The Pandemic in New Zealand

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- Planning began about 7 years ago, accelerated during last 3
- Culminated in development of updated New Zealand Influenza Pandemic Action Plan (NZIPAP)
- Latest version approved by Cabinet in September 2006
- New version of plan soon to be finalised
- Range of sectoral and local plans sit behind NZIPAP
- Program of exercises to test preparedness - Virex (Feb 2002), Makgill (Nov 2006), Cruickshank (May 2007), Spring Fever (Oct 2008)
Pandemic Planning in NZ—everyone’s business

- Across health sector
- All key Government agencies
- All major social support organisations
- Private sector – key infrastructure groups
- Local Government

An explicit Government decision made at highest level (sought by MoH) to take “whole of Government” approach, plus involving private sector/community
Preparedness into Practice - responding to the 2009 Pandemic

- Confirmation of small number of cases of novel influenza notified by US on secure IHR website on night of 24 April
- On 25 April group of Auckland students returned after stay in Mexico. Some had mild flu like symptoms and went to GPs. GPs advised ARPHS, ARPHS advised MOH public health staff, and national response commenced same day. Cases treated as probable in advance of lab confirmation (subsequently received first cases outside North America)
- Initial focus as per NZIPAP on border measures (screening, isolation/quarantine, provision of info), plus enhanced surveillance, response to possible cases in community, public information
For some weeks considerable uncertainty about severity of infection. Early reports from Mexico suggested relatively high CFR.

Containment measures appeared effective at preventing significant community transmission for up to 6 weeks. Time was valuable for health & other sectors to speed up preparedness, and to get ready to implement management plans. Also allowed us to learn more about virus. But containment was very resource intensive (PHUs, labs, border agencies).

On 19 June switched from containment to management. Focus changed to managing burden on clinical services. Pressures experienced across sector, but main pressure in ICUs. Management of ILI, rather than H1N1 specifically- stopped routine testing. No management of contacts, and priority was care for people most at risk.
- Pandemic peaked in July, demand in primary care peaking 1-2 weeks before hospitals/ICUs
- As of 25 February 3214 confirmed cases
  - 1039 hospitalisations
  - 20 deaths
- ILI activity back to baseline. Future wave in NZ likely, and most likely timing of commencement early Autumn (March/April)
Monitoring the curve - GP sentinel surveillance
Monitoring the curve- HealthLine calls

Daily ILI calls to Healthline: 7-day moving average
1 January 2007 - 15 November 2009

Note: From 1pm Tuesday 9 June 2009 to 1pm Sunday 14 June 2009, the ILI definition also included contacts of cases of Influenza A (H1N1) who were not symptomatic at the time of the call.
Monitoring the epidemic curve - H1N1 hospitalisations (ICU and non-ICU)
Pandemic strain replaced seasonal strains in NZ
Impacts distributed unevenly
Questions

1. Was there communication and shared-border preparedness between neighbouring countries?

- An island nation, so no ‘shared borders’
- But, regular and detailed communication, including sharing of plans, with countries in region – especially Australia and Pacific Island countries, but also more widely
- Also provided technical advice & support to Pacific Island countries and regional organisations to assist with regional preparedness (including involvement with exercises)
2. Did you experience a problem with H1N1 vaccine?

- Yes and no
- Had prioritised access to vaccine at level to be determined by us, but after orders of 2 other countries filled
- Meant vaccine would never be available in time to help deal with first wave
- However also meant that we had option of relying on enhanced seasonal vaccine program (once decision was taken to include pandemic strain). This is focus in NZ (only purchased 150,000 courses of H1N1 vaccine, for population of 4 million). Has been well accepted
3. Were there closings of schools and limitations of mass gatherings?

- Targeted school closures during containment phase, when multiple cases had occurred in the school
- No wider school closure, although school holidays (2 weeks) occurred around peak of pandemic
- No limitations of mass gatherings
- Emphasis on personal behaviour (see next question)
4. What policies were implemented (PPE etc)?

Face masks/PPE – had existing policies for their use, and large national stockpile. Emphasis on use in health care settings, not in community

“Campaign for improved hygiene” – major focus of activity (as well as during preparedness).
Emphasised covering coughs & sneezes, regular hand washing and drying, and staying home when sick

Effectiveness – PPE – Seroprevalence in HCW same as for general population (interim results) – i.e. no evidence of increased transmission via workplace

Campaign – currently being evaluated, but appears to have been highly successful in adjusting behaviour (especially staying home when sick), plus some indication other infectious diseases decreased
5. How were antivirals utilised?

- Had large national stockpile, and plans were in place for distribution and use.
- During containment used for treatment of all cases plus post exposure prophylaxis for contacts.
- During mitigation used for treatment of those more at risk of serious illness, and hospitalised cases.
- Main challenge was balancing need to control & monitor use of national asset, with need to ensure rapid access.
- Used only small proportion of total stockpile.
6. Did you experience a surge of ILI cases at hospitals?

- Of course, like every other affected country
- Were we adequately prepared? Very well prepared overall, and plans worked very well, but were surprised by extent of impact on intensive care
- Lessons (not just on hospitalisation)
  a) Preparedness
     - fundamental importance of whole of govt/society preparedness (and common approaches)
     - buy-in from key stakeholders
     - include the private sector
     - information for & conversations with community
     - work proactively with media
     - exercises
6. Did you experience a surge of ILI cases at hospitals (2)

- Lessons (not just on hospitalisation) cont.
  
  b) Response
  
  - be very open with community, including on what we don’t know
  - rely on a wide range of information for surveillance but existing systems are more robust than ones developed on the run
  - draw on clinical networks
  - draw on expertise from other sectors
  - make being spokesperson an explicit & senior role in response, not just an extra duty for someone already fully occupied
  - more people than anticipated seem to have been infected, including many with no history of ILI