Global Health Security WHO's role

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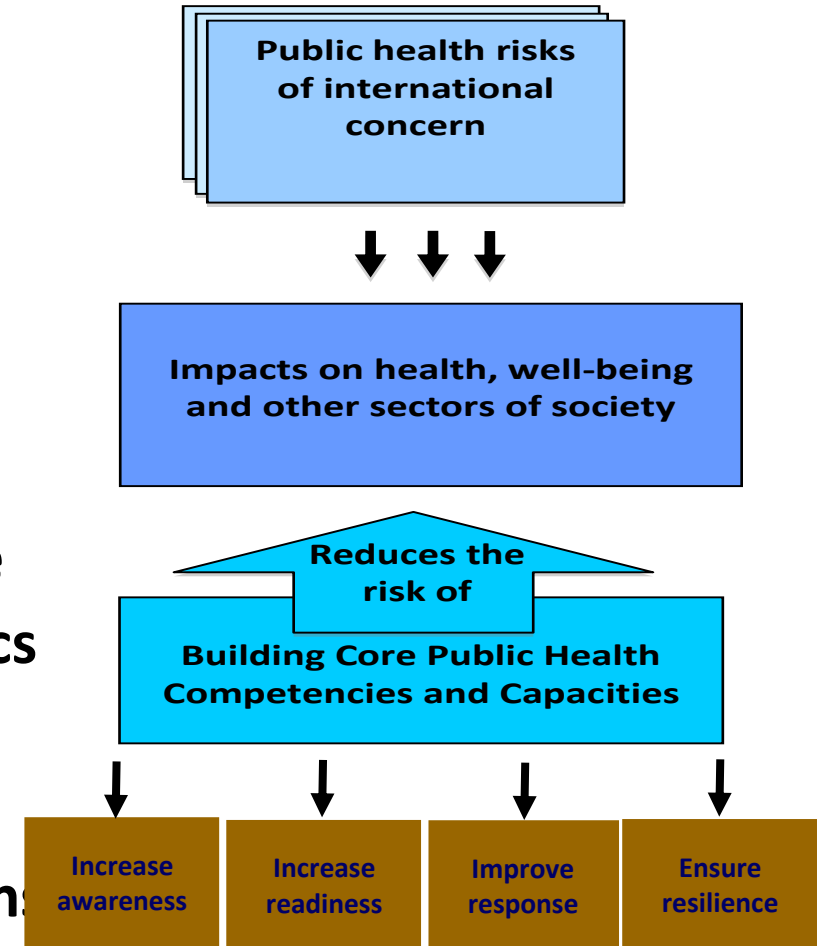INTERNATIONAL HEALTH REGULATIONS (2005)

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)
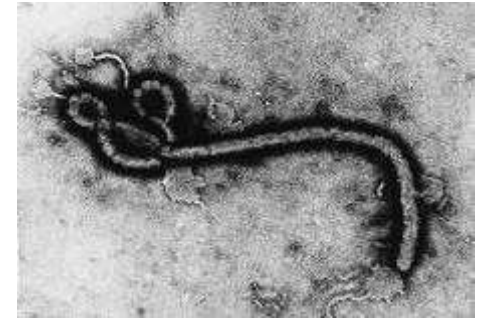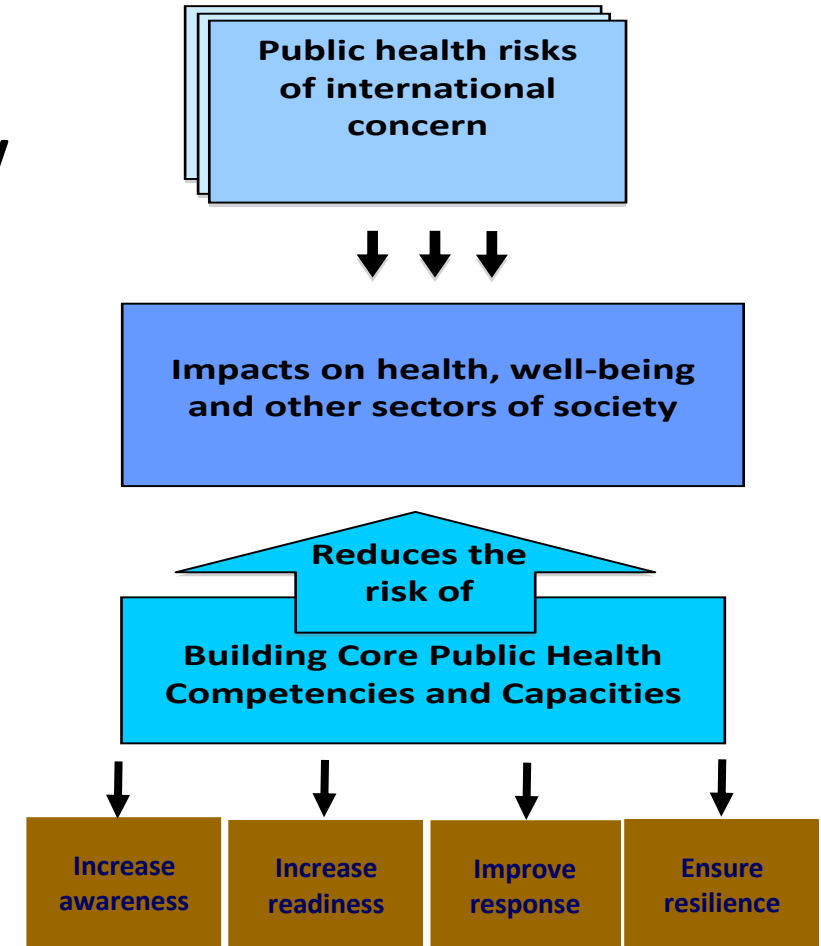

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A simple approach to build national and international capacities, competencies and practices

- ## 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**

Public health risks of international concern

Impacts on health, well-being and other sectors of society

Reduces the risk of

Building Core Public Health Competencies and Capacities

| Increase awareness | Increase readiness | Improve response | Ensure resilience |

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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**

Public health risks of international concern

↓ ↓ ↓

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Reduces the risk of

Building Core Public Health Competencies and Capacities

↓ ↓ ↓ ↓

| Increase awareness | Increase readiness | Improve response | Ensure resilience |

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The International Health Regulations (2005)
A legally binding framework for Global Health Security
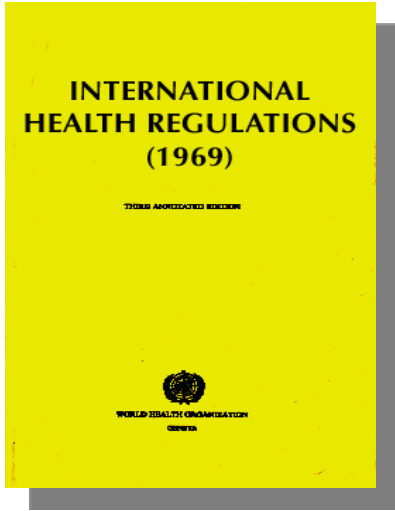
From three diseases **to**   all public health threats

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

	Strategic action	Goal	
	GLOBAL PARTNERSHIP		**Awareness**
1	**Foster global partnerships**	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).	
	STRENGTHEN NATIONAL CAPACITY		**8 core capacities**
2	Stren... surv... cont... and response systems	...et IHR (2005) requirements, thus permitting rapid detection and response to the risk of international disease spread.	
3	Stren... secu...ty in travel and transport	...ive permanent public health measures and response capacity at designated airports, ports and ground crossings in all countries.	**All hazard**
	PREVENT AND RESPOND TO INTERNATIONAL PUBLIC HEALTH EMERGENCIES		**Points of entry**
4	Stren... and r...	...th	
5	**Strengthen the management of** spec...	Systematic international and national management of the risks known to ...llow ...ve substances.	
	LEGAL ISSUES AND MONITORING		**A legal and monitoring framework**
6	**Sustain rights, obligations and procedures**	New legal mechanisms as set out in the Regulations are fully developed and upheld; all professionals involved in implementing IHR (2005) have a clear understanding of, and sustain, the new rights, obligations and procedures laid out in the Regulations.	
7	**Conduct studies and monitor progress**	Indicators are identified and collected regularly to monitor and evaluate IHR (2005) implementation at national and international levels. WHO Secretariat reports on progress to the World Health Assembly. Specific studies are proposed to facilitate and improve implementation of the Regulations.	

Overlaid labels:
- **National alert & response systems**
- **Travel & transport**
- **Global alert & response**
- **Specific risks** (e.g. influenza pandemic)

ª Strategic actions 2–5 are key because they call for significantly strengthened national and global efforts.

GLOBAL PARTNERSHIP

1	Foster global partnerships	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).

- **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 …

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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**

2007   2009   2012   2014   2016

Planning   Implementation   Possible extensions
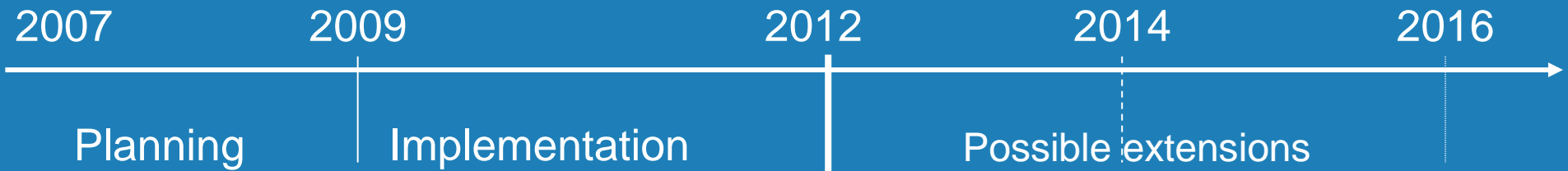
"**As soon as possible but no later than five years from entry into force** …"

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
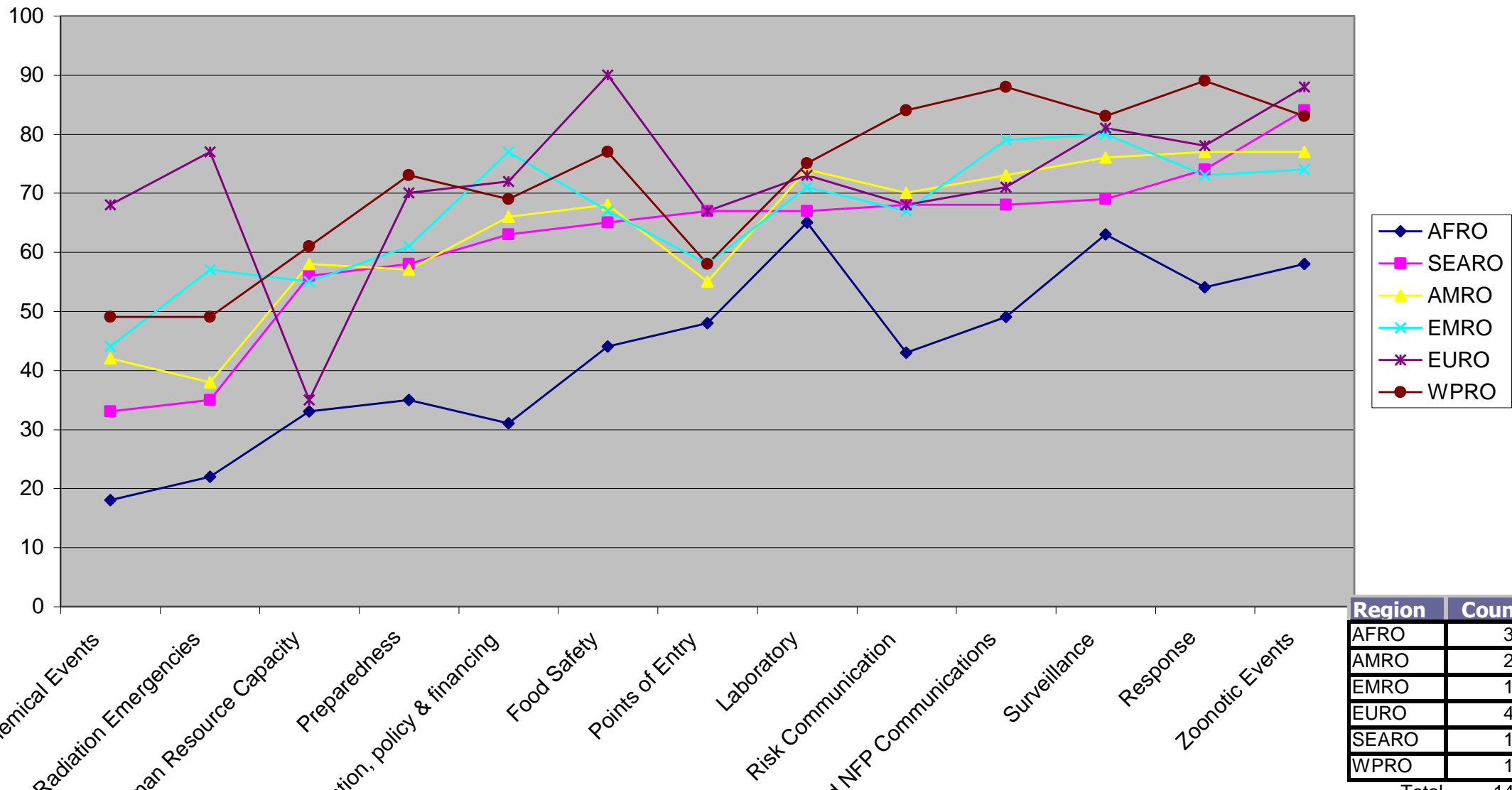
Region	Count
AFRO	34
AMRO	24
EMRO	17
EURO	43
SEARO	11
WPRO	17
Total	146

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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.

Annex 1B

- **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

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PREVENT AND RESPOND TO INTERNATIONAL PUBLIC HEALTH EMERGENCIES

| 4 | Strengthen WHO global alert and response systems | Timely and effective coordinated response to international public health risks and public health emergencies of international concern. |

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
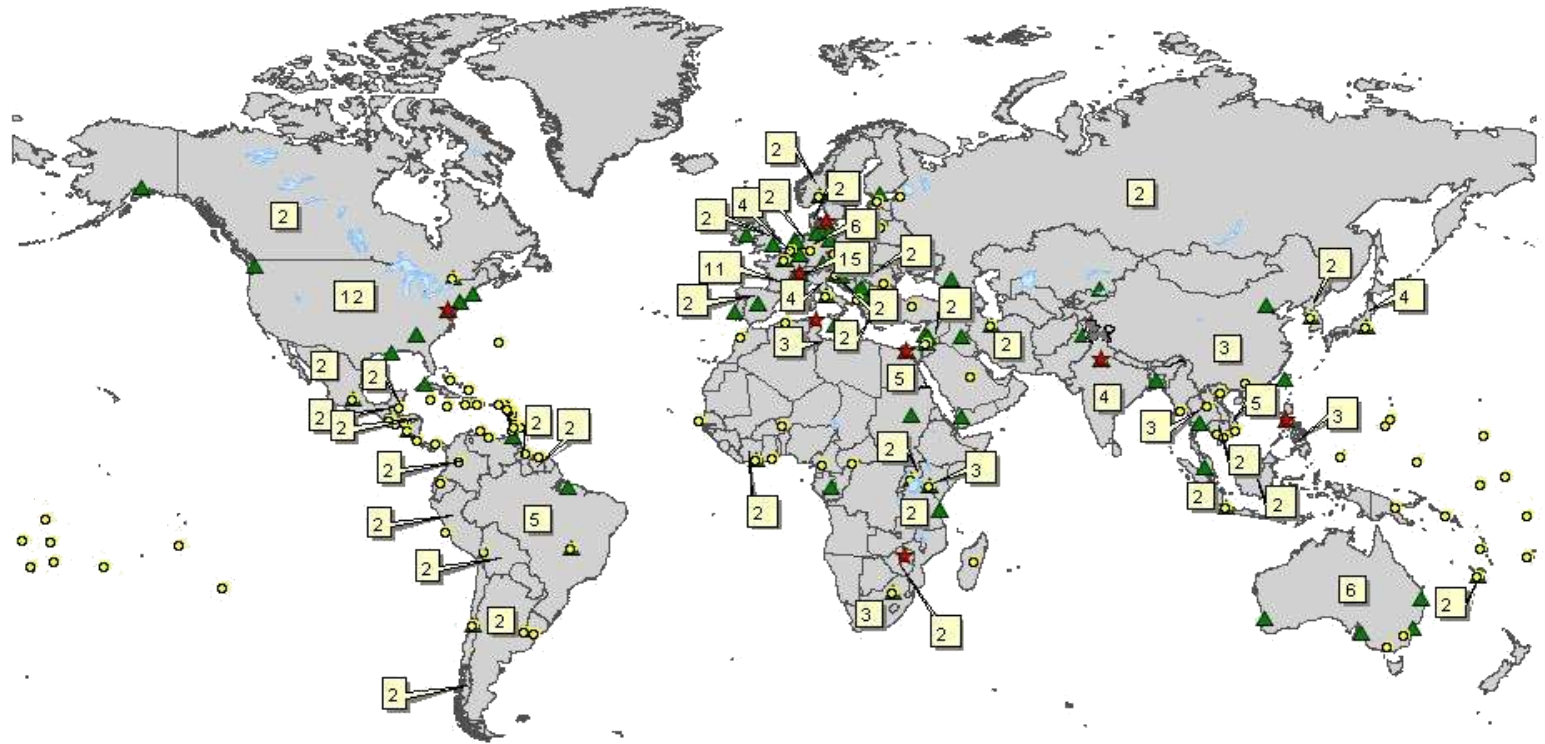
Operations

Event Management System

EURO

PAHO

EMRO

SEARO

AFRO

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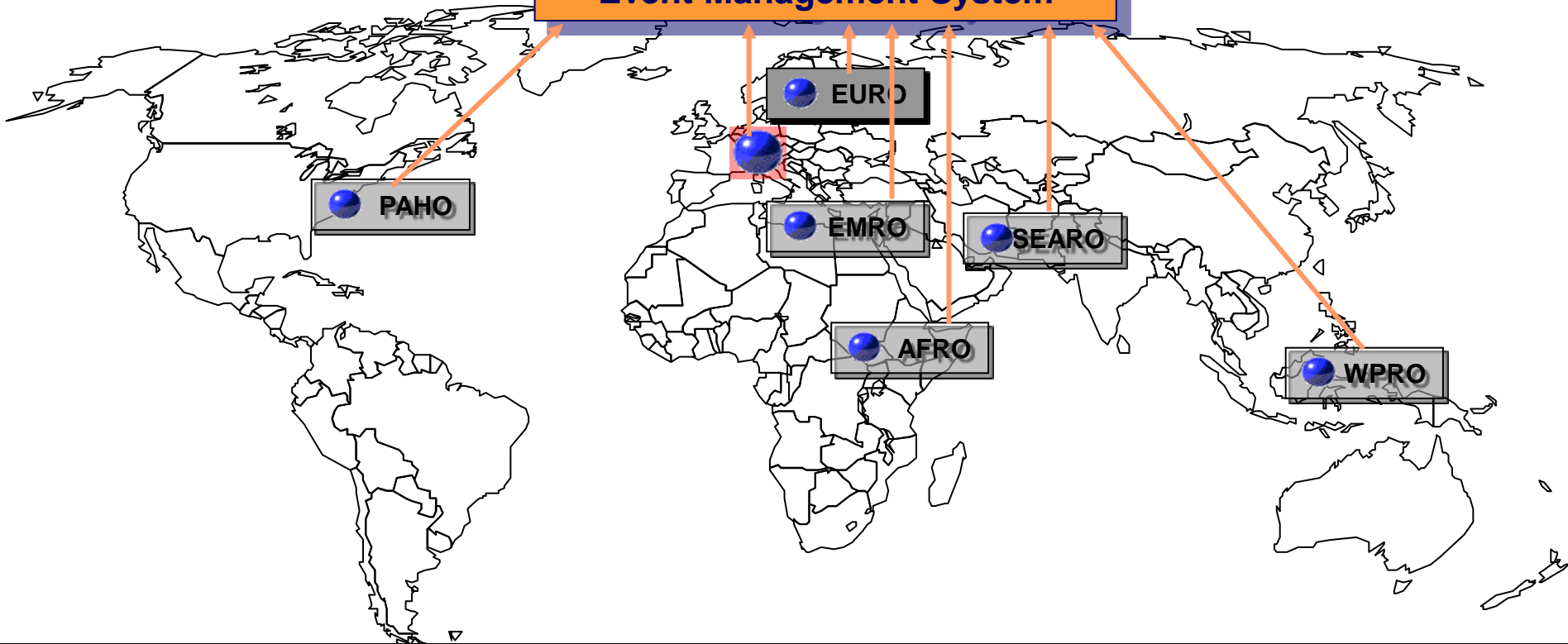
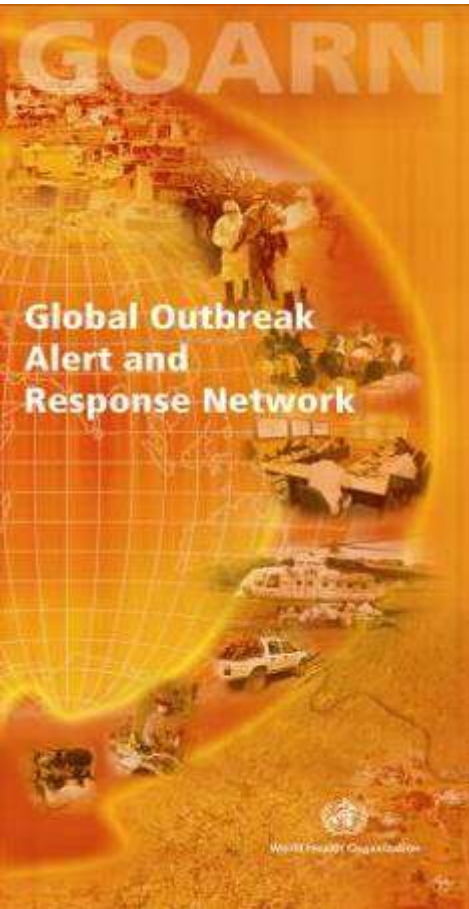# 10 years of event-based surveillance, WHO, 1 Jan 2001 – 18 Oct 2011 (N=3870)

Verified events mapped (n=2524)

Hazard						DistinctCount(Event ID)					
■ Animal	■ Chemical	■ Food Safety	■ Infectious	■ Product	■ Radionuclear	□ 0	▯ 20	▮ 40	▮ 60	▮ 80	▮ 100
■ Undetermined											
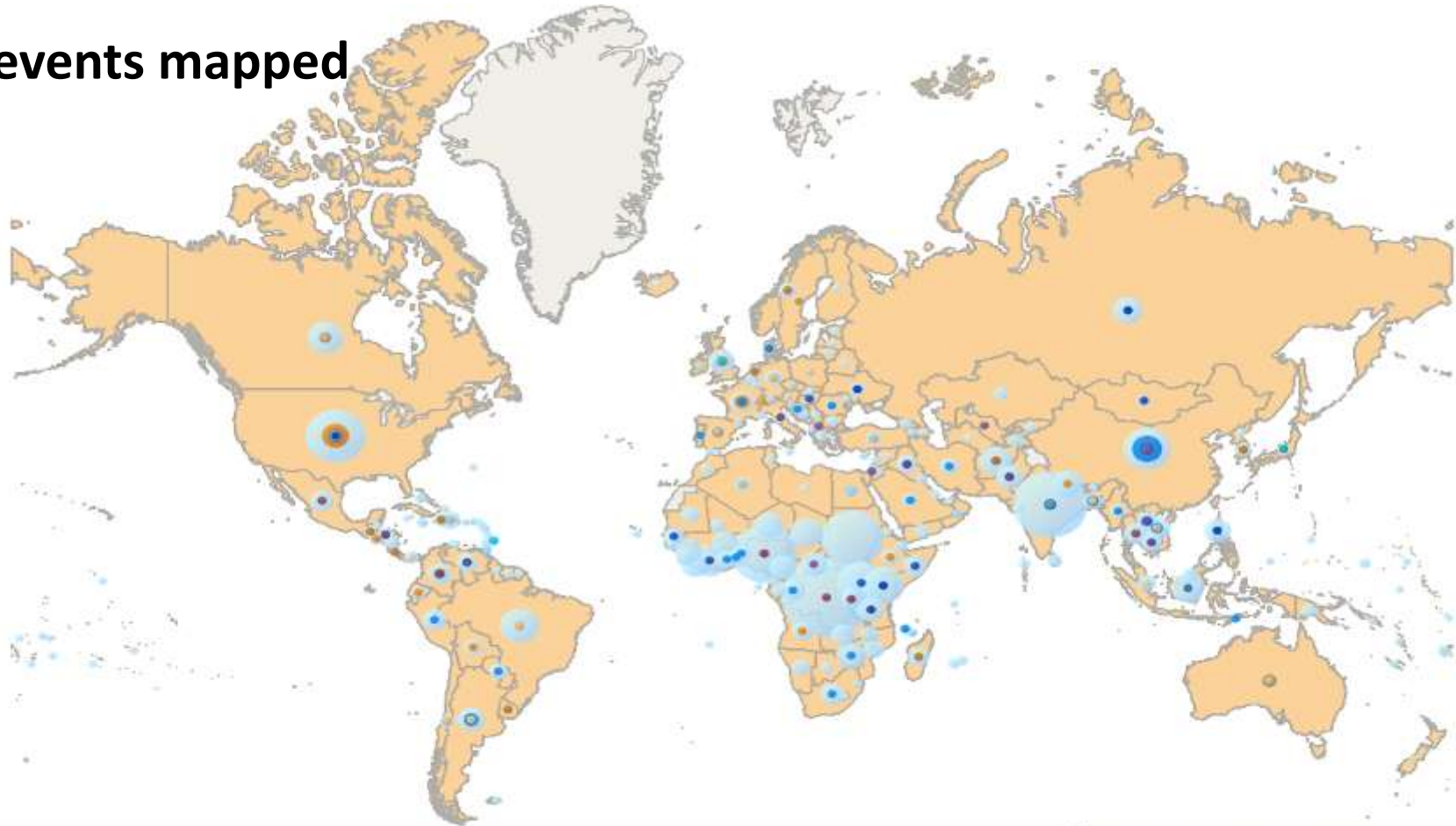
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GOARN Partner Institutions and Networks (n ≈ 300)

Active Surveillance by Mobile Teams

Collection of Samples, Laboratory
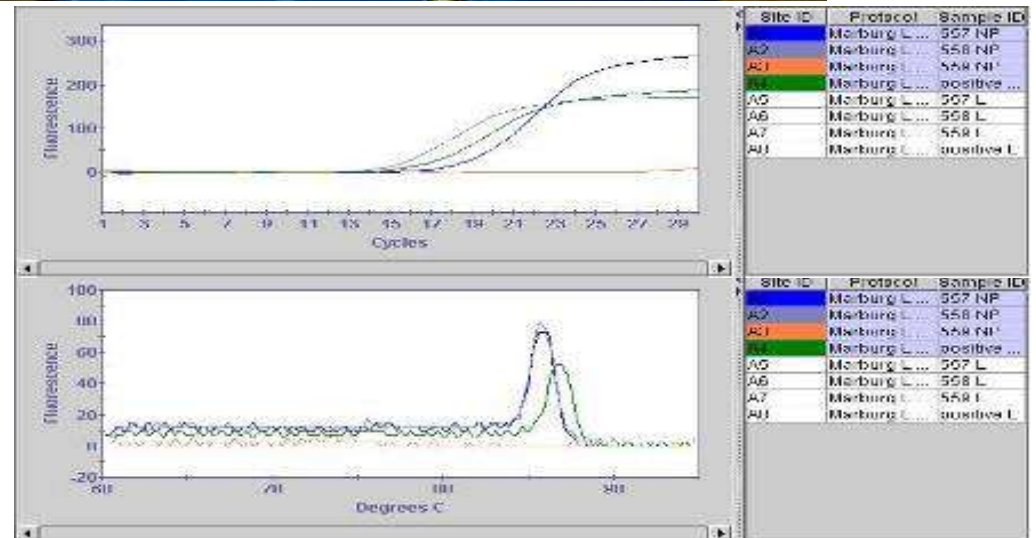
Organisation of Safe Burials

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Case management

Case management: Isolation ward

Infection Control

Social Mobilization

Logistics and Security

Media

Coordination

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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

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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**

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