Global Health Security
WHO’s role

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Maintaining health security is a challenge...

- **Emergence** of new or newly recognised pathogens (e.g. Ebola, Marburg, SARS, Avian flu (H5N1), Pandemic H1N1)

- **Resurgence** of well characterized outbreak-prone diseases (e.g. cholera, dengue, measles, meningitis, shigellosis, yellow fever)

- **Release** (accidental or deliberate) of a biological agent (e.g. BSE /v CJD, smallpox, SARS, anthrax)
A simple approach to build national and international capacities, competencies and practices

- Those that increase awareness
  - Access to scientific knowledge
  - Surveillance systems
  - Risk analysis and assessment

- Those that increase readiness
  - Sound health systems and infrastructure
  - Availability of vaccines, drugs, diagnostics
  - Multi-hazard operational planning
  - Multisectoral engagement
  - Exercises, events, and refinement of plans
A simple approach to build national and international capacities, competencies and practices (ctd.)

- **Those that improve responses**
  - Timeliness, coordination, surge capacity
  - Public health risk communication
  - Access to external support/expertise when needed
  - Applied research for better control in future

- **Those that ensure resilience**
  - Reinforcement of baseline functional capacities
  - Flexibility of systems
  - Adaptability of behavior
The International Health Regulations (2005)
A legally binding framework for Global Health Security

From three diseases to all public health threats
From preset measures to risk assessment response
From control of borders to also containment at source
The International Health Regulations (2005)

- The IHR (2005) provide the legal framework for collective responsibility in global health security
- The IHR specify the roles, responsibilities and core capacities for Member States and WHO
- The IHR reinforce WHO's central role in managing acute public health risks, including providing information and technical support to countries
- The effectiveness of the IHR requires international, multisectoral operational readiness and responsiveness

WHO structures, processes and tools exist to support strong national public health systems and effective international systems for detection, assessment, information and response.
### Strategic actions to guide IHR(2005) implementation

<table>
<thead>
<tr>
<th>Strategic action</th>
<th>Goal</th>
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<tbody>
<tr>
<td><strong>GLOBAL PARTNERSHIP</strong></td>
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<tr>
<td>1. Foster global partnerships</td>
<td>WHO, all countries and all relevant sectors (e.g. health, agriculture, travel, trade, education, defence) are aware of the new rules and collaborate to provide the best available technical support and, where needed, mobilize the necessary resources for effective implementation of IHR (2005).</td>
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<tr>
<td><strong>STRENGTHEN NATIONAL CAPACITY</strong></td>
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<tr>
<td>2. Strengthen surveillance and contact tracing capabilities to early detect and control the risk of international disease spread.</td>
<td>Awareness</td>
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<td>3. Strengthen security at airports, ports and ground crossings in all countries.</td>
<td>National alert &amp; response systems</td>
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<td><strong>PREVENT AND RESPOND TO INTERNATIONAL PUBLIC HEALTH EMERGENCIES</strong></td>
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<td>4. Strengthen the management of specific risks (e.g. influenza pandemic).</td>
<td>Travel &amp; transport</td>
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<td>5. Systematic international and national management of the risks known to allow effective containment.</td>
<td>Global alert &amp; response</td>
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<td><strong>LEGAL ISSUES AND MONITORING</strong></td>
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<td>6. Sustain rights, obligations and procedures</td>
<td>A legal and monitoring framework</td>
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<td>7. Conduct studies and monitor progress</td>
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Strategic actions 2–5 are key because they call for significantly strengthened national and global efforts.
### GLOBAL PARTNERSHIP

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- **Other Technical Intergovernmental organizations**
  - e.g. FAO, OIE, ICAO, IMO, UNWTO, IAEA, WTO, UNEP ...

- **Development agencies / Regional intergovernmental organizations**
  - e.g. AFD, CIDA, DFID, JAICA, USAID, ADB, ASEAN, EC, MERCOSUR, WB ...

- **WHO Collaborating Centres and Technical partners**
  - International Networks / National agencies / NGOs: e.g. GOARN, IANPHI, Pasteur IN, MSF, TEPHINET, DoD-GEIS, ICMM, CDC, ECDC, HPA, InVS ...

- **Industry associations**  e.g. ACI, IATA, ISF, ISO ...

- **Professional societies**  e.g. ASM, APHL, ISTM ...
STRENGTHEN NATIONAL CAPACITY

2 Strengthen national disease surveillance, prevention, control and response systems

Each country assesses its national resources in disease surveillance and response and develops national action plans to implement and meet IHR (2005) requirements, thus permitting rapid detection and response to the risk of international disease spread.

Core capacity requirements for surveillance and response (Annex 1A):

“capacity to detect, assess, notify and report events …”

Timeline


Planning Implementation Possible extensions

"As soon as possible but no later than five years from entry into force …"

15 June 2012
Detecting, assessing, notifying and responding

Core capacities
- Legislation and Policy
- Coordination
- Surveillance
- Response
- Preparedness
- Risk Communications
- Human Resources
- Laboratory

All hazards
- Biological
  - Infectious
  - Zoonosis
  - Food safety
- Chemical
- Radio nuclear

3 level system
- National
- Intermediate
- Peripheral/Community

Points of Entry and international travel
2011 – Results of IHR core capacities self assessment - (21.01.12) - 146 countries

- **AFRO**
- **SEARO**
- **AMRO**
- **EMRO**
- **EURO**
- **WPRO**

<table>
<thead>
<tr>
<th>Region</th>
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<tr>
<td>AFRO</td>
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<tr>
<td>AMRO</td>
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<td>EMRO</td>
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<td>EURO</td>
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<td>WPRO</td>
<td>17</td>
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<td><strong>Total</strong></td>
<td><strong>146</strong></td>
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</table>
3. Strengthen public health security in travel and transport

The risk of international spread of disease is minimized through effective permanent public health measures and response capacity at designated airports, ports and ground crossings in all countries.

- **At all times**
  - Access to medical service
  - Transport of ill travellers
  - Inspection of conveyances (e.g. Ship Sanitation Control Certificate)
  - Control of vectors / reservoirs

- **For responding to events**
  - Emergency contingency plan
  - Arrangement for isolation (human, animal)
  - Space for interview / quarantine
  - Apply specific control measures

Annex 1B

World Health Organization
WHO's public health event management – Identify, Assess, Assist, Inform

NB: Triage of incoming signals of potential public health risks relies on rapid risk assessment.
WHO Portal

States Parties

Operations

Event Management System

PAHO

EMRO

SEARO

AFRO

WPRO

EURO
10 years of event-based surveillance, WHO, 1 Jan 2001 – 18 Oct 2011 (N=3870)

Verified events mapped (n=2524)
GOARN Partner Institutions and Networks ($n \approx 300$)
Active Surveillance by Mobile Teams
Collection of Samples, Laboratory
Organisation of Safe Burials
Case management
Case management: Isolation ward
Social Mobilization
Logistics and Security
Media
Coordination
Conclusions - I

- The convergence of risk creates a need for the coherence in response

- Sophisticated tools, networks and systems have been developed by WHO and its partners for managing public health risks of any origin

- WHO's primary role in response to an accidental or intentional release of a biological agent will be to manage the public health consequences and communicate real-time public health risk assessments and recommendations
Conclusions - II

- WHO is most effective when it works through partnership and in a coordinated fashion with
  - Member States and other international Organizations
  - Technical partners in the public, academic and private sector

- Effective working relationships have been forged when collaboratively dealing with major threats/events

- These relationships have been based on mutual need, collective responsibility, solidarity, transparency, personal commitment, and pride in our organizations and systems

- This is not reproducible or sustainable without a major investment in national, regional and global public health capacities