

# Disaster Risk Reduction For Health

Not a new concept; however it is a new priority

## What is a disaster?

Disasters occur when vulnerable individuals and communities are impacted by environmental hazards.



**Disaster = Hazard x Vulnerability**

**What is DRR?** Disaster Risk Reduction (DRR) is a systematic approach to identifying, assessing, and reducing risks of disasters before they occur.

**Why DRR for Health?** The majority of disaster deaths occur during impact, yet historically efforts have focused on response.<sup>1</sup> DRR for health addresses the causal factors of disasters to prevent or mitigate illness or injury from ever occurring.



**100 million**  
people were affected by  
disasters in 2014<sup>2</sup>



### Disaster risk is rising

due to urbanization, population growth,  
poverty, and climate change<sup>3</sup>

## Vulnerable Populations

continue to be disproportionately affected by disasters



**30-50%** of disaster fatalities are children<sup>4</sup>



**50%** of disaster fatalities in Hurricane Katrina were over the age of 75<sup>5</sup>



**70%** of casualties in the 2004 Indian Ocean Tsunami were women<sup>6</sup>



**Every dollar spent on DRR saves \$4 in response and recovery cost<sup>7</sup>**

## DRR at CDC



### Science – Understanding disaster risk

- Contribute to the growing scientific literature on DRR

### Practice – Community efforts and best practices

- Identify baseline DRR efforts and build capacity
- Evaluate effectiveness of community DRR strategies and implementation
- Provide technical assistance to Federal, state, local, territorial, and international stakeholders to build capacity

### Policy – Inform national and global strategies

- Represent public health on the US National Platform to implement the UN Sendai Framework for DRR
- Represent health in the broader multi-sectoral DRR network



National Center  
for Environmental Health  
Agency for Toxic Substances  
and Disease Registry

<sup>1</sup>Malilay 1997, Schultz and Deynes 2010, and McCarty 2002; <sup>2</sup>CRED-EM-DAT 2015; <sup>3</sup>OID 2013; <sup>4</sup>WHO 2013; <sup>5</sup>Brunkard 2008; <sup>6</sup>World Bank 2013; <sup>7</sup>FEMA 2014