Pandemic Planning The Queensland Experience

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SESSION VII - Emergency Management of Infectious Disease Outbreaks "Disaster and Emergency Management in the Health Care Sector" - 23 Feb 2016



Outline

- International Health Regulations
- Communicable Disease Mx in Qld
- One Health
- Emerging Infectious Diseases
- Lessons Learned H1N1 Pandemic

Queensland

- ☐ the 2nd-largest and 3rd-most-populous state in Australia
- □ population of 4,560,059, concentrated along the coast and particularly in the state's South East
- ☐ the world's sixth largest subnational entity, with an area of 1,852,642 km2



International Health Regulations 2005 (IHR)

"to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade." ☐ require States/Parties to strengthen core surveillance and response capacities at the local and national level, as well as at designated international ports, airports and ground crossings ☐ require States/Parties to notify a wide range of events to WHO on the basis of defined criteria indicating that the event may constitute a public health emergency of international concern

☐ Global Outbreak and Alert Response Network (GOARN)

COMMUNICABLE DISEASE CONTROL SYSTEM



Communicable Diseases Mx in Qld

STRUCTURE

- 10 Public Health Units (local)
 - □Communicable Disease
 - □Environmental health
- □ Communicable Disease Branch (State)
- Communicable Disease Network of Australia
 - □ National Arbovirus & Malaria Advisory Committee
 - □National Immunisation Committee
 - □National TB Advisory Committee
- Australian Health Protection Principal Committee

RESPONSE

- **□**Surveillance
- □Case management (local)
- □Outbreak response (local/State)
- □Incident Management Team (State)

Public Health Act 2009

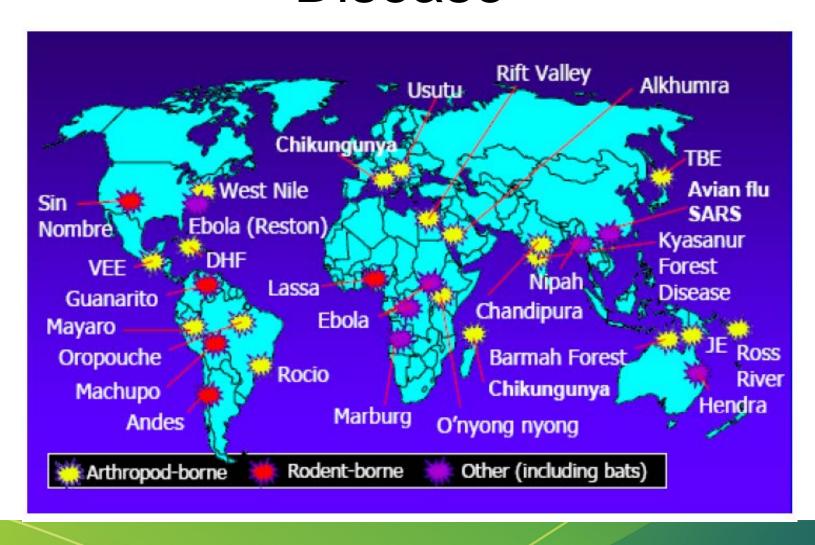
- ☐Multi-agency response or Multi-agency Threat Assessment Team (MATAT)
 - Comprised of relevant State agencies
- ☐ National Incident Room (Commonwealth)
- □PHEIC WHO DG

National Health Security Act 2007

One Health

- ☐ One Health (formerly called One Medicine) is dedicated to improving the lives of all species—human and animal—through the integration of human medicine, veterinary medicine and environmental science.
- ☐ The One Health concept is a worldwide strategy for expanding interdisciplinary collaborations and communications in all aspects of health care for humans, animals and the environment. The synergism achieved will advance health care for the 21st century and beyond by accelerating biomedical research discoveries, enhancing public health efficacy, expeditiously expanding the scientific knowledge base, and improving medical education and clinical care. When properly implemented, it will help protect and save untold millions of lives in our present and future generations.¹

One Health and Communicable Disease



Economic impact of selected infectious disease events

Year	Country/ City	Disease	Cost (USD)
1997	Hong Kong	'bird flu'	22 million*
1994	India	Plague	2 billion
1990-8	United Kingdom	BSE+	38 billion
1999	Malaysia	Nipah virus	540 million*
1999	New York	West Nile Fever	Almost 100 million
1979-94	New York city	Tuberculosis	Over 1 billion
2003	Multi-national	SARS^	40 billion

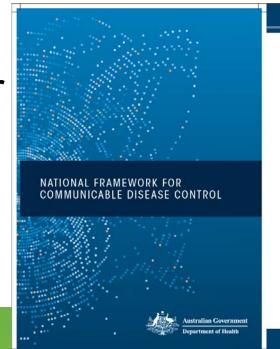
Source: World Health Organization

Planning

- Early identification and management of potential threats essential
- Australian Health
 Management Plan for
 Pandemic Influenza
- QH Influenza
 Pandemic Plan

Australian Health
Management Plan for
Pandemic Influenza





Queensland Health pandemic influenza plan

19 June 2014



Partnerships

- Building on current government systems
- Clear authority and reporting
- Standardisation and alignment with current plans and strategies
- Working with key government and nongovernment agencies

Research

- Real-time
- Appropriateness of the response
- Clinical research
- Review of public health measures during a pandemic and also during seasonal influenza
- CRE in Infectious Disease Emergency Response Research

Border Control

- Overview of management in 2009
- Challenges and issues
- Effectiveness





Antivirals

- Cochrane review
- Effectiveness
 - Individual
 - Population
 - Policy
- Modelling and distribution
- Legislative changes



Vaccination

- Mass vaccination programs
- Candidate and customised vaccine
- Direction from the Australia Government



Infection Prevention and Control

- Isolation V quarantine
- Healthcare workers and personal protective equipment (PPE)
- Stockpiling
- The community experience with masks
- Cough etiquette
- Hand hygiene



Social Distancing

- School closures
- Workplaces
- Major events
- Mass gatherings
- Economic impacts



National Medical Stockpile (NMS)

- Role of the NMS
- Reform
- Appropriate inventory levels
- Timely access
- Management, auditing and rotation

Other issues

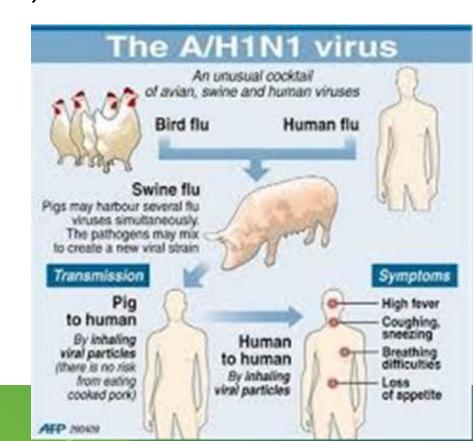
- Quarantine and control
- Public good vs. the individual
- Voluntary self isolation
- Contact tracing
- Management of information



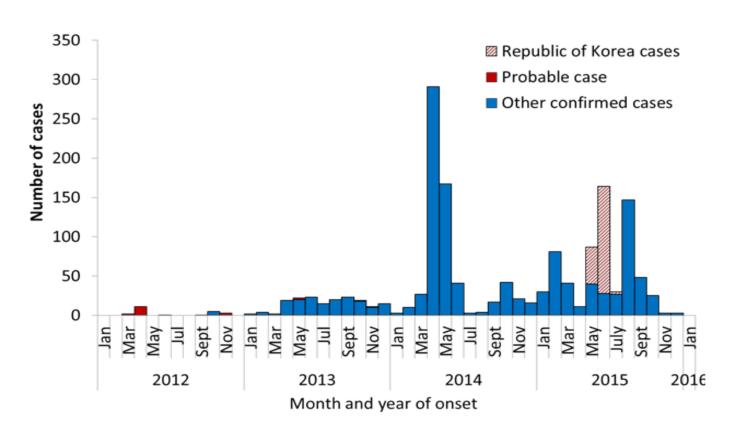
Recent potential threats

- "Swine" influenza: H1N1
- Avian influenza: H5N1; H7N9
- Ebola virus
- MERS CoV
- Zika virus?





MERS CoV

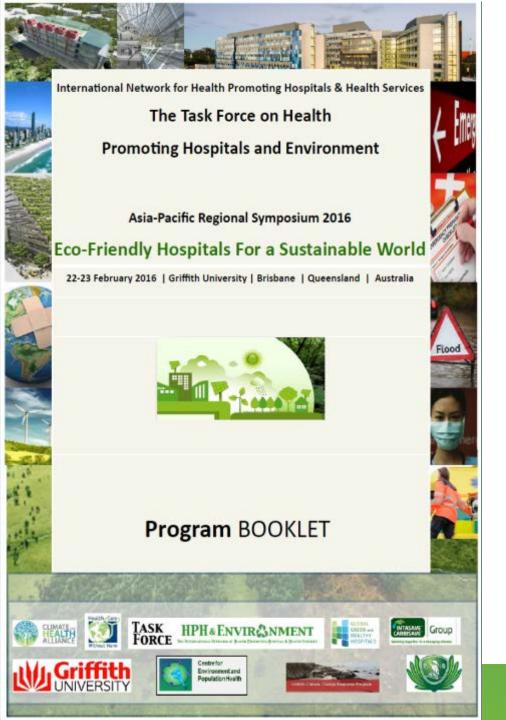


The Department's website – www.health.gov.au/mers-coronavirus

Where to from here

- Plan, Prepare, Monitor, Respond
- Ensuring a coordinated approach
- Review disaster management arrangements
- Monitor and respond to communicable disease threats
- Management inventory stockpiles.

Questions



AN INTERNATIONAL FORUM ON

"DISASTER and EMERGENCY MANAGEMENT in the HEALTH CARE SECTOR"

TUESDAY, Feb 23rd 2016 Griffith University, Southbank Campus

Hosted by Centre for Environment and Population Health, Griffith University and co-hosted by Tzu Chi Medical Foundation, Tzu Chi University

Venue: Griffith University South Bank Campus, Griffith Graduate Centre Building (\$07) Room 1.23

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