

The APHA Annual Meeting & Exposition
Washington, DC, 05th November 2007

Update on the implementation of the International Health Regulations

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Pan American Health Organization / World Health Organization

From Guénaël Rodier, Director, IHR Coordination, WHO, Geneva



A Changing World

- **Population growth**
- **Population ageing**
- **Population movements**
- **Urbanization**

- **Biotechnologies**
- **Food processing**
- **Globalized trade**
- **Access to remote biotopes**
- **Industrial pollution**
- **Climate change**
- ...



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A Changing World

- Collapse of public health infrastructure
- Ineffective vector control programmes (e.g. Chikungunya)
- Development of antimicrobial resistance (e.g. XDR-TB)
- Worries about accidental or deliberate release of biological, chemical, or nuclear, agents
- ...



AP Photo

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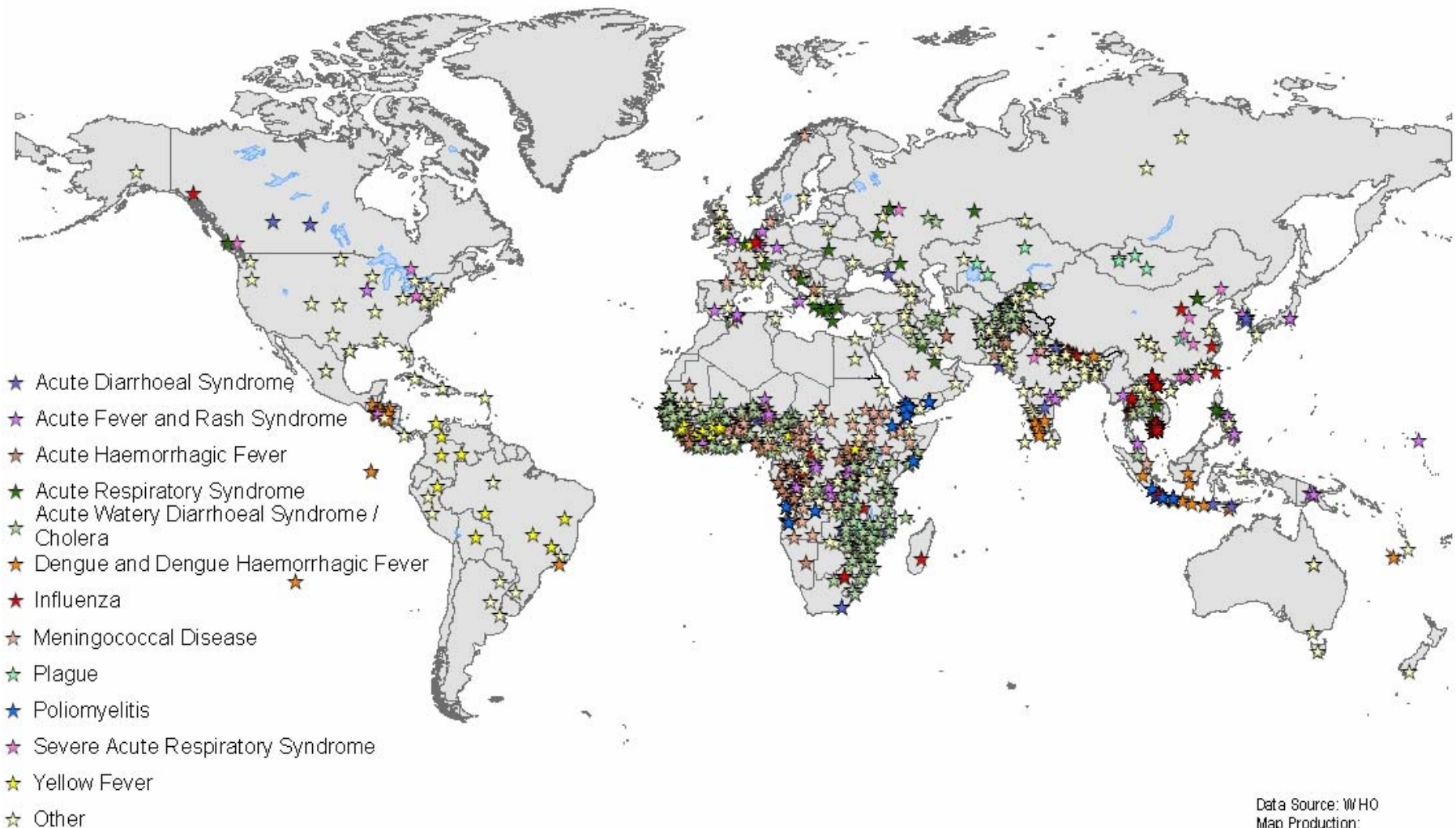
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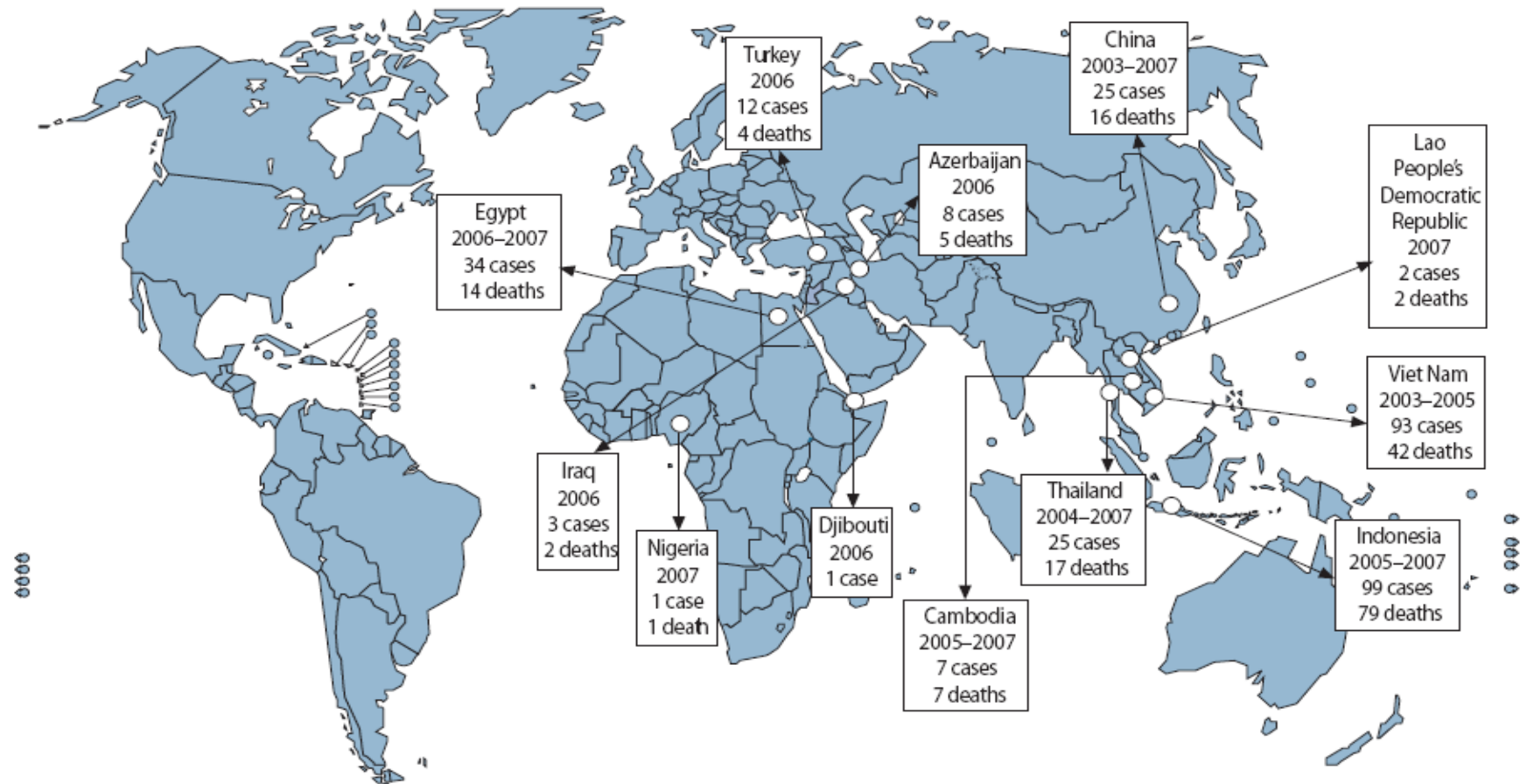
Events of potential international public health concern, January 2001 – June 2007 (n=1976)



Data Source: WHO
Map Production:

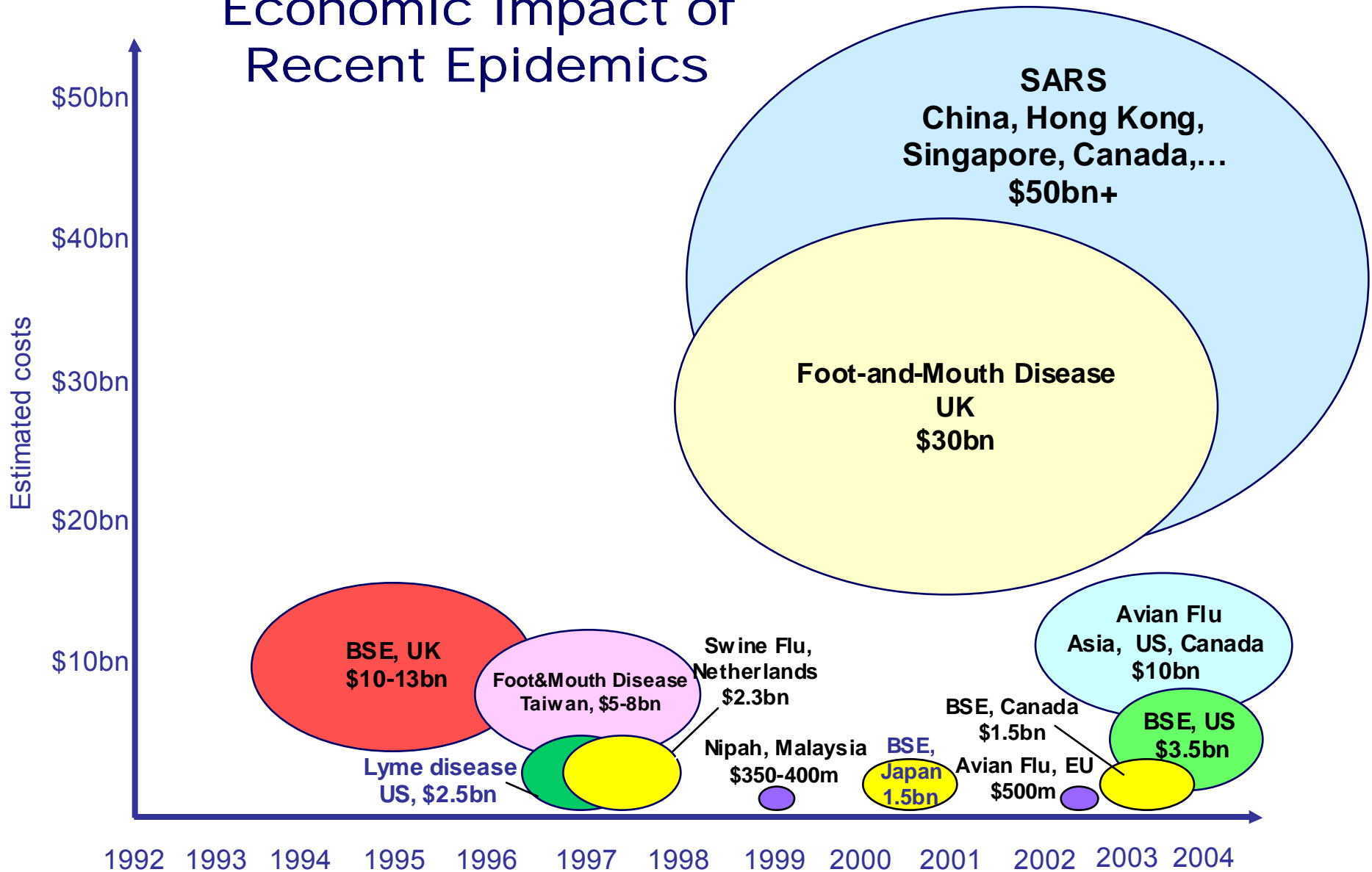


Cumulative number of confirmed human cases of avian influenza A/(H5N1) reported to WHO since 2003

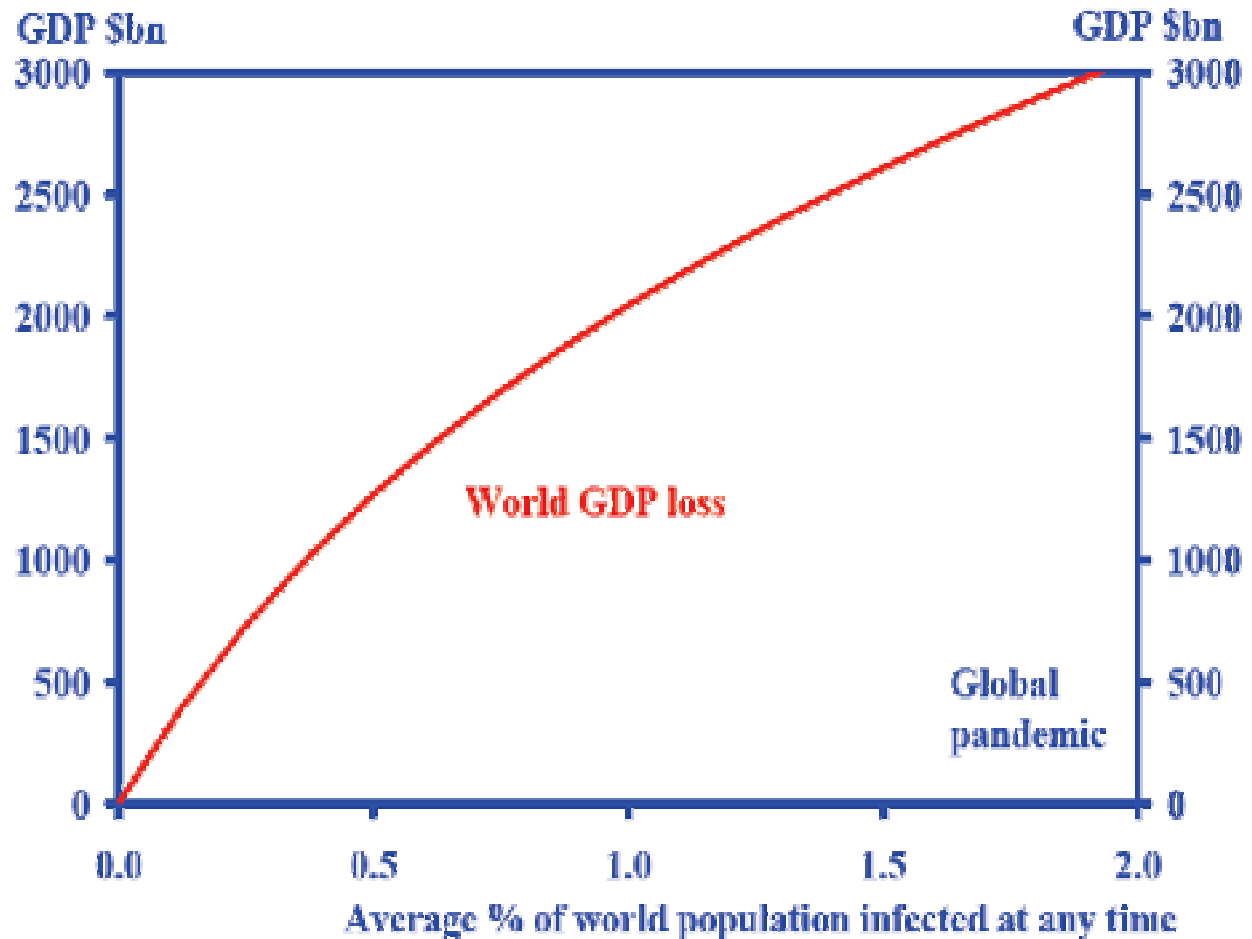


Total number of cases includes number of deaths.
 WHO reports only laboratory-confirmed cases.
 All dates refer to onset of illness.
 Data as of 6 June 2007.

Economic Impact of Recent Epidemics



Estimated Economic Impact, Pandemic Influenza



Source: Oxford Economic
Forecasting Group

International Health Regulations (2005)

From **control of borders** to [also] **containment at source**

From **3 diseases** to **all public health threats**

From **preset measures** to **adapted responses**

IHR(2005) entered into force on

15 June 2007 (or 18 July 2007)

Areas of work for IHR implementation

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 Intergovernmental organizations**

e.g. FAO, OIE, ICAO, IMO, UNWTO ...

▶ **Development agencies**

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, GEISS, CDC, ECDC, HPA, InVS ...

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

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.

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.

- Ports
- Airports
- Ground crossings

23 of 66 articles and 8 of 9 annexes directly address travel, trade, and transport.

- Health system
- Epidemiology
- Laboratory
- Preparedness
- Case management
- Infection control
- Social mobilisation
- Communication
- ...

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- ▶ **A commitment of countries** (e.g. National budget line)
- ▶ **Build on existing national and WHO regional strategies** for surveillance and response
 - e.g. National Pandemic Preparedness Plans
- ▶ Direct support from **WHO Regional Offices**
- ▶ Technical guidance from **WHO Offices** and **WHO Collaborating Centres** e.g. CDC, NIH, Universities ...



June 2007 – June 2009

Assessing Public Health Resources



Surveillance and response capacity

- **Early warning and detection systems** (information, communications etc)
- **Human resources** (rapid investigation teams, surveillance officers, ...)
- **Equipment and drugs** (PPEs, sampling materials, drugs, stockpiles)
- **Who's doing what and where** (NGOs, government, private)



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June 2009 – June 2012

Implementing national action plans



Surveillance and response system

- Investigation/response team
- Safe transport of specimens
- Reference laboratory
- Laboratory EQA programme
- Epidemiology & data analysis
- Risk assessment
- Case management
- Communication
- Social mobilization
- **Inter-sectoral collaboration**

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**

(Annex 1B)

- 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.

5

Strengthen the management of specific risks

Systematic international and national management of the risks known to threaten international health security, such as influenza, meningitis, yellow fever, SARS, poliomyelitis, food contamination, chemical and radioactive substances.

- Influenza
- polio
- SARS
- smallpox
- cholera
- meningitis
- yellow fever
- food safety
- chemical safety
- radionuclear safety
- ...

- Intelligence
- Verification
- Risk assessment
- Response (GOARN)
- Logistics
- ...



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.



Initial Screening

Verification with Member States

Risk Assessment

Response Strategy and Operations



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IHR Communications

"Shall be accessible at all times" (Art. 4)

IHR National
Focal Point



- ▶ **Notification**
- ▶ **Consultation**
- ▶ **Verification**

WHO IHR Contact
Point

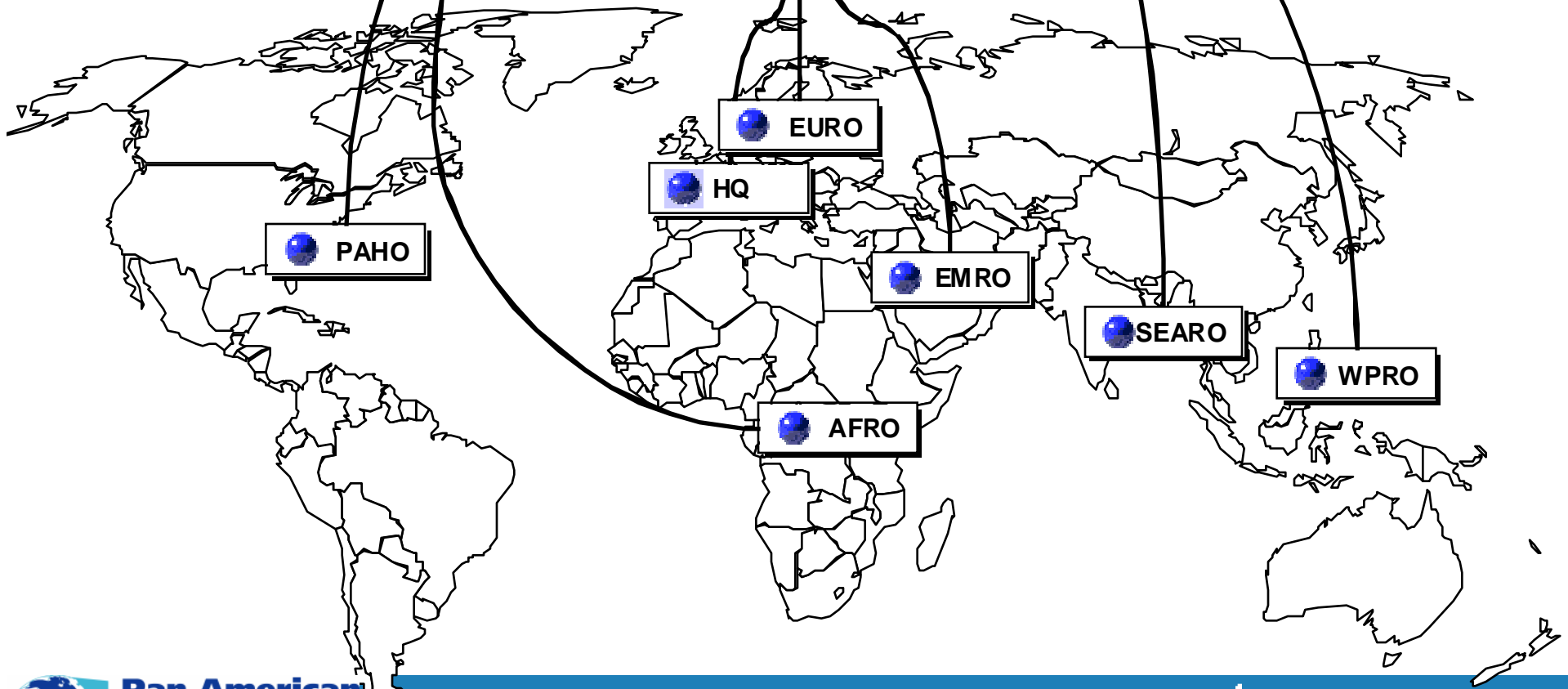


WHO
Regional
Office

EMS
Event Management System

Designated
national
institution

EMS Event Management System



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EMS

Event Management System

WHO Portal

WHO Intranet - Microsoft Internet Explorer provided by WHO

World Health Organization **Event Management System**

EVENTS

China, Hong Kong SAR
Disease: Severe Acute Respiratory Syndrome
Response in Progress - Regional Office

Event Summary | Surveillance & Verification | Contacts | Response | Logistics | Team Deployment | Budget & Costs | History

Event Group: SARS EPIDEMIC
Latest Update - 23-03-2003

Incubating info: 24 Health care workers within one hospital have developed acute respiratory syndromes, of whom 3 have developed pneumonia, each after caring for a patient hospitalized with pneumonia. The index patient died (8-Mar 2003) and reportedly traveled from Guangdong province to Hong Kong prior to being hospitalized.
(Source - WHO)

Initial Report
Date: 12 Mar 2003 Source: Media / GPHIS
Reported As: Severe Acute Respiratory Syndrome
Outbreak Type: Human

Criteria for Concern:
Unknown Cause
International Assistance Required
High Mortality / Fatality
International Disease Spread
Effect on Travel / Trade

Unofficial Official
Cases: FTA 1,621
Deaths: FTA 179

Events Linked by Transmission
06/02/2003 Singapore Severe Acute Respiratory Syndrome (source)
06/02/2003 Vietnam Severe Acute Respiratory Syndrome (transmitted to)
06/02/2003 Vietnam Severe Acute Respiratory Syndrome (transmitted to)
06/02/2003 Cambodia Severe Acute Respiratory Syndrome (transmitted to)
06/02/2003 Cambodia Severe Acute Respiratory Syndrome (transmitted to)

Tasks
 Follow up with Dr. Constant Hlouchi (assigned)
 Review GOARN CV's (assigned)

Activities
- Create a response team roster.
- Create a TOR for response team member.
- Send an alert to all critical aware contacts.
- Create an obligation request.

Recent Documents
- 23 Apr 2003 WHO SARS Guidelines (ppt)
- 23 Feb 2003 WHO Response Kick-Off Presentation (ppt)
- 8 Feb 2003 Field Team Contact List (xls)
- 7 Feb 2003 WHO Response Kick-Off Presentation (ppt)
- 3 Feb 2003 WHO Press Release (ppt)

Member States

IHR 2005
Event Information

Current Events

Updates to Post Events

Event Details

Event Group: SARS EPIDEMIC
Latest Update: 23-03-2003

Criteria for Concern:
Unknown Cause
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Effect on Travel / Trade

Unofficial Official
Cases: FTA 1,621
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Operations

GOARN
Global Outbreak Alert and Response Network

Current Events

Weekly Outbreak Verification List (Events 02* March 2003)

CHINA (7N)
Believes A/H5N1 virus China
Culture ID: 2003-03-04 CHN

Event Name	Country	Status	Date of Visit
Pharyngitis (SARS-like) Taiwan	Taiwan	Verified	05/03/2003
Influenza A/H5N1 Vietnam	Vietnam	Verified	21/02/2003
Enterovirus Singapore	Singapore	Verified	06/03/2003
Cholera	Cameroon	Verified	06/03/2003
Enterovirus Singapore	Singapore	Verified	06/03/2003
Enterovirus Singapore	Singapore	Verified	06/03/2003
Acute Myocardial Infarction	Indonesia	Verified	23/03/2003
Enterovirus Singapore	Singapore	Verified	23/03/2003
Acute Myocardial Infarction	Indonesia	Verified	23/03/2003
Enterovirus Singapore	Singapore	Verified	23/03/2003
Enterovirus Singapore	Singapore	Verified	23/03/2003
Cholera	Cameroon	Verified	23/03/2003
Influenza A/H5N1 Vietnam	Vietnam	Verified	23/03/2003
Enterovirus Singapore	Singapore	Verified	23/03/2003



IHR Event Information Site for NFPs

عربي | 中文 | English | Français | Русский | Español



Event Information Site for IHR National Focal Points

Welcome Tom Grein [Logout]

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Current Events

Current Events

All Events

This site has been developed by WHO to facilitate secure communications with the IHR National Focal Points (NFP) as part of the implementation of the International Health Regulations (2005).

Information on this site is provided by WHO to National Focal Points, in confidence, as specified in Article 11.1 of the IHR (2005).

Current Events

This section lists ongoing events which are currently being assessed against the criteria for public health risks of international importance under the IHR (2005).

Click an event's **Updated** link to see the current risk assessment and most recent updates for the event.

Updated	Country	Hazard	Syndrome	Disease	Information Received	IHR Status
2007/08/21	Democratic Republic of the Congo	Infectious		Poliomyelitis, acute paralytic, wil...	2006/05/18	Public Health Risk (PHR)
2007/08/20	Indonesia	Infectious	Acute Respiratory Syndrome	Influenza due to identified avian o...	2005/07/13	Public Health Risk (PHR)
2007/08/17	Comoros	Infectious		Cholera	2007/06/27	Public Health Risk (PHR)
2007/08/17	Uganda	Infectious		Marburg Haemorrhagic Fever	2007/07/31	Public Health Risk (PHR)

Total number of items : 4

Updates to Past Events

This section displays events that no longer represent a risk to international public health, but for which you information or

Announcements

[2007/08/17 Updated list of IHR NFP contact details 17 August 2007](#)



ALERT & RESPONSE – DAILY SUMMARY – 05 September 2007

Department of Epidemic and Pandemic Alert and Response (EPR)

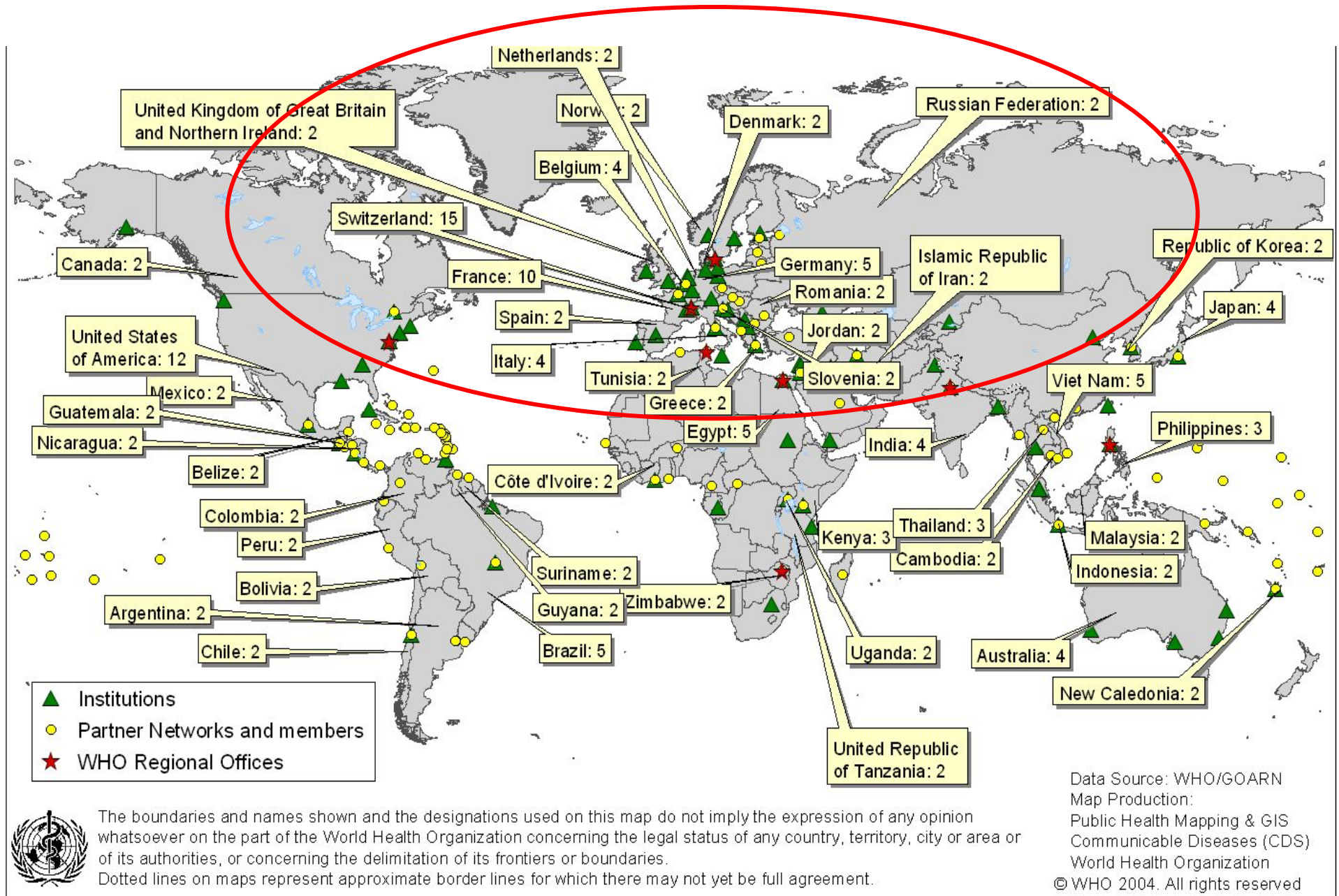
World Health Organization (WHO), Geneva, Switzerland

WHO INTERNAL WORKING DOCUMENT; CONFIDENTIAL - NOT FOR FURTHER DISTRIBUTION

Verification requested from NFP

Hazard/Disease/Syndrome	Location - onset - Epidemiological data	Decision and action	Publications
Hazard: FOOD SAFETY Syndrome: N/A Disease: N/A Aetiology: L. MONOCYTOGENES Event ID 2007-E-2802 INITIAL REPORT: National Governmental agency - not IHR NFP FSNET 28-Aug-2007	UNITED STATES OF AMERICA Georgia	LAST INCOMING INFO Follow up 28-Aug-2007 Further information requested from USA Infosan contact points (address of manufacturer, L. monocytogenes count)	POINTS OF CONTACT HQ: Jenny Bishop RO: M. Libel
	FIRST REPORT VERIFIED cases:; deaths: UNOFFICIAL cases:; deaths: LAST UPDATE: VERIFIED cases:; deaths: UNOFFICIAL cases:; deaths: NEW AFFECTED AREAS: CONFIRMED BY: LABORATORY: No	SUMMARY INFO • 28-08-07 - Listeria monocytogenes was found in a sample of Ricotta Salata cheese collected as part of the department's food safety program. The contamination was found in a package marked SELL BY 01/21/08. The brand name of the cheese is Locatelli and the importer is The Ambriola Company, Inc., of Jersey City, New Jersey 07305. The cheese is imported from Italy. ACTION INFOSAN verification request sent to Italy <input checked="" type="checkbox"/>	Daily list: 28 Aug 2007 OVL: No (0) Web: No Press release: No CRITERIA FOR INT.C. • Serious Public Health Impact • Int. Disease spread
Hazard: UNDETERMINED Syndrome: ACUTE FEBRILE SYNDROME Disease: N/A Aetiology: N/A Event ID 2007-E-2799 INITIAL REPORT: News media (including all news)	INDIA Chakshyampur village in Baharia	LAST INCOMING INFO 24-Aug-2007 News: Four children of a family in Chakshyampur village in Baharia suffered from a mystery disease with high fever during the past 7 days, and 3 of them died in the past 2 days. Two of them died under the treatment. They were transferred from hospital to hospital seeking treatment. Their symptoms resembled those of viral encephalitis. The District Epidemic Team was sent. The pathology samples were taken for malaria and also sent to the Dept. of Microbiology at MLN Medical College.	POINTS OF CONTACT HQ: RO: Khanchit Limpakamjanarat
	FIRST REPORT VERIFIED cases:; deaths: UNOFFICIAL cases:; deaths: LAST UPDATE: VERIFIED cases:; deaths: UNOFFICIAL cases:; deaths:	Daily list: 24 Aug 2007 OVL: No (0) Web: No Press release: No	

GOARN: Institutions and Partner Network



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

GOARN Site

GOARN

Global Outbreak Alert and Response Network



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About GOARN

Workspaces

Resources

Contact us

Global Outbreak Alert and Response Network

This site has been developed by WHO for the Global Outbreak Alert and Response Network to enhance secure communications and promote collaboration among partnering institutions and networks. This site provides timely information and regular updates on acute public health risks/events of international importance with the dual aim of enhancing operational readiness for GOARN response and facilitating access to the technical resources of GOARN institutions.

Protecting the confidentiality of sensitive information obtained via this site, is critically important to timely operational communications. Partners must ensure a high level of discretion when dealing with sensitive issues and are requested to contact WHO (email goarn@who.int) on any issue which raises concerns and before taking any independent action.



LATEST EVENTS

Event name

Acute Neurological Syndrome, unspecified, Bangladesh **NEW**

Meningococcal disease, Indonesia **NEW**

Poliomyelitis, acute paralytic, wild virus, imported, Australia **NEW**

Salmonella infections, other, Slovenia **NEW**

Cholera, Sudan **NEW**

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World Health Organization 2007

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GOARN WHO Support System

Operational Support Team

- GOARN management
- Field epidemiology unit

Logistics unit

- Field logistics
- Stockpiles
- Logistics mobility unit (Dubai)

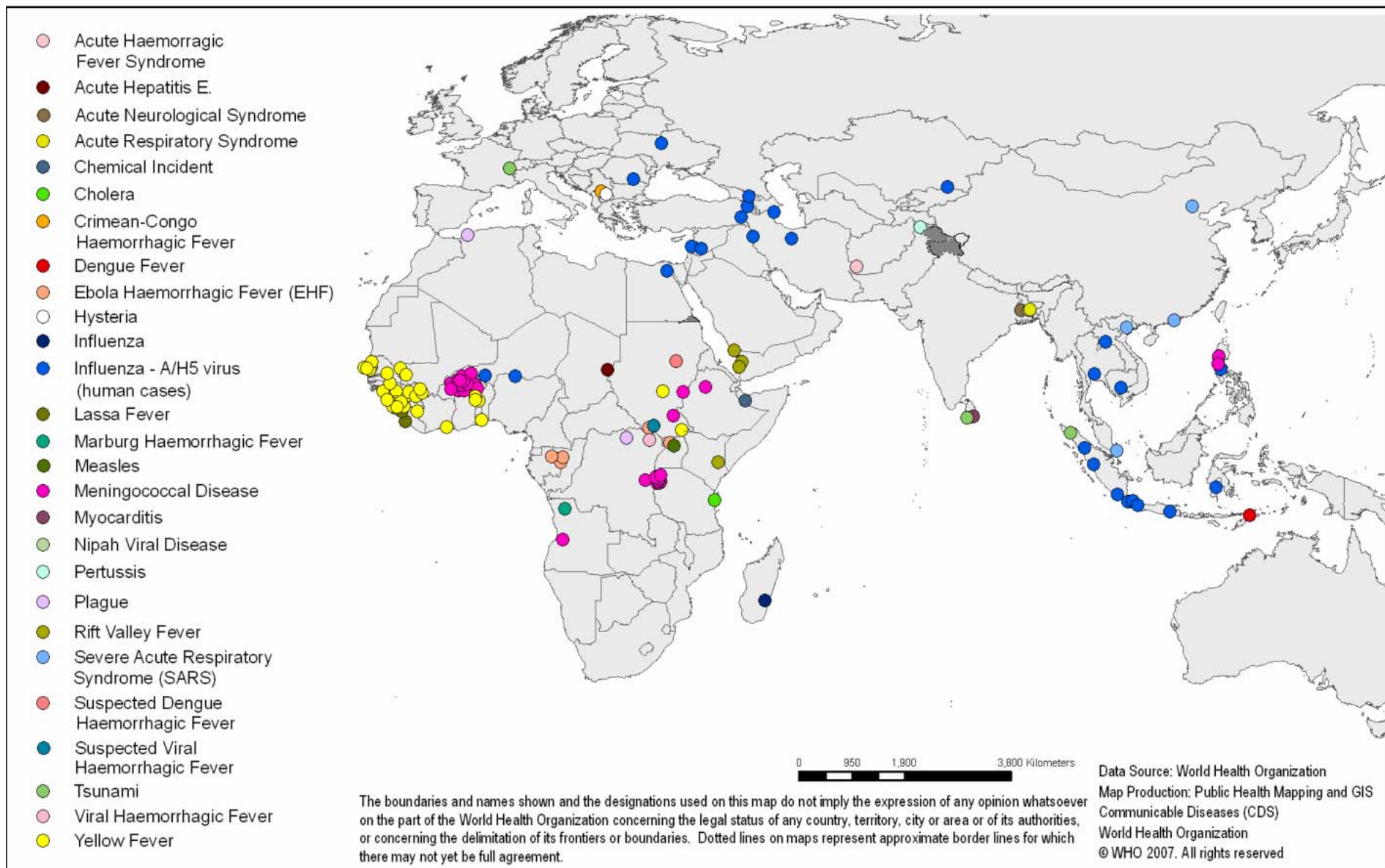
Electronic tools

- Event Management System (EMS)
- Field Information Management System (FIMS)
- Early Warning Alert and Response System (EWARN)

Strategic Health Operations Centre (SHOC)



WHO/GOARN Outbreak Response Operations 2000-2007







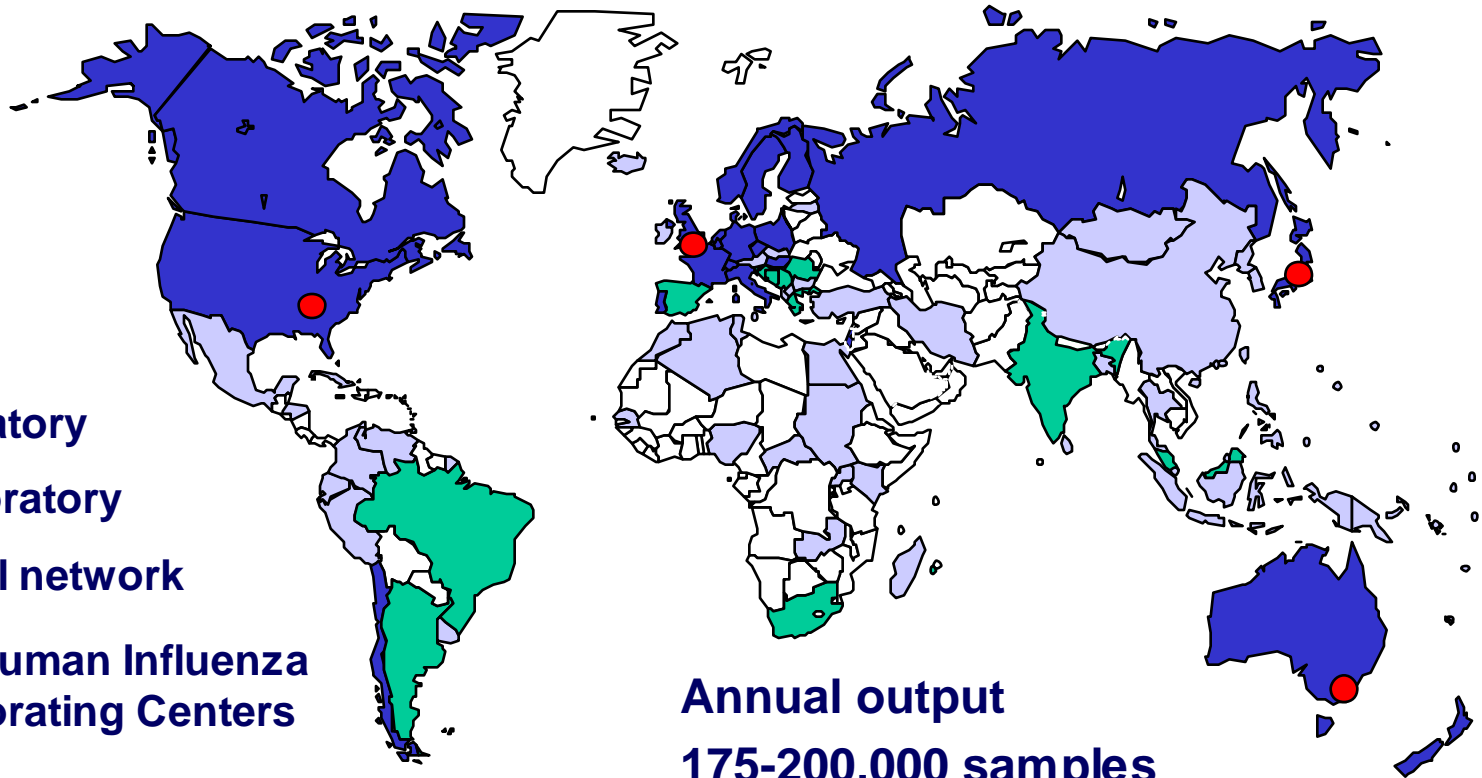
5

Strengthen the management of specific risks

Systematic international and national management of the risks known to threaten international health security, such as influenza, meningitis, yellow fever, SARS, poliomyelitis, food contamination, chemical and radioactive substances.

e.g. Global Influenza Surveillance Network

-  1 laboratory
-  >1 laboratory
-  national network
-  WHO Human Influenza Collaborating Centers



115 National Influenza Centers (NIC) in 84 countries

Annual output
175-200,000 samples
15-40,000 isolates
2-6000 viruses characterized



Seasonal Vaccine Composition



Strengthen threat-specific control programmes

- *Anthrax*
- *Anti-microbial resistance*
- *Arboviruses (e.g. Rift valley fever, West Nile fever)*
- *Chemical Safety*
- *Cholera and other epidemic diarrhoeal diseases*
- *Dengue*
- *Food safety*
- *HIV/AIDS*
- *Influenza (seasonal, avian, and pandemic threat)*
- *Malaria*
- *Measles and other vaccine-preventable diseases*
- *Meningococcal meningitis*
- *Poliomyelitis eradication initiative*
- *Radiation and environmental health*
- *Smallpox*
- *SARS and other severe acute respiratory infections*
- *Tuberculosis*
- *Yellow Fever*
- *Viral haemorrhagic fevers (e.g. Ebola, Marburg, Lassa)*
- *Zoonoses*

▶ **> 95% of
day-to-day
threats to
international
health
security !**

... / ...

LEGAL ISSUES AND MONITORING

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.

- ▶ **IHR Roster of Experts**
- ▶ **Emergency Committee**
- ▶ **Review Committee**
- ▶ **Progress report to the World Health Assembly**

Main Challenges

- ▶ **National and international awareness**
- ▶ **Playing “the game” or not...**
- ▶ **Intersectoral collaboration**
 - Health, Agriculture, Education, Defence, Transport, Trade
- ▶ **Resource mobilization**
 - Countries (national budget) with initial support from bilateral donors, WHO, foundations, private sector, ...
 - “Rich” countries supporting the “poor” countries...

Thank you

www.who.int/ihr
www.paho.org

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