677**	**23 743**	**16 109**	**4 912**	**650**	**456**	**219 223**

(a) FTE = full time equivalent.

(b) Numbers for Volunteer fire fighters include volunteer fire support staff.

(c) Jurisdiction notes:

NSW: Numbers for fire service organisations' human resources include retained firefighters and community fire unit members.

Vic: From 2005-06, data includes Victoria's land management agency, Department of Sustainability and Environment (DSE).

In 2007-08, DSE figures have been derived from 2006-07 DSE figures, due to data quality issues.

Table 9A.3 **Fire service organisations human resources (a)**

	Unit	*NSW* (c)	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA* (c)	*Tas*	*ACT*	*NT* (c)	*Aust*

Victorian Permanent Fire fighter numbers are over reported between 2005-06 to 2008-09 due to inclusion of some non fire fighting personnel from within Victorias land management agencies.

Qld: Firefighting personnel include senior fire officers, Assistant Commissioners, the Deputy Commissioner and the Commissioner. Volunteer firefighter data for Queensland includes volunteer rural firefighters and volunteer rural operations support personnel.

WA: From 2006-07 support staff data include all non-fire specific staff, including those that support SES and volunteer marine rescue. Volunteer firefighter data include volunteers from local government bush fire brigades, volunteer fire and rescue brigades, volunteer fire services and multi-skilled volunteer emergency services. Data for the Department of Environment and Conservation are not included.

SA: The SA Fire and Emergency Services Commission employs most support personnel. Fire agency support staff include Metropolitan Fire Service training, building inspection and fire cause investigatory staff.

NT: Numbers reflect NT Fire and Rescue Service and Bushfires NT uniformed, non-uniformed and volunteers.

– Nil or rounded to zero.

Source : State and Territory governments (unpublished).

Table 9A.4 **Fire death rate (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (d)
Fire deaths									
Annual rate				***per million people***					
2010	4.0	4.7	4.2	4.8	0.6	7.9	8.4	–	4.1
2009	4.2	36.5	3.6	2.7	7.4	9.9	8.5	8.9	12.3
2008	4.3	6.6	4.9	6.9	6.2	16.1	11.6	–	5.6
2007	3.6	5.8	5.7	6.2	6.9	8.1	17.7	4.7	5.4
2006	4.7	4.3	6.6	2.9	8.3	2.0	–	9.5	5.0
2005	9.2	5.3	4.5	3.5	8.4	10.3	6.1	14.5	6.8
2004	5.8	4.6	3.8	3.0	7.8	22.8	3.1	4.9	5.5
2003	6.9	5.9	4.7	10.2	10.4	14.7	3.1	5.0	7.2
2002	7.4	7.0	6.5	5.2	7.9	16.9	6.2	5.0	7.2
2001	4.1	3.3	4.7	6.8	10.6	19.1	3.1	15.2	5.4
2000	8.5	6.3	9.5	3.7	6.0	2.1	3.2	20.5	7.6
1999	5.8	5.5	9.4	2.7	10.7	6.4	12.8	15.6	6.6
1998	8.8	6.7	8.1	7.1	7.4	25.4	3.2	–	8.3
1997	6.4	6.7	9.4	9.5	11.5	16.9	12.9	16.1	7.9
1996	11.3	8.8	6.6	4.5	10.2	6.3	13.0	–	8.9
1995	9.5	8.2	12.9	6.3	14.3	12.7	–	–	9.8
1994	8.3	9.1	11.0	5.9	15.0	14.8	–	34.6	9.6
1993	10.3	8.7	6.8	7.2	10.3	6.4	10.0	17.6	8.8
1992	10.1	11.2	5.9	4.2	17.9	14.9	17.0	–	10.0
1991	13.6	10.4	7.8	4.3	14.5	10.7	10.4	–	10.6
1990	6.0	8.2	6.9	11.8	9.1	10.8	10.6	–	7.7
1989	10.7	10.2	13.1	3.2	12.0	6.6	–	31.0	10.4
1988	9.6	11.3	5.8	7.2	12.1	13.3	11.0	–	9.6
1987	12.8	12.1	6.0	6.7	6.5	6.7	11.3	–	10.1
1986	11.6	11.1	9.9	8.9	8.7	11.2	11.6	–	10.6
1985	13.2	13.3	10.9	7.8	11.7	–	–	20.2	11.9
1984	10.0	8.8	10.3	15.1	8.1	13.7	–	–	9.9
1983	11.4	29.2	8.5	15.3	31.2	6.9	12.6	–	17.4
1982	12.1	19.3	20.6	9.7	12.8	14.0	17.2	23.0	15.3
Annual rate (3 year average)				***per million people***					
2008 to 2010	4.2	15.9	4.2	4.8	4.7	11.3	9.5	3.0	7.3
2007 to 2009	4.1	16.5	4.7	5.2	6.9	11.4	12.6	4.5	7.8
2006 to 2008	4.2	5.6	5.7	5.4	7.2	8.8	9.8	4.6	5.3
2005 to 2007	5.8	5.1	5.6	4.2	7.9	6.8	8.0	9.5	5.7
2004 to 2006	6.6	4.8	5.0	3.1	8.2	11.7	3.0	9.7	5.7
2003 to 2005	7.3	5.3	4.4	5.5	8.9	15.9	4.1	8.2	6.5
2002 to 2004	6.7	5.8	5.0	6.1	8.7	18.1	4.1	5.0	6.6

Table 9A.4 **Fire death rate (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (d)
2001 to 2003	6.1	5.4	5.3	7.4	9.6	16.9	4.1	8.4	6.6
2000 to 2002	6.7	5.6	6.9	5.3	8.2	12.7	4.2	13.5	6.7
1999 to 2001	6.1	5.1	7.9	4.4	9.1	9.2	6.3	17.1	6.5
1998 to 2000	7.7	6.2	9.0	4.5	8.0	11.3	6.4	12.1	7.5
1997 to 1999	7.0	6.3	9.0	6.4	9.8	16.2	9.7	10.5	7.6
1996 to 1998	8.8	7.4	8.1	7.1	9.7	16.2	9.7	5.4	8.4
1995 to 1997	9.0	7.9	9.6	6.8	12.0	12.0	8.7	5.5	8.9
1994 to 1996	9.7	8.7	10.1	5.6	13.2	11.3	4.4	11.3	9.5
1993 to 1995	9.3	8.7	10.2	6.5	13.2	11.3	3.3	17.3	9.4
1992 to 1994	9.5	9.7	7.9	5.8	14.4	12.0	8.9	17.6	9.5
1991 to 1993	11.3	10.1	6.8	5.2	14.2	10.7	12.5	5.9	9.8
1990 to 1992	9.9	10.0	6.9	6.7	13.8	12.2	12.7	–	9.5
1989 to 1991	10.1	9.6	9.2	6.4	11.9	9.4	7.1	10.2	9.6
1988 to 1990	8.8	9.9	8.6	7.4	11.0	10.2	7.2	10.3	9.2
1987 to 1989	11.1	11.2	8.4	5.6	10.2	8.9	7.4	10.5	10.0
1986 to 1988	11.3	11.5	7.2	7.6	9.1	10.4	11.3	–	10.1
1985 to 1987	12.5	12.2	8.9	7.8	8.9	6.0	7.7	6.5	10.9
1985 to 1987	12.5	12.2	8.9	7.8	8.9	6.0	7.7	6.5	10.9
1984 to 1986	11.6	11.1	10.4	10.5	9.5	8.3	4.0	6.7	10.8
1983 to 1985	11.5	17.1	9.9	12.7	16.9	6.9	4.1	7.0	13.1
Annual fire deaths					***number***				
2010	29	26	19	11	1	4	3	–	92
2009	30	198	16	6	12	5	3	2	270
2008	30	35	21	15	10	8	4	–	120
2007	25	30	24	13	11	4	6	1	113
2006	32	22	27	6	13	1	–	2	104
2005	62	27	18	7	13	5	2	3	138
2004	39	23	15	6	12	11	1	1	110
2003	46	29	18	20	16	7	1	1	143
2002	49	34	24	10	12	8	2	1	141
2001	27	16	17	13	16	9	1	3	104
2000	55	30	34	7	9	1	1	4	146
1999	37	26	33	5	16	3	4	3	125
1998	56	31	28	13	11	12	1	–	155
1997	40	31	32	17	17	8	4	3	147
1996	70	40	22	8	15	3	4	–	163
1995	58	37	42	11	21	6	–	–	178
1994	50	41	35	10	22	7	–	6	172
1993	62	39	21	12	15	3	3	3	156

Table 9A.4 **Fire death rate (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (d)
1992	60	50	18	7	26	7	5	–	175
1991	80	46	23	7	21	5	3	–	183
1990	35	36	20	19	13	5	3	–	132
1989	62	44	37	5	17	3	–	5	175
1988	55	48	16	11	17	6	3	–	158
1987	72	51	16	10	9	3	3	–	165
1986	64	46	26	13	12	5	3	–	170
1985	72	55	28	11	16	–	–	3	188
1984	54	36	26	21	11	6	–	–	155
1983	61	118	21	21	42	3	3	–	268
1982	64	77	50	13	17	6	4	3	233
1981	86	34	44	5	15	7	3	4	198

(a) Data for 2010 are preliminary and subject to a revisions process. Data for 2008 and 2009 have been subject to revisions. See *Causes of Death, Australia* (cat.no. 3303.0) Technical Note: Causes of Death Revisions. Cells in this table have been randomly adjusted to avoid the release of confidential data. Where necessary, totals have been adjusted separately to the component cells and totals are not necessarily the sum of the component cells.

(b) Fire deaths are coded according to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire death codes Exposure (X00-X09) plus X76, X97 and Y26. Fire deaths data are reported by the State or Territory of the deceased's usual residence, and by the year the death was registered.

(c) The small number of deaths means it is difficult to establish patterns and provide detailed analysis.

(d) Includes Other Territories.

– Nil or rounded to zero.

Source : ABS various years, *Causes of Death, Australia,* Cat. no. 3303.0 (published - *ICD code details,* and unpublished - *Total fire deaths*); ABS 2012, *Australian Demographic Statistics,* Cat. no. 3101.0 (table AA.2).

Table 9A.5 **Fire deaths (a), (b), (c), (e)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (d)
Total fire deaths (ICD codes X00-X09, X76, X97, Y26) (f)										
2010										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	19	15	9	10	3	–	–	3	58
Intentional self-harm	no.	1	6	6	–	–	4	–	–	17
Assault	no.	–	1	–	–	–	–	–	–	1
Undertermined intent	no.	7	1	1	1	–	–	–	–	15
Total	**no.**	**29**	**26**	**19**	**11**	**1**	**4**	**3**	**–**	**92**
2009										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	18	181	14	2	2	2	2	4	224
Intentional self-harm	no.	8	7	2	3	6	3	–	–	26
Assault	no.	1	–	–	2	2	–	–	–	6
Undertermined intent	no.	4	10	–	–	–	3	–	–	14
Total	**no.**	**30**	**198**	**16**	**6**	**12**	**5**	**3**	**2**	**270**
2008										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	23	20	15	14	5	6	–	1	84
Intentional self-harm	no.	2	9	6	3	3	3	–	–	22
Assault	no.	–	–	–	–	4	–	–	–	4
Undertermined intent	no.	5	6	–	–	3	–	–	–	13
Total	**no.**	**30**	**35**	**21**	**15**	**10**	**8**	**4**	**–**	**120**
2007										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	17	21	8	10	9	2	–	5	72
Intentional self-harm	no.	5	5	12	1	2	2	2	–	28
Assault	no.	–	–	3	–	–	–	–	–	1
Undertermined intent	no.	2	4	2	2	–	–	–	2	11
Total	**no.**	**25**	**30**	**24**	**13**	**11**	**4**	**6**	**1**	**113**
2006										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	24	15	14	1	8	1	1	–	68
Intentional self-harm	no.	4	5	7	4	4	–	–	–	18
Assault	no.	3	4	3	2	2	–	–	–	10
Undertermined intent	no.	3	3	3	4	4	–	–	–	8
Total	**no.**	**32**	**22**	**27**	**6**	**13**	**1**	**–**	**2**	**104**
2005										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	48	21	12	6	12	2	2	1	109
Intentional self-harm	no.	13	2	5	1	4	–	–	–	23

Table 9A.5 **Fire deaths (a), (b), (c), (e)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (d)
Assault	no.	–	3	–	–	–	2	–	–	np
Undertermined intent	no.	4	1	2	–	–	–	–	–	4
Total	**no.**	**62**	**27**	**18**	**7**	**13**	**5**	**2**	**3**	**138**
2004										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	33	14	12	6	8	10	1	3	86
Intentional self-harm	no.	3	9	3	–	3	1	1	–	21
Assault	no.	4	–	–	–	–	–	–	–	np
Undertermined intent	no.	1	–	3	–	–	–	–	–	np
Total	**no.**	**39**	**23**	**15**	**6**	**12**	**11**	**1**	**1**	**110**
2003										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	33	16	13	17	9	4	3	4	98
Intentional self-harm	no.	10	9	4	2	6	1	–	1	36
Assault	no.	1	2	2	–	3	–	–	–	9
Undertermined intent	no.	–	–	–	–	–	–	–	–	–
Total	**no.**	**46**	**29**	**18**	**20**	**16**	**7**	**1**	**1**	**143**
2002										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	32	25	17	9	10	7	–	1	103
Intentional self-harm	no.	13	6	6	4	3	2	1	–	29
Assault	no.	4	3	3	–	4	–	–	–	7
Undertermined intent	no.	4	2	–	–	–	–	–	–	np
Total	**no.**	**49**	**34**	**24**	**10**	**12**	**8**	**2**	**1**	**141**
2001										
Deaths from smoke, fire and flames, due to:										
Exposure	no.	16	10	6	10	13	6	4	2	66
Intentional self-harm	no.	11	2	7	4	3	4	1	–	31
Assault	no.	–	4	4	–	–	–	–	–	5
Undertermined intent	no.	–	1	–	–	–	–	–	–	np
Total	**no.**	**27**	**16**	**17**	**13**	**16**	**9**	**1**	**3**	**104**

(a) Data for 2009 are preliminary and subject to a revisions process. Data for 2007 and 2008 have been subject to revisions. See *Causes of Death, Australia* (cat.no. 3303.0) Technical Note: Causes of Death Revisions. Cells in this table have been randomly adjusted to avoid the release of confidential data. Where necessary, totals have been adjusted separately to the component cells and totals are not necessarily the sum of the component cells.

(b) Fire deaths are coded according to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire death codes Exposure (X00-X09) plus X76, X97 and Y26. Fire deaths data are reported by the State or Territory of the deceased's usual residence, and by the year the death was registered.

(c) The small number of deaths means it is difficult to establish patterns and provide detailed analysis.

(d) Includes Other Territories.

Table 9A.5 **Fire deaths (a), (b), (c), (e)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust* (d)

(e) Significant increases in the number of deaths of undetermined intent in 2007 relate to a change in ABS coding practice. ABS advise that the number of deaths attributed to undetermined intent codes for the 2007 reference year is expected to decrease as data are revised.

(f) Total fire deaths are unpublished data from the ABS. Totals have been adjusted separately to the component cells and revised totals are not necessarily the sum of the component cells.

– Nil or rounded to zero. **np** Not published.

Source : ABS various years, *Causes of Death, Australia,* Cat. no. 3303.0 (published - *ICD code details,* and unpublished - *Total fire deaths*); ABS 2012, *Australian Demographic Statistics,* Cat. no. 3101.0 (table AA.2).

Table 9A.6 **Landscape fire deaths (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Landscape fire deaths									
Annual rate				***per million people***					
2011-12	–	0.2	0.2	–	–	–	–	–	0.1
2010-11	0.3	–	–	0.4	–	–	–	–	0.1
2009-10	0.1	0.2	–	–	–	–	–	–	0.1
2008-09	0.1	32.6	–	–	–	–	–	–	8.1
2007-08	–	0.4	–	1.4	0.6	–	–	4.6	0.3
2006-07	0.1	0.2	–	0.5	–	2.0	–	–	0.2
2005-06	0.4	0.8	–	–	–	–	–	–	0.3
2004-05	–	–	–	–	5.8	–	–	–	0.4
2003-04	–	–	–	1.0	–	–	–	–	0.1
2002-03	0.5	0.2	0.3	1.0	–	–	12.3	5.0	0.6
2001-02	–	0.2	0.3	–	–	–	–	–	0.1
2000-01	0.2	–	–	–	–	–	–	5.1	0.1
1999-2000	0.6	–	–	–	–	–	–	–	0.2
1998-99	–	1.1	–	–	–	–	–	–	0.3
1997-98	0.6	–	0.3	0.6	–	–	–	–	0.3
1996-97	–	0.7	–	–	–	–	–	–	0.2
1995-96	–	0.2	–	–	–	–	–	–	0.1
1994-95	–	–	–	–	–	–	–	–	–
1993-94	0.7	0.2	–	–	–	–	–	–	0.3
1992-93	–	–	–	–	–	–	–	–	–
1991-92	0.3	–	0.3	–	–	–	–	–	0.2
1990-91	–	–	–	–	–	–	–	–	–
1989-90	–	–	–	–	–	–	–	–	–
1988-89	0.2	–	–	–	–	–	–	–	0.1
1987-88	–	–	–	–	–	–	–	–	–
1988-89	0.5	–	–	–	–	–	–	–	0.2
1985-86	0.2	–	–	–	–	–	–	–	0.1
1984-85	0.6	1.0	–	–	0.7	–	–	–	0.5
1983-84	–	–	–	–	–	–	–	–	–
1982-83	0.8	11.7	–	–	20.9	–	–	–	5.2
Total landscape fire deaths				***number***					
2011-12	–	1	1	–	–	–	–	–	2
2010-11	2	–	–	1	–	–	–	–	3
2009-10	1	1	–	–	–	–	–	–	2
2008-09	1	175	–	–	–	–	–	–	176
2007-08	–	2	–	3	1	–	–	1	7
2006-07	1	1	–	1	–	1	–	–	4

Table 9A.6 **Landscape fire deaths (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
2005-06	3	4	–	–	–	–	–	–	7
2004-05	–	–	–	–	9	–	–	–	9
2003-04	–	–	–	2	–	–	–	–	2
2002-03	3	1	1	2	–	–	4	1	12
2001-02	–	1	1	–	–	–	–	–	2
2000-01	1	–	–	–	–	–	–	1	2
1999-2000	4	–	–	–	–	–	–	–	4
1998-99	–	5	–	–	–	–	–	–	5
1997-98	4	–	1	1	–	–	–	–	6
1996-97	–	3	–	–	–	–	–	–	4
1995-96	–	1	–	–	–	–	–	–	1
1994-95	–	–	–	–	–	–	–	–	–
1993-94	4	1	–	–	–	–	–	–	5
1992-93	–	–	–	–	–	–	–	–	–
1991-92	2	–	1	–	–	–	–	–	3
1990-91	–	–	–	–	–	–	–	–	–
1989-90	–	–	–	–	–	–	–	–	–
1988-89	1	–	–	–	–	–	–	–	1
1987-88	–	–	–	–	–	–	–	–	–
1988-89	3	–	–	–	–	–	–	–	3
1985-86	1	–	–	–	–	–	–	–	1
1984-85	3	4	–	–	1	–	–	–	8
1983-84	–	–	–	–	–	–	–	–	–
1982-83	4	47	–	–	28	–	–	–	79

(a) The small number of deaths means it is difficult to establish patterns and provide detailed analysis.

(b) Population estimates are the midpoint estimate of the relevant financial year (that is, as at 31 Dec).

(c) The landscape fire death rate and the fire death rate (table 9A.7) rate are different. The scope and definition of the two measures differ according to:

- Fire type — the scope of the landscape fire death rate is landscape fires only (such as bushfires).
- Cause of death — the total fire death rate (ABS) includes only deaths primarily caused due to smoke, fire and flames. The landscape fire death rate includes all deaths that may have resulted from the landscape fire, but whose primary cause may be related to other factors (such as the onset of a stress related coronary death or deaths as a result of actions attempting to escape a fire (such as a motor vehicle accident).
- Location of death — the landscape fire death rate records the location of death according to the location of the fire (not residential address of the victim).

– Nil or rounded to zero.

Source : Australasian Fire and Emergency Service Authorities Council (AFAC) (unpublished) Landscape Fire Deaths database; ABS 2012, *Australian Demographic Statistics* , Cat. no. 3101.0 (table AA.2).

Table 9A.7 **Fire injuries (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas* (d)	*ACT* (d)	*NT* (d)	*Aust*
Hospital admissions due to fire injury									
Annual rate				***per 100 000 people***					
2010-11	12.6	13.8	19.7	19.4	21.2	16.9	4.7	87.0	16.4
2009-10	12.3	13.3	17.1	16.2	20.0	17.4	4.8	89.6	15.3
2008-09	11.3	13.3	20.7	15.3	20.7	16.2	8.9	88.4	15.7
2007-08	14.6	12.3	17.6	16.8	20.7	15.9	5.9	89.6	15.9
2006-07	13.9	12.7	15.6	18.8	21.8	np	np	np	15.8
2005-06	16.2	10.6	16.1	17.5	23.9	np	np	np	16.1
2004-05	14.5	12.6	17.8	15.6	19.2	np	np	np	15.7
2003-04	15.0	11.3	15.7	16.9	17.1	np	np	np	14.6
2002-03	13.5	11.6	16.0	17.6	18.9	np	np	np	13.7
2001-02	15.2	11.4	20.6	20.2	17.3	np	np	np	16.2
Annual rate (3 year average)				***per 100 000 people***					
2008-09 to 2010-11	12.1	13.5	19.2	17.0	20.6	16.8	6.1	88.3	15.8
2007-08 to 2009-10	12.7	13.0	18.5	16.1	20.4	16.5	6.5	89.2	15.6
2006-07 to 2008-09	13.2	12.8	18.0	16.9	21.0	np	np	np	15.8
2005-06 to 2007-08	14.9	11.9	16.5	17.7	22.1	np	np	np	16.0
2004-05 to 2006-07	14.9	12.0	16.5	17.3	21.6	np	np	np	15.9
2003-04 to 2005-06	15.3	11.5	16.5	16.7	20.1	np	np	np	15.5
2002-03 to 2004-05	14.4	11.8	16.5	16.7	18.4	np	np	np	14.6
2001-02 to 2003-04	14.6	11.4	17.4	18.2	17.8	np	np	np	14.8
Total fire injury admissions				***number***					
2010-11	918	773	898	449	350	86	17	200	3 691
2009-10	885	730	767	368	326	88	17	204	3 385
2008-09	798	713	900	338	333	81	31	196	3 390
2007-08	1 008	644	745	357	330	79	20	195	3 378
2006-07	951	656	644	391	343	np	np	np	3 305
2005-06	1 100	537	653	357	373	np	np	np	3 305
2004-05	979	633	702	312	296	np	np	np	3 170
2003-04	1 004	559	604	333	262	np	np	np	2 923
2002-03	901	567	601	341	289	np	np	np	2 699
2001-02	1 005	551	758	386	262	np	np	np	3 170

(a) Fire injuries are represented by hospital admissions. Fire injuries data in the 2008 and subsequent Reports differ from those in earlier Reports because counting rules for fire injury data were aligned with those for fire deaths in 2008. Fire injuries are coded according to the ICD and Related Health Problems Revision 10 (ICD-10) and include ICD fire injury codes X00-X09 plus X76, X97 and Y26. Fire injuries are reported by the State or Territory where the injury is treated. Excludes secondary fires resulting from explosions, transport accidents, and emergency department non-admitted casualties.

Table 9A.7 **Fire injuries (a), (b), (c)**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas* (d)	*ACT* (d)	*NT* (d)	*Aust*

(b) Historical population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(c) The AIHW note that for the fire injuries measure, the period of the extended time series covers all six editions of the ICD-10-AM classification. Data providers have expressed concerns over the length of the series due to possible changes in the classification and inconsistent coding over time.Therefore, AIHW have expressed the opinion that a review of the consistency in coding over time is warranted.

(d) Jurisdiction notes:

Tas, ACT and NT:

Data for reference years 2001-02 to 2006-07 are not available. For the period 2005-06 to 2007-08, the average is calculated on only one year of data for these jurisdictions, and two years of data for the period 2006-07 to 2008-09.

na Not available. **np** Not published.

Source : Australian Institute of Health and Welfare (AIHW), *Australian Hospital Statistics* , (unpublished), Canberra; ABS 2010, *Australian Demographic Statistics,* Cat. no. 3101.0, Canberra (table AA.2).

Table 9A.8 **Confinement of building fires to room of origin (per cent)**

	NSW (a)	*Vic*	*Qld* (a)	*WA* (a)	*SA* (a)	*Tas* (a)	*ACT*	*NT*
All ignition types								
2011-12	66.1	74.9	70.0	63.7	62.0	57.9	72.8	69.4
2010-11	69.7	75.6	72.3	65.0	67.0	59.2	75.9	75.5
2009-10	67.4	73.1	70.6	71.1	67.4	59.5	72.2	75.5
2008-09	66.9	75.9	66.3	67.7	69.7	62.6	72.5	73.4
2007-08	65.7	73.7	68.4	65.4	72.8	62.5	77.0	67.4
2006-07	69.4	73.9	66.6	64.1	65.1	66.3	75.7	68.3
2005-06	69.2	74.3	65.2	66.4	64.7	64.5	82.0	65.4
2004-05	70.7	76.5	66.9	69.3	64.0	64.7	78.0	59.0
2003-04	74.4	77.3	69.5	71.4	69.0	63.5	81.0	77.1
2002-03	69.1	76.5	69.5	69.7	63.9	63.8	70.1	63.5
Incendiary and suspicious structure fires								
2011-12	54.4	58.1	51.8	50.9	45.0	43.2	66.7	100.0
2010-11	58.0	63.1	63.7	59.8	66.0	37.5	62.8	100.0
2009-10	53.2	59.6	57.6	61.4	46.8	53.8	64.4	57.1
2008-09	50.8	62.2	58.9	59.1	65.2	47.2	69.8	61.5
2007-08	65.4	57.8	60.4	57.1	59.4	50.6	69.8	55.6
2006-07	55.7	60.9	61.5	55.3	64.4	53.1	61.1	60.0
2005-06	57.5	59.7	54.4	55.2	71.4	53.1	60.0	100.0
2004-05	56.8	55.8	61.4	55.2	70.4	58.3	54.5	27.3
2003-04	63.4	61.8	54.2	61.8	64.7	51.5	60.6	57.1
2002-03	na	na	56.9	na	na	na	na	na
Accidental structure fires								
2011-12	80.6	83.1	81.1	74.1	70.0	64.3	76.3	83.3
2010-11	81.5	82.6	82.2	82.9	73.0	76.6	84.6	72.0
2009-10	80.6	81.4	84.4	82.9	80.2	69.6	76.6	86.7
2008-09	78.9	83.6	77.2	85.2	79.9	73.9	80.0	74.2
2007-08	77.5	81.7	80.5	82.4	83.7	72.6	85.7	79.5
2006-07	80.7	82.1	80.6	83.7	79.0	76.0	85.0	70.4
2005-06	80.9	82.8	80.1	77.4	64.3	74.6	84.5	56.3
2004-05	82.8	84.4	80.0	79.1	64.0	73.4	77.2	86.7
2003-04	83.4	84.7	84.6	78.7	78.8	73.3	67.5	89.3
2002-03	na	na	84.2	na	na	na	na	na

(a) Jurisdiction notes:

Vic: Due to data collection issues, data is incomplete for 2005-06.

Qld: Structure fires within the Urban Levy Boundary are included. Excluded are non-emergency calls and those where QFRS experienced delays due to either extreme weather conditions or where the initial response was by another agency or brigade.

WA: Total confinement percentages include fires confined but not classified as either accidental or suspicious.

Table 9A.8 **Confinement of building fires to room of origin (per cent)**

	NSW (a)	*Vic*	*Qld* (a)	*WA* (a)	*SA* (a)	*Tas* (a)	*ACT*	*NT*

In 2007-08, 566 incidents were excluded as containment codes were not completed.

In 2006-07, 507 incidents were excluded as containment codes were not completed.

SA: From 2011-12 data includes reporting from both CFS and MFS. In prior years, data exclude the CFS as they did not routinely collect the source data.

Tas: Data are for *all* fire brigades, both full-time and volunteer.

Due to industrial action 90 incident reports are incomplete in 2008-09.

na Not available.

Source: State and Territory governments (unpublished).

Table 9A.9 Confinement of building and other structure fires to room/object of origin (per cent)

	NSW (a)	*Vic*	*Qld* (a)	*WA* (a)	*SA* (a)	*Tas* (a)	*ACT*	*NT*
All ignition types								
2011-12	80.1	82.9	84.5	77.7	70.0	74.7	85.8	82.6
2010-11	82.0	83.6	87.6	76.3	73.0	85.3	77.1	86.9
2009-10	na	80.9	na	66.3	75.0	72.5	78.5	83.0
2008-09	na	81.6	na	70.1	70.0	74.5	80.5	80.3
2007-08	na	80.6	na	64.6	73.0	73.8	81.6	78.3
2006-07	na	80.2	na	65.5	na	76.3	83.6	81.3
Incendiary and suspicious structure fires								
2011-12	60.1	62.6	55.6	57.6	47.0	46.6	77.7	100.0
2010-11	63.0	68.1	68.1	55.9	67.0	39.9	63.6	100.0
2009-10	na	61.6	na	56.7	na	56.9	67.3	44.4
2008-09	na	64.9	na	54.8	na	52.5	74.5	70.0
2007-08	na	60.1	na	54.8	na	59.4	70.0	61.9
2006-07	na	63.3	na	52.5	na	58.6	71.7	64.3
Accidental structure fires								
2011-12	90.0	89.2	90.0	85.3	78.0	83.7	88.5	93.8
2010-11	91.0	89.0	91.2	72.9	80.0	56.4	85.7	81.6
2009-10	na	87.8	na	74.6	87.0	82.8	83.0	89.7
2008-09	na	88.0	na	80.0	80.0	84.4	87.2	96.1
2007-08	na	87.1	na	72.7	84.0	82.0	89.5	87.3
2006-07	na	87.2	na	74.0	na	84.6	91.0	83.0

(a) Jurisdiction notes:

Qld: Structure fires within the Urban Levy Boundary are included Excluded are non-emergency calls and those where QFRS experienced delays due to either extreme weather conditions or where the initial response was by another agency or brigade.

WA: Total confinement percentages include fires confined but not classified as either accidental or suspicious.

In 2007-08, 566 incidents were excluded as containment codes were not completed.
In 2006-07, 507 incidents were excluded as containment codes were not completed.

SA: Data include MFS, but exclude the CFS as they do not routinely collect the source data. Data for confinement of small fires to object of origin are not available in 2006-07 and exclude incendiary incidents prior to 2010-11.

Tas: Data are for *all* fire brigades, both full-time and volunteer.

Due to industrial action 90 incident reports are incomplete in 2008-09.

ACT: In 2011-12, the ACT did not record any fires in a building confined to the 'object' on origin (AIRS codes 120-129)

na Not available.

Source: State and Territory governments (unpublished).

Table 9A.10 **Median dollar loss per structure fire (2011-12 dollars) (a)**

	NSW (b)	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT*
2011-12	2 000	1 000	2 000	5 000	5 000	1 000	1 000	5 000
2010-11	2 033	1 016	2 033	3 811	10 163	2 033	1 016	1 016
2009-10	2 155	1 078	2 155	5 388	5 388	1 078	2 694	2 155
2008-09	2 176	1 088	2 176	3 264	5 441	1 088	1 088	2 176
2007-08	2 286	2 286	2 286	2 857	5 714	5 714	2 343	8 571
2006-07	2 392	1 196	2 392	3 589	9 569	3 768	1 406	3 589
2005-06	2 509	1 255	2 509	3 764	6 274	3 764	2 509	2 509
2004-05	2 628	1 314	2 628	3 942	6 570	5 256	1 708	2 628
2003-04	2 732	820	2 732	4 098	4 098	4 781	2 732	3 757
2002-03	2 813	844	1 406	3 516	5 626	7 032	2 813	7 032

(a) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Estimates are not validated by the insurance industry, or adjusted for interstate valuation differences.

(b) Jurisdiction notes:

NSW: Some structure fires resulted in direct dollar loss in excess of $1 million each. In:
2004-05 there were 17 such structure fires;
2005-06, 32 with five of these at $10+ million each and one at $89 million;
2006-07, 15 such structure fires, all of these at $1+ million each;
2007-08, 19 at $1+ million each with four at $5+ million each and one of $100 million.

Vic: 2008-09 data do not include loss arising from the Black Saturday Bushfires in 2009.

2005-06 data are incomplete, due to data collection issues.

Qld: Accurate identification of incidents attended by QFRS rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. The 2010-11 and 2011-12 results are based on the values over the previous five years due to a systems issue. It is anticipated that this issue will be resolved during 2012-13.

WA: Dollar losses are based on estimated values provided by firefighters.

SA: Metropolitan Fire Service data entry for 2006-07 reported property loss from structure fire was incomplete.

Tas: Data are for *all* fire brigades, both full-time and volunteer. Property loss does not include losses as a result of vegetation fires. Due to industrial action 90 incident reports are incomplete in 2008-09.

ACT: Data for 2002-03 exclude the January 2003 wildfires, which destroyed over 500 houses and resulted in losses in excess of $200 million.

Source State and Territory Governments (unpublished); ABS 2012, *Australian National Accounts: National Income, Expenditure and Product, June 2012* , Cat. no. 5206.0, Canberra (table AA.51).

Table 9A.11 **Property loss from structure fire (2011-12 dollars per person) (a), (b), (c)**

	NSW (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas* (d)	*ACT* (d)	*NT* (d)	*Aust* (d)
Property loss from structure fire									
2011-12	30.1	32.7	29.9	36.9	36.9	60.0	65.0	81.4	33.7
2010-11	30.7	39.8	25.7	40.6	31.5	97.3	21.7	61.4	34.7
2009-10	26.3	52.1	32.7	52.0	24.4	81.5	36.0	131.5	39.0
2008-09	31.9	39.9	32.2	61.4	53.6	67.5	26.4	83.2	39.8
2007-08	49.3	40.0	41.5	54.8	24.4	233.3	25.0	127.1	48.8
2006-07	30.0	43.1	26.9	40.6	32.1	55.1	36.9	56.1	34.8
2005-06	77.8	39.5	34.6	27.6	22.6	84.1	39.1	59.7	50.0
2004-05	35.2	47.6	31.9	29.9	37.7	63.7	25.8	30.9	37.8
2003-04	38.3	30.1	32.8	30.1	27.3	58.7	35.5	15.0	33.7
2002-03	35.2	19.7	39.4	33.8	36.6	30.9	35.2	23.9	31.9
Three year averages									
2011-12 to 2009-10	29.1	41.6	29.4	43.2	30.9	79.6	40.9	91.4	35.8
2010-11 to 2008-09	29.6	44.0	30.2	51.3	36.5	82.1	28.1	92.0	37.8
2009-10 to 2007-08	35.9	44.0	35.5	56.0	34.2	127.4	29.1	113.9	42.6
2008-09 to 2006-07	37.1	41.0	33.6	52.3	36.7	118.6	29.4	88.8	41.2
2007-08 to 2005-06	52.4	40.9	34.3	41.0	26.4	124.2	33.6	81.0	44.5
2006-07 to 2004-05	47.7	43.4	31.2	32.7	30.8	67.6	33.9	48.9	40.9
2005-06 to 2003-04	50.4	39.0	33.1	29.2	29.2	68.8	33.5	35.2	40.5
2004-05 to 2002-03	36.2	32.4	34.7	31.2	33.9	51.1	32.2	23.3	34.5

(a) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Estimates are not validated by the insurance industry, or adjusted for interstate valuation differences.

(b) Historical rates in this table may differ from those in previous Reports, as historical population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(c) Property loss does not include losses as a result of landscape fires (such as bushfires or vegetation fires).

(d) Jurisdiction notes:

NSW: Some structure fires resulted in direct dollar loss in excess of $1 million each. In:
2004-05 there were 17 such structure fires;
2005-06, 32 with five of these at $10+ million each and one at $89 million;
2006-07, 15 such structure fires, all of these at $1+ million each;
2007-08, 19 at $1+ million each with four at $5+ million each and one of $100 million.

Vic: During 2010-11 there were 15 structure fires with significant dollar losses ($1 million and above) totalling $31.2 million.

2008-09 data do not include loss arising from the Black Saturday Bushfires in 2009.

Due to data collection issues, data are incomplete for 2005-06.

Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population.

Table 9A.11 **Property loss from structure fire (2011-12 dollars per person) (a), (b), (c)**

	NSW (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas* (d)	*ACT* (d)	*NT* (d)	*Aust* (d)

2010-11 data are understated due to a systems issue. It is anticipated that this issue will be resolved during 2012-13.

WA: Dollar losses are based on estimated values provided by firefighters.

SA: In 2011-12 there was a large petrochemical fire which accounted for $10 million loss.

In 2008-09 two fires accounted for 35 per cent of reported dollar loss.

In 2006-07 there was a $15 million fire that accounted for 35 per cent of the reported dollar loss. MFS data entry for 2006-07 reported property loss from structure fire was incomplete.

Tas: Data are for all fire brigades, both full time and volunteer.

Due to industrial action 90 incident reports are incomplete in 2008-09.

For 2007-08, data include two significant fires where the property loss was $60 million and $20 million respectively.

ACT: Data for 2002-03 exclude the January 2003 wildfires, which destroyed over 500 houses and resulted in losses in excess of $200 million.

Tas, ACT and NT:

Due to small population sizes, rates in these jurisdictions may be impacted significantly by single large-loss events.

Aus: Average for Australia excludes rural fire service data for some years as per the jurisdictions' caveats.

Source: State and Territory governments (unpublished); ABS 2012, *Australian Demographic Statistics*, Cat. no. 3101.0, Canberra (table AA.2); ABS 2012, *Australian National Accounts: National Income, Expenditure and Product, June 2012* , Cat. no. 5206.0, Canberra (table AA.51).

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
2011-12									
Fires									
Structure fires	6 402	6 278	3 017	1 442	1 494	645	265	175	19 718
Landscape fires	10 489	4 825	9 367	5 741	2 382	1 732	199	2 504	37 239
Other fires	15 963	10 154	6 870	4 105	3 211	1 701	505	375	42 884
Total fires	**32 854**	**21 257**	**19 254**	**11 288**	**7 087**	**4 078**	**969**	**3 054**	**99 841**
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	19 268	11 785	16 754	2 728	5 934	1 259	1 372	684	59 784
Hazardous conditions	10 386	6 530	3 462	1 031	1 618	256	408	151	23 842
Floods, storm and tempest and other natural disasters	10 517	3 265	3 887	701	2 998	387	1 203	191	23 149
Good intent calls	13 864	10 535	2 892	1 807	2 628	1 105	655	262	33 748
Malicious false calls	2 267	1 647	852	335	324	126	146	77	5 774
System initiated false alarms	53 336	14 102	20 548	10 627	7 804	3 807	6 280	2 658	119 162
Other	5 422	1 970	2 420	1 240	–	44	334	329	11 759
Total other emergencies and incidents	**115 060**	**49 834**	**50 815**	**18 469**	**21 306**	**6 984**	**10 398**	**4 352**	**277 218**
Incident type not determined or not classified	1 743	6	na	na	–	432	–	401	na
Total fires, other emergencies and incidents	**149 657**	**71 097**	**70 069**	**29 757**	**28 393**	**11 494**	**11 367**	**7 807**	**377 059**
2010-11									
Fires									
Structure fires	6 675	6 307	2 811	1 567	1 403	663	245	136	19 807

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
Landscape fires	11 149	2 520	5 072	6 546	1 944	1 413	142	1 393	30 179
Other fires	16 130	8 929	5 897	3 753	3 215	1 582	513	317	40 336
Total fires	**33 954**	**17 756**	**13 780**	**11 866**	**6 562**	**3 658**	**900**	**1 846**	**90 322**
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	18 453	10 629	16 151	2 585	6 289	1 381	1 497	717	57 702
Hazardous conditions	10 734	6 371	3 769	908	1 717	227	438	155	24 319
Floods, storm and tempest and other natural disasters	9 755	3 604	5 013	51	3 805	440	1 452	208	24 328
Good intent calls	13 709	10 048	3 026	1 683	2 581	1 079	651	333	33 110
Malicious false calls	2 731	1 605	985	327	307	150	125	62	6 292
System initiated false alarms	53 615	14 835	22 725	9 283	8 261	4 067	6 468	2 801	122 055
Other	5 855	2 114	3 040	1 680	1 082	51	321	654	14 797
Total other emergencies and incidents	**114 852**	**49 206**	**54 709**	**16 517**	**24 042**	**7 395**	**10 952**	**4 930**	**282 603**
Incident type not determined or not classified	937	7	na	na	1	384	–	474	1 803
Total fires, other emergencies and incidents	**149 743**	**66 969**	**68 489**	**28 383**	**30 605**	**11 437**	**11 852**	**7 250**	**374 728**
2009-10									
Fires									
Structure fires	7 044	6 286	2 688	1 550	1 418	694	246	114	20 040
Landscape fires	15 874	5 253	10 298	7 199	2 810	1 925	268	1 343	44 970
Other fires	17 540	10 511	5 463	3 909	3 486	1 669	709	378	43 665
Total fires	**40 458**	**22 050**	**18 449**	**12 658**	**7 714**	**4 288**	**1 223**	**1 835**	**108 675**

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	16 969	9 668	14 914	1 984	5 864	1 293	1 461	693	52 846
Hazardous conditions	11 126	6 391	3 437	857	1 608	223	403	180	24 225
Floods, storm and tempest and other natural disasters	9 098	2 853	2 822	739	2 378	431	1 062	210	19 593
Good intent calls	14 278	10 528	5 618	1 401	2 654	1 104	621	254	36 458
Malicious false calls	3 208	1 896	1 222	330	367	135	117	87	7 362
System initiated false alarms	49 324	12 732	20 418	8 972	7 714	3 872	5 713	2 470	111 215
Other	10 241	1 846	1 939	1 066	934	110	325	471	16 932
Total other emergencies and incidents	**114 244**	**45 914**	**50 370**	**15 349**	**21 519**	**7 168**	**9 702**	**4 365**	**268 631**
Incident type not determined or not classified	730	5	–	–	–	751	–	450	1 936
Total fires, other emergencies and incidents	**155 432**	**67 969**	**68 819**	**28 007**	**29 233**	**12 207**	**10 925**	**6 650**	**379 242**
2008-09									
Fires									
Structure fires	6 917	6 459	2 960	1 543	1 469	805	263	172	20 588
Landscape fires	14 531	7 661	7 358	7 607	2 749	1 966	337	1 640	43 849
Other fires	18 452	12 507	5 565	4 419	3 754	1 617	899	383	47 596
Total fires	**39 900**	**26 627**	**15 883**	**13 569**	**7 972**	**4 388**	**1 499**	**2 195**	**112 033**
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	16 548	9 606	17 831	1 869	5 717	1 422	1 274	714	54 981
Hazardous conditions	12 570	6 181	3 529	922	1 522	222	440	147	25 533

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
Floods, storm and tempest and other natural disasters	8 197	2 839	2 784	955	2 131	398	888	248	18 440
Good intent calls	13 561	11 421	5 100	1 571	2 332	1 121	597	342	36 045
Malicious false calls	3 747	2 229	1 441	380	372	124	110	139	8 542
System initiated false alarms	54 706	12 590	21 264	8 657	7 364	3 742	5 622	2 676	116 621
Other	5 652	1 839	2 198	931	745	53	354	334	12 106
Total other emergencies and incidents	**114 981**	**46 705**	**54 147**	**15 285**	**20 183**	**7 082**	**9 285**	**4 600**	**272 268**
Incident type not determined or not classified	1 682	4	–	–	–	301	24	–	2 011
Total fires, other emergencies and incidents	**156 563**	**73 336**	**70 030**	**28 854**	**28 155**	**11 771**	**10 808**	**6 795**	**386 312**
2007-08									
Fires									
Structure fires	7 179	6 391	2 893	1 538	1 544	639	246	173	20 603
Landscape fires	13 517	7 553	8 093	7 114	2 862	2 048	237	1 789	43 213
Other fires	18 461	11 297	5 774	4 251	4 137	1 381	541	361	46 203
Total fires	**39 157**	**25 241**	**16 760**	**12 903**	**8 543**	**4 068**	**1 024**	**2 323**	**110 019**
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	15 465	8 954	17 261	1 686	5 240	1 153	1 315	638	51 712
Hazardous conditions	12 508	6 365	3 468	1 109	1 599	212	431	200	25 892
Floods, storm and tempest and other natural disasters	7 508	3 005	2 859	842	2 043	388	809	234	17 688
Good intent calls	12 976	10 821	5 241	1 285	2 053	1 126	603	309	34 414
Malicious false calls	4 321	2 521	1 598	395	410	152	164	123	9 684

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
System initiated false alarms	51 193	12 807	20 916	8 682	8 423	3 290	5 768	2 319	113 398
Other	8 716	1 584	2 042	906	763	69	298	428	14 806
Total other emergencies and incidents	**112 687**	**46 057**	**53 385**	**14 905**	**20 531**	**6 390**	**9 388**	**4 251**	**267 594**
Incident type not determined or not classified	528	1	–	–	22	1 605	–	–	2 156
Total fires, other emergencies and incidents	**152 372**	**71 299**	**70 145**	**27 808**	**29 096**	**12 063**	**10 412**	**6 574**	**379 769**
2006-07									
Fires									
Structure fires	6 971	6 233	2 747	1 452	1 534	708	278	146	20 069
Landscape fires	17 684	10 008	10 912	7 343	3 170	2 441	481	1 714	53 753
Other fires	18 597	11 143	5 526	4 128	4 352	1 517	838	394	46 495
Total fires	**43 252**	**27 384**	**19 185**	**12 923**	**9 056**	**4 666**	**1 597**	**2 254**	**120 317**
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	14 970	8 591	16 109	1 590	4 535	990	1 278	624	48 687
Hazardous conditions	13 523	6 959	3 304	917	1 939	249	239	181	27 311
Floods, storm and tempest and other natural disasters	7 864	4 034	2 686	857	2 000	409	941	181	18 972
Good intent calls	13 628	10 865	4 717	1 456	1 978	1 206	636	345	34 831
Malicious false calls	5 093	2 547	1 752	321	591	169	181	111	10 765
System initiated false alarms	49 724	13 026	19 130	7 688	4 799	3 771	5 361	2 359	105 858
Other	9 757	1 928	1 778	831	4 796	69	444	408	20 011
Total other emergencies and incidents	**114 559**	**47 950**	**49 476**	**13 660**	**20 638**	**6 863**	**9 080**	**4 209**	**266 435**

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
Incident type not determined or not classified	423	1	–	–	50	291	–	–	765
Total fires, other emergencies and incidents	**158 234**	**75 335**	**68 661**	**26 583**	**29 744**	**11 820**	**10 677**	**6 463**	**387 517**
2005-06									
Fires									
Structure fires	7 342	5 574	2 720	1 348	1 455	696	331	144	19 610
Landscape fires	19 604	5 534	8 780	6 567	2 371	1 775	263	1 338	46 232
Other fires	19 118	9 124	5 305	3 675	3 840	1 358	681	357	43 458
Total fires	**46 064**	**20 232**	**16 805**	**11 590**	**7 666**	**3 829**	**1 275**	**1 839**	**109 300**
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	12 929	6 127	13 722	876	4 158	527	1 246	653	40 238
Hazardous conditions	12 481	6 097	3 202	928	1 830	234	191	211	25 174
Floods, storm and tempest and other natural disasters	6 607	4 459	2 352	814	2 259	392	1 095	184	18 162
Good intent calls	12 922	7 821	4 212	1 290	1 617	1 047	592	246	29 747
Malicious false calls	5 061	2 005	1 584	264	629	141	161	95	9 940
System initiated false alarms	49 270	9 224	20 699	7 540	5 016	3 784	5 313	2 307	103 153
Other	9 495	11 387	2 044	759	4 580	49	450	454	29 218
Total other emergencies and incidents	**108 765**	**47 120**	**47 815**	**12 471**	**20 089**	**6 174**	**9 048**	**4 150**	**255 632**
Incident type not determined or not classified	–	38	8	–	45	228	–	–	319
Total fires, other emergencies and incidents	**154 829**	**67 390**	**64 628**	**24 061**	**27 800**	**10 231**	**10 323**	**5 989**	**365 251**

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
2004-05									
Fires									
Structure fires	6 917	5 804	2 424	1 437	1 433	741	279	140	19 175
Landscape fires	17 157	5 823	12 989	7 598	2 877	2 133	217	1 882	50 676
Other fires	18 978	9 110	5 284	4 525	3 405	1 193	546	286	43 327
Total fires	**43 052**	**20 737**	**20 697**	**13 560**	**7 715**	**4 067**	**1 042**	**2 308**	**113 178**
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	11 846	7 303	11 769	959	3 324	549	1 285	597	37 632
Hazardous conditions	12 532	6 931	3 046	980	1 557	235	224	152	25 657
Floods, storm and tempest and other natural disasters	6 638	3 155	2 204	734	1 903	319	698	174	15 825
Good intent calls	11 166	9 745	4 260	1 464	1 538	964	436	180	29 753
Malicious false calls	5 338	2 596	1 553	326	588	169	145	114	10 829
System initiated false alarms	47 990	10 357	18 163	7 406	3 870	3 491	4 586	1 740	97 603
Other	9 947	3 822	2 513	284	4 288	290	1 067	455	22 666
Total other emergencies and incidents	**105 457**	**43 909**	**43 508**	**12 153**	**17 068**	**6 017**	**8 441**	**3 412**	**239 965**
Incident type not determined or not classified	na	na	na	na	na	na	–	na	–
Total fires, other emergencies and incidents	**148 509**	**64 646**	**64 205**	**25 713**	**24 783**	**10 084**	**9 483**	**5 720**	**353 143**
2003-04									
Fires									
Structure fires	7 192	5 989	2 538	1 391	1 833	762	245	119	20 069

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
Landscape fires	16 266	6 130	9 376	8 387	3 182	2 124	238	1 704	47 407
Other fires	18 036	9 258	5 335	4 083	3 757	1 164	522	269	42 424
Total fires	**41 494**	**21 377**	**17 249**	**13 861**	**8 772**	**4 050**	**1 005**	**2 092**	**109 900**
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	11 047	7 190	10 501	804	3 596	452	1 082	551	35 223
Hazardous conditions	12 464	6 309	3 760	1 065	1 821	256	438	163	26 276
Floods, storm and tempest and other natural disasters	6 836	2 955	2 702	612	1 809	318	974	183	16 389
Good intent calls	11 281	8 504	4 574	1 315	1 699	844	537	157	28 911
Malicious false calls	6 140	2 831	1 752	243	838	136	174	86	12 200
System initiated false alarms	48 185	10 188	16 890	6 367	5 239	3 348	5 162	2 506	97 885
Other	8 122	3 779	4 907	1 436	4 042	54	113	294	22 747
Total other emergencies and incidents	**104 075**	**41 756**	**45 086**	**11 842**	**19 044**	**5 408**	**8 480**	**3 940**	**239 631**
Incident type not determined or not classified	3 270	–	428	–	–	329	–	70	4 097
Total fires, other emergencies and incidents	**148 839**	**63 133**	**62 763**	**25 703**	**27 816**	**9 787**	**9 485**	**6 102**	**353 628**
2002-03									
Fires									
Structure fires	7 301	6 128	2 504	1 398	1 906	780	280	130	20 427
Landscape fires	21 510	8 005	13 042	9 072	3 642	2 737	623	2 137	60 768
Other fires	18 084	10 255	5 319	4 226	3 344	1 211	640	284	43 363
Total fires	**46 895**	**24 388**	**20 865**	**14 696**	**8 892**	**4 728**	**1 543**	**2 551**	**124 558**

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*
Other emergencies and incidents									
Nonfire rescue calls incl. road crash rescue	10 529	6 856	9 231	817	3 347	393	1 096	517	32 786
Hazardous conditions	13 012	6 422	3 078	1 097	1 877	344	443	209	26 482
Floods, storm and tempest and other natural disasters	5 258	3 880	2 450	585	1 639	275	699	–	14 786
Good intent calls	11 357	8 516	4 540	1 652	1 236	921	690	53	28 965
Malicious false calls	6 491	3 002	1 728	320	765	170	242	127	12 845
System initiated false alarms	48 253	10 179	16 042	6 079	4 599	1 149	4 744	2 202	93 247
Other	7 419	4 768	4 280	1 757	5 582	2 410	316	813	27 345
Total other emergencies and incidents	**102 319**	**43 623**	**41 349**	**12 307**	**19 045**	**5 662**	**8 230**	**3 921**	**236 456**
Incident type not determined or not classified	na	na	na	na	na	na	–	na	–
Total fires, other emergencies and incidents	**149 214**	**68 011**	**62 214**	**27 003**	**27 937**	**10 390**	**9 773**	**6 472**	**361 014**

(a) Data in this table may be different to other tables in the chapter as these data only reflect responses from fire service organisations, and, where stated, land management agencies. These data report the type of incident that reflects the most serious situation as determined by operational personnel after arriving at the scene and not the incident type relayed by the communication centre.

(b) Jurisdiction notes:

Vic: Landscape fires data include incidents from the Department of Sustainability and Environment from 2004-05 onwards. Some degree of duplicate counting may be present across Country Fire Authority and Department of Sustainability and Environment figures.

Due to data collection issues, data are incomplete for 2005-06.

Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population.

Table 9A.12 **Reported fires and other primary incidents attended to by fire service organisations (no.) (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust*

Flooding and wet weather in 2010-11 resulted in a lower than anticipated number of landscape fires. Despite an increase in false alarms across regions affected by wet weather in 2010-11, the total number of false alarms was lower than anticipated as a result of the rollout of a new alarm solution and ongoing work with building owners who have high alarm frequencies.

WA: Data include reported turnouts by career and volunteer services for all areas of the state.

Data excludes Department of Environment and Conservation fires (625 fires in 2011-12).

SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period).

Tas: Data include *all* fire brigades, both full-time and volunteer.

Due to industrial action 90 incident reports are incomplete in 2008-09.

ACT: For 2009-2010 and 2010-2011 the lower number of landscape fires were attributable to wetter than average summer conditions.

For 2007-08, a 51 per cent decrease in the number of landscape fires from 2006-07 corresponds to a milder fire season than the previous year. Better reporting and analysis of incidents has redistributed some incident types from other categories into hazardous conditions.

The January 2003 bushfires included in the 2002-03 data have been counted as one event. Due to a change of AIRS reporting data bases, all incidents from 1-16 August have been classified as 'other' and as such data is slightly inaccurate.

NT: Excludes data from Bushfires NT and some NT Fire and Rescue Service volunteer brigades.

na Not available. **–** Nil or rounded to zero.

Source : State and Territory governments (unpublished).

Table 9A.13 Fire incidents attended by fire service organisations (number per 100 000 people)

	NSW	*Vic*	*Qld* (b)	*WA* (b)	*SA*	*Tas* (b)	*ACT* (b)	*NT* (b)	*Aust* (b)
Incidents per 100 000 people (a)									
2011-12	453	381	427	473	431	797	261	1 314	444
2010-11	467	318	303	512	398	718	249	803	402
2009-10	563	401	412	558	472	848	345	806	491
2008-09	567	496	365	616	495	877	431	990	518
2007-08	565	481	396	606	537	821	300	1 068	519
2006-07	631	530	464	621	575	949	475	1 060	577
2005-06	679	398	416	569	492	784	384	882	532
2004-05	640	414	525	678	499	839	318	1 133	559
2003-04	620	432	447	704	571	842	308	1 043	549
2002-03	705	498	554	758	583	996	476	1 280	630

(a) Historical rates and population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing. Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(b) Jurisdiction notes:

Vic: Prior to 2005-06, landscape fires data exclude incidents from the Department of Sustainability and Environment.

Data for 2005-06 are incomplete, due to data collection issues.

Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population.

Flooding and wet weather in 2010-11 resulted in a lower than anticipated number of landscape fires.

WA: Data include reported turnouts by career and volunteer services for all areas of the State.

Tas: Data include *all* fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09.

ACT: Includes data for urban and rural fire service organisations.

NT: The high number of incidents per 100 000 people can be attributed to deliberately lit fires and the large number of grass fires in northern Australia that are caused by the annual growth of vegetation following the wet season.

Aus: The average for Australia excludes rural fire service data for some years as per the jurisdictions' caveats.

Source: State and Territory governments (table 9A.2); ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2).

Table 9A.14 **Accidental residential structure fires reported to fire service organisations per 100 000 households (a)**

	NSW	*Vic*	*Qld* (b)	*WA* (b)	*SA*	*Tas* (b)	*ACT*	*NT* (b)	*Aust*
2011-12	108.6	135.2	47.7	63.9	76.1	140.2	115.9	69.8	96.2
2010-11	114.2	142.3	49.3	71.1	74.5	130.5	92.1	40.5	100.0
2009-10	121.3	144.5	60.1	70.5	67.8	145.2	91.4	35.6	104.8
2008-09	123.1	140.4	61.9	76.4	71.7	173.7	100.4	53.9	106.8
2007-08	128.7	143.6	67.3	70.2	72.0	141.3	73.7	67.2	108.8
2006-07	124.3	142.9	64.7	72.2	48.2	163.8	108.7	50.6	106.1
2005-06	131.6	106.6	65.9	65.5	50.6	167.7	107.7	52.2	99.4
2004-05	123.6	134.1	57.7	72.6	62.2	169.4	86.6	38.2	103.2
2003-04	130.5	141.4	65.5	66.1	77.8	179.7	104.0	46.5	110.1
2002-03	127.9	142.5	72.2	74.1	87.5	199.0	na	56.7	111.4

(a) Rates may not be entirely comparable. The numerator (the number of accidental residential structure fires) is affected by the number of fires where the cause has been determined and classified by fire service personnel. Data for the denominator are derived from ABS Australian Demographic Statistics Household projection series by averaging household data from the start and end of a financial year to derive the financial year midpoint estimate. For example, household data for the 2010-11 financial year are the average of total households as at 30 June 2010 and as at 30 June 2011.

(b) Jurisdiction notes:

Vic: Due to data collection issues, data are incomplete for 2005-06.

Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population.

WA: Data include reported turnouts by career and volunteer services.

SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period).

Tas: Data include *all* fire brigades, both full-time and volunteer. Due to industrial action 90 incident reports are incomplete in 2008-09.

NT: Data are for NT Fire and Rescue Service permanent fire stations only.

Source: State and Territory governments (unpublished); ABS 2012, *Australian Demographic Statistics,* Cat. no. 3101.0, Table 20, Projected number of households, states and territories–at 30 June, Canberra.

Table 9A.15 Fire service organisations and land management agencies reported total landscape fires (bush and grass) incidents (no.) and rates (a)

	NSW (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA*	*Tas* (d)	*ACT* (d)	*NT* (d)	*Aust*
Number of landscape fires									
2011-12	10 568	4 824	9 367	6 366	2 382	1 775	199	2 504	37 985
2010-11	11 222	2 520	5 072	7 175	1 944	1 413	142	1 393	30 881
2009-10	16 201	5 253	10 298	7 199	2 810	1 925	268	1 343	45 297
2008-09	14 583	7 661	7 358	7 607	2 749	1 966	337	1 640	43 901
2007-08	13 605	7 553	8 093	7 114	2 862	2 048	237	1 789	43 301
2006-07	17 993	10 008	10 912	7 836	3 170	2 441	481	1 714	54 555
2005-06	19 806	5 534	8 780	6 981	2 371	1 775	263	1 338	46 848
2004-05	21 014	6 462	12 989	7 962	2 877	2 133	217	1 882	55 536
2003-04	16 529	6 835	9 376	8 740	3 182	2 273	238	1 704	48 877
2002-03	21 942	8 862	13 042	9 597	3 642	2 737	623	2 137	62 582
Landscape fires per 100 000 people (b)									
2011-12	146	87	208	267	145	347	54	1078	169
2010-11	154	45	112	310	118	277	39	606	137
2009-10	225	96	230	317	172	381	76	590	204
2008-09	207	143	169	345	171	393	97	740	203
2007-08	196	144	191	334	180	413	70	822	204
2006-07	262	194	264	377	201	496	143	806	262
2005-06	292	109	217	343	152	363	79	642	228
2004-05	312	129	329	398	186	440	66	924	274
2003-04	247	138	243	444	207	473	73	849	244
2002-03	330	181	346	495	239	576	192	1072	317
Landscape fires per 100 000 hectares (c)									
2011-12	13.2	21.2	5.4	2.5	2.4	25.9	84.4	1.9	4.9
2010-11	14.0	11.1	2.9	2.8	2.0	20.7	60.2	1.0	4.0
2009-10	20.2	23.1	6.0	2.8	2.9	28.1	113.7	1.0	5.9
2008-09	18.2	33.7	4.3	3.0	2.8	28.7	142.9	1.2	5.7
2007-08	17.0	33.2	4.7	2.8	2.9	29.9	100.5	1.3	5.6
2006-07	22.5	44.0	6.3	3.1	3.2	35.7	204.0	1.3	7.1
2005-06	24.7	24.3	5.1	2.8	2.4	25.9	111.5	1.0	6.1
2004-05	26.2	28.4	7.5	3.1	2.9	31.2	92.0	1.4	7.2
2003-04	20.6	30.1	5.4	3.5	3.2	33.2	100.9	1.3	6.4
2002-03	27.4	39.0	7.5	3.8	3.7	40.0	264.2	1.6	8.1

(a) These data may be different to those reported elsewhere because they reflect responses from fire service organisations and, where stated, land management agencies.

Table 9A.15 Fire service organisations and land management agencies reported total landscape fires (bush and grass) incidents (no.) and rates (a)

	NSW (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA*	*Tas* (d)	*ACT* (d)	*NT* (d)	*Aust*

(b) Historical population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(c) 100 hectares equals one square kilometre.

(d) Jurisdiction notes:

NSW: Data include fires from the NSW Department of Environment and Climate Change, the NSW Rural Fire Service and the NSW Fire Brigades for all bush and grass fires regardless of size of area burnt.

Vic: From 2004-05 data include incidents from the Department of Sustainability and Environment.

Black Saturday (Victorian fires 2009) is treated as a single landscape fire event in 2008-09.

Due to data collection issues, data are incomplete for 2005-06.

Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures.

Flooding and wet weather in 2010-11 resulted in a lower than anticipated number of landscape fires.

WA: Data include landscape fires reported by the Department of Environment and Conservation as a lead agency, with 625 fires recorded for 2011-12.

SA: MFS industrial action: 18/4/05 0800 hrs to 20/06/05 1800 hrs (no incident reports completed during this period).

Tas: Data include *all* vegetation fires, regardless of size, from all fire brigades (full time and volunteer) and land management agencies.

Due to industrial action 90 incident reports are incomplete in 2008-09.

ACT: For 2009-2010 and 2010-2011 the lower number of landscape fires were attributable to wetter than average summer conditions.

For 2007-08, a 51 per cent decrease in the number of landscape fires from 2006-07 corresponds to a milder fire season than the previous year. This number corresponds with prior years.

The January 2003 bushfires included in the 2002-03 data have been counted as one event.

NT: Excludes data from Bushfires NT and some NT Fire and Rescue Service volunteer brigades. Includes 60 responses from NT Emergency Service who provide response in some remote communities across the Northern Territory.

Source: State and Territory governments (unpublished); Geoscience Australia 2011, Area of Australia - States and Territories, www.ga.gov.au/education/geoscience-basics/dimensions/area-of-australia-states-and-territories.html (accessed October 2011); ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2).

Table 9A.16 **Ignition factors for structure fires**

		NSW	*Vic*	*Qld* (d)	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
2011-12										
Structure fires	**no**	**6 402**	**6 278**	**3 017**	**1 442**	**1 494**	**645**	**208**	**175**	**19 661**
Ignition factors										
Unattended heat sources	%	18.4	18.9	12.3	8.3	na	20.5	17.3	5.7	15.4
Electrical failure (a)	%	10.1	13.2	6.6	10.0	10.7	9.3	8.7	14.9	10.6
Suspicious	%	6.5	9.9	2.7	9.4	8.2	–	20.7	5.1	7.3
Next highest ingnition factor for jurisdiction	%	3.8 (Incendiary)	4.2 (Failure to clean - included is a fouled flue)	3.5 (Incendiary)	4.4 (Abandoned, discarded material (b))	3.3 (Abandoned, discarded material (b))	21.4 (Incendiary)	11.1 (Abandoned, discarded material (b))	2.3 (Abandoned, discarded material (b))	3.4 (Abandoned, discarded material (b))
Undetermined/not reported	%	23.1	12.0	45.3	21.1	36.3	7.8	4.3	36.6	23.2
Other factors (c)	%	38.1	41.7	29.6	46.9	41.5	41.1	38.0	35.4	40.0
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2010-11										
Structure fires	**no**	**6 675**	**6 307**	**2 811**	**1 567**	**1 403**	**663**	**245**	**136**	**19 807**
Ignition factors										
Unattended heat sources	%	17.9	20.6	9.1	7.5	na	18.7	12.2	3.7	15.3
Electrical failure (a)	%	10.4	12.9	6.7	11.6	10.8	7.5	6.9	5.1	10.6
Suspicious	%	6.4	10.2	2.4	11.2	8.8	–	15.9	1.5	7.5
Next highest ingnition factor for jurisdiction	%	3.2 (Incendiary)	4.7 (Failure to clean - included is a fouled flue)	3.5 (Incendiary)	5.0 (Design, construction, installation deficiency)	2.8 (Abandoned, discarded material (b))	23.7 (Incendiary)	11.8 (Abandoned, discarded material (b))	3.7 (Abandoned, discarded material (b))	3.4 (Abandoned, discarded material (b))
Undetermined/not reported	%	22.3	12.0	46.1	18.7	39.8	13.4	2.4	53.7	23.0

Table 9A.16 Ignition factors for structure fires

		NSW	*Vic*	*Qld* (d)	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Other factors (c)	%	39.8	39.7	32.1	46.1	37.7	36.7	50.6	32.4	40.2
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2009-10										
Structure fires	**no**	**7 044**	**6 286**	**2 688**	**1 550**	**1 418**	**694**	**253**	**114**	**20 047**
Ignition factors										
Unattended heat sources	%	17.8	21.7	11.0	7.1	na	16.3	13.4	5.3	15.8
Electrical failure (a)	%	9.3	13.0	7.7	11.8	9.7	5.6	11.1	9.6	10.3
Suspicious	%	6.8	9.9	4.2	9.0	10.4	–	19.0	3.5	7.7
Next highest ingnition factor for jurisdiction	%	3.9 (Abandoned, discarded material (b))	4.3 (Abandoned, discarded material (b))	5.2 (Incendiary)	5.2 (Abandoned, discarded material (b))	3.7 (Abandoned, discarded material (b))	23.6 (Incendiary)	7.1 (Abandoned, discarded material (b))	2.6 (Abandoned, discarded material (b))	4.2 (Abandoned, discarded material (b))
Undetermined/not reported	%	21.9	12.3	34.2	21.2	41.3	12.4	2.8	53.5	21.5
Other factors (c)	%	40.3	38.9	37.7	45.6	35.0	42.1	46.6	25.4	40.5
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2008-09										
Structure fires	**no**	**6 917**	**6 459**	**2 836**	**1 543**	**1 469**	**805**	**263**	**172**	**20 464**
Ignition factors										
Unattended heat sources	%	17.6	19.1	10.8	7.9	na	18.4	13.3	4.7	15.0
Electrical failure (a)	%	10.0	13.0	7.5	12.2	9.3	6.5	8.4	4.7	10.5
Suspicious	%	7.9	10.6	5.8	13.6	13.1	–	19.0	4.7	9.1

Table 9A.16 Ignition factors for structure fires

		NSW	*Vic*	*Qld* (d)	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Next highest ingnition factor for jurisdiction	%	3.7 (Incendiary)	4.7 (Failure to clean - included is a fouled flue)	5.6 (Incendiary)	5.1 (Abandoned, discarded material (b))	3.6 (Abandoned, discarded material (b))	17.6 (Incendiary)	9.1 (Abandoned, discarded material (b))	3.5 (Abandoned, discarded material (b))	4.0 (Abandoned, discarded material (b))
Undetermined/not reported	%	17.9	12.4	33.9	23.1	38.5	11.1	4.6	50.0	20.1
Other factors (c)	%	42.9	40.2	36.3	38.2	35.5	46.5	45.6	32.6	41.4
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2007-08										
Structure fires	**no**	**7 179**	**6 391**	**2 795**	**1 538**	**1 544**	**639**	**246**	**170**	**20 502**
Ignition factors										
Unattended heat sources	%	19.0	17.8	11.9	8.9	na	19.1	11.4	4.1	15.3
Electrical failure (a)	%	8.6	12.9	8.3	9.6	8.9	7.8	4.5	10.0	10.0
Suspicious	%	7.4	10.7	4.5	11.7	12.0	–	26.4	7.1	8.7
Next highest ingnition factor for jurisdiction	%	3.7 (Incendiary)	5.9 (Abandoned, discarded material (b))	5.0 (Incendiary)	4.8 (Incendiary)	3.3 (Abandoned, discarded material (b))	15.0 (Incendiary)	10.2 (Abandoned, discarded material (b))	4.7 (Abandoned, discarded material (b))	4.2 (Abandoned, discarded material (b))
Undetermined/not reported	%	22.1	12.4	31.4	21.6	43.2	14.1	4.1	40.6	21.6
Other factors (c)	%	39.3	40.2	38.8	43.4	32.6	44.0	43.5	33.5	40.3
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Short-circuit, ground fault and other electrical failure.

(b) Abandoned, discarded material including discarded cigarettes

Table 9A.16 **Ignition factors for structure fires**

	NSW	*Vic*	*Qld* (d)	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*

(c) Factors include: Unattended heat sources; Short-circuit, ground fault and other electrical failure; Suspicious; Incendiary; Abandoned, discarded material including discarded cigarettes; Falling asleep; Children misusing heat of ignition; Combustible too close to heat; Children misusing ignited materials; Part failure, leak, break; Design, construction, installation deficiency; Accidentally turned on, not turned off; Failure to clean - included is a fouled flue; Natural condition/event; Re-kindled from a previous fire; Undetermined or not reported; and Other not classified.

(d) Jurisdiction notes:

Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population.

Source : State and Territory Governments (unpublished).

Table 9A.17 **Hazardous materials incidents (a), (b), (c), (d)**

	NSW	*Vic*	*Qld* (e)	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Hazardous materials incidents (per 100 000 people)									
2011-12	10.5	72.2	6.6	5.7	11.9	7.2	39.7	58.1	25.5
2010-11	11.1	16.8	7.6	5.5	12.2	6.1	38.1	57.0	12.1
2009-10	11.9	17.6	7.1	4.4	10.0	9.1	36.3	76.9	12.4
2008-09	12.9	17.0	9.9	3.2	28.9	6.2	37.4	83.0	14.5
2007-08	11.2	27.6	9.8	4.1	11.3	5.2	52.5	41.4	15.1
2006-07	14.2	31.7	7.8	4.5	68.3	7.3	37.7	77.2	21.2
2005-06	12.5	24.5	7.1	4.1	71.6	6.1	18.7	114.2	19.0
2004-05	11.6	34.2	7.5	3.9	65.9	4.5	23.5	130.0	21.0
2003-04	na	na	na	na	na	na	na	na	na
2002-03	na	na	na	na	na	na	na	na	na
Hazardous materials incidents (number)									
2011-12	760	4 024	300	135	196	37	147	135	5 734
2010-11	809	937	347	127	202	31	138	131	2 722
2009-10	854	970	319	101	164	46	129	175	2 758
2008-09	911	910	430	70	466	31	130	184	3 132
2007-08	777	1 448	415	87	180	26	179	90	3 202
2006-07	971	1 637	324	94	1 077	36	127	164	4 430
2005-06	848	1 245	288	84	1 116	30	62	238	3 911
2004-05	782	1 714	296	77	1 018	22	77	265	4 251
2003-04	na	na	na	na	na	na	na	na	na
2002-03	na	na	na	na	na	na	na	na	na

(a) Data may differ from those in table 9A.4 which include fires involving or releasing hazardous materials. Data also exclude minor fuel or other flammable liquid spills/leaks less than 200 litres except for SA in 2006‑07 and the ACT for all years.

(b) Data represent incidents attended by FSOs. FSOs may not be notified of all hazardous materials incidents occurring in the community.

(c) Coding of hazardous materials incidents is based on the judgment of the reporting fire officer shortly after the time of the incident. Some coding of incidents may be inaccurate due to the information available at the time of reporting.

(d) Changes to hazardous materials incident reporting were accepted and ratified by the AFAC SIMSG in November 2005 for implementation from July 1 2006. However, each fire service may have implemented these changes at different times, with implementation complete in the 2009-10 year.

(e) Jurisdiction notes:

Qld: Accurate identification of incidents attended by QFRS Rural brigades is not possible at this stage due to incomplete voluntary reporting procedures. QFRS Urban stations are estimated to serve 87.6 per cent of Queensland's population.

Source: State and Territory governments (unpublished); ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2).

Table 9A.18 **Reported road crash rescue incidents (number)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA*	*Tas* (b)	*ACT* (b)	*NT*	*Aust*
Total incidents									
2011-12	5 332	2 235	7 675	2 140	5 593	475	666	70	24 186
2010-11	5 247	2 157	7 501	2 104	6 633	494	630	332	25 098
2009-10	5 515	1 910	6 995	1 507	5 788	395	668	304	23 082
2008-09	6 163	2 166	8 436	1 360	5 799	476	451	430	25 281
2007-08	6 166	2 200	8 192	1 218	3 592	460	489	408	22 725
2006-07	7 002	2 258	7 809	1 129	1 997	475	954	437	22 061
2005-06	6 358	2 151	6 814	500	2 379	520	903	446	20 071
2004-05	6 512	2 317	5 360	863	2 619	545	597	73	18 886
2003-04	7 574	2 543	4 464	120	2 708	392	774	340	18 915
2002-03	5 544	2 565	3 797	144	2 650	423	56	306	15 485
Incidents per 100 000 people (a)									
2011-12	73.6	40.1	170.1	89.6	340.0	92.8	179.6	30.1	107.6
2010-11	72.2	38.6	164.9	90.8	401.9	97.0	174.1	144.4	111.7
2009-10	76.7	34.7	156.4	66.4	354.3	78.2	188.2	133.5	104.2
2008-09	87.5	40.4	194.0	61.7	359.7	95.1	129.7	194.0	116.8
2007-08	89.0	41.9	193.7	57.2	225.6	92.8	143.5	187.5	107.3
2006-07	102.1	43.7	189.0	54.3	126.7	96.6	283.6	205.6	105.8
2005-06	93.7	42.3	168.5	24.5	152.6	106.4	271.7	214.0	97.7
2004-05	96.8	46.2	135.8	43.2	169.5	112.5	181.9	35.8	93.3
2003-04	113.2	51.4	115.7	6.1	176.3	81.5	237.4	169.5	94.5
2002-03	83.4	52.4	100.9	7.4	173.7	89.1	17.3	153.5	78.3

(a) Historical rates in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(b) Jurisdiction notes:

Vic: 2010-11 data excludes 'cancelled before arrival' incidents.

Qld: The decrease in QFRS attendance at traffic incidents in 2009-10 and 2010-11 can be attributed to the revised road crash rescue protocols implemented in September 2009 to reduce unnecessary attendance by the QFRS at mobile property crashes. Revised road crash rescue response protocols were again implemented in October 2011, as part of an ongoing service delivery review for QFRS attendance at mobile property crashes. Data for 2009-10 and 2010-11 have been revised.

WA: Data includes responses by career and volunteer fire services and SES volunteers.

Tas: Data include responses by fire services, ambulance services and SES.

ACT: Data analysis has been refined in 2007-08 to better reflect road crash rescue incidents.

NT: The Northern Territory Fire and Rescue Service is currently examining its data reporting and inputting processes to ensure accurate reporting in line with the counting rules as defined in the data dictionary. Inconsistencies in data input in this reporting period has resulted in a significant reduction in the number of road crash incidents and extractions. The figure for 2011-12 is likely to indicate a considerable under-reporting.

Source : State and Territory governments (unpublished); ABS 2011, *Australian Demographic Statistics* , Cat. no. 3101.0, Canberra (Table AA.2).

Table 9A.19 **Reported road crash rescue extrications (number)**

	NSW	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA*	*Tas* (d)	*ACT*	*NT* (d)	*Aust*
Total extrications									
2011-12	4 046	1 499	2 405	612	391	31	244	37	9 265
2010-11	4 105	2 517	2 260	547	589	166	261	122	10 567
2009-10	4 111	2 113	1 982	551	550	104	323	113	9 847
2008-09	4 481	1 672	2 382	541	549	129	80	138	9 972
2007-08	4 180	1 704	2 183	536	533	146	108	108	9 498
2006-07	4 453	1 751	2 104	531	524	117	487	91	10 058
2005-06	4 073	1 831	1 829	347	666	389	485	294	9 914
2004-05	4 657	1 002	717	802	na	117	104	68	na
2003-04	2 337	987	749	89	521	104	84	115	4 986
2002-03	648	1 103	654	108	479	101	11	105	3 209
Extrications per 100 000 people (a)									
2011-12	55.8	26.9	53.3	25.6	23.8	6.1	65.8	15.9	41.2
2010-11	56.4	45.1	49.7	23.6	35.7	32.6	72.1	53.1	47.0
2009-10	57.2	38.4	44.3	24.3	33.7	20.6	91.0	49.6	44.4
2008-09	63.6	31.2	54.8	24.5	34.1	25.8	23.0	62.3	46.1
2007-08	60.3	32.5	51.6	25.2	33.5	29.4	31.7	49.6	44.8
2006-07	65.0	33.9	50.9	25.5	33.3	23.8	144.7	42.8	48.2
2005-06	60.0	36.0	45.2	17.0	42.7	79.6	145.9	141.1	48.3
2004-05	69.2	20.0	18.2	40.1	na	24.1	31.7	33.4	na
2003-04	34.9	19.9	19.4	4.5	33.9	21.6	25.8	57.3	24.9
2002-03	9.7	22.5	17.4	5.6	31.4	21.3	3.4	52.7	16.2
Extrications per 100 000 registered vehicles (b)									
2011-12	83.1	35.0	68.9	30.9	30.7	7.2	91.3	26.2	55.3
2010-11	85.9	60.0	66.4	28.6	46.7	39.6	100.8	89.0	64.6
2009-10	87.8	51.4	59.0	29.5	44.4	25.4	127.2	83.9	61.3
2008-09	98.1	41.7	72.6	29.6	45.4	32.2	32.4	107.2	63.6
2007-08	92.5	43.5	68.8	30.7	45.2	37.3	44.7	87.8	62.1
2006-07	102.1	45.9	69.4	31.7	45.3	30.7	207.6	77.0	68.1
2005-06	95.4	48.9	63.1	21.7	58.5	103.8	216.4	257.9	69.0
2004-05	111.7	27.5	25.9	52.4	na	32.3	47.4	61.9	na
2003-04	57.5	27.7	28.2	6.0	47.5	29.7	38.9	108.5	36.8
2002-03	16.4	31.6	25.6	7.5	44.5	29.8	5.2	100.7	24.4
Extrications per 100 million vehicle kilometres travelled (c)									
2011-12	5.8	2.4	5.5	2.2	2.6	0.6	6.6	1.8	3.9
2010-11	6.0	4.1	4.6	2.0	4.0	3.3	7.2	6.2	4.6
2009-10	6.2	3.5	4.1	2.1	3.8	2.1	9.1	5.8	4.3
2008-09	6.8	2.9	4.9	2.1	3.6	2.5	2.3	7.2	4.4
2007-08	6.4	3.0	4.5	2.1	3.3	2.7	3.3	5.8	4.3
2006-07	7.1	3.0	4.6	2.2	3.7	2.3	15.4	5.1	4.7

Table 9A.19 **Reported road crash rescue extrications (number)**

	NSW	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA*	*Tas* (d)	*ACT*	*NT* (d)	*Aust*
2005-06	6.6	3.3	4.0	2.2	2.9	7.7	16.1	17.9	4.7
2004-05	7.3	1.9	1.6	3.7	na	2.2	3.4	4.2	na
2003-04	4.0	1.9	1.8	0.4	3.4	2.3	2.6	7.2	2.5
2002-03	1.0	2.0	1.7	0.5	3.2	2.2	0.3	6.7	1.6

(a) Historical rates in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(b) Registered vehicle numbers from the ABS *Motor Vehicle Census* (ABS 2011 and various years). ABS revisions to census data means that the rates shown here may differ from those in previous reports.

(c) Kilometers travelled: For 2006-07, 2007-08 and 2009-10 data are from the ABS Survey of Motor Vehicle Use (ABS 2011). For 2008-09 data are from ABS *Experimental estimates of motor vehicle use* (ABS 2009). For 2010-11 data are estimated from 2009-10 plus a growth factor based on the growth of the number of registed vehicles. ABS revisions to survey data means that the rates shown here may differ from those in previous reports.

(d) Jurisdiction notes:

Vic: A higher number of extrications has been observed for 2009-10 due to incidents involving more than one extrication.

Qld: The decrease in QFRS attendance at traffic incidents in 2009-10 and 2010-11 can be attributed to the revised road crash rescue protocols implemented in September 2009 to reduce unnecessary attendance by the QFRS at mobile property crashes. Flooding and wet weather in 2010-11 also resulted in a lower than anticipated number of road rescue incidents and extrications. Data for 2009-10 and 2010-11 has been revised.

WA: Data excludes extrications performed by State Emergency Services volunteers.

Tas: Data include responses by fire services, ambulance services and SES.

NT: The Northern Territory Fire and Rescue Service is currently examining its data reporting and inputting processes to ensure accurate reporting in line with the counting rules as defined in the data dictionary. Inconsistencies in data input in this reporting period has resulted in a significant reduction in the number of road crash incidents and extractions. The figure for 2011-12 is likely to indicate a considerable under-reporting.

Source : ABS 2011, *Motor Vehicle Census* , Cat. no. 9309.0, Canberra; ABS 2011, *Survey of Motor Vehicle Use* , Cat. No. 9208.0, Canberra; ABS 2009, *Experimental estimates of motor vehicle use* , Cat. No. 9222.0, Canberra; ABS 2011, *Australian Demographic Statistics* , Cat. no. 3101.0 (table AA.2); State and Territory governments (unpublished).

Table 9A.20 **Prevention activities of fire service organisations**

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
Promotion of:								
Smoke alarms	✓	✓	✓	✓	✓	✓	✓	✓
Maintenance of smoke alarms	✓	✓	✓	✓	✓	✓	✓	✓
Safety switches	✓	✓	✓	✓	✓	✓	✓	✓
Fire extinguishers	✓	✓	✓	✓	✓	✓	✓	✓
Fire blankets	✓	✓	✓	✓	✓	✓	✓	✓
General prevention and awareness for:								
Residential	✓	✓	✓	✓	✓	✓	✓	✓
Business and government	✓	✓	✓	✓	✓	✓	✓	✓
Industry	✓	✓	✓	✓	✓	✓	✓	✓
Rural/farming	✓	✓	✓	✓	✓	✓	✓	✓
Targeted programs for:								
Cultural and language diversity groups	✓	✓	✓	✓	✓	×	✓	×
Aboriginal and Torres Strait Islander communities	✓	✓	✓	✓	✓	×	×	×
Other risk groups	✓	✓	✓	✓	✓	✓	✓	×
Conduct of community engagement and awareness programs in bush fire prone areas	✓	✓	✓	✓	✓	✓	✓	✓

Source: State and Territory governments (unpublished).

Table 9A.21 **Selected fire risk management/mitigation strategies (a)**

	Bushfire risk management strategies	*Community awareness and fire education*	*Smoke alarm legislation*
NSW	• Implementation of bushfire risk management plans • Community Fire Units • Amendments to Rural Fires Act leading to implementation of a Bushfire Code of Practice with links to bushfire risk management plans • Static Water Supply Program • Standards of Fire Cover Program for vehicle resource allocation • Development of a brigade classification system based on risk analysis • Service Delivery Model to guide District activities and ongoing community education strategies	• School fire education programs • Preschool fire education • Aboriginal Fire Stories • Juvenile Intervention and Fire Awareness Program • Partnerships with agencies with similar objectives • Development and distribution of education teaching resources, community safety videotapes, fact sheets available	Mandatory legislation for new homes or homes undergoing major renovations. The Building Legislation Amendment (Smoke Alarms) Act 2005 and the Environmental Planning and assessment Amendment (Smoke Alarms) regulation 2006 commenced on 1 May 2006 and requires: the installation of one or more smoke alarms in buildings in which persons sleep; smoke alarms in such buildings must be operational; and persons do not remove or interfere with the operation of smoke alarms installed in such buildings.
Vic	• Creation of commercial plantation industry brigades (Forestry Industry Brigades) • Wildfire Management Overlay and Planning Control • Bushfire Prone Area building control • Fire access road subsidy scheme • Integrate fire management planning with municipalities and other agencies • Roadside fire management planning	Community Fire Awareness Programs including: • Brigades in Schools • Early FireSafe • Isolated Elderly • FireReady • Fired up English • Community Fireguard • Summer Street Meetings	Mandatory for all homes supported by public awareness campaigns
Qld	• Wildfire mitigation coordination: Cooperative approach to bushfire prevention at many levels (State Inter-departmental Committees [IDC], Regional IDC, Local Fire Management Groups) • Wildfire Readiness Plans (Wildfire Mitigation Plans; Wildfire Operations Plans) • Rural brigade classification and resource allocation system based on risk analysis • Fire Danger Ratings Signs • Neighbourhood safer places	• *Fire Ed* — for Year one students • *Safehome* initiative • Initiatives to support people with a disability in preparing for emergencies • *PREPARE.ACT.SURVIVE. Bushfire preparedness campaign* • Volunteer Community Educator Network	From 1 July 1997, mandatory legislation exists for hard wired smoke alarm installation in all new households and homes undergoing major renovations. Homes built prior to 1 July 1997 have a minimum requirement to install at least one 9 volt battery operated smoke alarm.

Table 9A.21 **Selected fire risk management/mitigation strategies (a)**

	Bushfire risk management strategies	*Community awareness and fire education*	*Smoke alarm legislation*
WA	• Partnership agreements between Department of Fire and Emergency Services (DFES) and local governments and between DFES and the Department of Environment and Conservation • DFES provides a fire risk management service to the Department of Environment and Conservation for unallocated Crown land and unmanaged reserves	• Community fire education programs • School education programs	Mandatory legislation for hard wired smoke alarm installation in all new households and homes undergoing major renovations
SA	• Comprehensive Statewide bushfire prevention planning process with a local government focus • Statewide consultation with government land management agencies and utilities on bushfire prevention planning processes • Mandatory consultation by State and local planning authorities with CFS for new residential and tourist developments in bushfire-prone areas	• Community fireguard fire safety education for junior and primary schools • Community fire safe programs	Legislation mandates hard wired smoke alarms in all new households and homes and in all households and homes before sale
Tas	• Development of Fire Protection Plans for areas at risk from bushfire. • Establishment of Multi-Agency Coordination Group comprising TFS, Forestry Tasmania and the Parks and Wildlife Service to jointly manage significant landscape fires • Establishment of self sustaining neighbourhood groups to develop local bushfire survival strategies • Permit system to control the number, type and location of prescribed fires burning during the bushfire season.	• Partnerships with agencies with similar objectives • Specific fire safety programs for at-risk sectors of domestic and business community	Legislation mandating hard wired smoke alarms in all new homes and those undergoing major renovations

Table 9A.21 **Selected fire risk management/mitigation strategies (a)**

	Bushfire risk management strategies	*Community awareness and fire education*	*Smoke alarm legislation*
ACT	• Strategic bushfire management plan outlines a strategic risk management approach to bushfires and includes: risk assessment, prevention, preparedness, response, recovery, standards monitoring and reporting, and resource planning. • Community Fire Units commenced. • Permit system, in accordance with Emergencies Act, 2004, to control the number, type, and location of prescribed fires during the bushfire season. • MOUs between the ESA and other government agencies, both ACT and NSW.	• Juvenile Firelighting Awareness Intervention Program (JFAIP) - fire prevention program to children 3-16 yrs presenting with dangerous firelighting behaviours • Fire Ed (primary school fire safety education) • Community Liaison and Safety Program (CLASP) - assists older people to reduce safety and security risks in the home • Community Fire Unit Saturday and RFS open day campaigns • Bush FireWise program - provide information and increase resilience of community living in rural interface - Revised Yellow Pages incorporating the 'Handy Map' - Extensive consultation in lead up to SBMP - Televised community service announcements - Attendance at The Canberra Show - Publication of several community information booklets	Mandatory legislation for new homes or homes undergoing major renovations
NT	• Implementation of hazard reduction plans	• Community fire awareness programs • School education programs • Hazard abatement programs	Mandatory legislation for hard wired smoke detector installation in all new households and homes undergoing major renovations

Table 9A.21 **Selected fire risk management/mitigation strategies (a)**

	Bushfire risk management strategies	*Community awareness and fire education*	*Smoke alarm legislation*
Aus Gov	• Bushfire risk management studies in the Hobart Region and Faulkner (Tas); the Great Lakes, Baulkham Hills and Lake Macquarie/ Newcastle (NSW); and Caboolture (Qld) which are funded in part under the Natural Disaster Risk Management Studies Program	• Development and distribution of school education teaching resources, television programs, videotapes, maps and bushfire action guides by EMA	Requirement under Building Code of Australia (developed and managed by the Australian Building Codes Board) that smoke alarms be installed in all new homes
	• Requirement under Building Code of Australia that residential type buildings in bushfire prone areas be constructed to provide protection against embers, radiation and direct flame contact to reduce danger to life and minimise the risk of the loss of the building	• Enhancement of Disaster Education in Schools in EMA website	

(a) This table does not provide an exhaustive list of fire risk management/mitigation strategies across jurisdictions. Some jurisdictions also operate ambulance risk management/mitigation strategies.

Source : State and Territory emergency management agencies (unpublished).

Table 9A.22 Household preparedness for emergencies, October 2007 (a)

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Presence of selected safety precautions									
Smoke alarms/detectors (b)	%	94.1	97.2	93.8	na	na	na	89.7	na
Tested smoke alarms/detectors (c)	%	75.7	82.2	78.8	na	na	na	69.6	na
Fire blankets	%	18.4	21.8	18.5	na	na	na	19.4	na
Fire extinguishers	%	27.4	30.5	32.3	na	na	na	30.3	na
Electrical safety switches or circuit breakers	%	75.9	75.0	89.5	na	na	na	78.5	na
Written or rehearsed emergency plan (d)	%	13.3	15.1	19.7	na	na	na	14.7	na
Portable first aid kit	%	57.1	55.8	62.8	na	na	na	59.0	na
First aid qualification (e)	%	30.7	29.4	35.0	na	na	na	31.0	na
Households with emergency phone numbers located for ease of use (f)	%	63.6	70.3	61.3	na	na	na	62.1	na
Most recent emergency in the last two years									
House fire	%	1.9	2.0	2.2	na	na	na	2.9	na
Bushfire	%	0.8	1.1	*0.7	na	na	na	np	na
Storm, wind or hail (g)	%	7.2	3.4	5.8	na	na	na	11.9	na
Flood	%	1.3	0.7	0.7	na	na	na	*1.8	na
Other emergency (h)	%	0.4	*0.3	0.2	na	na	na	np	na
Most recent emergency by type of emergency services contacted									
Fire service	%	11.7	17.5	8.0	na	na	na	9.1	na
State Emergency Service	%	11.2	6.8	6.6	na	na	na	*7.9	na
Ambulance	%	*0.7	**0.7	*2.5	na	na	na	np	na
Police	%	*3.3	*1.9	**1.2	na	na	na	**1.5	na
No emergency services contacted	%	78.8	76.3	84.7	na	na	na	83.0	na
Most recent emergency by whether changes were made as a result (i)									
House fire	%	49.9	55.7	56.1	na	na	na	44.5	na
Bushfire	%	55.9	50.6	50.7	na	na	na	np	na
Storm, wind or hail (g)	%	40.8	36.6	49.0	na	na	na	32.8	na
Flood	%	56.9	62.8	67.3	na	na	na	*43.7	na
Other emergency (h)	%	57.2	*42.5	63.7	na	na	na	np	na

(a) Household data are based on area of usual residence. No ABS survey data are available for SA, Tasmania and the NT. Related survey data for WA are available in ABS 2008, *Community preparedness for emergencies,* Cat. no. 4818.5.

(b) The difference in the percentage of households with a smoke alarm between tables 9A.19 and 9A.20 for NSW and Queensland is because of the different sources of data used to collate the figures. Data for table 9A.19 is sourced from the ABS and data for table 9A.20 is sourced from the jurisdictions.

(c) Manually tested within the last 12 months.

(d) Rehearsed within the last 12 months. Emergency plan is for non-medical emergencies only.

(e) First aid qualification either obtained or renewed by a household member during the last 3 years. Also included if a household member is a doctor or nurse.

Table 9A.22 **Household preparedness for emergencies, October 2007 (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*

(f) Includes only emergency phone numbers that are displayed/stored separately and are easily accessible in an emergency. This excludes looking up phone numbers in the White or Yellow pages phone books.

(g) Includes cyclones.

(h) Includes landslide, earthquake, explosion, bomb threat and gas or chemical leak.

(i) Changes made refers to additional or improved safety measures and includes, for example, installed smoke alarms, installed gutter guards and upgraded electrical switchboards.

* Estimate has a relative standard error of 25–50 per cent and should be used with caution.

** Estimate has a relative standard error greater than 50 per cent and is considered too unreliable for general use.

na Not available. **np** Not published.

Source : ABS 2008, *Household preparedness for emergencies,* Cat. no. 4818.0.55.001, Canberra.

Table 9A.23 **Households with a smoke alarm or smoke detector installed (a), (b), (c)**

	Unit	*NSW* (e)	*Vic* (e)	*Qld* (e)	*WA* (e)	*SA* (d)	*Tas* (d)	*ACT* (e)	*NT* (d)	*Aust*
Estimated percentage of households with a smoke alarm/detector										
February 2000 to November 2000 (a)	'000	1 431	1 665	813	378	557	153	83	20	5 100
	%	60.8	95.1	60.8	54.0	95.0	82.1	73.5	40.0	72.0
Standard error	±	2.3	1.4	2.5	3.4	1.6	2.4	2.3	4.0	0.7
Total households	'000	2 355	1 751	1 337	700	586	187	113	50	7 080
Estimated percentage of households with a smoke alarm/detector										
2011-12	%	na	97.2	94.7	92.0	na	na	na	na	na
2010-11	%	94.2	97.2	95.0	90.0	na	na	na	na	na
2009-10	%	93.7	97.2	96.4	89.0	na	na	na	na	na
2008-09	%	93.6	97.2	97.3	86.0	na	na	na	na	na
2007-08	%	92.9	97.2	96.2	86.0	na	na	89.7	na	na
2006-07	%	86.9	95.5	87.1	86.0	na	na	na	na	na
2005-06	%	76.9	95.5	84.2	86.0	na	na	na	73.0	na
2004-05	%	71.5	95.5	82.0	70.0	na	na	na	63.0	na
2003-04	%	72.8	95.5	80.2	75.0	na	na	na	63.0	na
2002-03	%	72.9	95.1	79.6	75.2	na	na	na	na	na
Estimated percentage of households with a smoke alarm/detector that is operational/has been tested (c)										
2011-12	%	na	na	87.0	na	na	na	na	na	na
2010-11	%	na	na	86.6	na	na	na	na	na	na
2009-10	%	na	na	89.2	na	na	na	na	na	na
2008-09	%	na	na	90.1	na	na	na	na	na	na
2007-08	%	na	82.2	87.6	na	na	na	69.6	na	na
2006-07	%	na	na	79.0	na	na	na	na	na	na
2005-06	%	na	na	76.4	na	na	na	na	na	na
2004-05	%	na	na	72.6	na	na	na	na	na	na
2003-04	%	na	na	72.0	na	na	na	na	na	na
2002-03	%	na	na	71.4	na	na	na	na	na	na

(a) The February 2000 to November 2000 data are from the Population Survey Monitor (PSM) and represent the last occasion on which smoke alarm data were collected for all jurisdictions. The PSM was subsequently discontinued and, from 2002-03 onwards, the data were sourced from jurisdictional collections that were not strictly comparable with the PSM because of methodological differences.

(b) The difference in the percentage of households with a smoke alarm between tables 9A.22 and 9A.23 for NSW and Queensland is because of the different sources of data used to collate the figures. Data for table 9A.20 are sourced from the ABS and data for table 9A.19 are sourced from the jurisdictions.

(c) Tested manually tested within the last 12 months.

(d) No data are available for SA and Tasmania. No survey has been carried out in the NT after 2005-06, in the ACT the only survey was undertaken in 2007-08.

Table 9A.23 **Households with a smoke alarm or smoke detector installed (a), (b), (c)**

	Unit	*NSW* (e)	*Vic* (e)	*Qld* (e)	*WA* (e)	*SA* (d)	*Tas* (d)	*ACT* (e)	*NT* (d)	*Aust*

(e) Jurisdiction notes:

NSW: These data are sourced from the New South Wales Population Health Survey 2008 (HOIST). Centre for Epidemiology and Research, NSW Department of Health. Estimates are based on the following numbers of respondents for NSW: 2003 (13,008), 2004 (8,892), 2005 (10,687), 2006 (7,795), 2007 (7,301), 2008 (8,417) and 2009 (7,846). The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: Do you have smoke alarms installed in your home?

The 95 per cent confidence interval for 2009 is (92.9 - 94.5). Because the data collected is a sample of the population, the 95 per cent confidence interval provides a range of values that could contain the actual value for the population 95 per cent of the time. In general, a wider confidence interval reflects less certainty in the indicator estimate.

Vic: 2007-08 data are sourced from ABS Household Preparedness for Emergencies Survey. Prior data sourced from a random telephone survey of 2304 respondents residing within the 23 local government areas significant to the metropolitan fire district which was conducted in April 2004.

Qld: The 2011-12 result is sourced from an online survey undertaken in November 2011. This survey is conducted annually. Data are estimates for the whole population of Queensland. Legislation requiring the compulsory installation of smoke alarms in all Queensland homes was introduced in July 2007. The QFRS continues to deliver promotional strategies to increase the percentage of households with an operational smoke alarm.

WA: Most recent data based on market research conducted in April 2012. The improved result reflects recent legislation requiring installation of mains powered smoke alarms on change of tenancy or sale of a residential property.

ACT: Data for 2007-08 supplied by ABS Household Preparedness for Emergencies survey.

na Not available.

Source: ABS 2001, *Population Survey Monitor*, Cat. no. 4103.0, Canberra; ABS 2008, *Household preparedness for emergencies,* Cat. no. 4818.0.55.001, Canberra; State and Territory governments (unpublished).

Table 9A.24 **Number of structure fires, by remoteness area**

	NSW	*Vic* (a)	*Qld* (a)	*WA* (a)	*SA* (a)	*Tas* (a)	*ACT*	*NT*
Statewide								
2011-12	5 808	6 036	2 661	1 135	1 494	645	265	175
2010-11	5 924	5 799	2 491	1 279	1 331	663	245	136
2009-10	6 346	5 969	2 197	1 268	1 342	694	246	114
2008-09	6 589	5 525	2 380	1 410	1 394	805	263	172
2007-08	6 862	6 051	2 573	1 380	1 353	639	246	170
2006-07	6 683	6 039	2 415	1 288	1 349	708	278	146
2005-06	7 052	5 292	1 871	1 070	1 382	696	331	144
2004-05	6 620	5 487	2 214	1 214	1 368	737	279	140
2003-04	6 890	5 643	2 476	1 123	1 694	744	245	119
2002-03	6 932	5 367	2 335	1 291	1 781	758	280	130
Major cities								
2011-12	4 058	4 423	1 756	848	1 064	..	265	..
2010-11	4 187	4 265	1 811	1 007	906	..	245	..
2009-10	4 539	4 430	1 391	957	932	..	246	..
2008-09	4 637	3 927	1 263	1 061	965	..	263	..
2007-08	4 724	4 549	1 318	1 064	939	..	246	..
2006-07	4 294	4 491	1 209	1 007	905	..	278	..
2005-06	4 449	4 135	962	801	967	..	331	..
2004-05	4 203	4 199	1 100	937	932	..	279	..
2003-04	4 339	4 326	1 259	895	1 236	..	245	..
2002-03	4 371	4 190	1 292	920	1 256	..	280	..
Innner regional								
2011-12	1 229	1 306	434	150	145	418	..	..
2010-11	1 197	1 212	272	147	171	451	..	..
2009-10	1 260	1 212	445	122	190	448	..	..
2008-09	1 373	1 266	695	160	212	515	..	..
2007-08	1 510	1 172	732	157	169	408	..	..
2006-07	1 321	1 213	591	136	194	470	..	..
2005-06	1 472	901	482	128	185	434	..	..
2004-05	1 314	1 023	634	139	174	487	..	..
2003-04	1 424	1 051	695	115	195	479	..	..
2002-03	1 465	888	528	153	199	499	..	..
Outer regional								
2011-12	451	307	374	95	234	205	..	106
2010-11	469	322	388	82	196	187	..	91
2009-10	483	327	290	118	175	222	..	66
2008-09	500	332	430	113	161	269	..	107
2007-08	545	330	416	99	198	215	..	90

Table 9A.24 **Number of structure fires, by remoteness area**

	NSW	*Vic* (a)	*Qld* (a)	*WA* (a)	*SA* (a)	*Tas* (a)	*ACT*	*NT*
2006-07	849	335	415	95	201	218	..	96
2005-06	895	252	346	93	190	239	..	91
2004-05	892	258	382	98	206	230	..	78
2003-04	945	248	425	68	212	245	..	73
2002-03	891	282	365	131	268	244	..	76
Remote								
2011-12	70	np	55	27	36	22	..	44
2010-11	69	np	9	30	38	21	..	29
2009-10	61	np	54	55	32	24	..	33
2008-09	76	np	72	47	45	19	..	52
2007-08	78	np	85	42	37	16	..	55
2006-07	173	np	129	32	37	17	..	37
2005-06	182	4	62	27	28	20	..	39
2004-05	166	7	73	40	45	18	..	50
2003-04	147	7	45	31	44	16	..	37
2002-03	151	5	91	49	49	11	..	30
Very remote								
2011-12	na	..	23	15	15	–	..	25
2010-11	2	..	–	13	20	4	..	16
2009-10	3	..	15	16	13	2	..	15
2008-09	3	..	21	29	11	3	..	13
2007-08	5	..	22	18	10	–	..	25
2006-07	46	..	71	18	12	3	..	13
2005-06	54	..	19	21	12	1	..	14
2004-05	45	..	25	na	11	2	..	12
2003-04	28	..	52	14	7	4	..	9
2002-03	54	..	59	38	9	4	..	24

(a) Jurisdiction notes:

Vic: There are no very remote areas in Victoria. Remote structure fires are rolled into the outer regional classification due to the low numbers of events. Excludes calls attended under NRC, late notifications, calls with Event Create time stamp blank.

Qld: Structure fires within the Urban Levy Boundary are included. Only primary exposure incidents are included. Incidents that could not be identified by remoteness category have been included in the statewide calculations only.

WA: Data include both career and volunteer responses where response was provided under emergency conditions (lights and sirens).

SA: Excludes response times of 12 hours or more.

Tas: Due to industrial action 90 incident reports are incomplete in 2008-09.

na Not available. **..** Not applicable. **–** Nil or rounded to zero.

Source: State and Territory governments (unpublished).

Table 9A.25 **Structure fire response times to structure fires, *including call taking time* , by remoteness area (a)**

		NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)	*NSW*	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)
Statewide																	
Structure fires																	
2011-12	no.	5 808	6 036	2 661	1 135	1 494	645	265	175	..	..	..	..	..	..	..	..
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	8.2	6.8	7.3	8.6	na	8.3	7.6	7.3	15.0	10.6	11.3	14.5	na	16.7	11.6	16.8
2010-11	min.	8.0	6.8	7.4	8.3	na	8.5	7.4	7.3	14.0	11.0	12.2	14.6	na	16.9	10.7	15.0
2009-10	min.	8.0	6.9	7.9	8.3	na	7.9	7.0	6.4	13.6	10.7	12.4	15.9	na	15.0	11.3	11.3
2008-09	min.	7.4	7.0	7.6	8.4	na	8.2	7.1	6.3	12.0	11.0	12.3	15.4	na	16.0	10.7	12.9
2007-08	min.	8.0	6.8	6.8	8.6	na	8.0	7.2	6.5	14.0	10.6	12.8	14.7	na	15.2	11.1	13.5
2006-07	min.	7.1	6.8	6.9	8.3	na	7.5	7.3	5.4	12.3	10.5	13.1	13.8	na	12.8	11.7	12.7
Major cities																	
Structure fires																	
2011-12	no.	4 058	4 423	1 756	848	1 064	..	265	..	..	..	..	..	..	..	..	..
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	7.5	6.4	7.2	8.0	na	..	7.6	..	11.5	9.0	10.5	11.6	na	..	11.6	..
2010-11	min.	7.4	6.4	7.3	7.9	na	..	7.4	..	11.5	9.0	12.1	11.3	na	..	10.7	..
2009-10	min.	7.4	6.6	7.6	7.8	na	..	7.0	..	11.2	9.2	11.6	11.6	na	..	11.3	..
2008-09	min.	7.1	6.6	7.2	8.0	na	..	7.1	..	10.6	9.3	11.3	11.6	na	..	10.7	..
2007-08	min.	7.0	6.4	6.3	8.3	na	..	7.2	..	11.0	9.0	10.4	11.8	na	..	11.1	..
2006-07	min.	6.6	6.4	6.4	8.0	na	..	7.3	..	10.3	9.0	9.7	12.1	na	..	11.7	..
Inner regional																	
Structure fires																	
2011-12	no.	1 229	1 306	434	150	145	418	..	..	..	..	..	..	..	..	..	..

Table 9A.25 **Structure fire response times to structure fires, *including call taking time*, by remoteness area (a)**

		NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)	*NSW*	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	10.6	8.6	7.6	12.9	na	7.5	..	..	22.0	14.0	12.1	22.4	na	12.2	..	..
2010-11	min.	10.2	8.6	7.1	12.6	na	7.8	..	..	19.0	15.2	11.9	24.3	na	13.0	..	..
2009-10	min.	10.3	8.6	8.5	12.9	na	7.3	..	..	18.9	14.2	13.5	24.7	na	11.5	..	..
2008-09	min.	9.3	8.3	7.6	12.8	na	7.5	..	..	14.4	14.5	12.3	23.7	na	11.6	..	..
2007-08	min.	10.0	8.3	7.1	11.6	na	7.3	..	..	20.0	14.4	14.7	23.1	na	11.1	..	..
2006-07	min.	9.0	8.8	7.6	11.2	na	7.5	..	..	15.4	15.3	15.3	25.1	na	12.8	..	..
Outer regional																	
Structure fires																	
2011-12	no.	451	307	374	95	234	205	..	106	..	..	..	..	..	..	..	..
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	11.0	9.4	8.2	9.9	na	10.6	..	7.2	25.7	18.9	12.6	23.9	na	20.7	..	14.4
2010-11	min.	10.4	9.5	7.3	9.4	na	10.3	..	6.7	22.0	20.7	12.3	22.4	na	22.7	..	10.3
2009-10	min.	10.1	9.0	8.6	11.3	na	9.9	..	6.4	21.0	18.3	14.2	27.2	na	22.2	..	10.4
2008-09	min.	9.4	8.8	9.4	10.3	na	11.0	..	6.7	15.3	17.9	22.0	21.5	na	22.8	..	13.8
2007-08	min.	10.0	8.8	8.1	9.9	na	11.1	..	6.8	27.0	18.0	19.0	22.7	na	21.2	..	13.7
2006-07	min.	9.0	9.0	7.5	10.5	na	10.9	..	5.6	20.3	18.2	16.4	22.0	na	22.6	..	11.8
Remote																	
Structure fires																	
2011-12	no.	70	np	55	27	36	22	..	44	..	..	..	..	..	..	..	..
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	11.0	np	7.6	14.3	na	10.9	..	6.5	27.5	np	15.7	76.0	na	21.9	..	12.3
2010-11	min.	8.6	np	8.5	15.7	na	12.8	..	7.3	21.2	np	11.9	23.4	na	22.7	..	16.8

Table 9A.25 Structure fire response times to structure fires, *including call taking time*, by remoteness area (a)

		NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)	*NSW*	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)
2009-10	min.	9.6	np	8.0	14.3	na	11.4	..	7.1	20.3	np	17.5	27.2	na	22.8	..	11.3
2008-09	min.	8.1	np	7.8	14.7	na	15.5	..	5.6	11.4	np	28.5	33.7	na	38.7	..	11.9
2007-08	min.	9.0	np	7.1	14.9	na	9.7	..	6.7	16.5	np	17.2	28.2	na	21.6	..	14.3
2006-07	min.	8.0	np	8.8	11.9	na	10.4	..	5.4	19.3	np	19.1	24.4	na	26.8	..	12.3
Very remote																	
Structure fires																	
2011-12	no.	na	..	23	15	15	–	..	25	..	..	..	..	..	..	..	..
Response times				***50th percentile***								***90th percentile***					
2011-12	min.	na	..	8.5	13.6	na	..	..	10.8	na	..	17.3	41.4	na	..	..	75.8
2010-11	min.	16.0	..	..	14.4	na	13.5	..	10.8	18.0	..	..	94.8	na	17.1	..	36.1
2009-10	min.	18.0	..	10.6	12.4	na	..	..	6.0	22.0	..	14.9	59.2	na	..	..	18.0
2008-09	min.	5.0	..	12.6	9.8	na	6.4	..	5.7	9.0	..	24.0	23.2	na	7.3	..	9.1
2007-08	min.	7.0	..	8.1	13.6	na	..	..	5.0	15.0	..	17.9	22.5	na	..	..	11.1
2006-07	min.	8.2	..	7.8	10.9	na	21.7	..	4.0	13.1	..	16.0	32.9	na	33.9	..	20.2

(a) Differences between jurisdictions in definitions of response times, geography, personnel mix, and system type (manual or CAD), affect the comparability of response times data. Percentile calculations are based on emergency responses to structure fire incidents and include responses by both permanent and volunteer brigades (unless otherwise noted in jurisdictions' caveats). Different methods of calculating percentiles may affect results. Data in this table are not directly comparable.

(b) Jurisdiction notes:

Vic: There are no very remote areas in Victoria. Remote structure fires are rolled into the outer regional classification due to the low numbers of events. Excludes calls attended under NRC, late notifications, calls with Event Create time stamp blank.

Qld: Structure fires within the Urban Levy Boundary are included. Excluded are calls where QFRS experienced delays due to either extreme weather conditions or where the initial response was by another agency or brigade. Only primary exposure incidents are included. Incidents that could not be identified by remoteness category have been included in the statewide calculations only.

Table 9A.25 **Structure fire response times to structure fires, *including call taking time* , by remoteness area (a)**

	NSW	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)	*NSW*	*Vic* (b)	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)

WA: Data include both career and volunteer responses where response was provided under emergency conditions (lights and sirens). Incidents where response time information is incomplete are excluded from response time calculations. Response time for major cities, regional and remote areas are impacted by volunteer data that, particularly in remote areas of the state are affected by significant travel time to incidents.

SA: Data including call taking time are not available.

Tas: Due to industrial action 90 incident reports are incomplete in 2008-09.

NT: The Northern Territory Fire and Rescue Service is currently examining its data reporting and inputting processes to ensure accurate reporting in line with the counting rules as defined in the data dictionary. Inconsistencies in data input in this reporting period has resulted in a significant increase in the times reported for responses to structure fires by remoteness of area (90th percentile). The figure for 2011-12 is likely to indicate a considerable exageration of times. Changes to the data reporting and inputting processes over the coming months will see this issue rectified by the next report.

na Not available. **..** Not applicable. **np** Not published. **–** Nil or rounded to zero.

Source : State and Territory governments (unpublished); ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2).

Table 9A.26 **Structure fire response times to structure fires, *excluding call taking time* , by remoteness area (a)**

		NSW	*Vic*	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)	*NSW*	*Vic*	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)
Statewide																	
Structure fires																	
2011-12	no.	5 808	6 036	2 661	1 135	1 494	645	265	175	..	..	..	..	..	..	..	..
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	7.3	5.7	6.8	7.6	7.0	7.4	5.7	5.3	13.5	9.2	10.7	13.5	13.2	15.5	9.2	11.5
2010-11	min.	7.1	5.7	6.7	7.2	7.0	7.6	6.0	5.5	12.6	9.6	11.1	13.0	13.0	15.4	9.1	11.1
2009-10	min.	na	5.8	na	7.3	7.0	7.0	5.7	5.9	na	9.2	na	14.4	13.0	13.5	9.7	10.7
2008-09	min.	na	5.8	na	7.3	6.9	7.2	5.7	5.5	na	9.5	na	14.0	13.0	14.9	8.9	9.4
2007-08	min.	na	5.7	na	7.6	6.6	7.1	5.7	5.7	na	9.2	na	14.2	13.0	13.9	9.5	10.0
2006-07	min.	na	5.7	na	7.3	7.3	7.1	5.8	5.3	na	9.2	na	13.6	14.0	14.1	9.5	10.0
Major cities																	
Structure fires																	
2011-12	no.	4 058	4 423	1 756	848	1 064	..	265	..	..	..	..	..	..	..	..	..
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	6.7	5.4	6.7	7.0	6.3	..	5.7	..	10.4	7.7	10.0	10.5	10.2	..	9.2	..
2010-11	min.	6.6	5.4	6.8	6.8	6.4	..	6.0	..	10.5	7.7	11.1	10.3	9.7	..	9.1	..
2009-10	min.	na	5.5	na	6.7	6.3	..	5.7	..	na	7.9	na	10.4	9.5	..	9.7	..
2008-09	min.	na	5.5	na	6.9	6.2	..	5.7	..	na	7.9	na	10.7	9.7	..	8.9	..
2007-08	min.	na	5.4	na	7.2	6.0	..	5.7	..	na	7.8	na	11.1	9.0	..	9.5	..
2006-07	min.	na	5.4	na	6.9	7.0	..	5.8	..	na	7.8	na	10.9	10.4	..	9.5	..
Inner regional																	
Structure fires																	
2011-12	no.	1 229	1 306	434	150	145	418	..	..	..	..	..	..	..	..	..	..

Table 9A.26 **Structure fire response times to structure fires, *excluding call taking time* , by remoteness area (a)**

		NSW	*Vic*	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)	*NSW*	*Vic*	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	9.6	7.3	6.9	11.5	11.0	6.5	..	..	20.0	12.6	11.7	22.1	21.0	10.7	..	..
2010-11	min.	9.2	7.3	6.4	11.1	10.0	6.8	..	..	17.0	13.7	10.7	22.0	17.0	11.4	..	..
2009-10	min.	na	7.2	na	11.0	10.0	6.2	..	..	na	12.7	na	23.0	16.0	10.0	..	..
2008-09	min.	na	6.8	na	10.6	9.0	6.4	..	..	na	13.2	na	21.3	15.0	10.3	..	..
2007-08	min.	na	6.9	na	11.2	9.0	6.2	..	..	na	12.6	na	20.9	15.0	9.6	..	..
2006-07	min.	na	7.1	na	10.9	10.0	6.3	..	..	na	13.5	na	23.9	17.0	10.8	..	..
Outer regional																	
Structure fires																	
2011-12	no.	451	307	374	95	234	205	..	106	..	..	..	..	..	..	..	..
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	10.1	8.0	7.6	9.2	10.0	9.8	..	5.6	24.0	16.5	12.0	22.7	19.5	18.9	..	11.3
2010-11	min.	9.1	8.0	6.4	8.2	10.0	9.3	..	5.5	20.0	19.7	11.5	22.1	19.0	22.2	..	9.5
2009-10	min.	na	7.5	na	10.2	10.0	8.9	..	6.1	na	16.2	na	26.2	18.4	21.0	..	9.0
2008-09	min.	na	7.4	na	8.8	10.0	9.7	..	5.6	na	16.7	na	20.3	17.0	20.8	..	9.4
2007-08	min.	na	7.4	na	9.4	10.0	9.9	..	5.6	na	16.3	na	21.7	17.0	19.7	..	9.6
2006-07	min.	na	7.3	na	9.2	10.0	9.7	..	5.2	na	16.0	na	21.7	17.0	20.6	..	8.6
Remote																	
Structure fires																	
2011-12	no.	70	np	55	27	36	22	..	44	..	..	..	..	..	..	..	..
Response times					***50th percentile***								***90th percentile***				
2011-12	min.	10.0	np	6.9	13.4	11.5	9.9	..	4.3	24.0	np	14.9	76.9	17.1	19.2	..	9.0
2010-11	min.	7.7	np	7.2	14.8	10.0	10.9	..	4.8	20.3	np	11.4	23.2	17.5	21.6	..	12.2

Table 9A.26 **Structure fire response times to structure fires, *excluding call taking time* , by remoteness area (a)**

		NSW	*Vic*	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)	*NSW*	*Vic*	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)
2009-10	min.	na	np	na	13.1	11.0	10.0	..	5.6	na	np	na	23.3	15.7	20.8	..	11.0
2008-09	min.	na	np	na	12.8	12.0	14.8	..	5.5	na	np	na	28.9	18.0	40.4	..	9.1
2007-08	min.	na	np	na	14.6	12.0	8.6	..	5.9	na	np	na	27.8	23.4	20.5	..	9.1
2006-07	min.	na	np	na	10.7	12.0	9.4	..	5.0	na	np	na	23.6	21.6	24.7	..	11.4
Very remote																	
Structure fires																	
2011-12	no.	na	..	23	15	15	–	..	25	..	..	..	..	..	..	..	..
Response times				***50th percentile***								***90th percentile***					
2011-12	min.	7.3	..	8.2	13.2	16.0	..	..	7.4	na	..	16.4	46.4	23.0	..	..	24.8
2010-11	min.	15.0	..	..	13.2	11.5	11.9	..	9.0	17.0	..	..	93.4	33.8	16.0	..	18.8
2009-10	min.	na	..	na	12.6	10.0	..	..	4.8	na	..	na	58.8	35.2	..	..	17.5
2008-09	min.	na	..	na	9.0	14.0	5.5	..	5.8	na	..	na	20.0	28.0	6.6	..	9.6
2007-08	min.	na	..	na	11.5	21.0	..	..	5.0	na	..	na	21.6	57.6	..	..	17.4
2006-07	min.	na	..	na	11.0	9.0	21.0	..	7.4	na	..	na	22.8	150.1	26.1	..	24.7

(a) Differences between jurisdictions in definitions of response times, geography, personnel mix, and system type (manual or CAD), affect the comparability of response times data. Percentile calculations are based on emergency responses to structure fire incidents and include responses by both permanent and volunteer brigades (unless otherwise noted in jurisdictions' caveats). Different methods of calculating percentiles may affect results. Data in this table are not directly comparable.

(b) Jurisdiction notes:

NSW: Data excluding call taking time are not available prior to 2010-11.

Vic: There are no very remote areas in Victoria. Remote structure fires are rolled into the outer regional classification due to the low numbers of events. Excludes calls attended under NRC, late notifications, calls with Event Create time stamp blank.

Table 9A.26 **Structure fire response times to structure fires, *excluding call taking time* , by remoteness area (a)**

	NSW	*Vic*	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)	*NSW*	*Vic*	*Qld* (b)	*WA* (b)	*SA* (b)	*Tas* (b)	*ACT*	*NT* (b)

Qld: Data excluding call taking time are not available prior to 2010-11. Structure fires within the Urban Levy Boundary are included. Excluded are calls where QFRS experienced delays due to either extreme weather conditions or where the initial response was by another agency or brigade. Only primary exposure incidents are included. Incidents that could not be identified by remoteness category have been included in the statewide calculations only.

WA: Data include both career and volunteer responses where response was provided under emergency conditions (lights and sirens). Incidents where response time information is incomplete are excluded from response time calculations. Response time for major cities, regional and remote areas are impacted by volunteer data that, particularly in remote areas of the state are affected by significant travel time to incidents.

SA: Incomplete data are excluded from percentile calculations. Excludes response times of 12 hours or more.

Tas: Due to industrial action 90 incident reports are incomplete in 2008-09.

NT: The Northern Territory Fire and Rescue Service is currently examining its data reporting and inputting processes to ensure accurate reporting in line with the counting rules as defined in the data dictionary. Inconsistencies in data input in this reporting period has resulted in a significant increase in the times reported for responses to structure fires by remoteness of area (90th percentile). The figure for 2011-12 is likely to indicate a considerable exageration of times. Changes to the data reporting and inputting processes over the coming months will see this issue rectified by the next report.

na Not available. **..** Not applicable. **np** Not published. **–** Nil or rounded to zero.

Source : State and Territory governments (unpublished).

Table 9A.27 **Fire service organisations' costs ($'000) (2011-12 dollars) (a)**

	NSW (f)	*Vic* (f)	*Qld* (f)	*WA* (f)	*SA*	*Tas*	*ACT* (f)	*NT*	*Total*
2011-12									
Labour costs - Salaries and payments in the nature of salaries	597 543	505 260	306 181	158 390	108 310	39 566	44 719	27 045	1 787 014
Capital costs (b)									
Depreciation	44 473	57 043	32 134	11 449	17 259	5 114	5 130	1 845	174 447
User cost of capital - Other	33 466	166 782	28 247	15 066	19 058	6 230	4 089	2 052	–
Other costs (c)	245 287	417 065	150 477	268 184	56 417	17 223	21 036	10 969	1 186 658
Total costs (d), (e)	**920 769**	**1 146 150**	**517 039**	**453 089**	**201 044**	**68 133**	**74 974**	**41 911**	**3 423 109**
Other expenses									
Payroll tax	*29 300*	*23 486*	*13 413*	*na*	*5 233*	*2 339*	*–*	*1 296*	*na*
User cost of capital - Land	*11 394*	*27 896*	*12 243*	*6 151*	*4 177*	*1 223*	*981*	*500*	*64 565*
Interest on borrowings	*–*	*146*	*205*	*2 539*	*–*	*283*	*–*	*na*	*na*
2010-11									
Labour costs - Salaries and payments in the nature of salaries	577 103	482 941	289 457	140 810	99 302	37 785	40 376	27 230	1 695 002
Capital costs (b)									
Depreciation	41 407	63 553	31 370	11 063	18 261	5 075	5 646	1 766	178 141
User cost of capital - Other	33 508	167 238	29 031	15 347	29 089	6 338	2 102	2 509	285 162
Other costs (c)	275 242	379 105	146 869	163 448	38 742	17 166	21 232	9 498	1 051 301
Total costs (d), (e)	**927 259**	**1 092 837**	**496 727**	**330 669**	**185 394**	**66 363**	**69 356**	**41 002**	**3 209 607**
Other expenses									
Payroll tax	*28 261*	*22 020*	*12 842*	*–*	*4 931*	*2 303*	*–*	*1 318*	*71 675*
User cost of capital - Land	*10 862*	*27 436*	*11 962*	*6 451*	*2 313*	*1 244*	*1 249*	*508*	*62 024*
Interest on borrowings	*–*	*175*	*227*	*232*	*–*	*320*	*–*	*–*	*953*

Table 9A.27 **Fire service organisations' costs ($'000) (2011-12 dollars) (a)**

	NSW (f)	*Vic* (f)	*Qld* (f)	*WA* (f)	*SA*	*Tas*	*ACT* (f)	*NT*	*Total*
2009-10									
Labour costs - Salaries and payments in the nature of salaries	572 258	448 906	278 752	141 765	101 211	39 639	43 386	27 529	1 653 446
Capital costs (b)									
Depreciation	41 408	61 939	35 816	10 333	20 704	5 053	3 838	1 768	180 860
User cost of capital - Other	33 634	131 196	30 859	15 297	29 309	6 474	2 176	2 229	251 174
Other costs (c)	323 306	368 798	146 053	126 152	46 056	21 655	21 643	9 899	1 063 562
Total costs (d), (e)	**970 606**	**1 010 839**	**491 480**	**293 547**	**197 280**	**72 821**	**71 043**	**41 425**	**3 149 041**
Other expenses									
Payroll tax	*27 577*	*20 899*	*12 471*	*–*	*4 887*	*2 351*	*–*	*1 387*	*69 571*
User cost of capital - Land	*11 459*	*20 459*	*12 941*	*6 115*	*2 448*	*1 188*	*1 324*	*403*	*56 337*
Interest on borrowings	*43*	*170*	*259*	*127*	*–*	*362*	*–*	*–*	*961*
2008-09									
Labour costs - Salaries and payments in the nature of salaries	544 718	445 701	267 214	130 261	97 197	37 558	44 967	25 606	1 593 223
Capital costs (b)									
Depreciation	37 307	57 967	34 183	9 601	18 591	4 996	4 634	1 849	169 128
User cost of capital - Other	29 335	127 205	31 119	14 730	27 192	6 318	2 319	2 126	240 344
Other costs (c)	265 347	663 112	114 226	101 079	47 084	17 700	15 192	10 703	1 234 442
Total costs (d), (e)	**876 707**	**1 293 985**	**446 742**	**255 671**	**190 064**	**66 571**	**67 112**	**40 284**	**3 237 137**
Other expenses									
Payroll tax	*27 559*	*20 542*	*12 039*	*–*	*4 565*	*2 250*	*–*	*1 336*	*68 291*
User cost of capital - Land	*9 924*	*20 211*	*12 987*	*6 095*	*2 456*	*1 162*	*1 099*	*371*	*54 304*
Interest on borrowings	*274*	*47*	*279*	*3 243*	*–*	*367*	*–*	*–*	*4 209*

Table 9A.27 **Fire service organisations' costs ($'000) (2011-12 dollars) (a)**

	NSW (f)	*Vic* (f)	*Qld* (f)	*WA* (f)	*SA*	*Tas*	*ACT* (f)	*NT*	*Total*
2007-08									
Labour costs - Salaries and payments in the nature of salaries	540 189	314 170	248 801	121 895	92 226	36 930	37 504	21 102	1 412 817
Capital costs (b)									
Depreciation	37 559	50 926	31 039	10 889	16 838	5 489	1 536	1 901	156 176
User cost of capital - Other	30 524	72 353	32 272	14 822	24 365	6 359	2 571	2 098	185 362
Other costs (c)	255 931	495 145	122 233	114 202	47 247	16 007	17 951	10 455	1 079 171
Total costs (d), (e)	**864 202**	**932 594**	**434 345**	**261 808**	**180 676**	**64 785**	**59 561**	**35 555**	**2 833 527**
Other expenses									
Payroll tax	*28 141*	*13 190*	*11 075*	*–*	*4 528*	*2 229*	*–*	*–*	*59 162*
User cost of capital - Land	*10 463*	*21 185*	*12 379*	*6 144*	*2 579*	*1 071*	*1 108*	*389*	*55 320*
Interest on borrowings	*273*	*–*	*310*	*2 585*	*–*	*453*	*–*	*–*	*3 621*
2006-07									
Labour costs - Salaries and payments in the nature of salaries	524 767	434 206	243 244	124 228	91 200	37 798	39 626	24 744	1 519 812
Capital costs (b)									
Depreciation	39 557	47 358	32 778	10 501	19 254	5 541	1 202	1 812	158 002
User cost of capital - Other	30 727	70 406	31 051	13 387	25 045	6 535	3 355	1 673	182 178
Other costs (c)	308 060	462 346	118 557	114 233	49 215	19 915	29 452	9 023	1 110 801
Total costs (d), (e)	**903 111**	**1 014 315**	**425 630**	**262 349**	**184 713**	**69 789**	**73 635**	**37 252**	**2 970 794**
Other expenses									
Payroll tax	*27 586*	*22 023*	*10 670*	*–*	*4 778*	*2 053*	*–*	*1 354*	*68 463*
User cost of capital - Land	*10 958*	*18 675*	*11 090*	*4 308*	*2 666*	*786*	*782*	*408*	*49 672*
Interest on borrowings	*312*	*–*	*1 072*	*5 055*	*–*	*474*	*–*	*–*	*6 913*

Table 9A.27 **Fire service organisations' costs ($'000) (2011-12 dollars) (a)**

	NSW (f)	*Vic* (f)	*Qld* (f)	*WA* (f)	*SA*	*Tas*	*ACT* (f)	*NT*	*Total*
2005-06									
Labour costs - Salaries and payments in the nature of salaries	531 962	341 708	237 689	90 695	84 555	35 626	38 089	23 558	1 383 882
Capital costs (b)									
Depreciation	40 158	46 862	29 281	9 216	21 535	5 488	1 489	2 023	156 051
User cost of capital - Other	31 207	65 172	30 791	12 307	23 688	6 700	3 784	1 815	175 463
Other costs (c)	233 166	181 548	115 353	52 641	44 164	14 763	22 428	8 561	672 624
Total costs (d), (e)	**836 493**	**635 290**	**413 113**	**164 859**	**173 941**	**62 577**	**65 790**	**35 956**	**2 388 020**
Other expenses									
Payroll tax	*27 194*	*17 508*	*10 542*	*–*	*4 605*	*2 128*	*–*	*1 297*	*63 275*
User cost of capital - Land	*11 803*	*16 606*	*7 501*	*2 736*	*3 836*	*803*	*820*	*383*	*44 488*
Interest on borrowings	*838*	*–*	*1 103*	*3 049*	*–*	*417*	*–*	*–*	*5 407*
2004-05									
Labour costs - Salaries and payments in the nature of salaries	507 736	319 484	234 896	84 754	93 238	35 578	40 456	22 677	1 338 819
Capital costs (b)									
Depreciation	41 221	48 453	30 444	7 724	23 141	5 222	2 158	1 924	160 286
User cost of capital - Other	32 683	60 996	28 385	7 673	23 212	6 751	4 094	1 848	165 642
Other costs (c)	210 769	159 247	102 702	48 227	55 113	15 995	14 989	8 135	615 177
Total costs (d), (e)	**792 408**	**588 180**	**396 427**	**148 379**	**194 703**	**63 546**	**61 697**	**34 584**	**2 279 924**
Other expenses									
Payroll tax	*25 728*	*16 461*	*10 608*	*–*	*4 503*	*1 913*	*–*	*1 258*	*60 472*
User cost of capital - Land	*12 362*	*15 521*	*7 293*	*2 892*	*2 660*	*701*	*868*	*478*	*42 775*
Interest on borrowings	*598*	*–*	*996*	*3 318*	*–*	*381*	*–*	*–*	*5 293*

Table 9A.27 **Fire service organisations' costs ($'000) (2011-12 dollars) (a)**

	NSW (f)	*Vic* (f)	*Qld* (f)	*WA* (f)	*SA*	*Tas*	*ACT* (f)	*NT*	*Total*
2003-04									
Labour costs - Salaries and payments in the nature of salaries	496 160	296 848	226 201	92 803	82 999	33 598	35 959	19 029	1 283 597
Capital costs (b)									
Depreciation	37 638	48 650	28 607	9 770	20 917	5 049	1 955	1 620	154 206
User cost of capital - Other	31 472	49 760	27 346	7 315	22 484	5 988	3 429	1 915	149 710
Other costs (c)	213 780	158 952	118 708	42 747	52 725	17 755	11 201	8 709	624 578
Total costs (d), (e)	**779 050**	**554 211**	**400 861**	**152 636**	**179 125**	**62 391**	**52 543**	**31 273**	**2 212 091**
Other expenses									
Payroll tax	*26 693*	*15 105*	*10 178*	*–*	*4 082*	*2 000*	*–*	*1 134*	*59 191*
User cost of capital - Land	*12 823*	*14 412*	*5 203*	*2 644*	*2 253*	*588*	*1 026*	*336*	*39 285*
Interest on borrowings	*127*	*78*	*917*	*5 663*	*92*	*398*	*–*	*–*	*7 273*
2002-03									
Labour costs - Salaries and payments in the nature of salaries	448 065	270 359	220 460	92 684	88 383	34 405	35 506	18 174	1 208 035
Capital costs (b)									
Depreciation	33 453	44 668	30 316	9 581	14 899	4 736	1 955	1 768	141 376
User cost of capital - Other	28 860	53 658	24 861	6 675	21 369	6 094	3 383	1 885	146 784
Other costs (c)	365 734	151 980	112 039	42 421	52 806	20 073	12 665	8 233	765 952
Total costs (d), (e)	**876 111**	**520 665**	**387 677**	**151 360**	**177 456**	**65 307**	**53 509**	**30 061**	**2 262 147**
Other expenses									
Payroll tax	*24 301*	*13 245*	*10 103*	*–*	*3 994*	*2 073*	*..*	*1 260*	*54 976*
User cost of capital - Land	*7 309*	*15 231*	*5 059*	*2 076*	*2 125*	*588*	*1 172*	*28*	*33 589*
Interest on borrowings	*72*	*764*	*1 467*	*4 356*	*945*	*464*	*–*	*–*	*8 068*

Table 9A.27 **Fire service organisations' costs ($'000) (2011-12 dollars) (a)**

	NSW (f)	*Vic* (f)	*Qld* (f)	*WA* (f)	*SA*	*Tas*	*ACT* (f)	*NT*	*Total*

(a) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Totals may not sum as a result of rounding.

(b) Figures vary from year to year as a result of abnormal expenditure related to response to specific major emergencies.

(c) The user cost of capital is partly dependent on depreciation and asset revaluation methods employed. Details of the treatment of assets by emergency management agencies across jurisdictions are outlined in table 9A.43.

(d) Includes the running, training, maintenance, communications, provisions for losses and other recurrent costs.

(e) Total costs excludes payroll tax, the user cost of capital associated with land, and interest on borrowings.

(f) Jurisdiction notes:

Vic: In 2010-11 capital cost increase largely due to DSE revaluation of DSE roads.

In 2008-09 capital cost increase largely due to DSE reclassification of fire tracks. 2008-09 data include a significant increase in costs due to emergency funding arising from the Black Saturday Bushfires.

From 2006-07 data include funding and expenditure for the Department of Sustainability and Environment (DSE).

In 2005-06, MFB user cost of capital increase is related to June 2005 revaluations of $34 million and the 8 per cent cost of capital calculation. Increase in other revenue is due to recharges to CFA (aproximately $2.5 million) for fibre optic communications/ICS support (SAP etc).

Qld: The increase in firefighting staff payroll in 2010-11, was due mainly to overtime expenses arising from responses to the Queensland flooding and tropical cyclone events and the response to the Christchurch earthquake. The reduction in depreciation expenses in 2010-11 was due mainly to a downward revaluation of property, plant and equipment assets at 30 June 2010.

Expenditure in 2009-10 included costs of $6.8 million associated with the Natural Disaster Relief and Recovery Arrangements declared bushfire event in September-October 2009.

WA: DFES provides a wide range of emergency services under an integrated management structure. From 2006-07, data cannot be segregated by service and include costs related to the State Emergency Service and volunteer marine rescue as well as fire. Expenses also include costs related to Wildfire Suppression and Western Australia Natural Disaster Relief and Recovery Arrangements. Data for the Department of Environment and Conservation are not included.

ACT: Depreciation increase in 2010-11 relates to the completion of New Headquarters and Training Facilities.

In 2006-07 funding is included under 'miscellaneous revenue' for the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.

Table 9A.27 **Fire service organisations' costs ($'000) (2011-12 dollars) (a)**

	NSW (f)	*Vic* (f)	*Qld* (f)	*WA* (f)	*SA*	*Tas*	*ACT* (f)	*NT*	*Total*
The increase in 2005-06 is due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs.									

na Not available. **..** Not applicable. **–** Nil or rounded to zero.

Source : State and Territory governments (unpublished). ABS 2012, Australian National Accounts: National Income, Expenditure and Product, June 2012, Cat. no. 5206.0, Canberra (table AA.51).

Table 9A.28 **Fire service organisations' expenditure per person (2011-12 dollars) (a), (b)**

	Unit	*NSW*	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*
2011-12										
Total	$m	920.8	1 146.2	517.0	453.1	201.0	68.1	75.0	41.9	3 423.1
Population	m	7.2	5.6	4.5	2.4	1.6	0.5	0.4	0.2	22.5
Per person	$	127.04	205.61	114.57	189.80	122.21	133.15	202.23	180.37	152.24
2010-11										
Total	$m	927.3	1 092.8	496.7	330.7	185.4	66.4	69.4	41.0	3 209.6
Population	m	7.3	5.6	4.5	2.3	1.7	0.5	0.4	0.2	22.5
Per person	$	127.51	195.65	109.20	142.71	112.33	130.30	191.64	178.37	142.79
2009-10										
Total	$m	970.6	1 010.8	491.5	293.5	197.3	72.8	71.0	41.4	3 149.0
Population	m	7.2	5.5	4.5	2.3	1.6	0.5	0.4	0.2	22.2
Per person	$	134.97	183.91	109.88	129.30	120.75	144.09	200.18	181.91	142.13
2008-09										
Total	$m	876.7	1 294.0	446.7	255.7	190.1	66.6	67.1	40.3	3 237.1
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	$	124.51	241.20	102.71	116.00	117.91	133.07	192.94	181.72	149.56
2007-08										
Total	$m	864.2	932.6	434.3	261.8	180.7	64.8	59.6	35.6	2 833.5
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	$	124.76	177.77	102.72	122.87	113.49	130.67	174.76	163.43	133.78
2006-07										
Total	$m	903.1	1 014.3	425.6	262.3	184.7	69.8	73.6	37.3	2 970.8
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	$	131.75	196.37	103.01	126.07	117.23	141.94	218.86	175.26	142.47
2005-06										
Total	$m	836.5	635.3	413.1	164.9	173.9	62.6	65.8	36.0	2 388.0
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	$	123.26	124.92	102.16	80.92	111.55	128.10	197.94	172.53	116.24
2004-05										
Total	$m	792.4	588.2	396.4	148.4	194.7	63.5	61.7	34.6	2 279.9
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	$	117.76	117.31	100.46	74.24	125.98	131.12	188.01	169.71	112.58
2003-04										
Total	$m	779.0	554.2	400.9	152.6	179.1	62.4	52.5	31.3	2 212.1
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.0
Per person	$	116.47	111.91	103.93	77.56	116.60	129.77	161.16	155.90	110.54

Table 9A.28 Fire service organisations' expenditure per person (2011-12 dollars) (a), (b)

	Unit	*NSW*	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas*	*ACT* (c)	*NT*	*Aust*
2002-03										
Total	$m	876.1	520.7	387.7	151.4	177.5	65.3	53.5	30.1	2 262.1
Population	m	6.6	4.9	3.8	1.9	1.5	0.5	0.3	0.2	19.8
Per person	$	131.76	106.42	102.98	78.12	116.29	137.53	165.08	150.83	114.42

(a) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Totals may not sum as a result of rounding. Data exclude the user cost of capital associated with land, interest on borrowings and payroll tax. Total fire expenditure includes levies on insurance companies and property owners, user charges, fundraising and donations and indirect revenue.

(b) Historical population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(c) Jurisdiction notes:

Vic: 2008-09 data include a significant increase in expenditure due to emergency funding arising from the Black Saturday Bushfires. From 2006-07 data include funding and expenditure for the Department of Sustainability and Environment (DSE).

Qld: Expenditure in 2009-10 included costs of $6.8 million associated with the Natural Disaster Relief and Recovery Arrangements declared bushfire event in September-October 2009.

WA: DFES provides a wide range of emergency services under an integrated management structure. From 2006-07, data cannot be segregated by service and include costs related to the State Emergency Service and volunteer marine rescue as well as fire. Expenses also include costs related to Wildfire Suppression and Western Australia Natural Disaster Relief and Recovery Arrangements. Data for the Department of Environment and Conservation are not included.

ACT: In 2006-07 expenditure included the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.

The increase in 2005-06 is due to a significant upgrade of Emergency Services Communications systems and inclusion of Joint Emergency Services Training Costs.

Source: State and Territory governments (table 9A.25); ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2); ABS 2012, Australian National Accounts: National Income, Expenditure and Product, June 2012, Cat. no. 5206.0, Canberra (table AA.51).

Table 9A.29 **Fire service organisations' funding per person (2011-12 dollars) (a), (b), (c)**

	NSW (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA*	*Tas*	*ACT* (d)	*NT*	*Aust*
2011-12									
Total government grants	32.9	74.7	25.2	67.4	2.0	11.9	137.7	144.8	45.5
Total levies	90.8	119.7	73.7	97.5	102.3	97.4	–	–	93.8
User charges	3.7	6.4	11.9	2.6	3.1	19.3	27.9	11.0	6.7
Miscellaneous revenue	4.4	7.5	0.8	4.2	1.4	4.9	8.3	0.4	4.3
Indirect government funding	–	0.9	–	–	–	–	–	na	0.2
Total	**131.7**	**209.3**	**111.6**	**171.7**	**108.8**	**133.6**	**173.9**	**156.2**	**150.5**
2010-11									
Total government grants	39.4	69.6	26.9	71.6	1.9	12.1	106.8	118.2	46.2
Total levies	87.9	99.0	70.1	96.0	96.2	95.1	–	–	86.3
User charges	2.1	5.7	11.4	2.2	2.6	19.3	27.5	11.7	5.8
Miscellaneous revenue	4.6	7.2	1.1	3.9	1.7	3.0	4.5	0.3	4.2
Indirect government funding	–	0.7	–	–	–	–	–	–	0.2
Total	**133.9**	**182.3**	**109.4**	**173.7**	**102.4**	**129.5**	**138.8**	**130.3**	**142.7**
2009-10									
Total government grants	42.7	65.2	24.7	27.5	2.3	15.4	118.4	111.0	41.4
Total levies	86.8	105.5	72.7	85.5	106.7	99.9	–	–	87.9
User charges	2.1	8.3	9.1	1.9	2.5	24.6	27.9	10.7	6.1
Miscellaneous revenue	5.7	6.0	1.2	3.0	1.7	6.2	12.6	0.3	4.4
Indirect government funding	–	1.0	–	–	–	–	–	–	0.3
Total	**137.3**	**186.0**	**107.7**	**117.9**	**113.2**	**146.1**	**158.8**	**122.1**	**140.0**
2008-09									
Total government grants	34.2	141.1	19.7	24.9	2.5	11.7	126.2	106.9	56.2
Total levies	95.1	90.3	70.8	83.4	109.0	95.7	–	–	86.4
User charges	2.2	7.0	8.1	1.8	3.1	18.7	26.1	10.8	5.5
Miscellaneous revenue	6.3	3.2	1.7	4.3	3.1	5.0	2.8	0.1	4.0
Indirect government funding	–	2.2	–	–	–	–	3.0	–	0.6
Total	**137.7**	**244.0**	**100.2**	**114.4**	**117.8**	**131.1**	**158.2**	**117.8**	**152.6**
2007-08									
Total government grants	27.4	62.8	18.9	31.0	3.5	15.8	130.6	88.8	35.1
Total levies	90.3	89.6	70.6	86.3	109.3	96.5	–	–	85.0
User charges	2.2	6.8	7.2	2.3	3.7	15.6	28.2	10.4	5.3
Miscellaneous revenue	6.7	6.2	1.1	5.0	2.5	3.4	3.9	1.7	4.8
Indirect government funding	–	–	–	–	–	–	–	–	–
Total	**126.6**	**165.4**	**97.8**	**124.6**	**119.0**	**131.4**	**162.7**	**100.8**	**130.1**
2006-07									
Total government grants	39.9	97.9	18.1	37.7	0.7	18.1	127.0	108.4	48.4
Total levies	87.4	87.4	72.9	84.0	105.6	91.4	–	–	83.3

Table 9A.29 **Fire service organisations' funding per person (2011-12 dollars) (a), (b), (c)**

	NSW (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA*	*Tas*	*ACT* (d)	*NT*	*Aust*
User charges	2.3	5.0	6.9	2.2	2.6	16.1	30.7	11.2	4.8
Miscellaneous revenue	5.5	15.8	1.7	7.1	2.4	4.4	20.9	4.5	7.4
Indirect government funding	–	–	–	–	–	–	0.7	–	0.0
Total	**135.2**	**206.1**	**99.5**	**131.0**	**111.3**	**129.9**	**179.3**	**124.1**	**143.9**
2005-06									
Total government grants	28.2	28.0	17.0	16.1	1.2	10.0	155.0	109.3	25.1
Total levies	87.4	87.0	74.1	64.7	107.1	93.4	–	–	81.8
User charges	2.3	4.5	5.6	1.4	1.7	15.7	31.3	11.4	4.3
Miscellaneous revenue	5.1	8.2	1.9	1.3	3.2	2.8	0.2	4.7	4.6
Indirect government funding	–	–	–	–	–	–	8.2	–	0.1
Total	**123.1**	**127.7**	**98.6**	**83.4**	**113.2**	**121.9**	**194.7**	**125.4**	**115.9**
2004-05									
Total government grants	29.5	27.3	16.6	10.1	0.1	15.7	137.0	109.1	24.5
Total levies	84.7	86.3	74.9	63.1	107.9	96.1	–	–	80.9
User charges	3.9	3.9	5.1	1.4	2.4	17.4	27.2	10.3	4.5
Miscellaneous revenue	3.4	6.2	2.0	1.2	2.5	5.0	0.7	2.3	3.5
Indirect government funding	–	–	–	–	–	–	9.2	–	0.1
Total	**121.5**	**123.7**	**98.7**	**75.8**	**113.0**	**134.2**	**174.0**	**121.7**	**113.6**
2003-04									
Total government grants	21.4	25.5	21.7	0.8	0.3	14.3	118.0	97.3	21.0
Total levies	86.6	83.5	75.6	77.5	108.2	98.3	–	–	82.5
User charges	3.8	4.4	5.7	0.9	2.3	18.2	16.4	9.5	4.5
Miscellaneous revenue	4.3	6.2	2.0	1.6	4.2	5.9	10.0	0.5	4.2
Indirect government funding	–	–	–	–	–	–	12.9	–	0.2
Total	**116.1**	**119.6**	**105.0**	**80.8**	**114.9**	**136.6**	**157.3**	**107.2**	**112.3**
2002-03									
Total government grants	25.3	27.2	22.2	26.5	0.1	17.5	110.0	97.9	25.3
Total levies	80.5	73.6	76.3	42.9	103.2	102.9	–	–	74.5
User charges	4.1	3.1	5.1	1.3	3.0	16.8	0.6	10.9	4.0
Miscellaneous revenue	25.7	4.6	2.7	1.7	4.1	4.7	0.7	0.3	10.9
Indirect government funding	0.2	–	–	–	–	–	12.0	–	0.3
Total	**135.8**	**108.6**	**106.3**	**72.4**	**110.4**	**141.9**	**123.3**	**109.1**	**114.9**

(a) Figures vary from year to year as a result of abnormal grants for specific major emergencies.

(b) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Due to differences in definitions and counting rules, data reported may differ from those in agency annual reports and other sources. Some jurisdictions do not obtain funds from all funding sources identified in the table. Totals may not sum as a result of rounding.

Table 9A.29 **Fire service organisations' funding per person (2011-12 dollars) (a), (b), (c)**

	NSW (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA*	*Tas*	*ACT* (d)	*NT*	*Aust*

(c) Historical population data in this table may differ from those in previous Reports. Population data are revised using Final Rebased Estimated Resident Population (ERP) data following each Census of Population and Housing (the most recent census was 2006). Financial year population estimates are the midpoint estimate of the relevant financial year (i.e. as at 31 December).

(d) Jurisdiction notes:

NSW: From 2009-10 data include funding for the Department of Environment, Climate Change and Water.

Vic: From 2006-07 data include funding and expenditure for the Department of Sustainability and Environment (DSE).

2008-09 data include a significant increase in government grants due to emergency funding arising from the Black Saturday Bushfires.

Qld: Increases in State Government Grants in 2009-10 and 2010-11 are due to increased recurrent contributions from the state to fund increased wages and operating expenses ($15.9 million annually ongoing from 2009-10 and an additional $13.0 million ongoing from 2010-11) and one-off revenues from Natural Disaster Relief and Recovery Arrangements declared events (bushfires in 2009 and flooding and tropical cyclones in 2010-11). NDRRA revenues of $7.9 million were recognised in 2010-11.

Lower growth in levy income in 2010-11 is due to lower leviable property growth.

The increase in user charges revenues in 2010-11, resulted from increases in alarm monitoring, unwanted alarm attendance and commercial services volumes and an increase in prices for building fire safety services.

WA: DFES provides a wide range of emergency services under an integrated management structure. Data for 2006-07 and subsequent years cannot be segregated by service and include SES and volunteer marine services as well as fire. Data for the Department of Environment and Conservation are not included.

ACT: In 2006-07 funding was included under 'miscellaneous revenue' for the placement of an Ericson sky crane in the ACT as part of the National Aerial Firefighting Strategy.

na Not available. **–** Nil or rounded to zero.

Source: State and Territory governments (table 9A.2); ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2); ABS 2012, Australian National Accounts: National Income, Expenditure and Product, June 2012, Cat. no. 5206.0, Canberra (table AA.51).

All jurisdictions — ambulance events

Table 9A.30 **Major sources of ambulance service organisations revenue (2011-12 dollars) (a)**

	Unit	*NSW* (d)	*Vic*	*Qld*	*WA*	*SA* (d)	*Tas*	*ACT*	*NT*	*Aust* (d)
2011-12										
Revenue sources (dollars)										
Government grants/contributions	$m	506.8	399.8	448.5	89.0	110.3	49.9	31.0	19.9	1 655.1
Transport fees	$m	197.0	114.0	107.4	80.8	65.1	6.1	4.7	2.6	577.8
Subscriptions and other income	$m	11.5	95.8	16.2	39.5	31.9	–	0.2	1.0	196.0
Total	$m	**715.3**	**609.6**	**572.1**	**209.3**	**207.3**	**56.0**	**35.8**	**23.5**	**2 428.9**
Proportion of total										
Government grants and indirect revenue										
State/Territory Government grants	%	70.8	63.8	78.4	42.5	53.2	89.1	86.5	84.4	67.7
Other government contributions (c)	%	–	1.8	–	–	–	–	–	–	0.5
Transport fees										
Fees from Interhospital transfers	%	13.2	5.3	11.8	3.1	8.3	–	–	–	9.0
Fees from (uninsured) citizens	%	6.6	8.4	1.1	31.2	18.4	3.6	–	6.6	8.7
Charges to motor accident insurers	%	4.2	3.8	2.4	1.9	2.2	2.7	–	1.8	3.2
Charges to other organisations	%	3.6	1.1	3.5	2.5	2.6	4.6	13.1	2.9	2.9
Other revenue (b)										
Subscription fees	%	–	13.5	–	1.0	10.4	–	–	2.0	4.4
Other fees, donations, miscellaneous	%	1.6	2.2	2.8	17.9	4.9	–	0.4	2.3	3.7
Total	%	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2010-11										
Revenue sources (dollars)										
Government grants/contributions	$m	487.0	360.1	430.5	66.0	102.6	49.8	23.1	19.1	1 538.1
Transport fees	$m	191.2	110.7	101.5	73.8	69.5	4.6	5.3	2.2	558.7
Subscriptions and other income	$m	8.5	115.3	19.8	36.4	28.6	0.7	0.1	1.0	210.5
Total	**$m**	**686.6**	**586.1**	**551.7**	**176.2**	**200.6**	**55.1**	**28.5**	**22.4**	**2 307.2**

Table 9A.30 **Major sources of ambulance service organisations revenue (2011-12 dollars) (a)**

	Unit	*NSW* (d)	*Vic*	*Qld*	*WA*	*SA* (d)	*Tas*	*ACT*	*NT*	*Aust* (d)
Proportion of total										
Government grants and indirect revenue										
State/Territory Government grants	%	70.9	59.8	78.0	37.4	51.1	90.4	80.9	85.4	66.2
Other government contributions (c)	%	–	1.6	–	–	–	–	–	–	0.4
Transport fees										
Fees from Interhospital transfers	%	13.1	5.3	11.2	3.3	8.7	–	–	–	8.9
Fees from (uninsured) citizens	%	6.4	8.7	1.2	33.3	18.2	1.6	–	6.1	8.6
Charges to motor accident insurers	%	5.0	3.8	2.4	2.4	2.5	2.2	–	1.9	3.5
Charges to other organisations	%	3.4	1.1	3.6	2.8	5.2	4.6	18.6	2.0	3.2
Other revenue (b)										
Subscription fees	%	–	18.2	–	1.3	10.8	–	–	2.1	5.7
Other fees, donations, miscellaneous	%	1.2	1.5	3.6	19.4	3.5	1.2	0.5	2.4	3.5
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2009-10										
Revenue sources (dollars)										
Government grants/contributions	$m	496.7	366.0	406.8	45.8	104.6	49.2	19.9	16.8	1 505.8
Transport fees	$m	196.5	112.0	106.4	63.8	62.8	4.7	4.7	2.5	553.4
Subscriptions and other income	$m	10.1	105.0	16.0	36.6	26.9	0.9	0.5	1.1	197.1
Total	**$m**	**703.4**	**583.0**	**529.2**	**146.1**	**194.3**	**54.9**	**25.0**	**20.3**	**2 256.3**
Proportion of total										
Government grants and indirect revenue										
State/Territory Government grants	%	70.4	61.6	76.9	31.3	53.8	89.7	79.4	82.6	66.4
Other government contributions (c)	%	0.2	1.2	–	–	–	–	–	–	0.4
Transport fees										
Fees from Interhospital transfers	%	12.8	5.2	12.5	3.0	8.0	–	–	–	9.2

Table 9A.30 **Major sources of ambulance service organisations revenue (2011-12 dollars) (a)**

	Unit	*NSW* (d)	*Vic*	*Qld*	*WA*	*SA* (d)	*Tas*	*ACT*	*NT*	*Aust* (d)
Fees from (uninsured) citizens	%	6.5	8.9	1.2	34.3	18.6	0.6	–	6.9	8.5
Charges to motor accident insurers	%	4.7	4.0	2.4	3.0	2.9	2.9	–	2.3	3.6
Charges to other organisations	%	3.9	1.1	4.0	3.4	2.8	5.1	18.6	3.1	3.2
Other revenue (b)										
Subscription fees	%	–	16.7	–	1.6	11.3	–	–	2.5	5.4
Other fees, donations, miscellaneous	%	1.4	1.3	3.0	23.4	2.5	1.7	2.0	2.7	3.3
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2008-09										
Revenue sources (dollars)										
Government grants/contributions	$m	479.2	349.0	401.4	43.3	113.9	41.3	20.3	15.5	1 463.9
Transport fees	$m	183.1	98.7	79.9	53.3	54.5	5.1	4.7	2.1	481.5
Subscriptions and other income	$m	8.7	108.4	19.9	34.8	25.5	0.7	0.2	6.4	204.5
Total	**$m**	**671.0**	**556.1**	**501.3**	**131.4**	**193.9**	**47.1**	**25.2**	**24.0**	**2 149.9**
Proportion of total										
Government grants and indirect revenue										
State/Territory Government grants	%	71.4	61.8	80.1	32.9	58.7	86.4	80.7	64.5	67.8
Other government contributions (c)	%	–	0.9	–	–	–	1.3	–	–	0.3
Transport fees										
Fees from Interhospital transfers	%	14.1	4.6	7.6	2.8	7.4	–	–	–	8.2
Fees from (uninsured) citizens	%	6.7	7.6	1.3	31.4	15.1	0.8	–	5.1	7.7
Charges to motor accident insurers	%	3.0	4.0	2.5	3.0	3.0	4.1	–	1.7	3.1
Charges to other organisations	%	3.5	1.6	4.6	3.5	2.6	5.9	18.7	2.0	3.4
Other revenue (b)										
Subscription fees	%	–	16.7	–	1.7	10.6	–	–	2.0	5.4
Other fees, donations, miscellaneous	%	1.3	2.8	4.0	24.8	2.6	1.4	0.6	24.8	4.1

Table 9A.30 **Major sources of ambulance service organisations revenue (2011-12 dollars) (a)**

	Unit	*NSW* (d)	*Vic*	*Qld*	*WA*	*SA* (d)	*Tas*	*ACT*	*NT*	*Aust* (d)
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2007-08										
Revenue sources (dollars)										
Government grants/contributions	$m	438.8	315.1	368.7	41.0	75.8	32.2	19.3	14.5	1 305.4
Transport fees	$m	171.0	102.6	80.2	59.0	55.6	5.0	5.0	2.1	480.6
Subscriptions and other income	$m	11.2	117.2	19.5	35.8	26.0	0.7	0.2	6.0	216.7
Total	**$m**	**621.0**	**534.9**	**468.4**	**135.9**	**157.5**	**38.0**	**24.4**	**22.6**	**2 002.6**
Proportion of total										
Government grants and indirect revenue										
State/Territory Government grants	%	70.7	56.5	78.7	30.2	47.9	83.9	79.0	64.1	64.5
Other government contributions (c)	%	–	2.5	–	–	0.2	0.9	–	–	0.7
Transport fees										
Fees from Interhospital transfers	%	13.6	4.5	8.2	3.8	8.7	–	–	–	8.3
Fees from (uninsured) citizens	%	6.9	9.0	1.5	33.0	19.8	1.0	–	5.5	8.8
Charges to motor accident insurers	%	3.6	4.0	2.7	2.9	3.8	4.9	–	1.7	3.4
Charges to other organisations	%	3.4	1.7	4.7	3.8	3.0	7.4	20.3	2.1	3.5
Other revenue (b)										
Subscription fees	%	–	18.1	–	1.5	12.9	–	–	1.9	6.0
Other fees, donations, miscellaneous	%	1.8	3.8	4.2	24.9	3.6	2.0	0.6	24.8	4.8
Total	**%**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 9A.30 **Major sources of ambulance service organisations revenue (2011-12 dollars) (a)**

	Unit	*NSW* (d)	*Vic*	*Qld*	*WA*	*SA* (d)	*Tas*	*ACT*	*NT*	*Aust* (d)
2006-07										
Revenue sources (dollars)										
Government grants/contributions (c)	$m	403.9	295.9	346.8	41.5	65.4	31.8	17.6	13.8	1 216.7
Transport fees	$m	125.4	100.1	75.0	55.3	51.9	3.9	4.7	2.0	418.4
Subscriptions and other income (b)	$m	12.7	115.5	20.1	31.5	25.9	0.3	0.2	5.3	211.6
Total	**$m**	**541.9**	**511.5**	**441.9**	**128.3**	**143.3**	**36.1**	**22.5**	**21.1**	**1 846.7**
2005-06										
Revenue sources (dollars)										
Government grants/contributions (c)	$m	401.1	318.1	321.2	42.5	64.9	29.6	23.2	12.7	1 213.4
Transport fees	$m	111.1	96.8	72.8	50.4	49.2	3.6	1.3	2.0	387.2
Subscriptions and other income (b)	$m	19.2	108.0	17.7	30.9	26.1	0.6	0.1	5.2	207.8
Total	**$m**	**531.4**	**523.0**	**411.7**	**123.8**	**140.2**	**33.7**	**24.6**	**19.9**	**1 808.3**
2004-05										
Revenue sources (dollars)										
Government grants/contributions (c)	$m	386.0	300.8	308.4	25.4	65.5	26.2	19.1	12.1	1 143.4
Transport fees	$m	93.2	87.9	68.1	68.2	47.4	4.7	1.9	2.2	373.7
Subscriptions and other income (b)	$m	14.2	103.0	16.1	28.3	27.1	0.3	0.1	5.4	194.5
Total	**$m**	**493.4**	**491.7**	**392.6**	**121.9**	**140.0**	**31.2**	**21.1**	**19.7**	**1 711.5**
2003-04										
Revenue sources (dollars)										
Government grants/contributions (c)	$m	371.7	257.2	309.9	18.8	59.9	22.0	25.2	9.7	1 074.4
Transport fees	$m	94.0	85.2	65.9	62.9	44.8	4.3	1.8	1.5	360.5
Subscriptions and other income (b)	$m	11.3	100.6	14.9	24.5	23.2	0.5	1.2	4.6	180.9
Total	**$m**	**477.0**	**443.0**	**390.8**	**106.2**	**128.0**	**26.8**	**28.2**	**15.8**	**1 615.8**

Table 9A.30 **Major sources of ambulance service organisations revenue (2011-12 dollars) (a)**

	Unit	*NSW* (d)	*Vic*	*Qld*	*WA*	*SA* (d)	*Tas*	*ACT*	*NT*	*Aust* (d)
2002-03										
Revenue sources (dollars)										
Government grants/contributions (c)	$m	340.5	260.7	209.2	19.4	51.9	21.4	27.8	9.0	939.8
Transport fees	$m	95.5	85.1	73.2	59.3	39.0	3.9	1.8	2.0	359.8
Subscriptions and other income (b)	$m	6.9	81.2	95.5	19.2	22.6	0.7	0.2	4.4	230.7
Total	**$m**	**442.8**	**427.0**	**377.9**	**97.9**	**113.5**	**25.9**	**29.8**	**15.4**	**1 530.3**

(a) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Due to differences in definitions and counting rules, data reported may differ from data in agency annual reports and other sources. Totals may not add due to rounding.

(b) Other revenue is equal to the sum of subscriptions, donations and miscellaneous revenue.

(c) Other government contributions includes Australian Government grants, Local government grants, and indirect government funding

(d) Jurisdiction notes:

NSW: NSW has a subscription scheme but funds are deposited to the consolidated revenue of the NSW Treasury.

SA: For the 2012 Report 2010-11 ambulance financial and workforce data were not available due to reporting system issues. This was rectified for the 2013 Report. 2007-08 other fees from citizens includes workers compensation fees.

– Nil or rounded to zero.

Source: State and Territory governments (unpublished); ABS 2012, Australian National Accounts: National Income, Expenditure and Product, June 2012, Cat. no. 5206.0, Canberra (table AA.51).

Table 9A.31 **Reported ambulance incidents, responses, patients and transport (a), (b)**

	Unit	*NSW* (c)	*Vic* (c)	*Qld*	*WA* (c)	*SA*	*Tas*	*ACT*	*NT* (c)	*Aust* (c)
2011-12										
Incidents										
Emergency incidents	'000	548	293	289	87	141	34	15	na	1 407
Urgent incidents	'000	139	158	307	44	57	22	16	na	743
Non-emergency incidents	'000	287	343	233	98	58	12	8	na	1 039
Casualty room attendances	'000	–	–	5	–	–	–	–	–	5
Total incidents	'000	**973**	**795**	**833**	**230**	**256**	**68**	**39**	**na**	**3 194**
Incidents per 1 000 people	no.	134	143	185	96	155	134	106	na	142
Responses										
Emergency responses	'000	695	428	368	93	191	42	16	13	1 847
Urgent responses	'000	171	203	336	45	74	25	16	21	891
Non-emergency responses	'000	318	386	227	103	63	13	8	10	1 128
Total responses	'000	**1 184**	**1 017**	**931**	**241**	**328**	**80**	**40**	**44**	**3 866**
Responses per 1 000 people	no.	163	182	206	101	200	157	108	191	172
Patients										
Transported	'000	801	650	701	221	197	55	27	36	2 689
Treated not transported	'000	130	68	81	20	46	12	6	9	372
Total patients	'000	**931**	**718**	**782**	**241**	**243**	**67**	**33**	**44**	**3 060**
Patients per 1 000 people	no.	128	129	173	101	148	131	89	191	136
Transport										
Total fleet road	m km	35.9	29.5	33.9	6.7	10.5	2.8	1.1	1.0	121.3
Flying hours fixed wing	'000 hrs	9.1	4.9	–	–	–	1.4	–	–	15.4
Flying hours rotary wing	'000 hrs	6.2	3.2	–	–	–	0.4	0.7	–	10.5
2010-11										
Incidents										
Emergency incidents	'000	514	278	257	64	133	36	14	na	1 297
Urgent incidents	'000	148	166	303	50	58	21	16	na	761
Non-emergency incidents	'000	282	337	236	92	87	18	7	na	1 060
Casualty room attendances	'000	–	–	6	–	–	–	–	–	6
Total incidents	'000	**944**	**781**	**801**	**207**	**279**	**75**	**36**	**na**	**3 123**
Incidents per 1 000 people	no.	130	140	176	89	169	148	100	na	139
Responses										
Emergency responses	'000	655	404	331	68	167	41	14	11	1 692
Urgent responses	'000	182	207	332	51	67	23	15	20	897
Non-emergency responses	'000	313	377	231	96	89	16	7	9	1 138
Total responses	'000	**1 150**	**988**	**894**	**215**	**323**	**80**	**36**	**41**	**3 727**
Responses per 1 000 people	no.	158	177	197	93	196	157	99	177	166
Patients										
Transported	'000	778	640	675	198	192	55	24	33	2 594

Table 9A.31 **Reported ambulance incidents, responses, patients and transport (a), (b)**

	Unit	*NSW* (c)	*Vic* (c)	*Qld*	*WA* (c)	*SA*	*Tas*	*ACT*	*NT* (c)	*Aust* (c)
Treated not transported	'000	126	68	61	18	43	9	7	4	334
Total patients	'000	**904**	**707**	**735**	**216**	**235**	**64**	**31**	**36**	**2 928**
Patients per 1 000 people	no.	124	127	162	93	142	125	86	158	130
Transport										
Total fleet road	m km	35.1	29.0	31.2	6.5	10.5	2.7	0.9	0.9	116.8
Flying hours fixed wing	'000 hrs	8.3	4.7	–	–	–	1.4	–	–	14.3
Flying hours rotary wing	'000 hrs	6.2	3.0	–	0.5	–	0.7	0.7	–	11.0
2009-10										
Incidents										
Emergency incidents	'000	504	261	232	58	123	35	14	na	1 226
Urgent incidents	'000	155	159	284	50	58	23	16	na	746
Non-emergency incidents	'000	278	322	228	90	86	12	6	na	1 023
Casualty room attendances	'000	–	–	6	–	–	–	–	–	6
Total incidents	'000	**936**	**742**	**750**	**199**	**268**	**70**	**36**	**na**	**3 001**
Incidents per 1 000 people	no.	130	135	168	87	164	138	101	na	135
Responses										
Emergency responses	'000	638	356	305	61	153	38	13	10	1 576
Urgent responses	'000	189	188	309	52	67	24	15	18	861
Non-emergency responses	'000	306	356	224	94	87	11	7	9	1 093
Total responses	'000	**1 133**	**900**	**838**	**206**	**307**	**73**	**36**	**38**	**3 530**
Responses per 1 000 people	no.	158	164	187	91	188	144	100	166	159
Patients										
Transported	'000	769	617	628	189	190	52	24	31	2 499
Treated not transported	'000	124	65	54	17	38	9	7	3	318
Total patients	'000	**892**	**683**	**683**	**207**	**229**	**61**	**31**	**34**	**2 817**
Patients per 1 000 people	no.	124	124	153	91	140	120	86	149	127
Transport										
Total fleet road	m km	33.4	29.6	30.3	6.3	10.4	2.7	0.9	0.8	114.4
Flying hours fixed wing	'000 hrs	8.1	4.7	–	–	–	1.4	–	–	14.2
Flying hours rotary wing	'000 hrs	6.5	2.8	–	0.4	–	0.5	0.7	–	10.8
2008-09										
Incidents										
Emergency incidents	'000	491	240	217	51	108	30	12	na	1 150
Urgent incidents	'000	181	153	285	47	62	23	14	na	765
Non-emergency incidents	'000	266	322	242	90	76	10	7	na	1 013
Casualty room attendances	'000	–	–	7	–	–	–	–	–	7
Total incidents	'000	**939**	**714**	**751**	**188**	**246**	**63**	**33**	**na**	**2 934**
Incidents per 1 000 people	no.	133	133	173	85	153	127	94	na	136
Responses										

Table 9A.31 **Reported ambulance incidents, responses, patients and transport (a), (b)**

	Unit	*NSW* (c)	*Vic* (c)	*Qld*	*WA* (c)	*SA*	*Tas*	*ACT*	*NT* (c)	*Aust* (c)
Emergency responses	'000	611	331	285	54	128	33	13	10	1 465
Urgent responses	'000	215	178	309	48	68	24	14	18	873
Non-emergency responses	'000	295	356	235	94	76	9	7	10	1 080
Total responses	'000	**1 120**	**864**	**829**	**196**	**272**	**65**	**34**	**37**	**3 418**
Responses per 1 000 people	no.	159	161	190	89	169	130	99	169	158
Patients										
Transported	'000	764	593	607	177	184	38	22	30	2 416
Treated not transported	'000	119	62	51	19	35	12	7	3	309
Total patients	'000	**884**	**656**	**658**	**196**	**220**	**50**	**28**	**33**	**2 725**
Patients per 1 000 people	no.	126	122	151	89	136	100	82	151	126
Transport										
Total fleet road	m km	30.4	30.8	29.6	6.1	10.4	2.4	0.9	0.8	111.5
Flying hours fixed wing	'000 hrs	8.2	4.8	–	–	–	1.3	–	–	14.3
Flying hours rotary wing	'000 hrs	7.0	2.2	–	0.5	–	0.5	0.6	–	10.8
2007-08										
Incidents										
Emergency incidents	'000	480	228	220	48	108	29	12	na	1 125
Urgent incidents	'000	196	162	284	41	59	22	13	na	776
Non-emergency incidents	'000	256	313	220	85	69	10	8	na	961
Casualty room attendances	'000	–	–	9	–	–	–	–	–	9
Total incidents	'000	**932**	**702**	**733**	**174**	**236**	**61**	**32**	**na**	**2 870**
Incidents per 1 000 people	no.	135	134	173	82	148	123	95	na	136
Responses										
Emergency responses	'000	605	330	311	51	120	32	13	8	1 469
Urgent responses	'000	233	176	329	41	63	23	13	18	896
Non-emergency responses	'000	280	325	218	88	69	9	8	9	1 006
Total responses	'000	**1 119**	**831**	**858**	**180**	**252**	**63**	**34**	**35**	**3 371**
Responses per 1 000 people	no.	161	158	203	85	158	127	100	161	159
Patients										
Transported	'000	755	587	604	163	183	37	20	28	2 377
Treated not transported	'000	106	61	47	19	33	13	7	2	287
Total patients	'000	**860**	**648**	**651**	**182**	**216**	**50**	**27**	**30**	**2 663**
Patients per 1 000 people	no.	124	123	154	85	135	100	80	138	126
Transport										
Total fleet road	m km	30.1	25.6	28.0	5.9	10.5	2.3	0.8	0.8	104.1
Flying hours fixed wing	'000 hrs	8.0	4.9	–	–	–	1.3	–	–	14.2
Flying hours rotary wing	'000 hrs	6.9	2.0	–	0.6	–	0.5	0.7	–	10.8
2006-07										
Total incidents	'000	**880**	**674**	**682**	**166**	**220**	**61**	**29**	**na**	**2 713**

Table 9A.31 **Reported ambulance incidents, responses, patients and transport (a), (b)**

	Unit	*NSW* (c)	*Vic* (c)	*Qld*	*WA* (c)	*SA*	*Tas*	*ACT*	*NT* (c)	*Aust* (c)
Incidents per 1 000 people	no.	128	131	165	80	140	124	86	na	130
Total responses	'000	**1 053**	**805**	**797**	**171**	**232**	**63**	**32**	**34**	**3 188**
Responses per 1 000 people	no.	154	156	193	82	148	128	96	160	153
Total patients	'000	**889**	**623**	**621**	**174**	**202**	**49**	**27**	**29**	**2 614**
Patients per 1 000 people	no.	130	121	150	83	128	101	80	137	125
Total fleet road	m km	na	23.6	25.4	5.8	9.4	2.3	0.8	0.7	na
2005-06										
Total incidents	'000	**834**	**631**	**636**	**156**	**206**	**59**	**27**	**na**	**2 549**
Incidents per 1 000 people	no.	123	124	157	76	132	121	81	na	124
Total responses	'000	**999**	**752**	**732**	**159**	**215**	**62**	**30**	**31**	**2 980**
Responses per 1 000 people	no.	147	148	181	78	138	126	90	151	145
Total patients	'000	**801**	**584**	**601**	**161**	**188**	**46**	**25**	**27**	**2 433**
Patients per 1 000 people	no.	118	115	149	79	121	94	75	130	118
Total fleet road	m km	na	21.2	21.8	5.3	8.9	2.2	0.8	0.7	na
2004-05										
Total incidents	'000	**794**	**578**	**593**	**150**	**189**	**49**	**23**	**na**	**2 375**
Incidents per 1 000 people	no.	118	115	150	75	122	101	71	na	117
Total responses	'000	**947**	**694**	**677**	**153**	**201**	**56**	**27**	**31**	**2 785**
Responses per 1 000 people	no.	141	139	172	76	130	116	81	150	138
Total patients	'000	**763**	**534**	**548**	**154**	**181**	**41**	**23**	**26**	**2 271**
Patients per 1 000 people	no.	113	107	139	77	117	84	69	130	112
Total fleet road	m km	na	16.6	20.4	5.1	2.1	2.1	0.6	0.7	47.6
2003-04										
Total incidents	'000	**787**	**563**	**566**	**144**	**184**	**53**	**25**	**na**	**2 323**
Incidents per 1 000 people	no.	118	114	147	73	120	109	76	na	116
Total responses	'000	**928**	**675**	**648**	**145**	**195**	**51**	**27**	**26**	**2 694**
Responses per 1 000 people	no.	139	136	168	74	127	106	83	130	135
Total patients	'000	**753**	**515**	**520**	**147**	**177**	**33**	**27**	**23**	**2 196**
Patients per 1 000 people	no.	113	104	135	75	115	70	84	113	110
Total fleet road	m km	na	15.8	19.6	5.0	2.0	2.0	0.6	0.6	45.6
2002-03										
Total incidents	'000	**768**	**558**	**510**	**118**	**176**	**44**	**25**	**26**	**2 226**
Incidents per 1 000 people	no.	116	114	136	61	115	94	76	0	113
Total responses	'000	**896**	**670**	**572**	**136**	**185**	**51**	**27**	**26**	**2 563**
Responses per 1 000 people	no.	135	137	152	70	121	108	82	132	130
Total patients	'000	**737**	**509**	**491**	**138**	**185**	**42**	**25**	**23**	**2 150**
Patients per 1 000 people	no.	111	104	130	71	121	89	76	115	109
Total fleet road	m km	na	15.3	18.2	4.6	2.0	2.2	0.9	0.6	43.7

Table 9A.31 Reported ambulance incidents, responses, patients and transport (a), (b)

	Unit	NSW (c)	Vic (c)	Qld	WA (c)	SA	Tas	ACT	NT (c)	Aust (c)

(a) An incident is an event that results in a demand for ambulance resources to respond. An ambulance response is a vehicle or vehicles sent to an incident. There may be multiple responses/vehicles sent to a single incident. A patient is someone assessed, treated or transported by the ambulance service.

(b) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2007 is used as the denominator for 2007-08.

(c) Jurisdiction notes:

NSW: Comparisons of NSW cases types in 2008-09 with previous years is affected by changes in the Medical Priority Dispatch System classification which were implemented in 2008-09.

Vic: Victorian incidents and responses are for road ambulances only (excludes air ambulance).

WA: Does not have a policy of automatically dispatching more than one unit to an incident unless advised of more than one patient. Separate statistics are not kept for incidents and responses. Numbers shown under incidents are cases.

Tas: For flying hours data, From 2011-12, actual engines on/off time has been used. In prior years, total case time was the only available information.

NT: Incident data are unavailable as data are not recorded on the JESC system and all cases are considered an incident. A response is counted as an incident, therefore, data for incidents are not included in the rates for Australia.

Aust: Australian incidents data exclude NT.

na Not available. – Nil or rounded to zero.

Source : State and Territory governments (unpublished); ABS 2012, *Australian Demographic Statistics* , Cat no. 3101.0, Canberra (table AA.2).

Table 9A.32 **Emergency department patients who arrived by ambulance, air ambulance, or helicopter, by triage category (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
2011-12										
Emergency department patients who arrived by ambulance, air ambulance, or helicopter										
1 - Resuscitation	'000	10.9	5.9	8.8	4.6	4.3	0.6	0.4	0.5	36.1
2 - Emergency	'000	97.7	60.7	73.8	29.5	25.2	6.1	5.1	4.3	302.3
3 - Urgent	'000	237.5	163.9	194.5	57.1	55.1	18.1	12.0	11.7	749.9
4 - Semi urgent	'000	181.6	103.2	79.1	32.2	25.6	11.0	6.2	9.8	448.8
5 - Non urgent	'000	18.0	4.8	3.6	1.4	1.6	0.6	0.3	0.6	30.9
Total	'000	**546.9**	**338.6**	**359.9**	**124.7**	**111.8**	**36.4**	**24.0**	**26.9**	**1 569.3**
Total number of emergency presentations										
1 - Resuscitation	'000	12.9	7.1	10.3	5.4	5.2	0.7	0.5	0.7	42.7
2 - Emergency	'000	206.9	134.9	139.5	81.1	51.5	10.5	12.9	10.4	647.7
3 - Urgent	'000	689.7	484.7	513.0	232.6	152.3	46.3	39.6	40.7	2 198.8
4 - Semi urgent	'000	977.0	712.7	496.9	348.7	185.7	67.5	52.6	78.1	2 919.2
5 - Non urgent	'000	342.5	167.4	78.9	58.1	32.4	16.3	12.8	14.9	723.3
Total	'000	**2 235.5**	**1 509.1**	**1 238.5**	**725.8**	**427.0**	**141.7**	**118.4**	**144.8**	**6 540.8**
Per cent of emergency department patients who arrived by ambulance, air ambulance or helicopter										
1 - Resuscitation	%	84.6	83.4	85.7	84.8	84.1	91.6	88.6	71.7	84.6
2 - Emergency	%	47.2	45.0	52.9	36.3	48.9	57.9	39.6	41.1	46.7
3 - Urgent	%	34.4	33.8	37.9	24.6	36.2	39.1	30.2	28.7	34.1
4 - Semi urgent	%	18.6	14.5	15.9	9.2	13.8	16.3	11.9	12.6	15.4
5 - Non urgent	%	5.2	2.9	4.6	2.4	4.9	3.8	2.2	4.2	4.3
Total	%	**24.5**	**22.4**	**29.1**	**17.2**	**26.2**	**25.7**	**20.3**	**18.6**	**24.0**
2010-11										
Emergency department patients who arrived by ambulance, air ambulance, or helicopter										
1 - Resuscitation	'000	10.3	6.5	9.5	4.3	3.8	0.6	0.4	0.6	36.0
2 - Emergency	'000	83.2	59.5	67.5	26.9	23.4	5.8	4.4	3.6	274.3
3 - Urgent	'000	213.8	158.9	179.6	51.2	51.0	18.0	10.2	10.0	692.7
4 - Semi urgent	'000	178.0	98.2	77.7	28.5	24.0	10.6	6.4	9.5	432.8
5 - Non urgent	'000	19.7	4.2	3.8	1.0	1.8	0.5	0.5	0.7	32.1
Total	'000	**505.1**	**327.2**	**338.1**	**111.9**	**104.0**	**35.9**	**21.8**	**24.3**	**1 468.3**
Total number of emergency presentations										
1 - Resuscitation	'000	12.2	7.9	10.9	5.1	4.5	0.6	0.5	0.8	42.4
2 - Emergency	'000	173.0	132.7	126.6	72.0	47.3	10.2	11.1	8.6	581.6
3 - Urgent	'000	620.6	467.5	482.6	206.0	138.9	48.3	34.4	36.4	2 034.8
4 - Semi urgent	'000	925.3	694.2	488.7	320.0	164.0	69.6	51.4	79.0	2 792.2
5 - Non urgent	'000	341.9	178.6	86.5	46.0	29.4	14.7	14.8	16.6	728.5
Total	'000	**2 074.1**	**1 483.2**	**1 195.3**	**649.2**	**384.0**	**143.8**	**112.2**	**141.4**	**6 183.3**
Per cent of emergency department patients who arrived by ambulance, air ambulance or helicopter										

Table 9A.32 **Emergency department patients who arrived by ambulance, air ambulance, or helicopter, by triage category (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
1 - Resuscitation	%	84.8	82.2	87.1	84.5	85.0	90.0	85.5	72.4	84.8
2 - Emergency	%	48.1	44.8	53.4	37.3	49.5	56.5	39.3	41.6	47.2
3 - Urgent	%	34.5	34.0	37.2	24.8	36.8	37.3	29.5	27.5	34.0
4 - Semi urgent	%	19.2	14.1	15.9	8.9	14.6	15.3	12.4	12.1	15.5
5 - Non urgent	%	5.8	2.3	4.4	2.3	6.0	3.2	3.1	4.1	4.4
Total	%	**24.4**	**22.1**	**28.3**	**17.2**	**27.1**	**24.9**	**19.4**	**17.2**	**23.7**
2009-10										
Emergency department patients who arrived by ambulance, air ambulance, or helicopter										
1 - Resuscitation	'000	10.2	7.8	8.0	4.2	3.7	0.7	0.4	0.6	35.7
2 - Emergency	'000	80.1	55.7	59.8	26.0	21.5	5.9	4.0	3.9	256.8
3 - Urgent	'000	209.1	149.0	163.3	47.6	48.6	17.4	10.2	9.6	654.8
4 - Semi urgent	'000	173.2	96.4	73.9	27.8	23.6	9.2	6.0	7.8	417.8
5 - Non urgent	'000	19.6	4.8	3.6	0.9	1.8	0.4	0.4	0.5	32.0
Total	'000	**492.7**	**313.7**	**308.5**	**106.6**	**99.2**	**34.0**	**21.0**	**22.4**	**1 398.1**
Total number of emergency presentations										
1 - Resuscitation	'000	12.2	9.3	9.1	5.0	4.3	0.8	0.5	0.8	42.0
2 - Emergency	'000	166.7	121.1	113.5	65.9	43.0	10.7	9.9	9.2	540.1
3 - Urgent	'000	605.3	430.5	450.5	185.6	134.1	48.7	33.4	36.5	1 924.6
4 - Semi urgent	'000	903.8	668.5	470.7	299.9	163.2	65.8	48.8	70.4	2 691.2
5 - Non urgent	'000	344.3	201.0	90.1	44.1	29.1	15.2	14.3	15.6	753.8
Total	'000	**2 035.8**	**1 432.7**	**1 134.1**	**600.6**	**373.7**	**141.6**	**106.8**	**132.6**	**5 958.0**
Per cent of emergency department patients who arrived by ambulance, air ambulance or helicopter										
1 - Resuscitation	%	83.7	83.7	87.6	85.6	86.1	90.1	86.7	74.9	85.0
2 - Emergency	%	48.1	46.0	52.6	39.4	49.9	55.0	40.8	42.1	47.6
3 - Urgent	%	34.6	34.6	36.2	25.6	36.3	35.8	30.5	26.4	34.0
4 - Semi urgent	%	19.2	14.4	15.7	9.3	14.5	13.9	12.3	11.0	15.5
5 - Non urgent	%	5.7	2.4	4.0	2.1	6.1	2.5	2.7	3.5	4.2
Total	%	**24.2**	**21.9**	**27.2**	**17.7**	**26.5**	**24.0**	**19.7**	**16.9**	**23.5**
2008-09										
Emergency department patients who arrived by ambulance, air ambulance, or helicopter										
1 - Resuscitation	'000	10.5	7.5	7.4	4.1	3.9	0.6	0.4	0.6	35.0
2 - Emergency	'000	76.5	53.0	54.4	23.8	20.9	4.9	3.7	3.5	240.6
3 - Urgent	'000	206.8	135.3	152.6	43.7	45.7	15.7	9.3	9.2	618.2
4 - Semi urgent	'000	170.8	90.2	74.7	28.1	22.6	9.2	5.6	7.3	408.5
5 - Non urgent	'000	20.3	5.0	4.0	1.2	1.4	0.4	0.4	0.6	33.2
Total	'000	**485.3**	**291.1**	**293.0**	**100.8**	**94.5**	**30.7**	**19.5**	**21.1**	**1 335.9**
Total number of emergency presentations										
1 - Resuscitation	'000	12.6	9.1	8.4	4.8	4.5	0.7	0.5	0.8	41.5

Table 9A.32 Emergency department patients who arrived by ambulance, air ambulance, or helicopter, by triage category (a)

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
2 - Emergency	'000	158.7	113.4	101.6	59.0	41.7	8.8	9.4	8.5	501.2
3 - Urgent	'000	602.7	398.9	413.9	169.2	124.9	42.6	31.1	36.6	1 819.9
4 - Semi urgent	'000	881.4	635.7	465.2	286.4	157.1	64.8	44.9	67.9	2 603.5
5 - Non urgent	'000	349.5	198.3	101.9	47.0	29.2	12.7	15.9	15.4	769.9
Total	'000	**2 007.9**	**1 358.2**	**1 091.1**	**566.4**	**357.4**	**130.1**	**101.9**	**129.2**	**5 742.1**
Per cent of emergency department patients who arrived by ambulance, air ambulance or helicopter										
1 - Resuscitation	%	82.8	82.9	87.1	85.8	85.6	90.1	84.4	72.3	84.3
2 - Emergency	%	48.2	46.7	53.5	40.3	50.2	55.0	39.3	41.3	48.0
3 - Urgent	%	34.3	33.9	36.9	25.8	36.6	36.7	29.8	25.1	34.0
4 - Semi urgent	%	19.4	14.2	16.1	9.8	14.4	14.1	12.5	10.7	15.7
5 - Non urgent	%	5.8	2.5	3.9	2.5	4.7	2.8	2.7	3.8	4.3
Total	%	**24.2**	**21.4**	**26.9**	**17.8**	**26.4**	**23.6**	**19.1**	**16.3**	**23.3**
2007-08										
Emergency department patients who arrived by ambulance, air ambulance, or helicopter										
1 - Resuscitation	'000	10.1	7.1	6.3	3.8	3.8	0.7	0.4	0.6	32.8
2 - Emergency	'000	74.3	50.2	47.4	22.3	20.1	5.0	2.9	2.9	225.2
3 - Urgent	'000	204.2	132.1	136.4	40.2	44.9	14.7	8.8	8.5	589.9
4 - Semi urgent	'000	165.2	89.8	74.0	27.5	24.3	8.8	4.6	7.0	401.1
5 - Non urgent	'000	18.7	5.4	4.1	1.3	1.5	0.3	0.3	0.8	32.5
Total	'000	**472.9**	**284.7**	**268.2**	**95.1**	**94.7**	**29.5**	**17.1**	**19.8**	**1 282.0**
Total number of emergency presentations										
1 - Resuscitation	'000	12.4	8.6	7.1	4.5	4.5	0.8	0.5	0.8	39.1
2 - Emergency	'000	155.5	107.0	86.5	55.5	40.8	9.4	7.7	7.4	469.7
3 - Urgent	'000	603.8	389.0	350.0	160.1	125.4	41.7	31.8	36.1	1 737.7
4 - Semi urgent	'000	864.0	632.8	415.8	292.9	169.2	62.3	44.6	65.2	2 546.8
5 - Non urgent	'000	324.6	212.7	89.6	47.8	24.7	10.3	13.9	15.6	739.1
Total	'000	**1 962.5**	**1 352.1**	**948.9**	**560.7**	**364.5**	**124.9**	**98.4**	**125.1**	**5 537.2**
Per cent of emergency department patients who arrived by ambulance, air ambulance or helicopter										
1 - Resuscitation	%	81.9	83.3	88.5	83.7	85.2	88.8	81.1	75.6	84.0
2 - Emergency	%	47.8	46.9	54.8	40.3	49.3	53.8	38.1	38.6	47.9
3 - Urgent	%	33.8	34.0	39.0	25.1	35.8	35.3	27.7	23.6	33.9
4 - Semi urgent	%	19.1	14.2	17.8	9.4	14.4	14.1	10.4	10.7	15.8
5 - Non urgent	%	5.8	2.5	4.6	2.7	6.3	2.7	2.5	5.2	4.4
Total	%	**24.1**	**21.1**	**28.3**	**17.0**	**26.0**	**23.6**	**17.4**	**15.8**	**23.2**
2006-07										
Emergency department patients who arrived by ambulance, air ambulance, or helicopter										
1 - Resuscitation	'000	9.8	6.8	5.4	3.5	4.1	0.9	0.5	0.7	31.8
2 - Emergency	'000	70.2	46.4	41.2	20.9	19.7	5.0	2.4	2.8	208.6

Table 9A.32 **Emergency department patients who arrived by ambulance, air ambulance, or helicopter, by triage category (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
3 - Urgent	'000	193.9	123.4	123.7	38.8	43.2	14.2	8.6	9.3	555.1
4 - Semi urgent	'000	153.2	87.1	71.7	27.0	21.1	8.4	4.6	7.0	380.1
5 - Non urgent	'000	16.9	5.5	3.5	1.4	1.0	0.2	0.2	0.9	29.6
Total	'000	**444.2**	**269.2**	**245.5**	**91.6**	**89.1**	**28.8**	**16.4**	**20.7**	**1 205.4**
Total number of emergency presentations										
1 - Resuscitation	'000	12.0	8.0	6.1	4.3	4.7	1.0	0.6	0.8	37.6
2 - Emergency	'000	149.2	98.3	74.5	52.2	41.5	9.0	6.6	6.5	437.8
3 - Urgent	'000	585.7	368.2	320.1	151.5	125.1	38.7	31.4	34.2	1 655.0
4 - Semi urgent	'000	827.1	612.2	404.0	267.9	166.8	59.6	46.2	62.5	2 446.3
5 - Non urgent	'000	302.0	216.0	82.7	48.1	17.1	10.7	11.5	18.5	706.6
Total	'000	**1 876.6**	**1 305.1**	**888.1**	**524.0**	**355.3**	**119.5**	**96.3**	**122.6**	**5 287.5**
Per cent of emergency department patients who arrived by ambulance, air ambulance or helicopter										
1 - Resuscitation	%	81.5	85.3	88.2	82.9	86.7	90.4	84.8	82.3	84.5
2 - Emergency	%	47.0	47.1	55.4	40.0	47.5	55.7	36.4	43.3	47.6
3 - Urgent	%	33.1	33.5	38.6	25.6	34.6	36.7	27.2	27.3	33.5
4 - Semi urgent	%	18.5	14.2	17.7	10.1	12.7	14.1	10.1	11.2	15.5
5 - Non urgent	%	5.6	2.5	4.2	2.9	5.6	2.2	2.0	4.8	4.2
Total	%	**23.7**	**20.6**	**27.6**	**17.5**	**25.1**	**24.1**	**17.0**	**16.9**	**22.8**
2005-06										
Emergency department patients who arrived by ambulance, air ambulance, or helicopter										
1 - Resuscitation	no.	na	na	na	na	na	na	na	na	29.5
2 - Emergency	no.	na	na	na	na	na	na	na	na	188.6
3 - Urgent	no.	na	na	na	na	na	na	na	na	506.8
4 - Semi urgent	no.	na	na	na	na	na	na	na	na	338.2
5 - Non urgent	no.	na	na	na	na	na	na	na	na	25.3
Total	**no.**	**393.2**	**250.5**	**224.0**	**77.8**	**80.2**	**27.4**	**16.5**	**19.0**	**1 088.7**
Total number of emergency presentations										
1 - Resuscitation	no.	na	na	na	na	na	na	na	na	35.1
2 - Emergency	no.	na	na	na	na	na	na	na	na	391.9
3 - Urgent	no.	na	na	na	na	na	na	na	na	1 535.0
4 - Semi urgent	no.	na	na	na	na	na	na	na	na	2 259.7
5 - Non urgent	no.	na	na	na	na	na	na	na	na	689.9
Total	no.	**1 725.5**	**1 249.1**	**843.8**	**426.8**	**335.5**	**114.8**	**99.6**	**119.7**	**4 914.9**
Per cent of emergency department patients who arrived by ambulance, air ambulance or helicopter										
1 - Resuscitation	%	na	na	na	na	na	na	na	na	84.2
2 - Emergency	%	na	na	na	na	na	na	na	na	48.1
3 - Urgent	%	na	na	na	na	na	na	na	na	33.0
4 - Semi urgent	%	na	na	na	na	na	na	na	na	15.0

Table 9A.32 **Emergency department patients who arrived by ambulance, air ambulance, or helicopter, by triage category (a)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
5 - Non urgent	%	na	na	na	na	na	na	na	na	3.7
Total	%	**22.8**	**20.1**	**26.5**	**18.2**	**23.9**	**23.9**	**16.6**	**15.9**	**22.2**

(a) Data represent the 78 per cent of emergency department presentations for which patient level data were available. Data include all presentations.

na Not available.

Source : AIHW 2011, *Australian Hospital Statistics, 2010-11* , Health services series no. 43, Cat. no. HSE 117, Canberra.

Table 9A.33 **Ambulance service organisations' human resources (a), (b), (c)**

	Unit	*NSW* (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas*	*ACT* (d)	*NT*	*Aust* (d)
2011-12										
Salaried personnel										
Ambulance operatives	%	84.9	82.1	84.3	69.8	75.1	78.1	75.7	81.4	81.8
Ambulance operatives	FTE	3 702	2 831	3 284	786	909	279	170	136	12 095
Patient transport officers	FTE	219	63	182	67	52	19	13	8	622
Students and base level ambulance officers	FTE	510	283	352	193	74	33	26	55	1 527
Qualified ambulance officers	FTE	2 601	2 421	2 326	441	655	197	109	51	8 801
Clinical other	FTE	53	12	–	–	39	3	–	–	107
Communications operatives	FTE	319	52	424	84	89	27	21	22	1 039
Operational support personnel	FTE	389	262	301	156	164	47	30	12	1 362
Corporate support personnel	FTE	269	356	310	184	137	31	24	19	1 331
Total salaried personnel	**FTE**	**4 360**	**3 449**	**3 895**	**1 126**	**1 210**	**357**	**224**	**167**	**14 788**
Per 100 000 people										
Students and base level ambulance officers	FTE	7.0	5.1	7.8	8.1	4.5	6.4	7.0	23.7	6.8
Qualified ambulance officers	FTE	35.9	43.4	51.5	18.5	39.8	38.5	29.4	21.9	39.1
Total	**FTE**	**42.9**	**48.5**	**59.3**	**26.6**	**44.3**	**45.0**	**36.4**	**45.6**	**45.9**
Volunteers										
Ambulance operatives	no.	285	505	118	2 704	1 255	488	–	–	5 355
Operational / corporate support	no.	23	–	–	452	182	–	–	–	657
Total volunteers	**no.**	**308**	**505**	**118**	**3 156**	**1 437**	**488**	**–**	**–**	**6 012**
Community first responders	**no.**	**198**	**411**	**236**	**750**	**37**	**38**	**–**	**–**	**1 670**
2010-11										
Salaried personnel										
Ambulance operatives	%	86.3	80.4	82.9	70.8	74.1	77.9	80.0	78.1	81.5
Ambulance operatives	FTE	3 693	2 654	3 196	706	930	272	151	121	11 723
Patient transport officers	FTE	226	61	176	73	81	19	11	7	653
Students and base level ambulance officers	FTE	611	265	419	149	66	57	24	44	1 635
Qualified ambulance officers	FTE	2 491	2 201	2 177	410	648	168	99	51	8 244
Clinical other	FTE	58	17	1	2	45	1	–	–	124
Communications operatives	FTE	307	110	423	72	91	27	17	19	1 067
Operational support personnel	FTE	303	284	309	139	171	46	17	15	1 284
Corporate support personnel	FTE	286	363	348	152	155	31	21	19	1 374
Total salaried personnel	**FTE**	**4 281**	**3 301**	**3 853**	**997**	**1 256**	**349**	**189**	**155**	**14 381**
Per 100 000 people										
Students and base level ambulance officers	FTE	8.4	4.7	9.2	6.4	4.0	11.2	6.6	19.1	7.3
Qualified ambulance officers	FTE	34.3	39.4	47.9	17.7	39.2	33.0	27.4	22.2	36.7

Table 9A.33 **Ambulance service organisations' human resources (a), (b), (c)**

	Unit	*NSW* (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas*	*ACT* (d)	*NT*	*Aust* (d)
Total	**FTE**	**42.7**	**44.1**	**57.1**	**24.1**	**43.2**	**44.2**	**34.0**	**41.3**	**43.9**
Volunteers										
Ambulance operatives	no.	303	460	132	2 882	1 127	457	–	–	5 361
Operational / corporate support	no.	23	–	–	287	182	–	–	na	492
Total volunteers	**no.**	**326**	**460**	**132**	**3 169**	**1 309**	**457**	**–**	**–**	**5 853**
Community first responders	**no.**	**212**	**483**	**224**	**576**	**43**	**67**	**–**	**–**	**1 605**
2009-10										
Salaried personnel										
Ambulance operatives	%	86.4	81.3	82.9	70.0	77.1	80.3	80.4	79.7	82.2
Ambulance operatives	FTE	3 563	2 588	3 118	599	900	255	134	126	11 284
Patient transport officers	FTE	190	60	179	35	110	6	8	2	591
Students and base level ambulance officers	FTE	601	322	567	115	84	62	15	48	1 814
Qualified ambulance officers	FTE	2 422	2 102	1 979	399	617	162	98	58	7 837
Clinical other	FTE	54	11	1	2	9	1	–	–	77
Communications operatives	FTE	298	93	392	48	80	24	13	18	965
Operational support personnel	FTE	285	262	301	119	102	39	18	15	1 141
Corporate support personnel	FTE	276	333	340	138	165	24	15	17	1 307
Total salaried personnel	**FTE**	**4 125**	**3 182**	**3 759**	**856**	**1 167**	**318**	**167**	**158**	**13 732**
Per 100 000 people										
Students and base level ambulance officers	FTE	8.4	5.9	12.7	5.1	5.2	12.3	4.2	21.1	8.2
Qualified ambulance officers	FTE	33.7	38.2	44.2	17.6	37.7	32.1	27.7	25.5	35.4
Total	**FTE**	**42.0**	**44.1**	**56.9**	**22.6**	**42.9**	**44.4**	**32.0**	**46.5**	**43.6**
Volunteers										
Ambulance operatives	no.	226	489	136	2 577	1 219	508	–	20	5 175
Operational / corporate support	no.	–	–	–	241	166	–	–	6	413
Total volunteers	**no.**	**226**	**489**	**136**	**2 818**	**1 385**	**508**	**–**	**26**	**5 588**
Community first responders	**no.**	**140**	**474**	**192**	**559**	**38**	**62**	**–**	**–**	**1 465**
2008-09										
Salaried personnel										
Ambulance operatives	%	86.3	82.0	82.8	69.7	76.3	82.4	81.1	73.8	82.1
Ambulance operatives	FTE	3 464	2 506	2 988	590	869	229	128	135	10 909
Patient transport officers	FTE	160	64	175	40	89	6	9	2	545
Students and base level ambulance officers	FTE	625	452	613	132	100	53	25	46	2 045
Qualified ambulance officers	FTE	2 340	1 877	1 819	378	592	151	81	69	7 306
Clinical other	FTE	48	10	1	4	11	–	–	–	74
Communications operatives	FTE	291	104	380	37	76	19	14	18	939
Operational support personnel	FTE	295	199	304	110	104	30	18	30	1 091

Table 9A.33 **Ambulance service organisations' human resources (a), (b), (c)**

	Unit	*NSW* (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas*	*ACT* (d)	*NT*	*Aust* (d)
Corporate support personnel	FTE	254	352	317	147	166	19	12	18	1 283
Total salaried personnel	**FTE**	**4 013**	**3 057**	**3 608**	**848**	**1 138**	**278**	**158**	**183**	**13 283**
Per 100 000 people										
Students and base level ambulance officers	FTE	8.9	8.4	14.1	6.0	6.2	10.6	7.2	20.8	9.4
Qualified ambulance officers	FTE	33.2	35.0	41.8	17.1	36.7	30.1	23.2	31.1	33.8
Total	**FTE**	**42.1**	**43.4**	**55.9**	**23.1**	**42.9**	**40.7**	**30.4**	**51.9**	**43.2**
Volunteers										
Ambulance operatives	no.	205	494	188	2 310	1 268	574	–	12	5 051
Operational / corporate support	no.	–	–	–	256	234	–	–	1	491
Total volunteers	**no.**	**205**	**494**	**188**	**2 566**	**1 502**	**574**	**–**	**13**	**5 542**
Community first responders	**no.**	**85**	**490**	**231**	**471**	**34**	**34**	**–**	**–**	**1 345**
2007-08										
Salaried personnel										
Ambulance operatives	%	86.3	82.5	81.0	71.9	75.0	81.9	83.5	81.5	81.9
Ambulance operatives	FTE	3 262	2 264	2 738	561	799	226	129	132	10 110
Patient transport officers	FTE	142	55	186	43	81	2	13	1	525
Students and base level ambulance officers	FTE	595	321	565	130	86	73	17	50	1 837
Qualified ambulance officers	FTE	2 189	1 769	1 651	349	554	132	92	64	6 799
Clinical other	FTE	47	5	1	–	9	–	–	–	62
Communications operatives	FTE	289	113	336	39	69	19	7	17	888
Operational support personnel	FTE	284	164	332	116	92	32	16	11	1 047
Corporate support personnel	FTE	232	317	312	103	175	18	9	19	1 186
Total salaried personnel	**FTE**	**3 778**	**2 745**	**3 382**	**780**	**1 065**	**276**	**154**	**162**	**12 344**
Per 100 000 people										
Students and base level ambulance officers	FTE	8.6	6.1	13.4	6.1	5.4	14.7	5.0	23.0	8.7
Qualified ambulance officers	FTE	31.6	33.7	39.0	16.4	34.8	26.6	27.0	29.4	32.1
Total	**FTE**	**40.2**	**39.8**	**52.4**	**22.5**	**40.2**	**41.3**	**32.0**	**52.4**	**40.8**
Volunteers										
Ambulance operatives	no.	163	437	225	1 889	1 285	507	–	9	4 515
Operational / corporate support	no.	–	–	–	1 071	249	–	–	1	1 321
Total volunteers	**no.**	**163**	**437**	**225**	**2 960**	**1 534**	**507**	**–**	**10**	**5 836**
Community first responders	**no.**	**39**	**516**	**188**	**–**	**2**	**34**	**–**	**–**	**779**
2006-07										
Salaried personnel										
Ambulance operatives	%	86.3	83.0	77.6	71.1	73.8	81.7	79.1	74.9	80.9
Ambulance operatives	FTE	3 194	2 147	2 481	524	725	215	105	100	9 491
Patient transport officers	FTE	148	53	163	43	87	2	10	1	506

Table 9A.33 **Ambulance service organisations' human resources (a), (b), (c)**

	Unit	*NSW* (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas*	*ACT* (d)	*NT*	*Aust* (d)
Students and base level ambulance officers	FTE	530	354	500	45	80	55	8	20	1 592
Qualified ambulance officers	FTE	2 212	1 641	1 511	400	504	139	78	63	6 548
Clinical other	FTE	33	–	1	–	–	–	–	–	34
Communications operatives	FTE	271	100	306	36	54	19	9	16	811
Operational support personnel	FTE	278	169	227	72	82	32	10	16	887
Corporate support personnel	FTE	229	272	489	141	176	16	18	18	1 358
Total salaried personnel	**FTE**	**3 701**	**2 589**	**3 197**	**737**	**983**	**263**	**133**	**134**	**11 736**
Per 100 000 people										
Students and base level ambulance officers	FTE	7.7	6.9	12.1	2.2	5.1	11.2	2.4	9.4	7.6
Qualified ambulance officers	FTE	32.3	31.8	36.6	19.2	32.0	28.2	23.2	29.6	31.4
Total	**FTE**	**40.0**	**38.6**	**48.7**	**21.4**	**37.1**	**39.4**	**25.6**	**39.0**	**39.0**
Volunteers										
Ambulance operatives	no.	121	897	416	1 938	1 377	507	–	9	5 265
Operational / corporate support	no.	–	–	–	901	242	–	–	1	1 144
Total volunteers	**no.**	**121**	**897**	**416**	**2 839**	**1 619**	**507**	**–**	**10**	**6 409**
Community first responders	**no.**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
2005-06										
Salaried personnel										
Ambulance operatives	%	86.6	83.1	79.2	72.5	76.9	81.1	75.0	72.9	81.7
Ambulance operatives	FTE	3 066	2 040	2 402	504	725	188	107	84	9 116
Patient transport officers	FTE	140	44	153	39	40	2	5	1	425
Students and base level ambulance officers	FTE	547	329	461	108	31	40	12	17	1 545
Qualified ambulance officers	FTE	2 083	1 562	1 505	321	580	129	78	55	6 313
Clinical other	FTE	23	–	1	–	–	–	–	–	24
Communications operatives	FTE	273	106	282	35	74	17	12	12	810
Operational support personnel	FTE	257	152	178	72	81	28	14	15	797
Corporate support personnel	FTE	218	263	453	118	136	16	22	16	1 243
Total salaried personnel	**FTE**	**3 541**	**2 455**	**3 033**	**695**	**942**	**232**	**143**	**116**	**11 157**
Per 100 000 people										
Students and base level ambulance officers	FTE	8.1	6.5	11.4	5.3	2.0	8.2	3.6	8.2	7.5
Qualified ambulance officers	FTE	30.7	30.7	37.2	15.8	37.2	26.4	23.5	26.3	30.7
Total	**FTE**	**38.8**	**37.2**	**48.6**	**21.1**	**39.2**	**34.6**	**27.1**	**34.5**	**38.2**
Volunteers										
Ambulance operatives	no.	84	915	427	1 951	1 221	503	–	13	5 114
Operational / corporate support	no.	–	–	–	900	258	–	–	1	1 159
Total volunteers	**no.**	**84**	**915**	**427**	**2 851**	**1 479**	**503**	**–**	**14**	**6 273**

Table 9A.33 **Ambulance service organisations' human resources (a), (b), (c)**

	Unit	*NSW* (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas*	*ACT* (d)	*NT*	*Aust* (d)
Community first responders	**no.**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
2004-05										
Salaried personnel										
Ambulance operatives	%	86.2	83.7	79.2	73.6	77.9	83.2	75.5	72.2	82.0
Ambulance operatives	FTE	2 926	2 016	2 289	475	667	185	110	78	8 747
Patient transport officers	FTE	134	41	138	38	69	2	5	1	429
Students and base level ambulance officers	FTE	534	411	468	104	58	33	11	18	1 637
Qualified ambulance officers	FTE	1 994	1 463	1 426	297	496	133	84	48	5 941
Clinical other	FTE	18	–	2	–	–	–	–	–	20
Communications operatives	FTE	247	101	255	35	44	17	10	11	721
Operational support personnel	FTE	246	144	212	64	57	24	14	13	774
Corporate support personnel	FTE	222	248	390	106	133	14	22	17	1 152
Total salaried personnel	**FTE**	**3 394**	**2 409**	**2 891**	**645**	**857**	**223**	**146**	**108**	**10 672**
Per 100 000 people										
Students and base level ambulance officers	FTE	7.9	8.2	11.9	5.2	3.8	6.8	3.4	8.8	8.1
Qualified ambulance officers	FTE	29.6	29.2	36.1	14.9	32.1	27.4	25.6	23.5	29.3
Total	**FTE**	**37.6**	**37.4**	**48.0**	**20.1**	**35.8**	**34.3**	**28.9**	**32.3**	**37.4**
Volunteers										
Ambulance operatives	no.	118	819	575	1 767	1 295	448	–	16	5 238
Operational / corporate support	no.	–	–	–	857	235	–	–	1	1 144
Total volunteers	**no.**	**118**	**819**	**575**	**2 624**	**1 530**	**448**	**–**	**17**	**6 382**
Community first responders	**no.**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
2003-04										
Salaried personnel										
Ambulance operatives	%	86.8	84.0	78.4	68.8	76.4	86.3	74.2	63.3	81.6
Ambulance operatives	FTE	2 865	1 887	2 088	410	649	162	95	74	8 230
Patient transport officers	FTE	96	39	143	33	48	2	2	–	363
Students and base level ambulance officers	FTE	523	394	336	96	151	23	18	20	1 561
Qualified ambulance officers	FTE	1 981	1 354	1 380	254	404	121	65	43	5 602
Clinical other	FTE	18	–	2	–	–	–	–	–	20
Communications operatives	FTE	247	100	227	27	46	16	10	11	684
Operational support personnel	FTE	226	145	188	60	68	14	18	15	734
Corporate support personnel	FTE	210	215	386	126	132	12	15	28	1 123
Total salaried personnel	**FTE**	**3 301**	**2 246**	**2 662**	**596**	**849**	**187**	**128**	**117**	**10 087**
Per 100 000 people										
Students and base level ambulance officers	FTE	7.8	8.0	8.7	4.9	9.8	4.8	5.5	10.0	7.8

Table 9A.33 **Ambulance service organisations' human resources (a), (b), (c)**

	Unit	*NSW* (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas*	*ACT* (d)	*NT*	*Aust* (d)
Qualified ambulance officers	FTE	29.6	27.3	35.8	12.9	26.3	25.2	19.9	21.4	28.0
Total	**FTE**	**37.4**	**35.3**	**44.5**	**17.8**	**36.1**	**30.0**	**25.5**	**31.4**	**35.8**
Volunteers										
Ambulance operatives	no.	115	501	445	1 694	1 383	567	–	19	5 196
Operational / corporate support	no.	–	–	–	1 026	200	–	–	1	1 144
Total volunteers	**no.**	**115**	**501**	**445**	**2 720**	**1 583**	**567**	**–**	**20**	**6 340**
Community first responders	**no.**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
2002-03										
Salaried personnel										
Ambulance operatives	%	86.7	84.3	67.2	67.1	80.1	85.2	77.5	62.2	78.9
Ambulance operatives	FTE	2 743	1 730	1 679	380	635	154	93	70	7 483
Patient transport officers	FTE	97	37	123	25	58	2	2	–	344
Students and base level ambulance officers	FTE	455	343	232	108	114	21	18	18	1 309
Qualified ambulance officers	FTE	1 953	1 269	1 132	224	420	113	63	41	5 215
Clinical other	FTE	16	–	3	–	–	–	–	–	19
Communications operatives	FTE	222	81	190	23	43	18	10	11	597
Operational support personnel	FTE	233	136	315	66	52	15	14	15	846
Corporate support personnel	FTE	186	187	506	120	106	12	14	28	1 157
Total salaried personnel	**FTE**	**3 162**	**2 053**	**2 499**	**566**	**793**	**180**	**120**	**113**	**9 486**
Per 100 000 people										
Students and base level ambulance officers	FTE	6.8	7.0	6.2	5.6	7.5	4.4	5.6	9.0	6.6
Qualified ambulance officers	FTE	29.4	25.9	30.1	11.6	27.5	23.8	19.4	20.6	26.4
Total	**FTE**	**36.2**	**32.9**	**36.2**	**17.1**	**35.0**	**28.2**	**25.0**	**29.6**	**33.0**
Volunteers										
Ambulance operatives	no.	57	387	403	2 022	1 354	530	–	21	5 169
Operational / corporate support	no.	–	–	–	726	300	–	–	1	1 144
Total volunteers	**no.**	**57**	**387**	**403**	**2 748**	**1 654**	**530**	**–**	**22**	**6 313**
Community first responders	**no.**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**

(a) Previous years data may not be comparable. Prior to 2007-08 volunteer data were categorised into volunteers with transport capability and first responders with no transport capability. Community first responders are reported separately from 2007-08.

(b) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2008 is used as the denominator for 2008-09.

(c) From 2007-08 operational support staff include community service operatives previously reported under corporate support staff.

(d) Jurisdiction notes:

Table 9A.33 **Ambulance service organisations' human resources (a), (b), (c)**

	Unit	*NSW* (d)	*Vic* (d)	*Qld* (d)	*WA* (d)	*SA* (d)	*Tas*	*ACT* (d)	*NT*	*Aust* (d)

NSW: A volunteer ambulance service audit was undertaken in 2008-09 which lead to improved reporting of community first responder numbers.

Vic: Data on volunteers includes some renumerated volunteers. These volunteers were remunerated for some time (usually response), but not for other time (usually on-call time). Data on community first responders includes 50 CERT and 30 Hatzolah responders.

Qld: Volunteer numbers may fluctuate as members leave the service, new members are recruited and data cleansing occurs. In addition, the decrease of ASOs from 2007-08 to 2008-09 can be attributed to the removal from this category of university students undergoing paramedical studies enrolled as Honorary Officers.

WA: Operational and corporate support volunteers are the total of volunteers who perform a support role and do not undertake ambulance rosters. The reduction in this number in 2008-09 compared with earlier years has resulted from an improvement in the volunteer records system. Prior to 2008-09, the comparatively high number of volunteers in the operational and corporate support category arises from including staff involved in the provision of the public First Aid services division which accounts for 45.7 FTE of corporate personnel.

SA: For the 2012 Report, ambulance financial and workforce data were not available due to reporting system issues. This has been rectified for the 2013 Report. 2007-08 other fees from citizens includes workers compensation fees.

ACT: Includes attribution of Emergency Service Agency Staff; on 1 July 2006 the ESA was re-absorbed into the Justice & Community Safety Directorate nd the ACT Government centralised Finance and HR staff in a Shared Service Centre. In 2007-08 ACT operational support staff are calculated by partial attribution using total ESA FTE as a driver and does not include FTE's from Shared Services.

FTE Full time equivalent. **na** Not available. – Nil or rounded to zero.

Source: State and Territory governments (unpublished); ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2).

Table 9A.34 Ambulance service organisations' human resources, operational workforce, by age group and attrition

	Unit	NSW	Vic	Qld	WA	SA (a)	Tas	ACT	NT	Aust
2011-12										
Operational workforce, by age group										
Under 30 years of age	no.	549	769	689	178	290	69	29	35	2 608
30–39 years of age	no.	1 138	751	972	299	362	98	46	39	3 705
40–49 years of age	no.	1 275	817	1 093	263	375	88	68	41	4 020
50–59 years of age	no.	757	607	511	96	243	71	25	10	2 320
60 or over years of age	no.	142	120	126	20	46	8	2	2	466
Total operational workforce	no.	3 861	3 064	3 391	856	1 316	334	170	127	13 119
Total operational workforce	**FTE**	**3 868**	**3 030**	**2 995**	**824**	**873**	**321**	**170**	**127**	**12 208**
Operational workforce, attrition	FTE	246	133	80	54	23	15	7	–	557
Operational workforce, attrition	%	6.4	4.4	2.7	6.5	2.6	4.7	4.1	–	4.6
2010-11										
Operational workforce, by age group										
Under 30 years of age	no.	630	728	539	134	221	67	26	32	2 377
30–39 years of age	no.	1 204	709	1 005	301	350	90	43	33	3 735
40–49 years of age	no.	1 182	791	1 019	251	392	76	67	34	3 812
50–59 years of age	no.	652	568	487	100	270	65	22	5	2 169
60 or over years of age	no.	121	96	122	20	60	12	2	3	436
Total operational workforce	no.	3 789	2 892	3 172	806	1 293	310	160	107	12 529
Total operational workforce	**FTE**	**3 778**	**2 861**	**2 906**	**748**	**891**	**314**	**153**	**na**	**na**
Operational workforce, attrition	FTE	190	149	85	45	24	7	7	na	na
Operational workforce, attrition	%	5.0	5.2	2.9	6.0	2.6	2.2	4.6	na	na
2009-10										
Operational workforce, by age group										
Under 30 years of age	no.	590	670	542	99	222	61	15	31	2 230
30–39 years of age	no.	1 181	756	1 059	267	277	79	35	45	3 699
40–49 years of age	no.	1 174	766	961	220	275	74	60	30	3 560
50–59 years of age	no.	607	544	460	86	154	54	17	11	1 933
60 or over years of age	no.	112	75	99	19	32	5	2	2	346
Total operational workforce	no.	3 664	2 811	3 121	691	960	273	129	119	11 768
Total operational workforce	**FTE**	**3 564**	**2 701**	**2 841**	**619**	**887**	**270**	**138**	**119**	**11 139**
Operational workforce, attrition	FTE	141	114	105	38	11	11	10	22	451
Operational workforce, attrition	%	4.0	4.2	3.7	6.1	1.2	4.1	7.2	18.5	4.1
2008-09										
Operational workforce, by age group										
Under 30 years of age	no.	549	585	489	100	218	49	18	27	2 035
30–39 years of age	no.	1 178	755	1 040	266	284	81	47	63	3 714
40–49 years of age	no.	1 110	786	918	199	272	69	52	44	3 450
50–59 years of age	no.	609	510	421	77	132	47	18	14	1 828

Table 9A.34 **Ambulance service organisations' human resources, operational workforce, by age group and attrition**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA* (a)	*Tas*	*ACT*	*NT*	*Aust*
60 or over years of age	no.	96	69	101	19	28	6	1	4	324
Total operational workforce	no.	3 542	2 705	2 969	661	934	252	136	152	11 351
Total operational workforce	**FTE**	**3 460**	**2 561**	**2 729**	**614**	**857**	**238**	**130**	**122**	**10 711**
Operational workforce, attrition	FTE	153	74	114	44	10	14	13	7	429
Operational workforce, attrition	%	4.4	2.9	4.2	7.2	1.1	5.9	10.0	5.7	4.0
2007-08										
Operational workforce, by age group										
Under 30 years of age	no.	528	421	411	87	192	50	12	44	1 745
30–39 years of age	no.	1 197	716	1 001	255	271	82	52	52	3 626
40–49 years of age	no.	1 075	748	839	194	262	71	55	46	3 290
50–59 years of age	no.	605	474	407	81	98	51	13	16	1 745
60 or over years of age	no.	87	59	84	18	21	10	2	4	285
Total operational workforce	no.	3 492	2 418	2 742	635	844	264	134	162	10 691
Total operational workforce	**FTE**	**3 409**	**2 314**	**2 549**	**604**	**786**	**237**	**130**	**121**	**10 149**
Operational workforce, attrition	FTE	178	107	107	46	25	17	14	6	501
Operational workforce, attrition	%	5.2	4.6	4.2	7.6	3.2	7.2	10.8	5.0	4.9

(a) SA: For the 2012 Report, ambulance financial and workforce data were not available due to reporting system issues. This has been rectified for the 2013 Report.

FTE Full time equivalent. **na** Not available. – Nil or rounded to zero.

Source: State and Territory governments (unpublished).

Table 9A.35 **Ambulance assets (number) (a) (b)**

	NSW (c)	*Vic* (c)	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
2011-12									
Ambulance stations and locations									
Response locations	267	230	266	189	114	49	7	9	1 131
Communication centres	5	7	7	1	1	1	1	1	24
Other locations	60	34	25	177	23	6	4	1	330
Total	**332**	**271**	**298**	**367**	**138**	**56**	**12**	**11**	**1 485**
First responder locations									
Ambulance	16	31	30	254	8	4	–	–	343
Third party	6	68	–	–	7	5	–	–	86
Ambulances and other vehicles									
Ambulance general purpose	914	527	816	448	226	108	25	31	3 095
Patient transport vehicles	122	57	105	29	15	14	4	3	349
Operational support vehicles	309	310	210	24	104	30	12	12	1 011
Special operations vehicles	94	16	18	11	15	3	–	1	158
Administrative vehicles	68	150	47	53	27	3	1	6	355
Other vehicles	67	32	48	22	12	6	4	5	196
Total	**1 574**	**1 092**	**1 244**	**587**	**399**	**164**	**46**	**58**	**5 164**
2010-11									
Ambulance stations and locations									
Response locations	266	232	265	192	112	49	7	9	1 132
Communication centres	5	9	7	1	1	1	1	1	26
Other locations	47	32	25	113	19	6	3	1	246
Total	**318**	**273**	**297**	**306**	**132**	**56**	**11**	**11**	**1 404**
First responder locations									
Ambulance	16	30	30	114	8	4	–	–	202
Third party	6	68	–	–	7	5	–	–	86
Ambulances and other vehicles									
Ambulance general purpose	909	523	804	442	214	108	20	31	3 051
Patient transport vehicles	116	53	110	26	18	13	3	3	342
Operational support vehicles	318	302	221	23	102	25	5	12	1 008
Special operations vehicles	91	15	16	11	15	3	–	1	152
Administrative vehicles	69	155	53	46	28	3	4	6	364
Other vehicles	66	33	57	20	12	6	4	5	203
Total	**1 569**	**1 081**	**1 261**	**568**	**389**	**158**	**36**	**58**	**5 120**
2009-10									
Ambulance stations and locations									
Response locations	267	232	264	189	115	49	7	9	1 132
Communication centres	5	10	7	1	1	1	1	1	27
Other locations	47	33	25	113	16	6	3	1	244

Table 9A.35 **Ambulance assets (number) (a) (b)**

	NSW (c)	*Vic* (c)	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
Total	**319**	**275**	**296**	**303**	**132**	**56**	**11**	**11**	**1 403**
First responder locations									
Ambulance	13	30	27	87	5	4	–	–	166
Third party	5	68	–	–	8	3	–	–	84
Ambulances and other vehicles									
Ambulance general purpose	887	528	788	448	207	108	20	31	3 017
Patient transport vehicles	95	50	110	16	19	4	3	2	299
Operational support vehicles	371	298	216	12	95	23	4	9	1 028
Special operations vehicles	57	15	13	8	15	–	–	–	108
Administrative vehicles	48	146	54	44	36	2	2	9	341
Other vehicles	74	30	56	19	13	5	4	5	206
Total	**1 532**	**1 067**	**1 237**	**547**	**385**	**142**	**33**	**56**	**4 999**
2008-09									
Ambulance stations and locations									
Response locations	263	224	259	184	112	48	7	9	1 106
Communication centres	4	6	7	1	1	1	1	1	22
Other locations	46	31	25	113	16	2	3	1	237
Total	**313**	**261**	**291**	**298**	**129**	**51**	**11**	**11**	**1 365**
First responder locations									
Ambulance	8	28	28	88	5	4	–	–	161
Third party	13	68	–	–	6	3	–	–	90
Ambulances and other vehicles									
Ambulance general purpose	888	519	770	441	207	99	21	31	2 976
Patient transport vehicles	93	47	114	16	19	3	3	2	297
Operational support vehicles	357	260	204	13	91	22	9	9	965
Special operations vehicles	20	19	1	8	11	2	1	–	62
Administrative vehicles	46	140	46	45	36	2	2	9	326
Other vehicles	72	28	53	19	10	5	4	5	196
Total	**1 476**	**1 013**	**1 188**	**542**	**374**	**133**	**40**	**56**	**4 822**
2007-08									
Ambulance stations and locations									
Response locations	250	218	259	184	111	47	7	8	1 084
Communication centres	4	6	7	2	1	1	1	1	23
Other locations	52	32	25	113	16	2	3	–	243
Total	**306**	**256**	**291**	**299**	**128**	**50**	**11**	**9**	**1 350**
First responder locations									
Ambulance	5	29	28	na	5	3	–	–	na
Third party	–	68	–	–	6	–	–	–	74
Ambulances and other vehicles									

Table 9A.35 **Ambulance assets (number) (a) (b)**

	NSW (c)	*Vic* (c)	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
Ambulance general purpose	895	513	730	415	202	98	16	28	2 897
Patient transport vehicles	95	46	112	16	19	2	2	2	294
Operational support vehicles	340	237	200	10	78	22	9	9	905
Special operations vehicles	21	11	1	–	4	2	1	–	40
Administrative vehicles	48	142	46	43	35	2	2	8	326
Other vehicles	72	31	50	21	9	5	2	4	194
Total	**1 471**	**980**	**1 139**	**505**	**347**	**131**	**32**	**51**	**4 656**
2006-07									
Ambulance stations and locations									
Response locations	244	214	277	184	108	47	7	8	1 089
Communication centres	4	6	7	2	1	1	1	1	23
Other locations	44	52	34	113	17	2	3	–	265
Total	**292**	**272**	**318**	**299**	**126**	**50**	**11**	**9**	**1 377**
First responder locations									
Ambulance	na	na	na	na	na	na	na	na	na
Third party	na	na	na	na	na	na	na	na	na
Ambulances and other vehicles									
Ambulance general purpose	876	497	729	410	201	98	16	31	2 858
Patient transport vehicles	94	40	112	16	19	2	2	2	287
Operational support vehicles	300	226	169	8	69	22	11	10	815
Special operations vehicles	22	17	–	–	4	2	1	–	46
Administrative vehicles	51	127	46	44	37	2	–	5	312
Other vehicles	67	28	47	20	9	5	2	4	182
Total	**1 410**	**935**	**1 103**	**498**	**339**	**131**	**32**	**52**	**4 500**
2005-06									
Ambulance stations and locations									
Response locations	238	213	275	184	107	46	7	8	1 078
Communication centres	4	5	7	2	1	1	1	1	22
Other locations	44	51	36	113	17	2	2	–	265
Total	**286**	**269**	**318**	**299**	**125**	**49**	**10**	**9**	**1 365**
First responder locations									
Ambulance	na	na	na	na	na	na	na	na	na
Third party	na	na	na	na	na	na	na	na	na
Ambulances and other vehicles									
Ambulance general purpose	869	488	691	405	199	94	16	30	2 792
Patient transport vehicles	84	41	104	16	19	2	2	2	270
Operational support vehicles	297	208	154	11	66	22	11	10	779
Special operations vehicles	19	18	–	–	–	6	1	–	44
Administrative vehicles	46	114	65	44	35	2	–	5	311

Table 9A.35 **Ambulance assets (number) (a) (b)**

	NSW (c)	*Vic* (c)	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
Other vehicles	58	27	46	18	8	5	1	4	167
Total	**1 373**	**896**	**1 060**	**494**	**327**	**131**	**31**	**51**	**4 363**
2004-05									
Ambulance stations and locations									
Response locations	246	209	271	181	107	46	7	8	1 075
Communication centres	4	6	8	2	4	1	1	1	27
Other locations	44	54	29	113	17	2	3	–	262
Total	**294**	**269**	**308**	**296**	**128**	**49**	**11**	**9**	**1 364**
First responder locations									
Ambulance	na	na	na	na	na	na	na	na	na
Third party	na	na	na	na	na	na	na	na	na
Ambulances and other vehicles									
Ambulance general purpose	851	448	658	394	195	94	15	29	2 684
Patient transport vehicles	84	38	115	14	19	2	9	2	283
Operational support vehicles	272	203	128	14	58	26	4	10	715
Special operations vehicles	–	7	–	–	–	–	1	–	8
Administrative vehicles	55	112	85	39	33	2	–	5	331
Other vehicles	56	25	47	19	8	5	1	4	165
Total	**1 318**	**833**	**1 033**	**480**	**313**	**129**	**30**	**50**	**4 186**
2003-04									
Ambulance stations and locations									
Response locations	244	207	261	179	102	41	7	8	1 049
Communication centres	4	6	9	1	3	1	–	2	26
Other locations	42	34	29	113	6	2	1	4	231
Total	**290**	**247**	**299**	**293**	**111**	**44**	**8**	**14**	**1 306**
First responder locations									
Ambulance	na	na	na	na	na	na	na	na	na
Third party	na	na	na	na	na	na	na	na	na
Ambulances and other vehicles									
Ambulance general purpose	852	442	633	356	186	94	15	24	2 602
Patient transport vehicles	63	39	111	14	15	2	1	2	247
Operational support vehicles	236	177	117	14	53	20	9	17	643
Special operations vehicles	3	7	–	–	–	–	1	–	11
Administrative vehicles	47	94	81	34	29	6	1	6	298
Other vehicles	47	22	46	19	8	4	–	3	149
Total	**1 248**	**781**	**988**	**437**	**291**	**126**	**27**	**52**	**3 950**
2002-03									
Ambulance stations and locations									
Response locations	241	205	252	179	104	40	7	8	1 036

Table 9A.35 **Ambulance assets (number) (a) (b)**

	NSW (c)	*Vic* (c)	*Qld*	*WA*	*SA*	*Tas*	*ACT* (c)	*NT*	*Total*
Communication centres	4	6	10	1	3	1	1	2	28
Other locations	44	29	29	113	6	2	3	4	230
Total	**289**	**240**	**291**	**293**	**113**	**43**	**11**	**14**	**1 294**
First responder locations									
Ambulance	na	na	na	na	na	na	na	na	na
Third party	na	na	na	na	na	na	na	na	na
Ambulances and other vehicles									
Ambulance general purpose	834	426	615	338	181	102	14	24	2 534
Patient transport vehicles	61	34	106	13	16	2	1	2	235
Operational support vehicles	214	151	95	15	52	19	8	17	571
Special operations vehicles	4	7	–	–	–	2	1	–	14
Administrative vehicles	56	104	88	31	29	7	1	6	322
Other vehicles	48	19	47	20	8	3	–	3	148
Total	**1 217**	**741**	**951**	**417**	**286**	**135**	**25**	**52**	**3 824**

(a) Differences in geography, topography and operational structures require different resourcing models across jurisdictions.

(b) Response locations data for 2007-08 and subsequent years reflect changes in the new data definition, which do not include first responder locations, now reported separately.

(c) Jurisdiction notes:

NSW: A volunteer ambulance service audit was undertaken in 2008-09 which has led to improved reporting of data for ambulance stations and locations.

Vic: General purpose ambulances exclude contractors' nonemergency vehicles and special operations vehicles include four fixed wing and three rotary wing aircraft under contract. In 2006-07 for the then Victorian Metropolitan Ambulance Service (MAS), two ambulances were excluded as they were loaned for student training purposes only and not used for responding.

WA: St John WA uses a number of country ambulance sub centres as training facility as well as the dedicated training facility in the metro area.

ACT: For 2006-07 the ESA provided shared HQ/Comcen, Fleet Workshop and Store/Logistics Centre to all four operational agencies (ambulance, urban fire, rural fire, and SES).

na Not available. – Nil or rounded to zero.

Source: State and Territory governments (unpublished).

Table 9A.36 **Ambulance response locations, by staff type (a), (b)**

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2011-12										
Ambulance response locations										
With paid staff only	no.	223	159	239	30	42	11	7	4	715
With mixed paid and volunteer staff	no.	6	43	–	12	3	17	–	3	84
With volunteer staff only	no.	38	28	27	147	69	21	–	2	332
Total	**no.**	**267**	**230**	**266**	**189**	**114**	**49**	**7**	**9**	**1 131**
Per 100 000 people										
With paid staff only	no.	3.1	2.9	5.3	1.3	2.6	2.1	1.9	1.7	3.2
With mixed paid and volunteer staff	no.	0.1	0.8	–	0.5	0.2	3.3	–	1.3	0.4
With volunteer staff only	no.	0.5	0.5	0.6	6.2	4.2	4.1	–	0.9	1.5
Total	**no.**	**3.7**	**4.1**	**5.9**	**7.9**	**6.9**	**9.6**	**1.9**	**3.9**	**5.0**
2010-11										
Ambulance response locations										
With paid staff only	no.	222	162	238	30	41	10	7	4	714
With mixed paid and volunteer staff	no.	6	42	–	12	3	18	–	3	84
With volunteer staff only	no.	38	28	27	150	68	21	–	2	334
Total	**no.**	**266**	**232**	**265**	**192**	**112**	**49**	**7**	**9**	**1 132**
Per 100 000 people										
With paid staff only	no.	3.1	2.9	5.2	1.3	2.5	2.0	1.9	1.7	3.2
With mixed paid and volunteer staff	no.	0.1	0.8	–	0.5	0.2	3.5	–	1.3	0.4
With volunteer staff only	no.	0.5	0.5	0.6	6.5	4.1	4.1	–	0.9	1.5
Total	**no.**	**3.7**	**4.2**	**5.8**	**8.3**	**6.8**	**9.6**	**1.9**	**3.9**	**5.0**
2009-10										
Ambulance response locations										
With paid staff only	no.	222	162	237	27	44	11	7	4	714
With mixed paid and volunteer staff	no.	6	43	–	12	3	17	–	3	84
With volunteer staff only	no.	39	27	27	150	68	21	–	2	334
Total	**no.**	**267**	**232**	**264**	**189**	**115**	**49**	**7**	**9**	**1 132**
Per 100 000 people										
With paid staff only	no.	3.1	2.9	5.3	1.2	2.7	2.2	2.0	1.8	3.2
With mixed paid and volunteer staff	no.	0.1	0.8	–	0.5	0.2	3.4	–	1.3	0.4
With volunteer staff only	no.	0.5	0.5	0.6	6.6	4.2	4.2	–	0.9	1.5
Total	**no.**	**3.7**	**4.2**	**5.9**	**8.3**	**7.0**	**9.7**	**2.0**	**4.0**	**5.1**

Table 9A.36 **Ambulance response locations, by staff type (a), (b)**

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2008-09										
Ambulance response locations										
With paid staff only	no.	221	151	231	27	44	11	7	4	696
With mixed paid and volunteer staff	no.	6	49	–	12	2	14	–	3	86
With volunteer staff only	no.	36	24	28	145	66	23	–	2	324
Total	**no.**	**263**	**224**	**259**	**184**	**112**	**48**	**7**	**9**	**1 106**
Per 100 000 people										
With paid staff only	no.	3.1	2.8	5.3	1.2	2.7	2.2	2.0	1.8	3.2
With mixed paid and volunteer staff	no.	0.1	0.9	–	0.5	0.1	2.8	–	1.4	0.4
With volunteer staff only	no.	0.5	0.4	0.6	6.6	4.1	4.6	–	0.9	1.5
Total	**no.**	**3.7**	**4.2**	**6.0**	**8.3**	**6.9**	**9.6**	**2.0**	**4.1**	**5.1**
2007-08										
Ambulance response locations										
With paid staff only	no.	217	148	231	25	42	10	7	2	682
With mixed paid and volunteer staff	no.	9	44	–	13	1	14	–	5	86
With volunteer staff only	no.	24	26	28	146	68	23	–	1	316
Total	**no.**	**250**	**218**	**259**	**184**	**111**	**47**	**7**	**8**	**1 084**
Per 100 000 people										
With paid staff only	no.	3.1	2.8	5.5	1.2	2.6	2.0	2.1	0.9	3.2
With mixed paid and volunteer staff	no.	0.1	0.8	–	0.6	0.1	2.8	–	2.3	0.4
With volunteer staff only	no.	0.3	0.5	0.7	6.9	4.3	4.6	–	0.5	1.5
Total	**no.**	**3.6**	**4.2**	**6.1**	**8.6**	**7.0**	**9.5**	**2.1**	**3.7**	**5.1**
2006-07										
Ambulance response locations										
With paid staff only	no.	221	143	228	25	39	10	7	2	675
With mixed paid and volunteer staff	no.	5	44	–	12	1	14	–	5	81
With volunteer staff only	no.	18	27	49	147	68	23	–	1	333
Total	**no.**	**244**	**214**	**277**	**184**	**108**	**47**	**7**	**8**	**1 089**
Per 100 000 people										
With paid staff only	no.	3.2	2.8	5.5	1.2	2.5	2.0	2.1	0.9	3.2
With mixed paid and volunteer staff	no.	0.1	0.9	–	0.6	0.1	2.8	–	2.4	0.4
With volunteer staff only	no.	0.3	0.5	1.2	7.1	4.3	4.7	–	0.5	1.6
Total	**no.**	**3.6**	**4.1**	**6.7**	**8.8**	**6.9**	**9.6**	**2.1**	**3.8**	**5.2**

Table 9A.36 **Ambulance response locations, by staff type (a), (b)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*
2005-06										
Ambulance response locations										
With paid staff only	no.	218	143	227	25	38	10	7	2	670
With mixed paid and volunteer staff	no.	5	43	–	12	1	13	–	5	79
With volunteer staff only	no.	15	27	48	147	68	23	–	1	329
Total	**no.**	**238**	**213**	**275**	**184**	**107**	**46**	**7**	**8**	**1 078**
Per 100 000 people										
With paid staff only	no.	3.2	2.8	5.6	1.2	2.4	2.0	2.1	1.0	3.3
With mixed paid and volunteer staff	no.	0.1	0.8	–	0.6	0.1	2.7	–	2.4	0.4
With volunteer staff only	no.	0.2	0.5	1.2	7.2	4.4	4.7	–	0.5	1.6
Total	**no.**	**3.5**	**4.2**	**6.8**	**9.0**	**6.9**	**9.4**	**2.1**	**3.8**	**5.2**
2004-05										
Ambulance response locations										
With paid staff only	no.	221	149	221	22	38	8	7	2	668
With mixed paid and volunteer staff	no.	6	33	–	9	1	15	–	5	69
With volunteer staff only	no.	19	27	50	150	68	23	–	1	338
Total	**no.**	**246**	**209**	**271**	**181**	**107**	**46**	**7**	**8**	**1 075**
Per 100 000 people										
With paid staff only	no.	3.3	3.0	5.6	1.1	2.5	1.7	2.1	1.0	3.3
With mixed paid and volunteer staff	no.	0.1	0.7	–	0.5	0.1	3.1	–	2.5	0.3
With volunteer staff only	no.	0.3	0.5	1.3	7.5	4.4	4.7	–	0.5	1.7
Total	**no.**	**3.7**	**4.2**	**6.9**	**9.1**	**6.9**	**9.5**	**2.1**	**3.9**	**5.3**
2003-04										
Ambulance response locations										
With paid staff only	no.	222	148	221	22	36	6	7	2	664
With mixed paid and volunteer staff	no.	6	33	–	9	–	12	–	5	65
With volunteer staff only	no.	16	26	40	148	66	23	–	1	320
Total	**no.**	**244**	**207**	**261**	**179**	**102**	**41**	**7**	**8**	**1 049**
Per 100 000 people										
With paid staff only	no.	3.3	3.0	5.7	1.1	2.3	1.2	2.1	1.0	3.3
With mixed paid and volunteer staff	no.	0.1	0.7	–	0.5	–	2.5	–	2.5	0.3
With volunteer staff only	no.	0.2	0.5	1.0	7.5	4.3	4.8	–	0.5	1.6
Total	**no.**	**3.6**	**4.2**	**6.8**	**9.1**	**6.6**	**8.5**	**2.1**	**4.0**	**5.2**

Table 9A.36 **Ambulance response locations, by staff type (a), (b)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Total*

(a) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2009 is used as the denominator for 2009-10.

(b) Response locations data for 2007-08 reflect changes in the new data definition, which do not include first responder locations.

– Nil or rounded to zero.

Source : ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2); State and Territory governments (unpublished).

Table 9A.37 **Aero medical resources and expenditure (2011-12 dollars) (a), (b)**

	Unit	*NSW*	*Vic*	*Qld* (c)	*WA* (c)	*SA* (c)	*Tas* (d)	*ACT*	*NT* (c)	*Aust*
2011-12										
Total aircraft, operated by:										
State Ambulance Service										
Fixed wing	no.	4	4	–	–	–	1	–	–	9
Helicopter	no.	5	5	–	–	–	–	–	–	10
Other service providers										
Fixed wing	no.	1	–	14	13	7	–	–	–	35
Helicopter	no.	5	–	12	3	3	1	1	–	25
Total	**no.**	**15**	**9**	**26**	**16**	**10**	**2**	**1**	**–**	**79**
Expenditure	**$'000**	**90 899**	**64 387**	**–**	**1 226**	**9 000**	**3 863**	**592**	**600**	**170 567**
2010-11										
Total aircraft, operated by:										
State Ambulance Service										
Fixed wing	no.	4	4	–	–	–	1	–	–	9
Helicopter	no.	5	5	–	–	–	–	–	–	10
Other service providers										
Fixed wing	no.	1	–	14	13	7	–	–	–	35
Helicopter	no.	5	–	11	3	3	1	1	–	24
Total	**no.**	**15**	**9**	**25**	**16**	**10**	**2**	**1**	**–**	**78**
Expenditure	**$'000**	**84 338**	**49 536**	**–**	**1 332**	**–**	**3 877**	**610**	**–**	**139 693**
2009-10										
Total aircraft, operated by:										
State Ambulance Service										
Fixed wing	no.	4	4	–	–	–	1	–	–	9
Helicopter	no.	9	5	–	1	–	–	–	–	15
Other service providers										
Fixed wing	no.	–	–	13	13	7	–	–	–	33
Helicopter	no.	9	–	15	2	3	1	1	–	31
Total	**no.**	**22**	**9**	**28**	**16**	**10**	**2**	**1**	**–**	**88**
Expenditure	**$'000**	**86 596**	**39 272**	**–**	**1 425**	**–**	**3 847**	**613**	**–**	**131 752**
2008-09										
Total aircraft, operated by:										
State Ambulance Service										
Fixed wing	no.	4	4	–	–	–	1	–	–	9
Helicopter	no.	5	5	–	–	–	–	–	–	10
Other service providers										
Fixed wing	no.	1	–	14	12	7	–	–	–	34
Helicopter	no.	5	–	14	1	3	1	1	–	25
Total	**no.**	**15**	**9**	**28**	**13**	**10**	**2**	**1**	**–**	**78**
Expenditure	**$'000**	**80 102**	**37 544**	**–**	**1 299**	**–**	**3 874**	**632**	**–**	**123 452**

Table 9A.37 **Aero medical resources and expenditure (2011-12 dollars) (a), (b)**

	Unit	*NSW*	*Vic*	*Qld* (c)	*WA* (c)	*SA* (c)	*Tas* (d)	*ACT*	*NT* (c)	*Aust*
2007-08										
Total aircraft, operated by:										
State Ambulance Service										
Fixed wing	no.	4	4	–	–	–	1	–	–	9
Helicopter	no.	4	4	–	–	–	–	–	–	8
Other service providers										
Fixed wing	no.	1	–	13	11	7	–	–	6	38
Helicopter	no.	5	1	16	1	3	1	1	–	28
Total	**no.**	**14**	**9**	**29**	**12**	**10**	**2**	**1**	**6**	**83**
Expenditure	**$'000**	**71 641**	**31 305**	**–**	**535**	**–**	**4 303**	**688**	**–**	**108 472**
2006-07										
Total aircraft, operated by:										
State Ambulance Service										
Fixed wing	no.	4	4	–	–	–	1	–	–	9
Helicopter	no.	4	4	–	–	–	–	–	–	8
Other service providers										
Fixed wing	no.	1	–	9	11	4	–	–	6	31
Helicopter	no.	5	2	13	1	3	1	1	–	26
Total	**no.**	**14**	**10**	**22**	**12**	**7**	**2**	**1**	**6**	**74**
Expenditure	**$'000**	**50 812**	**33 493**	**2 221**	**525**	**–**	**4 414**	**652**	**–**	**92 117**
2005-06										
Total aircraft, operated by:										
State Ambulance Service										
Fixed wing	no.	4	4	–	–	–	1	–	–	9
Helicopter	no.	–	3	–	–	–	–	–	–	3
Other service providers										
Fixed wing	no.	1	–	7	11	4	–	–	6	29
Helicopter	no.	9	3	12	1	3	1	1	–	30
Total	**no.**	**14**	**10**	**19**	**12**	**7**	**2**	**1**	**6**	**71**
Expenditure	**$'000**	**52 115**	**31 393**	**2 283**	**517**	**–**	**3 930**	**744**	**–**	**90 982**
2004-05										
Total aircraft, operated by:										
State Ambulance Service										
Fixed wing	no.	4	4	–	–	–	1	–	–	9
Helicopter	no.	–	3	–	–	–	–	–	–	3
Other service providers										
Fixed wing	no.	1	–	9	11	7	–	–	6	34
Helicopter	no.	9	3	9	1	2	1	1	–	26
Total	**no.**	**14**	**10**	**18**	**12**	**9**	**2**	**1**	**6**	**72**
Expenditure	**$'000**	**47 306**	**35 407**	**3 351**	**963**	**–**	**4 074**	**431**	**–**	**91 532**

Table 9A.37 **Aero medical resources and expenditure (2011-12 dollars) (a), (b)**

	Unit	*NSW*	*Vic*	*Qld* (c)	*WA* (c)	*SA* (c)	*Tas* (d)	*ACT*	*NT* (c)	*Aust*

(a) These figures do not represent the total air ambulance medical expenditure for jurisdictions, but only that funded through ambulance services and reported as part of the total ambulance service expenditure.

(b) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51). Due to differences in definitions and counting rules, data reported may differ from data in agency annual reports and other sources. Totals may not add due to rounding.

(c) Jurisdiction notes:

Qld: The fixed wing network comprises of a total of 14 aircraft, which is made up of 11 primary response aircraft that are solely responsible for patient retrieval and transfers, and three traditional based aircraft that are utilised when not being used for day clinics. In addition, there are three spare aircraft to support the fixed wing network. The helicopter network comprises of a total of 12 helicopters, which is supported by nine spare helicopters.

WA, SA and NT:

Fixed wing services are provided by the Royal Flying Doctor Service (RFDS). In addition, AMS, a NT Government operated aero medical service, operates in the 'top end' of the NT.

Tas: Aircraft and pilot are provided by the RFDS under contract, aero medical crew are provided by the State.

– Nil or rounded to zero.

Source: Council of Ambulance Authorities (unpublished).

Table 9A.38 **Cardiac Arrest Survived Event Rate (a), (b), (c), (d), (e), (f), (g), (h)**

	Unit	*NSW* (i)	*Vic* (i)	*Qld* (i)	*WA*	*SA*	*Tas* (i)	*ACT*	*NT* (i)	*Aust*
Paramedic witnessed adult cardiac arrests										
2011-12	no.	na	397	340	67	73	11	19	16	na
2010-11	no.	na	407	355	59	98	13	10	na	na
2009-10	no.	na	364	291	39	74	30	8	na	na
2008-09	no.	262	357	278	58	104	17	12	na	na
2007-08	no.	246	323	299	49	65	16	8	17	1 023
2006-07	no.	191	246	292	36	84	na	3	9	na
2005-06	no.	na	261	266	54	na	na	8	na	na
2004-05	no.	na	na	na	na	na	na	na	na	na
2003-04	no.	na	na	na	na	na	na	na	na	na
2002-03	no.	na	na	na	na	na	na	na	na	na
Survival incidents										
2011-12	no.	na	196	150	29	28	3	12	11	na
2010-11	no.	na	190	143	21	51	4	3	na	na
2009-10	no.	na	174	104	12	30	14	3	na	na
2008-09	no.	70	154	94	19	45	9	4	na	na
2007-08	no.	83	131	99	14	31	5	4	11	378
2006-07	no.	71	98	93	8	44	na	1	3	na
2005-06	no.	na	92	82	12	na	na	1	na	na
2004-05	no.	na	na	na	na	na	na	na	na	na
2003-04	no.	na	na	na	na	na	na	na	na	na
2002-03	no.	na	na	na	na	na	na	na	na	na
Survival rate										
2011-12	%	na	49.4	44.1	43.3	38.4	27.3	63.2	68.8	na
2010-11	%	na	46.7	40.3	35.6	52.0	30.8	30.0	na	na
2009-10	%	na	47.8	35.7	30.8	40.5	46.7	37.5	na	na
2008-09	%	26.7	43.1	33.8	32.8	43.3	52.9	33.3	na	na
2007-08	%	33.7	40.6	33.1	28.6	47.7	31.3	50.0	64.7	37.0
2006-07	%	37.2	39.8	31.8	22.2	52.4	na	33.3	33.3	na
2005-06	%	na	35.2	30.8	22.2	na	na	12.5	na	na
2004-05	%	na	na	na	na	na	na	na	na	na
2003-04	%	na	na	na	na	na	na	na	na	na
2002-03	%	na	na	na	na	na	na	na	na	na
Adult cardiac arrests where resuscitation attempted (excluding paramedic witnessed)										
2011-12	no.	na	1 970	1 634	545	649	167	55	123	na
2010-11	no.	na	1 889	1 646	434	648	88	52	145	na
2009-10	no.	na	1 742	1 552	329	565	170	53	86	na
2008-09	no.	1 821	1 772	1 533	355	631	131	69	72	6 384
2007-08	no.	2 438	1 702	1 577	389	620	83	64	111	6 984
2006-07	no.	1 875	1 655	1 505	380	633	na	59	53	na

Table 9A.38 **Cardiac Arrest Survived Event Rate (a), (b), (c), (d), (e), (f), (g), (h)**

	Unit	*NSW* (i)	*Vic* (i)	*Qld* (i)	*WA*	*SA*	*Tas* (i)	*ACT*	*NT* (i)	*Aust*
2005-06	no.	na	1 592	1 369	364	na	na	67	na	na
2004-05	no.	na	na	na	na	na	na	na	na	na
2003-04	no.	na	na	na	na	na	na	na	na	na
2002-03	no.	na	na	na	na	na	na	na	na	na
Survival incidents										
2011-12	no.	na	634	392	125	142	56	12	24	na
2010-11	no.	na	618	347	62	164	28	13	na	na
2009-10	no.	na	601	349	38	132	47	18	15	na
2008-09	no.	337	586	364	48	149	42	23	12	1 561
2007-08	no.	476	473	293	35	157	29	17	24	1 504
2006-07	no.	387	463	242	45	151	na	14	7	na
2005-06	no.	na	426	248	31	na	na	23	na	na
2004-05	no.	na	na	na	na	na	na	na	na	na
2003-04	no.	na	na	na	na	na	na	na	na	na
2002-03	no.	na	na	na	na	na	na	na	na	na
Survival rate										
2011-12	%	na	32.2	24.0	22.9	21.9	33.5	21.8	19.5	na
2010-11	%	na	32.7	21.1	14.3	25.3	31.8	25.0	na	na
2009-10	%	na	34.5	22.5	11.6	23.4	27.6	34.0	17.4	na
2008-09	%	18.5	33.1	23.7	13.5	23.6	32.1	33.3	16.7	24.5
2007-08	%	19.5	27.8	18.6	9.0	25.3	34.9	26.6	21.6	21.5
2006-07	%	20.6	28.0	16.1	11.8	23.9	na	23.7	13.2	na
2005-06	%	na	26.8	18.1	8.5	na	na	34.3	na	na
2004-05	%	na	na	na	na	na	na	na	na	na
2003-04	%	na	na	na	na	na	na	na	na	na
2002-03	%	na	na	na	na	na	na	na	na	na
Adult VF/VT cardiac arrests (excluding paramedic witnessed)										
2011-12	no.	na	650	445	132	167	40	19	39	na
2010-11	no.	na	592	423	148	185	27	10	na	na
2009-10	no.	na	530	436	107	143	45	18	na	na
2008-09	no.	453	566	430	114	172	48	25	na	na
2007-08	no.	487	508	436	133	161	29	26	31	1 811
2006-07	no.	403	510	458	121	194	na	19	10	na
2005-06	no.	na	577	470	118	na	na	23	na	na
2004-05	no.	na	na	na	na	na	na	na	na	na
2003-04	no.	na	na	na	na	na	na	na	na	na
2002-03	no.	na	na	na	na	na	na	na	na	na
Survival incidents										
2011-12	no.	na	342	167	45	75	23	6	13	na
2010-11	no.	na	300	151	47	76	13	6	na	na

Table 9A.38 **Cardiac Arrest Survived Event Rate (a), (b), (c), (d), (e), (f), (g), (h)**

	Unit	*NSW* (i)	*Vic* (i)	*Qld* (i)	*WA*	*SA*	*Tas* (i)	*ACT*	*NT* (i)	*Aust*
2009-10	no.	na	281	158	25	64	21	8	na	na
2008-09	no.	149	290	179	30	81	25	11	na	na
2007-08	no.	183	232	144	22	69	11	10	10	681
2006-07	no.	164	214	138	33	90	na	7	1	na
2005-06	no.	na	228	143	20	na	na	8	na	na
2004-05	no.	na	na	na	na	na	na	na	na	na
2003-04	no.	na	na	na	na	na	na	na	na	na
2002-03	no.	na	na	na	na	na	na	na	na	na
Survival rate										
2011-12	%	na	52.6	37.5	34.1	44.9	57.5	31.6	33.3	na
2010-11	%	na	50.7	35.7	31.8	41.1	48.1	60.0	na	na
2009-10	%	na	53.0	36.2	23.4	44.8	46.7	44.4	na	na
2008-09	%	32.9	51.2	41.6	26.3	47.1	52.1	44.0	na	na
2007-08	%	37.6	45.7	33.0	16.5	42.9	37.9	38.5	32.3	37.6
2006-07	%	40.7	42.0	30.1	27.3	46.4	na	36.8	10.0	na
2005-06	%	na	39.5	30.4	16.9	na	na	34.8	na	na
2004-05	%	na	na	na	na	na	na	na	na	na
2003-04	%	na	na	na	na	na	na	na	na	na
2002-03	%	na	na	na	na	na	na	na	na	na

(a) Rates are the percentage of patients aged 16 years or over who were in out-of-hospital cardiac arrest (excluding paramedic witnessed) for:

i) all paramedic witnessed adult cardiac arrests where any chest compressions and/or defibrillation was undertaken by ambulance/EMS personnel, where the patient has a return of spontaneous circulation (ROSC) on arrival at hospital; and

ii) all adult cardiac arrests (excluding paramedic witnessed) where any chest compressions and/or defibrillation was undertaken by ambulance/EMS personnel, where the patient has a return of spontaneous circulation (ROSC) on arrival at hospital; and

iii) adult VF/VT cardiac arrests (a further breakdown of cardiac arrest data) the arrest rhythm on the first ECG assessment was either Ventricular Fibrillation or Ventricular Tachycardia, where the patient has a ROSC on arrival at hospital.

(b) For each of the indicators used a higher or increasing rate is a desirable outcome.

(c) Successful outcome is defined as the patient having return of spontaneous circulation (ROSC) on arrival to hospital (i.e. the patient having a pulse). This is not the same as the patient surviving the cardiac arrest as having ROSC is only one factor that contributes to the overall likelihood of survival.

(d) The indicators used to measure outcomes for cardiac arrests are not directly comparable as each are subject to variations based on differing factors used to define the indicator which are known to influence outcome. A recent review of the data across jurisdictions has highlighted a level of uncertainty that all jurisdictions are utilising a consistent definition in the denominator presented within the Cardiac Arrest data. These discrepancies are currently the subject of further review by the Council of Ambulance Authorities.

(e) The indicator 'Adult cardiac arrests where resuscitation attempted' provides an overall indicator of outcome without specific consideration to other factors known to influence survival.

Table 9A.38 **Cardiac Arrest Survived Event Rate (a), (b), (c), (d), (e), (f), (g), (h)**

	Unit	*NSW* (i)	*Vic* (i)	*Qld* (i)	*WA*	*SA*	*Tas* (i)	*ACT*	*NT* (i)	*Aust*

(f) Patients in Ventricular Fibrillation (VF) or Ventricular Tachycardia (VT) are more likely to have better outcomes compared with other causes of cardiac arrest as these conditions are primarily correctable through defibrillation.

(g) Paramedic witnessed cardiac arrests are analysed separately in the indicators reported as these cardiac arrests are treated immediately by the paramedic and as such have a better likelihood of survival due to this immediate and rapid intervention. This is vastly different to cardiac arrests occurring prior to the ambulance arriving where such increasing periods of treatment delay are known to negatively influence outcome.

(h) Cardiac arrest data is not comparable between jurisdictions due to different methods of reporting. Data is only comparable between years for each individual jurisdiction (unless caveats say otherwise).

(i) Jurisdiction notes:

NSW: Data consistency issues mean that this measure is unable to be reported from 2009-10. NSW is awaiting the development of a national methodology for calculation of this measure prior to revising its internal processes.

Vic: Excludes patients with unknown rhythm on arrival at hospital.

Qld: Data are for the calendar year (2010-11 data pertains to the 2010 calendar year).

Tas: For 2007-08 VF/VT arrests is for two out of three regions only as no rhythm was recorded in the remaining region. Data for 2010-11 only includes data for the first half year.

NT: For 2008-09 VF/VT arrests are not available due to a change in systems.

na Not available.

Source: State and Territory governments (unpublished).

Table 9A.39 **Satisfaction with ambulance service organisations (a), (d)**

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
2012										
Number of patients surveyed	no.	1 300	2 600	1 300	1 300	1 475	1 300	1 300	1 300	11 875
Usable responses	no.	458	996	453	406	579	555	478	198	4 123
Overall satisfaction										
Very satisfied or satisfied	%	98	97	97	98	97	98	97	98	98
95% confidence interval	±	1.2	1.0	1.6	1.4	1.4	1.1	1.6	2.0	0.5
Neither satisfied / dissatisfied	%	1	1	2	1	2	1	1	2	1
Dissatisfied / very dissatisfied	%	1	2	1	1	1	1	2	–	1
Phone answer time										
Very satisfied or satisfied	%	99	98	97	98	98	99	99	97	98
Neither satisfied / dissatisfied	%	–	1	2	2	–	1	1	2	1
Dissatisfied / very dissatisfied	%	1	1	1	–	2	–	–	1	1
Ambulance arrival time										
Very satisfied or satisfied	%	96	92	96	96	96	97	94	90	95
Neither satisfied / dissatisfied	%	3	4	1	3	2	2	3	6	3
Dissatisfied / very dissatisfied	%	1	4	3	1	2	1	3	4	2
Satisfaction with treatment										
Very satisfied or satisfied	%	99	98	98	98	98	98	97	97	98
Neither satisfied / dissatisfied	%	1	1	1	–	1	1	1	2	1
Dissatisfied / very dissatisfied	%	–	1	1	2	1	1	2	1	1
Satisfaction with paramedic attitude										
Very satisfied or satisfied	%	99	97	98	97	98	99	96	98	98
Neither satisfied / dissatisfied	%	1	2	1	2	–	1	2	–	1
Dissatisfied / very dissatisfied	%	–	1	1	1	2	–	2	2	1
Total patients (est.) (b)	'000	931	718	782	241	243	67	33	44	3 060
Patients not surveyed (est.) (c)	'000	930	715	781	240	242	66	32	43	3 048
2011										
Number of patients surveyed	no.	1 300	2 600	1 300	1 300	1 476	1 585	1 300	1 300	12 161
Usable responses	no.	470	1 019	404	403	624	638	423	202	4 183
Overall satisfaction										
Very satisfied or satisfied	%	98	98	98	98	98	98	96	98	98
95% confidence interval	±	1.1	0.9	1.4	1.4	1.0	1.0	1.9	1.9	0.4
Neither satisfied / dissatisfied	%	1	1	1	1	1	1	2	1	1
Dissatisfied / very dissatisfied	%	1	1	1	1	1	1	2	1	1
Phone answer time										
Very satisfied or satisfied	%	97	97	98	97	97	99	99	97	97
Neither satisfied / dissatisfied	%	2	2	1	2	2	1	1	3	2
Dissatisfied / very dissatisfied	%	1	1	1	1	1	–	–	–	1
Ambulance arrival time										
Very satisfied or satisfied	%	94	92	96	94	95	96	95	89	94

Table 9A.39 **Satisfaction with ambulance service organisations (a), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Neither satisfied / dissatisfied	%	3	4	1	3	3	3	3	5	3
Dissatisfied / very dissatisfied	%	3	4	3	3	2	1	2	6	3
Satisfaction with treatment										
Very satisfied or satisfied	%	99	98	99	98	98	99	96	100	98
Neither satisfied / dissatisfied	%	–	1	–	1	1	1	2	–	1
Dissatisfied / very dissatisfied	%	1	1	1	1	1	–	2	–	1
Satisfaction with paramedic attitude										
Very satisfied or satisfied	%	99	98	99	98	98	99	96	99	99
Neither satisfied / dissatisfied	%	1	1	–	2	1	–	2	1	–
Dissatisfied / very dissatisfied	%	–	1	1	–	1	1	2	–	1
Total patients (est.) (b)	'000	904	707	735	216	235	64	31	36	2 928
Patients not surveyed (est.) (c)	'000	903	705	734	214	233	62	30	35	2 916
2010										
Number of patients surveyed	no.	1 300	2 600	1 300	1 300	1 300	1 730	1 300	1 300	12 130
Usable responses	no.	486	1 071	466	400	565	795	526	194	4 503
Overall satisfaction										
Very satisfied or satisfied	%	98	98	98	98	99	97	97	97	98
95% confidence interval	±	1.1	0.9	1.3	1.3	0.9	1.1	1.6	2.4	0.4
Neither satisfied / dissatisfied	%	1	1	1	1	–	1	1	1	1
Dissatisfied / very dissatisfied	%	1	1	1	1	1	2	2	2	1
Phone answer time										
Very satisfied or satisfied	%	98	97	97	99	99	98	99	96	98
Neither satisfied / dissatisfied	%	1	2	2	1	1	1	1	2	1
Dissatisfied / very dissatisfied	%	1	1	1	–	–	1	–	2	1
Ambulance arrival time										
Very satisfied or satisfied	%	96	92	95	97	96	93	94	88	95
Neither satisfied / dissatisfied	%	2	4	3	2	2	3	4	5	3
Dissatisfied / very dissatisfied	%	2	4	2	1	2	4	2	7	2
Satisfaction with treatment										
Very satisfied or satisfied	%	99	98	99	98	99	97	97	98	99
Neither satisfied / dissatisfied	%	1	1	1	1	1	1	–	1	1
Dissatisfied / very dissatisfied	%	–	1	–	1	–	2	3	1	–
Satisfaction with paramedic attitude										
Very satisfied or satisfied	%	99	99	99	98	98	97	97	98	98
Neither satisfied / dissatisfied	%	1	–	1	1	1	1	1	1	1
Dissatisfied / very dissatisfied	%	–	1	–	1	1	2	2	1	1
Total patients (est.) (b)	'000	1 300	2 600	1 300	1 300	1 300	1 590	2 081	1 300	12 771
Patients not surveyed (est.) (c)	'000	–	–	–	–	–	- 0	1	–	1
2009										
Number of patients surveyed	no.	1 300	2 600	1 300	1 300	1 300	1 590	2 081	1 300	12 771

Table 9A.39 **Satisfaction with ambulance service organisations (a), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Usable responses	no.	467	1 121	571	444	613	689	744	202	4 851
Overall satisfaction										
Very satisfied or satisfied	%	98	97	98	96	98	98	96	97	97
95% confidence interval	±	1.4	0.9	1.2	1.8	1.0	1.1	1.3	2.4	0.5
Neither satisfied / dissatisfied	%	1	2	1	2	1	1	1	3	2
Dissatisfied / very dissatisfied	%	1	1	1	2	1	1	3	–	1
Phone answer time										
Very satisfied or satisfied	%	99	98	97	99	99	98	97	96	98
Neither satisfied / dissatisfied	%	–	2	2	1	1	1	2	1	1
Dissatisfied / very dissatisfied	%	1	–	1	–	–	1	1	3	1
Ambulance arrival time										
Very satisfied or satisfied	%	95	95	94	95	98	94	93	90	95
Neither satisfied / dissatisfied	%	3	3	3	3	2	3	4	6	3
Dissatisfied / very dissatisfied	%	2	2	3	2	–	3	3	4	2
Satisfaction with treatment										
Very satisfied or satisfied	%	99	98	99	98	98	98	96	98	98
Neither satisfied / dissatisfied	%	–	1	–	1	1	1	2	1	1
Dissatisfied / very dissatisfied	%	1	1	1	1	1	1	2	1	1
Satisfaction with paramedic attitude										
Very satisfied or satisfied	%	98	99	99	97	97	98	97	97	98
Neither satisfied / dissatisfied	%	1	1	1	2	1	1	1	1	1
Dissatisfied / very dissatisfied	%	1	–	–	1	2	1	2	2	1
Total patients (est.) (b)	'000	884	656	658	196	220	50	28	33	2 725
Patients not surveyed (est.) (c)	'000	882	653	657	195	218	49	26	32	2 712
2008										
Number of patients surveyed	no.	1 300	2 600	1 300	1 300	1 300	1 560	1 300	1 300	11 960
Usable responses	no.	350	1 136	479	389	590	701	458	236	4 347
Overall satisfaction										
Very satisfied or satisfied	%	96	98	99	96	98	98	96	96	98
95% confidence interval	±	na	na	na	na	na	na	na	na	na
Neither satisfied / dissatisfied	%	2	1	–	2	1	–	1	2	1
Dissatisfied / very dissatisfied	%	2	1	1	2	1	2	3	2	1
Phone answer time										
Very satisfied or satisfied	%	97	na	98	99	99	99	99	95	98
Neither satisfied / dissatisfied	%	2	na	1	–	1	–	–	3	1
Dissatisfied / very dissatisfied	%	1	na	1	1	–	1	1	2	1
Ambulance arrival time										
Very satisfied or satisfied	%	94	na	94	95	98	95	94	90	95
Neither satisfied / dissatisfied	%	3	na	3	3	1	3	3	2	3
Dissatisfied / very dissatisfied	%	3	na	3	2	1	2	3	8	3

Table 9A.39 **Satisfaction with ambulance service organisations (a), (d)**

	Unit	*NSW*	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Satisfaction with treatment										
Very satisfied or satisfied	%	97	na	99	97	99	98	97	99	98
Neither satisfied / dissatisfied	%	2	na	1	1	–	1	2	–	1
Dissatisfied / very dissatisfied	%	1	na	–	2	1	1	1	1	1
Satisfaction with paramedic attitude										
Very satisfied or satisfied	%	98	na	99	97	98	99	97	97	98
Neither satisfied / dissatisfied	%	1	na	1	1	1	–	1	1	1
Dissatisfied / very dissatisfied	%	1	na	–	2	1	1	2	2	1
Total patients (est.) (b)	'000	860	648	651	182	216	50	27	30	2 663
Patients not surveyed (est.) (c)	'000	859	645	650	181	214	48	26	29	2 652
2007										
Overall satisfaction										
Very satisfied or satisfied	%	97	98	97	97	98	99	95	93	97
95% confidence interval	±	na	na	na	na	na	na	na	na	na
Neither satisfied / dissatisfied	%	1	2	1	1	1	1	3	4	2
Dissatisfied / very dissatisfied	%	2	1	2	2	1	–	2	3	1
2006										
Overall satisfaction										
Very satisfied or satisfied	%	98	97	98	95	99	97	98	96	97
95% confidence interval	±	na	na	na	na	na	na	na	na	na
Neither satisfied / dissatisfied	%	1	2	1	3	–	2	1	1	1
Dissatisfied / very dissatisfied	%	1	1	1	2	1	1	1	3	2
2005										
Overall satisfaction										
Very satisfied or satisfied	%	97	97	98	98	98	97	98	94	97
95% confidence interval	±	na	na	na	na	na	na	na	na	na
Neither satisfied / dissatisfied	%	1	2	1	1	1	1	2	3	2
Dissatisfied / very dissatisfied	%	2	2	1	1	1	2	1	3	1
2004										
Overall satisfaction										
Very satisfied or satisfied	%	98	98	98	98	97	98	99	96	98
95% confidence interval	±	na	na	na	na	na	na	na	na	na
Neither satisfied / dissatisfied	%	1	1	1	2	1	1	1	3	1
Dissatisfied / very dissatisfied	%	1	1	1	1	1	1	1	1	1
2003										
Overall satisfaction										
Very satisfied or satisfied	%	97.3	97.7	96.2	97.9	97.8	98.6	96.1	95.1	97.5
95% confidence interval	±	na	na	na	na	na	na	na	na	na
Neither satisfied / dissatisfied	%	1	1	1	2	1	1	4	4	2
Dissatisfied / very dissatisfied	%	2	1	3	1	1	0	–	1	1

Table 9A.39 **Satisfaction with ambulance service organisations (a), (d)**

	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust

(a) These results are from a survey distributed to code 1 and code 2 patients (Emergency and Urgent), per jurisdiction, per year.

(b) Total patients is equal to the sum of the number of patients transported plus the number treated and not transported, reported in table 9A.30.

(c) Number of patients not surveyed is equal to the total number of patients (those transported plus those not transported) minus the patients who were surveyed.

(d) Overall satisfaction rates from 2009 include standard errors for the 95 per cent confidence interval (for example, X per cent ± X per cent). Confidence intervals for prior years are not available.

na Not available. – Nil or rounded to zero.

Source: Council of Ambulance Authorities 2011, *2007–2011 National Patient Mailout Satisfaction Research,* Adelaide.

Table 9A.40 **Ambulance code 1 response times (minutes) (a)**

	NSW	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas* (c)	*ACT*	*NT*
Statewide 50th percentile								
2011-12	10.9	11.0	8.3	9.6	9.8	11.2	9.3	9.6
2010-11	10.6	10.7	8.2	10.7	9.4	11.4	9.8	10.3
2009-10	10.3	10.0	8.1	9.6	9.4	11.0	10.0	10.1
2008-09	10.3	10.0	8.4	9.5	9.4	10.9	10.3	9.5
2007-08	9.9	10.0	8.3	9.3	9.4	10.3	9.2	10.1
2006-07	9.6	9.0	8.2	9.0	9.4	10.5	8.2	9.0
2005-06	9.5	9.0	8.0	9.7	9.4	10.2	7.5	8.5
2004-05	9.8	9.0	8.0	9.1	9.4	10.1	7.5	9.5
2003-04	9.9	9.0	8.0	9.0	9.2	10.3	7.5	9.0
2002-03	9.7	9.0	9.0	9.0	8.5	10.2	7.4	9.0
Statewide 90th percentile								
2011-12	22.5	22.1	17.0	17.8	17.4	23.1	14.8	22.5
2010-11	21.7	21.0	16.7	18.8	16.4	23.2	15.6	23.9
2009-10	21.0	19.9	16.4	17.8	16.1	22.8	15.8	24.1
2008-09	20.8	19.0	17.2	17.6	16.0	22.8	16.8	19.6
2007-08	19.9	19.0	16.7	16.6	15.7	22.4	16.3	23.5
2006-07	19.7	18.0	16.5	15.2	15.6	21.5	14.2	22.0
2005-06	19.6	17.0	16.0	15.9	15.6	21.1	13.3	21.0
2004-05	19.7	17.0	16.0	15.4	17.0	20.7	12.3	21.5
2003-04	19.5	16.0	17.0	15.2	15.8	21.3	12.3	14.0
2002-03	19.2	16.0	17.0	15.7	14.6	20.9	12.0	17.0
Capital city 50th percentile (b)								
2011-12	10.7	10.6	8.5	9.3	9.7	10.3	9.3	8.6
2010-11	10.3	10.1	8.2	9.8	9.2	10.6	9.8	8.4
2009-10	10.0	9.5	8.1	9.4	9.3	10.2	10.0	8.1
2008-09	10.1	9.2	8.5	9.2	9.2	10.0	10.3	7.6
2007-08	9.7	9.4	8.4	9.2	9.3	9.6	9.2	12.5
2006-07	9.3	9.0	8.3	8.9	9.3	9.4	8.2	8.3
2005-06	9.1	9.0	9.0	9.1	9.3	9.2	7.5	8.3
2004-05	na	na	na	na	na	na	na	na
2003-04	na	na	na	na	na	na	na	na
2002-03	na	na	na	na	na	na	na	na
Capital city 90th percentile (b)								
2011-12	19.7	18.7	15.7	15.4	15.5	16.2	14.8	15.0
2010-11	19.1	17.2	15.1	15.9	14.5	17.6	15.6	16.9
2009-10	18.3	15.7	14.5	15.0	14.3	16.6	15.8	17.2
2008-09	18.7	15.1	15.8	15.7	14.2	16.6	16.8	14.1
2007-08	17.8	15.5	15.3	15.6	14.1	16.0	16.3	22.0
2006-07	17.0	15.0	15.0	14.9	14.2	15.6	14.2	20.5

Table 9A.40 **Ambulance code 1 response times (minutes) (a)**

	NSW	*Vic* (c)	*Qld* (c)	*WA* (c)	*SA*	*Tas* (c)	*ACT*	*NT*
2005-06	16.6	14.0	15.0	15.4	14.2	15.3	13.3	21.0
2004-05	na	na	na	na	na	na	na	na
2003-04	na	na	na	na	na	na	na	na
2002-03	na	na	na	na	na	na	na	na
Capital city (b)								
Population ('000)	4 606.0	4 169.1	2 146.6	1 832.1	1 262.9	216.3	367.8	129.1
Area (sq km) (mil)	12 368	9 991	15 826	6 418	3 258	1 695	2 358	3 164
Population per sq km	372.4	417.3	135.6	285.5	387.7	127.6	156.0	40.8

(a) Response times commence from the following time points: Vic (AV rural) receipt of call; Vic (AV metro), SA and Tas first key stroke; NSW, Qld (QAS) and WA transfer to dispatch; and the NT crew dispatched. Since 2007-08 the ACT response times commence from the first key stroke, wheras, prior to 2006-07 response times commenced from incident creation. Therefore, ACT data across years are not directly comparable.

(b) Urban centre response times are currently measured by the response times within each jurisdictions' capital city — boundaries based on the ABS Greater Capital City Statistical Areas (GCCSAs). GCCSAs represent a broad socioeconomic definition of each of the eight state and territory capital cities. They contain not only the urban area of the city, but also the surrounding and non-urban areas where much of the population has strong links to the capital city. Capital cities are Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart, Canberra and Darwin.

(c) Jurisdiction notes:

Vic: The basis of response time reporting changed in 2007-08 and results are not directly comparable with previous years. Metropolitan response and case times data are sourced from Computer Aided Dispatch system, prior to 2008-09 these data were sourced from patient care records completed by paramedics. Rural response times are sourced from Patient Care Records completed by paramedics.

Qld: Casualty room attendances are not included in response count and, therefore, are not reflected in response times data. Response time calculations for percentiles for both Capital City and Statewide sourced from Computer Aided Dispatch (CAD) system.

WA: Ambulance first responder locations data are not available for 2007-08.

Tas: The highest proportion of population is in small rural areas, relative to other jurisdictions, which increase median response times.

na Not available.

Source: ABS 2012, *Regional Population Growth, Australia, 2011,* Cat. no. 3218.0, Canberra; State and Territory governments (unpublished).

Table 9A.41 **Ambulance service costs ($'000) (2011-12 dollars) (a)**

	NSW	*Vic*	*Qld*	*WA* (e)	*SA* (e)	*Tas* (e)	*ACT* (e)	*NT* (e)	*Total*
2011-12									
Labour costs - Salaries and payments in the nature of salaries	504 572	376 308	380 481	97 222	186 448	37 782	23 860	17 048	1 623 720
Capital costs (b)									
Depreciation	19 557	28 800	39 246	9 959	8 443	3 044	859	1 460	111 368
User cost of capital - Other assets	13 017	15 449	27 022	6 427	4 340	2 152	562	320	69 290
Other costs	205 276	189 696	120 481	58 103	54 944	14 610	12 031	4 516	659 657
Total expenditure (d)	**742 422**	**610 253**	**567 230**	**171 711**	**254 175**	**57 588**	**37 312**	**23 344**	**2 464 036**
Other costs									
Payroll tax (c)	np	–	16 081	–	–	2 197	–	–	np
User cost of capital - Land	7 316	4 179	8 672	935	944	582	453	21	23 103
Interest on borrowings	–	–	–	–	124	–	–	–	124
2010-11									
Labour costs - Salaries and payments in the nature of salaries	482 638	362 563	370 345	78 443	128 885	35 237	21 608	15 709	1 495 428
Capital costs									
Depreciation	20 088	27 889	38 277	9 930	9 774	2 808	888	1 143	110 799
User cost of capital - Other assets	11 349	15 458	26 757	5 751	4 086	2 067	722	343	66 533
Other costs	191 578	177 731	116 549	48 008	48 662	15 246	10 323	4 136	612 233
Total expenditure (i)	**705 654**	**583 640**	**551 929**	**142 131**	**191 408**	**55 358**	**33 541**	**21 331**	**2 284 992**
Other costs									
Payroll tax	–	–	15 235	–	na	1 935	–	–	na
User cost of capital - Land	5 667	4 158	8 440	781	1 066	588	419	21	21 140
Interest on borrowings	–	–	1	–	118	–	–	–	119

Table 9A.41 **Ambulance service costs ($'000) (2011-12 dollars) (a)**

	NSW	*Vic*	*Qld*	*WA* (e)	*SA* (e)	*Tas* (e)	*ACT* (e)	*NT* (e)	*Total*
2009-10									
Labour costs - Salaries and payments in the nature of salaries	472 192	359 862	352 232	68 539	130 511	30 275	24 567	14 162	1 452 338
Capital costs (b)									
Depreciation	21 878	28 437	39 976	11 306	10 422	2 414	777	989	116 201
User cost of capital - Other assets	11 557	16 570	28 797	5 592	3 937	1 909	756	268	69 386
Other costs	209 308	184 108	110 626	49 281	45 766	12 242	11 071	4 206	626 610
Total expenditure (d)	**714 935**	**588 977**	**531 631**	**134 719**	**190 636**	**46 840**	**37 171**	**19 625**	**2 264 534**
Other costs									
Payroll tax (c)	–	–	14 536	–	–	1 820	–	–	16 356
User cost of capital - Land	5 691	4 332	9 583	830	1 130	643	444	23	22 676
Interest on borrowings	–	–	10	–	–	–	–	–	10
2008-09									
Labour costs - Salaries and payments in the nature of salaries	449 863	334 378	315 095	63 920	173 739	28 770	16 197	12 751	1 394 712
Capital costs (b)									
Depreciation	21 602	23 075	36 999	11 137	10 854	1 947	862	948	107 423
User cost of capital - Other assets	12 922	18 915	28 471	5 443	3 754	1 617	731	269	72 122
Other costs	199 547	181 165	121 413	43 335	44 373	12 576	9 810	4 600	616 819
Total expenditure (d)	**683 934**	**557 533**	**501 978**	**123 835**	**232 720**	**44 910**	**27 599**	**18 567**	**2 191 076**
Other costs									
Payroll tax (c)	–	–	12 954	–	–	1 663	–	–	14 617
User cost of capital - Land	5 174	4 440	9 660	802	1 141	617	448	23	22 305
Interest on borrowings	–	–	52	–	–	–	–	–	52

Table 9A.41 **Ambulance service costs ($'000) (2011-12 dollars) (a)**

	NSW	*Vic*	*Qld*	*WA* (e)	*SA* (e)	*Tas* (e)	*ACT* (e)	*NT* (e)	*Total*
2007-08									
Labour costs - Salaries and payments in the nature of salaries	407 553	332 219	296 897	58 373	109 813	26 391	14 734	14 503	1 260 482
Capital costs (b)									
Depreciation	25 283	22 109	30 744	10 194	9 789	2 024	538	854	101 535
User cost of capital - Other assets	13 171	17 014	25 904	5 548	4 142	1 169	771	230	67 948
Other costs	185 321	163 021	101 262	45 729	44 389	11 654	9 362	4 574	565 311
Total expenditure (d)	**631 328**	**534 363**	**454 807**	**119 844**	**168 131**	**41 238**	**25 405**	**20 160**	**1 995 276**
Other costs									
Payroll tax (c)	–	–	12 481	–	–	1 662	–	–	14 143
User cost of capital - Land	5 339	4 521	7 101	842	1 130	198	379	24	19 534
Interest on borrowings	–	–	151	–	–	–	–	–	151
2006-07									
Labour costs - Salaries and payments in the nature of salaries	373 011	314 093	274 659	49 153	95 786	24 098	13 795	11 746	1 156 342
Capital costs (b)									
Depreciation	18 230	22 839	30 500	8 962	9 238	1 362	638	659	92 427
User cost of capital - Other assets	14 214	18 340	24 995	2 049	4 198	986	777	173	65 732
Other costs	164 642	158 167	100 593	46 699	36 111	12 055	9 246	3 834	531 348
Total expenditure (d)	**570 097**	**513 439**	**430 748**	**106 862**	**145 333**	**38 502**	**24 456**	**16 413**	**1 845 849**
Other costs									
Payroll tax (c)	–	–	10 953	–	–	1 474	–	–	12 427
User cost of capital - Land	5 755	4 319	7 441	4 262	881	207	336	25	23 227
Interest on borrowings	2	–	251	–	–	–	–	–	254

Table 9A.41 **Ambulance service costs ($'000) (2011-12 dollars) (a)**

	NSW	*Vic*	*Qld*	*WA* (e)	*SA* (e)	*Tas* (e)	*ACT* (e)	*NT* (e)	*Total*
2005-06									
Labour costs - Salaries and payments in the nature of salaries	371 061	308 834	263 465	47 644	85 162	23 123	15 575	10 935	1 125 799
Capital costs (b)									
Depreciation	18 011	22 196	26 280	6 645	9 481	2 434	419	701	86 167
User cost of capital - Other assets	15 081	16 196	23 378	4 640	4 031	965	1 452	134	65 877
Other costs	143 142	148 243	87 516	37 790	32 277	11 198	8 095	3 666	471 928
Total expenditure (d)	**547 296**	**495 469**	**400 639**	**96 719**	**130 950**	**37 720**	**25 541**	**15 437**	**1 749 771**
Other costs									
Payroll tax (c)	–	13 723	12 241	–	–	1 325	–	–	27 289
User cost of capital - Land	6 030	4 280	5 035	2 743	663	225	261	26	19 263
Interest on borrowings	134	–	414	–	–	–	–	21	570
2004-05									
Labour costs - Salaries and payments in the nature of salaries	356 909	273 168	253 876	43 330	89 042	22 414	17 205	9 105	1 065 050
Capital costs (b)									
Depreciation	18 861	20 962	25 993	5 668	9 276	2 665	604	746	84 775
User cost of capital - Other assets	11 742	14 772	20 995	3 656	3 481	1 366	1 124	124	57 260
Other costs	131 853	139 665	81 723	42 665	33 491	11 895	6 532	3 321	451 145
Total expenditure (d)	**519 365**	**448 567**	**382 588**	**95 318**	**135 290**	**38 340**	**25 466**	**13 296**	**1 658 230**
Other costs									
Payroll tax (c)	–	11 301	12 099	–	–	1 269	–	–	24 669
User cost of capital - Land	5 394	2 976	4 732	2 872	602	235	322	28	17 162
Interest on borrowings	240	–	300	–	–	–	–	20	560

Table 9A.41 **Ambulance service costs ($'000) (2011-12 dollars) (a)**

	NSW	*Vic*	*Qld*	*WA* (e)	*SA* (e)	*Tas* (e)	*ACT* (e)	*NT* (e)	*Total*
2003-04									
Labour costs - Salaries and payments in the nature of salaries	350 268	254 900	241 227	41 381	84 570	18 678	14 030	9 489	1 014 542
Capital costs (b)									
Depreciation	20 270	19 358	25 596	5 313	9 316	1 598	447	822	82 720
User cost of capital - Other assets	12 659	13 132	19 554	3 240	3 032	1 824	76	605	54 122
Other costs	130 235	136 574	99 210	41 321	26 245	7 019	4 751	3 221	448 577
Total expenditure (d)	**513 432**	**423 964**	**385 587**	**91 255**	**123 161**	**29 119**	**19 305**	**14 137**	**1 599 961**
Other costs									
Payroll tax (c)	–	–	10 978	–	–	1 060	–	–	12 038
User cost of capital - Land	5 597	3 082	3 903	2 611	625	233	202	29	16 283
Interest on borrowings	310	–	391	–	–	–	–	3	704
2002-03									
Labour costs - Salaries and payments in the nature of salaries	334 055	245 951	231 188	38 190	78 810	18 205	12 430	8 765	967 595
Capital costs (b)									
Depreciation	18 947	19 387	25 398	4 256	8 691	1 421	515	896	79 509
User cost of capital - Other assets	13 812	9 720	17 377	2 956	3 342	1 816	801	568	50 392
Other costs	112 011	133 910	95 461	38 197	25 347	6 632	5 669	3 354	420 582
Total expenditure (d)	**478 825**	**408 968**	**369 425**	**83 599**	**116 190**	**28 074**	**19 415**	**13 583**	**1 518 079**
Other costs									
Payroll tax (c)	–	–	10 594	–	–	1 100	–	–	11 693
User cost of capital - Land	5 600	3 006	3 839	2 605	314	216	211	30	15 821
Interest on borrowings	381	–	658	–	–	–	–	–	1 039

(a) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51).

Table 9A.41 **Ambulance service costs ($'000) (2011-12 dollars) (a)**

	NSW	*Vic*	*Qld*	*WA* (e)	*SA* (e)	*Tas* (e)	*ACT* (e)	*NT* (e)	*Total*

(b) The capital costs are partly dependent on depreciation and asset revaluation methods employed. Details of the treatment of assets by emergency management agencies across jurisdictions are outlined in table 9A.43.

(c) Payroll tax is excluded from labour costs.

(d) Total expenditure excludes the user cost of capital for land, interest on borrowings and payroll tax.

(e) Jurisdiction notes:

WA: WA use a contracted service model for ambulance services.

SA: For 2010-11 ambulance financial and workforce data were not available due to reporting system issues which have been rectified for the 2013 Report. 2007-08 other fees from citizens includes workers compensation fees. The increase in salaries and payments in the nature of salaries from 2007-08 to 2008-09 reflect three significant events that in 2008-09: 1) increase in wages 2) subsequent back pay paid to frontline paramedics as a result of the "work value" case (from the 2007 enterprise bargaining agreement) reaching finalisation and 3) an increase in the number of frontline paramedics recruited.

Tas: The service is part of the Department of Health and Human Services and sources corporate support services from the Department. Other assets includes $3 million funded through recurrent operational funds (land and buildings, medical equipment) subsequently transferred to capital.

ACT: Variation in expenses largely due to the recognition of the Professional Officer Workvalue Outcome of $6.444m, relating to the period 1 July 2008‑30 June‑2010.

NT: NT use a contracted service model for ambulance services. All property holding assets are held under a separate entity to St John Ambulance NT.

na Not available. **np** Not published. – Nil or rounded to zero.

Source: State and Territory governments (unpublished); ABS 2012, Australian National Accounts: National Income, Expenditure and Product, June 2012, Cat. no. 5206.0, Canberra (table AA.51).

Table 9A.42 **Ambulance service organisations' expenditure per person (2011-12 dollars) (a), (b)**

	Unit	*NSW*	*Vic*	*Qld*	*WA* (c)	*SA* (c)	*Tas*	*ACT*	*NT* (c)	*Aust* (c)
2011-12										
Total	$m	742.4	610.3	567.2	171.7	254.2	57.6	37.3	23.3	2 464.0
Population	m	7.2	5.6	4.5	2.4	1.6	0.5	0.4	0.2	22.5
Per person	$	102.44	109.47	125.69	71.93	154.51	112.54	100.64	100.46	109.58
2010-11										
Total	$m	705.7	583.6	551.9	142.1	191.4	55.4	33.5	21.3	2 285.0
Population	m	7.3	5.6	4.5	2.3	1.7	0.5	0.4	0.2	22.5
Per person	$	97.04	104.49	121.34	61.34	115.98	108.70	92.68	92.80	101.66
2009-10										
Total	$m	714.9	589.0	531.6	134.7	190.6	46.8	37.2	19.6	2 264.5
Population	m	7.2	5.5	4.5	2.3	1.6	0.5	0.4	0.2	22.2
Per person	$	99.41	107.16	118.85	59.34	116.68	92.68	104.74	86.18	102.21
2008-09										
Total	$m	683.9	557.5	502.0	123.8	232.7	44.9	27.6	18.6	2 191.1
Population	m	7.0	5.4	4.3	2.2	1.6	0.5	0.3	0.2	21.6
Per person	$	97.13	103.92	115.41	56.19	144.37	89.77	79.34	83.76	101.23
2007-08										
Total	$m	631.3	534.4	454.8	119.8	168.1	41.2	25.4	20.2	1 995.3
Population	m	6.9	5.2	4.2	2.1	1.6	0.5	0.3	0.2	21.2
Per person	$	91.14	101.86	107.56	56.24	105.61	83.18	74.54	92.66	94.20
2006-07										
Total	$m	570.1	513.4	430.7	106.9	145.3	38.5	24.5	16.4	1 845.8
Population	m	6.9	5.2	4.1	2.1	1.6	0.5	0.3	0.2	20.9
Per person	$	83.17	99.40	104.25	51.35	92.23	78.31	72.69	77.22	88.52
2005-06										
Total	$m	547.3	495.5	400.6	96.7	131.0	37.7	25.5	15.4	1 749.8
Population	m	6.8	5.1	4.0	2.0	1.6	0.5	0.3	0.2	20.5
Per person	$	80.65	97.43	99.07	47.47	83.98	77.22	76.84	74.07	85.17
2004-05										
Total	$m	519.4	448.6	382.6	95.3	135.3	38.3	25.5	13.3	1 658.2
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.3
Per person	$	77.18	89.46	96.96	47.69	87.54	79.11	77.60	65.25	81.88
2003-04										
Total	$m	513.4	424.0	385.6	91.3	123.2	29.1	19.3	14.1	1 600.0
Population	m	6.7	5.0	3.9	2.0	1.5	0.5	0.3	0.2	20.0
Per person	$	76.76	85.61	99.97	46.37	80.17	60.57	59.21	70.48	79.95
2002-03										
Total	$m	478.8	409.0	369.4	83.6	116.2	28.1	19.4	13.6	1 518.1

Table 9A.42 Ambulance service organisations' expenditure per person (2011-12 dollars) (a), (b)

	Unit	*NSW*	*Vic*	*Qld*	*WA* (c)	*SA* (c)	*Tas*	*ACT*	*NT* (c)	*Aust* (c)
Population	m	6.6	4.9	3.8	1.9	1.5	0.5	0.3	0.2	19.8
Per person	$	72.01	83.59	98.13	43.15	76.14	59.12	59.90	68.15	76.78

(a) Non-government revenue is now termed other revenue because some items in this category (for example, Veterans' Affairs) are not strictly non-government. Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51).

(b) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2011 is used as the denominator for 2011-12.

(c) Jurisdiction notes:

WA: WA use a contracted service model for ambulance services.

SA: For 2010-11 ambulance financial and workforce data were not available due to reporting system issues which have been rectified for the 2013 Report.

2011-12 SA Ambulance Service results include some significant once-off items. There are two items involving calculations of net present value using the long term government bond rate as the long term discount rate. In 2012 that rate reduced significantly which caused increases in: (1) Long Service Leave Liability which was re-valued up by about $9 million. (2) the Defined Benefit Superannuation Fund liability which experienced an actuarial loss of about $24 million.

The 2011-12 results also includes back-pay for an Enterprise Bargaining Agreement. The SAAS EB has a preserved commencement date and consequently once the EB is ratified some increases are backdated to end of the last agreement (31 December 2010). The 2011-12 results include a retrospective adjustment of approximately $4 million for the 6 months from January 2011 to June 2011.

2007-08 other fees from citizens includes workers compensation fees. The increase in salaries and payments in the nature of salaries from 2007-08 to 2008-09 reflect three significant events that in 2008-09: 1) increase in wages 2) subsequent back pay paid to frontline paramedics as a result of the "work value" case (from the 2007 enterprise bargaining agreement) reaching finalisation and 3) an increase in the number of frontline paramedics recruited.

NT: NT use a contracted service model for ambulance services. All property holding assets are held under a separate entity to St John Ambulance NT.

Aust For 2010-11 Australian total exclude SA.

Source : State and Territory governments; ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0 (table AA.2); ABS 2012, Australian National Accounts: National Income, Expenditure and Product, June 2012, Cat. no. 5206.0, Canberra (table AA.51).

Table 9A.43 **Ambulance service organisations' revenue per person (2011-12 dollars) (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA* (d)	*Tas*	*ACT*	*NT*	*Aust* (d)
2011-12									
Government grants/contributions	69.9	71.7	99.4	37.3	67.1	97.5	83.6	85.5	73.6
Transport fees	27.2	20.4	23.8	33.8	39.6	12.0	12.7	11.4	25.7
Other revenue (c)	1.6	17.2	3.6	16.6	19.4	–	0.4	4.4	8.7
Total	**98.7**	**109.4**	**126.8**	**87.7**	**126.0**	**109.5**	**96.7**	**101.3**	**108.0**
2010-11									
Government grants/contributions	67.0	64.5	94.6	28.5	62.2	97.8	63.7	83.1	68.4
Transport fees	26.3	19.8	22.3	31.8	42.1	9.1	14.6	9.8	24.9
Other revenue (c)	1.2	20.7	4.4	15.7	17.3	1.3	0.4	4.4	9.4
Total	**94.4**	**104.9**	**121.3**	**76.0**	**121.6**	**108.2**	**78.8**	**97.3**	**102.6**
2009-10									
Government grants/contributions	69.1	66.6	90.9	20.2	64.0	97.4	56.0	73.7	68.0
Transport fees	27.3	20.4	23.8	28.1	38.4	9.3	13.1	10.9	25.0
Other revenue (c)	1.4	19.1	3.6	16.1	16.5	1.8	1.4	4.6	8.9
Total	**97.8**	**106.1**	**118.3**	**64.4**	**118.9**	**108.6**	**70.6**	**89.2**	**101.8**
2008-09									
Government grants/contributions	68.1	65.1	92.3	19.6	70.6	82.6	58.3	69.7	67.6
Transport fees	26.0	18.4	18.4	24.2	33.8	10.2	13.5	9.5	22.2
Other revenue (c)	1.2	20.2	4.6	15.8	15.8	1.3	0.4	28.9	9.5
Total	**95.3**	**103.7**	**115.3**	**59.6**	**120.3**	**94.2**	**72.3**	**108.1**	**99.3**
2007-08									
Government grants/contributions	63.3	60.1	87.2	19.3	47.6	64.9	56.5	66.6	61.6
Transport fees	24.7	19.6	19.0	27.7	34.9	10.2	14.6	9.5	22.7
Other revenue (c)	1.6	22.3	4.6	16.8	16.4	1.5	0.5	27.8	10.2
Total	**89.6**	**102.0**	**110.8**	**63.8**	**98.9**	**76.6**	**71.6**	**103.9**	**94.6**
2006-07									
Government grants/contributions	58.9	57.3	83.9	20.0	41.5	64.7	52.4	65.0	58.4
Transport fees	18.3	19.4	18.2	26.6	33.0	8.0	13.9	9.5	20.1
Other revenue (c)	1.9	22.4	4.9	15.1	16.5	0.7	0.7	24.9	10.1
Total	**79.1**	**99.0**	**107.0**	**61.7**	**90.9**	**73.4**	**67.0**	**99.4**	**88.6**
2005-06									
Government grants/contributions	59.1	62.6	79.4	20.9	41.6	60.5	69.7	60.8	59.1
Transport fees	16.4	19.0	18.0	24.7	31.5	7.3	3.8	9.7	18.8
Other revenue (c)	2.8	21.2	4.4	15.2	16.7	1.2	0.4	25.2	10.1
Total	**78.3**	**102.8**	**101.8**	**60.8**	**89.9**	**69.1**	**73.9**	**95.7**	**88.0**
2004-05									
Government grants/contributions	57.4	60.0	78.2	12.7	42.4	54.0	58.1	59.2	56.5
Transport fees	13.8	17.5	17.3	34.1	30.7	9.8	5.9	10.9	18.5

Table 9A.43 **Ambulance service organisations' revenue per person (2011-12 dollars) (a), (b)**

	NSW	*Vic*	*Qld*	*WA*	*SA* (d)	*Tas*	*ACT*	*NT*	*Aust* (d)
Other revenue (c)	2.1	20.5	4.1	14.1	17.5	0.6	0.4	26.7	9.6
Total	**73.3**	**98.1**	**99.5**	**61.0**	**90.6**	**64.4**	**64.4**	**96.9**	**84.5**
2003-04									
Government grants/contributions	55.6	51.9	80.4	9.5	39.0	45.7	77.3	48.2	53.7
Transport fees	14.0	17.2	17.1	32.0	29.2	9.0	5.5	7.7	18.0
Other revenue (c)	1.7	20.3	3.9	12.4	15.1	1.0	3.8	22.9	9.0
Total	**71.3**	**89.5**	**101.3**	**54.0**	**83.3**	**55.7**	**86.6**	**78.8**	**80.7**
2002-03									
Government grants/contributions	51.2	53.3	55.6	10.0	34.0	45.0	85.6	45.1	47.5
Transport fees	14.4	17.4	19.5	30.6	25.6	8.2	5.7	10.0	18.2
Other revenue (c)	1.0	16.6	25.4	9.9	14.8	1.5	0.7	22.1	11.7
Total	**66.6**	**87.3**	**100.4**	**50.5**	**74.4**	**54.6**	**92.0**	**77.2**	**77.4**

(a) Data are adjusted to 2011-12 dollars using the gross domestic product (GDP) price deflator (2011-12 = 100) (table AA.51).

(b) Historical rates in this table may differ from those in previous Reports, as historical population data have been revised using Final Rebased Estimated Resident Population (ERP) data following the 2006 Census of Population and Housing (for 31 December 2001 to 2005). Population data relate to 31 December, so that ERP at 31 December 2011 is used as the denominator for 2011-12.

(c) Other revenue is equal to the sum of subscriptions, donations and miscellaneous revenue.

(d) Jurisdiction notes:

SA: For 2010-11 ambulance financial and workforce data are not available due to reporting system issues which will be rectified for the 2013 Report.

Aust: For 2010-11 Australian total exclude SA. Totals may not add as a result of rounding.

na Not available. – Nil or rounded to zero.

Source: State and Territory governments (table 9A.28); ABS 2012, Australian Demographic Statistics, Cat. no. 3101.0, Canberra (table AA.2); ABS 2012, Australian National Accounts: National Income, Expenditure and Product, June 2012, Cat. no. 5206.0, Canberra (table AA.51).

All jurisdictions — contextual and other information

Table 9A.44 **Communications and dispatching systems**

	NSW	*Vic* (a)	*Qld* (b)	*WA*	*SA*	*Tas* (c)	*ACT* (d)	*NT* (e)
Development stage	Operating CAD system	Operating	Operating	Operating	New CAD in test	Operating	Operating	Operating
Agency involvement	Fire Brigades	Metropolitan Fire and Emergency Services Board	Fire and Rescue Service	Fire and Emergency Services Authority	Metropolitan Fire Service	Tasmania Fire Service (all brigades)	Fire Brigade	Fire and Rescue
	Rural Fire Service	Country Fire Authority		Fire and Rescue Service	Country Fire Service		Rural Fire Service	
	NSW Ambulance Service	Ambulance Victoria	Ambulance Service	Local Government Bush Fire Brigades	Ambulance Service	Ambulance Service	Ambulance	St John Ambulance
		SES		SES	SES		SES	TES
		Police			Police			Police
Future agency involvement	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete
Coverage	Statewide	Melbourne Metropolitan	Statewide	Statewide	Statewide	Statewide for each service	Territorywide	Darwin emergency response area
		Inner Country						
		CFA Statewide						
		SES Statewide						

(a) Vic: Further development includes technological enhancement of mobile data terminals for all services and an automatic vehicle location system for police, the SES and fire services.

(b) Qld: The roll out of a new single state-wide CAD system across all ambulance and fire communication centres was completed in 2008-09.

(c) Tas: The CAD system is routinely upgraded to enhance service delivery by taking advantage of a range of technological innovations.

(d) ACT: Common CAD system.

(e) NT: Communications and "000" dispatch are provided by PFES Joint Emergency Services Communications Centre.

Source : State and Territory governments (unpublished).

Table 9A.45 Treatment of assets by emergency management agencies (a), (b), (c)

		NSW	*Vic*	*Qld* (d)	*WA*	*SA*	*Tas*	*ACT* (e), (f)	*NT*
Depreciation method	Depreciable assets	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line
Revaluation method	Land	Fair or market value	Deprival or market value	Fair or market value	Market value	Deprival value	Fair value or historical cost	Market value	na
	Buildings	Fair or market value	Deprival or market value	Fair or market value	Market value	Deprival value	Fair value or historical cost	Market value	na
	Other assets	Fair or market value	Deprival or market value	Fair or market value	..	Deprival value	na	na	na
Frequency of revaluations	Land, buildings	3 years	1–5 years	1–5 years	3 years	3 years	5 years	5 years	na
	Other assets	5 years	1–5 years	Annually	3 years	3 years	na	na	na
Useful asset lives	Buildings	40 years	12–66 years	15–80 years	40 years	20–30 years	33–100 years	30–40 years	40 years
	Specialist equipment	10 years	2–50 years	3–20 years	10–15 years	1–20 years	5–25 years	10 years	5–10 years
	IT equipment	3 years	3–5 years	3–5 years	3 years	9–20 years	5–10 years	4 years	na
	Other vehicles	3–5 years	2–20 years	2–10 years	5–20 years	6–20 years	5–10 years	7–15 years	5–15 years
	Office equipment (g)	5–10 years	2–20 years	3–10 years	10–15 years	10 years	3–10 years	7 years	na
	Other equipment (h)	5–10 years	3–20 years	3–10 years	5–15 years	5 years	3–10 years	10 years	na
Threshold capitalisation levels ($)	Buildings	10 000	All	10 000	1 000	10 000	1 000	2 000	na
	IT equipment	10 000	1 000	5 000	1 000	10 000	1 000	na	na
	Other assets	10 000	1 000	5 000	1 000	10 000	1 000	2 000	na

(a) Market value is the current (net) value market selling price or exchange value; deprival value may be either the depreciated replacement cost of an asset of a similar service potential or the stream of its future economic benefits.

(b) The assets used by the NSW Rural Fire Service are largely vested in Local Government. Accordingly, although issues such a asset depreciation and useful lives may be guided by Service policies, Local Government policies will prevail in other areas.

(c) Estimated as 1/depreciation rate.

(d) Asset lives for some assets have been grouped with other classifications.

Table 9A.45 **Treatment of assets by emergency management agencies (a), (b), (c)**

	NSW	*Vic*	*Qld* (d)	*WA*	*SA*	*Tas*	*ACT* (e), (f)	*NT*

(e) The recognition threshold for the revaluation of assets is $500 000.

(f) Treatment includes all four response agencies: the ACT Fire and Rescue, the ACT Rural Fire Service, the ACT State Emergency Service and the ACT Ambulance Service. Assets have been manually apportioned. Apportionment process varies from previous years.

(g) For some jurisdictions, office equipment includes furniture and fittings.

(h) For some jurisdictions, other equipment includes information technology.

na Not available. .. Not applicable.

Source : State and Territory governments.

Data quality information — Fire and ambulance services, chapter 9

Data Quality Information

Data quality information (DQI) was prepared for the first time for the 2011 Report on Government Services. DQI provides information for a selection of performance indicators in the Fire, road rescue and ambulance chapter. DQI for additional indicators will be progressively introduced in future reports.

Where RoGS indicators align with National Agreement indicators, DQI has been sourced from the Steering Committee's reports on National Agreements to the COAG Reform Council.

Technical DQI has been supplied or agreed by relevant data providers. Additional Steering Committee commentary does not necessarily reflect the views of data providers.

DQI are available for the following performance measures:

Emergency services for fire events

Residential structures with smoke alarms

Data quality information for this indicator has been drafted by the Emergency Management Working Group in consultation with the Australasian Fire and Emergency Service Authorities Council (AFAC), with additional Steering Committee comments.

Indicator definition and description

Element	Fire events performance indicator framework – Outputs
Indicator	Residential structures with smoke alarms
Measure (computation)	'Proportion of residential structures with smoke alarms' is defined as the number of households with an smoke alarm installed, divided by the total number of households.
Data source/s	State and Territory governments. Jurisdictions collect and compile data for their own jurisdiction. Survey questions, as recommended by the *Directory of National Data Items and Questions for Evaluation of Household Preparedness for Fire and Natural Disaster Emergencies*, are:

Identifier	*Question*	
188	**Q1.**	Are there any smoke alarms or smoke detectors installed in [this / your] home?
	Q2.	How many?
189	[How many are / Is it] currently in working order?	
190	**Q1**.	[Was it / Were any of them] manually tested [in the last 12 months / since moving into [this / your] home]?
	Q2.	When [was it / were they] last tested? • Less than 3 months ago • 3 months to less than 6 months ago • 6 months to less than 9 months ago • 9 months to 12 months ago.

Data Quality Framework dimensions

Institutional environment

Not all jurisdictions regularly collect data on residential structures with smoke alarms. Where they do, they measurement questionnaires and tools are not applied consistently across Australia (table 1).

Directory of National Data Items and Questions for Evaluation of Household Preparedness for Fire and Natural Disaster Emergencies

The Australian Natural Disasters Impacts Framework Project is being managed by the NSW Fire Brigade, funded under the Natural Disaster Mitigation Program, through the NSW State Emergency Management Committee, with 50 per cent contribution from the Australian and 50 per cent from NSW.

To assist agencies collect up-to date, comprehensive and coherent information on household preparedness, the ABS was contracted the Project to develop the *Directory of National Data Items and Questions for Evaluation of Household Preparedness for Fire and Natural Disaster Emergencies.* The Directory aims to help inform decision making at the policy level by development of this nationally agreed directory of questions to measure household preparedness.

Relevance	High or increasing numbers of households with a smoke alarm installed, increases the likelihood that the adverse effects of fire will be avoided or reduced..
Timeliness	Nationally consistent data for all jurisdictions were last available for the reference period February to November 2000, from the discontinued ABS Population Survey Monitor. Since 2000, jurisdictions have collected data for their own states and territories, with the frequency and timeliness determined by jurisdiction requirements and available resources.
Accuracy	All jurisdictions collect data from a sample of households in their state or territory. These are subject to sample and non-sample error, particular to their collection.
Coherence	Each State and Territory government maintain their own systems, processes, and training for estimation of Data were sourced from jurisdictional collections that were not strictly comparable because of methodological differences. Collection methods and time series changes for each jurisdiction are identified with relevant footnotes.
Accessibility	Residential structures with smoke alarms data are publicly available on the Productivity Commission's website from the time of RoGS publication.
Interpretability	The *Directory of National Data Items and Questions for Evaluation of Household Preparedness for Fire and Natural Disaster Emergencies* is available on the Australian Natural Disasters Impacts Framework Project page, hosted by NSW Fire Brigade website at: www.fire.nsw.gov.au/page.php?id=914

Data Gaps/Issues Analysis

Key data gaps/issues	The Steering Committee notes the following key data gaps/issues: • Residential structures with smoke alarms indicators lack a consistent, comparable and iterative data source. • Text caveats note the need for of residential structures with smoke alarms to be 'interpreted with caution because the data are not strictly comparable across jurisdictions.' A number of factors are identified as contributing to this lack of comparability, but without detailed analysis of such factors.

Residential structures with smoke alarms appendix

Table 1 Residential structures with smoke alarms calculation

Jurisdiction's method for estimating 'Residential structures with smoke alarms'.

	Jurisdiction's collection and estimation method
NSW	Data are sourced from the New South Wales Population Health Survey (HOIST), Centre for Epidemiology and Research, NSW Department of Health. • Estimates are based on the following numbers of respondents for NSW: 2003 (13,008), 2004 (8,892), 2005 (10,687), 2006 (7,795), 2007 (7,301), 2008 (8,417) and 2009 (7,846). • The 95 per cent confidence interval for 2009 is (92.9 - 94.5). • The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: – **Do you have smoke alarms installed in your home?**
Vic	Data are sourced from Household Preparedness for Emergencies Survey, 2007-08 (ABS cat. no. 4818.0). • The number of households enumerated for the survey were 1 207 for Victoria. • Relative standard error for Victorian estimate is 0.8 per cent. • The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: – **Do you have smoke alarms installed in your home?**
Qld	The 2011-12 result is sourced from an online survey undertaken in November 2011. The survey is conducted annually. Data are estimates for the whole population of Queensland. The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: • **Do you have smoke alarms installed in your home?** A household is deemed to have an operational smoke alarm if, in the past 12 months, any of the following apply: 'tested smoke alarm'; 'vacuumed or cleaned smoke alarm'; 'replaced smoke alarm battery'; or 'replaced smoke alarm unit'. Note that households without an operational smoke alarm include those where a smoke alarm is not installed and those where a smoke alarm is installed but none of the above maintenance activities have been carried out in the past 12 months.
WA	Data are based on market research conducted annually (most recently April 2011). The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: • **Do you have smoke alarms installed in your home?**
SA	..
Tas	..
ACT	Data are sourced from Household Preparedness for Emergencies Survey, 2007-08 (ABS cat. no. 4818.0). • The number of households enumerated for the survey were 1 207 for the ACT. • Relative standard error for the ACT estimate is 2.0 per cent • The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: – **Do you have smoke alarms installed in your home?**
NT	..

Source: State and Territory governments

Reported road crash rescue incidents

Data quality information for this indicator has been drafted by the Emergency Management Working Group in consultation with the Australasian Fire and Emergency Service Authorities Council (AFAC) and the Australian Council of State Emergency Services (ACSES), with additional Steering Committee comments.

Indicator definition and description

Element Emergency management sector performance indicator framework

Indicator ..

Measure incidents (computation)

'Reported road crash rescue incidents' is defined as the number of reported incidents involving a motor vehicle and the presumption that assistance is required from emergency services organisations.

It is measured by the rate of reported road crash rescue incidents per 100 000 people. It is calculated as:

$$\frac{\textbf{Numerator: the number of road rescue incidents}}{\textbf{Denominator: estimated resident population}}$$

According to the Australian Incident Reporting System (AIRS) classification road crash rescue incidents are where:

The Type of Incident is A23 = Division 3: 351 and 352
AND the Type of Action Taken is A24= 20–23, 29
OR: the No. of Injuries is D2>=1, Fatalities is D4>=1, Rescued is D5>=1
AND the Mobile Property Type is J1 = 10–29, 61–65, 67

Measure extractions (computation)

'Reported road crash rescue extrications' is defined as an assisted release and removal of trapped people (usually casualties) from motor vehicles by specially equipped and trained emergency service crews, arising from incidents reported. It is measured by the rate of reported extrications per 100 000 people; per 100 000 registered vehicles; and per million vehicle kilometres travelled. It is calculated as:

$$\frac{\textbf{Numerator: the number of road rescue extractions}}{\textbf{Denominator: (estimated resident population) (number of registered vehicles) (number of vehicle kilometres travelled)}}$$

According to the AIRS classification road crash rescue extractions are:

The 'Type of Incident' is A23 = Division 3: 351 and 352
AND the: 'Type of Action Taken' is A24= 21–23
AND No. of Injuries is D2 >=1, Fatalities is D4 >=1, Rescued is D5 >=1
AND the Mobile Property Type is J1 = 10–29, 61–65, 67

Data source/s

Numerator

State and Territory governments. The Secretariat collects data directly from all jurisdictions. Within each jurisdiction, fire service and emergency services organisations collect and compile data.

Denominator

Population: *Australian Demographic Statistics*, Cat. no. 3101.0 (table AA.2)

Registered Vehicles: *Motor Vehicle Census*, Cat. no. 9309.0

Vehicle kilometres travelled: *Survey of Motor Vehicle Use*, Cat. No. 9208.0.

Data Quality Framework dimensions

Institutional environment

Road crash rescue data are collected by fire and emergency service organisations in each State and Territory according to the reporting requirements of their jurisdiction.

Not all of the contributing fire and emergency services collect all of the data because each fire and emergency service has different legislated roles and responsibilities, environments and history of reporting and therefore have developed processes relevant to their business.

Jurisdictions that code their road crash rescue data according to the Australian Incident Reporting System (AIRS) are:

- Victoria (fire agencies only)
- Queensland
- Western Australia
- South Australia
- Tasmania
- Australian Capital Territory
- Northern Territory (?)

The AIRS is a nationally agreed data standard. It takes a systematic approach to collecting, recording and reporting information about responses to incidents and emergencies attended primarily by fire services. It provides a standard for the structure, definitions and integrity of the data collected.

The AFAC Data Management Group is responsible for managing and reviewing the AIRS data standard. For further information about the AFAC knowledge data base see the AFAC National Data and Glossary.

The data are requested and submitted to the Secretariat in accordance with the authority of the terms of reference of the Review of Government Service Provision.

Relevance

'Reported road crash rescue incidents' and 'Reported road crash rescue extractions' are an indicator of governments' objective to reduce the adverse effects of road incidents on the community through appropriate response activities. A lower or decreasing number of reported road crash rescue incidents and extrications, adjusted for population, indicates a better community outcome. Higher or increasing proportions of reported road crash rescue incidents and extrications indicate higher emergency response workloads.

Each State and Territory have different road crash rescue attendance policies (table 1). As a result, road crash rescue incident data may vary according to the jurisdiction's attendance policy, rather than the underlying number of road crash rescue incidents.

Timeliness

Reported road crash rescues are published annually for the latest financial year preceding the January release of each ROGS Report.

Accuracy

Text caveats in the RoGS provide a generalised warning that data are not strictly comparable and cite a number of physical, operational and data collection system factors that influence road rescue data.

Jurisdictions predominately follow the data definitions, although jurisdictions have indicated probable over-counting in the data collection due to:

- *multiple agency response* — where both fire and SES services attend the same road crash event, due to data collection deficiencies several jurisdiction count this as multiple incidents
- *multiple SES response* — where multiple SES services attend the same incident
- *counting of 'call-backs' as incidents* — in some cases SES may count events as road crash rescue 'incidents', which are outside the scope provided in the data definition (such as counting 'call-back' incidents or traffic management incidents).

In practice there are differences in the method between (and within) jurisdictions

	to estimate road rescue data. Each jurisdiction's approach is summarised in the Road crash rescue data quality appendix (table 2).
Coherence	Each State and Territory government maintain their own systems, processes, and training for estimation. Any time series changes are identified with relevant footnotes.
Accessibility	Road crash rescue data are publicly available on the Productivity Commission's website from the time of RoGS publication.
Interpretability	Copies of the complete AFAC AIRS data standard are available upon request through AFAC. Text caveats and chapter footnotes provide additional commentary on data quality, as do the footnotes in the relevant attachment tables.

Data Gaps/Issues Analysis

Key data gaps/issues	The Steering Committee notes the following key data gaps/issues: • Text caveats note the need for road crash rescue data to be 'interpreted with caution because the data are not strictly comparable across jurisdictions.' A number of factors are identified as contributing to this lack of comparability, but without detailed analysis of such factors.

Road crash rescue appendix

Table 1 Road crash rescue policies

Attendance policies that influence the number of road crash rescue incidents attended to and recorded by emergency service organisations.

	Jurisdiction's emergency service road crash rescue attendance policies
NSW	Rescue units in NSW are predominantly provided by the NSW Police, Ambulance Service of NSW, Fire and Rescue NSW, State Emergency Service, NSW Volunteer Rescue Association Incorporated, Royal Volunteer Coastal Patrol, and Australian Volunteer Coast Guard Association Incorporated. Under the State Emergency and Rescue Management Act 1989 and the State Rescue Policy, the NSW Police Force has a central role in coordinating rescue. Rescue services in NSW are based on a network of 'accredited' rescue units located throughout the State, managed by the Board through an accreditation process. A Primary Rescue Unit is a unit with trained crew, rescue vehicle and rescue equipment which has been accredited to respond first to rescue situations, on a 24 hour, seven day a week basis.
Vic	Road rescue services are provided by 145 Road Rescue approved crews in Victoria. These crews are derived from the Country Fire Authority (CFA), Metropolitan Fire and Emergency Services Board (MFESB), Victoria State Emergency Service (VICSES), and two independent units (the Echuca-Moama and Shepparton Search and Rescue Squads. Road Rescue crews must be called out concurrently with ambulance to all road rescue events by communications centres unless it is known that no persons are trapped. In addition, fire service and police will also be responded concurrently. Once verified that no persons are trapped, responding crew/s are immediately advised.
Qld	Revised road crash rescue protocols were implemented in September 2009 to reduce unnecessary attendance by the QFRS at mobile property crashes. Revised road crash rescue response protocols were again implemented on 18 October 2011, as part of ongoing service delivery review for QFRS attendance at mobile property crashes.
WA	In Western Australia the Hazard Management Agency is the Western Australia Police Service. Response services are provided by career and volunteer firefighters, the State Emergency Service and St John Ambulance.
SA	The SA emergency services work to a dispatch policy that requires a fire service response as well as a rescue response for any reported vehicle accident outside the Metro Area.
Tas	The main agencies responding to Road Accident Rescue (RAR) incidents are the Tasmania Police (TasPol), Tasmanian Ambulance Service (TAS), Tasmania Fire Service (TFS) and State Emergency Service (SES). The agency receiving the emergency call '000' for a road accident must ascertain whether any persons are trapped. Information on road accidents must be passed to the TAS, TasPol, and TFS (FireComm) control rooms. TFS (FireComm) will dispatch TFS and SES RAR Units when it is determined necessary. Requests for multiple unit dispatches (TFS and/or SES) can be made if extra rescue or other services are required. There are also some dual response areas where both SES and TFS RAR units are dispatched at the same time.
ACT	The ACT Fire and Rescue have the sole responsibility for road rescue in the ACT. ACT Fire and Rescue are dispatched whenever notified of an incident. In most cases, when the ACT Ambulance Service receive a call from the general public or from ACT Policing, the ACT CAD system creates a road rescue job for both the ACT Ambulance Service and ACT Fire and Rescue.
NT	na

Source: State and Territory governments

Table 2 Calculation of road crash rescue incidents

A summary of each jurisdiction's approach calculating road crash rescue data and differences to the data collection manual.

	Jurisdiction's calculating road crash rescue data
NSW	Rescue data reported in the RoGS are sourced from the State Rescue Log, an electronic database of rescue incidents managed by the NSW Police Force. The State Rescue Log has been established as the definitive list of all rescue incidents that occur in New South Wales. Rescue incidents are logged by the Rescue Coordinator at each of the various Police Communications Centres. In situations where the NSW Police Force itself is not the agency that calls out the rescue units, it is to be advised of rescue incidents that have occurred and details of these incidents are to be recorded on the State Rescue Log. The State Rescue Policy defines a Rescue Incident is an event requiring the dispatch of an accredited rescue unit to effect the safe removal of persons or domestic animals from actual or threatened danger or physical harm.
Vic	Fire agencies use the AIRS codes as provided in data dictionary to calculate the incident count. VICSES road rescue definitions are taken from the Road Rescue Arrangements Victoria document (RRAV) — the relationship between these definitions and AIRS to be confirmed. Where the call out has been cancelled prior to arrival on scene, the incident is not counted towards rescue. • Where the SES attends the incident after cancellation, the incident is counted as what the incident is found to be. (This might occur when the Unit was cancelled in error or the type of incident has changed, usually to Assist Agency).
Qld	Queensland agencies use the AIRS codes as provided in data dictionary.
WA	• Incidents where Fire and SES both attend are counted as one. • Only incidents involving a rescue are counted (as per the dictionary), therefore if a service is called back prior to arrival that incident would not be counted. • Road crash incidents only requiring clean-up of fuel spills are not counted.
SA	In SA, AIRS codes are used calculate the incident count. The incident types used are: (All over fields are correct) • 322 – Vehicle Accident with Injuries • 352 – Vehicle Accident no injury • 351 – Vehicle Accident Rescue At the time of the year data are extracted for RoGS, SA has not finished data cleaning. As a result some records counted in the RoGS may been inaccurately coded. If SES get a stop call before getting out the station gate they don't record an RCR incident attendance. If they get a stop call after getting out the station gate they record and RCR incident attendance.
Tas	• Over-counting may occur where: – As reporting is completed by both TFS & SES on separate databases, there may be duplication of incidents (although this would be minimal). – It is also possible within the SES figures where multiple SES Units attend a single incident, that each SES Unit will submit a report for the same incident. ie 1 report per Unit, not one report per incident. • For Tas SES, all events attended to by a Unit is counted as an incident, irrespective of action taken (eg extrication, traffic management, called off en-route). • For TFS the following events are not included: – 'Cancelled prior to arrival on scene' events – 'No rescue service was required' events – 'Washaways events'.

ACT In ACT, AIRS codes are used calculate the incident count. The incident types used are:

- Type of incident (A23):
  - 322 – vehicle accident with injuries
  - 351 – vehicle accident rescue
  - 352 – vehicle accident no injury
- AND Type of action taken (A24): 20-23, 29
  OR No. of other persons injured (D2)>=1, Fatalities (D4) >=1, Rescued is (D5) >=1

NT na

Source: State and Territory governments

Table 3 **Calculation of road crash rescue extractions**

	Jurisdiction comments
NSW	Extrication is the assisted release and removal of trapped people (or domestic animals) by specially equipped and trained emergency service crews, arising from incidents reported. The State Rescue Log has a dedicated field to where the Rescue Coordinator can indicate whether the primary rescue unit at the scene performed extrication, or whether the unit provided general assistance to the affected persons.
Vic	For fire services there should be no other interpretation issues associated with this data, other than those noted for incidents. For VICSES Road Rescue Arrangements Victoria (RRAV) defines a road rescue as "The release and extrication of trapped people from motor vehicles", which is what VICSES conforms to. As such, VICSES conforms with the data dictionary, but note that: • a person is trapped if they are unable to leave the vehicle by their own efforts, which could include a jammed door. • where Victoria Police have requested SES return to extricate a deceased after the coroner has completed his investigation a separate report is completed with an incident type of Assist Police (or assist crime scene as appropriate).
Qld	No further details
WA	• The data dictionary definition counts all rescues (extrications and releases). WA is now able to separate extrications and releases. • WA counts the number of incidents involving rescues not the number of persons rescued.
SA	In SA the incident types used are: (All over fields are correct) • Type of incident (A23): – 322 – vehicle accident with injuries – 351 – vehicle accident rescue – 352 – vehicle accident no injury At the time of the year data are extracted for RoGS, SA has not finished data cleaning. As a result some records counted in the RoGS may been inaccurately coded.
Tas	• For TFS, the extraction count complies strictly with the ROGS definition. • For Tas SES: – There is inconsistency in the reporting of injuries, fatalities and extrications. – D5 Number of personnel rescued by authority definition "Persons non-injured, injured and deceased" that were trapped, in difficulty that are subsequently released or rescued by the Reporting Authority. – A deceased person requiring extrication is being recorded as a fatality only. An injured person requiring extrication is being recorded as extrication only, or as an extrication and injury.
ACT	In ACT the incident types used are • Type of incident (A23): – 322 – vehicle accident with injuries – 351 – vehicle accident rescue – 352 – vehicle accident no injury • AND Type of action taken (A24):21-23 AND No. of other persons injured (D2)>=1, Fatalities (D4) >=1, Rescued is (D5) >=1
NT	No further details

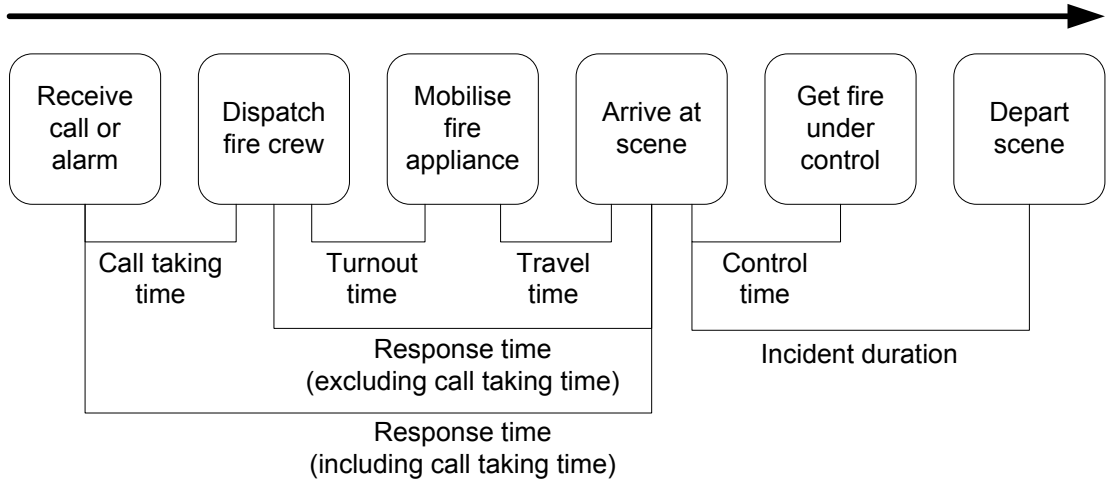
Source: State and Territory governments

Structure fire response times

Data quality information for this indicator has been drafted by the Secretariat in consultation with the Australasian Fire and Emergency Service Authorities Council (AFAC), with additional Steering Committee comments.

Indicator definition and description

Element	Fire events performance indicator framework – Outputs
Indicator	Response times to structure fires
Measure (computation)	There are two measures of structure fire response times: • response times to structure fires (*including* call taking time) • response times to structure fires (*excluding* call taking time). Response times to structure fires *(including call taking time)* Response times to structure fires *(including call taking time)* is defined as the interval between the receipt of the call at the dispatch centre and the arrival of the first vehicle at the scene (that is, when the vehicle is stationary and handbrake is applied). Response times to structure fires *(excluding call taking time)* Response time *(excluding call taking time)* is defined as the interval between the dispatch of the fire crew and the arrival of the first vehicle at the scene (that is, when the vehicle is stationary and handbrake is applied).



Further guidance is provided in the Fire and Emergency Services Activity Data Dictionary as follows:

- The measures of response times are for emergency calls only — exclude all calls where vehicle travels 'code 3' or under normal road conditions.
- Include 'genuine' outliers and 0 response times (i.e. where passing appliance notifies the event).
- Exclude from the calculation records with incomplete time stamps.
- Exclude from the calculation records where the appliance was called off en-route to scene.
- The 50th percentile is the time within which 50% of first fire resources actually arrive on scene.
- The 90th percentile is the time within which 90% of first fire resources actually arrive on scene.
- The call handling time by the Telstra '000' triple-zero operator which occurs prior to hand over to the emergency services operator is

excluded.

Structure fire

A structure fire is a fire inside a building or structure, whether or not there is damage to the structure. Within the Fire and Emergency Services Activity Data Dictionary, the following guidance is provided:

- Structure fires are defined as Australian Incident Reporting System (AIRS) data element A23, type of incident codes 110-129 inclusive.

All jurisdictions conform with the definition but SA uses a limited range of codes namely 110, 111, 112, 113, 121,123 and 126.

Data source/s

State and Territory governments. The Secretariat collects data directly from all jurisdictions.

Within each jurisdiction, fire service and emergency services organisations collect and compile data. Not all jurisdictions have systems in place to capture all components of the response time continuum from time of call to arrival at the scene, as outlined in the figure above. Some agencies use manual systems to calculate response times, while others retrieve data from computer aided dispatch (CAD) systems.

Data Quality Framework dimensions

Institutional environment

Response time estimates are collected by fire and emergency service organisations in each State and Territory according to the Australian Incident Reporting System (AIRS).

The AIRS is a nationally agreed data standard. It takes a systematic approach to collecting, recording and reporting information about responses to incidents and emergencies attended primarily by fire services. It provides a standard for the structure, definitions and integrity of the data collected.

The AFAC Data Management Group is responsible for sustaining the production and currency of AIRS data and support the continued development of data requirements to ensure consistent and reliable methods of data collection, compilation and analysis can be applied throughout member agencies. For further information about the AFAC knowledge data base see the AFAC National Data and Glossary.

Not all of the contributing fire and emergency services collect all of the data because each fire service has different legislated roles and responsibilities, environments and history of reporting and therefore have developed processes relevant to their business.

The data are requested and submitted to the Secretariat in accordance with the authority of the terms of reference of the Review of Government Service Provision.

Relevance	Timeliness of response and early intervention is a precursor for preventing the spread of fire and reducing its impacts on life and property. Timeliness of arrival is used to measure the effectiveness of reducing the impacts of fire, not the actions taken after arrival. Data are available both on a state-wide basis and by remoteness area, with response times reported in minutes for the 50th and 90th percentiles in each category. Data are presented by remoteness area in an attempt to correct for some of the physical and operational factors that are believed to adversely affect response times in areas that are relatively remote compared with the major cities. Response times are classified according to the Remoteness Area (RA) classification maintained by the ABS (Australian Standard Geographical Classification (ASGC) (cat. no. 1216.0)), The delimitation criteria for RAs are based on the Accessibility/Remoteness Index of Australia (ARIA) developed by the Commonwealth Department of Heath and Ageing and the National Key Centre For Social Applications of GIS. ARIA measures the remoteness of a point based on the physical road distance to the nearest Urban Centre in each of five size classes.
Timeliness	Response time data are published annually for the latest financial year preceding the January release of each ROGS Report.
Accuracy	Text caveats in the RoGS provide a generalised warning that data are not strictly comparable and cite a number of physical, operational and data collection system factors that influence response times. Response time data are not collected for all incident responses. Separate urban and rural fire service organisations — consisting of both volunteer and career/permanent personnel — provide fire response services within jurisdictions. Resulting data issues include: • whether structure fires attended by volunteer brigades are included in calculating a jurisdictional response time value • the percentage of structure fires attended by volunteer brigades, where: – response times tend to be calculated manually – there is potential for variation in data completeness. In practice there are differences in the method each jurisdiction uses to estimate response time to structure fires. Each jurisdiction's approach is summarised in the Structure fire response times appendix (page 6), including their approach to: • response time definition (table 1) • differences data collection systems and coverage (table 2) • data completeness (volunteer and permanent brigades) (table 3) • extrapolation and estimation (table 4) • percentile calculations (table 5).
Coherence	Each State and Territory government maintain their own systems, processes, and training for estimation of response times in accordance with AIRS. Any time series changes are identified with relevant footnotes.
Accessibility	Structure fire and response time data are publicly available on the Productivity Commission's website from the time of publication. Interested parties, particularly researchers, may request access to unpublished portions of the AFAC Knowledge data base's Core Data (de-identified unit record data) to undertake their own statistical analysis for particular research and/or projects. For more information about access to national data see AFAC data requests.

Interpretability	Copies of the complete AFAC AIRS data standard, 1997, are available upon request through AFAC. The AFAC knowledge web provides links to a range of related statistics to enable a better understanding of how interrelationships between socio-demographic, economic, geographic and environmental factors influence emergency incidents. Text caveats and chapter footnotes provide additional commentary on data quality, as do the footnotes in the relevant attachment tables.

Data Gaps/Issues Analysis

Key data gaps/issues	The Steering Committee notes the following key data gaps/issues: • Response times are identified on the three point comparability scale as 'not complete or not directly comparable'. • Text caveats note the need for response times to be 'interpreted with caution because the data are not strictly comparable across jurisdictions.' A number of factors are identified as contributing to this lack of comparability, but without detailed analysis of such factors.

Structure fire response times appendix: Jurisdictions response time calculation

The following tables are a summary of each jurisdiction's compliance in calculating the structure fires response time.

Table 1 **Response time definition**

	Complies with definition	*Jurisdiction's interpretation and/or application of definition that may impact on comparability*
NSW	Yes (NSWFB) No (NSWRFS)	The NSW Rural Fire Service (NSWRFS) does not capture the 'Call taking time' data to calculate Response times to structure fires *(including call taking time)*.
Vic	Yes	Response times are calculated from the time the Emergency Services Telecommunications Authority (ESTA) creates an event for the emergency call to arrival of the first appliance on scene.
Qld	No	Response time for Queensland applies the following additional parameters: • Exclude calls where A37 Delayed Arrival code is 71 (Severe weather conditions), 91 (Initial response by other agency). • Incident must be within the urban levy boundary. • Alarm time is not at the point of call pickup but at the time the incident is placed in the waiting queue (waiting assignment to a crew) and deemed an actual incident.
WA	Yes	..
SA	No	SA does not capture the 'Call taking time' data to calculate Response times to structure fires (*including call taking time*).
Tas	Yes	..
ACT	Yes	Up until and including the 2009-2010 data the ACTFB's response times had been calculated from dispatch to arrival. This was an error in the data extraction programming and has been rectified for the 2010-2011 year to reflect the ROGS definition.
NT	Yes	..

Source: State and Territory governments

Table 2 **Data collection and storage**

Computer Assisted Dispatch (CAD), manual or combined systems

	System	*What % of response time data are extracted from CAD systems (2008-09)?*	*Additional information*
NSW	Combination of manual and CAD systems.	89 per cent	The NSW Fire Board (NSWFB) collects response times using a CAD system. The NSWRFS collects response times using a manual system.
Vic	Combination of manual and CAD systems.	93 per cent	The MFB collects response times using a CAD system. CFA collects response times according to: • Category 1 Brigades (Full Radio Traffic) collect response times using a CAD system. • Other brigades collect response times using a manual system.
Qld	CAD system	100 per cent	
WA	Combination of manual and CAD systems.	100 per cent	Bush Fire Brigade data may be entered manually where volunteers have self-dispatched (<1%). Times may also be modified manually as a consequence of data auditing where incorrect times are recorded through CAD (estimated at 1% of total incidents).
SA	Combination of manual and CAD systems	MFS: Metropolitan Stations (arrival times) are documented via the CAD system (82%). Country Stations (arrival times) are manually populated with the AIRS database (12%). CFS: CAD dispatches CFS's structure fire responses but all (100%) of CFS's arrival times are manually entered in the incident record. For 2008/2009 CFS brigades attended 13% of the structure fires we're reporting in RoGS 2010	All incidents are despatched from CAD for Metropolitan and Country Stations. Call taking time for the MFS is the time incident is received on pagers or MCTs and is created from CAD. Metro Stations mobile and arrival times are automatically populated by CAD. Country Stations (MFS and CFS) complete hand written or electronic form for documenting mobile and arrival times (except CFS only have pagers)
Tas	CAD system	100 per cent	
ACT	CAD system	100 per cent	CAD data are automatically loaded to AIRS data system.
NT	Combination of manual and CAD systems	Data is entered directly into AIRS via CAD. Percentage (estimate of <10%) of data is entered manually into AIRS by remote stations.	

Source: State and Territory governments

Table 3 **Data completeness (volunteer and permanent brigades)**

	Volunteer brigade data included?	*Percentage of data relating to volunteer brigades (2008-2009)*	*Other information relating to data completeness*
NSW	Yes	Approximately 13 per cent of structure fires	
Vic	Yes	Approximately 29 per cent of structure fires	MFB account for around 50% of all structure fires and is fully staffed by professional crews. CFA account for around 50% of all structure fires and comprises brigades fully crewed by professional fire fighters, brigades fully crewed by volunteer fire fighters and brigades with a mixture of professional and volunteer firefighters. For CFA around 58 percent of structure fires are attended to by volunteer brigades which, after taking into account MFB activity, translates to around 29 percent of Victoria's structure fires.
Qld	No	na	Queensland data exclude volunteer brigades and are limited to incidents within the urban levy boundary.
WA	Yes	Approximately 21 per cent of structure fires (average over 5 years)	Response time data can only be provided if all time fields are completed. In 2007-08 approximately 10% of total structure fires were excluded as some time fields were incomplete.
SA	Yes	Approximately 13 per cent of structure fires	MFS Stations are all paid personnel allocated to stations. Metro Stations are all full time and Country Stations are retained. CFS stations are all volunteer. CFS has no paid firefighters. Both fire services have data quality assurance processes but weren't able to estimate record completeness. In any case, incomplete record numbers are expected to be smaller than record numbers with keying errors. For RoGS 2009,1353 structure fires (88% of the total) were used in response time calculations i.e. had the data necessary for response time calculation.
Tas	Yes	Approximately 43 per cent of structure fires	TFS collects data from career and volunteer brigades and the data set is >98% complete.
ACT	No	..	..
NT	No	..	Currently there are no provisions for data entry by volunteers in the NTFRS. It should be noted that Bushfires NT provides response to grassfires only outside NTFRS Emergency Response Areas and does not provide any data to ROGS

Source: State and Territory governments

Table 4 **Extrapolation and estimation responses**

	Are any response time data extrapolated	*Are any response time data estimated and if so explain the rationale and method used*
NSW	No	Response times collected manually from volunteer brigades are estimates. Incident information provided by volunteer fire-fighters is entered into an AIRS-compliant database. However, the information is provided post incident. There is a margin of error, in that times are very difficult to correlate from independent sources.
Vic	No	Where response time data is incomplete it is excluded from reporting. CFA response time data (mostly volunteer brigades) may incorporate an estimation factor of arrival time provided by the responding operational crews, either to the nearest minute on a wrist watch, or in the case of rural volunteer brigades, estimated after the incident. There is no estimation undertaken on data reported by the brigades.
Qld	No	No
WA	No	No
SA	No	If times required to calculate response time are not documented then these records are excluded from response time calculations.
Tas	No	No
ACT	No	No
NT	No	No

Source: State and Territory governments

Table 5 **Percentiles calculation**[a]

	Are there any records excluded from the percentile calculations other than those recommended in the data dictionary?	*Are outliers excluded? If so, how they are defined?*
NSW	Records with incomplete response time data are excluded.	NSWFB — outliers are not excluded. NSWRFS — outliers are excluded. The NSWRFS excludes records with response times that are deemed to be entry errors (for example, greater than 100 hours).
Vic	No	Outliers are not excluded. However, given the low number of remote structure fires, these data are incorporated into the outer regional figures for statistical purposes. If the ESTA CAD is down and ESTA is in manual mode and there is an observed timestamp issue with the manual data, then that information is excluded from the calculations.
Qld	Exclusions include: structure fires outside the Urban Levy Boundary; delays due to extreme weather conditions or where the initial response was by another agency or brigade.	Outliers are not excluded.
WA	No	Outliers are not excluded.
SA	No	Outliers resulting from manual keying errors are excluded. MFS's historic system didn't use a standard data base date/time field. Rather, they used separate fields for dates and times, so the time field couldn't be assumed to relate to the recorded date (that is, if the dispatch occurred five minutes before midnight and the travel time was 10 minutes then the arrival time should be for the date of arrival (not the day beforehand). Therefore, we exclude records where apparent 'response time' exceeds 12 hours.
Tas	No	Outliers are not excluded.
ACT	No	Outliers are not excluded.
NT	No	Outliers are excluded. Where it is clear by built-rules related to response type and reasonable response time within or outside Emergency Response Areas.

a There are various statistical methods implemented in different software for calculating percentiles which can result in different values being calculated.

Source: State and Territory governments

Annual fire death rate

Data quality information for this indicator has been drafted by the Secretariat in consultation with the ABS, with additional Steering Committee comments.

Indicator definition and description

Element	Fire events performance indicator framework – Outcomes
Indicator	Fire death rate
Measure (computation)	This indicator is defined as the number of deaths from fire: Numerator/s The following International Classification of Diseases (ICD) codes are aggregated to define the data set: • Exposure to smoke, fire and flames (ICD X00—X09) as follows: – ICD X00 Exposure to uncontrolled fire in building or structure – ICD X01 Exposure to uncontrolled fire, not in building or structure – ICD X02 Exposure to controlled fire in building or structure – ICD X03 Exposure to controlled fire, not in building or structure – ICD X04 Exposure to ignition of highly flammable material – ICD X05 Exposure to ignition or melting of nightwear – ICD X06 Exposure to ignition or melting of other clothing and apparel – ICD X08 Exposure to other specified smoke, fire and flames – ICD X09 Exposure to unspecified smoke, fire and flames • Intentional self-harm by smoke, fire and flames (ICD X76) • Assault by smoke, fire and flames (ICD X97) • Exposure to smoke, fire and flames, undetermined intent (ICD Y26) Denominator Population by State and Territory and Australian total The measure is expressed by State and Territory and Australian total, by ICD code detail and total, as an annual, and a three year rolling weighted average rate per million people.
Data source/s	Numerator ABS Causes of Death, Australia, Cat. no. 3303.0 (Underlying causes of death, State and Territory tables, published and unpublished data). Denominator ABS Estimated Residential Population, Cat. no. 3101.0 (for more detail about the population data used in the Report see RoGS Statistical Appendix, Attachment Table AA2).

Data Quality Framework dimensions

Institutional environment	The Causes of Death collection is published by the Australian Bureau of Statistics (ABS), with data sourced from deaths registrations administered by the various State and Territory Registrars of Births, Deaths and Marriages. It is a legal requirement of each State and Territory that all deaths are registered. The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These Acts ensure the confidentiality of respondents and ABS' independence and impartiality from political influence. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

Relevance	The ABS Causes of Death collection includes all deaths that occurred and were registered in Australia, including deaths of persons whose usual residence is overseas. Deaths of Australian residents that occurred outside Australia may be registered by individual Registrars, but are not included in ABS deaths or causes of death statistics. Data in the Causes of Death collection include demographic items, as well as Causes of Death information coded according to the International Classification of Diseases (ICD). The ICD is the international standard classification for epidemiological purposes and is designed to promote international comparability in the collection, processing, classification, and presentation of cause of death statistics. The classification is used to classify diseases and causes of disease or injury as recorded on many types of medical records as well as death records. The ICD has been revised periodically to incorporate changes in the medical field. The 10th revision of ICD (ICD-10) has been used since 1997.
Timeliness	Causes of Death data are published on an annual basis. Death records are provided electronically to the ABS by individual Registrars on a monthly basis for compilation into aggregate statistics on a quarterly and annual basis. One dimension of timeliness in death registrations data is the interval between the occurrence and registration of a death. As a result, a small number of deaths occurring in one year are not registered until the following year or later. Preliminary Estimated Residential Population (ERP) data are compiled and published quarterly and are generally made available five to six months after the end of each reference quarter. Commencing with data for September quarter 2006, revised estimates are released annually and made available 21 months after the end of the reference period for the previous financial year, once more accurate births, deaths and net overseas migration data becomes available. In the case of births and deaths, the revised data are compiled on a date of occurrence basis. In the case of net overseas migration, final data are based on actual traveller behaviour. Final estimates are made available every 5 years after a census and revisions are made to the previous inter-censal period. ERP data are not changed once finalised. Releasing preliminary, revised and final ERP involves a balance between timeliness and accuracy.
Accuracy	Information on Causes of Death is obtained from a complete enumeration of deaths registered during a specified period and is not subject to sampling error. However, deaths data are subject to non sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. The most significant of these errors are: misreporting of data items; deficiencies in coverage; non-response to particular questions; and processing errors. Every effort is made to minimise error by working closely with data providers, the careful design of forms, training of processing staff and efficient data processing procedures. All ERP data sources are subject to non-sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. In the case of Census and Post Enumeration Survey (PES) data, every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Causes of Death data for 2007 are subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years, where all ABS processing of causes of death data for a particular reference period was

	finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (e.g. a coroner certified death was yet to be finalised by the Coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes. Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, Australia (Cat. no 3303.0). Some rates are unreliable due to small numbers of deaths over the reference period. All rates in this indicator must be used with caution.
Coherence	The ABS provide source data for the numerator and denominator for this indicator.
Accessibility	Causes of Death data are available in a variety of formats on the ABS website, www.abs.gov.au, under Causes of Death, Australia (Cat. no 3303.0). ERP data are available in a variety of formats on the ABS website, www.abs.gov.au, under the 3101.0 and 3201.0 product families. Further information on deaths and mortality may be available on request. The ABS observes strict confidentiality protocols as required by the Census and Statistics Act (1905). This may restrict access to data at a very detailed level.
Interpretability	Data for this indicator are presented as crude rates, per million estimated resident population, and as three year rolling averages due to volatility of the small numbers involved. Information on how to interpret and use the cause of death data is available from the Explanatory Notes in Causes of Death, Australia (Cat. no 3303.0). Small value data are randomly adjusted to avoid the release of confidential data. Causes of death statistics for states and territories have been compiled in respect of the state or territory of usual residence of the deceased, regardless of where in Australia the death occurred and was registered. The ERP is Australia's population reported by state and territory and by place of usual residence.

Data Gaps/Issues Analysis

Key data gaps/issues	The Steering Committee notes the following key data gaps/issues: • Timeliness — data available for the Report on Government Services are delayed by one reference year. This is due to a trade off between accuracy and timeliness. • Volatility — due to the small numbers of fire deaths annually, there is a high level of volatility in reported indicator rates. It is important therefore to assess longer term trends where data are available.

Landscape fire death rate

Data quality information for this indicator has been drafted by the Secretariat in consultation with AFAC, with additional Steering Committee comments.

Indicator definition and description	
Element	Fire events performance indicator framework – Outcomes
Indicator	Fire death rate
Measure (computation)	Numerator The number of people killed by landscape fires in the jurisdiction during the defined period times one million. Denominator: The estimated resident population for the jurisdiction on 31 December during the defined period.
Data source/s	Numerator AFAC Landscape Fire Deaths Database [Dated] that contains data sourced from media reports, agency reports, PerilAus from Risk Frontiers and NCIS records. Denominator ABS Estimated Residential Population (ERP) 3101.0 (for more detail about the population data used in the Report see RoGS Statistical Appendix, Attachment Table AA2).

Data Quality Framework dimensions	
Institutional environment	AFAC maintains the Landscape Fire Deaths database on behalf of its members. It has a formal data access agreement with the Victorian Institute of Forensic Medicine to use records in the National Coroners Information System. Data sharing arrangements are in place with the Bushfire CRC that first compiled the data from the PerilAus data held by Risk Frontiers. The original data has been modified for Bushfire CRC research objectives and more recently for the Landscape Fire Performance Measures project. There is no legislative framework for the existence of the data. The estimated resident data is from the ABS that operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents.
Relevance	The Landscape Fire Deaths Database contains records of every death that has been attributed to a landscape fire. Landscape fires include all planned and unplanned fires burning outside in vegetation fuels. They exclude campfires and receptacle fires. A death that is attributed to a landscape fire as confirmed by a coroner or inquest or provisionally by the incident controller. Unconfirmed deaths are recorded as provisional until an inquest or finding is completed. Included are deaths travelling to and from fires and the full range of causes not just heat, fire and smoke. Unborn babies are excluded as are intentional self harm, assault or murder. The data contain other data elements that allow for analysis of the reasons, background and activities associated with the incident. The data contains all known records back to July 2003 and all known civilian deaths back to 1900. The indicator is titled Landscape fire death rate because although the

	term bushfire is more recognisable than Landscape fire the former has the correct technical meaning. Bushfires are an entire sub set of Landscape fires which also includes planned fires. Deaths from planned fires are included in the deaths data.
Timeliness	The data is added periodically and continually. The NCIS is interrogated annually to find any additional records and to confirm the status of any provisional records. Historic records are periodically reviewed to add known firefighter deaths. Releasing preliminary, revised and final ERP involves a balance between timeliness and accuracy.
Accuracy	The deaths data is considered accurate although it has many sources and contains both provisional and confirmed records. The number of deaths from landscape fires is well known within the industry and each record can be confirmed from multiple sources. All ERP data sources are subject to non-sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. In the case of Census and Post Enumeration Survey (PES) data, every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. The records will change over time as there can be a two year delay between the death and the coronial finding. Provisional records may be later eliminated and new records added for deaths that were unknown to incident controllers. The actual numbers can be reported and there is no requirement to randomise small numbers. The data back to 2003 has been thoroughly researched and most records are confirmed from multiple sources. The same data for civilian deaths from a previous source was submitted as evidence to the Victorian Bushfire Royal Commission.
Coherence	The management of the database by AFAC on behalf of 29 contributing agencies provides coherence. The ABS provides the denominator for this indicator with reliable coherence.
Accessibility	The Landscape Fire Deaths Database contains personal identification information. This is essential in being able to eliminate potential duplicate records from different sources for the same death. There are privacy issues in being able to access the NCIS and all reported uses of the data must be de-identified. The privacy concerns are managed by restricting access to the data with the identities retained. Analysed and de-identified data can be freely accessed although its uses must be reported to the Victorian Institute of Forensic Medicine. ERP data is available in a variety of formats on the ABS website, www.abs.gov.au, under the 3101.0 and 3201.0 product families.
Interpretability	Data for this indicator are controlled by a comprehensive Data Dictionary. Every element is defined as fully as possible. There are still some interpretations required to record a death. The degree to which the fire contributed to the death is interpreted by the coroner and then again at the time of data entry. Data are reported by jurisdiction of the incident irrespective of the home location of the deceased.

Data Gaps/Issues Analysis

Key data gaps/issues	The Steering Committee notes the following key data gaps/issues: • Volatility — due to the small numbers of fire deaths annually, there is a high level of volatility in reported indicator rates. It is important therefore to assess longer term trends where data are available. A five year rolling average will be investigated. The impact of the Black Saturday fires will remain as a spike in the data for a number of years. Spikes in the trends have occurred on about a 30 year cycle. Longer term trends can also be investigated. Recent research has indicated that the 1939 fires killed more people per population than Black Saturday 2009 so there may be a long term downward trend.

Confinement to room/object of origin

Data quality information for this indicator has been drafted by the Emergency Management Working Group in consultation with the Australasian Fire and Emergency Service Authorities Council (AFAC), with additional Steering Committee comments.

Indicator definition and description

Element Fire events performance indicator framework – Outcomes

Indicator Confinement to room/object of origin

Measure (computation)

There are two measures of Confinement to room/object of origin:

- confinement of building fires to room of origin
- confinement of building and other structure fires to room/object of origin.

(1) Confinement of building fires to room of origin

Confinement of building fires to room of origin is a measure of the proportion of building fires confined to the room in which the fire originated, calculated as:

Numerator: **the number of building fires* confined to the object, part room and room of origin**

Denominator: **the number of building fires attributed to confinement**

* A building fire is a fire that has caused some damage to a building structure (such as a house).

According to the Australian Incident Reporting System (AIRS) classification this is:

$$\frac{\text{A23 Type of Incident 110 – 119 where K20 Extent of Flame Damage is (1,2,3)}}{\text{A23 Type of Incident 110 – 119 where K20 Extent of Flame Damage is (1 to 7)}} * 100$$

(2) Confinement of building and other structure fires to room/object of origin

Confinement of building and other structure fires to room/object of origin is a measure of the both the proportion of building fires and other structure fires* confined to the room/object from which the fire originated, calculated as:

Numerator: **the number of building and other structure fires* confined to the object, part room and room of origin**

Denominator: **the number of building fires attributed to confinement**

* Other structure fires are fires within a building structure (such as fires confined to rubbish bins, burnt foodstuffs and fires confined to cooking equipment) that requires a fire service response.

According to the AIRS classification this is:

$$\frac{\text{A23 Type of Incident 110 – 129 where K20 Extent of Flame Damage is (1,2,3)}}{\text{A23 Type of Incident 110 – 129 where K20 Extent of Flame Damage is (1 to 7)}} * 100$$

Data source/s State and Territory governments. The Secretariat collects data directly from all jurisdictions.

Within each jurisdiction, fire service and emergency services organisations collect and compile data.

Data Quality Framework dimensions

Institutional environment

Confinement data are collected by fire and emergency service organisations in each State and Territory according to the Australian Incident Reporting System (AIRS).

The AIRS is a nationally agreed data standard. It takes a systematic approach to collecting, recording and reporting information about responses to incidents and emergencies attended primarily by fire services. It provides a standard for the structure, definitions and integrity of the data collected.

The AFAC Data Management Group is responsible for sustaining the production and currency of AIRS data and support the continued development of data requirements to ensure consistent and reliable methods of data collection, compilation and analysis can be applied throughout member agencies. For further information about the AFAC knowledge data base see the AFAC National Data and Glossary.

Not all of the contributing fire and emergency services collect all of the data because each fire service has different legislated roles and responsibilities, environments and history of reporting and therefore have developed processes relevant to their business.

The data are requested and submitted to the Secretariat in accordance with the authority of the terms of reference of the Review of Government Service Provision.

Relevance

Confinement of building fires to room of origin is reflective of the response strategies of the fire services to extinguish structure fires before they cause extensive building damage. It also reflective of the community's overall mitigation and preparedness strategies such as constructing buildings that are fire resistant, installing and maintaining operational smoke alarms, and other fire safety practises.

Other structure fires confined to object of origin is reflective of the community's overall mitigation and preparedness strategies such as constructing 'objects' (such as electronic appliances, cooking equipment, and chimneys) that are fire resistant. It is also reflective of the community's response abilities to contain a fire by having working fire alarms, fire extinguishers and/or fire blankets.

Timeliness

Confinement to room/object of origin data are published annually for the latest financial year preceding the January release of each ROGS Report.

Accuracy

Text caveats in the RoGS provide a generalised warning that data are not strictly comparable and cite a number of physical, operational and data collection system factors that influence confinement data:

- Confinement data are not collected for all incident responses and excludes records where the extent of flame damage is not recorded or zero.
- The calculation of this measure has been amended over time and therefore the results are not fully comparable between years.
- Confinement data a collected separately by most jurisdictions' urban and rural fire service organisations — which also consist of volunteer and career/permanent personnel.
- Confinement data from rural/volunteer fire services are not available in all jurisdictions.

In practice there are differences in the method between (and within) jurisdictions to estimate confinement of structure fire data. Each jurisdiction's approach is summarised in the confinement of structure fire appendix, including approaches to:

- confinement rate calculation (table 1)
- data completeness (table 2)

- extrapolation and estimation (table 3).

Coherence

Each State and Territory government maintain their own systems, processes, and training for estimation of confinement to room/object of origin in accordance with AIRS.

Any time series changes are identified with relevant footnotes.

Accessibility

Structure fire confinement rate data are publicly available on the Productivity Commission's website from the time of RoGS publication.

Interested parties, particularly researchers, may request access to unpublished portions of the AFAC Knowledge data base's Core Data (de-identified unit record data) to undertake their own statistical analysis for particular research and/or projects. For more information about access to national data see AFAC data requests.

Interpretability

Copies of the complete AFAC AIRS data standard, 1997, are available upon request through AFAC.

The AFAC knowledge web provides links to a range of related statistics to enable a better understanding of how interrelationships between socio-demographic, economic, geographic and environmental factors influence emergency incidents.

Text caveats and chapter footnotes provide additional commentary on data quality, as do the footnotes in the relevant attachment tables.

Data Gaps/Issues Analysis

Key data gaps/issues

The Steering Committee notes the following key data gaps/issues:

- Confinement of structure fires to room/object of origin is identified on the three point comparability scale as 'not complete or not directly comparable'.
- Text caveats note the need for of confinement to room/object of origin to be 'interpreted with caution because the data are not strictly comparable across jurisdictions.'

A number of factors are identified as contributing to this lack of comparability, but without detailed analysis of such factors.

Confinement to room/object of origin appendix

The following tables are a summary of each jurisdiction's compliance in calculating the of confinement of structure fires to room/object of origin.

Table 1 **Confinement rate calculation**

	Complies with definition	*Jurisdiction's interpretation and/or application of definition that may impact on comparability*
NSW	Yes	No further information.
Vic	na	na
Qld	Yes	Structure fires *within* the Urban Levy Boundary are included. Excluded are non-emergency calls and those where QFRS experience delays due to either extreme weather conditions or where the initial response was by another agency or brigade.
WA	Yes	Blanks in both the numerator and denominator are excluded. Only structure fires originating inside a building are included in the calculation.
SA	na	na
Tas	Yes	All fires coded as a 'building fire' (AIRS code A23 Type of Incident 110 – 119) are included. Blanks in both the numerator and denominator are excluded.
ACT	Yes	Blanks in both the numerator and denominator are excluded.
NT	na	na

Source: State and Territory governments

Table 2 **Data completeness**

	Volunteer brigade data included?	*Urban and rural areas included*	*Other information relating to data completeness*
NSW	Yes	Yes	No further information.
Vic	na	na	
Qld	Partial — where volunteers enter an Urban Levy Boundary	Yes — where Urban Levy Boundaries are in rural areas.	Accurate identification by QFRS Rural brigades (volunteers) is not possible at this stage due to incomplete voluntary reporting procedures.
WA	Yes	Yes	Incidents where there are blanks or zeros are excluded from calculation in both the numerator and denominator.
SA	na	na	
Tas	Yes	Yes	No further information.
ACT	..	Yes	Volunteer data is not applicable in the ACT
NT	na	na	

Source: State and Territory governments

Table 3 **Extrapolation and estimation responses**

	Are any confinement data estimated/ extrapolated	*If so explain the rationale and method used*
NSW	No	When reporting on incidents coded as 'other building fire' (A23 Type of Incident 120 – 129), it is assumed that where fires are confined to non-combustible containers, such as foodstuffs burnt or cooking equipment, there is no flame damage or damage is confined to the object of origin.
Vic	na	na
Qld	No	When reporting on incidents coded as 'other building fire' (A23 Type of Incident 120 – 129), it is assumed that there is either no flame damage or damage confined to the object of origin.
WA	Yes / No	When reporting on incidents coded as 'other building fire' (A23 Type of Incident 120 – 129), it is assumed that there is either no flame damage or damage confined to the object of origin.
SA	na	na
Tas	No	When reporting on incidents coded as 'other building fire' (A23 Type of Incident 120 – 129), it is assumed that there is either no flame damage or damage confined to the object of origin.
ACT	No	No further information.
NT	na	na

Source: State and Territory governments

Value of asset loss

Data quality information for this indicator has been drafted by the Secretariat in consultation with AFAC, with additional Steering Committee comments.

Indicator definition and description

Element	Fire events performance indicator framework – Outputs
Indicator	Value of asset loss
Measure (computation)	There are two measures of property losses from structure fire: • median dollar losses from structure fire • property losses from structure fire. (1) Median dollar losses from structure fire Median dollar loss from structure fire is the median of all values of damage as a result of structure fires, and includes the estimated monetary value of the damage to property and contents caused by the fire and fire-fighting operations. The median is the middle number in a sequence of data observations. Where the value of loss is null, these records are excluded from the data prior to calculating the median value. (2) Property losses from structure fire Property losses from structure fire is expressed as a rate (numerator / denominator) defined as: • numerator — total value of property loss in a State or Territory • denominator — population of a State and Territory. Structure fire A structure fire is a fire inside a building or structure, whether or not there is damage to the structure. Within the Fire and Emergency Services Activity Data Dictionary, the following guidance is provided: • Structure fires are defined as Australian Incident Reporting System (AIRS) data element A23, type of incident codes 110-129 inclusive.
Data source/s	Median dollar losses from structure fire and Numerator: Property losses from structure fire State and Territory governments. The Secretariat collects data directly from all jurisdictions Within each jurisdiction, fire service and emergency services organisations collect and compile data. Denominator: Property losses from structure fire Australian Bureau of Statistics (ABS) 2010 and previous years, *Australian Demographic Statistics, December 2009* (Cat. no. 3101.0). (for more detail about the population data used in the Report see ROGS Statistical Appendix, Attachment Table AA.2)

Data Quality Framework dimensions

Institutional environment	Measure (1) and numerator for Measure (2) Value of fire loss estimates are collected by fire and emergency service organisations in each State and Territory according to the Australian Incident Reporting System (AIRS). The AIRS is a nationally agreed data standard. It takes a systematic approach to collecting, recording and reporting information about responses to incidents and emergencies attended primarily by fire services. It provides a standard for the structure, definitions and integrity of the data collected. The AFAC Data Management Group is responsible for sustaining the

production and currency of AIRS data and support the continued development of data requirements to ensure consistent and reliable methods of data collection, compilation and analysis can be applied throughout member agencies. For further information about the AFAC knowledge data base see the AFAC National Data and Glossary.

Not all of the contributing fire and emergency services collect all of the data because each fire service has different legislated roles and responsibilities, environments and history of reporting and therefore have developed processes relevant to their business.

The data are requested and submitted to the Secretariat in accordance with the authority of the terms of reference of the Review of Government Service Provision.

Measure (2) denominator:

Population data is collected by the ABS as part of its demographics collection.

The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These Acts ensure the confidentiality of respondents and ABS' independence and impartiality from political influence. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

Relevance

Measure (1) and numerator for Measure (2)

Value of asset loss is a measure of the economic cost of fire and is consistent with the objective of emergency management in reducing the impact of fire.

Measures exclude the value of asset loss from landscape fires (such as bushfire).

Measure (2) denominator:

Use of the population data converts the dollar loss to a population standardised rate that can be compared across jurisdictions.

Timeliness

Measure (1) and numerator for Measure (2)

Data are published annually for the latest financial year preceding the January release of each ROGS Report.

Measure (2) denominator:

Published quarterly.

Accuracy

Measure (1) and numerator for Measure (2)

Text caveats in the RoGS provide a generalised warning that data are not strictly comparable and cite a number of physical, operational and data collection system factors that influence value of asset loss estimates.

Value of asset loss estimates are generally made by responding firefighters in each jurisdiction. The accuracy of these estimates can be affected by:

- the quality of the firefighters subjective assessment
- firefighter assessors not completing the value of asset loss field. Of the total number of structure fires reported in 2008, approximately 39 per cent were recorded as having a zero dollar loss (12 per cent) or the value of asset loss field was not completed by the assessor (28 per cent).

In practice there are differences in the method each jurisdiction uses to estimate value of asset loss. Each jurisdiction's approach is summarised in the Value of asset loss appendix (page 20), including their approach to:

- scope of value of asset loss data (table 6)
- definition of dollar loss (table 7)
- assessing dollar loss for each structure fire (table 8)

	• calculation of 'Median dollar loss per structure fire' (table 9). Measure (2) denominator: All population data sources are subject to non-sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. In the case of Census and Post Enumeration Survey (PES) data, every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures.
Coherence	Measure (1) and numerator for Measure (2) Each State and Territory government maintain their own systems, processes, and training for estimation of dollar loss estimates in accordance with AIRS. Value of asset loss estimates are generally sourced from firefighters' or fire investigators' estimates. Any time series changes are identified with relevant footnotes.
Accessibility	Measure (1) and numerator for Measure (2) Value of asset loss data are publicly available on the Productivity Commission's website from the time of publication. Interested parties, particularly researchers, may request access to unpublished portions of the AFAC Knowledge data base's Core Data (de-identified unit record data) to undertake their own statistical analysis for particular research and/or projects. For more information about access to national data see AFAC data requests. Measure (2) denominator: Population data are available in a variety of formats on the ABS website, www.abs.gov.au, under the 3101.0 and 3201.0 product families.
Interpretability	Measure (1) and numerator for Measure (2) Copies of the complete AFAC AIRS data standard, 1997, are available upon request through AFAC. The AFAC knowledge web provides links to a range of related statistics to enable a better understanding of how interrelationships between socio-demographic, economic, geographic and environmental factors influence emergency incidents. Text caveats and chapter footnotes provide additional commentary on data quality, as do the footnotes in the relevant attachment tables.

Data Gaps/Issues Analysis

Key data gaps/issues	The Steering Committee notes the following key data gaps/issues: • Value of asset loss is identified on the three point comparability scale as 'not complete or not directly comparable'. • Text caveats note the need for value of asset loss to be 'interpreted with caution because the data are not strictly comparable across jurisdictions.' A number of factors are identified as contributing to this lack of comparability, but without detailed analysis of such factors.

Value of asset loss appendix: Jurisdictions value of asset loss estimation

The following tables are a summary of each jurisdiction's approach to estimating the value of asset loss from structure fires.

Table 1 **Scope of value of asset loss data**

	Does your jurisdiction's figures on dollar loss conform to the scope of 'structure fires' in the fire activity data dictionary?	*Additional details regarding the interpretation of the scope that may impact on comparability.*
NSW	Yes	AIRS reports that have not been submitted to the central database at time of reporting are excluded from 'Median dollar loss per structure fire' and 'Total property loss from structure fires'. Also excluded from 'Median dollar loss per structure fire' and 'Total property loss from structure fires' are AIRS records categorised as bush, grass and landscape fires but may involve structures and buildings.
Vic	Yes	..
Qld	Yes	..
WA	Yes	..
SA	Yes	..
Tas	Yes	..
ACT	Yes	..
NT	Yes	..

Source: State and Territory governments

Table 2 **Definition of dollar loss**

	Jurisdiction's definition of dollar loss	*Are indirect costs included in the dollar loss estimate figure?*	*Is the estimated dollar loss figure the replacement cost or market value of the item?*
NSW	Estimated monetary value of the damage to property and contents caused by fire and fire fighting operations. Excludes land value.	Estimates based on firefighters subjective estimate, which may be direct or indirect costs.	Estimates based on firefighters subjective estimate, which may be replacement or market costs.
Vic	MFB: Estimated monetary value of the damage to property and contents caused by fire and fire fighting operations. Excludes land value CFA: As per the data dictionary.	Estimates based on firefighters subjective estimate, which may be direct or indirect costs.	Estimates based on firefighters subjective estimate, which may be replacement or market costs.
Qld	Estimated monetary value of the damage to property and contents caused by fire and fire fighting operations. Excludes land value.	No	QFRS Fire Investigation Unit estimates in line with the Insurance Council of Australia ($1150 per sq metre for Brisbane residential area. Up to $1500 per sq metre in the Mt Isa residential area). Other estimates based on firefighters subjective estimate, which may be replacement or market costs
WA	As per the data dictionary.	Estimates based on firefighters subjective estimate, which may be direct or indirect costs.	Estimates based on firefighters subjective estimate, which may be replacement or market costs.
SA	MFS: Estimate includes the damage to the structure, the removal of debris to bring the structure back to its original state and the cost of replacing all contents. Losses due to business disruption are not included. CFS: Estimated dollar value of damage caused by fire	MFS: losses include cost of replacement of all goods, painting etc. CFS: Estimates based on firefighters subjective estimate, which may or may not include indirect costs..	MFS: Market value. CFS: Estimates based on firefighters subjective estimate, which may be replacement or market costs.
Tas	Estimated monetary value of the damage to property and contents caused by fire and fire fighting operations. Excludes land value.		Market value
ACT	As per the data dictionary	Estimates based on firefighters subjective estimate, which may be direct or indirect costs.	Estimates based on firefighters subjective estimate, which may be replacement or market costs.
NT	As per the data dictionary	Estimates based on firefighters subjective estimate, which may be direct or indirect costs.	Estimates based on firefighters subjective estimate, which may be replacement or market costs.

Source: State and Territory governments

Table 3 **Assessing dollar loss for each structure fire**

	Training	*Are 'small' building fires included?*	*What does a loss of $0 mean?*	*Method for assessing asset loss*
NSW	No training or estimation guidelines provided	FRNSW: Yes. However, 20% of 'small fires' have no dollar loss value reported. NSWRFS: does not have any protocol.	It can mean: • asset loss is $0 • damage undetermined • NSWRFS does not have a determination for a $0. No conclusion can be drawn from a $0 entry.	(a),(b), (c),(d)[a]
Vic	MFB: Firefighters have some training in AIRS entry which does not specifically provide information on the estimation of property loss values. CFA: No training or estimation guidelines provided.	MFB: Yes CFA: Rarely	MFB: Value of asset loss is $0 CFA: It can mean: • asset loss is $0 • damage undetermined • dollar loss unknown.	(b)
Qld	QFRS Fire Investigation Unit liaises with Insurance companies to determine estimated dollar loss of contents.	Yes	Value of asset loss is $0.	(b),(c)[b]
WA	No formula or tools for determining dollar loss are currently provided. Dollar loss recording is covered in general information system training and is based on AFAC guidelines.	Optional	Value of asset loss is $0	(a),(b)
SA	No training or estimation guidelines provided (except for full-time fire investigators).	Yes	Value of asset loss is $0	(a),(b), (c),(d)[c]
Tas	No training or estimation guidelines provided.	No	Value of asset loss is $0	(a),(b), (c)[d]
ACT	Estimate guides were issued many years ago.	Yes	Value of asset loss is $0	(a),(b), (c),(d)[e]
NT	Firefighters are advised to use common sense approach to considering estimated replacement costs.	Yes	Value of asset loss is $0	(b)

(a) Information from owners/occupiers. (b) Fire fighter judgement (for example, based on local knowledge or real estate sales). (c) Other expert judgement (such as insurance or builders). (d) Dollar Loss Guide .

[d] NSWRFS can only answer based on anecdotal evidence. [b] QFRS Fire Investigation Unit uses dollar loss figures in line with the Insurance Council of Australia ($1150 per sq metre for Brisbane residential area. Up to $1500 per sq metre for Mt Isa residential area). [c] When MFS Fire Cause Investigator(s) investigate a fire the AIRS report is updated with this information when the Fire Cause Investigation Report is received – for MFS and CFS. [d] Where an insurance assessor is available his opinion will be sought. [e] No formal method.

Source: State and Territory governments

Table 4 **Calculation of 'Median dollar loss per structure fire'**

	Describe method	*Are $0 loss included?*	*Exclude outliers?*
NSW	Reported dollar loss values are listed in ascending order together with a cumulative frequency count of the number of incident exposures that have that value. The dollar loss value that has a cumulative frequency closest to but less than or equal to 50% is taken as the median. In our past and current calculations the frequency count has inadvertently been based on the number of exposures rather than the number of incidents. However due to the small number of incidents with multiple exposures this has not distorted the median dollar loss reported to RoGs.	No	No
Vic	Median dollar loss is the median of all values of damage as a result of structure fires. Include dollar loss values reported as 0's if value is legitimate. The median is that value in an array which divides it so that there are an equal number of observations on either side of it.	Yes	No
Qld	Excel is used to calculate the median dollar loss. Zeros are included in the calculation though nulls are excluded.	Yes	No
WA	Entire array is used for calculation of median dollar loss per structure fire, including zero and blank values.	Yes	No
SA	As per data dictionary	Yes	No
Tas	As per data dictionary — except that the incidents coded A23 120 to 129 are assumed to have zero loss and therefore are included.	Yes	No
ACT	The median incident is picked from the data table.	Yes	No
NT	NTFRS data for ROGS is raw data.	Yes	No

Source: State and Territory governments

Ambulance services

Response Locations

Data quality information for this indicator has been drafted by the Secretariat in consultation with the Council of Ambulance Authorities (CAA), with additional Steering Committee comments.

Indicator definition and description

Element	Equity — Access
Indicator	'Response locations' is defined as the number of paid (or salaried), mixed and volunteer response locations per 100 000 people.
Measure (computation)	Numerator: Number of ambulance response locations The total number of separate sites or response locations operated (either owned, leased or occupied) by the ambulance service and serviced by either an ambulance general purpose, special operations vehicles, salaried ambulance operatives or volunteer ambulance operatives. Response locations excludes both ambulance community and third party first responder locations. Denominator: Estimated resident population Source: *Australian Demographic Statistics* (ABS Cat. no. 3101.0). For further information see Statistical Appendix, table AA.2.
Data source/s	*Consolidated Returns*, Council of Ambulance Authorities (CAA)

Data Quality Framework dimensions

Institutional environment	The CAA is the peak body representing the principal statutory providers of ambulance services in Australia. The CAA collects administrative data annually from all statutory ambulance services, using the same core questionnaire and instructions — the *CAA Consolidated Returns*. The ambulance service organisations send their data to the CAA. The CAA then collates all data to be provided to the Productivity Commission use in the RoGS.

Relevance

The indicator is available for all statutory ambulance services in Australia, by State and Territory.

The *CAA Consolidated Returns* collects data for:

- Ambulance response locations
  - Ambulance response locations with paid staff only
  - Ambulance response locations with mix of paid staff and volunteer staff
  - Ambulance response locations with volunteer staff only
- Communication centres
- Other Locations
  - Educational centres
  - Administrative centres
  - Fleet management centres

This indicator complements the 'availability of paramedics' indicator, as some jurisdictions' ambulance workforce comprises a large proportion of volunteers, particularly in rural and remote locations.

Timeliness

Response location data is published annually for the latest financial year preceding the January release of each ROGS Report.

Accuracy

The *CAA Consolidated Returns* compile administrative data from all statutory providers of ambulance services in Australia.

They are collected according to agreed definitions provided in the CAA data dictionary.

Coherence

All data (numerators and denominators) are sourced from the CAA *Consolidated Returns*.

Estimates from the CAA *Consolidated Returns* are comparable over time and between jurisdictions, subject to caveats provided by services.

The collection, instructions, definitions and analysis are prepared and overseen by the CAA and are the same for all state and territory services.

Accessibility

The response locations data is made publicly available as part of the CAA Annual Report on the CAA website annually (www.caa.net.au).

Interpretability

The response locations data is publicly available and includes definitions of the collected data.

Data Gaps/Issues Analysis

Key data gaps/issues

The Steering Committee notes the following issues:

- Some jurisdictions do not satisfy the criteria for all the staffing categories.
- The data definition for response locations are collected under a revised data definition to exclude first responder locations.

Workforce by Age Group

Data quality information for this indicator has been drafted by the Emergency Management Working Group in consultation with the Council of Ambulance Authorities (CAA), with additional Steering Committee comments.

Indicator definition and description

Element	Effectiveness — sustainability
Indicator	Workforce by age group
Measure (computation)	'Workforce by age group' is defined as the age profile of the workforce, measured by the proportion of the operational workforce in 10 year age brackets (under 30, 30–39, 40–49, 50–59 and 60 and over). Operational workforce Number of ambulance services personnel who fall into the following categories. • Patient transport officers • Student ambulance officers • Qualified ambulance officers • Clinical other • Communication operatives • Management — operational managers and clinical support Age group Ambulance services personnel who fall into the following age groups: • under 30 year old, • 30-39 year old, • 40-49 year old, • 50-59 year old • 60 and over year old.
Data source/s	*Consolidated Returns*, Council of Ambulance Authorities (CAA)

Data Quality Framework dimensions

Institutional environment	The CAA is the peak body representing the principal statutory providers of ambulance services in Australia. The CAA collects administrative data annually from all statutory ambulance services, using the same core questionnaire and instructions — the *CAA Consolidated Returns*. The ambulance service organisations send their data to the CAA. The CAA then collates all data to be provided to the Productivity Commission use in the RoGS.
Relevance	The indicator is available for all statutory ambulance services in Australia, by State and Territory. The *CAA Consolidated Returns* collects data for each of the operational workforce categories and age group, as defined in the measure. The age profile of the ambulance service workforce represents one aspect of sustainability — indicating the proportion of the workforce closer to retirement.

Timeliness	Workforce by age group data is published annually for the latest financial year preceding the January release of each ROGS Report.
Accuracy	The *CAA Consolidated Returns* compile administrative data from all statutory providers of ambulance services in Australia. They are collected according to agreed definitions provided in the CAA data dictionary.
Coherence	All data (numerators and denominators) are sourced from the CAA *Consolidated Returns.* Estimates from the CAA *Consolidated Returns* are comparable over time and between jurisdictions, subject to caveats provided by services. The collection, instructions, definitions and analysis are prepared and overseen by the CAA and are the same for all state and territory services.
Accessibility	The workforce by age group data is made publicly available as part of the CAA Annual Report on the CAA website annually (www.caa.net.au).
Interpretability	The workforce by age group data is publicly available and includes definitions of the collected data.

Data Gaps/Issues Analysis

Key data gaps/issues	The Steering Committee notes the following issue: • The age profile is only one aspect of workforce sustainability. Further research into understanding and measuring the profile of the ambulance workforce is required.

Level of patient satisfaction

Data quality information for this indicator has been drafted by the Emergency Management Working Group in consultation with the Council of Ambulance Authorities (CAA), with additional Steering Committee comments.

Indicator definition and description

Element	Ambulance events performance indicator framework - Outcome
Indicator	Proportion of ambulance users who were satisfied or very satisfied with the ambulance service
Measure (computation)	Level of Patient Satisfaction definition The total number of patients who were either 'satisfied' or 'very satisfied' with ambulance services they had received divided by the total number of patients. **Patients —**people who were transported under an emergency event classified as code 1 (an emergency event requiring one or more immediate ambulance responses under light and sirens where the incident is potentially life threatening) or code 2 (urgent incidents requiring an undelayed response by one or more ambulances without warning devices, with arrival desirable within thirty minutes). **Satisfaction —** descriptive statistics were used to uncover the proportion of people who were *very dissatisfied or dissatisfied*, *neither satisfied nor dissatisfied*, and *satisfied or very satisfied* for the various satisfaction and service quality attributes. *Unsure* and *not applicable* responses are not included as the number of these responses is generally low.
Data source/s	*Patient Satisfaction Survey*, Council of Ambulance Authorities (CAA)

Data Quality Framework dimensions

Institutional environment	The CAA is the peak body representing the principal statutory providers of ambulance services in Australia. The CAA provides the survey and instructions. The data are collected by each ambulance service, using the same core questionnaire. The individual service providers then send the data to the CAA. The Ehrenberg-Bass Institute, as an independent research body then prepares the analysis and final report of the survey. The report is sent to member services for review and sign off. The key purpose of the *Patient Satisfaction Survey* is to track perceived service quality and customer satisfaction across Australian states and territories.

Relevance

The indicator is available for all ambulance services in Australia.

The sample population represents the total population that used ambulance services in the last year.

The *Patient Satisfaction Survey* collects the level of patient satisfaction against three service areas:

- *Call response time* — the time taken to answer their emergency call.
- *Communication staff assistance* — the operator they spoke to when their emergency phone call was answered.
- *Ambulance response time* —the time the ambulance took to arrive.

They survey collects the level of patient satisfaction against five paramedic satisfaction areas:

- *Paramedics care* — the care the ambulance paramedics took when attending them
- *Treatment satisfaction* — the standard of treatment they received from the ambulance paramedics.
- *Ambulance paramedics* — explanations given by the ambulance paramedics about what was happening to them and why.
- *Trip/ride satisfaction* — the conditions of the trip when being transported by an ambulance.
- *Overall satisfaction* — their overall satisfaction using the ambulance service

Timeliness

Level of Patient Satisfaction data is published annually for the latest financial year preceding the January release of each ROGS Report.

Accuracy

The data are collected by survey form, which is mailed to a randomly selected sample of ambulance services users in the past year. The sample size is 1300 users with an average 35 per cent return rate.

The standard errors for 95 per cent confidence interval for each member service are included in the ROGS report.

In some cases differences in scores between states/territories are not statistically significant (ie they arose from random sampling fluctuation) which means that all states/territories can be considered equal in performance.

There are also demographic factors that could drive the differences in proportions. For example, patients are more likely to provide higher scores for call response time and ambulance arrival time than carers or relatives (when they complete the questionnaire on behalf of patients). This pattern is because many patients are unable to judge the response time accurately when they need urgent medical help.

Coherence

All data (numerators and denominators) are sourced from the CAA *Patient Satisfaction Survey*.

Estimates from the CAA *Patient Satisfaction Survey* are comparable over time and between jurisdictions, subject to sampling variability. Over time the sample sizes have increased in smaller jurisdictions to reduce sampling error.

The survey questionnaire, instructions, definitions and analysis are prepared and overseen by the CAA and are the same for all state and territory services.

Accessibility

The CAA *Patient Satisfaction Survey* report is publicly available and includes information to thoroughly explain the methods, definitions and results of the data collection.

Interpretability	The CAA *Patient Satisfaction Survey* report is made publicly available on the CAA website annually (www.caa.net.au).

Data Gaps/Issues Analysis

Key data gaps/issues	The measurement of the current structure is not sensitive enough to readily identify improvements and declines in ambulance performance. For instance, for 'communication staff assistance', Tasmania scored 100% of satisfied or very satisfied respondents in 2011. This is an indication that the measurement has reached the ceiling.