International Health Regulations (2005)

Update on implementation

Monitoring & Evaluation System

WHO/EPR
IHR is not a surrogate for national surveillance and response systems

- IHR is about preventing the international spread of diseases
- IHR is not about a global surveillance system
- But IHR seeks that all Member States be able to timely detect, assess, notify and report events and respond to public health risks and public health emergency of international concern (PHEIC)
IHR (2005) core capacities requirements for surveillance and response

Community level and/or primary public health response level
- To detect events involving disease or death above expected levels, report to the local health personnel and implement preliminary control measures

Intermediate public health response levels
- To confirm the status of reported events and implement control measures

National level (on a 24-hour basis)
- To assess all reports of urgent events within 48 hours and notify the WHO immediately through the national IHR focal point when required.
- To rapidly determine the control measures required to prevent domestic and international spread
- To provide direct operational links with senior decision makers and provide liaison with other sectors
- To establish, operate and maintain a national public health emergency response plan
IHR Timeframe

May 2005: World Health Assembly approves the revised IHR

2007: Entry into force of the revised IHR

2009: All countries have assessed their level of core capacities

2012: All countries have reached a minimum required level of core capacities
Elements for a WHO strategy

• 3 domains: Project management, WHO ARO, National Core capacity

• Build on existing
  • WHO alert & response operations
  • WHO (relevant) control programmes
    (e.g. GIP, ADE, ERI, IVB, POL, FOS, PHE …)
  • Regional strategies for surveillance & response
    (e.g. joint WPRO/SEARO, PAHO, IDSR in AFRO & EMRO)
Coordination:
Many players to bring on board

- Potential Donors
- WHO Senior Management
- Country relevant professionals
- National IHR Focal Points
- WHO Country Offices
- Regional Organizations (ASEAN, EU, ...)
- International Organisations (FAO, OIE, WTO, ...)
- Media / The public
- WHO Governing Bodies
Event notification and determination under IHR (2005)

**WHO DG**
- Determine whether an event constitutes a PHEIC and recommend measures
- Consult events or notify WHO of any events that may constitute a PHEIC
- Receive, assess and respond to events notified
- Detect and report any urgent or unexpected events

**WHO IHR Contact Points**
- Coordinate
- Communicate
- Report

**National IHR Focal Points**
- Receive, assess and respond to events notified
- Consult events or notify WHO of any events that may constitute a PHEIC
- Detect and report any urgent or unexpected events

**Emergency Committee**
- External advice

**Other competent Organizations (IAEA etc.)**
- Coordinate

**Ministries/Sectors Concerned**
- Communicate

**Various disease and event surveillance systems within a country**

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Epidemic and Pandemic Alert and Response

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World Health Organization
M&E of IHR Implementation at country level

- M&E worldwide: 192 countries
- Multiple areas for M&E: events irrespective origin/source
- Routine Monitoring: e-routine monitoring, experience-based monitoring
- Performance Evaluation: Internal reviews, external reviews, simulation exercises, e-tests
- Roster of International M&E Experts
IHR M & E: 5 Pillars System

**Pillar 1**
Policy Planning Financing

1. Legal framework for IHR
2. National Plan for PHEIC
3. Budget allocation for IHR

**Pillar 2**
IHR Infrastructures & Institutions

4. National IHR Focal Point
5. Focal Point for communication with Media
6. Points of Entry
7. National Emergency Committee

**Pillar 3**
IHR Human Resources knowledge & skills

8. IHR training and continuous education
9. Roster of professionals with IHR “qualification”
10. Active Participation in International IHR related Networks

**Pillar 4**
IHR Technical Resources

11. IHR Resources Mapping
12. Telecommunication Resources
13. Infection Control SOPs
14. Clinical Management guidelines for PHEIC

**Pillar 5**
IHR Systems and Services

15. Early Warning System
16. Verification and risk assessment system
17. Rapid Investigation & Response Team
18. Equipments and Stockpiles
19. Functioning laboratory system for PHEIC

WHO Resources
IDSR – APSED – EID – HMN

Epidemic and Pandemic Alert and Response
# IHR Monitoring: a score-based system

## Pillar 1. Policy - Planning - Financing
- 1. Legal Framework for IHR
- 2. National Plan for PHEIC
- 3. Budget Allocation for IHR

### Routine Monitoring (2x/year)
(Using diverse ICT services when available)

<table>
<thead>
<tr>
<th>WHO Resources</th>
<th>Core Capacities</th>
<th>Available Data Bases</th>
<th>Items</th>
<th>Score 0 to 3*1</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
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</thead>
<tbody>
<tr>
<td>1. Legal Framework for IHR</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. National Plan for PHEIC</td>
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<td>3. Budget Allocation for IHR</td>
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</table>
## IHR M&E System: IHR Priority Action Plan

### IHR PAP

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Items</th>
<th>Level 0 to 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pillar 1 - Policy - Planning - Financing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-</td>
<td>Up to date legislation providing framework for IHR implementation</td>
<td>3</td>
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<tr>
<td>2-</td>
<td>There is a written IHR Strategy Plan in active use</td>
<td>2</td>
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<tr>
<td>3-</td>
<td></td>
<td>1</td>
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<tr>
<td><strong>Pillar 2 - IHR Infrastructures &amp; Institutions</strong></td>
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<td>4</td>
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<td>6</td>
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<td><strong>Pillar 3 - IHR Human Resources knowledge and skills</strong></td>
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<td><strong>Pillar 4 - IHR Technical Resources</strong></td>
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<tr>
<td><strong>Pillar 5 - IHR Systems and Services</strong></td>
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<td>...</td>
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<tr>
<td>19</td>
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</tbody>
</table>

0: Not adequate  
1: Present but not adequate  
2: Adequate  
3: Highly adequate

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**Priority Action**

**IHR Priority Action Plan**

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Epidemic and Pandemic Alert and Response

World Health Organization
IHR M&E System: IHR State Party Compliance

IHR compliance: 80%

Country A: IHR fully compliant: Level 3
Country B: IHR almost compliant: level 2
Country C: IHR needs improvement: level 1
IHR M&E System:
General overview of IHR implementation

192 member states
60% fully compliant
30% almost compliant
20% needs improvement
5% needs major improvements
Data & Experience Based M&E System

**Collection**
- Data Collection
  - inputs
  - process
  - output
  - outcomes
  - impact
- Factual Collection
  - experiences
  - stories
  - success stories
  - good sense
  - habits
  - behaviour

**Information**
- Formal Data Information
- Informal Information

**Monitoring**

**Evaluation**
- Data Management Systems
- Experience based Management Systems

**Decision**
- Support Systems

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Epidemic and Pandemic Alert and Response

World Health Organization
Web Based M&E System

IHR PORTAL

IHR Information
IHR Knowledge Management

Global Data Base
Experiences Sharing
Stories Collection

Online Web-based M&E System
E-routine Monitoring
Performance Evaluation
Online Simulation, E-test

Knowledge

Experiences

Information Data Base

Action

Response/GOARN

Decision Support System
Experience based DSS

CBR

EMS

HQ
Health Mapper
GIS/Global Atlas
HMN E-Health
EMS GOARN

Regional Offices

IDSR, APSED, EIP
Partners, CDC, IP
MoH, Administrations
Sentinels Communities

Epidemic and Pandemic Alert and Response
IHR M&E Mapping

Mapping epidemiological trends, resources and risks to support IHR
IHR M&E Mapping

List of IHR Requirements to be mapped

* NFP
* Points of Entry (airports, ports....)
* Hospitals, Labs
* Infrastructures (roads, bridges...)
* Stockpiles
* ...
Tracking and monitoring outbreak alerts globally

Weekly Outbreak Verification List Events - 03/05/2006

- Weekly outbreak events

Epidemic and Pandemic Alert and Response

World Health Organization
Geographic spread of avian influenza

- Avian influenza in human (yearly and cumulative geographical spread)

Epidemic and Pandemic Alert and Response
Geographic spread of avian influenza

Overlap of avian influenza in human and animal

Epidemic and Pandemic Alert and Response
Mapping risk factors:
- poultry densities
- flight routes of migratory birds
- Lakes, etc.
Mapping infrastructures

Global location of airports
Global location of ports

Avian influenza: confirmed human cases and occurrence in poultry and wild birds of H5N1 avian influenza, since 2003.
Mapping resources for response

- Mapping regional and country offices
- Mapping laboratory network (national reference labs, diagnostic capacities)
Identifying areas at risk

- Identifying countries at risk of importation of the virus
- Pinpointing areas where surveillance should be intensified and identifying populations at great risk of exposure
Identifying areas at risk and resources

- Mapping airports, ports, national lab, etc.

Epidemic and Pandemic Alert and Response
Local infrastructures for response

- Identifying health services, schools, locating roads, railroads, workplaces, etc... to support targeting of drugs, equipment, surge capacity