Introduction

- World experiencing evolving emergence of two exceptional new virus infections
  - Avian influenza A(H7N9)
  - Novel coronavirus
    - Termed Middle east Respiratory Syndrome Coronavirus (MERS CoV)

- Unusual global situation
  - Unrelated viruses
  - Both highly pathogenic
  - Both considered to have potential to evolve & spread
**Epidemiology**

- First known cases spring 2012
- 44 lab-confirmed cases (22 deaths)
- Most male (79%); age 24 to 94 years (median 56)

Settings where infection has occurred
- Communities: sporadic cases with unknown exposure
- Families: contact with infected family members
- Health care facilities: patients & health care workers
Epidemiology

- Countries where cases acquired infection in-country from an unknown source
  - Jordan, KSA, Qatar, UAE

- Countries where cases are associated with travel or contact with a returned infected traveler
  - Germany, France, Tunisia, UK
• Several clusters

• In large clusters
  – Connection between cases not fully understood & under investigation

• Evidence for limited person-to-person transmission in some clusters
Illness & Treatment

- All have respiratory disease
  - From mild symptoms to severe pneumonia
  - Atypical symptoms can be predominant if immunocompromised

- General care can be life saving

- No approved virus-specific therapy at this time
WHO assessment and concerns

- Evolving, urgent & complex situation

- Several critical gaps in understanding
  - Geographic spread?
  - Most important exposures leading to infection?
  - Degree of transmissibility between people?
  - Possibility of "super spreaders"?
WHO assessment and concerns

- High concern over potential for sustainable person-to-person transmission & spread

- Countries & global community not adequately prepared
  - Awareness
  - Surveillance
  - Readiness for potential impact on health, health systems, communities & economies
  - Most effective prevention, treatment & public health control measures
WHO strategic goals for MERS CoV (& H7N9)

- Protect people and communities
- Assess and monitor the situation
- Ensure preparedness by all countries
- Provide global leadership and coordination
Central Role of International Health Regulations

- 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 & response
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

- Situation evolving & future course unknown

- Guidance
  - Intensify surveillance
  - Increase awareness
    - Especially medical workers, travelers
  - Review, improve & accelerate readiness / preparedness

- WHO actively planning joint missions with KSA & Tunisia
  - Similar to joint mission with China on H7N9
Thank you