

Health and disaster management: planning for pandemic

Speed read

- All Australian States and Territories maintain a pandemic response plan, in line with the *Australian Health Management Plan for Pandemic Influenza*.
- Existing systems and governance mechanisms should be used to respond to pandemics where possible.
- Use a flexible approach that can be scaled and varied and emphasise communication activities as a key tool in managing the response.

Key points

Table 1: Stages in the health sector response to pandemic:

PREPAREDNESS		<ul style="list-style-type: none"> • Establish pre-agreed arrangements by developing and maintaining plans. • Research pandemic specific influenza management strategies. • Ensure resources are available and ready for rapid response. • Monitor the emergence of diseases with pandemic potential and investigate outbreaks if they occur.
RESPONSE	Standby	<ul style="list-style-type: none"> • Prepare to commence enhanced arrangements . • Identify and characterise the nature of the disease (commenced in preparedness). • Communicate to raise awareness and confirm governance arrangements.
	Action – initial	<p>When information about the disease is scarce:</p> <ul style="list-style-type: none"> • Prepare and support 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.
	Action - targeted	<p>When enough is known about the disease to tailor measures to specific needs:</p> <ul style="list-style-type: none"> • Support and maintain quality care. • Ensure a proportionate response. • Communicate to engage, empower and build confidence in the community. • Provide a coordinated and consistent approach.
	Stand down	<ul style="list-style-type: none"> • Support and maintain quality care. • Ensure a proportionate response. • Communicate to engage, empower and build confidence in the community. • Provide a coordinated and consistent approach.

The first step in managing an outbreak is a detailed assessment. This will examine the nature, extent and impact of an outbreak. The outbreak needs to be diagnosed accurately. Recognition of the organism causing the outbreak helps understand the mode of transmission and the span of diseases that may be expected. These determine the management strategies required.

The second stage is to evaluate the impact. Pandemics not only cause disease but also result in a significant impact on social and economic parts of society, e.g. through loss of workforce, loss of productivity and failure of supply chains. These impacts are exacerbated by strategies designed to limit the spread of the disease such as a school closures, quarantine and restriction of movements. Integrated planning and communication is required to make sure there is consistency between different levels of government and agencies.

Stockpiles of necessary equipment are available within hospitals and health services and dedicated stores held nationally or distributed from a national pool. Countries are moving to create stockpiles of equipment and consumables. This is particularly important considering that Australia is not a manufacturer.

Vaccines are the foundation of pandemic control. Maintenance of vaccination rates is critical to disease prevention and control. However, a new organism will require production of a new vaccine. There are potential legal and ethical issues associated with the fast tracking of new vaccines to market in the absence of widespread clinical trials.

Consider how to distribute the vaccine. Accumulation of large numbers of people at a vaccination centre is unwise in the environment of an infectious disease outbreak. Vaccinations can be done in two ways – blanket or selective. Blanket (or mass) vaccinations are designed to protect the vulnerable. Targeted (or ring) vaccinations are designed to isolate those affected and create a barrier of resistance between those affected and the general population at risk.

Take action

- Review the [Australian Health Management Plan for Pandemic Influenza](#) (AHMPPI 2019)

More information

- [Pandemic Collection on the Australian Disaster Resilience Knowledge Hub](#)
- [Health and Disaster Management Handbook](#) (AIDR 2019)
- [Australian Government Department of Health](#)