SA Health Viral Respiratory Disease Pandemic Response Plan (including influenza, COVID-19, SARS & MERS)

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Government of South Australia

SA Health

Document Control Information

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6.0	Disaster Preparedness and Resilience Branch (DPRB)	Complete review and update to incorporate all viral respiratory diseases, such as influenza, COVID-19, coronavirus, SARS and MERS into a single plan, and to bring in line with recent updates and new national publications for pandemic planning, including the Australian Health Management Plan for Pandemic Influenza and Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19).	Endorsed by SA Health Strategic Operations Group; Approved by SA Health IMT	March 2020

Table of Contents

Executive Summary

Introduction

The *SA Health Viral Respiratory Disease Pandemic Response Plan* (VRDPR Plan) provides a strategic outline of the South Australian Government and SA Health's response to a viral respiratory disease pandemic in Australia, and describes the high level decisions and broad approach the South Australian Government and health sector will take to respond to the pandemic.

Purpose and scope

The aim of the plan is to minimise the consequences of a viral respiratory disease pandemic on the South Australian health system, community and economy.

The plan provides the platform to manage a disease outbreak but allows for flexibility in its application according to the severity and transmissibility of the particular disease outbreak. Its intention is to inform health care workers, government agencies and the community and contains a series of sub plans relating to specific topic areas and is consistent with the Australian Government's *Australian Health Management Plan for Pandemic Influenza 2014*, the *SA Health Human Disease Hazard Plan* and the *Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19)*.

This plan does not focus on disease prevention measures but is structured to reflect the AHMPPI preparedness and response stages, that change over the course of responding to the pandemic:

Phase	Stage	Activities	Equivalent SEMP phase
Preparedness	Preparedness	> No novel strain detected (or emerging strain under initial investigation	Preparedness
Response	Standby	> Sustained community person-to-person transmission overseas	Alert Lean forward
	Action	Two stages: > Initial (when information about the disease is scare) > Targeted (when enough is known about the disease to tailor measures to specific needs)	Stand up
	Stand down	> Virus no longer presents a major public health threat	Stand down
Recovery	Recovery	> Support to those affected with ongoing medical, psychosocial and economic assistance	Recovery

Comprehensive approach

This plan takes an emergency response approach and is readily integrated into broader emergency arrangements, including the importance of seeing the management of all hazards within an ongoing cycle of prevention, preparedness, response and recovery.

Implementation of the plan: objectives and activities

A viral respiratory disease pandemic represents a significant risk to Australia and has the potential to cause high levels of morbidity and mortality and to disrupt our community socially and economically. The overarching objectives and activities in all stages will be to:

> Minimise transmissibility, morbidity and mortality;

> Minimise the burden on/support health systems and

> Inform, engage and empower the public.

Communications

A comprehensive communications strategy, implemented across all stages of the pandemic is a key component of a successful response. Sharing information between those managing the response will enable the coordination of resources, better inform decision makers and provide access to expert guidance on application of response measures. Communication with the public, through the media and other sources, will shape the public perception of risk and public engagement in measures to address the pandemic.

National Incident Room

The Australian Government Department of Health National Incident Room (NIR) provides a point of communication with the Australian Government for health incidents. During the standby, initial action, targeted action and stand down stages, the NIR will provide timely situation reports to relevant Australian Government agencies, state and territory health authorities and other relevant stakeholders. Consistency of shared information during this process is vital and all relevant information received from the NIR will form the substance of situation reports (sit reps) from SA Health as Control Agency.

Key health stakeholders (healthcare workers, health and social service providers)

Healthcare workers and providers need access to timely, accurate and comprehensive clinical information and advice to effectively manage patients, implement pandemic control measures and minimise their own risk of exposure. Such advice will be provided nationally by the Communicable Disease Network Australia (CDNA) and other clinical groups, as appropriate, and endorsed by AHPPC. In the South Australian context, these messages will be contextualised for South Australia and coordinated and distributed by the SA Health Media and Communications Branch.

Whole of government (WoG)

SA Health will also communicate and work with the following key agencies across government, in addition those communications held within the SEC environment, that may also be impacted:

> Local Government (through the Local Government Association)
> Schools and educational services (through Department for Education)
> SA Prison Health Service.
> Primary Industries and Regions SA (PIRSA)
> Public transport (through Department for Planning, Transport and Infrastructure)
> Industry (particularly small business)
> Vulnerable groups (through Department of Human Services), including Disability
> Commonwealth Aged Care and peak Aged Care organisations
> Aboriginal and Torres Strait Islander organisations

Structure of the plan

The VRDPR Plan is structured in two parts, with the first providing details about the state approach in responding to a pandemic, and the second part provides the high level operational response approach across each of the AHMPPI stages:

> Part one: Overview of the state approach
> Part two: Operational plan

Part one: Overview of the state approach

Introduction

Background

A viral respiratory disease pandemic represents a significant risk to South Australia, as it has the potential to cause high levels of morbidity and mortality, challenge the ability of the state health system to cope and disrupt the community socially and economically.

Viral respiratory diseases have the greatest potential to cause pandemics, due to the strong link between the emergence of a novel pandemic strain of virus and the human-animal transmission interface. For example, novel influenza strains were transmitted by animals such as birds (H5N1 Avian Flu) and pigs (H1N1 Swine Flu); while coronaviruses such as Severe Acute Respiratory Syndrome (SARS) was linked to civets and bats, and Middle East Respiratory Syndrome (MERS) was linked to camels. COVID-19 was first reported in December 2019 in Wuhan City in China and linked to a local seafood/live animal market in Wuhan, Hubei province, with pangolins considered the potential animal host.

Influenza and coronaviruses are known to have high genetic mutation rates which lead to a significant potential for the emergence of novel viral strains infectious to humans. Novel viral strains are capable of causing significant morbidity and mortality due to the lack of immunity in human populations.

Influenza is an acute viral infection characterised by fever, headache, muscle aches, fatigue, runny nose, sore throat and cough, although it may be asymptomatic (a patient is a carrier for a disease or infection but experiences no symptoms). Complications such as pneumonia, sepsis (blood infection) and secondary bacterial infection can occur. Influenza is transmitted from person to person through respiratory droplets from coughing or sneezing, or direct contact with respiratory secretions. Influenza is typically infectious 1 day before until 5-7 days after symptom onset, but in some individuals, potentially for up to 3 weeks.

Coronaviruses are a large family of viruses that cause illnesses that can range from the common cold to more severe respiratory diseases, including complications such as pneumonia. Transmission occurs person to person through close contact with an infectious person, contact with droplets from an infected person's cough or sneeze, or touching objects or surfaces (like doorknobs or tables) that have cough or sneeze droplets from an infected person. COVID-19 to date is characterised by fever, or acute respiratory infection (eg shortness of breath or cough) with or without fever, and has an average incubation period of 5.2 days, with an infectious period of 1 – 14 days, however, the case definition for COVID-19 is still evolving, with possible asymptomatic carriers.

Outbreak	Countries	Cases	Deaths	Fatality rate
Bird Flu – 1996	18	861	455	60%
SARS – 2002	29	8036	774	9.5%
Swine Flu – 2009	214	> 762,630,000	284,500	0.02%
MERS – 2012-19	27	2494	858	34.4%
COVID-19 – 2019-2020 *	194*	354,867*	16,030*	4.5%*

* Data as at 25 March 2020

Prevention strategies for all novel viral respiratory diseases, prior to vaccine development, include standard hygiene practises, such as covering mouth and nose when coughing or sneezing, washing hands regularly with soap and water or alcohol-based hand rub, and avoiding unprotected close contact with those who are currently infected.

Purpose and scope

The purpose of the *SA Health Viral Respiratory Disease Pandemic Response Plan* (VRDPR Plan) is to provide a strategic outline of SA Health responses to a viral respiratory disease pandemic. The VRDPR Plan should be read in conjunction with the *Australian Health Management Plan for Pandemic Influenza*, the *SA Health Human Disease Hazard Plan* and the *Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19)*.

This VRDPR Plan does not focus on disease prevention measures, but describes the high level decisions and broad approach the South Australian health sector will take to respond to a pandemic.

The aim of the plan is to minimise the health consequences of a viral respiratory disease pandemic on the South Australian community and minimise disruption to the South Australian health system.

The plan may also be applied to the management of other highly transmissible respiratory infections associated with significant morbidity (diseased state) or mortality (number of deaths within the population), including severe seasonal influenza.

In addition, the plan aims to inform whole of government measures intended to minimise adverse social and economic consequences associated with a human disease outbreak in South Australia.

Links to resources including guidelines and tools to assist hospital and health services with operational planning are detailed in Part two of the plan, and also listed in Appendix 3.

The development of this plan has been informed by the:

> *Emergency Response Plan for Communicable Disease Incidents of National Significance: National Arrangements (National CD Plan)* — a national whole of government communicable disease pandemic plan

> *Australian Health Management Plan for Pandemic Influenza* (AHMPPI) — a national health influenza pandemic plan

> *Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19)* – a national response plan specifically for COVID-19

> *State Public Health Plan 2019-2024* – provides a framework for early action activities to protect health, prevent illness and promote physical and mental health and wellbeing for all South Australians

> *State Emergency Management Plan* – which details the emergency arrangements within South Australian Government

> *Public Health Emergency Management Plan* (PHEMP) – which details the public health arrangements within South Australian Government.

> *Human Disease Hazard Plan* (HDHP) — which details the leadership role for planning emergency management activities around a human disease hazard

> *SA Health Disaster Resilience Policy Directive*, and its associated Frameworks, including the *Emergency Management Framework*, *Business Continuity Management Framework* and *Training and Exercising Framework*.

Objectives

The activities and objectives required to support the system and community will involve SA health, state government agencies, local government and non-government organisations in a collaborative approach.

The plan seeks to inform of the hazards and associated impact of a pandemic on the South Australian population and identify strategies that need to be put in place to prepare for, delay, contain and minimise the human, social, economic and environmental disruption that may occur during a pandemic.

The objectives described in this plan reflect the key aspects of the AHMPPI:

> Ensure the health system is prepared for a viral respiratory disease pandemic by using existing systems and governance mechanisms as the basis of the response

> Recognise the potential to apply this plan to seasonal influenza when it threatens to overwhelm South Australia's health system

> Capitalise on existing emergency management arrangements within South Australia by developing and maintaining stronger links with other government agencies, non- government health services and the community

> Incorporate a flexible and scalable approach which is proportionate to the level of risk and appropriate to the level of impact the pandemic is likely to have on vulnerable populations, and on the community as a whole

> Emphasise communications activities as a key tool in the management of the response to ensure timely, clear, accurate and transparent information is disseminated to health services staff, the community and the media

> Ensure a health system response based on the principles of emergency risk management for health in full compliance with South Australian, Australian and international laws (World Health Organisation, 2013)

> Monitor and report on the epidemiology of the pandemic

> Minimise transmission, morbidity and mortality.

Structure of the Plan

As the nature of the viral respiratory disease makes it difficult to control the transmission of this disease, it is unlikely it will be possible to prevent its entry into Australia once a pandemic is spreading globally.

This plan does not focus on prevention measures but is structured to reflect the AHMPPI preparedness and response stages:

Phase	Stage	Activities	Equivalent SEMP phase
Preparedness	**Preparedness**	> Develop plans, and regularly review and exercise them > Establish pre-agreed arrangements > Research pandemic specific management strategies > Ensure knowledge hub established, and resources are current, available and ready for rapid response > Monitor the emergence of diseases with pandemic potential and investigate outbreaks if they occur	Preparedness
Response	**Standby**	> Monitor and investigate sustained outbreak overseas > Identify and characterise the nature of the disease, and clinical severity > Prepare to commence enhanced arrangements, including strategies to minimise risk > Communicate to raise awareness and confirm governance arrangements	Alert Lean forward
	Action	Action is divided into two groups of activities: *Initial (when information about the disease is scare)* > Minimise transmission > Preparing and supporting health system needs > Manage initial cases > Identify and characterise the nature of the disease within the Australian context > Provide information to support best practice health care and to empower the community and responders to manage their own risk of exposure > Support effective governance *Targeted (when enough is known about the disease to tailor measures to specific needs)* > Ensure a proportionate response > Support and maintain quality care > Communicate to engage, empower and build confidence in the community > Provide a coordinated and consistent approach	Stand up

	Stand down		Support and maintain quality care	Stand down
		>	Cease activities that are no longer needed, and transition activities to seasonal or interim arrangements	
		>	Monitor for a second wave of the outbreak	
		>	Monitor for the development of antiviral resistance	
		>	Communicate to support the return from pandemic to business as usual	
		>	Evaluate systems and revise plans/procedures	
Recovery	Recovery (not the primary focus of this plan)	>	Virus no longer presents a major public health threat	Recovery
		>	Provide people and staff affected with ongoing medical, psychosocial and economic support	

Planning assumptions

This plan is based on a set of assumptions around incubation period, attack rate, modes of transmission and survival of the virus using available scientific and medical evidence. As a pandemic emerges it is essential to reassess these assumptions as quickly as possible to allow time to adjust the responses if the pandemic virus appears to behave differently from what the initial assumptions suggested. These assumptions are detailed in the AHMPPI.

This plan is based on the following assumptions:

> The next pandemic will emerge overseas
> Implementation of strategies to minimise the spread of the disease will be effective
> The pandemic virus will be susceptible to antiviral agents (i.e. neuraminidase inhibitors)
> A vaccine will be developed to enable the outbreak to be controlled.

Key aspects of the plan

The key factors in this VRDPR plan's approach include:

> The use of existing systems and governance mechanisms, particularly those for other respiratory diseases and human biosecurity
> A flexible approach that can be scaled and varied to meet the needs experienced at the time
> Evidence-based decision making
> Strong linkages with emergency response arrangements
> Clear strategic approaches to the collection of national surveillance data
> An emphasis on communication activities as a key tool in management of the response.

Comprehensive approach

This plan takes an emergency response approach as its framework. This approach will allow it to be readily integrated into broader emergency arrangements.

Therefore, it is consistent with Australia's strategic approach to emergency management, including the importance of seeing the management of all hazards within an ongoing cycle of prevention, preparedness, response and recovery.

Legislation

In the event of a public health emergency involving a communicable disease, Australian and South Australian legislation provide a legal framework to support measures that may be required to mitigate the threat. However, implementation of measures will rely on voluntary compliance rather than legal enforcement wherever possible.

The principal legislation includes the:

> *International Health Regulations 2005*

> *Biosecurity Act 2015*

> *National Health Security Act 2007*

> *Therapeutic Goods Act 1989*

> *Emergency Management Act 2004*

> *South Australian Public Health Act 2011*

> *Health Care Act 2008*

> *Controlled Substances Act 1984*

Business continuity

Viral respiratory diseases present a unique challenge to health services and business units in the management of staff absenteeism and the maintenance of essential services.

All South Australian Government agencies are required to undertake Business Continuity Planning (BCP). These plans should mitigate the impact of a viral respiratory disease pandemic, particularly considering potential staff shortages.

Business Impact Assessments (BIAs) are an analysis of business processes and an evaluation of their criticality during disruption. BIAs are conducted as part of the business continuity process to identify Critical Business Functions (CBFs). CBFs are business processes and/or functions identified as critical to achieving key business objectives or maintaining essential operations. In identifying their CBFs, health services and LHNs should pay specific attention to managing staff absenteeism during a pandemic and/or supplementing critical services with staff from less critical areas.

For further detail on BIAs and BCPs please read the *SA Health Business Continuity Management Framework* on the Disaster Preparedness and Resilience page on the SA Health website.

Escalation

It is important to have a proportionate response. It needs to be flexible to scale the response to be proportionate to the risk associated with the current disease.

This relates to the:

> Clinical severity of the disease will affect the number of people that present to primary care, or require hospitalisation (and subsequently the burden on the health system), as well as the number of deaths

> Transmissibility of the virus between humans, and how this will affect the breadth and speed of spread across the world, the Australian and South Australian community

> Capacity of the health system, which affects the way healthcare is provided, including capacity, specialist expertise, acute care, intensive care nursing, and ambulance services

> Effectiveness of interventions and its effect on an individual's health and levels of morbidity and mortality, including antivirals and vaccine

> Vulnerability of the population and the influence this will have on spread and clinical severity of the disease

> The lack of immunity, and whether those people with underlying illness or immunocompromised conditions are likely to experience more severe outcomes.

Each outbreak is different clinically, so activities need to be flexible and scalable across the following scenarios:

> If **clinical severity is low**, the majority of cases are likely to experience mild to moderate clinical features. People in at-risk groups and those with comorbidities may experience more severe illness, so strategies for at risk groups may be required. At the peak of the outbreak, primary care and hospital services may become stretched, but existing legislation is likely to be sufficient to support activities

> If **clinical severity is moderate**, the majority of cases are likely to experience severe illness the number of presentations may be more than for severe seasonal influenza. People in at-risk groups may experience severe illness. At the peak of the outbreak, primary care and hospital services will be under severe pressure, particularly areas associated with respiratory illness and acute care. Non-urgent procedures and activities may need to be scaled back and surge staffing may be needed, in addition to alternate models of clinical care

> If **clinical severity is high**, then widespread severe illness will cause concern and challenge the capacity of the health sector. All areas across the system will be stretched to capacity, especially primary care, acute care, pharmacies, nurse practitioners and aged care facilities, and mortuary services will be under pressure. Healthcare staff may themselves be ill or have to care for ill family members, while the demand for specialist equipment and personnel will also challenge capacity. Emergency legislation may be needed to support outbreak specific activities.

Triggers to activate the plan

It is hard to identify clear triggers for activation of a pandemic viral respiratory disease plan, however activation will take into consideration:

> Declaration of a Public Health Emergency of International Concern (PHEIC) or a pandemic by the World Health Organisation

> A report from the Australian Government Department of Health of the emergence of a novel influenza virus with pandemic potential in Australia or overseas

> Disease surveillance and reporting data indicating community transmission of a novel virus with pandemic potential has occurred

> Health service capacity, including the potential or actual overwhelming of the health system by seasonal influenza

> Morbidity and mortality rates of the novel virus.

The National Incident Room (NIR) in the Department of Health will function as the National Health Sector Emergency Operations Centre and the National Focal Point (NFP) under the International Health Regulations. The State Control Centre – Health (SCC-H) will function as the State Health Sector Emergency Operations Centre and State Emergency Committee (SEC) will functions as the State Emergency Operations Centre.

Authority to activate the plan

The Chief Public Health Officer (CPHO) has authority to activate the plan after consultation with subject matter experts and in consultation with the Chief Executive, SA Health and Australian Health Protection Principal Committee (AHPPC).

Activation of other plans

The VRDPR Plan will be independent of activation of whole-of-government or jurisdictional plans.

Governance

A clear understanding of the roles and responsibilities between parties responding to a viral respiratory disease will support quick and appropriate decision making and the efficient, coordinated use of resources.

Roles and responsibilities

The WHO advocates multi-sectorial linkage and integration across the whole of government and the whole of society (World Health Organisation, 2013).

SA Health is the Control Agency for the state's response to a human disease event as outlined in the State Emergency Management Plan (SEMP) and is responsible for state-wide strategic preparedness for, response to, and recovery from health aspects of a pandemic.

The State Human Disease Committee (SHDC) is responsible to the State Emergency Management Committee (SEMC) for ensuring a coordinated approach to pandemic planning and preparedness across South Australian Government.

Health services and Local Health Networks (LHNs) are responsible for tactical and operational preparedness and response according to the principles outlined in this plan.

SA Health is responsible for engaging other South Australian and Australian Government departments, external health services and community-based non-government organisations to ensure South Australia's whole of society response will be integrated and comprehensive in the event of a pandemic. As stakeholders, State Government agencies are responsible for developing their own pandemic plans in accordance with national and jurisdictional arrangements and for incorporating pandemic viral respiratory disease into overall emergency management and business continuity arrangements.

Australian Government roles and responsibilities are outlined in the National Action Plan for Human Influenza Pandemic 2011 and throughout the AHMPPI.

For further details regarding SA Health roles and responsibilities for preparedness and response in an 'all-hazards' approach, please view the SA Health Emergency Management Framework on the SA Health website.

Incident management

As Control Agency for human epidemic, and food and drinking water contamination, SA Health will ensure it complies with the *Emergency Management Act 2004* and State Emergency Management Plan (SEMP), as well as the *SA Public Health Act 2011* and Public Health Emergency Management Plan (PHEMP). As outlined in the South Australian Government Control Agency - Common Incident Management Framework (CIMF), SA Health will also ensure functional management is applied at all levels during emergencies, by embedding the ten Control Agency responsibilities within its incident management arrangements. **Health services must apply these responsibilities in their incident management systems**; however, the responsibilities should be applied as a functional approach to management rather than prescriptive and restrictive positions or posts to be allocated in an Incident Management Team (IMT).

Command and control

SA Health (including SA Ambulance Service) has adopted the command and control structure, from the CIMF. This structure outlines a clear process of command, control and communication within the pre-hospital and hospital settings. Any command and control structure must apply levels of command to appropriate positions of leadership, reflecting responsibility and accountability within the agency, supported by appropriate education and exercises.

The Chief Public Health Officer (CPHO) or delegate, will facilitate the State Controller role (supported by the State Commander Health) and function during a human epidemic, such as a viral respiratory diseases pandemic. The State Commander is then responsible for SA Health's response (excluding SA Ambulance Service) and maintains a strategic approach in dealing with the incident(s) working within the CIMF. Local/regional health service operations will remain the responsibility of the relevant executive appointed as the Network Commander for that health service.

In the event of a declared identified major incident, major emergency, or disaster under the Public Health Act 2011 or Emergency Management Act 2004, the State Commander will notify the SA Health State Controller - Health (SC-H) or delegate, who will be responsible to the Chief Executive and the Minister for all health response activity. The SC-H may choose to assume the position of State Commander or retain a separate and distinct State Controller whilst executing their role as SC-H.

For further detail regarding command and control and incident management visit the Disaster Preparedness and Resilience page on the SA Health website.

Subject matter experts

Subject matter experts may be required to act as advisors to the State Control Centre – Health (SCC-H) and State Commander's IMT. Subject matter experts provide strategic advice on the public health management of communicable diseases and clinical care within South Australia.

Whole of government (WoG)

A viral respiratory disease pandemic will disrupt South Australia's social and economic functioning, and a whole of government response will be required to maintain essential services. Some predictions of the course of a pandemic and the demands it may make on our health systems and wider society can be made in comparison with seasonal influenza and past pandemics. Using this information, a menu of actions and guide to implementation of those measures has been developed as part of the AHMPPI, and would be likely to effectively meet the objectives of both the AHMPPI and this VRDPR plan. The appropriateness of the recommended measures should be examined considering what is known of the pandemic virus, the vulnerability of the community (particularly at-risk groups), and the current resource constraints.

As Control Agency for human epidemic, food and water contamination and Hazard Leader for human disease, SA Health will work closely with AHPPC in determining the method and timing of implementation of these measures. Where implementation will or is likely to have an impact on the community (eg social distancing) implementation will also be subject of careful consideration by AHPPC, the Australian Government and the South Australian Government through the State Coordinator.

Local Government

In the event of a pandemic, Local Government across Australia is likely to be involved in supporting national and state and territory response and recovery activities. In South Australia, the Local Government Association (LGA) is a member of the State Human Disease Committee and will play a significant role in ensuring communication with Local Government across the state regarding planning for pandemic viral respiratory disease. The LGA will also ensure that Local Government issues are heard at both the state and national planning forums for pandemic viral respiratory disease.

In 2007, the LGA developed Business Continuity Guidelines for South Australian Local Government. The guidelines are formed as a structured risk management process as outlined in AS/NZS 4360 and can be found on the website by visiting http://www.lga.sa.gov.au

Local Government's role would be guided by SA Health, but is likely to include dissemination of information (web, social media, pamphlets etc.) and possible immunisation capacity.

Schools and educational services

The Department for Education (DED) oversees early childhood care and pre-school services, provides services and supports that benefit children and families and is responsible for leading and managing South Australia's education system.

If a pandemic is imminent or present DED will release information, through established communication channels, alerting sites on protective and preventative measures that can be taken. Individual sites will be responsible for checking and disseminating this information and ensuring required actions are implemented.

Infection control measures are also available for DED employees from within the Infection Control Procedure available from the DED website by visiting www.decd.sa.gov.au

SA Prison Health Service

The SA Prison Health Service (SAPHS) is considered to be a part of the Central Adelaide Local Health Network structure. In the event of a viral respiratory disease pandemic, SAPHS will work in collaboration with the Department for Correctional Services (DCS) and health services to ensure health needs are met for patients, appropriate with that which they would receive in the general community within the public health system.

Primary Industries and Regions SA (PIRSA)

Prevention

> Provide influenza vaccinations for all PIRSA personnel

> Maintain relationships and communication paths with livestock industry stakeholders.

Preparedness

> Maintain business continuity plans to ensure loss of workforce impacts are minimised

> Contribute to the development and maintenance of the SA Health VRDPR Plan

> Share information on avian influenza surveillance in animals with SA Health

> Advise all PIRSA staff to maintain vaccination status for influenza.

Response and recovery

> Communicate health messages to PIRSA personnel to support SA Health activities and minimise business interruption

> Provide information on the nature of disease to animal health industries:

o To ensure biosecurity measures are implemented to protect livestock and the workforce from infection

o To ensure market and trade access is maintained

> Provide human resources and information to SA health to support the response

> Undertake avian influenza surveillance as agreed between SA Health and PIRSA.

Public transport

Public transport covers the operation of the state's passenger transport network, including bus, train and tram services and the regulation of the state's taxi industry by the Department of Planning, Transport and Infrastructure (DPTI). This includes supporting the provision of regional and community passenger transport networks. The focus is to provide a safe, effective and customer-focused public transport network for all South Australians.

DPTI has Emergency Management Plans and supporting Business Continuity and Recovery Plans that include coverage for pandemic viral respiratory disease for the train and tram network. These plans are tested and updated for currency on a regular basis, and used in live situations during major disruptions to the Adelaide Metropolitan Passenger Rail Network.

The Adelaide Metropolitan Bus Network is provided under contract to DPTI through Bus Service Contractors. The contracts with DPTI require Bus Service Contractors to have in place a current Emergency Management Plan and supporting Business Continuity Plans that include coverage for pandemic viral respiratory disease outbreak.

In all instances the Business Continuity Plans list the strategy and plan for the provision of public transport services even at reduced levels to cover identified critical and key strategic services while it is safe to do so, or until instructed by the State Emergency Management Controller or representative (SA Heath in terms of pandemic) to cease operations to limit the spread of infection.

Industry

There are over 139,000 small businesses in South Australia, representing 97.5 % of total businesses in the state. The Department for Trade and Investment provides resources and support programs to assist business intenders and existing businesses to grow. A key element of these resources is the "Business Continuity Planning (BCP)" workbooks and checklists available www.statedepartment.sa.gov.au/smallbusiness.

BCP sets out how a business will operate following an incident and how it expects to return to 'business as usual' in the quickest possible time afterwards. Disruptions to business can be a result of natural disaster, an electrical blackout or societal hazards such as criminal activity or infrastructure failure. Even greater threats to business may include national and international events such as an outbreak of pandemic viral respiratory disease. The Department delivers BCP workshops to interested groups throughout South Australia.

The Department's Small Business Unit works closely with industry bodies such as Regional Development Australia, Business Enterprise Centres, industry associations and individual businesses to identify the impact of a disaster on the business. In the event of a pandemic viral respiratory disease incident, the Department can assist these businesses identify possible ways to continue their business operations and recover from the disaster as quickly as possible.

Vulnerable groups

The Department of Human Services (DHS) has developed and maintains a Pandemic Influenza Plan to reduce the risk of harmful effects of pandemic viral respiratory diseases on vulnerable people who are clients of DHS or DHS-funded service providers.

The plan includes measures in preparedness and response to:

> prioritise the most vulnerable DHS clients for service provision

> support client resilience

> ensure continuation of funding to DCSI-funded service providers

> ensure continuity of essential services in particular during workforce depletion

> reduce the spread of infection through hygiene practices, contact avoidance and use of PPE.

Implementation

Preparedness

A viral respiratory disease pandemic represents a significant risk to Australia and has the potential to cause high levels of morbidity and mortality and to disrupt our community socially and economically. The overarching objectives and activities in all stages will be to:

> Minimise transmissibility, morbidity and mortality;

> Minimise the burden on/support health systems and

> Inform, engage and empower the public.

To mitigate this risk, the health sector will maintain an ongoing state of preparedness to respond to a pandemic. When no pandemic is occurring (the inter-pandemic period) preparedness activities will focus on our readiness to respond promptly, should a pandemic emerge. These activities will focus on:

> Establishing pre-agreed arrangements by developing and maintaining plans

> Ensuring resources are available and ready for rapid response in accordance with these plans

> Ensuring public information is continuously and readily available including infection control campaigns

To develop and maintain preparedness to implement these arrangements, pandemic plans and arrangements should be regularly exercised and reviewed to ensure understanding of arrangements and capacity to implement them.

The activities undertaken during preparedness will be based on existing arrangements for seasonal influenza and the monitoring of communicable diseases. Should a virus of concern emerge, existing National and South Australian surveillance systems will monitor the situation and advise on the need to enhance existing arrangements for managing viral respiratory disease by escalating to the response stage. The decision to formally escalate from preparedness, standby and response will be made by the Chair of AHPPC, in consultation with AHPPC members (in South Australia this is the CPHO) and advisory bodies.

Response

Standby

The importance of the standby phase is to communicate and raise awareness of the potential emergence of a pandemic.

Preparing to enhance arrangements and identifying characteristics of the virus to assist with the dissemination of information and potential treatments is also vital.

Response – initial and targeted

In weighing up options for both standby and response, two key principles should be applied:

> The use of existing systems and governance mechanisms

> Strong linkages with emergency response arrangements, to capitalise on existing systems and avoid duplication

In escalating through the response phases, adherence to these two key principles will assist in implementing response activities:

> Allocating resources where they are needed (including anticipation of when they are needed, as this will change over time)

> Putting in place strategies to supplement likely shortfalls (eg loss of workforce, subsequent reduction in services or increased demand for services, availability and appropriate use of Personal Protective Equipment)

> Reducing the risk to vulnerable people

> Minimising disruption to the community

> Providing a response that is proportionate to the level of impact

Stand down and recovery

Dependent on the scale of the outbreak, recovery following a pandemic could be significant and require a whole of government and community response. The State Recovery arrangements would be implemented to facilitate the required recovery response.

Stand down activities will start with the onset of a decline in presentations and recorded cases and will take a number of weeks in the event that case numbers do not again peak in numbers. The following table provides some general guidance on recovery activities which will be dependent on the severity of the outbreak and its health system and social impacts.

Implementation activities during response phase

Communicable Diseases Control Branch

Public health workforce surge

During a pandemic, it is important the public health workforce has adequate capacity to deliver services effectively. Identifying available pools of surge personnel with relevant skills is a key feature of public health emergency preparedness and will contribute to the efficiency of the pandemic response. Staff with various backgrounds may be engaged to provide the diverse skills required during a pandemic.

Activities that may need additional support during a protracted public health surge include:

> Case and contact tracing

> Infection prevention and control

> Staffing and management of Incident Management Teams

> Health risk communication (for both the general public and health care professionals)

> Information management

> Interpretation and translation

> Laboratory liaison

> Surveillance

> Managing enquiries from the public

> Logistics

> Document control

Surveillance - roles and responsibilities

SA Health is responsible for facilitating individual case and contact data collection and timely reporting of surveillance data to the Australian Government Department of Health. In South Australia, the public health response will be implemented largely through the DHW Communicable Disease Control Branch (CDCB).

Viral respiratory disease surveillance

> Enables the detection of pandemic viral respiratory disease as early as possible, and monitoring of the characteristics of the infection in order to facilitate appropriate public health responses and public health activities to limit the spread of disease

> Includes clinical and laboratory diagnoses of viral respiratory disease and influenza-like illness

> Enables contact tracing/surveillance to be carried out by communicable disease control units, locum services, emergency departments, general practices, and clinical laboratories, to enable isolation/quarantine, early treatment and timely interventions.

For further detail regarding planning for surveillance activities during pandemic, read the **Surveillance Sub-Plan** on the Disaster Preparedness and Resilience page on the SA Health website.

Epidemiological data

Influenza (seasonal, pandemic and avian influenza in humans) is a notifiable condition under the *South Australian Public Health Act 2011*. Any new viral respiratory disease pandemics can also be made notifiable under this legislation, such as in the case of COVID-19. Medical practitioners and diagnostic laboratories must notify the CDCB of patients with suspected or confirmed viral respiratory disease, as soon as practicable.

Routinely collected influenza notification data will be insufficient to meet information needs during the early stage of a pandemic. Previously agreed additional data elements will be collected and de-identified data supplied to the Australian Government Department of Health to enable the fastest possible characterisation of:

> Virus transmissibility and pathogenicity

> Population groups at high risk of complicated disease

> Predicted impact of the pandemic

Initially collected data will be additional to that required for case ascertainment and contact tracing required to inform local public health action. However, ongoing intensive collection of enhanced surveillance data to inform the national response is likely to be unnecessary and unsustainable.

The existing surveillance system will need to be scaled up to ensure data collection and management objectives can be met and to allow data to be drawn from a number of different sources.

Vaccine data

During a pandemic, access to a vaccination program is one of the main goals of a national pandemic response and collection of vaccination data, including adverse event data, will need to occur.

Containment

A layered containment strategy consisting of pharmaceutical measures and public health measures will be implemented in a pandemic.

Pharmaceutical measures

Interventions involving antiviral agents and vaccines are likely to play a significant role in reducing morbidity and mortality.

The pharmaceuticals referred to in this plan include antivirals, candidate pandemic vaccine (a vaccine based on a strain of influenza virus considered to have pandemic potential), customised pandemic vaccine (a vaccine based on the actual pandemic virus) and seasonal influenza vaccine.

Part 2 of the AHMPPI provides the operational plan and potential actions that could be implemented across stages of a pandemic for management of pharmaceuticals.

Part 3 of the AHMPPI provides evidence and tools to support decision making at a national, state and local level.

These actions may include the following:

> Antivirals for treatment of cases
> Antivirals for post exposure prophylaxis for contacts
> Antivirals for post exposure prophylaxis for at risk groups
> Antivirals for pre exposure prophylaxis for healthcare workers
> Candidate pandemic vaccine
> Customised pandemic vaccine
> Seasonal influenza vaccine.

Antivirals

The Medicines and Technology Policy and Programs Branch of SA Health has responsibility for managing the strategy and distribution of antivirals. The Australian Government Department of Health National Medical Stockpile of antiviral drugs will contribute to the healthcare sector emergency preparedness and response capability during a pandemic (see pandemic stockpile information below).

The implementation of the appropriate strategy for the use of antivirals will depend on:

> The stage of the pandemic
> The epidemiology including transmissibility and clinical severity
> Characteristics of the virus particularly around any antiviral resistance
> Pre-existing immunity
> Antiviral availability and practicalities such as logistics of antiviral delivery.

For further detail regarding antiviral measures read the **Antiviral Sub-Plan** on the Disaster Preparedness and Resilience page on the SA Health website.

Vaccine

Vaccination is the key tool to limit the number of individuals infected. Any vaccination strategy will be dependent on the pattern of disease and the recommendation from the Australian Government and the South Australian CHPO.

Guidelines are based on:

> Best practice principles drawn from National Health and Medical Research Council (NHMRC) recommendations

> Research into mass vaccination activities in Australia and overseas.

It may be necessary to prioritise vaccination of individuals at greater risk, such as healthcare workers or individuals at high risk of severe outcomes. If sufficient time and stocks of vaccine are available to vaccinate the wider population, distribution strategies might aim to target individuals more likely to spread infection.

Vaccine related strategies for candidate vaccines, which are developed prior to a pandemic, are different from those developed for customised pandemic vaccines.

Candidate pandemic vaccines:

> Prior variant viruses are all currently considered strains of pandemic potential, against which vaccine seed strains have been developed

> The effectiveness of candidate pandemic vaccines will depend on the similarity between the strain used to develop the vaccine and the strain causing the pandemic

> Administration of a candidate pandemic vaccine prior to established within-country transmission of an emergent strain would be recommended on specific advice from the WHO.

Customised pandemic vaccine:

> Once a novel strain of a viral respiratory disease has emerged, the WHO will recommend a suitable vaccine virus and the Australian Influenza Vaccine Committee will advise whether this is endorsed for use in Australia

> Following this advice, vaccine companies will work to develop a new vaccine for the strain. This development process may take several months, so the customised pandemic vaccine may not be available until the disease is widespread

> The Australian Government has arrangements in place to ensure that once a customised pandemic vaccine is developed, it could be purchased as quickly as possible.

Seasonal vaccination programs should be maintained and promoted to help reduce inter-current morbidity and mortality from these diseases during a pandemic and will contribute to global production capacity and local infrastructure for vaccinations, enabling better pandemic preparedness.

For more detail regarding planning for pandemic vaccination measures view the **Vaccination Sub-Plan** on the Disaster Preparedness and Resilience page on the SA Health website.

Pandemic stockpiles

Pandemic stockpiles are reserves of antivirals and/or PPE for use during a health emergency and are designed to supplement existing medical stock to ensure medical supplies do not run low during periods of extremely high global demand.

National stockpiles

National Medical Stockpile (NMS)

The Australian Government is responsible for maintenance and deployment plans relevant to the NMS. The Secretary of the Australian Government Department of Health and the Chief Medical Officer of Australia have authority to approve a stockpile deployment on request from state or territory authorities. South Australia's CHPO is responsible for requests to the NMS.

Antiviral stockpile

The provision of antivirals to cases and contacts (including healthcare workers) during a pandemic will be directed by the Australian Government Department of Health.

Antivirals available from the stockpile for influenza include:

> Oseltamivir (Tamiflu®)

> Zanamivir (Relenza®) - held at a national level only

Antibiotics for the treatment of secondary bacterial pneumonia associated with influenza infection are also held at national level - azithromycin, flucloxacillin and ceftriaxone.

State stockpiles

Antiviral stockpile

SA Health maintains responsibility for stockpile management of antivirals held in South Australia including:

> Monitoring stockpile levels

> Reporting on the status of the stockpile

> Deploying to LHNs as required.

LHNs, including hospital pharmacies holding or receiving stockpile antivirals, will be responsible for:

> Monitoring stock levels and requesting additional supplies

> Distributing of antivirals within the LHN

> Developing a standard operating procedure for antiviral distribution.

Personal protective equipment (PPE)

LHNs will be responsible for:

> Monitoring stock levels and identifying the need for additional supplies in response to extreme/unusual demand

> Distributing of PPE within their LHN

> Developing a standard operating procedure for PPE use and distribution.

The Disaster Preparedness and Response Branch, Department for Health and Wellbeing in collaboration with SA Health Distribution Centre, Procurement and Supply Chain Management will be responsible for:

> Monitoring state stockpile levels

> Reporting on the status of the stockpile

> Distributing to health services as required.

Access to the state PPE stockpile will be via request from Network Commanders to the SA Health IMT and State Commander.

Public health measures

During the early stages of a pandemic, public health measures used in conjunction with antiviral agents are the principal prevention and containment measures pending the availability of a vaccine.

Infection control measures

When a pandemic occurs, the appropriateness of recommended infection prevention and control measures will be reviewed by the Communicable Disease Network Australia (CDNA) and relevant experts. Advice confirming or altering existing measures will be provided to the Australian Government Department of Health and distributed to health services and key stakeholders.

Infection control has the potential to limit spread of respiratory infections throughout the community, as well as in healthcare settings.

Infection control for pandemic viral respiratory disease will involve a two-tiered approach:

> Standard precautions, which apply to all patients at all times

> Transmission based (contact and droplet) precautions.

For further detail regarding infection control measures then read the **Infection Control Sub-Plan** by visiting the Disaster Preparedness and Resilience page on the SA Health website.

Border measures

The Australian Government will decide whether to implement border measures to minimise transmission of the disease into the Australian community. The Australian Government has responsibility for implementing the following measures, if required:

> Pandemic specific in-flight announcements and on-board announcements on ships

> Distribution of communication materials for incoming or outgoing travellers

> Travel advice regarding high risk locations and to raise awareness of symptoms in returned travellers

> Information for border staff.

> Specialised border nursing service that undertake clinical assessment and test collection on any unwell or suspected cases.

In the event the Australian Government advises that entry/exit screening is required, SA Health will liaise with Australian Customs and Border Protection Service to determine appropriate deployment of border control personnel including, on the advice of AHPPC, medical staff.

For further detail regarding border control activities read the **Border Control Sub-Plan** by visiting the Disaster Preparedness and Resilience page on the SA Health website.

Social distancing

Social distancing is a community level intervention to reduce normal physical and social population mixing in order to slow the spread of a pandemic throughout society. Slowing down the rate of infection is just as critical to saving lives, because it helps to slow the spread of the virus within the community, allowing the health system, particularly hospitals, to respond effectively. During the COVID-19 outbreak the term "flatten the curve" has been used widely, where the aim is to keep the rate of cases below the 'healthcare system capacity' line demonstrated in the graph below through protective measures such as practicing good hygiene; isolating suspected and confirmed cases; and social distancing measures, such as cancelling mass gatherings:
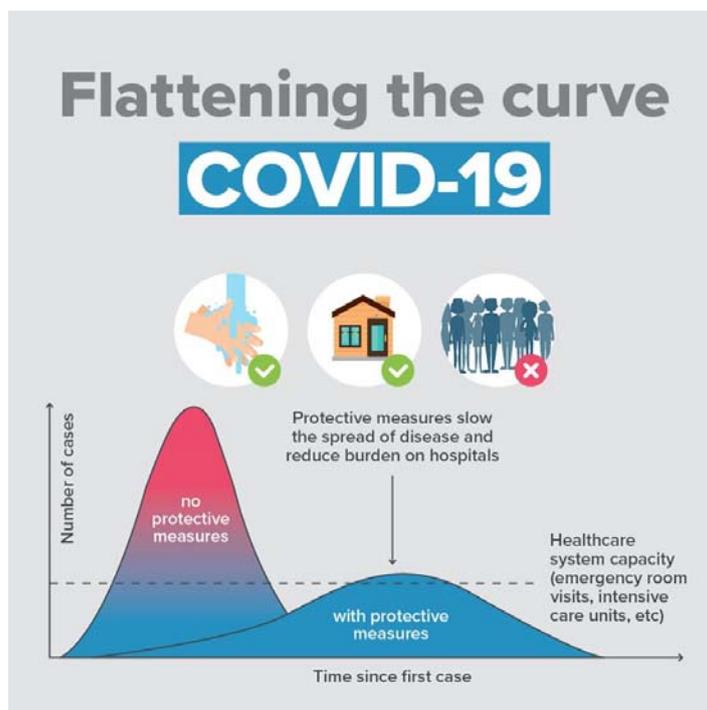
Decisions on implementation of social distancing measures, (ie proactive and reactive school closures, workplace closures and cancellation of mass gatherings) may have a profound effect on public anxiety and social cohesion and will be made in close consultation with AHPPC. The role of SA Health during a pandemic will be to make recommendations to the SEMC for consideration based on this national consultation process.

Isolation and/or quarantine of cases and contacts are related public health measures which aim to reduce infection transmission by reducing contact between infectious cases and uninfected persons. Health services are responsible for appropriately isolating cases and contacts within the healthcare setting and for advising on the appropriate isolation of cases and contacts within the community.

To facilitate community compliance with voluntary isolation, cases and contacts must be able to access medical care and non-health services such as food supply, social support and psychological assistance, if required. Management of cases and contacts in the community requires a whole of government and local government response and will be subject to consultation at the SEMC and State Emergency Centre (SEC).

Primary health care

Primary care is the first point of call for the majority of individuals seeking health care external to a hospital or specialist setting. Primary care incorporates multiple agencies and organisations, all of which link together and play a vital role in planning for all phases of a viral respiratory disease pandemic. Hospitals will not have the capacity to care for all viral respiratory disease cases, and much of the focus of pandemic planning in South Australia will be on care that can be provided in the community.

The primary care response will need to be built from the community based organisations and healthcare workers upwards, and not be a hospital-centric outreach response.

While it is hoped Community Flu clinics may be able to remove much of the load arising from pandemic viral respiratory disease away from general practice and hospitals, general practitioners (GPs) will be an integral part of the pandemic response. Other primary care providers and organisations will also be involved with the delivery of information, advice and home care (eg pharmacists, Royal District Nursing Service (RDNS), telephone information health lines, the Department of Human Services).

General practice will therefore need to be well prepared for an influx of potential pandemic viral respiratory disease patients prior to being advised of the imminence of a pandemic. General practitioners should consider suspending some face-to-face consultations (e.g. repeat prescriptions) and offer some clinical services by telephone to ensure the health and welfare of staff and patients during a pandemic. A pragmatic model for primary health care planning by key groups within the local community would be for at least three lead organisations within a region to drive the process of pandemic preparedness and planning. Medicare Local regions, the local hospital/community health service and the local district council could take this lead role in ensuring regional primary care planning for pandemic viral respiratory disease. This would ensure a coordinated approach to planning and response during a pandemic and that all stakeholders are aware of their roles and responsibilities during a disaster.

For further detail regarding primary health care activities read the **Primary Care Sub-Plan** by visiting the Disaster Preparedness and Resilience page on the SA Health website.

Role of the South Australia Ambulance Service

During a viral respiratory disease pandemic, normal SA Ambulance Service procedures for the transport of infectious patients to hospitals will be followed. Under these arrangements, each hospital will also have a plan for receiving patients with influenza like symptoms.

Transport arrangements and/or issues for viral respiratory disease patients during a pandemic will be determined by the SA Ambulance Service Incident Management Team.

For further detail regarding transport arrangements read the **Transport Sub-Plan** by visiting the Disaster Preparedness and Resilience page on the SA Health website.

Hospitals and Local Health Networks

The level and severity of a pandemic may vary depending on the disease spread and susceptibility of local populations. Even if clinical severity is low, LHNs are likely to be stretched to maximum capacity in areas associated with respiratory illness and acute care. Adjustments may need to be made to the routine delivery of services, admission and discharge criteria.

As much as possible, changes to aspects such as triage and discharge criteria are to be developed within each LHN to provide guidelines and to assist with the overall capacity of the hospitals.

In order to inform decisions on the management of clinical surge the following needs to be considered:

> Hospital bed numbers

> Emergency department bays

> Intensive care unit beds

> Community health resources

> Public health resources

> Laboratory capacity

> Pharmacy capacity.

Monitoring and reporting on human resource capacity is also essential and should include:

> Numbers and skill mix of staff available to work
> Numbers of staff on leave and reasons, especially sick leave related to pandemic viral respiratory disease
> Numbers of staff redeployed because of risk status
> Numbers of staff that have left the workforce and are potentially able to be recalled.

Patient flow, placement and segregation

Patient flow refers to the movements of patients in, through and out of the healthcare setting. The core principles of patient flow in SA Health are:

> improving the patient journey
> increasing access to services
> delivering best practice.

A key principal of improving patient flow during a pandemic will be hospital avoidance strategies such as flu clinics and services provided by SA Ambulance Service.

In the event of a viral respiratory disease pandemic, there will be an increased demand for isolation rooms in health facilities. Contact and droplet transmission-based precautions should be applied to all suspected or confirmed cases of pandemic viral respiratory disease (CDNA, 2011).

A suitable ward should be identified for the exclusive use of cohorting pandemic viral respiratory disease patients. When determining the location of the cohort ward consider:

> The ability to isolate the ward air-handling system
> The ability to limit entry/access to the ward
> Whether the ward contains the necessary equipment
> Whether there is a spatial separation of a minimum of one metre between bed spaces (National Health and Medical Research Council, 2010)
> The patient populations of adjacent areas. The cohort ward(s) should be separated from patients who are at greater risk of complications from pandemic viral respiratory disease.

Management of cohort areas should:

> Assign healthcare workers to cohorted patient care units only, wherever possible. Healthcare workers should not float or be assigned to other patient care areas
> Limit the number of persons entering the cohorted area to the minimum number necessary for patient care and support
> Limit patient transport by having necessary equipment (eg portable X-ray) available in cohort areas.

Flu/Fever/Respiratory Clinics

To prevent the spread of infection within hospitals and to prevent hospitals and primary care services being overwhelmed with pandemic cases, there is the potential for special hospital arrangements and the potential establishment of flu or fever clinics.

Special hospital arrangements will need to be well publicised to direct people with possible viral respiratory disease to designated locations.

Flu/Fever clinics will have a key role in the organised response to pandemic viral respiratory diseases. LHNs are responsible for developing plans for hospital flu clinics, whereby triage and assessment can be conducted in these clinics and patients streamed for admission to hospital or care at home, with consideration given to appropriate levels and types of support and follow up.

SA Health's Disaster Preparedness and Resilience Branch will be responsible for developing plans for community flu clinics required during the latter stages of a pandemic, where anticipated and/or actual presentations are beyond the capacity of LHN/hospital facilities and services.

For further detail regarding flu/fever clinics read the **Clinics Sub-Plan** by visiting the Disaster Preparedness and Resilience page on the SA Health website.

Emergency departments

Emergency departments (EDs) need enhanced surveillance of all presenting patients using a current pandemic case definition. EDs may consider external triaging and direct referral of patients, who meet a case definition, to the nearest flu clinic (if established).

Clear signage should be in place to advise patients with viral respiratory disease-like symptoms to inform triage staff. All patients presenting with viral respiratory disease-like symptoms should be provided with a surgical mask and directed to perform hand hygiene prior to further assessment.

Even if flu clinics are in place, EDs can still expect:

> Direct presentation of patients with suspected pandemic viral respiratory disease, especially out of hours
> Direct presentation of critical cases
> Referral of infectious patients from flu clinics for further treatment.

EDs should have in place a plan for managing infectious patients on presentation including:

> A separate waiting area
> Specific isolation rooms
> Dedicated staff (where possible) to assess suspected cases
> Specific procedures for assessment, testing and notification of pandemic viral respiratory disease
> Procedures for management of cases with consideration to specialised equipment that may be required
> Specific procedures for movement of patients with in the facility.

The Australasian College for Emergency Medicine (ACEM) has published guidelines for the Management of Severe Influenza, Pandemic Influenza and Emerging Respiratory Illnesses in Australasian Emergency Departments. This resource aims to provide guidance to fellows and trainees of the ACEM, as well as to other ED staff, on the management of severe seasonal and pandemic influenza, and emerging respiratory illnesses within EDs, please visit the ACEM website for more information.

Intensive care units

Past experiences have shown intensive care units are affected relatively early and more severely than other areas of the hospital. Demand for intensive care services during a viral respiratory disease pandemic is likely to exceed normal supply and this will be associated with an increased demand for specialised health care professionals (e.g. intensive care nurses), specialist equipment (e.g. ventilators) and beds.

During a pandemic alterations of normal standards of critical care and the access processes may be necessary. These changes and limitations will need to be implemented progressively as required.

It is the responsibility of LHNs to develop plans, inclusive of intensive care services, that specify responses to prolonged increases in intensive care service requirements. Plans will include consideration of early negotiations with private sector services to accept public sector patients when surge/demand issues arise.

Detail on hospital and LHN plans for Pandemic Viral respiratory disease will be contained in the LHN's individual plans.

Pathology services

The objectives of laboratory testing change over the course of a pandemic. In the early stages, the overall aim is to identify new cases of the disease to allow containment of an outbreak.

During a pandemic it is difficult to predict precisely where a new case of pandemic viral respiratory disease will present. Therefore, provision has to be made to either refer patients rapidly for specimen collection or provide collection at distributed sites. There is the potential that dedicated centres are established for specimen collection.

LHNs will be responsible for determining appropriate strategies for managing and servicing demand for pathology services within their facilities. The response to an evolving outbreak and development of dynamic strategies to cater for increases in demand will be informed by SA Pathology as part of the SA Health IMT.

For further detail regarding pathology services please read the **Pathology Sub-Plan** by visiting the Disaster Preparedness and Resilience page on the SA Health website.

Mental health and human social factors

As with most services, the occurrence of a pandemic can easily overwhelm or damage the capability of local mental health resources to meet community needs. LHNs will be responsible for developing structures and processes to assist and support the local mental health services to meet community needs in a collaborative, organised, effective, and culturally competent manner.

The role of mental health services will be to provide mental health information, consultation and support consistent with, and in support of, the general principles of the management of a viral respiratory disease pandemic. These principles include:

> Minimising serious illness and death

> Maintaining essential services

> Minimising social disruption.

Mental health information, consultation and support will be pivotal in managing the dynamic response to a pandemic and will include:

> Communications (strategic, professional, public and media)

> Leadership and organisation

> Mental health surveillance and clinical service provision

> Workforce education and training

For further detail regarding mental health and social factors please view the **Mental Health Sub-Plan** by visiting the Disaster Preparedness and Resilience page on the SA Health website.

Community home care support

During a pandemic, a significant proportion of the population will be unwell and unable to undertake normal daily activities, or they may be in situations where they routinely receive home care, or require special assistance due to their particular circumstances.

Demand for all healthcare services, including primary care services from GPs and home support, will be high and may exceed availability.

Non-essential health services may be rescheduled and patients discharged early from hospitals to enable the health system to respond to demands arising from the pandemic. Therefore, additional home support services, health and non-health, are likely to be needed. This will require a coordinated response from a number of services to enable people to recover at home.

The Department for Health and Wellbeing will require support from other agencies in order to maintain:

> Infection control policies (such as home quarantine)

> Minimum daily healthcare requirements

> Support to the well but vulnerable.

Management of the deceased

The risk of transmission from patients who have died during the infectious period of pandemic viral respiratory disease is low. However, it can be assumed there is infectious virus present in the respiratory tract for days and potentially weeks in a cooled body.

Precautions need to be in place for the funeral and related industries to minimise the risk of transmission of disease. Such precautions include the containment of bodily fluids.

All staff handling persons who have died while infectious with pandemic viral respiratory disease should follow standard precautions in addition to droplet and contact transmission-based precautions. Some high risk procedures such as embalming and autopsy may require a higher level of PPE to be worn.

For sensitivity issues the **Management of Deceased and Mortuary Services Sub-Plan** is confidential. Please contact the SA Health Disaster Preparedness and Resilience Branch on healthemergencymanagement@sa.gov.au for further information.

Workforce

Key Workforce issues around a pandemic are:

> Health, safety and welfare of employees

> Maintenance of business continuity.

A standardised approach to key workforce issues can be developed under the provisions of the Work Health and Safety Act 2012, Work Health and Safety Regulations 2012, Codes of Practice, and supporting policies and practices.

Managing injured/ill workers

During a pandemic viral respiratory disease, the potential for staff illness or injury may increase. Strategies to manage staff wellness and absenteeism may include:

> Undertaking risk assessment for identifying and managing staff at high risk of complications of viral respiratory disease. This may include the use of alternate work locations and/or duties to separate high risk staff from situations where they are likely to be exposed to pandemic viral respiratory disease

> Implementing staff viral respiratory disease screening procedures in all facilities, including self-monitoring by staff once signs and symptoms are known and can be communicated

> Referring symptomatic staff directly to a flu clinic or medical practitioner for an assessment and seeking advice about safe return to the workplace

> Careful consideration will need to be given to managing staff with respiratory symptoms presenting for work as this would be a significant route of transmission, particularly in health settings. Strategies for consideration include being sent home and use of face masks

> Providing support for workers who are affected including effective, timely and ongoing communications and Employee Assistance Programs

> Health service specific considerations may include implementing reactive and/or proactive prophylaxis treatment of healthcare workers including appropriate methodology for delivery via Worker Health and/or Infection Control nurses, Pharmacy departments or alternative means.

Industrial relations

During a pandemic, directives may be required which outline staff arrangements specific to the event, including leave applicable to staff who are sent home or called in. These decisions will be based on the clinical severity and transmissibility of the disease.

Workforce policies and procedures which may apply or may require clarity during a pandemic may include:

> Critical incident response and recovery
> Critical incident and conditions entitlements
> Volunteers
> Secondment
> Special leave, with pay
> Working from home
> Allowances
> Sick leave
> On call and recall
> Orientation, induction and mandatory training
> Indemnity guidelines.

For further detail read the **Workforce Sub-Plan** by visiting the Disaster Preparedness and Resilience page on the SA Health website.

Training

Agencies are responsible for ensuring all relevant staff are provided with appropriate training to enable them to undertake their duties safely and to the required standard.

Importantly, in the Response: Stand by phase, consideration for the types of training, including re-training to assist the current workforce, for example retraining of nursing staff who have previous critical care experience to assist the current workforce.

For pandemic specific information resources refer to Appendix 1 of this plan.

Financial impacts

Unplanned and significant costs may be incurred during a pandemic as with any emergency, such as costs incurred through loss of and replacement of workforce. Records of monetary costs should be accurate and timely, particularly if there is an intention to seek reimbursement.

Communications

A comprehensive communications strategy, implemented across all stages of the pandemic, is a key component of a successful response to a viral respiratory disease pandemic. As the presentation of a pandemic in Australia will inevitably be complex and varied it will be a priority to implement arrangements to support consistent and informative messaging.

Sharing information between those managing the response will enable the coordination of resources, better inform decision makers and provide access to expert guidance on application of response measures. Communication with the public, through the media and other sources, will shape the public perception of risk and public engagement in measures to address the pandemic.

National Incident Room

The Australian Government Department of Health National Incident Room (NIR) provides a point of communication with the Australian Government for health incidents. During the standby, initial action, targeted action and stand down stages, the NIR will provide timely situation reports to relevant Australian Government agencies, state and territory health authorities and other relevant stakeholders.

Consistency of shared information during this process is vital and all relevant information received from the NIR will form the substance of situation reports (sit reps) from SA Health as Control Agency.

Key health stakeholders (healthcare workers, health and social service providers)

Healthcare workers and providers need access to timely, accurate and comprehensive clinical information and advice to effectively manage patients, implement pandemic control measures and minimise their own risk of exposure. Such advice will be provided nationally by the Communicable Disease Network Australia (CDNA) and other clinical groups, as appropriate, and endorsed by AHPPC. In the South Australian context, these messages will be contextualised for South Australia and coordinated and distributed by the SA Health Media and Communications Branch.

For further detail regarding communications strategies to be employed during a pandemic read the **Communication Sub-Plan** by visiting the [Disaster Preparedness and Resilience](#) page on the SA Health website.

At risk groups

The AHMPPI acknowledges certain groups of people (at risk groups) are expected to be at increased risk of complications of pandemic viral respiratory disease, based on seasonal viral respiratory disease and experience from past pandemics. At risk groups will need to be confirmed by the CDNA when knowledge of the virus becomes available, but it is expected the impact on at risk groups will be greater than on the broader population. At risk groups are likely to include:

> Pregnant women

> People who are immunocompromised

> People with:

- o Chronic respiratory conditions
- o Cardiac disease
- o Down syndrome
- o Diabetes mellitus
- o Chronic renal failure
- o Chronic neurological conditions
- o Alcohol dependence
- o Haemoglobinopathies (for example haemophilia and sickle cell disease)
- o Chronic inherited metabolic disorders

- > People who are obese
- > Children receiving long-term aspirin therapy
- > Aboriginal and Torres Strait Islander peoples
- > Children aged less than five years
- > People aged over 65 years
- > People living in close communities (boarding homes, nursing homes, prisons, etc.)

In addition to these at risk groups, the AHMPPI identifies the following as groups with special needs:

- > People living in aged care facilities
- > People living in remote communities
- > People from a culturally and linguistically diverse background

Aged care

People over the aged of 65 are at greater risk of serious complications from viral respiratory disease due to the decreased immune response with increasing age.

In addition, people aged over 65 years may live in the aged care sector in close living quarters which assists virus spread.

National best practice guidelines for preventing, preparing for, defining and managing outbreaks of viral respiratory disease in RACFs in Australia can be found in the Practical Guide to Assist in the Prevention and Management of Influenza Outbreaks in Residential Care Facilities in Australia by the CDNA at www.health.sa.gov.au

The guidelines may also apply to other residential care facilities e.g. facilities for people with disability, many of whom also have impaired immunity.

Aboriginal and Torres Strait Islander peoples

The high prevalence of chronic disease and social determinants such as overcrowding and poverty in many Aboriginal communities makes Aboriginal people particularly vulnerable to new and emerging infections including pandemic viral respiratory disease.

Transportation to and from remote settings is variable and infrequent, which has implications for the transport of sick individuals and staff, transport of pathology specimens, and the distribution of PPE, antiviral medications and vaccines.

For further detail regarding pandemic planning for **Aboriginal Health Services Sub-Plan** please read the Plan by visit the [Disaster Preparedness and Resilience](#) page on the SA Health website.

Culturally and linguistically diverse groups

People with limited or no ability to understand and communicate in English are considered vulnerable as they may not be able to understand public messaging to assist in the preparation for, or management of incidents, including pandemic viral respiratory disease.

The use of pictures in messages has been recognised as a way to ensure a message, although brief, can be understood.

Pregnant women and infants under six months

Pregnant women are at high risk of severe consequences of viral respiratory disease, with the risk of complications increasing in the later stages of pregnancy. This is due to the changes in the immune system, heart and lungs during pregnancy.

Influenza vaccination does not always stop influenza – although it makes it less likely and, if it occurs, less severe.

Neonates are known to be at higher risk of severe illness from seasonal influenza virus infection. Newborns hospitalised in a group setting have a high potential for widespread infection. Infants less than six months old are not immunised for influenza.

Part two: Operational plan

Preparedness

Activities will focus on:

> Develop plans, and regularly review and exercise them

> Establish pre-agreed arrangements

> Research pandemic specific management strategies

> Ensure knowledge hub established, and resources are current, available and ready for rapid response

> Monitor the emergence of diseases with pandemic potential and investigate outbreaks if they occur

In the preparedness stage, the following activities can be considered:

Develop plans	> Develop and maintain (including exercising) response plans
	> Develop and maintain (including exercising) a strategic whole of Government plan
	> Develop and maintain a surveillance plan for pandemic viral respiratory diseases, including influenza, coronavirus, COVID-19, SARS and MERS
	> Establish and maintain infection control guidelines
	> Ensure pandemic arrangements can be incorporated into wider emergency plans and arrangements
	> Incorporate planning for a pandemic into overall business continuity plans, especially loss of workforce considerations
	> Develop and regularly maintain a list of critical contacts, including within Health and other across government departments and external stakeholders
Arrangements	> Ensure pandemic arrangements can be incorporated into wider emergency plans and arrangements
	> Establish and maintain a State PPE stockpile
	> Develop National Medical Stockpile (NMS) distribution plans
	> Maintain awareness of current stockpile levels, and implement measures to support strong supply chains
	> Regularly review deployment arrangements
	> Maintain awareness of evidence of antiviral/ antibiotic resistance
	> Implementation of seasonal influenza immunisation programs
	> Purchase and store vaccination equipment (needles and syringes)
	> Undertake seasonal influenza arrangements
	> Build the capacity in Residential Aged Care Facilities (RACFs) to manage outbreaks of viral respiratory diseases
	> Consider arrangements to ensure maintenance of human resource availability, particularly in highly skilled areas, such as ICU clinicians and nursing
	> Consider arrangements to ensure maintenance of human resource availability, particularly in highly skilled areas, such as intensive care unit (ICU) nursing
	> Establish and maintain infection control guidelines
	> Establish and maintain laboratory testing capacity/capability

Research	> Undertake, commission and share research, including modelling, on the impact and effectiveness of public health measures which could be used to manage a viral respiratory disease pandemic > Collate epidemiological, clinical severity and virological data on the outbreak from international sources
Knowledge	> Share information broadly amongst the health sector on the emergence of viral respiratory disease viruses with the pandemic potential > Provide advice to support management of seasonal influenza > Provide the media with information regarding the government approach to emerging respiratory disease viruses > Respond to media requests > Share information broadly amongst staff on the emergence of viral respiratory disease viruses with the pandemic potential
Monitor	> Establish and maintain systems to collect virus respiratory disease surveillance data > Establish and maintain laboratory testing capacity/capability > Undertake routine domestic surveillance, including liaising with animal surveillance sector > Establish arrangements to provide pandemic border control and relevant health services > Appoint human quarantine officers to implement arrangements > Develop communication materials appropriate for use at the border

Response: Standby

The response standby steps are:

> Monitor and investigate sustained outbreak overseas

> Identify and characterise the nature of the disease, and clinical severity

> Prepare to commence enhanced arrangements, including strategies to minimise risk

> Communicate to raise awareness and confirm governance arrangements

Monitor and investigate sustained outbreak overseas, and characterise the nature and clinical severity

Surveillance	> Continue to monitor international data > Undertake enhanced domestic surveillance > Activate case notification system > Review sustainability of surveillance systems > Prepare/ refine case definition as required > Prepare to conduct contact tracing > Confirm likely at-risk groups > Ensure readiness to commence First Few 100 study (please see Surveillance sub-plan)
Case definition	> Analyse and report Australian and major trends in international data

Enhance arrangement, including strategies to minimise risk

Public and primary health care	> Continue to identify and characterise the nature of the disease (commenced in preparedness) > Provide community education on seasonal influenza vaccination programs including education with hard-to-reach groups and at risk populations > Implement infection control guidelines and healthcare safety and quality standards > Establish systems to promote the safety and security of people in RACFs and other institutional settings > Coordinate distribution of antiviral drugs, if appropriate > Disseminate protocols on the use of antivirals including prophylactic use > Consider arrangements for triaging in primary care > Implementing an earlier than planned seasonal influenza vaccination programs to ensure a higher level of immunity across the population and trying to avoid a seasonal flu surge on top of a pandemic > Acceleration of the placement of National Disability Insurance Scheme (NDIS) patients would be beneficial to support the creation of extra beds > Develop/ensure access to laboratory test capacity/capability
Health system	> Consider and review plans for alternative models of care, including fever clinics > Check the status of stockpiles and equipment (antivirals, antibiotics, PPE) > Review of PPE and infection control education resources to ensure adherence to approved PPE protocols > Prepare arrangements for cohorting of patients > Raise awareness of potential at-risk groups > Prepare arrangements for providing additional support to at-risk groups > Prepare to review elective procedures, including modelling the impact of a reduction in elective surgery to create bed capacity in future months if needed. > Prepare for surge capacity in ICU beds/respiratory care beds, including increase ICU capacity > Prepare pre-hospital emergency care (ambulance and other medical transport) > Emergency departments prepare for increased demand > Retraining of nursing staff who have previous critical care experience to assist the current workforce > Consider needs for additional support to health systems in remote communities
Disaster management	> Raise awareness and confirm governance arrangements > Establish and maintain the state PPE stockpile, including raise awareness of protocols for access to the stockpile and liaising with SA Health Distribution Centre to ensure readiness > Raise awareness of potential at-risk groups (detailed on page 29 of this document) and remote communities, and liaise with peak bodies/organisations to support them to prepare arrangements and plans > Liaise with Border Control to advise them of proposed border measures, and provide support and advice, particularly disease specific communication materials and infection control guidance for points of entry

Communicate and confirm governance arrangements

Health	> Ensure staff are aware of available information about the epidemiology, virology and clinical severity of the disease
	> Ensure staff are aware of information about the progress of the pandemic overseas. This will allow them to consider planning aspects related to scale and timing
	> Ensure whole of government including local government are provided with accurate and timely information
	> Confirm governance arrangements both locally and across the health system, including response/incident management team
	> Review, prepare and action any legislative instruments required to support actions
Public	> Empower individuals and build public confidence by keeping people informed of the current situation, what is being done to address it and what individuals can to do minimise their risk and to prepare themselves for the potential societal impacts
	> Encourage behaviours and attitudes that will contribute positively to reducing the spread of disease and minimise the psychological, social and economic impacts including the need to assist others in the community
	> Shape public expectations of governments' response activities
	> Provide information to inform decisions about travel
WoG	> Monitor SA Health messaging to help understand the nature of the disease (commenced in Preparedness)
	> Communicate to raise awareness and confirm governance arrangements

Response: Action (Initial)

When information about the disease is scarce.

The response: initial activities include:

> Minimise transmission, including border measures

> Preparing and supporting health system needs

> Manage initial cases

> Identify and characterize the nature of the disease within the Australian context

> Provide information to support best practice health care and to empower the community and responders to manage their own risk of exposure

> Support effective governance

Minimise transmission, including border measures

Minimise transmission through:	> Isolation of confirmed cases
	> Quarantine of close contacts and suspected cases
	> Case and contact management
	> Quarantine of any repatriated nationals and approved foreign nationals upon arrival into Australia
	> Implement social distancing measures as per national recommendations and local risk assessment

Border measures	> Assist Border Security to implement enhanced border measures, such as enhanced entry screening, non-automatic pratique, preventative biosecurity measures through a Border Nursing/Paramedic service.
	> Provide support and advice, particularly disease specific and infection control guidance for travellers and border workers.

Preparing and supporting health system needs, including manage initial cases

Resources (HR & stockpile)	> Provide PPE, as appropriate (healthcare workers/ border)
	> Organise delivery to points of use (states and territories)
	> Consider prioritisation of resources
	> Maintain the SCC-H and IMT (staff, equipment, management systems)
	> Monitor health system capacity
	> Health system to prepare for potential need to engage surge staff
	> Consider needs for additional support to health systems in remote communities
	> Maintain essential health system activities
	> Manage jurisdictional distribution of the NMS and maintain the state PPE stockpile
Vaccination and Antivirals	*If a vaccine becomes/is available at this stage:*
	> Determine pandemic specific immunisation program
	> Implement the national pandemic immunisation program
	> Identify vulnerable groups to ensure access is available as early as possible
	> If available, commence candidate vaccination to target groups
	> If candidate vaccine is provided, include in surveillance system for monitoring adverse events
	> Ensure vaccination equipment from state stockpile or order in to support
	If suitable antivirals are available:
	> If suitable, provide antivirals for cases;
	> If suitable, provide antivirals as prophylaxis to agreed target groups
	> Ensure adequate stock of antivirals, supported by orders in place
Clinical care and public health management	> Manage cases and contacts;
	> Encourage voluntary isolation of cases and quarantine of close contacts and suspected cases;
	> Monitor and support needs of at risk groups (when identified);
	> Encourage advance planning directives of aged care providers and residents;
	> Health system to prepare for potential need to engage surge staff
	> Consider strategies to reduce routine hospital demand such as different models of healthcare provision
	> Develop and disseminate triage algorithm;
	> Develop cohort strategy
	> Monitor hospital and health system capacity - the demand for health services will rise quickly and be sustained for the duration of the pandemic
	> Consider the need to implement alternative models of care to minimise the burden on the health system for example, fever clinics

	> Support outbreak investigation and management in residential care facilities, schools, prisons and other institutions
Infection control	> Confirm with responders the application of standard infection control strategies (or provide alternate advice if appropriate)
	> Provide advice to the public on respiratory hygiene and hand washing

Identify and characterise within Australian context

Surveillance	> Identify and describe the epidemiology, clinical severity and virology of the disease in Australia through enhanced surveillance of confirmed cases
	> Conduct contact tracing (where need is identified)
	> Develop and refine case definitions as needed
	> Confirm identification of at risk groups
	> Analyse and report Australian and major trends in international data
	> Maintain case notification system
	> Activate academic studies using enhanced data to test assumptions
	> Implement testing protocols to support case management, surveillance needs and to preserve laboratory capacity
	> Support outbreak investigation and management in RACFs, schools, prisons and other institutions
	> Monitor sustainability of surveillance systems
Laboratory capacity	> Develop and validate pandemic viral respiratory disease laboratory testing as required to monitor the pandemic and for individual patient care
	> Support and undertake pandemic viral respiratory disease point of care testing if recommended, and coordinate point of care testing data management and reporting through a Domiciliary Service
	> Undertake laboratory testing as required to monitor the outbreak and for individual patient care
	> Implement testing protocols to support case management, surveillance needs and to preserve laboratory capacity
	> Maintain laboratory capacity/capability to detect/test for novel virus

Provide information

Health	> Build and maintain awareness across the health sector of the most up-to-date and accurate information about the disease, to support effective diagnosis and treatment, and better informed management decisions
	> Promote a consistent approach by ensuring all key parties have the same information, though recognising that disease spread may be variable across the country
	> Support best practice by disseminating guidance in key areas developed by expert bodies, such as Communicable Disease Network of Australia/Public Health Laboratory Network
	> Share effective strategies, avoiding the need for them to be developed separately by all parties
	> Input feedback on the effectiveness of treatment options, side effects and other clinical/ public health information into decision making processes to support refining the approach
	> Input feedback on how well the health care system is coping

	> Raise awareness of at risk groups
	> Liaise with other national counterparts
	> Monitor feedback and refine communications to address issues and concerns identified
	> Make spokespeople available
	> Respond to media requests
Public information	> Build and maintain public trust and support by providing consistent, clear, informative public messaging
	> Encourage behaviours and attitudes that will contribute positively to reducing the spread of disease and minimise the psychological, social and economic impacts including assisting others (neighbours, family, friends etc.)
	> Provide advice on:
	o respiratory hygiene and hand-washing;
	o mask wearing (if appropriate);
	o how to find out more information
	> Manage the disease threat by increasing uptake of recommended actions
	> Build public confidence by keeping people informed of the current situation and what is being done to address the impact of the pandemic
	> Empower individuals by increasing their understanding of the seriousness of the disease, knowledge of what to do to avoid/minimise exposure; ability to recognise symptoms and knowledge of what to do if symptoms present
Whole of Government	> Monitor SA Health messaging to help understand the nature of the disease
	> Coordinate and support effective governance across your organisation to manage the impacts of the disease
	> Prepare and support organisational needs
	> Identify and prioritise essential services and operations
	> Establish strategies to maintain essential services and operations
	> Provide information on the nature of the disease to support and empower your staff and the community and to help them manage their own risk of exposure
	> Continue to communicate to help engage, empower and build confidence in your staff and the community
	> Provide a coordinated and consistent approach across your organisation

Support effective governance

Governance	> Coordinate and support effective governance both locally and across the health system to manage the impacts
	> Maintain international health regulation core capacities and communicate public health events of significance to the National Incident Room (NIR)
Whole of Government	> Chief Public Health Officer assumes emergency powers under the Public Health Act 2011, if required
	> Undertake any state based legislative processes, including consideration for declaring a major incident under the Emergency Management Act 2004.
	> Convene the State Emergency Committee to provide a situation brief

Response: Action (Targeted)

> Ensure a proportionate response

> Support and maintain quality care

> Communicate to engage, empower and build confidence in the community

> Provide a coordinated and consistent approach

The key objective of the Targeted Action stage is ensuring a proportionate response to the outbreak, so scarce resources are properly allocated where most needed and that the risk to susceptible people in the community is mitigated.

The effectiveness and appropriateness of measures taken will be regularly reviewed by SA Health in consultation with key committees and stakeholders, as more information on the characteristics of the virus becomes available.

Communication measures will continue to be important, following the same approach as outlined in the Initial Action stage. Key messages should continue to be reviewed regularly to ensure they reflect current information about the response, the disease itself and recommended management strategies (both for responders and the public).

Ensure proportionate response

Minimise transmission	> Supporting isolation of identified cases and quarantine of suspected cases and close contacts
	> Ongoing case and contact management, as required
Border measures	> Regularly reassess border measures implemented during the Initial Action stage for countries deemed high risk, in consultation with key committees and stakeholders such as AHPPC
	> Continue supporting the repatriation of Australians from overseas, if required

Support and maintain quality care

Resources (HR & Stockpile)	> Monitor hospital and health system workforce capacity - the demand for health services will rise quickly and be sustained for the duration of the pandemic – threshold for when overwhelmed
	> Maintain the SCC-H and IMT (staff, equipment, management systems)
	> Health services will implement surge staff arrangements as needed (and where possible)
	> Health services will prioritise services to best meet demand for acute care
	> Manage jurisdictional distribution of the National Medical Stockpile and maintain the state medical and PPE stockpile
	> State and territory health departments will undertake urgent assessment and coordination of available specialist equipment based on outbreak predictions and geographic spread
	> Provide PPE and/or vaccines (if available) as appropriate to healthcare workers and other approved stakeholders as deemed necessary
Public health management	> Implement testing protocols to support case management, surveillance needs and to preserve laboratory capacity
	> Support outbreak investigation and management in Residential Aged Care Facilities, schools, prisons and other institutions
	> Encourage voluntary isolation of people with viral respiratory disease-like illnesses

	> Develop and validate pandemic laboratory testing as required to monitor the pandemic and for individual patient care
	> Support and undertake pandemic point of care testing if recommended, and coordinate point of care testing data management and reporting
	> Implement social distancing measures as per national recommendations and local risk assessment
	> Maintain international health regulation core capacities and communicate public health events of significance to the National Incident Room (NIR)
	> Tailor measures to the needs of remote communities (including remote Aboriginal and Torres Strait Islander communities). This may include arrangements for additional healthcare workers and additional support to health systems in remote communities (where needed, and if possible). Support implementation of border measures as agreed by AHPPC
	> Implement the national pandemic immunisation program
	> Early action to implement plans - health services and response measures need to be scaled up more quickly
Clinical care	> Isolation of confirmed cases
	> Encourage voluntary quarantine of close contacts and suspected cases
	> Triage and cohort patients, as necessary
	> Manage contacts as agreed by CDNA and AHPPC
	> Consider using different strategies to treat mild cases where resources are overwhelmed
	> New models of care may be instituted to manage novel coronavirus patients vs influenza patients, for example:
	o innovative methods for contact tracing and diagnostic testing (call centres, at-home specimen collection etc.);
	o home based care, which may require contingency community services support (potentially telephone support);
	o fever clinics staffed predominantly by nurses via management protocols, with onsite or telephone medical support;
	o Adjustment of ICU staffing ratios and opening of new ICU beds or negative pressure rooms, where available.
	> Antivirals - provide antivirals for cases
	> Prophylactic antivirals - consider antivirals as prophylaxis to agreed target groups including health care workers
	> Flu/fever clinics - consider staffing predominantly by nurses via management protocols with onsite or telephone medical support
	> Out of hospital care - consider contingency support for home based care
	> Management of patient flow and separation - the importance of measures to promote prompt presentation and diagnosis, while minimising opportunities for transmission
	> Surge capacity for specialist services and respiratory inpatient services - the demand for high end services, such as ICU, paediatric and respiratory care. Associated with this will be increased demand for specialised equipment and health care professionals, such as ICU nurses. High end services are areas likely to increase the demand on support services, such as laboratories, much more than increased demand in general wards
	> Laboratory capacity - develop and validate pandemic viral respiratory disease laboratory testing as required to monitor the pandemic and for individual patient care

	> Identify at risk groups - the importance of informing and supporting at risk groups
	> Mortuary capacity - the demand for services associated with management of the deceased
	> Forensic Science SA temporary mortuary capability
Infection control	> Infection control and social distancing - the timeliness of measures to limit spread becomes more critical as the window of opportunity is smaller
	> Plan to triage and cohort patients - as necessary
	> Isolation of confirmed cases, and quarantine of repatriated nationals and approved foreign nationals as required;
	> Encourage voluntary quarantine of close contacts and suspected cases;
	> Continue application of agreed infection control strategies appropriate to increasing knowledge of transmissibility; and
	> Continue to provide advice to the public on respiratory hygiene and hand-washing.
Governance	> Communicate regularly - to engage, empower and build confidence amongst health care providers in the response activities
	> Responsive governance - assessments and decisions will need to be made more quickly
	> LHNs will provide information on their capacity to State and Territory Chief Health Officers (CHOs) to allow state level coordination. In turn, CHOs will report to AHPPC to enable national coordination and sharing/allocation of resources where needed and where possible
	> CPHO, as the State AHPPC member, will work together to coordinate the availability of resources and to develop strategies for alternate sources where needed; and ensure all needs are met and a consistent approach to achieve coordination of measures and consistent message is maintained;
	> Make recommendations through Whole of Government channels when implementation of measures outside the health sector should be considered, such as school or workplace closures, or cancellation of mass gatherings.

Communicate to engage, empower and build confidence in the community, and provide coordinated and consistent approach

Health	> Build and maintain awareness across the health sector of the most up-to-date and accurate information about the disease, to support effective diagnosis and treatment, and better informed management decisions
	> Promote a consistent approach by ensuring all key parties have the same information, though recognising that disease spread may be variable across the country
	> Support best practice by disseminating guidance in key areas developed by expert bodies, such as Communicable Disease Network of Australia/Public Health Laboratory Network
	> Share effective strategies, avoiding the need for them to be developed separately by all parties
	> Input feedback on the effectiveness of treatment options, side effects and other clinical/ public health information into decision making processes to support refining the approach
	> Input feedback on how well the health care system is coping
	> Maintain trust and confidence

Public information	> Build and maintain public trust and support by providing consistent, clear, informative public messaging > Encourage behaviours and attitudes that will contribute positively to reducing the spread of disease and minimise the psychological, social and economic impacts including assisting others (neighbours, family, friends etc.) > Manage the disease threat by increasing uptake of recommended actions > Build public confidence by keeping people informed of the current situation and what is being done to address the impact of the pandemic > Empower individuals by increasing their understanding of the seriousness of the disease, knowledge of what to do to avoid/minimise exposure; ability to recognise symptoms and knowledge of what to do if symptoms present
Whole of Government	> Continue to monitor SA Health messaging to help understand the progression of the disease > Support effective governance to manage the initial and ongoing impacts of the disease and ensure a proportionate response > Ensure that essential services and operations are maintained > Consider scaling back of non-essential services and redirecting staff if required. This loss of workforce strategy should be considered at the preparedness stage and during business continuity planning. > Identify any at risk groups within your workforce and/or clients and support them as necessary > Communicate a consistent and timely message, to engage your staff and the community effectively in pandemic response measures and to build trust and confidence when there is broader vulnerability

Response: Stand down

The steps are:

> Support and maintain quality care

> Cease activities that are no longer needed, and transition activities to seasonal or interim arrangements

> Monitor for a second wave of the outbreak

> Monitor for the development of antiviral resistance

> Communicate to support the return from pandemic to business as usual

> Evaluate systems and revise plans/procedures

Support and maintain quality care, including cease and transition activities

Clinical care	> Supporting and maintaining quality care > Support any resources that are depleted in order to meet remaining demand > Assess the status of stockpiles and equipment, replenish where required > Review processes, update plans/protocols > Resume elective procedures/any services held during pandemic > Terminate additional supply contracts
Public health management	> Advise of the commencement of transition to seasonal arrangements and how this will be managed > Ceasing activities that are no longer required and transitioning activities to seasonal or interim arrangements > Communications activities to support the return from pandemic to normal business services > Evaluating systems and revising plans and procedures
Disaster management	> Notify of Stand down, and stand down the SCC-H and IMT > Acknowledge the recovery efforts that will be occurring > Provide information about the debrief and review process > At the end of stand down notify stakeholders of the transition to ongoing vigilance to ensure we are well placed to respond in future

Monitor for second wave outbreak or antiviral resistance

Public health management	> Monitoring for a second wave of the outbreak > Monitoring for the development of antiviral resistance

Communicate

Health and public information	> Coordinate public messaging > Notify the public that services will transition to normal arrangements and the reason for this > Provide specific information for groups at risk or with specific needs (eg CALD, aged care or Aboriginal and Torres Strait Islander people) about the transition of services > Thank the public for their engagement in the response

	> Monitor feedback and refine communications to address issues and concerns identified
	> Provide the media with access to information regarding the change of the status of disease spread and the transition of the response
	> Make spokespeople available
	> Respond to media requests

Evaluate systems and revise plans

Evaluation and lessons management	> Undertake a broad incident/pandemic debrief and review
	> Use learnings and feedback to review plans and procedures
	> Review the use of resources and consider the need to update/adjust resource allocations in preparations for future pandemics.

Recovery

Recovery is not the primary focus of this plan, however it is acknowledged that once the virus no longer presents a major public health threat, there are SEMP recovery activities. These include:

Support	> Support people and staff affected with ongoing medical, psychosocial and economic assistance
Whole of Government	> Implement recovery measure in accordance with State Recovery Operations Group recommendations
	> Make recommendations through whole of government channels where implementation of measures outside the health sector should be stood down, such as school or workplace closures
	> Participate in whole of government review processes

Appendix 1 – Resource Information

Resource	Website or contact	Comment
International		
Centers for Disease Control and Prevention	www.cdc.gov	Pandemic Flu Preparedness Tools and Influenza Risk Assessment Tool.
World Health Organization Save Lives: Clean your Hands	www.who.int https://www.who.int/gpsc/5may/tools/en/	WHOs global campaigns to highlight the role of hand hygiene in combatting antimicrobial resistance under 'Clean Care is Safer Care'.
National		
The Australasian College for Emergency Medicine (ACEM)	www.acem.org.au	Guidelines for the Management of Severe Influenza, Pandemic Influenza and Emerging Respiratory Illnesses in Australasian Emergency Departments.
Australian Government Department of Health	https://www.health.gov.au/	▪ Pandemic Influenza site ▪ National health influenza pandemic plan: *Australian Health Management Plan for Pandemic Influenza (2014)* ▪ *Avian influenza National guidelines for public health units* ▪ *CDNA Influenza Infection National Guidelines for Public Health Units* ▪ *Australian Health Sector Emergency Response Plan for Novel Coronavirus (CovID-19)*
Australian Government Department of Health COVID-19 specific	https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-nat-CD-plan.htm https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm	Coronavirus (COVID-19) health alert (and associated information) The Emergency Response Plan for Communicable Disease Incidents of National Significance (National CD Plan) Guidance on the public health management of novel coronavirus
Australian Institute for Disaster Resilience	https://www.aidr.org.au/	Australian emergency management handbook and manual series A-Z which includes a link to the Disaster Health handbook 1.

National Health and Medical Research Council (NHMRC)	www.nhmrc.gov.au	Australian guidelines for the Prevention and Control of Infection in Healthcare (2019).
Hand Hygiene Australia	https://www.hha.org.au/	National hand hygiene initiative.
Royal Australian College of General Practitioners	www.racgp.org.au	Pandemic Flu kit resource information for General Practitioners.
Immunise Australia Program	https://immunisationhandbook.health.gov.au/	Australian Immunisation Handbook.
Travel advice	www.smartraveller.gov.au	The Department of Foreign Affairs and Trade provides travel advice on its Smart Traveler website.

Resource	Website or contact	Comment
SA Health Internet		
Infectious Disease - Flu	www.sahealth.sa.gov.au/flu	Flu - seasonal, pandemic and avian - symptoms, treatment and prevention.
Flu vaccine	https://www.sahealth.sa.gov.au/wps/wcm/connect/Public+Content/SA+Health+Internet/Health+topics/Health+conditions+prevention+and+treatment/Immunisation/Vaccines/Flu+vaccine/Flu+vaccine	Flu vaccine and pregnancy frequently asked questions.
Business Continuity	https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/protecting+public+health/disaster+preparedness+and+resilience/business+continuity+management	SA Health requirements and the importance of business continuity.
Pathology Services	www.sahealth.sa.gov.au/Pathology	Includes link to SA Pathology website.
Other South Australia Government Departments		
South Australian Fire and Emergency Services Commission (SAFECOM)	www.safecom.sa.gov.au	State Emergency Management Arrangements.

Resource	Website or contact	Comment
Small Business Contact Service	https://www.sa.gov.au/topics/business-and-trade/running-a-business/preparing-a-	Business Continuity Planning for small business, disaster management.

Resource	Website or contact	Comment
At risk groups		
Aboriginal People The Department of Health	www.health.gov.au	Pandemic Influenza in Australia and the Impact on Aboriginal and Torres Strait Islander Peoples.
Aged Care Department of Social Services	www.dss.gov.au	Building resilience through business continuity and pandemic planning.
Vulnerable People Flu.gov	www.flu.gov	General flu information.

Appendix 2 – Abbreviations

ACEM	Australasian College for Emergency Medicine
AHMPPI	Australian Health Management Plan for Pandemic Influenza (2014)
AHPPC	The Australian Health Protection Principle Committee
BCP	Business Continuity Plan
BIA	Business Impact Assessment
CBF	Critical Business Functions
CDCB	Communicable Disease Control Branch
CDNA	Communicable Diseases Network Australia
CIMF	Common Incident Management Framework
CPHO	Chief Public Health Officer
DCS	Department of Correctional Services
DHW	Department for Health and Wellbeing
DoH	Department of Health (Commonwealth)
DPRB	Disaster Preparedness and Resilience Branch
ED	Emergency Department
ICU	Intensive Care Unit
ILI	Influenza-Like Illness
IMT	Incident Management Team
LHN	Local Health Network
MH	Mental Health
NHMRC	National Health and Medical Research Council
NIR	National Incident Room
NMS	National Medical Stockpile
PHEMP	Public Health Emergency Management Plan
PI	Pandemic Influenza
PPE	Personal Protective Equipment
RCF	Residential Care Facilities
RDNS	Royal District Nursing Service
SAAS	South Australia Ambulance Service
SAPHS	SA Prison Health Services
SCC-H	State Control Centre - Health
SC-H	State Controller - Health
SDHC	State Human Disease Committee
SEMC	State Emergency Management Committee
SEMP	State Emergency Management Plan
WHO	World Health Organization

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For more information

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