

Managing Pandemic (H1N1) 2009 influenza: A national health response

By Professor Jim Bishop AO, Australia's Chief Medical Officer

On 11 June, the World Health Organisation (WHO) raised its global pandemic alert level to Phase 6 which recognised the continuing spread of the influenza virus now called Pandemic (H1N1)2009 around the world.

WHO's Phase 6 is characterised by community level outbreaks in at least one other country in a different WHO region (from the source country). It indicates there is sustained human-to-human, community level transmission and that a global pandemic is underway and that it is no longer possible to contain the virus in a particular geographical area.

Simultaneously, after consultation with State and Territory governments, Commonwealth Minister for Health and Ageing, Nicola Roxon, announced that Australia had developed a new response phase to manage the outbreak of Pandemic (H1N1) 2009 called PROTECT. The new phase was created because this infection had turned out not to be as severe as originally envisaged when the Australian Health Management Plan for Pandemic Influenza (AHMPPI) was written in 2008 and that this new disease is mild in most cases but was severe in some and moderate overall.

PROTECT followed the CONTAIN National Pandemic phase with a greater focus on treating and caring for people in whom the disease may be severe. PROTECT is a measured, reasonable and proportionate health response to the risk that the infection poses to the Australian community. Under this phase the emphasis has now moved away from widespread testing, use of antivirals and school exclusions to concentrating on treating the most vulnerable people at risk of poor outcomes, such as those with underlying medical conditions, pregnant women and our Indigenous community.

In recent weeks there has been a marked increase in the number of cases, hospitalisations and deaths as the disease spreads as the dominant influenza this flu season. There is concern about a new category emerging who are at risk - young, fit people who deteriorate quickly. All of these cases are putting a considerable burden on our public health system, but we are coping well.



International travellers 'mask up' as a protection measure against the swine flu virus.

The Department of Health and Ageing has developed resources sent to GPs and others to assist in identifying a deteriorating patient early.

Our surveillance figures are showing that the number of confirmed pandemic (H1N1) 2009 influenza cases overtook the seasonal influenza cases from week 26 (20 June 2009), which could indicate that pandemic (H1N1) 2009 influenza is replacing seasonal flu activity this winter.

As at noon on 22 July 2009 Australia had 14703 confirmed cases of Pandemic (H1N1) 2009. The total number of Australian deaths associated with Pandemic (H1N1) 2009 influenza at this date was 41 with 17 deaths in NSW, 3 in the NT, 1 in Qld, 3 in SA, 1 in Tas, 15 in Victoria and 1 in WA.

Also at this date there were 226 people in hospital around Australia with Pandemic (H1N1) 2009 and 93 of these were in Intensive Care Units. The total number of hospitalisations in Australia as at 22 July 2009 since Pandemic (H1N1) 2009 was identified was 1662. The median age of confirmed pandemic (H1N1) 2009 is 19 years. This may rise as the focus changes to testing the severely affected or hospitalised individuals. Males are overrepresented among pandemic (H1N1) 2009 notifications in the younger age groups, while the number of females is slightly higher from age 20 years. Males are also overrepresented in the deaths associated with pandemic (H1N1) 2009.

Several jurisdictions have reported cases of pregnant women being admitted to hospital and ICU, reinforcing the fact that pregnant women, particularly in the second and third trimesters, are identified as a particular vulnerable group for poor outcomes with pandemic (H1N1) 2009 infection.

On the vaccine front, the Government has already placed an order for a vaccine being developed by CSL. The government has ordered 21 million doses of the vaccine which is enough to vaccinate half our population if two doses are required and the entire population if one dose is required. CSL began human trials of their vaccine on 22 July 2009 to ensure its safety and efficacy in both adults and children.

Results from the clinical trials would start to be available from September and would be carefully examined by the Therapeutic Goods Administration before the vaccine was authorised for distribution. Subject to these checks, the vaccine is likely to be available by October 2009 although if there is a need to move quicker in providing the vaccine to the public then this process can be re-evaluated. This means Australians would be among the first populations in the world to be vaccinated for this disease.

Dealing with this new infection, to which no one has immunity, has been a major challenge and has been guided by the Australian Health Protection Committee (AHPC), chaired by the Commonwealth and comprising Australia's Chief Medical Officer and the Chief Health Officers of all jurisdictions together with a range of experts. The management of this disease has been a great example of interjurisdictional cooperation and the lessons learned from this nationally coordinated effort will set us in good stead if there is a second wave of Pandemic (H1N1) 2009 influenza or any future communicable disease outbreak.

About the author

Professor Jim Bishop AO is Chief Medical Officer for the Australian Government and is the principal medical adviser to the Minister and the Department of Health and Ageing. He plays a key, strategic role in developing and administering major health reforms for all Australians. In particular his close association with Australia's medical fraternities and researchers will be crucial in the development of evidence based public health policy.