Avian Influenza A(H7N9)
Overview

Side event organized by China and WHO
21 May 2013
Avian Influenza A(H7N9) Novel Coronavirus (nCoV)

World experiencing emergence of 2 exceptional new virus infections
- Avian influenza A(H7N9)
- Novel coronavirus

Unusual global situation
- Unrelated, highly pathogenic
- Potential to evolve & spread
- No comparable situation since 2003 when SARS & H5N1 (re)emerged
H7N9: First 82 Patients by Province in China

- March 24, specimens from two Shanghai patients received at the NIC of China CDC
- March 25, specimen from one Anhui patient received at the NIC of China CDC
- March 28, 3 H7N9 viruses isolated by the NIC of China CDC
- March 29, gene sequencing analysis completed for 3 H7N9 viruses at the NIC of China CDC
- April 3, guideline released and enhanced surveillance implemented in ILI surveillance system
H7N9: Basic Situation

- First identified spring 2013

- Highly pathogenic
  - 131 cases (32 deaths)

- No evidence for sustained community spread
  - Most cases probably from infected poultry / live markets

- Neuraminidase inhibitors available

- Vaccine development started - no decision to produce
WHO assessment and concerns

- Measures by China having an effect but also may be seeing effect of seasonality
  - Need another autumn/winter/spring to know

- But high concern over potential for H7N9 to gain sustainable person-to-person transmissibility
  - H7N9 not expected to disappear
  - Some small clusters
  - In 2 months in China, as many H7N9 cases as caused by H5N1 cases over 10 years
  - Molecular genetic changes suggesting "adaptation"
WHO assessment and concerns

- If virus increases transmissibility and spreads internationally, significant impact on
  - Health
  - Health systems
  - Communities & economies

- Countries & global community not adequately prepared
Intense response by WHO

- Full time repurposing of staff at CO / RO / HQ
  - Strong example of "one WHO" event management
  - Use of Emergency Response Framework (ERF)
  - High usage of SHOC but below 24/7 level

- Intensified activities
  - Global coordination, monitoring, risk assessment
  - Communications
  - Technical support especially for vulnerable countries
  - Vaccine development, antiviral stockpile management
WHO strategic goals for H7N9 (and novel coronavirus)

- Protect people and communities
- Assess and monitor the situation
- Ensure preparedness by all countries
- Provide global leadership and coordination
Intense Collaborative Response

- H7N9 Joint China-WHO assessment mission
- WHO Collaborating Centers & networks
  - Vaccine, monitoring, analysis, clinical, other support
  - Leading role by WHO influenza CC, Beijing
- FAO & OIE
  - H7N9 virus naming
  - Data sharing, consultations & joint risk assessments
- National & regional agencies
Central Role of International Health Regulations (2005)

- Legally binding framework for global health security
- To strengthen detection, assessment, information & response to all potential public health events of international concern
- To minimize public health / economic impact of events
- Implementation dependent upon
  - National awareness, readiness & use of IHR
  - Strong national core capacities
  - Strong global systems for alert, assessment and response
Results of China's investments in IHR capacities evident
- Multi-sectoral coordination
- Surveillance & laboratory capacities
- Readiness, rapid response & communications

WHO investments in global system (tools and persons at country, regional and headquarters level)
- 24/7 global surveillance & timely risk assessment
- Rapid critical information for countries
- Technical guidance & support
- International coordination & networks
IHR Member State reporting requirements to WHO

- **Notification**
  - all events which **may** constitute a public health emergency of international concern
  - within 24 hours of assessment of public health information

- **Continued reporting**
  - timely accurate & sufficiently detailed public health information
  - to support development of risk assessment, case definition & guidance for treatment & case management
Take home messages

- Course of future events unknown & unpredictable

- But warning signals unusually strong & should not be ignored

- Critical steps
  - Use time to review, improve & accelerate readiness / preparedness
IHR the essential centerpiece for effective international support to affected countries as well as the world

Continued investment in strengthening national and WHO core capacities, transparency, collaboration & timeliness is vital & pays dividends
Thank you