Australia
Pandemic Preparedness and Response
APEC Virtual Symposium
January 2006
Population of 20 million
11% over the age of 65 years

4 million visitors a year
- Area 7.69 million km²
  6% arable land (UK 22%)

- 2.5 people per km²
  (UK 244/km²)

40% population live in either
Sydney or Melbourne
Australia

- Federal System
- Six states and two territories
  - State policy
  - Operational control
- Federal Government
  - Controls taxes
  - Determines national policy in consultation
  - Determines international policy
Committees advising the Government

- **National Policy** - Australian Health Disaster management and Policy Committee (AHDMPC)
- **Operational** - Communicable Disease Network of Australia (CDNA)
- **Expert** – National Influenza Pandemic Action Committee (NIPAC)
Governance

- In an emergency in a State or Territory that State or Territory must ask for help if needed
- A National Emergency can be declared by the Governor General
- In an national emergency a task force would be formed headed by a federal agency – usually Prime Minister and Cabinet
- The Quarantine Act of 1908 gives the Chief Medical Officer sweeping powers in the event of an epidemic
Australian Management Plan for Pandemic Influenza

- Builds on previous plan
- Consistent with WHO phases
- Makes use of strong public health infrastructure
- Outlines border, antiviral, vaccine policies
- Released in June 2005
- Currently being revised - Gaps in detail
<table>
<thead>
<tr>
<th>Period</th>
<th>Phase</th>
<th>Description</th>
<th>Main strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-pandemic</td>
<td>0</td>
<td>No animal infection (with subtype that has caused human disease in the past)</td>
<td>Containment</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Animal infection: low human risk</td>
<td></td>
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<tr>
<td></td>
<td>2</td>
<td>Animal infection: substantial human risk</td>
<td></td>
</tr>
<tr>
<td>Pandemic alert</td>
<td>3</td>
<td><strong>Human infection with novel subtype: no spread or at most rare instances</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Human infection with novel subtype: small clusters, limited human to human transmission</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Human infection with novel subtype: larger clusters, substantial pandemic risk</td>
<td>Maintenance of essential services</td>
</tr>
<tr>
<td>Pandemic</td>
<td>6</td>
<td>Pandemic: increased and sustained transmission in the general population</td>
<td></td>
</tr>
</tbody>
</table>
Containment

Keeping it out

• Border control
  – Screening to closure

• Antiviral policy
  – For prophylaxis

• Use of quarantine
  – home quarantine
  – Consideration of mass quarantine in Overseas 5 and 6
Border Control Options

Current

Pratique by exception
Screening baggage for chicken products
Health information sheet

Positive Pratique
Screening of select arrivals
  Declaration forms,
  thermal scanning,
  nurse assessment,
  isolation and quarantine

Screening all arrivals

Divert flights from specific locations
Containment

**Stamping it out**

- Use of antivirals for prophylaxis
- Treatment of index case
- Use of home quarantine
- Emphasis on early detection (testing)
- May use internal border controls or ‘ring fencing’
Maintenance of social function

*Keep society functioning*

- Continuous antivirals
  - for health care workers
  - those at high risk of exposure
- Post exposure prophylaxis
  - for those at less risk
- Treatment if symptomatic
  - depends on effectiveness of antivirals
- Quarantine
  - Still advised, monitoring to cease
  - Ban on mass gatherings advised to continue
Recovery

• Picking up the pieces
• Assisting schools and businesses back to normal
• Business Contingency plans now will help
• Mental wellbeing – use of local networks
Government Response
– since 2003

- Upgrading of surveillance ability
- Upgrading of laboratory capacity
- Office of Health Protection
- Purchase of antivirals
- Development of pandemic vaccine contracts
- Development of communication packages
- Urgent research process
National Incident Room (NIR)
Surveillance

• On line secure system for notifiable diseases
  • Web based
  • Different modules
  • Ability to send documents, secure email system

• Outbreak Management System
  • Tested in food outbreaks
  • Available now – being improved

• Laboratory downloading in the next few years
Laboratory Capacity

- Improvements in security
- Training, stockpile of reagents
- Upgrading of WHO Collaborating Centre to BSL 3
- National BSL 4 high containment laboratory
Anti-virals

- On soil stockpile for treatment of 22% of population or for prophylaxis for one million for 6 weeks
- To purchase additional 4 million courses (treat 44% of population)
- Oseltamivir (Tamiflu) and zanamivir (Relenza)
- Primary use will be for prophylaxis
Vaccines

• Contracts with CSL Ltd (in Australia) and Sanofi Pasteur (France) to provide pandemic vaccine in the event of a pandemic

• CSL Ltd carrying out trials on H5N1 (2003 NIBSc 14) testing antigen dose – adjuvenated and non-adjuvenated

• Government will stockpile 2 million doses or sucrose stored antigen when available
RESEARCH

• Diagnostic tests
• Vaccine Development and evaluation
• Anti-viral medication use and effectiveness
• Public Health Interventions
• Understanding behavioural response
Exercises

• ‘Eleusis’ tested coordination between health and agriculture departments
  • Avian influenza outbreaks in several states
  • Several human cases

• Debriefs
  • Mainly issues with communication
  • Roles of committees
  • Tightening of some national policies needed

• Major exercise to test Pandemic Plan – late 2006
Region

• 2004 – project to increase surveillance capacity particularly in agriculture through AusAID

• Discussion with countries to provide epidemiologists and planners

• Overall $141 million AUS to region

• Will provide assistance on request
Thank you