International Health Regulations Coordination

INTERNATIONAL HEALTH REGULATIONS

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Director, International Health Regulations Coordination

Biological Weapons Convention

IHR Workshop

21 August 2009,
Palais des Nations,
Geneva

International Health Regulations Coordination
Image of a page from a document discussing International Health Regulations with milestones. The text highlights the first effective public health intervention, with a mention of the 1951 IHR revised in 1969. It references the spread of diseases like smallpox, cholera, plague, and yellow fever in the 1950s, and refers to the International Sanitary Regulations.
International Health Regulations ...  
WHO’s milestones

Emergence of the AIDS pandemic

HIV/AIDS, 1980s

Major travel disruption. WHO’s DG on site

Plague, Surat, 1994

1st global response coordinated by WHO

Ebola, Kikwit, 1995

WHA considers IHR obsolete and requests IHR revision

May 1995
International Health Regulations

WHO’s milestones

1996

Creation of WHO Department for Emerging Diseases

Emergence in the North. Major economic cost.

1998

NvCJD, UK

Emergence in the South. Major economic cost.

2001

Nipah, Malaysia

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International Health Regulations Coordination

WHO’s milestones

Meningitis epidemic, West Africa
Geneva, 2000
Lyon, 2001

WHO’s Office for National Epidemic Preparedness and Response

New meningitis strain W135

The Global Outbreak Alert & Response (GOARN)

Major outbreaks continue to strike

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International Health Regulations ... 
WHO’s milestones

First 21st century’s global epidemic. Major economic cost

The International Health Regulations (2005)

Influenza pandemic threat

Entry into force of IHR(2005)

SARS, 2003

Avian Influenza, 2005-2006

15 June 2007

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World Health Organization
International Health Regulations ...

WHO’s milestones

12 April 2009
Mexico notifies an outbreak caused by new A/H1N1 virus,

1st IHR Emergency Committee, 25 April 09. WHO DG declares PHEIC

WHO DG declares Influenza pandemic, 11 June 2009

End of period for assessment of national capacity

International Health Regulations
Purpose of IHR

“to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade” (Article 2)
IHR (2005)
Three Paradigm Shifts

- From control of borders to [also] containment at source
- From diseases list to all public health threats
- From preset measures to adapted responses

A commitment of
194 States Parties
Global health agenda

Global Health security

Result of negotiation

- international disease spread ↔ trade and travel
  
  *Art. 2 on purpose and scope*

- global collaboration ↔ national sovereignty
  
  "may / should / would / in general / to the extent possible" …

Intersectoral

- health / transport / agriculture / commerce / defence / …

Innovative

- containment at source → core capacity requirements
- decision instrument → risk assessment is core
Economic Impact of Recent Epidemics

Influenza pandemic due to new A(H1N1) 2009 virus?

SARS
China, Hong Kong, Singapore, Canada,…
$50bn+

Foot-and-Mouth Disease
UK
$30bn

Avian Flu
Asia, US, Canada
$10bn

BSE, US
$3.5bn

Swine Flu,
Netherlands
$2.3bn

Nipah, Malaysia
$350-400m

BSE, Canada
$1.5bn

Avian Flu, EU
$500m

Lyme disease
US, $2.5bn

Foot&Mouth Disease
Taiwan, $5-8bn

BSE, UK
$10-13bn


Estimated costs
$50bn
$40bn
$30bn
$20bn
$10bn
Seven strategic actions to guide IHR(2005) implementation

<table>
<thead>
<tr>
<th>Strategic action</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GLOBAL PARTNERSHIP</strong></td>
<td></td>
</tr>
<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>
</tr>
<tr>
<td><strong>STRENGTHEN NATIONAL CAPACITY</strong></td>
<td></td>
</tr>
<tr>
<td>2 Strengthen surveillance and control to the risk of international diseases arriving</td>
<td></td>
</tr>
<tr>
<td>3 Strengthen security of airports, ports and ground crossings in all countries.</td>
<td></td>
</tr>
<tr>
<td><strong>PREVENT AND RESPOND TO INTERNATIONAL PUBLIC HEALTH EMERGENCIES</strong></td>
<td></td>
</tr>
<tr>
<td>4 Strengthen the management of specific risks (e.g. influenza pandemic)</td>
<td></td>
</tr>
<tr>
<td>5 Strengthen the management of specific risks (e.g. influenza pandemic)</td>
<td></td>
</tr>
<tr>
<td><strong>LEGAL ISSUES AND MONITORING</strong></td>
<td></td>
</tr>
<tr>
<td>6 Sustain rights, obligations and procedures</td>
<td>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.</td>
</tr>
<tr>
<td>7 Conduct studies and monitor progress</td>
<td>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.</td>
</tr>
</tbody>
</table>

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

**World Health Report 2007**
<table>
<thead>
<tr>
<th>GLOBAL PARTNERSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Foster global partnerships</td>
</tr>
</tbody>
</table>

- **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 …
<table>
<thead>
<tr>
<th></th>
<th>STRENGTHEN NATIONAL CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Strengthen national disease surveillance, prevention, control and response systems</td>
</tr>
<tr>
<td>3</td>
<td>Strengthen public health security in travel and transport</td>
</tr>
</tbody>
</table>

- **Intersectoral**
  - Ports
  - Airports
  - Ground crossings

- **Health system**
- **Epidemiology**
- **Laboratory**
- **Preparedness**
- **Case management**
- **Infection control**
- **Social mobilisation**
- **Communication**
- ...
<table>
<thead>
<tr>
<th>STRENGTHEN NATIONAL CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
<tr>
<td>Strengthen national disease</td>
</tr>
<tr>
<td>surveillance, prevention,</td>
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<tr>
<td>control and response systems</td>
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</tbody>
</table>

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

"capacity to detect, assess, notify and report events …"

<table>
<thead>
<tr>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>2012</td>
</tr>
<tr>
<td>2014</td>
</tr>
<tr>
<td>2016</td>
</tr>
</tbody>
</table>

Planning | Implementation | Possible extensions |

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

15 June 2009
(Annex 1A): “capacity to detect, assess, notify and report events in accordance with these Regulations …”.

Investing in

- **Human resources** (training, distance learning, twinning programmes …)
- **Infrastructure** (buildings, equipments, logistics …)
- **Standard Operating Procedures** (investigation, response, biosafety …)

Focusing on

- **Laboratory quality system** (EQA programmes, biosafety, biosecurity, specimen collection, lab regional network, reference laboratories …)
- **Event-base surveillance system** (epidemic intelligence, field investigation, data analysis, risk assessment, reporting, information sharing …)
- **Communication** (social mobilization, media, Web …)

Building on

- National and Regional strategies (e.g. APSED, IDSR, PPP)
External Quality Assessment Programme

Africa: 74 Laboratories from 47 countries

Diagnostic capacity:
- Enteric pathogens (Diarrhoeal diseases)
- Bacterial meningitides
- Plague
- Tuberculosis
- Malaria

Languages:
- French: 22 countries
- English: 20 countries
- Portuguese: 5 countries

3 panels per year

Support: WHO LYON Office / NICD, Johannesburg / USAID
Map of meningitis attack rates by district by country at week 9, 2009

Legende/Legend
- Pays/Country
- Taux d'Attaque/Attack Rate (x 100 000 Hab.)
  - Pas d'Information/No Data
  - Acceptable
  - Taux d'épandage > 10 hab/km²/Rapid Spread
  - Taux d'épidémie > 100 hab/km²/Endemic

(c) Multi Disease Surveillance Centre (MDSC)/World Health Organization/African region. Source: Ministries of Health
Biotechnology revolution

Powerful, rapid, affordable

• Rapid diagnostic tests (e.g. HIV, influenza, plague, cholera, meningitis)

• PCR machines (a global epidemic!)

• BSL3 / 4 laboratories (projects ongoing in many countries)

• Private sector is driving the change

• Biosafety / biosecurity challenges

A revolution which is not over

• How laboratories will look like in 2020?
"The nations of the world are caught up in a revolution: a technological revolution, which is bringing about dramatic changes in the way we live..."

Tom Forester in High-Tech Society: The Story of the Information Technology Revolution

... and is bringing dramatic changes in the way we conduct disease surveillance

- epidemic intelligence
- data analysis
- how surveillance will look like in 2020?
4 diseases that shall be notified: polio (wild-type polio virus), smallpox, human influenza new subtype, SARS.

Disease that shall always lead to utilization of the algorithm: cholera, pneumonic plague, yellow fever, VHF (Ebola, Lassa, Marburg), WNF, others…

Q1: public health impact serious?
Q2: unusual or unexpected?
Q3: risk of international spread?
Q4: risk of travel/trade restriction?

Insufficient information: reassess
### 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.

<table>
<thead>
<tr>
<th>At all times</th>
<th>For responding to events</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Access to medical service</td>
<td>- Emergency contingency plan</td>
</tr>
<tr>
<td>- Transport of ill travellers</td>
<td>- Arrangement for isolation (human, animal)</td>
</tr>
<tr>
<td>- Inspection of conveyances (e.g. Ship Sanitation Control Certificate)</td>
<td>- Space for interview / quarantine</td>
</tr>
<tr>
<td>- Control of vectors / reservoirs</td>
<td>- Apply specific control measures</td>
</tr>
</tbody>
</table>

Annex 1B
<table>
<thead>
<tr>
<th>CHALLENGES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STRENGTHEN NATIONAL CAPACITY</strong></td>
</tr>
</tbody>
</table>

| NATIONAL SURVEILLANCE |

- **No one size fits all**
  - diversity of national systems
  - national legislation

- **Special areas**
  - With little or no government control
  - Megacities and periurban areas

- **Donors partly on board**
  - no global cost estimate
  - **cross cutting** not attractive
  - monitoring indicators currently being field tested
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

International Health Regulations Coordination
World Health Organization
PART II INFORMATION AND PUBLIC HEALTH RESPONSE
“National IHR Focal Point” means the national centre, designated by each State Party, which shall be **accessible at all times** for communications with **WHO IHR Contact Points** under these Regulations;

Responsible authorities (Article 4)

- Notification
- Reports
- Consultation
- Verification

**National IHR Focal Point**  
(One per State Party)

**WHO IHR Contact Point**  
(One per WHO Region)
PART II – INFORMATION AND PUBLIC HEALTH RESPONSE

Article 5 Surveillance
“capacity to detect, assess, notify and report events in accordance with this Regulations …”

Article 6 Notification
all event that may constitute a Public Health Emergency of International Concern

Article 7 Information-sharing during unexpected or unusual public health events
… irrespective of origin or source… shall provide to WHO all relevant public health information

Article 8 Consultation
… where it is duly justified may WHO maintain the confidentiality of the source

Article 9 Other reports
If insufficient information to notify, State Party can consult with WHO

Article 10 Verification
… initial reply within 24h. …WHO shall offer to collaborate ...
If the State Party does not accept the offer of collaboration … WHO may share with other States Parties

Article 11 Provision of information by WHO

Article 12 Determination of a public health emergency of international concern

Article 13 Public health response

Article 14 Cooperation of WHO with intergovernmental organizations and international bodies
WHO shall not make information generally available to other States Parties unless …
Morning meeting site

This site is developed in order to support information dissemination about events of potential international concern. The primary purpose of this site is to support the 09.00 hours Morning Meeting. This meeting is the central coordination mechanism and decision-making forum regarding the management of acute public health emergencies for WHO Alert and Response Operations.

Announcements

<table>
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<tr>
<th>Title</th>
<th>Created</th>
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<tbody>
<tr>
<td>New interface for Interactive data mapping</td>
<td>26/11/2008 10:33</td>
</tr>
<tr>
<td>IHR Event Information Site statistics</td>
<td>11/07/2008 18:43</td>
</tr>
<tr>
<td>Infectious Disease Contact Points</td>
<td>05/05/2008 11:57</td>
</tr>
<tr>
<td>Interactive mapping with data from EMS</td>
<td>19/03/2008 17:26</td>
</tr>
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</table>

In the last 24 hours...

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Document Type</th>
<th>Document Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agenda 20090407 New</td>
<td>Daily agenda</td>
<td>07/04/2009</td>
</tr>
<tr>
<td></td>
<td>20090405 Daily List New</td>
<td>Daily list</td>
<td>06/04/2009</td>
</tr>
</tbody>
</table>

To view CSR/DDC Daily Summary of Events in AFRO, follow this link: http://intranet.afro.who.int/csr/events/
## Agenda

### 22 April 2009

<table>
<thead>
<tr>
<th>Event ID</th>
<th>Hazard</th>
<th>Syndrome</th>
<th>Disease</th>
<th>Aetiology</th>
<th>Country</th>
<th>Verification</th>
<th>Incoming dt</th>
<th>Last update</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-E-3536</td>
<td>Undetermined</td>
<td>Unknown and unspecified causes of morbidity or</td>
<td></td>
<td></td>
<td>Nepal</td>
<td>WHO-NFP risk assessment ongoing</td>
<td>2009-04-14</td>
<td>2009-04-17</td>
</tr>
<tr>
<td>2009-E-3532</td>
<td>Infectious</td>
<td>Cholera</td>
<td>V. cholerae C1 Ogawa</td>
<td>Paraguay</td>
<td></td>
<td>WHO-NFP risk assessment ongoing</td>
<td>2009-04-08</td>
<td>2009-04-16</td>
</tr>
<tr>
<td>2008-E-3402</td>
<td>Animal</td>
<td>Acute Respiratory Syndrome</td>
<td>Influenza due to identified avian or animal influenza virus</td>
<td>H5N1</td>
<td>Egypt</td>
<td>WHO-NFP risk assessment ongoing</td>
<td>2008-12-16</td>
<td>2009-04-20</td>
</tr>
<tr>
<td>2009-E-3493</td>
<td>Infectious</td>
<td>Meningococcal disease</td>
<td>N. meningitidis serogroup A</td>
<td>Niger</td>
<td></td>
<td>WHO-NFP risk assessment ongoing</td>
<td>2009-03-04</td>
<td>2009-04-17</td>
</tr>
<tr>
<td>2009-E-3451</td>
<td>Infectious</td>
<td>Meningococcal disease</td>
<td>N. meningitidis serogroup A</td>
<td>Sudan</td>
<td></td>
<td>No verification requested</td>
<td>2009-02-03</td>
<td>2009-04-14</td>
</tr>
<tr>
<td>2009-E-3432</td>
<td>Infectious</td>
<td>Meningococcal disease</td>
<td>N. meningitidis serogroup A</td>
<td>Uganda</td>
<td></td>
<td>WHO-NFP risk assessment concluded</td>
<td>2009-01-22</td>
<td>2009-04-02</td>
</tr>
</tbody>
</table>

**Color legend:**
- **New event**
- **Update received by ARO**
- **Awaiting update**
**WHO INTERNAL WORKING DOCUMENT; CONFIDENTIAL - NOT FOR FURTHER DISTRIBUTION**

<table>
<thead>
<tr>
<th>Hazard: ANIMAL SYNDROME</th>
<th>Egypt</th>
<th>Egypt</th>
<th>Points of Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Respiratory Syndrome</td>
<td>Asyot, Monofya, Minia</td>
<td>Last incoming info</td>
<td></td>
</tr>
<tr>
<td>Disease: Influenza due to Identified Avian or Animal Influenza Virus</td>
<td>2008-12-13</td>
<td>2009-03-11</td>
<td></td>
</tr>
<tr>
<td>Aetiology: H5N1</td>
<td>EMRO: MoH reported a new confirmed human case; a one and a half year old female from Menofia Governorate. Her symptoms began on 6 March and she was hospitalized on 9 March where she remains in a stable condition. Infection with H5N1 avian influenza was confirmed on 10 March by the Egyptian Central Public Health Laboratory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event ID 2008-E-3402</td>
<td>Investigations into the source of her infection indicate a history of close contact with dead and sick poultry prior to becoming ill.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial report: News media (including all news media, GPHIN, ProMED) GPHIN 2008-12-16</td>
<td>Of the 58 cases confirmed to date in Egypt, 23 have been fatal.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First report:</td>
<td>SUMMARY INFO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verified: 2008-12-16 cases: 1; deaths: 1</td>
<td>• 2009-03-10 - DON publication: MoH reported a new confirmed human case; a two and a half year old male from Amaria District, Alexandria Governorate. His symptoms began on 3 March and he was hospitalized at Alexandria Fever Hospital where he remains in a stable condition. Infection with H5N1 avian influenza was confirmed by the Egyptian Central Public Health Laboratory on 4 March.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unofficial: 2008-12-31 cases: 1; deaths: 1</td>
<td>Investigations into the source of infection indicate a history of close contact with dead and sick poultry prior to becoming ill.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last update: GPHIN 2009-01-26</td>
<td>Of the 57 cases confirmed to date in Egypt, 23 have been fatal.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verified cases: deaths:</td>
<td>• 2009-03-05 - GPHIN: 8 y.o. male suspected of having human AI from Alexandria Province. The case has a history of close contact with sick and dead poultry.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unofficial cases: deaths:</td>
<td>EMRO: confirms 57th case for Egypt in a 2.5 y.o. male from Amaria District, Alexandria Governorate. Onset of symptoms began on 3 March and was hospitalized at Alexandria Fever Hospital on the same day. The child received treatment with Tamiflu on the same day of hospitalization (3 March). Infection with H5N1 avian influenza was confirmed by the Egyptian Central Public Health Laboratory on the 4th of March. Investigations into the source of infection indicate a history of close contact with dead and sick poultry prior to becoming ill. The child is in a good health condition and he is stable.</td>
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<tr>
<td>New affected areas:</td>
<td>Action</td>
<td></td>
<td></td>
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<tr>
<td>Confirmed by: Laboratory: Yes NAMRU-3</td>
<td>DON publication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Points of contact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HQ: Keiji Fukuda</td>
<td></td>
<td></td>
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<tr>
<td>RO: H. El Mahdi El Bushra</td>
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<tr>
<td>Daily list: 2008-12-16</td>
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<tr>
<td>IHR site (ex OVL): No (0)</td>
<td></td>
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<tr>
<td>Web: No</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Press release: No</td>
<td></td>
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<tr>
<td>Criteria for Int. C.</td>
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<td></td>
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<tr>
<td>• Serious public health impact</td>
<td></td>
<td></td>
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<tr>
<td>• Unusual or unexpected</td>
<td></td>
<td></td>
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<tr>
<td>• Int. travel or trade</td>
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</table>
Plague in China

11 August 2009 -- On 1 August, the Ministry of Health (MOH), China reported a cluster outbreak of pulmonary plague cases in the remote town of Zikenan, Qinghai province. The first case was a 32 year old male herdsman, who developed fever and haemoptysis on 26 July. He was referred to a hospital but died en route, and was buried the following day. On 30 July, 11 people who had close contact with the case (mainly relatives who attended the funeral) developed fever and cough, and were all hospitalized. On 1 August, specimens taken from all these 12 people, including the 1st case, tested positive for plague.

On 2 August both the 64 year old father-in-law of the first case and a 37 year old male neighbour of the first case (who helped to bury the corpse) also died. Of the remaining 9 cases, 1 is in critical condition, 1 had acute symptoms of fever and cough, and 7 are in stable condition.

As of August 6, the local health authority has isolated 332 close contacts for further medical observation, and implemented traffic control around affected area. Experts on both disease prevention & control and clinical management have been dispatched to Qinghai province. Protective clothes, X-ray machines and other medical equipment have been sent to the affected area. Prevention guidance pamphlets have also been disseminated.

According to the epidemiological investigation, the source of this outbreak was a wild marmot, which had contact with the dog of the index case. Zikenan is in an area of natural plague bacteria circulation amongst animals and at the present time it is the active season for plague transmission amongst animals. No drug resistance of the bacterium has been found so far and the 3 death cases have been attributed largely to delayed treatment.

China has established a national surveillance network for plague, and has prepared necessary supplies in high-risk areas. After this outbreak, special funds, supplies and experts were quickly dispatched to the affected area.
Information sources and verification outcome

Media remain a key source of timely primary information

Distribution of events by initial source of information and verification outcome, 01 Jan 07 – 31 Dec 08
(N = 607)
### Type of events: June 2007 - January 2008, n = 210

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infectious</td>
<td>123</td>
</tr>
<tr>
<td>Animal</td>
<td>38</td>
</tr>
<tr>
<td>Food safety</td>
<td>19</td>
</tr>
<tr>
<td>Undetermined</td>
<td>17</td>
</tr>
<tr>
<td>Product</td>
<td>8</td>
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<tr>
<td>Chemical</td>
<td>4</td>
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<td>Natural disaster</td>
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#### Initial information source

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<td>Media</td>
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<td>Other org., NGOs, etc.</td>
<td>38</td>
</tr>
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<td>WHO</td>
<td>22</td>
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<td>Foreign government</td>
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</table>

#### WHO coordinated response (GOARN)

- H5N1, Pakistan
- Ebola, Uganda
- Ebola, DRC
- RVF, Sudan
- Marburg, Uganda
Information for action
GOARN Support System at WHO

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 Strategic Health Operations Centre (SHOC), May 2009
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.

Data Source: WHO/GOARN
Map Production: Public Health Mapping & GIS
Communicable Diseases (CDS)
World Health Organization
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Summary of the 3rd report on Rickettsia rickettsii in Mexicali, Baja California, Mexico. (Dated 11 August, 2009)

Between 22 February and 11 August 2009, a total of 1213 suspected cases of rickettsiosis have been identified (displaying symptoms of fever, cephalalgia and malaise). Of these, 552 are classified as probable; 259 cases are confirmed by laboratory, and 215 have been discarded. Meanwhile, 13 deaths have been recorded, of which six have been confirmed by laboratory.

Cases and hospitalizations
Of the suspected cases, the most affected age group is that between 11 and 14 years of age; followed by the 5 to 9 year age-group, and the 1 to 4 year age-group. There is no statistically significant difference between male and female suspected cases. However, regarding deaths, 62% of deaths have been women. The most affected age group within deaths is that between 1 and 4 years of age, representing 26% of total deaths.

Cases have been identified in four municipalities in the state of Baja California, with the most affected municipality being Mexicali (1,275 suspected cases), followed by Tijuana (530 suspected cases), Guadalupe (170 suspected cases), and Mexicali (150 suspected cases) and Tecate (140 suspected cases).
19.08.2009
Pandemic H1N1: Malaysia, MOH Update
As of the 19 August 2009, the Malaysian Ministry of Health (MoH) has reported that 1468 Influenza-like Illness (ILI) patients are currently being treated in...

16.08.2009
Cambodia: AI Bulletin issue No. 216
Please find attached the Cambodia weekly AI Bulletin (issue no. 216) prepared by the UN system and the Royal Government of Cambodia with...

Plague, China: WHO Disease Outbreak News
On 1 August, the Ministry of Health (MoH), China reported a cluster outbreak of pulmonary plague cases in the remote town of Ziketan, Qinghai province. The...

14.08.2009
Moldova: WHO Security Update #28/09
In view of the improved security situation in the county's capital, Chisinau, the Designated Official for Moldova, in consultation with the Security Management...

13.08.2009
Pandemic (H1N1) 2009, Multiple locations: GOARN Partner publication
Oseltamivir-Resistant Novel Influenza A (H1N1) Virus Infection in Two Immunosuppressed Patients --- Seattle, Washington, 2009. Novel influenza A (H1N1) ...

12.08.2009
Cholera, Nepal: WHO SEARO Sitrep
Since May 1, 2009, 52014 cases including 282 deaths due to an ongoing Cholera outbreak have been reported from 19 districts across Nepal...

Pandemic (H1N1) 2009, Multiple locations: WHO Disease Outbreak News
Laboratory-confirmed cases of pandemic (H1N1) 2009 as officially reported to WHO by States Parties to the IHR (2005) as of 6 August 2009. The countries and overseas...

11.08.2009
Unknown disease, Somalia: GOARN Update
Since 1 June 2009, 67 cases and 4 deaths due to an unknown cause of illness have been reported among African Union soldiers in 3 camps in Mogadishu, Somalia's capital...

Avian Influenza, Egypt: WHO Disease Outbreak News
Timelines
Depend on both National and Global Efforts

- Event onset
  - Median 15 days
- WHO Alert
  - Median 7 days
- Event detection
  - 12-24 hrs
- Verification
- Risk assessment
  - Mobilisation within 24-72 hrs
- Intervention
### PREVENT AND RESPOND TO INTERNATIONAL PUBLIC HEALTH EMERGENCIES

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<tr>
<td><strong>4</strong></td>
<td>Strengthen WHO global alert and response systems</td>
</tr>
<tr>
<td></td>
<td>Timely and effective coordinated response to international public health risks and public health emergencies of international concern.</td>
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<tr>
<td><strong>5</strong></td>
<td>Strengthen the management of specific risks</td>
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<tr>
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<td>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.</td>
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</tbody>
</table>

- Influenza
- Polio
- SARS
- Smallpox
- Cholera
- Meningitis
- Yellow fever
- Food safety
- Chemical safety
- Radionuclear safety
- ...  

- Tuberculosis
- Malaria
- HIV/AIDS
- EPI

> 95% of day-to-day threats to global public health security

Driving forces at country level ... but vertical and not integrated
BTWC Article X

- Grants the States Parties to the Convention the right to participate in, and the undertaking to facilitate, the exchange of equipment, materials and information for the use of biological agents for peaceful purposes, as well as scientific cooperation in the field.

IHR Art 5

- Each State Party shall develop, strengthen and maintain, as soon as possible but no later than five years from entry into force of these Regulations for State Party, the capacity to detect, assess, notify and report events in accordance with these Regulations, as specified in Annex 1.
44.1 States Parties **shall undertake to collaborate with each other**, to the extent possible, in:

(a) the detection and assessment of, and response to, events as provided under these Regulations;

(b) the provision or facilitation of technical cooperation and logistical support, particularly in the development, strengthening and maintenance of the public health capacities required under these Regulations; and

(c) …
A Challenge for Intersectoral Collaboration
avoid intersectoral confusion!

Public Health

Security

Public health 
security

International Health Regulations Coordination

World Health Organization
Thank you

www.who.int/ihr