Global Surveillance:
International Health Regulations 2005

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Global current situation

• Acceleration of outbreaks world-wide.
  – During last 5 years, 1100 outbreak events were verified world wide.
  – Since 1970’s – 40 one or more newly emerging disease each year (40).
  – 2.1 billion travelers last year.
  – Disease spread around the Globe (SARS - cost).
• Universal vulnerability.
• Need for global coordination and collaboration.
• Strengthening of national capacities is imperative.
• Achieve global public health security.

IHRs 2005

• International Health Regulations represent an international legal instrument which is binding on:
  – All WHO Member States who agreed to be bound by IHRs 2005.
  – All WHO Member States and non-Member States who have not rejected them (have made reservations).
  – All non-Member States of WHO that have agreed to be bound by them.
  – IHRs came into force on 15th of June, 2005.

History of IHRs

• Definition: “legal framework for actions designed to prevent the international spread of disease”
  – IHRs, 1951.
  – IHRs, 1969.
  – IHRs, 1981.
  – IHRs, 2005.

IHRs is the key global instrument for protection against the international spread of disease.
### Purpose and Scope of IHR 2005

- A significantly broader scope: “To prevent, protect against, control and provide a public health response to the international spread of disease…”
- Notification and response is no more limited to cases of cholera, plague and yellow fever i.e. not restricted to disease list but Public health emergencies of international concern including: Chemical, biological or radio-nuclear agents.

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### Understanding the Difference

- **Change in purpose and scope in IHR 2005**
  - Concept of Public Health Emergencies of International Concern (PHEIC).
  - Decision tree (Annex 2)
  - New partners
- **Importance of transparency**
  - Other sources of information.
  - Designation of IHR-NFP.
- **Protection of human rights for travelers**

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### Decision Tree on assessment and notification of PHEIC

- Events detected by national surveillance systems are classified into 3 groups:
  1. Group 1, where a single case would represent a PHEIC.
  2. Group 3, diseases that have the potential to cause PHEIC.
  3. Group 2, diseases of unknown causes or sources or events of PHEIC.

- Report to WHO if they fulfill 2 of the following:
  - Event has serious public health impact.
  - Event is unusual or unexpected.
  - Potential for international spread.
  - Significant risk of international travel or trade restrictions.

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### PHEIC?

PHEIC or “Public Health Emergency of International Concern” means an extraordinary event which is determined, as provided by IHR 2005:

1. To constitute a public health risk to other member states through the international spread of disease and
2. To potentially require a coordinated international response
**Group 1**

- Smallpox.
- WPV (wild polio viruses).
- Human influenza (new subtype).
- SARS.

**Groups 2 & 3**

- Cholera
- Pneumonic plague.
- Yellow fever.
- VHFs (Ebola, Marburg, Lassa fever).
- West Nile fever.
- Other diseases of national or regional concern (dengue fever, Rift valley and meningococcal disease).

**Inadequate Transparency**

- Could be attributed to:
  - Delayed diagnosis.
  - Under-reporting: confirmed vs. suspected (Case definition)
  - Fear of over-reaction (Economy and panic)
  - Who should report: MOA or MOH (AI)?
  - Over-confidence in national capacities
  - Weak national surveillance systems, and
  - Others
- Increases vulnerability to over-reactions (role of rumors).
- Compromises trust in surveillance systems
- Makes it difficult to justify timely support.

**Article 6-8: Transparency**

- Notification within 24 hours of assessment of public health information, of all events which may constitute a PHEIC irrespective of origin or source
- Continue to communicate to WHO timely, accurate and sufficiently detailed public health information available including:
  - Case definitions
  - Laboratory results
  - Number of cases and deaths
  - Source and type of the risk
  - Conditions affecting the spread of the disease
  - Health measures employed; and
  - Difficulties faced and support needed in responding to PHEIC
- Consultation is different: Request WHO assistance
**Article 9: Other Sources of Information**

- WHO may take into account reports from sources other than notifications or consultations
  - WHO shall consult with and attempt to obtain verification from the State Party in whose territory the event is allegedly occurring.
  - Obtain information from other sources.
  - WHO may maintain the confidentiality of the source

- States Parties shall inform WHO on public health risk(s) identified outside their territory that may cause international disease spread, as manifested by exported or imported:
  - human cases
  - vectors which carry infection or contamination; or
  - goods that are contaminated

**Article 14: Partners**

- Notification, verification of, or response to, an event is primarily within the competence of other intergovernmental organizations or international bodies (e.g. IAEA).

- Nothing in these Regulations shall preclude or limit the provision by WHO of advice, support, or technical or other assistance for public health purposes

**WHA58.3 / Article 14: Partners**

Intergovernmental organizations or international bodies with which WHO is expected to cooperate and coordinate its activities, as appropriate, include:

- United Nations
- International Labour Organization
- Food and Agriculture Organization
- International Atomic Energy Agency
- International Civil Aviation Organization
- International Maritime Organization
- International Committee of the Red Cross
- International Federation of Red Cross and Red Crescent Societies
- International Air Transport Association
- International Shipping Federation, and
- Office International des Epizooties

**Implementation of IHR - Timeline**

- Requirements (timeline):
  - Assessment of resources- Development of Plans of Action: 15.06.07 – 15.06.07.
  - Implementation of plans: 15.06.09 – 15.06.12.
  - Two years extension on basis of justified needs.
  - Maximum of two more exceptional years could be granted by WHO/DG.
Core capacity requirements for Surveillance and Response

• Each State Party shall develop, strengthen and maintain, as soon as possible but no later than five years from the entry into force of these Regulations for that State Party, the capacity to
  – detect, assess, notify and report events in accordance with these Regulations, as specified in Annex 1.
  – respond promptly and effectively to public health risks and PHEIC as set out in Annex 1.

Core capacities needed at community/primary public

• To detect events, report essential information and to implement preliminary control measures immediately.
  – List of potential events.
  – Definitions of events.
  – Identify informants, sources of and essential information.
  – Clear path for data transmission.
  – Identify contact details at intermediate level.
  – Communication means.

Core capacity requirements at intermediate level

• Confirm reported events, support or implement additional measures.
• Immediate assessment of reported events (PHEIC).
• Report essential information to national level.
  – List of potential events.
  – Definition of events.
  – Information needed according to type of events.

Core capacity requirements at National level

• Capacities for assessment and notification:
  – To assess all events within 48 hours.
  – To notify WHO immediately through the IHR-NFP in accordance with relevant IHR articles.
• Capacities for Public health Response:
  – Measures required to prevent spread.
  – Provide support (technical, laboratory and logistics).
  – On-site assistance.
  – Provide a direct operational link with senior officials.
  – Liaise with other ministries.
  – Provide communication with key operational areas.
  – Establish a national public health emergency plan.
  – Provide an update on a 24-hour basis.
Core capacity requirements for designated airports, ports and ground crossings

- **At all times: capacities:**
  - Provide transport and access to an appropriate medical service to ill travelers.
  - Provide trained personnel for the inspection of conveyances; trained personnel for vector control.
  - Ensure safe environment for travelers.
- **For response to events (PHEIC):**
  - Provide appropriate PH response.
  - Provide assessment of and care of affected travelers or animals.
  - Provide space, implement quarantine of suspect travelers.
  - Apply measures of disinfection, de-rating, or disinsect...etc.
  - Apply entry or exit controls for travelers.

Core National Surveillance Capacities

- **Strengthening core capacities:**
  - Functional epidemiological surveillance
  - Competent laboratory diagnosis
  - Efficient communications
  - Certified points of entry
  - Timely and appropriate response to outbreaks
  - Manuals, guidelines and SOPs
  - Stockpiling
- **Continuous training:**
  - High turn-over of trained staff
  - Allocation of resources

Hidden Challenges

- Many current benefits of “investment” in strengthening capacities as well as retaining trained capacities are not readily apparent
- Investment in safe water supply, veterinary health, vector control and vaccinations pays off

Thank you