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Pandemic Report: Period Ending 2 July 2006
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Avian Influenza - has been identified in birds in 53 countries. New outbreaks have been reported in Western Siberia (which indicates that avian influenza may be more widespread in Russia than has been reported); northwestern China; and eastern Nigeria - bringing to 15 the number of states, out of 36, to be affected.

On the other hand, Malaysia has proclaimed itself to be a zone free from bird flu and has not had a bird death for the last 95 days. This is put down to aggressive and timely interventions, and it is reported that this has preserved 160 million domestic birds.

Human Disease- the latest WHO data reports 130 human deaths from 228 reported cases. Most human cases of bird flu have been traced to contact with sick birds. In Vietnam 42 people have died and in Indonesia 39 since the virus began affecting Asian poultry flocks in late 2003.

Bird flu fatalities have almost tripled this year as the virus has spread across Asia, Europe and Africa.

On 23 June, WHO reported the first lab - confirmed case of avian flu spreading from person to person in a family of 7 in Sumatra. While the first 5 relatives were infected by identical strains on H5N1, a 10-year-old boy passed a mutated virus to his father. Fortunately the virus died out, and didn't go beyond the family - and was at a "dead end" - and could not be passed on, according to WHO officials. There is no evidence to indicate that the virus has adapted to a human host. All its genes are purely those of avian flu.

Previous family clusters of avian flu victims have been found in Azerbaijan, Turkey and Thailand - probably indicating a genetic predisposition to the avian disease. All family members had been in very close proximity.

German scientists revealed last week that four people from a family cluster in Azerbaijan (6 of 7 victims - aged 10 to 20 were from the same family) are believed to have caught the virus from plucking dead swans to sell the feathers. Three other people infected by the swans survived. It is well known that swans carry the virus, and that people can catch the virus from very close contact - "so it doesn't change anything, its just the first time it has been reported".

Meanwhile, a WHO epidemiological report showed that the H5N1 avian flu virus has a higher death toll in adolescents and young adults (as did the 1918 Spanish flu). Data used in the analysis were collected for surveillance purposes. Quality, reliability and format were not consistent across data from different countries. Despite this limitation, several conclusions could be reached:

- The number of new countries reporting human cases increased from 4 to 9 after October 2005, following the geographical extension of outbreaks among avian populations.
- Half of the cases occurred in people under the age of 20 years; 90% of cases occurred in people under the age of 40 years
- The overall case-fatality rate was 56%. Case fatality was high in all age groups but was highest in persons aged 10 to 39 years.
- By age 50 and over the fatality rate dropped to 18%.

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| Human diseases arise regularly from animals and birds. | True: Scientists have recorded a serious zoonotic human disease virtually every year for the last 50 years. | |
| H5N1 is just like SARs and will "disappear". | | False: SARs is different to H5N1 in two important ways - which meant that SARs is less dangerous. 1. SARs is spread mostly by very close direct contact with another infected person, 2. people are not infectious until after the SARs symptoms occur. Hence early identification, isolation and infection management will work better on SARs. |
| The incubation period of an H5N1 avian influenza may be up to 17 days. | True: normal seasonal influenza has an incubation period of 2-3 days; H5N1 is likely to be 2-8 days, and possibly up to 17 days. | |
| If a pandemic occurs it will be possible to get assistance from Australia. | | False: Once a fully contagious virus emerges its global spread is considered inevitable - and therefore there will be no cavalry. |
| Widespread illness would occur from an H5N1 pandemic. | True: Because most people will have no immunity to a pandemic virus (novel virus in a naive population) the illness rate will be higher - up to 40% of the population may get it. | |
| If you get pandemic you will die. | | False: Most people will recover - the planning assumptions are for 2% of those affected to die (ie approx 33,000 NZers). |
| Economic and social disruption will be great. | True: the planning assumptions are for 50% absenteeism at the peak pandemic period. All countries will be affected. The economic impact could be very large - perhaps 10-15% of GDP. | |
| Because it is a new disease Pandemic Influenza would pass quickly, and then be over. | | False: the planning assumptions are that there could be up to 3 waves of 8 weeks, with an 8 week period in between. |
| You will get H5N1 in NZ from eating chicken. | | False: the virus is killed by cooking (temperatures greater than 65 degrees C) |
| Pandemic Influenza is spread by respiratory secretions. | True: It spreads from person to person in 3 ways: 1. by droplets from one person to another (coughing/sneezing) 2. By touching contaminated surfaces (droplets) then touching mouth, eyes & nose. 3. Through spread of particles in the air in enclosed places. | |
| If a pandemic occurs individuals and families will need to look after most sick people themselves. | True: the medical system would be overwhelmed, for example up to 23,200 people could become sick in the peak pandemic period in Otago. Alternative ways to assess people and distribute medication will be used. | |
| If a pandemic occurs people would generally be better off if they go "bush". | | False: in previous pandemics up to 98% of the population were exposed. People are therefore likely to be much better off in supportive families and communities. |

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| Panic buying of food and groceries could clean out essential supplies in less than a day. | True: The FMCG sector operates on a just enough/ just in time system. On average essential items turn over in around 36 hours. Homes are the best place to build up food supplies. | |
| In a pandemic NZ would run out of food. | | False: NZ has a positive food balance- we export approx 80% of the food we produce. But we may run out of some foodstuffs. |
| The Police or Army would be able to step in and help others in all situations where extra labour is needed. | | False: Both will have 50% absenteeism, and will have their own priorities. It is best to assume that there is NO CAVALRY. |
| NZ government has decided how to use its stock of Tamiflu. | | False: No firm decisions have been made. Tamiflu will be used strategically to manage any disease out- break. |
| We will only have to wait a short time for a vaccine for pandemic. | | False: A vaccine cannot be made until the influenza virus has occurred (and it hasn't mutated yet). Even then it will take longer than 6 months to have enough to vaccinate all NZ'ers. |
| But Pandemic Influenza is "just Y2K with feathers". | | False: Y2K was a potential technical problem. H5N1 is an unstable virus whose developments cannot be predicted. |