Disaster Preparedness and Response
World Health Organization Regional Office for Europe
WHO principles

• all-hazard approach
• the multidisciplinary (intrasectoral) approach
• multisectoral approach
• comprehensive approach
The all-hazard approach

- Different crises invariably result in similar problems and response requiring similar systems and types of capacity.
- Information management, resource management, maintaining effective communication strategies
- WHO promotes a generic, all-hazard approach, actively discouraging the establishment of vertical planning mechanisms
The multidisciplinary (intrasectoral) approach

- Health systems are defined as comprising all the organizations, institutions and resources that are devoted to producing action aimed principally at improving, maintaining or restoring health (public and private initiatives, (NGOs) and international agencies),
- WHO encourages transparency and interoperability in the planning process, and promotes the involvement of all disciplines and levels of the health system to ensure a coordinated and effective response
The multisectoral approach

- Health sector plans also need to be linked to and interfaced with national disaster preparedness and response plans to avoid confusion, prevent duplication of effort and make the best use of resources.
- This is important not only during a crisis but also as part of prevention, reduction and mitigation strategies.
- However, multisectoral planning continues to be a challenge in many countries as governmental departments often prefer to develop their own individual plans, in parallel with other key partners.
The comprehensive approach

- The economic consequences of a crisis can be enormous and risk reduction, prevention and mitigation are increasingly becoming priority areas that need to be taken into consideration when planning national crises preparedness, mitigation and response.

- WHO encourages Member States to develop and implement strategies for the different aspects of crises preparedness planning, bearing in mind that they are not separate entities but overlap with each other in scope and timeframe.
Introduction to Health Vulnerability and Risk Analysis and Mapping (VRAM)
Several resolutions such as the one accepted during the 2005 World Health Assembly (WHA 58.1)

“(4) to formulate, on the basis of risk mapping, national emergency-preparedness plans that give due attention to public health, including health infrastructure, and to the roles of the health sector in crises, in order to improve the effectiveness of responses to crises and of contributions to the recovery of health systems;”
Opportunity for geography and GIS

... to be used as a neutral platform for the integration of data coming from different sources to:

- assess, analyze and map vulnerabilities and risks
- contribute to ensuring the continuity of the decision making process during the different phases of the emergency cycle
Opportunity for WHO

... to work with countries and capable research institutions to:

- **Identify the vulnerable populations** and their respective locations of risk in countries of the region.
- **Generate awareness** and advocacy for disaster reduction and risk management programs to be established/strengthened in countries.
- **Support decision-makers** in allocating the appropriate resources for preparedness and response.
- **Promote tools** which **facilitate coordination** and collaboration of potential partners working on disaster reduction in the region.
The WHO e-atlas of Disaster Risk for the Eastern Mediterranean Region

Distribution of the risks for five hazards (floods, heat, earthquakes, wind speed and landslides) with the objective of better understanding the health impact and vulnerabilities to such events.

Looking at 3 components:
- The distribution of each hazard (volume 1)
- The distribution of population's and infrastructure (the element at risk) vulnerability
- The distribution of health risks
The first volume of the WHO e-atlas of Disaster Risk

... use data collected from different sources including:

- GPS
- Climatic Stations
- Health Facilities
- Digital Elevation Model
- Landcover

... combine them in a GIS using specific models...

... to obtain the spatial distribution of the 5 hazards at the Regional ...and country level
The first volume of the WHO e-atlas of Disaster Risk

Only natural hazards for the moment

Need to add disease outbreaks, communicable diseases,...

Vulnerability and Risk
Analysis & Mapping platform (VRAM)
The Vulnerability and Risk Analysis & Mapping platform (VRAM)

Objectives

The primary objective of the VRAM is to support Member States and partners to strengthen their capacity to assess, visualize and analyse health risks and incorporate the results of this analysis in disaster risk reduction, emergency preparedness and response plans.

At the same time, the application of the VRAM process allows for the compilation and homogenisation of baseline data, information and maps to help health authorities and partners to take informed decisions in times of crises.
The Vulnerability and Risk Analysis & Mapping platform (VRAM)

Activities

To achieve its objectives, VRAM is building long-term collaborative relationships with government authorities and technically capable research institutions and universities both internationally and within targeted countries in order to:

- **Evaluate countries’ capacity** to assess and analyse hazards, vulnerabilities and risks;
- **Support the development** of national and local capacity within ministries of health and other partners to enable countries to implement the VRAM process;
- **Partner with local institutions to conduct and facilitate detailed assessments** of potential hazards, associated health vulnerabilities (infrastructures, services, population) and emergency preparedness in countries most at risk;
- **Develop, document and share methods, protocols and tools** for the collection, analysis and mapping of health hazards, vulnerability and risk information taking climate changes into account;
The Vulnerability and Risk Analysis & Mapping platform (VRAM)

In country process

The VRAM process is to answer the following questions:

1. What and where are the hazards to which populations are exposed to?
2. Where are the most vulnerable populations, health facilities and services exposed to these hazards?
3. What and where are the existing local capacities for emergency preparedness and response

Geography as the integrating platform
The VRAM process

1. Country Capacity evaluation
   - National Spatial Data Infrastructure (NSDI)
   - Evaluation, recommendations

2. Hazard analysis
   - Hazard mapping and analysis
   - e-atlas

3. Vulnerability/Capacity analysis
   - Health infrastructures and services
   - Population
   - Secondary data collection
   - Accessibility to health care

4. Risk analysis
   - Vulnerability / Capacity / Hazard
   - Health

5. Planning, baseline, capacity building
   - Emergency preparedness / Risk plan
   - Cases + Scenarios
   - Decision Support System
   - Baseline for WHO's interventions + Early warning
   - Community level sites
VRAM in countries activities

Examples:

Ghana: testing of the community level questionnaire developed in collaboration with WFP

Ethiopia: Capacity evaluation visit and recommendations provided to the MOH regarding the implementation of their emergency management plan

Nigeria: Capacity evaluation visit and support to the MOH and National Emergency Management Agency (NEMA) to conduct an hazard, vulnerability and risk pilot study in one of the States and to support the development of their state level policy

Mexico: Strengthening of the technical capacity of the Centro Regional de Investigación en Salud Pública (CRISP), translation of the e-atlas methodology documents in Spanish and support to the hazards, vulnerability and risk assessment conducted over the State of Chiapas
World Disaster Reduction Campaign 2008-09: Hospitals Safe From Disasters
Hospitals: Why are they also disaster casualties?

- Chronically weak health systems
- Under-investment in health
- Poor facility location, design and construction
- No emergency plan
- Staff are not trained
Six essential actions to make hospitals safe

1. Adopt national policies and programmes for safe hospitals
2. Design and build resilient hospitals
3. Assess the safety of your hospital
4. Plan for emergency response
5. Protect and train health workers for emergencies
6. Protect equipment, medicine and supplies
Lessons learned: 1985 Mexico earthquake

1985

- Five hospitals collapsed and 22 suffered major damage, 6000 beds lost.
- 561 people died at Juarez Hospital alone.

Today

- More than 500 people are trained to use the PAHO Hospital Safety Index, which has been applied to more than 100 facilities across the country.
- Index lets authorities determine which facilities are "safe" and which must be improved.
What can you do?

• Form partnerships between facilities and the community.

• Create emergency risk management programmes in health facilities.

• Develop health facility emergency response plans.

• Test and update response plans with drills and exercises.

• Train health workers to respond to emergencies.

• Learn lessons from past emergencies and disasters.
• Aims to foster mainstream disaster risk reduction into a broader array of health sector initiatives
• UNISDR devoting its 2008-2009 WDRC to "Hospitals Safe From Disasters," working closely with WHO and World Bank.
WHO focus on strengthening health facilities to withstand the impacts of natural disasters, conflicts, effects of climate change and disease outbreaks.

World Health Day 2009 devoted to the issue.

Developing Global Programme on Safe Hospitals
Proposed Global Safe Hospitals Programme

National programmes on Safe Hospitals (Member States, international and national financial institutions and other stakeholders)

- Advocacy for funding of health facilities, international financial institutions, and stakeholders
- Economic assessment methodologies, conduct assessments, and determine incentives for making health facilities safer

Advocacy on health facility emergency risk management

Technical materials on Safe Hospitals - health facility emergency risk management
- health facility safety assessments
- siting, design, development and construction of safe health facilities
- emergency preparedness, including exercising of plans
- damage assessment of health facilities

- Case studies, success stories
- Research programme
Global Safe Hospitals Programme

Training programmes for health and non-health sectors
- existing courses on health facility emergency risk management,
- training packages based on technical guidance indicated above to
- fostering institutions to conduct training courses
- conduct and evaluate training courses at regional, sub-regional and national levels

Demonstration sites and projects which exemplify good practice in health facility emergency risk management

Programme Coordination and Management
- Develop and strengthen regional task forces on Safe Hospitals and Health Facilities (eg. DiMÅG)
- Advisory committees and technical commissions
- Specific events, discussions and exhibition on health facility emergency risk management
- A network of specialists is needed to provide expert advice to national agencies, international agencies and other partners.
Proposed action

• * A global thematic platform for health risk reduction to bring health and other sectors together

• * Health represented on all regional and national platforms for disaster risk reduction

• * Continued investment in safe hospitals at facility, national and global levels, with priority to assessments of hospital safety

• * Investment in research and evidence base to inform decisions and action

• * 10-20 percent of humanitarian funding to disaster risk reduction
Save lives. Make hospitals safe in emergencies

Thank you.