

WHO Update <http://pandemicflu.gov/news/indonesiaupdate.html>

Indonesia Situation Update - May 31

There is an ongoing WHO investigation into an extended family cluster of H5N1-infected persons in Indonesia. According to the latest information from WHO, 8 members of the family have contracted avian influenza, 7 have died and 1 has survived.

There is no evidence of community spread beyond the initial family cluster and no infections in health care workers. A house-to-house surveillance for influenza-like illness is being conducted throughout the approximately 400 household community.

We are, however, continuing to monitor the situation and the 54 people in close contact of the cases are under quarantine and surveillance. With the exception of pregnant women and infants, Tamiflu is being used as prophylaxis for these close contacts, and the evidence suggests the virus remains susceptible to Tamiflu.

As a precaution, the WHO and the Indonesian authorities have decided to continue to closely monitor the situation until mid June.

A WHO team, including one of our foremost CDC influenza experts, is on-site and collaborating with the Indonesian Ministry of Health on this investigation. At this time, limited human-to-human transmission has not been established definitively, but it is the leading hypothesis. If true, it would be consistent with findings for earlier clusters in Hong Kong and Thailand.

However, genetic analyses by WHO reference laboratories at CDC and the University of Hong Kong indicate no evidence to date of evolution in the virus that would enhance its transmissibility between humans. There are no changes in the virus in Indonesia compared with other H5N1 viruses isolated recently.

WHO has confirmed that the initial case, a 37 year old woman, sold fruits at a market stand 15 meters from where live chickens were sold. She also kept a few chickens in her home, three of which died before she became ill. All confirmed cases in the cluster were present in a small room and experienced close and prolonged exposure to the patient during a severe phase of illness.

While this is a very sad situation for the family involved, and of concern to all of us, the evidence does not suggest that the virus has become more virulent or that a pandemic is imminent.

Human-to-human transmission can range along a continuum, from occasional, dead-end human-to-human transmission, to efficient (easily transmitted) and sustained human-to-human transmission.

It is important to distinguish the *limited* human-to-human transmission that may have occurred in this family from *efficient (easily transmitted)* and sustained human-to-human transmission that would represent a pandemic risk. Efficient and sustained transmission means that the virus is easily passed

from person to person. It is a characteristic of annual influenza and pandemic influenza viruses, but is not something we have seen in the Indonesia or other clusters.

Rare instances of probable human-to-human transmission associated with H5N1 viruses have occurred in the past. In addition, previous family clusters of H5N1 infections have been reported in Indonesia and other countries. Specific instances of suspected transmission include:

- In 1997 in Hong Kong, there was evidence of limited transmission of H5N1 virus to health care workers and household contacts of patients. These contacts exhibited mild or no illness and did not transmit the disease to others.
- In 2004 in Thailand, there was evidence of probable human-to-human transmission in a family cluster. Transmission was associated with prolonged very close contact between an ill child and her mother. Transmission did not continue beyond one person.
- It is possible that other cases of human-to-human transmission have occurred in association with the H5N1 epizootic that emerged in Asia in 2003. There is no current evidence that transmission has continued beyond one person.

So far, the spread of H5N1 virus from person to person has been rare, inefficient (not easily transmitted), and unsustainable.

It would not be surprising to see limited human-to-human transmission during the current H5N1 outbreak in Indonesia, as has been seen in the past.

These events remind us that we cannot be complacent in the face of this highly fatal virus and the threat it poses to the world community. They underscore the importance of continuing preparation.