International Health Regulations (IHR) 2005: An Overview and Implementation in Pakistan

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Global Health Security: Why we are concerned?

- Emergence/re-emergence of infectious diseases and increased pace of spread
- Globalization – public health event in one location can be a threat to others
- Serious and unusual disease events are increasing and inevitable
- Threat of deliberate use of biological and chemical agents
- Laboratory and industrial accidents
- Impact on health, economy, security
Public Health Threats

- Emergence & Spread of New Pathogens
- Globalization of Travel, Food and Medicines
- Rise of Drug Resistance
- Eng. Intentional Release

<table>
<thead>
<tr>
<th>Year</th>
<th>Threat</th>
<th># Infected</th>
<th># Deaths</th>
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<tr>
<td>2001</td>
<td>Anthrax</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>2002-03</td>
<td>SARS</td>
<td>8,096</td>
<td>77</td>
</tr>
<tr>
<td>2009</td>
<td>H1N1</td>
<td>43-89M</td>
<td>~284,000</td>
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<tr>
<td>2014-15</td>
<td>Ebola</td>
<td>~28,000</td>
<td>&gt;11,000</td>
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<td>MERS-CoV</td>
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A health threat anywhere is a health threat everywhere

IHR evolution

• 1951: First International Sanitary Regulations adopted by WHA

• 1969: Revised and renamed as International Health Regulations

• 1995: Resolution WHA 48.7 called for revision of IHR

• 1995 – 2005: 10 years of negotiations involving public health specialist, legal experts, diplomats & political dignitaries
  – 4 separate drafts of revised IHR circulated to Member States
  – Field testing of proposed method of surveillance
  – Multiple rounds of technical, legal and political consultations and meetings involving all MS
IHR 2005

- International Health Regulations (IHR) 2005 - an international agreement that is legally binding on State Parties/WHO Member States

- Two sessions of extremely intensive, face-to-face negotiations in 2004-2005 in Geneva on all aspects of the IHR (2005)

- Entry into force on 15 June 2007
Purpose & scope of IHR 2005

- Prevent, protect, and provide a public health response to the international threat and spread of diseases
- Avoid unnecessary disruption of international travel and trade
- IHR are not limited to specific diseases
- Applicable to health risks - irrespective of their origin or source
- Follow evolution of diseases and factors affecting their emergence and transmission
Major Concerns addressed by IHR 2005

• Much broader scope

• More Operational: National and WHO IHR Focal Point & competent authorities

• Consultation, notification, verification & assessment

• Public Health Emergencies of International Concern (PHEIC)

• Recommended measures from WHO in public health emergencies of international concern

• New obligation: National core capacity requirements
What’s New?

- From three diseases to all public health threats
- From preset measures to adapted response
- From control of borders to, also, containment at source
Key areas of IHR implementation

• Global event management
  – Global information system
  – Coordination of international response
• National core capacity requirements
  – National diseases surveillance and response system
  – Capacities at points of entries
• Inter-sectoral approach
• State sovereignty and international spread of diseases
IHR – global system of information sharing
Core capacity requirement (National, regional and local)

Annex 1

8 Core Capacities
- Legislation and Policy
- Coordination
- Surveillance
- Response
- Preparedness
- Risk Communication
- Human Resources
- Laboratory

Potential hazards
- Infectious diseases
- Zoonotic events
- Food safety
- Chemical events
- Radiological events

Events at Points of Entry
Inter-sectoral approach
Sovereignty vs international spread of diseases

Contain the international spread of diseases

Maintain the sovereignty of states and cause minimal disruption to international flow of people and goods
Public Health Emergency of International Concern (PHEIC)

- PHEIC is an extraordinary event which is determined, as provided in these Regulations:
  i. to constitute a public health risk to other States through the international spread of disease and
  ii. to potentially require a coordinated international response

- IHR require procedural steps by the DG/WHO in determining that a PHEIC exists
Event Management Timelines
(National & Global Efforts)
Decision instrument (Annex 2) of IHR (2005) for Assessment and Notification

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
Implications of non-compliance to IHR

- WHO will know from other sources

- Position of the State Party will change from article 6 (notification) to article 10 (verification)
  - WHO will request verification
  - WHO will embark on investigation based on risk assessment

- IHR allow WHO to use whatever available information to alert other partners

- Compliant SP will receive timely international support when needed
Timeline for IHR Implementation

15 June 2007
IHR 2005 enters into force. States Parties agree on 5 year timeframe for implementation of core capacities

2007
Deadline for implementation of core capacities.
Two year extension granted on submission of plan of action

Beyond 2016
WHO and partners to support and monitor SP
Global Health Security Agenda to facilitate IHR implementation

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<th>Prevent</th>
<th>Detect</th>
<th>Respond</th>
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<tr>
<td>Prevent 1: Antimicrobial Resistance</td>
<td>Detect 1: National Laboratory System</td>
<td>Respond 1: Emergency Operations Centers</td>
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<tr>
<td>Prevent 3: Biosafety and Biosecurity</td>
<td>Detect 4: GHSA Reporting</td>
<td>Respond 3: Medical Countermeasures and Personnel Deployment Action Package</td>
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<tr>
<td>Prevent 4: Immunization</td>
<td>Detect 5: Workforce Development</td>
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IHR Monitoring and Evaluation Framework

- Annual Reporting (to WHA)
- Independent/External Evaluation (4-5 years)
- After action Review (yearly)
- Simulation Exercises

- Transparency
- Mutual accountability
- Trust building
- Appreciation of public health benefits
- Dialogue
- Sustainability
Joint External Evaluation (JEE)

One tool for all WHO Member States

To identify gaps in IHR Core Capacity requirements

A major component of the IHR Monitoring & Evaluation Framework

Building on the momentum of the GHSA, G7, World Bank, etc...

Linked to funding opportunities of national action plan (by partners) & importance of country commitment
IHR - GHSA implementation and ongoing initiatives in Pakistan
Pakistan signatory to IHR 2005, is on extension to implement core competencies.

Self reporting, using IHR monitoring framework since 2013, on core capacities, potential hazards & events at POEs.

Ebola assessment mission in 2014-15:

  - Findings suggested gaps in self reporting and on-ground realities across EMRO region.

GHSA as a framework for IHR launched in 2014, to support countries to implement IHR and build core capacities.

Pakistan has been identified among phase I countries for GHSA support, by CDC.
• New framework for monitoring IHR through a Joint External Evaluation (JEE) Tool, developed in 2016 by WHO and CDC

• Countries to volunteer for JEE, in order to assess their status

• Pakistan volunteered for JEE during the Regional Committee Meeting in Kuwait during 2015

• Formal letter sent by Government to RD EMRO

• JEE Mission carried out from 27 April – 6 May 2016
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<th>IHR Core Capacity</th>
<th>Progress/Remarks</th>
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| National legislation policy and financing | - "Pakistan Public Health Surveillance and Response Act 2010" available  
- Following two options for enactment:  
  i. Respective provincial legislation  
  ii. Provincial request for national legislation  
- Development of PC – 1 for IHR NFP strengthening |
| Coordination and NFP Communications | - National Focal point designated for IHR and GHSA  
- Provincial focal points also notified  
- A multi-sectoral and multi-disciplinary task-force for IHR notified (One health approach)  
- IHR-NFP TORs developed  
- Some SOPs available  
- NPHI development in progress |
# Core Capacity wise Status ...

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| **Surveillance & Response** | - Surveillance in Pakistan is generally fragmented and highly donor dependent  
- Disease specific multiple vertical programme engaged in surv  
- Mostly event based  
- Division of FEDS notified at NIH  
- Communicable Disease data compiled at NIH for Alerts & Advisories  
- Diseases Surveillance and Response Units established  
- SOPs and guidelines for RRT (Ebola)  
- Disease prioritization exercise – List of diseases for surveillance  
- Technical Working Group notified  
- Proposal for national IDSRS is developed on defined attributes |
| **Preparedness** | - National Health Emergency Preparedness and Response Network (NHEPRN) has been established  
- NHEPRN in collaboration with WHO developed “preparedness and contingency plan for the Communicable Disease”  
- Deliberation on the contingency plan completed |
## Core capacity wise status...contd....

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| **Risk Communication**     | - Current coordination mechanism through the establishment of "Health Clusters”
|                            | - Provincial Focal person notified                        |
| **Human Resource Capacity**| - FELTP launched in 2006-07                               |
|                            | - 88 Field Epidemiologist                                 |
|                            | - 38 under training (60 per year from 2016 onwards)      |
|                            | - > 1000 trained through short course                     |
|                            | - Veterinarian and army included in FELTP course          |
| **Laboratory**             | - NIH as referral laboratory                              |
|                            | - Multiple Lab based surveillance initiative              |
|                            | - BSL-3 functional                                        |
|                            | - National Laboratory Working Group (NLWG) notified       |
|                            | - Laboratory strategic framework developed                |
|                            | - Provincial PH Labs being established                    |
|                            | - Capacity building on cross cutting issues (BRM, LQMS, Information systems) |
## Progress on selected GHSA action packages

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| AMR                 | - Focal point notified  
|                     | - Multi-sectoral/ multi disciplinary committee notified  
|                     | - National AMR strategic plan developed  
|                     | - Setting up sentinel surveillance using GLASS protocol |
| Biosafety & biosecurity | - Assessment conducted  
|                     | - Policy draft available  
|                     | - Multiple trainings on BRM |
| EOC                 | - Six EOC established (01 Federal, 4 provinces and 01 in FATA)  
|                     | - Presently used only for polio |
| Immunization        | - Federal and provincial programmes in place  
|                     | - GHSA grant with CDC for strengthening routine immunization |
| Zoonotic diseases   | - Cooperative agreement of NARC and CDC for Zoonotic diseases surveillance and diagnostic capacity enhancement  
|                     | - Inclusion of animal and livestock sector professionals on different forums including AMR, Laboratory system, Biosafety and Biosecurity, Surveillance |
| Others              | - Food safety assessment mission conducted  
|                     | - POEs assessment  
|                     | - Trainings and capacity building |
JEE Recommendations

• Need for multi-sectoral coordination between federal & provincial levels through a joint Public Health Commission/Task force;

• Development of mutually agreed & funded 5 year roadmap / action plans for 19 technical areas against key priorities

• Establishment of surveillance & laboratory systems with a “One Health Approach” to include human and animal health sector;

• Development of uniform regulatory standards in all areas of food security and

• Comprehensive national cross-sectional approach towards Antimicrobial Resistance (AMR)
Challenges

• Advocacy on IHR-GHSA as a national priority
• Resource mobilization for implementing of 5-year IHR-GHSA road map
• Establishing a sustained IDS Program
• Diversity of public health infrastructure among the provinces
• Continuous liaison with all stakeholders
• Legal frameworks to support Public Health Surveillance/Response/POEs/Labs/Coordination
• Workforce Development
Way Forward

• Finalize costed IHR-GHSA 5 year Action Plan based on JEE for 19 technical areas

• Consensus building, implementation & monitoring of National IHR/GHSA action plans to meet core capacities

• Secure sustainable funding for IHR-GHSA Action plan

• Technical and logistic support for provincial health departments under GHSA (Agreements between NIH-CDC)
  – Strengthening Surveillance and Response System
  – Implementation of AMR Surveillance
  – Public Health Laboratory system strengthening
  – Zoonotic diseases using “One Health” approach
  – Workforce Development
Thank you