

# Health Emergency and Disaster Risk Management

## CHILD HEALTH

### Key Points

- 30-50% of those who die as a result of natural events are children.<sup>1</sup>
- The main causes of mortality in children are usually the same conditions that cause morbidity in non-emergency settings.
- Children have vulnerabilities but disaster risk management can help minimize 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 disasters.

### Why is this important?

Children, especially those under the age of five, are particularly vulnerable in disasters. 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. The stressors associated with disaster can have important consequences for children's emotional, social and cognitive development.

In most disasters, between a third and a half of the dead are children.<sup>1</sup> It is currently estimated that around 250 million people are affected, each year, by disasters, and



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. (T. Salsbury, Save the Children)

this number is likely to increase to 350 million over the next decade. Half this number are thought to be children.<sup>1</sup> The impact of disaster on early childhood development is poorly assessed and therefore hard to quantify.

The exact health effects from a disaster depend on the type of disaster; for example earthquakes can lead to critical multiple injuries, and 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.

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

### What are the health risks?

Communicable diseases including acute respiratory illness, diarrhoea, malaria and measles are the most common causes of child mortality globally<sup>4</sup> and all of these have been shown to increase during disasters.

Children are more prone to suffer from anxieties as a consequence of disaster, affecting their mental health, their capacity for early learning, and their ability to grow into secure and stable adolescents.<sup>2</sup>

### Neonatal causes

- In emergencies, babies depend on their parents other caregivers to escape and manage the consequences of a hazard.
- Globally more than 86% of neonatal deaths are due to three causes: prematurity, birth complications and infections, and many of these deaths could be prevented with proper health care for the mother and her baby before, during and after childbirth.<sup>6</sup>
- In a disaster, however, disrupted access to health care increases the chance of complications for both mothers and the newborn.<sup>7</sup>

**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 resistance 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. Even for babies who are with their mother, the lack of skilled support to help them sustain breastfeeding practices is often an impediment to appropriate feeding practices.<sup>3</sup>

**Injury:** Children are more likely than adults to be injured following a disaster.<sup>7</sup>

**Children displaced or separated** from their parents, family and communities have an increased risk of death and can suffer short and long term psychological trauma. But even for children who are in the care of their parents or close relatives, the destabilization of the normal environment is a major risk factor for their mental health. While children have great capacity for resilience against adversities, the consequences of disaster on their development are often overlooked and may only become apparent at a later age.

## 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 newborns and 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 to respond to the health and development needs of newborns and children in emergencies. Policies need to be in place to promote exclusive breastfeeding and continued breastfeeding, provide caregivers with support that addresses their own mental health and capacity to provide nurturing care for their children.

### 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 the provision of primary health care increases the resilience of children in disasters. Safe spaces where children can play and learn are essential as well as skilled personnel that are able to support caregivers in providing nurturing care and early learning opportunities in own environment.

### Participation of children

Encourage children to play an active role in disaster risk management through hazard identification and building community resilience; for example teaching them first aid and ensuring they can swim in flood-prone regions.

## References and further reading

1. WHO (2008). Manual for the Health Care of Children in Humanitarian Emergencies, Geneva, World Health Organization, 2008.
2. Early childhood Development in Emergencies [https://www.unicef.org/earlychildhood/index\\_40745.html](https://www.unicef.org/earlychildhood/index_40745.html)
3. Integrating Early Childhood development activities into nutrition programs in Emergencies [http://www.who.int/mental\\_health/publications/emergencies\\_why\\_w\\_hat\\_how/en](http://www.who.int/mental_health/publications/emergencies_why_w_hat_how/en)
4. Save the Children UK. Legacy of disasters: The impact of climate change on children. Available at: <http://www.savethechildren.org.uk/en/docs/legacy-of-disasters.pdf>
5. Lozano, R., Naghavi, M., Foreman, K., Lim, S., Shibuya, K., Aboyans, V., Abraham, J., Adair, T., Aggarwal, R., Ahn, S.Y. and AlMazroa, M.A., 2013. Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010. The Lancet, 380(9859), pp.2095-2128.
6. Bryce J, Requejo JH. Tracking Progress in Maternal, Newborn and Child Survival: The 2008 Report. New York: UNICEF, 2008.
7. Save the Children UK. Staying Alive and well: child health and disasters. Available at: [http://www.savethechildren.org.uk/sites/default/files/docs/Staying%20Alive%20and%20Well%20low%20res%20\(2\).pdf](http://www.savethechildren.org.uk/sites/default/files/docs/Staying%20Alive%20and%20Well%20low%20res%20(2).pdf)
8. 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>
9. 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>