

SA Government and SA Health Emergency Management Overview

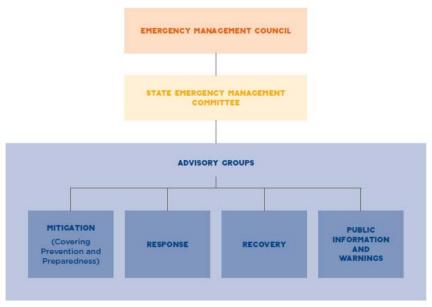
Including October to December 2018 seasonal outlook

SA GOVERNMENT EMERGENCY MANAGEMENT ARRANGEMENTS

South Australia's emergency management arrangements are guided by the key principles of emergency management – prevention, seeking to eliminate or reduce risk; preparedness, putting people, plans, training and equipment in place should an emergency take place; response, involving activating the plans in place; and recovery, involving community restoration after an emergency occurs. (Link to SAFECOM website and detail on State arrangements)

STATE EMERGENCY MANAGEMENT GOVERNANCE

- Emergency Management Council (EMC) is a committee of Cabinet chaired by the Premier.
- State Emergency Management Committee (SEMC) reports to the EMC and is chaired by the
 Chief Executive, Department of the Premier and Cabinet. (SA Health Chief Executive is the
 agency SEMC member, with responsibilities delegated to the Chief Medical Officer/Chief Public
 Health Officer CMO/CPHO, as State Controller Health. SAAS(SAAS) CEO is also a member of
 SEMC as the State Manager Ambulance and First Aid Functional Support group)
- SEMC oversees emergency management planning in the state, responsible for preparing the State Emergency Management Plan (<u>link to SEMP</u>) and is supported by Advisory groups, that provide assurance to SEMC



HAZARD LEADER

The Agency which has the knowledge, expertise and resources to undertake a leadership role for the planning of emergency management activities pertaining to its appointed hazard.

SA Health is the hazard leader for human disease and SA Health Emergency Management Unit (EMU) prepares and maintains the Human Disease Hazard Plan (as required by the SEMP) in partnership with Public Health Services and Communicable Disease Control Branch.

CONTROL AGENCY

The Agency that takes control of the response to an emergency and ensures effective liaison, communication and cooperation, continually assesses the situation, develops and shares an incident action plan, ensures the public is adequately informed and ensures transition from response to recovery

SA Health is the Control Agency for human epidemic and food & drinking water contamination

SUPPORT AGENCY

When not operating as the control Agency SA Health will be referred to as a Support Agency,



supporting and subject to direction by the nominated Control Agency e.g. CFS as Control Agency during a rural fire emergency.

FUNCTIONAL SUPPORT GROUP

Functional Support Groups (FSG) are comprised of both government and non-government agencies to perform functional roles to support the Control Agency or Support Agencies.

SAAS is the Ambulance and First Aid Functional Support Group (AFAFSG) and SAAS Emergency Planning Unit prepares and maintains the AFAFSG Plan

STATE EMERGENCY OPERATIONS AND COORDINATION

In an emergency, the State Emergency Centre (SEC) brings together relevant agencies to allow for a coordinated state level response. The SEC is operated and supported by the South Australia Police who are the coordinating agency for all emergencies, with the Commissioner as State Coordinator tasked with managing response and recovery operations in accordance with the Emergency Management Act 2004.

SA HEALTH EMERGENCY MANAGEMENT ARRANGEMENTS

STATE COMMAND AND CONTROL RESPONSIBILITIES

Control Agency and State Controller - Health

The leader of a Control Agency shall be known as a State Controller, who provides overall control to the operations at the emergency. When SA Health is the Control Agency the Chief Medical Officer/Chief Public Health Officer (CMO/CPHO) is the nominated State Controller – Health, with the Director Public Health Services and State Commander cohort the nominated Deputy State Controllers – Health.

Functional Support Group and State Manager – Ambulance and First Aid

The leader of a Functional Support group shall be known as the Functional Support Group State Manager and exercises overall command and coordination of field operations for the emergency, including statewide operations. SAAS Chief Executive Officer (CEO) is the nominated AFAFSG State Manager with the SAAS Operational Directors nominated as nominated deputy State Managers.

SA HEALTH COMMAND AND CONTROL RESPONSIBILITIES

SA Health implements the SA Health Emergency Management Command Structure for emergencies, with a cohort of State Commanders performing the role on a rostered basis.

Health - State Commander	SAAS – Gold Commander
 1 Commander providing strategic leadership and coordination across the Health system Ensure SA Health executes its Support Agency responsibilities and provides appropriate support to the Control Agency. Consider the incident in its wider context Determine longer-term impacts and risks with strategic implications. Define the overarching strategy and objectives for the response via an incident action plan (IAP) 	 1 Commander providing strategic leadership and coordination across the Ambulance Service Prepares a strategic action plan for managing the impacts across the Ambulance Service Considers longer term, wider impacts and strategic issues for the Ambulance Service Maintains regular contact with all Silver Commanders Maintains links to State emergency operations
Health - Network Commanders	SAAS - Silver Commanders
 1 Network Commander for each LHN/Service, providing tactical leadership Assume command of the Network during the response to and recovery from the incident. Ensure activities at the tactical (Network) and operational (Hospital/site) level are co-ordinated, and integrated to achieve maximum effectiveness and achieve the objectives in the State Commanders IAP CHSALHN – Regional Directors will assist the Network Commander in coordinating regional and local response and recovery operations 	 1 Silver Commander for each incident or significant site - Commands ambulance resources on incident site. Determines tactical plans Allocates resources, obtains additional resources as necessary, liaises with the incident controller and other agency commanders
Health – Hospital/Site Commanders	SAAS – Bronze Commanders
 Assume command of the Hospital/Site during the response to and recovery from the incident. Ensure activities at the operational (Hospital/site) level are co-ordinated, to achieve maximum effectiveness and efficiency and achieve the objectives established by the Network Commander. 	 Commands ambulance staff and activities at the incident scene Ensures effective casualty triage, treatment and transport to further care

SA Health and SAAS State Control Centres

The State Control Centre Health (SCCH) is situated within the EMU, Level 1 CitiCentre. The SCCH provides the Health State Commander with a facility from which to exercise command using the information, tools and resources available within the facility. The EMU provide the incident management team to support the State Commander.

The SAAS State Control Centre- Ambulance (SCC-A) is collocated with the Emergency Operations Centre at Eastwood headquarters and provides a facility for the SAAS Gold Commander to exercise command and coordinate field and statewide operations.

SA Health Data & Reporting Services maintains Geographic information Systems (GIS) containing the locations of all SA Health hospitals and aged care facilities (SA Health and non SA Health sites) to assist spatial awareness and planning for emergencies.

State Emergency Centre (SEC) activation

The Control Agency for an emergency (or potential emergency) may request the SEC be activated for briefings to provide updates in advance of potential events or when an emergency occurs. When the SEC is activated the EMU and SAAS will provide personnel to act as liaison for the Health State and SAAS Gold Commanders and to support the coordinated State response.

LHN Control Centres - Each LHN maintains an Emergency Control Centre (ECC) from which the Network Commander can exercise control, with some hospitals also maintaining site ECCs for the Hospital/Site Commander.

Country Health SALHN Control Centres - Given the geographic dispersion of Country Health SALHN sites, the CHSALHN Network Commander may choose to establish an ECC at the Corporate Office in King William Street or at a regional site appropriate to the incident.

GOVERNANCE

The Health Emergency Management Committee (HEMC) provides strategic oversight of SA Health's Emergency Management and Business Continuity Management programs through the development of consistent whole of agency policy, frameworks and arrangements.

The CMO/CPHO chairs the committee with the CEO SAAS acting as deputy chair. All Local Health Networks (LHN) provide an executive and senior clinical member with additional membership from Media & Communications, Statewide Clinical Support Services (SCSS), eHealth Systems, Procurement & Supply Chain Management, Risk & Assurance Services, Security Executive, Infrastructure and DASSA.

The Emergency Management Policy Directive and its accompanying framework provides for the consistent application of emergency management principles and practices across SA Health, in compliance with State arrangements <u>click here</u>

PREVENTION & PREPAREDNESS

As Control Agency for human epidemic and food & drinking water contamination, SA Health's prevention program is delivered through the work programs of Public Health & Clinical Systems:

Communicable Disease Control Branch

- Disease Surveillance and Investigation
- Immunisation Section
- Infection Control Service
- Sexually Transmissible Infection and Blood Borne Virus Section
- Specialist Services Public Health Alerts,
 Public Health Information

Public Health Services

- Health Protection environmental factors that impact on public health.
- Scientific Services Branch Air, water, soil and hazardous substances, technical advice
- Food Policy and Programs advice, education, Regulatory activities, local government liaison
- Public Health Partnerships Chronic disease prevention activities

PLANNING FRAMEWORK

SA Health adopts an all hazards approach to emergency planning, recognising the specialty services and community health impacts of emergencies and disasters:

- SA Health Major Incident Plan provides clear strategic direction to the whole of SA Health on responding to Major Incidents of any size or hazard, including actions and strategies that may be adopted by Health Commanders relative to the scale/level of the Major Incident. click here
- SAAS Emergency Management Plan (EMP) forms the basis of the SAAS response to defined
 Major incidents as described in the Major Incident Response Plan (MIRP) and the foundation for
 necessary support plans, procedures, work instructions and action cards.
- SAAS Major Incident Response Plan aims to ensure SAAS deliver the best possible ambulance services to communities in South Australia in the event of a major incident, whatever the cause. It describes the ambulance response and recovery roles and responsibilities in accordance with the EMP
- SA Health Multiple Burns Plan ensures coordination of South Australia's response to a multiple burns casualty incident, including responsibilities, authorities and links to National mass burns arrangements click here
- SA Health Catastrophic Fire Danger Rating Day Guideline outlines SA Health guidelines, consistent with whole-of-government principles for critical service provision and staff welfare on days of Catastrophic Fire Danger Rating click here
- SA Health Extreme Heat Strategy outlines health actions developed for implementation at
 each stage of 'Extreme Heat' Alerts to ensure a planned, managed and effective response to
 extreme heat events- click here
- SA Health Pandemic Influenza Plan outlines the response to an influenza pandemic and describes decisions and the broad approach for the South Australian Government and health sector to minimise the consequences on the South Australian health system, community and economy click here
- SA Health Public Health Emergency Management Plan outlines the responsibilities, authorities
 and the mechanisms to minimise, or if they occur, manage and recover from, declared or
 undeclared Public Health Incidents or Public Health Emergencies within South Australia click
 here
- SA Health Major Incident Community Recovery Arrangements The recovery arrangements ensure SA Health provides support to South Australians in accordance with the State Arrangements by outlining the governance structure for recovery, identifying SA Health's responsibilities in Recovery and those of our partners and connection with the broader state and national emergency recovery arrangements (see Disaster Recovery below) click here
- SA Health Business Continuity Management Policy Directive and accompanying Framework –
 provides for the consistent application of business continuity management principles and
 practices across SA Health click here

LHNs and Health services maintain emergency and business continuity plans and arrangements to ensure compliance with the strategic intentions outlined in the SA Health Emergency Management and Business Continuity Policy Directives and Frameworks and plans listed above.

EDUCATION & EXERCISING

EMU works in partnership with LHNs and services to deliver a range of education and exercise programs:

State and Multi Agency Exercises: SA Health and SAAS participate in a range of multi-agency
exercises including but not limited to Airport Exercises (metro and country), local facility
exercises including prisons and the annual State Emergency Centre exercise Team Spirit.

- The Hospital Major Incident Medical Management and Support (HMIMMS) program a course for hospital staff responsible for planning, training and managing aspects of a major incident from a hospital perspective.
- Incident Management Team Training Scenarios simulate the response to a hospital or network based incident with participants working together to establish how a response would occur, who would take responsibility as the commander and how the incident would be managed and coordinated
- Hospital Emergency Exercises The Emergo Train system is a real-time educational tool for training and testing preparedness for major incidents and disasters, using magnetic symbols representing patients, staff and resources, movable markers indicating priority and treatment and a large patient bank with various injuries.
- Statewide Health Exercises periodic statewide exercise including statewide notification, escalation and response to an incident of state significance, activation of emergency control centres and coordination of the response to and recovery from a major incident
- CHSALHN Seasonal Preparedness Program provides information to CHSALHN Executive and staff to assist them prepare their sites and personnel for summer and the potential threat of bushfire, whilst engaging with local emergency services, agencies and community partners, to inform emergency arrangements and plans

SAAS delivers a range of education and exercises for their staff including:

- **Annual exercise schedule** including internal and external exercises which may be field based or discussion.
- Incident Management Team Training Scenarios simulate the response to a state wide incident
 with participants working together to establish response strategy, command responsibilities
 incident management and coordination
- Local Exercises local teams and commanders exercising Bronze and Silver command functions

DISASTER RECOVERY

SA Health maintains major incident community recovery plans and arrangements to ensure SA Health, in partnership with the State Recovery Office, provides support to South Australians post disaster, through a phased approach

- Short term provision of public health information and alerts relative to the health impacts and risks specific to the event
- Medium term through a memorandum of understanding with Red Cross SA to deliver psychological first aid services to community members impacted by disaster at community recovery centres.
- Long term through psychosocial and community health programs for affected communities. These services are delivered in partnership with SA Primary Health networks to ensure recovery programs are locally focused click here

SA HEALTH BUSHFIRE AND EXTREME HEAT RESPONSIBILITIES, PREPAREDNESS AND RESPONSE

RECENT SIGNIFICANT BUSHFIRE EVENTS

• February 2014 Bangor Bushfire

Started 25 km north-east of Port Pirie 14th January, contained January 30th, controlled February 6th. Broke control lines 2 days later and threatened the township of Laura, finally controlled February 14th, 35000 hectares burnt. 5 houses destroyed, 24 injuries recorded none serious (injury data from CFS website).

Health system - Laura hospital was relocated during the high danger period, no adverse events reported during the relocation.

• January 2015 Sampson Flat Bushfire

Began January 2nd in the Adelaide Hills, burned uncontrolled for 4 days, across approx. 12,600 hectares. Fire travelled in a south easterly direction, impacting a number of towns including Kersbrook and Gumeracha. Fire destroyed approx. 24 houses, 103 sheds and caused 62 firefighter injuries, damage bill estimated at \$13 million. (injury data from CFS website).

Health system - Mount Pleasant hospital was relocated early on as a precaution and two days later Gumeracha hospital started to relocate as the fire threatened, but the relocation was stopped as conditions deteriorated with staff and patients sheltering in place, assisted by CFS and MFS assets protecting the hospital. No fatalities.

• November 2015 Pinery Fire

Began midday November 25th in lower-Mid-North wheat belt, approx. 70km north of Adelaide. Due to high winds and open wheat fields, fire moved with incredible speed not previously seen. Most destruction occurred during the first day, initially burning in a south easterly direction from Pinery. South westerly change in the afternoon of the first day meant the eastern flank of the fire became a new fire front burning in an easterly direction towards the Barossa Valley. Fire burnt an estimated 82,500 hectares, thousands of livestock and approximately 91 homes destroyed, many more damaged.

Health system - Two fatalities and 5 serious burns cases all retrieved to and treated at the RAH burns unit. Minor injuries very difficult to estimate but Gawler and Lyell McEwin hospitals experienced a steady presentation of patients with minor injuries including smoke inhalation during the afternoon and evening. Communities took refuge in a number of hospitals during the afternoon/evening including Kapunda, Eudunda and Tanunda.

Aged Care - Two residential aged care facilities (non SA Health) were burnt over and received assistance from emergency services and SA Health sourcing water supplies and emergency generators.

RECENT SIGNIFICANT HEATWAVE EVENTS

2009 - Record breaking 13 day heat wave experienced in late January to early February. Daily temperatures reached record high maximum and minimums. Health impacts were felt across the health sector as the hot weather continued. Ambulance call-outs and hospital and emergency presentations significantly increased. Total heat-related hospital admissions were 14-fold and emergency presentations were 12-fold higher compared to non-heat wave periods, adding an extra 518 heat-related cases to the health system. Subsequent data analysis indicated an 11% increase in mortality compared to previous heatwave periods (1993-2006).

As a result of this event SA Health developed it's Extreme Heat Strategy in partnership with the State Emergency Service (Control Agency) and Bureau of Meteorology identifying extreme heat thresholds

and triggers relative to health related impacts of extreme heat (see SA Health Extreme Heat Strategy detail and alert levels below).

• 2014 - Extreme Heat Warnings activated in both January and February. Temperatures twice soared over 40°C over consecutive days, with high over-night temperatures. These combined periods resembled in duration and intensity the 2009 event presenting an opportunity to compare the health impacts of the two events as part of an evaluation of the effectiveness of the heat health interventions in Adelaide. SAAS experienced a statistically significant reduction in heat related call outs compared to 2009 and heat related presentations and admissions to hospitals were also significantly reduced. Whilst the estimated excess mortality for 2014 was slightly increased (2009 34.5 cases and 2014 38.2 cases) this was not believed to be statistically significant.

SA HEALTH RESPONSIBILITIES

- SA Country Fire Service (CFS) is the Hazard leader and Control Agency for rural fire and the SA State Emergency Service is the Hazard Leader and Control Agency for Extreme Weather including extreme heat
- SA Health is a Support Agency for rural fire emergencies and extreme weather and is required to provide support, assistance and advice to CFS and SES during any emergency
- SAAS is a functional support group for all emergencies and is required to provide support, assistance and advice to CFS during any emergency, with significant responsibilities responding to and supporting emergency services and communities during bushfire emergencies.
- SA Health and SAAS must comply with the Whole of Government Operating Principles on Days of Catastrophic Fire Danger Rating issued by the Department of the Premier and Cabinet. The SA Health catastrophic fire danger rating day guideline outlines SA Health guidelines, consistent with whole-of-government principles for critical service provision and staff welfare on days of Catastrophic Fire Danger Rating (click here)

PREPAREDNESS

SA Govt Seasonal Preparedness briefings

SA Health/SAAS attend the annual Australian Govt preparedness briefing including briefings on the seasonal outlook from Bureau of Meteorology and CFS and an update on national coordination and strategic insights from Emergency Management Australia. (Abridged seasonal outlook attached below).

Annual Seasonal Preparedness training program

The program provides information to CHSALHN Executive and staff assisting them prepare their sites and personnel for summer and the potential threat of bushfire, whilst engaging with local emergency services, agencies and community partners, to inform emergency arrangements and plans. The program rotates through three CHSALHN regions each year ensuring each region participates every two years,

CHSALHN Bushfire Planning Framework

Country Health has developed specific bushfire procedures including:

- Bushfire Safety actions
- Seasonal Preparation



- Hospital Building Protection Zone Guidelines
- Shelter in Place/Relocation Guidelines

These arrangements are located on the Country Health Share point page called the Country Health Hub <u>click here</u>

SAAS Bushfire Planning Framework

SAAS maintain localised bushfire and heat specific procedures including:

- Bushfire Response;
- Catastrophic/Extreme Fire days
- Bushfire Burnover
- Extreme heat event arrangements

Residential aged Care Sector – (Non SA Health)

SA Health EMU attends the annual preseason briefings hosted by the two aged care sector peak bodies in SA, Aged & Community Services SA/NT (not for profit) Aged Care Industry Association (private providers). This presents an opportunity to update the sector on SA Health emergency management activities and provide advice on preparedness and response activities.

Australian Government Aged Care Programmes

SA Health EMU also maintains regular liaison with the Australian Government Aged Care Programmes (ACP) division in SA. ACP maintains an industry wide 24/7 emergency hotline and passes on urgent requests for assistance to SA Health emergency management duty officer in the event of a bushfire threatening facilities. ACP will also support EMU and providers sourcing alternative beds/accommodation should a facility need to relocate.

State Emergency Centre (SEC) activation for bushfire

CFS may request the SEC be activated for briefings to provide updates in advance of days of Catastrophic Fire Danger rating or when a significant bushfire emergency occurs. When the SEC is activated the EMU and SAAS will provide personnel to act as liaison for the Health/SAAS Gold Commanders and to support the coordinated State response.

NATIONAL HEALTH EMERGENCY MANAGEMENT ARRANGEMENTS

The Australian Government Deptof Health maintains emergency plans and arrangements for coordination of Health sector response to and recovery from incidents of national significance.

- National Health Emergency Response Arrangements coordination of health sector in response to emergencies of national consequence
- OSMASSCASPLAN national overseas mass casualty response plan
- AUSTRAUMA domestic response plan for Mass Casualty Incidents of National Consequence
 - AUSBURN annex –national response arrangements for an incident resulting in mass casualties with severe burns

SA Health has never requested activation of national plans and arrangements, however during the Pinery Fire November 2015 the Health State Commander contacted and briefed the National Health Incident Room on the status of the fire and the five major burns cases, in case further cases occurred, stretching the capacity of the RAH burns unit.

SA Health Burns Capability and arrangements

The Royal Adelaide Hospital Burns Unit has fifteen beds and the Women's & Children's hospital has capacity for four major burns patients, but as indicated in the SA Health Multiple Burns Plan (click here) the limitation on the number of burns casualties that can be treated in one location is determined by the acuity of the casualties injuries which determine the ongoing treatment

requirements, not the number of specialist burns beds available. The Primary Burns Surgeon at the RAH and the Burns Consultant at the WCH will determine the initial response strategies which will be coordinated through the CALHN/WCHN Network Commanders in consultation with the Health State and SAAS Gold Commanders. The Royal Flying Doctor Service (RFDS) facility at Adelaide airport has a stabilisation bay which can hold up to 3 patients and this stabilisation facility is an option which can inform strategic decision making.

SA HEALTH EXTREME HEAT STRATEGY

The purpose of the SA Health Extreme Heat Strategy (<u>click here</u>) is to reduce the risk of harmful effects of extreme heat on the health of the community by:

- Ensuring a planned, managed, and effective response to an extreme heat event
- Providing a coordinated SA Health communication plan; and
- Promoting community resilience and adaptation to extreme heat conditions.

As part of the Strategy, health actions have been developed for implementation at each stage of 'Extreme Heat' Alerts. These alerts are issued by the SA State Emergency Service (SASES <u>click here</u>) in conjunction with the Adelaide Bureau of Meteorology (BoM). There are two alert levels for the Greater Adelaide area relative to Average Daily Temperature (ADT) which is an average of the minimum overnight and maximum daily temperature occurring that day:

Extreme Heat WATCH

Issued at ADTs ≥ 28C for three or more consecutive days

E.g. a maximum ≥36C for three or more consecutive days, and a minimum ≥22C for three or more consecutive nights.

Public Alerts WILL NOT be issued by the SES / BoM at this alert level and Heat related hospital presentations WILL NOT be collected and reported

Extreme Heat WARNING

Issued at ADTs ≥32C for three or more consecutive days

E.g. a maximum ≥40C for three or more consecutive days, and a minimum ≥24C for three or more consecutive nights.

Public Alerts WILL be issued by the SES / BoM at this alert level and Heat related hospital presentations WILL be collected and reported

The Department of Human Services (DHS) reaches out to community services during Extreme Heat events and both before and during extreme heat events DHS and SA Health also refer vulnerable clients to the Red Cross service Telecross REDI, which telephones at risk people to check on their welfare twice a day during heat waves <u>click here</u>

Extreme Heat Communications

A comprehensive extreme heat communications plan aims to outline messaging related to the health impacts of extreme heat and to support the broader whole of government plan developed by SES. The plan is reviewed every year and incorporates guidance issued by SES and the Bureau of Meteorology (BoM), allowing learnings from the previous season to be applied and includes provision of advice and information to SA Health staff, GPs and health professionals and the community, particularly those in at risk groups. The plan includes general heat related messaging throughout and in preparation for the summer season and communications for times an Extreme Heat Watch or Warning is issued and includes the following strategies:

- **Healthy in the Heat webpage** a central repository of heat related information available on the Healthy in the Heat page on the SA Health website <u>click here</u>
- **Short URL** <u>www.sahealth.sa.gov.au/healthyintheheat</u> included on the websites of other relevant organisations, such as SES, Department for Communities and Social Inclusion (DCSI) and the www.sa.gov.au website.

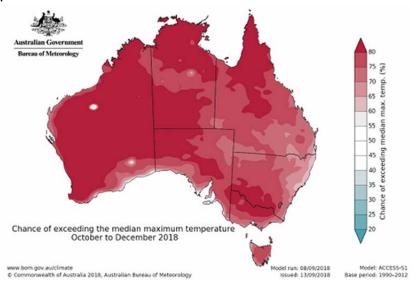


- Internet site Carousel to ensure visitors to the SA Health website can find information easily a carousel linking to the Healthy in the Heat webpage will be featured on the website during summer months. During periods where an Extreme Heat Watch or Warning has been issued by SES the carousel will be replaced with an extreme heat specific carousel.
- Intranet Screensaver staff will be provided with information about coping with the heat and the dangers of heat related illness via a screensaver pushed out to all SA Health computers.
- Media DHW Media unit will develop a media strategy including proactive and reactive media strategies in liaison with other relevant agencies, including SES, SAAS, Department of Human Services (DHS), to ensure consistent messages and information across government
- **Social media** SA Health will use its owned social media channels, Facebook and Twitter, to appropriately and actively disseminate key messages about staying healthy in the heat.

CLIMATE OUTLOOK - ISSUED: 13 SEPTEMBER 2018 - OCTOBER to DECEMBER 2018 SUMMARY

Rainfall - October to December is likely to be drier than average for large parts of Australia including eastern SA. Much of southern mainland Australia has been very dry and warm since the start of the year. This pattern continued during winter. The October to December outlook indicates current drought areas are unlikely to see significant respite in the coming three months

Temperature - October to December days are very likely to be warmer than average for most of Australia. Chances are greater than 80% over most of the western half of the country, the tropical north, and an area along the NSW-Victorian border. Nights are also likely to be warmer than average across Australia.



Fire outlook – With much of southern Australia experiencing a combination of above average temperatures and below average rainfall this year, large parts of the country face above normal bushfire potential over the coming months. The *Southern Australia Seasonal Bushfire Outlook 2018*, shows the most at risk areas. The warmer and drier than average weather over recent months, combined with the forecasts for spring, suggest that the southern fire season is likely to commence earlier than usual and be more active than normal.

