

Disaster Preparedness and Resilience Branch,
Health Regulation and Protection

Management of Deceased during a Pandemic Sub- Plan

A Viral Respiratory Disease Pandemic
Response Sub-Plan

Version 4.0, May 2020



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of South Australia

SA Health

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Introduction

In the event of a viral respiratory disease pandemic, South Australia has to be prepared to handle rapidly escalating numbers of fatalities both in the short term (daily or weekly) and over a prolonged period of time (months).

The *SA Health Management of Deceased during a Pandemic Sub-Plan* (the Plan) provides a strategic and broad approach consistent with the Australian Government's [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 \(COVID-19\)](#) and the [SA Health Viral Respiratory Disease Pandemic Response Plan](#), of which this is a Sub-Plan.

Purpose and scope

This Plan articulates the strategic method and plans to respond to mass fatalities due to a pandemic within South Australia. This Plan is based on the existing requirements and capabilities, and relies on strong cooperative, coordinated and consultative relationships among State Government departments, agencies and other specialists, such as the Funeral Industry. State government agencies and non-government specialists responding to multiple fatality pandemic event will base their plans on this Sub-Plan.

Collaborative approach

The activities and objectives required to support the management of mass fatalities due to a pandemic will involve a collaborative approach across health, emergency services, funeral industry and community working together to achieve a common goal.

This will involve the following key agencies and organisations across SA:

- > South Australia Police (SAPOL)
- > Forensic Science SA
- > Coroner's Office (Courts Administration Authority of South Australia)
- > Births, Deaths and Marriages (Attorney General's Department)
- > SA Health
- > SA Public Trustee
- > Funeral Assistance SA (Department of Human Services)
- > Australian Funeral Directors Association
- > State funeral operators (Adelaide Cemeteries Authority)
- > Private funeral companies
- > Numerous funeral industry and related organisations

Assumptions

This Plan is based on the following assumptions:

- > Government agencies, especially those with responsibilities under the *State Emergency Management Plan*, will have operational plans and procedures in place that compliment this strategic plan, including operational plans for establishing temporary mortuaries
- > Local Health Networks and other healthcare services will have local operational plans and procedures in place related to infectious diseases, infection control, risk minimisation during a pandemic and mortuary management
- > Funeral companies will have local operational plans and procedures in place related to infectious diseases, infection control, risk minimisation and mortuary management

- > All government and non-government organisations will proactively monitor Commonwealth and State information sources related to a viral respiratory disease pandemic, such as those created for COVID-19 in 2020.

Triggers and activation process

The triggers and activation process for this Plan, and other corresponding Control Agency Plans, will take into consideration:

- > disease surveillance and reporting data indicating community transmission of a novel pandemic potential has occurred,

For further information, please see *Appendix one: Triggers and Activation Process during a Pandemic Flowchart*.

Legislation

The applicable South Australian legislation includes :

- > *Coroners Act 2003*
- > *Coroners Regulations 2005*
- > *Emergency Management Act 2004*
- > *Burial and Cremation Act 2013*
- > *Burial and Cremation Regulations 2014*
- > *Births Deaths & Marriages Act 1996;*
- > *Births Deaths & Marriages Regulations 2011*
- > *South Australian Public Health Act 2011*
- > *Local Government Act 1999 (burial on private land outside a cemetery).*

Modelled Death Rates

Given viral respiratory diseases are novel with an emerging case definition and clinical presentations, the same can be said about the emerging nature of the rates of mortality as the pandemic progresses. Often, the rate of cases escalates exponentially on any given day, and the number of fatalities is equally agile by nature. Different countries, states and cities will experience different rates of transmission, recovery and deaths, due to geography, standards of healthcare, social distancing measures and travel restrictions.

This is exemplified through the following examples from the COVID-19 pandemic:

- > A number of countries had multiple deaths in a short timeframe, with the following rates of death over 24 hours recorded: 800 deaths in Italy and Spain (WHO, 1 April 2020), 900 deaths in the United Kingdom and 2000 deaths in the United States (JHU, 12 April 2020).
- > Other countries, such as Australia and New Zealand have experienced a smaller number of deaths overall, with these spread out over an extended period of time, for example, in Australia from 1 February to 10 April 2020, there were a total of 57 deaths across these three months (JHU, 12 April 2020) and in New Zealand there were 4 deaths for the same period.

For further information specifically on COVID-19 Mortality data* please see:

- > John Hopkins University Mortality Analysis for COVID-19: <https://coronavirus.jhu.edu/data/mortality>
- > World Health Organisation's COVID-19 dashboard: <https://who.sprinklr.com/>

* These links may be subject to change post pandemic.

Structure of the plan

The Plan is structured in three parts:

- > Part one: Management of deceased during a pandemic in a healthcare and mortuary setting
- > Part two: Strategic management of mass fatalities during a pandemic
- > Part three: Management of bereaved relatives and distressed community at time of death through to burial*

**Please note: Part three is under development, and content is not included in this current version of the Plan at this time*

Part one: Management of Deceased during a Pandemic in Healthcare and Mortuary Settings

Health Risks posed by the deceased

The risk of transmission from patients who have died from a viral respiratory disease, such as COVID-19, SARS or MERS, during the virus' infectious period is low. However, it can be assumed the infectious virus will still be present in the patient's respiratory tract for days and potentially weeks in a cooled body.

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

All healthcare, mortuary and funeral staff should be trained in infection control policies and practices – Local Health Networks and funeral directors should review their own infection control policies and procedures and ensure staff are familiar with these practices. This may include providing training in hand hygiene and how to put on and remove Personal Protective Equipment (PPE).

Transmission risks

Healthcare workers, mortuary personnel and funeral directors are less likely to contract a viral respiratory disease from deceased persons infected with the virus if they adopt appropriate infection control procedures and wear appropriate PPE. The greatest risk is likely to come from contact with family members, during in times of passing, identification and funeral service.

Practicing good hand and respiratory hygiene is the best defence against most viruses, including the virus that causes COVID-19. Funeral directors should encourage and facilitate all attendees at a service to:

- > wash hands frequently with soap and water or use an alcohol-based hand rub before and after eating, and after going to the toilet
- > practice good respiratory hygiene and cover coughs and sneezes with their elbow or a disposable tissue, dispose of tissues, and use alcohol-based hand rub immediately
- > avoid physical contact with others (stay more than 1.5 metres from people, avoid hugging and kissing)
- > if unwell, stay at home or, if attending the service is essential, do so for as short a time as possible and stay more than 1.5 metres from others
- > strongly adhere to any direction under a declaration of an Act stipulating maximum number of attendees

Standard Precautions

Standard precautions are defined as work practices required for the basic level of infection control. Standard precautions include:

- > use of protective barriers or PPE (including gloves, gowns, plastic aprons, masks, eye shields or goggles);
- > appropriate handling and disposal of sharps and other contaminated or infectious waste; and
- > The regular wiping of coffin handles and nameplates with appropriate anti-bacterial wipes or liquids

Standard precautions should be undertaken and apply to all contact with:

- > blood and body fluids; and
- > skin and mucous membranes regardless of the patient's presumed infectious status.

It is uncommon for cemetery/crematorium staff to be exposed to bodily fluids leaking from coffins/caskets, as all coffins need to be appropriately lined. All measures must be used to ensure that the risk of leakage is minimised as far as is possible.

Anyone who has had close contact with a person with confirmed viral respiratory disease, especially COVID-19, or who has been diagnosed themselves should follow public health advice about testing, self-quarantine and/or isolation, as well as social distancing measures to minimise transmission risks impact upon the numbers of people attending funerals.

Further information specific to COVID-19 is:

- > [Limits on public gatherings for coronavirus \(COVID-19\)](#)
- > [Social distancing for coronavirus \(COVID-19\)](#)

Handling bodies

Precautions while handling the body include:

- > Avoid unnecessary manipulation of the body that may expel air from the lungs
- > Wear appropriate PPE while handling the body at all times
- > Practice hand hygiene practices before and after contact with the body
- > Perform regular environmental decontamination including all surfaces and equipment with a disinfectant included in the Australian Register of Therapeutic Goods as a listed disinfectant with a specific virucidal claim (“kills viruses”).

Aerosol generating procedures

The potential for airborne spread of viral respiratory disease, such as COVID-19, is still unknown. Aerosol generating procedures should be avoided if possible. Airborne precautions should be employed when performing aerosol generating procedures, such as post mortem use of fast-spinning power tools.

Airborne precautions include:

- > Fluid resistant long-sleeved gown
- > P2/N95 respirator (mask) – should be fit checked with each use
- > face shield or safety glasses
- > disposable nonsterile gloves when in contact with patient
- > hand hygiene before donning and after removing gloves, and other PPE

Personal Protective Equipment (PPE)

Standard infection control and occupational health and safety guidelines should always be followed while handling and preparing a body. All staff should be trained in the correct use of PPE.

Persons in close contact with the body must wear:

- > a clean protective outer garment, such as a gown
- > disposable gloves
- > a disposable surgical mask
- > appropriate eye protection such as safety glasses or a face shield.

After use, PPE should be carefully removed (utilising approved PPE doffing procedures) and decontaminated or disposed of into infectious waste as soon as practicable.

For further information, please consult:

- > [Interim recommendations for the use of personal protective equipment \(PPE\) during hospital care of people with Coronavirus Disease 2019 \(COVID-19\)](#)

- > [Australian Guidelines for the Prevention and Control of Infection in Healthcare \(2019\)](#)
- > [Safe use of PPE brochure \(SA Health\)](#)
- > [Safe use of PPE DVD \(Commonwealth Government\)](#)

Body bags

The body of a deceased person confirmed or suspected to have a viral respiratory disease, including COVID-19, should be transported and stored in a leak-proof body bag (or double-bagged if not leak-proof).

The body bag should be clearly and permanently labelled as containing an infectious disease, such as: “Infectious – Handle with care” or “COVID-19 – Handle with care”.

Mortuary staff or funeral director should only remove the body to prepare the body for viewing, cremation or burial.

Used body bags should be disposed of in clinical waste.

Embalming

Embalming is not recommended for bodies who died from a viral respiratory disease, such as COVID-19, as it is not clear whether embalming is safe to do.

If embalming must be done, the embalmer should be certified and trained in the use of PPE consistent with contact and airborne precautions. This includes a P2/N95 respirator which has been fit-checked, gown, gloves and eye protection.

Viewing the body in mortuary and forensic pathology settings

Family viewing of the deceased should be allowed to take place in a funeral director’s mortuary facility and standard precautions should be observed.

Family members are strongly advised not to kiss or touch the deceased to minimise the risk of transmission.

If a family member does touch the body, they should wash their hands with soap and water immediately afterwards or use an alcohol-based hand rub. Gloves are not necessary unless there are visible bodily fluids present on the body.

Importantly, anyone who has had close contact with a person with confirmed viral respiratory disease, especially COVID-19, or who has been diagnosed themselves, should follow public health advice about quarantine or isolation and should not attend the healthcare or mortuary setting.

Other recommended precautions to minimise risk to staff

Healthcare workers handling the body at time of death

Precautions (such as the containment of bodily fluids) need to be in place for all staff handling persons who have died while infectious with a viral respiratory disease, such as COVID-19, should follow standard precautions in addition to droplet and contact transmission-based precautions.

Undertake the usual last offices procedures for your healthcare facility (including regular or coronial cases), but in addition take these extra steps when managing all positively diagnosed or suspected with active viral respiratory disease virus:

- > Use a leak-proof body bag (or double-bagged, if not leak-proof) clearly labelled “infectious – handle with care” (COVID-19 – handle with care is also appropriate)
- > Correctly position a surgical mask over the nose and mouth of the deceased
- > Place a towel, that has been surface sprayed with hospital strength disinfectant underneath the deceased patient’s head and shoulders, to absorb above neck secretions

- > Ensure the body bag is zipped and the outer surface wiped with hospital grade disinfectant
- > Affix a clear, adhesive A5 doculope alongside the mortuary identification label
- > Ensure one of the treating Medical Officers completes a Form 7 – Certificate of Identification of Deceased is (in addition to any regular necessary certification or coroner's deposition) place it in the A5 doculope now on the outer bag surface.

Local Health Networks and funeral organisations should have local plans and procedures that ensure the safety of workers handling bodies at the time of death.

Persons attending only (not transporting a body)

Mortuary workers and others attending the body, but not transporting it, are advised to use a surgical mask and standard precautions only, unless respiratory or other body secretions are anticipated (when gloves and gown are also recommended).

Mortuary staff

Mortuary staff should adhere to contact, droplet and airborne precautions when performing autopsies on patients with pandemic viral respiratory disease who died during the infectious period. Full PPE including P2 (N95) mask, gown, gloves, cap and eye wear should be worn. Care to minimise aerosols is advised (avoid power saws; avoid splashing when removing lung tissue).

Embalming staff

It is recommended that embalming is not undertaken during an viral respiratory disease pandemic. Should this procedure be required it is recommended that precautions be taken to avoid aerosol generation and workers wear full PPE (ie P2/N95 mask, gown, gloves, cap and eye wear) and suitable closed shoes.

Funeral staff

The infectious virus may still be present on the surface of the body after transfer to the funeral home. It is recommended as a precaution that:

- > a surgical mask or cloth be placed on the deceased person's mouth and nose whenever the body is moved
- > gowns should be worn. This is particularly important if a body has visible secretions or other bodily fluids on it
- > surgical masks are worn to help prevent the funeral worker from touching his/her mouth or nose and to protect against any splashed droplets
- > Staff should be trained in the proper use and removal of PPE
- > Staff should practice hand hygiene practices before and after contact with the body.

Crematorium and burial staff

Normal infection control and occupational health and safety procedures should be followed, including wiping down or spraying of coffin handles and other points of contact with the coffin should be implemented.

In addition, the infectious virus may still be present on the surface of the body after transfer from the funeral home to the place of interment of cremation. It is recommended as a precaution that crematorium and cemetery burials staff wear:

- > a surgical mask or cloth be placed on the deceased person's mouth and nose whenever the body is moved
- > gowns should be worn. This is particularly important if a body has visible secretions or other bodily fluids on it

- > surgical masks are worn to help prevent the funeral worker from touching his/her mouth or nose and to protect against any splashed droplets
- > Staff should practice hand hygiene before and after contact with the body.

Explanting medical devices is not recommended for persons who died from, or with, COVID-19 as it is not clear whether it is safe to do. Cremation practices should be managed accordingly. If it must be done, then airborne precautions should be employed.

Funeral Arrangers

The role of the funeral arranger is to meet with families to discuss and make the arrangements for a funeral service. In the event of a pandemic, the funeral arranging process can expose funeral home staff to a high degree of risk of infection. This is risk to the funeral arranger themselves, and a risk to their work colleagues if they carry the infection back to their funeral home premises. Careful management and separation of roles and locations need to be considered by funeral homes for the arranging of funerals.

Religious Workers

As with funeral arrangers, in the event of a pandemic, religious workers can be exposed to a high degree of risk of infection. This is a risk to the religious worker themselves, and a risk to their colleagues if they carry the infection back to their place of work. Religious workers should follow standard precautions in order to minimise risk.

Transportation of bodies

The owner or driver of the vehicle used to transport the deceased should be informed that the body is confirmed or suspected to be infected with a viral respiratory disease, such as COVID-19.

There is no change to the usual body transport protocols for COVID-19 related deaths, however, drivers should be encouraged to wipe down or spraying of coffin handles and other points of contact with the coffin.

State stockpile (PPE and Body bags)

As outlined in the *SA Health Viral Respiratory Pandemic Response Plan*, SA Health through its SA Health Distribution Centre will manage the state stockpile for a pandemic. This will include access to the state stockpile by state government agencies and non-government organisations, such as the Funeral Industry for supplies of PPE and Body Bags, once their normal arrangements have been exhausted. The SA Health PPE Distribution Decision Matrix will be applied to the supply of PPE and Body Bag to non-SA Health organisations.

Part two: Strategic Management of Mass Fatalities during a Pandemic

The objectives for the management of deceased will change during the course of a pandemic. In the early phase, the overall aim will be to continue business as usual while preparing to manage increasing numbers of deceased persons as the outbreak unfolds with a potentially reducing workforce.

Required identification and reporting procedures of deceased

The identification and reporting of the deceased will be conducted in accordance with normal procedures for deaths.

There are legislated requirements for the identification of bodies prior to burial and cremation in South Australia. The *Burial and Cremation Act 2013* and the *Burial and Cremation Regulations 2014*, applies penalties if these are not adhered to. Therefore, particular care needs to be taken to avoid identification mistakes occurring, especially in the busy scenario resulting from pandemic viral respiratory disease.

Further information on the [Burial and Cremation Act 2013](#) and the [Burial and Cremation Regulations 2014](#) can be obtained at:

Births, Deaths and Marriages Registration

The Doctor's Certificate of Cause of Death and notification to the Registrar of Births, Deaths and Marriages is a legislated requirement of medical practitioners who are required to attend the body and certify death. Under the current legislation, this is required to be done within 48 hours.

Alternatively, paramedic ambulance staff who have an intensive care qualification are permitted to declare life extinct and the Doctor's Certificate of Cause of Death can be completed later by the medical practitioner. However, this process is demanding of resources that would already be significantly strained, and if the person declaring life extinct is not confident in the cause of death, then the death must be reported to the State Coroner.

A registered nurse or midwife is able to also declare life extinct in the absence of a Medical Practitioner (refer to Medical Reporting further down).

Further information can be found at

- > [Responsibilities of Doctor's and Funeral Directors](#)
- > [Guidance for Certifying Death due to COVID-19](#)

Coronial process

A Post Mortem may not necessarily be required if the medical practitioner is willing to provide their medical opinion as to the cause of death to the Coroner. Currently, viral respiratory disease pandemics are not reportable.

This aside, there are many circumstances in which a death is reportable, which will not change during a pandemic, and this includes deaths that occur:

- > Unexpectedly, unusually or by a violent, unnatural or unknown cause.
- > While the person is in custody (persons subject to a Mental Health Treatment order under the Mental Health Treatment Act 2009 or a protected person subject to an order under the section 32 of the Guardianship and Administration Act 1993 or any person who has been detained, apprehended or held, even if that order was revoked during their admission).
- > During, as a result of, or within 24 hours of certain surgical or invasive medical or diagnostic procedures, including the giving of an anaesthetic for the purpose of performing the procedure.
- > Within 24 hours of being discharged from a hospital or having sought emergency treatment at a hospital.
- > While the deceased was a 'protected' person.

- > While the deceased was under a custody or guardianship order under the Children’s Protection Act.
- > While the deceased was a patient in an approved treatment centre under the Mental Health Act.
- > While the deceased was a resident of a licensed supported residential facility under the Supported Residential Facilities Act.
- > While the deceased was in a hospital/other facility being treated for drug addiction
- > During, as a result of, or within 24 hours of medical treatment to which consent had been given under Part 5 of the Guardianship and Administration Act.
- > During a flight or voyage to South Australia.
- > When a doctor is uncertain about the cause of death.

Medical Reporting (death, notification of disease)

Pandemic viral respiratory disease is a notifiable disease under the *South Australian Public Health Act 2011*, and so a death from this disease must be notified to the SA Health Communicable Disease Control Branch (CDCB).

Reporting of these diseases enables the CDCB to monitor the disease in the community and help reduce the impact on others.

Medical practitioners and microbiological laboratories are obliged by the *South Australian Public Health Act 2011*, to notify cases suspected of having Pandemic viral respiratory disease as soon as possible.

As mentioned earlier, Doctor’s Certificate of Cause of Death or Authority to Dispose of Human Remains are mandatory and can only be issued by a doctor or the Coroner respectively.

In South Australia, in accordance with the [SA Health Policy Directive Declaration of Life Extinct by Registered Nurses and Midwives in the Absence of a Medical Practitioner](#), a registered nurse or midwife is able to assess and declare life extinct in the absence of a Medical Practitioner, where the patient dies in a hospital, a nursing home, hostel or at home. Importantly, the assessment of the extinction of life and the certification of death must be recognised as being two separate procedures or processes, this Policy Directive does not detract from the legislative requirements of the Births, Deaths and Marriages Registration Act 1996 and the Coroners Act 2003.

Further information can be found at:

- > [Guidance for Certifying Death due to COVID-19](#)

Capacity and resources for managing bodies

In a pandemic, there would need to be operational plans developed to manage the transportation of bodies, the activation of hospital temporary mortuaries or emergency mortuaries, as well as any security requirements surrounding such facilities.

There is no central morgue storage facility for a viral respiratory disease pandemic.

In the initial stages, storage capacity will be managed through state facilities (hospitals and forensic, when applicable) and through funeral industry locations.

In the event of a pandemic, such as COVID-19, then alternative arrangements will be planned and implemented as required.

Collection and transport of bodies

The transport of bodies remains the duty of funeral directors. It does not fall under the responsibilities of the SA Ambulance Service. The funeral industry needs to ensure that it identifies ahead of time potential overwhelming of their transport and other services to enable sourcing of alternative means of transport and storage arrangements for bodies, if required.

Please see *Appendix two: Cemetery and Crematoria Transportation Capability*

Hospital mortuary facilities and capacity

Local Health Networks have mortuaries across metropolitan and regional hospital sites. Each LHN is responsible for developing additional mortuary capacity within local business continuity arrangements.

Additional capacity will likely include refrigerated/freezer shipping containers, and consideration should be given to the following requirements of a temporary mortuary facility:

- > refrigeration or freezer capability, including appropriate temperatures (and certified documentation) for short and long term storage
- > availability for a variable period from one month to up to six months in the first instance
- > large volume body capacity: larger in the Adelaide metropolitan area and smaller throughout the country areas.
- > the number of suitable mobile refrigerated/freezer containers available in Adelaide at any time, including whether these could be deployed to regional centres on a needs basis;
- > determining whether a direct electrical or diesel power source is required to facilitate cooling, taking into account potential shortage of diesel fuel and required ampage specifications
- > ensuring safe conditions for those involved in body handling and storage, including storage methods, body capacity, emergency exit and/or door release, as well as other stringent work health and safety business and staff protocols.

Please see *Appendix three: Mortuary storage capacity in SA Health & Forensic facilities and Funeral Industry facilities.*

Funeral Industry mortuary facilities and capacity

Like hospitals, the funeral industry in South Australia have mortuaries across metropolitan and some regional areas. Like hospitals, in a pandemic, the storage capacity for on-site storage within the funeral industry could become exceeded, and each private funeral operator is responsible for developing additional mortuary capacity within their business continuity plans.

If additional capacity is to include refrigerated shipping containers, then the considerations outlined above should equally be considered by the funeral industry.

Please see *Appendix three: Mortuary storage capacity in SA Health & Forensic facilities and Funeral Industry facilities.*

Emergency mortuary facilities

South Australian Police are responsible for the coordination and management of emergency mortuary facilities. This includes establishing either an emergency mortuary facility (with the ability to undertake post-mortem) or mass storage facility, if required, based upon the prevailing requirements.

Burial Grounds and Burial Capacities in South Australia

In the event of a major surge in deaths and increased demand for burial plots, then nearly all Regional/Rural cemeteries have grave site capacities (These refer to standard “earth burial site”, each of which have the capacity for holding up to three interments).

Please see *Appendix Four: Burial Ground capacity in South Australia.*

Cremation of bodies

Funeral directors must comply with the relevant SA regulations with regards to disposal of bodies. Infection control precautions should be used during body handling and the cremation of deceased bodies confirmed or suspected to have a viral respiratory disease, such as COVID-19.

Coffins

South Australian funeral directors source most of their stock locally –

- > two dedicated manufacturers (Casket Company and Yatala Prison),
- > one assembler/supplier, and
- > two suppliers with large Adelaide warehouses.

It is recommended that the Funeral Industry stockpile 'flat-pack' coffins to ensure that funerals and cremations can continue during an viral respiratory disease pandemic without disruption from a lack of coffins. It is also recommended that the Funeral Industry explores locally sourced coffin production, which may be more simplistic but suit requirements.

Coffins must be appropriately manufactured in line with industry standards.

Special situations and issues

Delays in Finalising Funeral Arrangements

Delays in burial/cremation are anticipated, which will require a planned community awareness program to inform and support family concerns for this. Communication to the public should include advice on:

- > expected timeframe for the delay;
- > process involved in storage of the body;
- > Coroner's Office requirements
- > reassurance about the ultimate outcome in terms of a suitable funeral and cremation or burial; and
- > reassurance about the care of their deceased loved ones, and any property that may be with them;
- > in particular, the identification process and the process required (care and control of bodies) should mass storage be put into place.
- > likelihood of funerals being low key, with limited attendees, possibly due to social distancing restrictions
- > the inability of the funeral industry to undertake embalming during an viral respiratory disease pandemic
- > advice to the general public about documentation, including Wills, Power of Attorney and Advance Care Directives.

Rural & Remote Issues

Remoteness exacerbates problems for the community and will cause specific problems in terms of managing the deceased in the pandemic setting.

Transport of bodies from rural regions to the city, or vice versa, will raise specific issues, particularly if there are issues pertaining to the Coroner.

Storage of bodies in rural and remote areas may need to be put into place due to the limited capacity to deal with an increase in numbers.

A number of potential rural and remote sites have been identified as being appropriate for the storage of bodies using refrigerated containers, and this will be managed through local business continuity arrangements.

Burials Outside a Designated or Prescribed Area

Burials are allowed as outside a designated cemetery or a prescribed area in South Australia. This is facilitated by Local Government.

The requirements for this are prescribed in:

- > Section 8 of the Burial and Cremation Act 2013,

- > Regulation 4 of the Burial and Cremation Regulations 2014; and
- > Regulation 9(m)(a) of the Births, Deaths and Marriages Regulations 2011.

Religious and Cultural Issues

In a pandemic situation, some usual cultural burial requirements will not be able to be satisfied due to the constraints upon the industry due to potential public health implications and capacity.

Public gatherings and social distancing

Public gatherings and social distancing can be expected during pandemic, which has implications for the operation of funerals. Therefore, the management of the deceased will be as follows:

- > bodies will be buried or cremated without public funeral; or
- > the number of attendees at funeral services may be restricted by a Direction under a Declaration of an Act regarding social distancing measures

Repatriation (to be determined by National Mass Fatalities Group)

Interstate

The law (via the Coroner's Act) requires a body transferred from another State/Territory to SA to be reported to the Coroner where the circumstances of the person's death arose in a manner that would ordinarily be reported to the Coroner.

A report to the SA Coroner is required even if the case has been investigated by an interstate Coroner.

The issue of potential infection from pandemic viral respiratory disease will require assurance that all required infection control procedures are in place for transfer.

International

Current procedures are in place to facilitate the repatriation of bodies internationally, guided by international rules and regulations.

The issue of potential infection from pandemic viral respiratory disease will require assurance that all required infection control procedures are in place for repatriation.

Currently, repatriation to an overseas country requires the embalming of the body, which is not recommended during a viral respiratory disease pandemic.

A body not accompanied by documentation which shows the cause of death will require an Import Permit for entry into Australia. Refer to AQIS in Canberra for the permit.

Funeral Directors or persons organising the process of transportation of a body to another country should contact the Embassy or Consulate of the country of destination. In addition to the general international rules, the country receiving the body might have specific requirements.

Importantly, current practice is to transport the bodies by air (both interstate and international), but if border control measures and decreased flight schedules, then this could delay or cease these activities altogether.

Funeral Assistance for repatriation

In a pandemic viral respiratory disease environment the severity of the illness or the restrictions on travel is likely to result in a greater number than normal of South Australian citizens who will die outside of South Australia, either interstate or overseas. In addition, the inability to transport remains back to South Australia because of limited and timely transport facilities will require funerals to occur in the place of death.

Currently no assistance is available to families wishing to transport remains back to their home state when a person dies in South Australia.

Similarly, no assistance is available for families wishing to bring back to South Australia the remains of a person who dies outside of the State or overseas.

For more information, see the section on Funeral Assistance SA section below.

Workforce capacity required for mass fatalities in pandemic setting

Business continuity

There will be strain upon various resources (including human resources) that support the government agencies involved, such as SAPOL, Forensic Science SA, Births Deaths & Marriages, and Coroner's Office to funeral and crematorium industries. The high likelihood of system strain requires planning to accommodate the needs of the population at a most vulnerable time. Should staff (or their families) from the industry be affected to any significant extent there will be an adverse impact, and in this instance, storage of the bodies and subsequent slow release would greatly assist the industry in coping.

It is recommended that all government agencies and funeral industries ensure that they have appropriate Business Continuity Plans in place, that specifically include surge in fatalities, surge in administrative processes related to mass fatalities and loss of workforce while trying to cope with such surges. This should include religious, cemetery and crematory, grave diggers and monumental masons industries.

Work health and safety in mortuary, funeral and related industries

Staff supporting the mortuary, funeral, cemetery, crematorium, monumental masons and related industries will require training and education around dealing with the deceased during an viral respiratory disease pandemic. This will help prepare the industries to cope with and reduce the potential for adverse psychological impacts upon workers.

People who will potentially have contact with a patient infected with pandemic viral respiratory disease include:

- > autopsy staff (pathologists and other staff);
- > funeral home staff;
- > funeral attendees;
- > crematorium workers;
- > cemetery staff.

Similarly, due to loss of workforce, some areas will need to ensure new staff or additional rostered staff bought in to deal with a surge in work are appropriately trained, particularly in standard precautions and PPE to minimise the risk of transmission.

Funeral Assistance

Funeral Assistance SA

As mentioned earlier, the Department for Human Services (DHS) provides funeral assistance, particularly where there are special needs required (such as homeless). In a viral respiratory disease pandemic then this would increase.

People who have recently experienced the death of a family member or friend, and who have exhausted all options to raise funds or obtain credit, may be eligible for assistance through Funeral Assistance SA.

The funeral provided is normally a cremation service, except in certain cultural and religious circumstances.

Funeral Assistance SA

Phone - 1300 762 577

Email - FuneralAssistanceSA@sa.gov.au

Applications must be done through: <https://www.sa.gov.au/topics/care-and-support/concessions-and-grants/concessions/funeral-assistance-program>

Assisted funerals are only arranged to take place at the place of death and apart from the circumstances of some Aboriginal persons, will not include transport costs from the place of death to the person's home town.

It is normal practice that, in the event of no family or friends coming forward to cover the costs of a person's funeral, DHS will undertake an assessment of the person's estate including searching for family members. If no relative is found or if no person is willing to cover the cost of the funeral, then DHS will cover the cost of a basic funeral. However, the numbers of unclaimed funerals is likely to increase in the event of a viral respiratory disease pandemic.

Unclaimed Bodies

The system for unclaimed bodies is that the mortuary facility (usually public hospital or coroner) advise SAPOL. SAPOL refer the case to the Public Trustee.

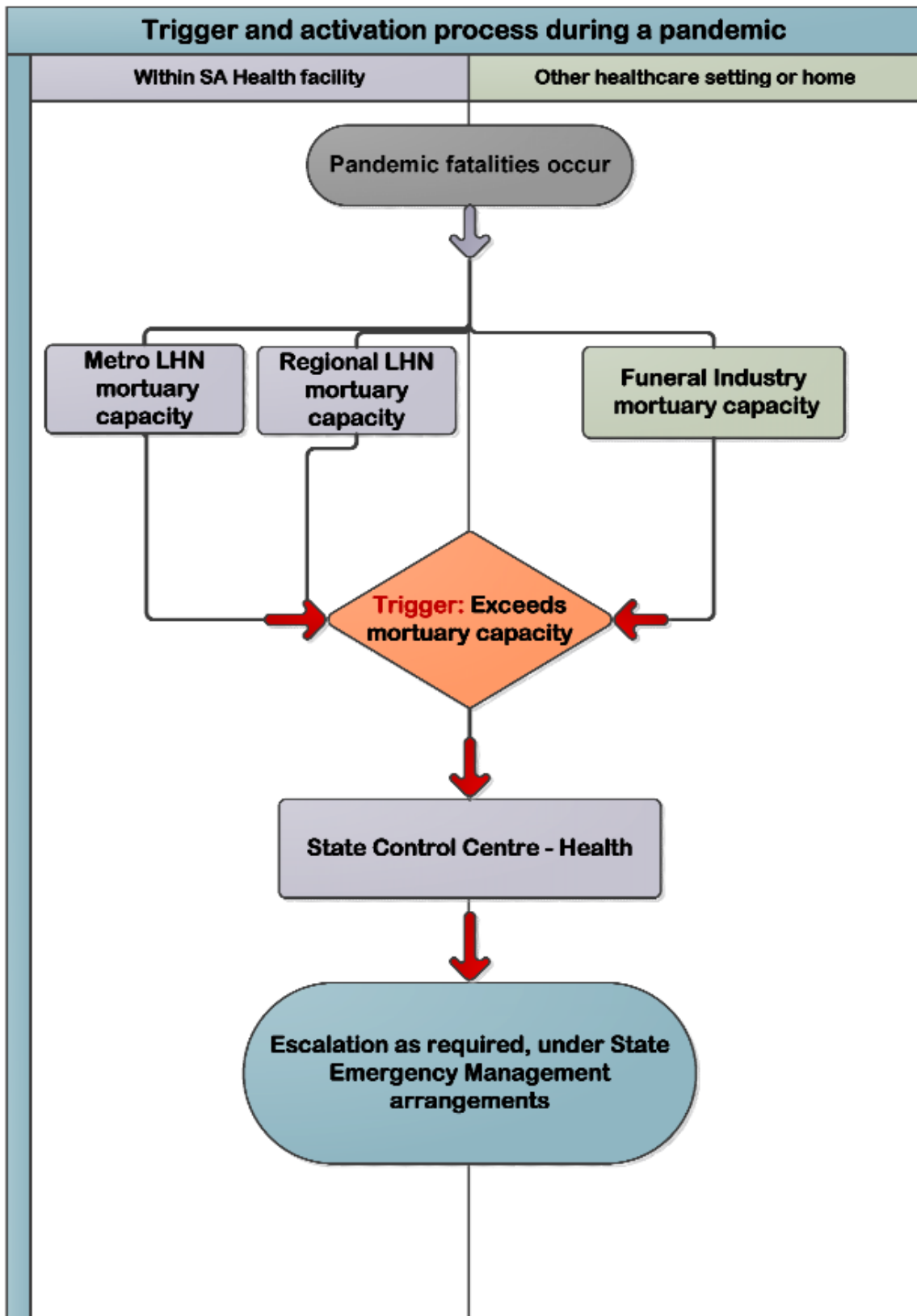
The Public Trustee then needs to research who this person is, what property they have, whether there is family, did they leave any instructions upon death. This process can take many weeks.

If the person has less than \$3500 in assets, then their cremation is covered by the Funeral Assistance Program (and its private contractor).

If the person has more than \$3500 in assets, then the Public Trustee engages one of their panel funeral directors (private contractors who have an agreed service and price list). Funeral services are not always possible due to lack of funds.

Appendices

Appendix one: Trigger and Activation Process Flowchart



Appendix two: Cemetery and Crematoria Transportation Capability

Table 1 below summarises a number of cemetery entities that may have coffin transportation capacities. These apply to the transportation of standard coffins.

Table 1: Cemetery and Crematoria Coffin Transportation Resources and Capacities

Coffin Transport Van Capacities	Location	Number of Vans	Maximum Number of Standard Coffins* Carried per Van	Total Coffin Carrying Capacity at One Time
Centennial Park Cemetery	Pasadena	3	4	12
SA Cremations Services	Seaford	1	4	4
Norther Regions Crematorium	Gawler	3	4	12
Adelaide Cemeteries Authority	Clearview	3	4	12
Western Cremation Services	Port Adelaide	1	4	4
Tri-Transfer Services	Edwardstown	3	2	6
TOTALS		14		50

*A standard coffin is distinct from the larger “casket” coffin. Generally, only 2 “caskets can fit in the rear of each van.

In addition to the list above, major funeral homes have coffin carrying van capabilities.

Appendix three: Mortuary storage capacity in SA Health & Forensic facilities and SA Funeral Industry facilities

Table 2a: Storage capacity in Local Health Networks (Metropolitan and Regional)

Facility	Location	Refrigerated Storage	Non- Refrigerated Storage *
Forensic Science SA	Divett Place, Adelaide	80	0

Table 2b: Storage capacity in Local Health Networks (Metropolitan and Regional)

Healthcare facility	Location	Refrigerated Storage	Non- Refrigerated Storage
Metropolitan LHNs			
Central Adelaide LHN	Royal Adelaide Hospital	43 (including X 3 freezer)	Nil
	Queen Elizabeth Hospital	18 fridge only	Nil
Northern Adelaide LHN	Lyell McEwin	17 fridge only	Nil
	Modbury	18 fridge only	Nil
Southern Adelaide LHN	Flinders Medical Centre	42 (including 3 in freezer)	Nil
	Noarlunga	Nil	< 5 unrefrigerated
	Repatriation	Decommissioned	Nil
Women's & Childrens	WCHN	6 fridge only (adult or paediatric)	Nil
TOTAL		149	5
Regional LHNs			
Barossa Hills LHN	N/A	8	
Eyre & Far North LHN	N/A	24	
Flinders & Upper North LHN		16	
Limestone Coast LHN	N/A	18	
Riverland Murray Coorong LHN	N/A	10	2
Yorke & Northern LHN	N/A	12 (+3 hired shipping containers each with 6-8 capacity)	4
TOTAL		88	6

Table 2c: Crematoria Coffin Storage Facilities in the Adelaide Metropolitan Area

Storage Provider	Location	Refrigerated Storage	Non- Refrigerated Storage*
Centennial Park Cemetery	Pasadena	25	15
SA Cremations Services	Seaford	8	50
Norther Regions Crematorium	Gawler	38	n/a
Adelaide Cemeteries Authority	Clearview	8	20
Western Cremation Services	Port Adelaide	8	n/a
Tri-Transfer Services	Edwardstown	8	20
TOTAL		95	105

*Non-refrigerated storage is a less preferred option. Centennial Park and Adelaide Cemeteries have air-conditioned ‘non-refrigerated” coffin storage areas.

Tri-Transfers are not a crematorium as such, but are long-term providers of contracted coffin transport services to the funeral and cemetery industries.

All sites have capabilities for the temporary installation of refrigerated shipping containers or vehicles for the purpose of storing coffins.

Nearly all funeral homes have some on-site refrigerated coffin storage capacity for between 2 to 10 coffins.

REGIONAL LHN MORTUARY STORAGE – as at April 2020

Riverland Mallee Coorong LHN

Hospital	Refrigerated Storage	Non-refrigerated storage
Renmark Paringa	Nil	Air-conditioned room only
Riverland General Hospital	Nil	Air-conditioned room only
Loxton	Nil	Air-conditioned room only
Barmera	Nil	Air-conditioned room only
Waikerie	Nil	Air-conditioned room only
Lameroo	1	Air-conditioned room only
Pinnaroo	2	Air-conditioned room only
Karoonda	2	Air-conditioned room only
Mannum	1	Air-conditioned room only
Murray Bridge	3	2
Tailem Bend	Nil	Air-conditioned room only
Meningie	1	Air-conditioned room only

Yorke and Northern LHN

Hospital	Refrigerated Storage	Non-refrigerated storage
Booloroo, no morgue	Nil	Nil
Balaklava	Nil	1
Burra, no morgue	Nil	Nil
Clare	2 plus 6-8 in hired container	2
Crystal Brook, no morgue	Nil	Nil
Jamestown, no morgue	Nil	Nil
Laura, no morgue	Nil	Nil
Maitland, no morgue	Nil	Nil
Minlaton (Melaleuca Court)	Nil	Nil
Orroroo	2	Nil
Peterborough	2	Nil
Pt Broughton, no morgue	Nil	Nil
Port Pirie	4 plus 6-8 in hired container	Nil
Riverton, no morgue	Nil	Nil
Snowtown, no morgue	Nil	Nil
Wallaroo	2 plus 6-8 in hired container	Nil
Yorke town, no morgue	Nil	1

Limestone Coast LHN

Hospital	Refrigerated Storage	Non-refrigerated storage
Mount Gambier	6	Nil
Penola	0	Nil
Naracoorte	4	Nil
Bordertown	2	Nil
Millicent	4	Nil
Kingston	2	Nil

Eyre and Far North LHN

Hospital	Refrigerated Storage	Non-refrigerated storage	Comments
Port Lincoln	6	Nil	
Tumby bay	0	Nil	We have no refrigerated Morgue at Tumby. Reliant on local Funeral Director

Cummins	1	Nil	Cummins has one morgue – one space inside it
Cleve	1	Nil	Turn on as required.
Cowell	1	Nil	Turn on as required.
Kimba	2	Nil	
Wudinna	2	Nil	
Elliston	1	Nil	
Streaky Bay	2	Nil	Maximum, with funeral companies both based in Port Lincoln
Ceduna	6	Nil	The old morgue which can be turned on and can hold 15-20 bodies
Cooper Pedy	2	Nil	Can fit as many as 4

Barossa Hills Fleurieu LHN

Site	Morgue / Capacity
Eudunda	Nil
Kapunda	Nil
Gawler	Yes – only 1 barouche – potentially could hold 2
Tanunda	Nil
Angaston	Nil
Mt Pleasant	Nil
Gumeracha	Nil
Mount Barker	Nil
Strathalbyn	Nil
South Coast	Nil
KI	Yes – 6 spaces

Flinders and Upper North LHN

Site	Morgue / Capacity
Hawker	2
Leigh Creek	2
Roxby Downs	2
Port Augusta	4 bodies at Hospital. Local Funeral Home has x2 Refrigerated shipping containers available for storage + has ordered 150 additional coffins.
Whyalla	6 at Hospital + 10 at Local Funeral Home.
All other sites	Nil

Appendix four: Burial Ground capacity in SA

There is an existing 13 hectares of undeveloped burial land at Smithfield Memorial Park. This site, owned and operated by the Adelaide Cemeteries Authority, a State Government entity, has the following burial capacity:

- > 13 hectares of undeveloped land.
- > Industry benchmarking identifies 3,600 standard earth burial grave sites per hectare in a high density burial plan.
- > Three levels of interment in each earth burial grave site.
- > Hence 13 hectares x 3,600 sites x 3 interments per site = 140,400 persons buried.

The other sites owned and operated by the Adelaide Cemeteries Authority are:

- > Enfield Memorial Park at Clearview has 9 hectares of undeveloped burial grounds. (Nine hectares could provide up to 32,000 earth graves for 96,000 burials).
- > West Terrace Cemetery has limited burial space. Estimated 200 vacant grave sites.
- > Cheltenham Cemetery on Port Road has been operating via grave re-use and redevelopment since 1987. At any one time, up to 200 graves are redeveloped and available for use.

As of 1 April 2020, the Centennial Park Cemetery at Pasadena has:

- > 4,542 unused adult graves (4,542 x 3 interments = 13,636 interments); and
- > 562 children's' grave sites (562 x 3 = 1,686 child interments).
- > Like other South Australian cemeteries, the option of grave re-use at Centennial Park is available. With current resources, Centennial Park can prepare and complete 14 burials per day.

Payneham and Dudley Park cemeteries provide only re-used grave sites and generally have up to 200 graves prepared at any one time.

Salisbury Memorial has an estimated 500 burial plots remaining.

The North Road Cemetery operated by the Anglican Church has limited burial space.

There are a number of small Council owned and operated cemeteries including:

- > Adelaide Hills Council (17 cemeteries)
- > Holdfast Bay (2)
- > Tea Tree Gully (2)
- > Burnside (2)
- > Charles Sturt (1)
- > Playford Council (3)

The majority of these sites have limited grave capacity, with the exception of some of the Adelaide Hills Council cemeteries.

Appendix five: Key contact details (as at April 2020)

Adelaide Cemeteries Authority (Based at Clearview)

www.aca.sa.gov.au

Manages 4 cemeteries and Enfield Crematorium

Robert Pitt
Chief Executive Officer
Email: robert.pitt@aca.sa.gov.au
Phone: 8139 7423
Mobile: 0421 646 508

Alternate:
Michael Robertson
Chief Operating Officer
Email: michale.robertson@aca.sa.gov.au
Phone: 8139 7417
Mobile: 0407 390 562

Centennial Park Cemetery Authority (Pasadena)

www.centennialpark.org

Manages Centennial Park Cemetery and Crematorium

Janet Miller
Chief Executive Officer
Email: janetm@centpark.org.au
Phone: 82752202
Mobile: 0410 524 834

Alternate:
Mike Rusby
Chief Operating Officer
Email: miker@centpark.org.au
Phone: 8275 2215
Mobile: 0448 803 560

Northern Regions Crematorium (Gawler)

www.taylorandforgie.com.au

Mark Forgie

Phone: 8522 1734

Mobile: 0411 173 390

Claire Forgie
claire.forgie@gmail.com
Phone: 8522 1734

Western Cremation Services (Port Adelaide)

www.tonymontefunerals.com.au

Manager

Ty Monte

Email: not known

Phone: 8341 2822

SA Cremation Services (Seaford)

www.fulhamfunerals.com.au

Jamie Grant
jamiegrant@fulhamfunerals
Phone: 8234 0506
Mobile: 0418 894 014

Damien Grant
damiengrant@fulhamfunerals
Phone: 8234 0506

Funeral Assistance Program South Australia

Coordinated and managed by the Department for Human Services:

Funeral Assistance SA

Phone - 1300 762 577

Email - FuneralAssistanceSA@sa.gov.au

Applications must be through: <https://www.sa.gov.au/topics/care-and-support/concessions-and-grants/concessions/funeral-assistance-program>

Tri-Transfers (Edwardstown)

www.tri-transfers.com.au

Craig Bottrill
General Manager
Email: info@tri-transfers.com.au
Mobile: 0413 584 770

Monumental Masons Association of South Australia

www.monumentalassociationsa.com.au

President
Chris Tillett
S.D. Tillett Memorials
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Phone: 8346 0971
Mobile: 0414 846 190

Secretary
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For more information

Disaster Preparedness and Resilience Branch
Health Regulation and Protection
HealthEmergencyManagement@sa.gov.au
Telephone: 7425 7065
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