

Disaster Risk Management for Health

CHILD HEALTH

Key Points

- 30-50 percent of fatalities arising from natural events are children
- The main causes of mortality in children are usually the same conditions that cause morbidity in non-emergency settings
- Children are vulnerable but disaster risk reduction can help minimise the risks from hazards.
- Children have a vital role to play when building community resilience and should be involved in planning for, responding to and recovering from natural disasters



Children draw maps of their village in the Irrawaddy Delta, Myanmar. Two thirds of the children in the village were killed when Cyclone Nargis swept across the delta in May 2008. Photo Tina Salisbury, Save the Children.

Why is this important?

Children, especially those under the age of five are particularly vulnerable to disaster. They are more likely to be injured, lost, unable to access help or health care, or exposed to greater danger through separation from their families or caregivers.

In most disasters, between a third and a half of the dead are children.¹

It is currently estimated that around 250 million people are affected, each year, by disasters, and this number is likely to increase to 350 million over the next decade. Half this number are thought to be children.

The exact health effects from a disaster depend on the type of disaster, for example earthquakes can lead to critical multiple injuries, flooding can lead to outbreaks of diarrhoea. However disasters often exacerbate the most common causes of childhood mortality worldwide. These include acute respiratory illness, diarrhoea, malaria and measles, malnutrition and neonatal causes.

Disasters also affect development and delay the attainment of the Millennium Development Goals. The countries least likely to achieve the MDG targets are the same as those experiencing or recovering from disasters and acute or chronic humanitarian crises.

Whilst children are more vulnerable to the effect of disaster, this need not be the case. Good disaster risk reduction for health can help reduce the effects of a disaster on the health of children.

What are the health risks?

Communicable diseases and vector borne illness including acute respiratory illness, diarrhoea, malaria and measles.

- These are the most common causes of child mortality globally but all of these have been shown to increase when crises occur.
- Disasters can also increase the risk of outbreaks such as cholera as a result of flooding, measles as a result of overcrowding following population displacement.

Neonatal causes

- In emergencies, babies depend on others to escape a hazard.
- Globally more than 86% of neonatal deaths are due to three causes- infections, prematurity and birth complications and many of these deaths could be prevented with health care before, during and after delivery.
- In a disaster, however, disrupted access to health care increases the chance of complications for both mothers and newborn.

Malnutrition and micronutrient deficiencies have a significant impact on child mortality.

- This is not only from the direct effects of the deficiency but also due to reduced resilience caused by nutritional deficiencies that makes children more susceptible to infections.
- Babies separated from their mothers are of particular concern during disasters, as they are often unable to access breast milk, which leaves them at risk of diarrhoeal illness and infection.

Injury: Children are more likely to be injured following a disaster.

Children displaced or separated from their parents, family and communities are at greater risk of death and can suffer short and long term psychological trauma.

Risk management considerations

Governments and communities can manage risks to children's health in disasters through:

Governance, advocacy and policy

Health and disaster risk management sectors should work closely together and prioritise children when planning for disasters. This includes identifying and addressing the health risks for children in their policies, programmes and plans.

Health and child-care facilities including schools should receive early warning messages, allowing them to plan and prepare.

Multi-sector working and coordination

Maximise effectiveness of DRR activities by working with other sectors such as water and sanitation, shelter, nutrition and food security and livelihoods both before and after a disaster.

The health of a child is dependent on sectors beyond health alone. Children need access to food, clean water, shelter, housing and education in safe buildings that are appropriately placed in order to be resilient to disasters.

Health System Resilience and Response

Ensure all components of a health system are strengthened to cope with local hazards and respond to the health needs of children following a disaster. Activities include: training adequate numbers of health workers to manage the health problems of children following a disaster and ensuring there are plans for surge capacity; developing disease surveillance and early warning systems; planning to ensure there are contingency stocks of drugs and other supplies that are appropriate to the needs of children. It is also important that health facilities are built safely and prepared for response to the health needs of children in emergencies.

Community Resilience

Empowering communities and families by raising awareness of risks and actions to protect health from local hazards. Improving the baseline health of children through provision of primary health care increases the resilience of children in disasters.

Participation of Children

Encourage children to play an active role in disaster risk management through hazard identification and building community resilience (e.g. teaching them first aid and ensuring they can swim in flood prone regions.)

Example: Tsunami, Chile (2010)

It was a 12 year old girl, living on Robinson Crusoe Island, who alerted neighbours that a tsunami was approaching following the 2010 earthquake, giving them time to run to safety.

References and further reading

1. WHO (2008). Manual for the Health Care of Children in Humanitarian Emergencies, Geneva, World Health Organization, 2008.
2. Save the Children UK. Legacy of disasters: The impact of climate change on children <http://www.savethechildren.org.uk/en/docs/legacy-of-disasters.pdf>
3. Save the Children UK. Reducing risks, Saving lives.
4. UN Millennium Project (2005). Investing in development: A practical plan to achieve the Millennium Development Goals 2005 <http://www.unmillenniumproject.org/documents/MainReportComplete-lowres.pdf>
5. UNISDR (2010). Background document: Accelerating MDGs by Reducing Risk to Natural Hazards: Invest today for a safer tomorrow. <http://www.unisdr.org/english/focus/mdg/documents/MDGs-and-DRR%20DRAFT-as-of-16-June.pdf>