Opportunities and challenges with mortality and health related indicators

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Health consequences of El Niño

- Direct injuries and fatalities
- Malnutrition
- Communicable diseases
- Increased rains
- Increased dry conditions
- Food insecurity
- Decreased water quality
- Lack of water supply and sanitation
- Reduced access to health care
- FLOODS
- STORMS, CYCLONES
- DROUGHT
- WILDFIRES
- Increased vectors
- Increased rodents and animal hosts
- Contaminated water
- Damaged infrastructure
- Air pollution
- Population displacement
- Respiratory diseases
- Heat stress
- Mental health and psychosocial effects
- Water-borne diseases
- Disruption of health services
Worldwide disaster-related mortality, according to causative hazard (1966-2015)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Technological</th>
<th>Geophysical</th>
<th>Hydrometeorological</th>
<th>Societal</th>
<th>Biological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of global mortality</td>
<td>7%</td>
<td>30%</td>
<td>45%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>Cause of death</td>
<td>Trauma Burns Poisoning</td>
<td>Trauma Burns Asphyxia</td>
<td>Drowning Trauma Malnutrition Communicable diseases</td>
<td>Violence Malnutrition Communicable diseases</td>
<td>Communicable diseases</td>
</tr>
<tr>
<td>Mortality pattern</td>
<td>Injuries only</td>
<td>Mostly injuries</td>
<td>Mixed - injuries and disease</td>
<td>Disease only</td>
<td></td>
</tr>
</tbody>
</table>
Health impacts of emergencies & disasters

• Natural and technological hazards
  • Ave 90,000 deaths/year (1966-2015);
  • 22,500 deaths in 2015 *(UNISDR)*
  • Approx 100 million affected/year – sick, injured

• Plus epidemics and other biological hazards
  • 125m people need assistance - conflict, displacement *(OCHA – 2016)*

• Psychosocial and mental health problems
• Disability; non-communicable diseases
• Damage to health facilities; disrupted services

• Health as determinant of other societal outcomes
Challenges

• Attribution & thresholds
  ▫ Patterns of mortality and morbidity
  ▫ Primary/secondary vs direct/indirect

• Biological hazards/infectious diseases

• Medium and long-term effects

• Reporting: two-thirds (38 million) of 56 million annual deaths not registered
ANNEX 2
DECISION INSTRUMENT FOR THE ASSESSMENT AND NOTIFICATION OF EVENTS THAT MAY CONSTITUTE A PUBLIC HEALTH EMERGENCY OF INTERNATIONAL CONCERN

Events detected by national surveillance system (see Annex I)

A case of the following diseases is unusual or unexpected and may have serious public health impact, and thus shall be notified:
- Smallpox
- Poliomyelitis due to wild-type poliovirus
- Human influenza caused by a new subtype
- Severe acute respiratory syndrome (SARS).

Any event of potential international public health concern, including those of unknown cause or source and those involving other events or diseases than those listed in the box on the left and the box on the right shall lead to utilization of the algorithm.

An event involving the following diseases shall always lead to utilization of the algorithm, because they have demonstrated the ability to cause serious public health impact and to spread rapidly internationally:
- Cholera
- Pneumonic plague
- Yellow fever
- Viral haemorrhagic fevers (Ebola, Lassa, Marburg)
- West Nile fever
- Other diseases that are of special national or regional concern, e.g. dengue fever, Rift Valley fever, and meningococcal disease.

Is the public health impact of the event serious?

Yes

Is the event unusual or unexpected?

Yes

Is there a significant risk of international spread?

Yes

Is there a significant risk of international travel or trade restriction?

Yes

EVENT SHALL BE NOTIFIED TO WHO UNDER THE INTERNATIONAL HEALTH REGULATIONS

1 As per WHO case definitions.
Events detected by national surveillance system (see Annex 1)

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- West Nile fever
- Other diseases that are of special national or regional concern, e.g. dengue fever, Rift Valley fever, and meningococcal disease.

Is the public health impact of the event serious?

Yes
- Is the event unusual or unexpected?
  Yes
  - Is there a significant risk of international spread?
    Yes
    - No
  No
  - Is there a significant risk of international spread?
    Yes
    - No

No
Challenges

- Attribution & thresholds
  - Patterns of mortality and morbidity
  - Primary/secondary vs direct/indirect

- Biological hazards/infectious diseases

- Medium and long-term effects

- Reporting: two-thirds (38 million) of 56 million annual deaths not registered
Opportunities

- Health effects of different types of events
- Disaggregated data - better understanding of sources of vulnerability and capacity
- WHO Global Reference List of 100 Core Health Indicators – SDG edition
- Global Burden of Disease study
- Global Aids Reporting System: 2004 – 53% countries reported data; 2012 – 96% reported
- Opportunities in the other Sendai Targets
Opportunities: WHO Leadership Priorities

Vision: A world in which all people attain the highest possible level of health

“Keep the World Safe, Improve Health, Serve the Vulnerable”

• Health emergencies: Prevent, detect and respond to epidemics
• Provide health services in emergencies and strengthen health system
• Help countries to achieve Universal Health Coverage
• Lead on health-related SDGs – focus on women & children; climate and environmental health; non-communicable diseases; communicable diseases
• Provide the world’s platform for collective decision-making in health

(Draft concept note towards WHO’s 13th General Programme of Work 2019-2023)
References/further reading


• Bapon Fakhruddin, Virginia Murray, Rishma Maini, Disaster loss data in monitoring the implementation of the Sendai Framework [https://www.icsu.org/cms/2017/05/DRR-policy-brief-2-data.pdf](https://www.icsu.org/cms/2017/05/DRR-policy-brief-2-data.pdf)

• Mark Keim, Disaster mortality: how do people die in disasters and what can be done to reduce mortality: [disasterdoc.org/how-do-people-die-in-disasters/](http://disasterdoc.org/how-do-people-die-in-disasters/)

• The Lancet Countdown: Tracking Progress on Health and Climate Change and the Global Burden of Disease (GBD) Study [www.lancetcountdown.org](http://www.lancetcountdown.org)
Further information

http://www.who.int/hac/techguidance/preparedness/en/

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