

## Health, disasters and risk

### Speed read

- All disasters disrupt the health system.
- Health takes the lead on a number of disaster types.
- Work in all phases of disasters needs to be based on best available information and analysis.

### Key points

#### Sources of risk to communities and the health system include:

- **Heatwaves** have the highest fatalities than all other hazards combined. Heatwaves can result in hyperthermia but also have an aggravating impact on a range of medical conditions through dehydration and physical exhaustion. Support is needed for higher risk groups such as the elderly, children, and those with chronic illnesses.
- **Pandemics** not only cause disease but also result in a significant impact on social and economic aspects of society, such as through absenteeism, loss of productivity and failure of supply chains.
- **Crowded places and mass** gatherings pose health risks to the community when large crowds gather and move about. The nature of presentations to health care will depend on the nature of the situation or event and the profile of the crowd.
- **CBRN** incidents pose three main issues for health services: potential for large numbers of casualties, long-term effects for communities and health services to address and risks to health and emergency workers and others assisting, particularly in the early stages when the agent may not be known and appropriate precautions specific to the agent may not be implemented.
- **Mass burns** require a whole of system approach. Mass burns can result from explosions, transport accidents and fires. In a major burns event, people will best be treated where possible by specialised burns units, for example following Black Saturday. In Australia, the National Burns Plan envisages the need to distribute patients across the national burns capability
- **Floods** impact communities either directly through contact with the water or indirectly through damage and disruption the water creates on infrastructure, supply chains and the health system. Floodwaters may contaminate the local water and food supply and damage waste systems. Mould is especially hazardous.
- **Storms** can cause injury to people or damage to infrastructure as either a direct or indirect effect. For example, a lightning strike can directly kill or injure people or it can damage power supplies leading to a loss of infrastructure to support people with health issues.
- **Cyclones** can damage huge areas, leading to significant disruption to the health system.
- **Bushfires** can result in severe injury and loss of life and **smoke** can exacerbate people with respiratory problems.

**Understand and assess how different risks impact the health system.** The consequences and level of disruption will vary depending on factors such as:

- scale and type of damage
- size of the area affected
- number and duration of evacuations
- the experience that community has with the hazard
- damage to health system infrastructure.

# Quick Guide

## Take action

- Review the Quick Guide on [Australia's health emergency response arrangements](#)
- Print or save the Quick Guide [Concepts and principles of health and disaster management](#)

## More information

- [Health and Disaster Management](#) (AIDR 2019)
- [Pandemic Collection](#) on AIDR's Knowledge Hub
- [Australian Government Department of Health and Aged Care emergency management plans](#)
- [Safe and Healthy Crowded Places](#) (AIDR 2018)