

**Background Information on Recent U.S. Human Cases of Novel Influenza A (H3N2)**  
**Michigan Department of Community Health**  
**December 15, 2011**

Since July 2011, the Centers for Disease Control and Prevention (CDC) has reported 11 confirmed human cases of infection with a novel influenza A (H3N2) virus. This influenza virus has genes from swine, human, and avian lineages with the M gene from the 2009 H1N1 influenza virus. The 11 cases occurred in Indiana (2), Pennsylvania (3), Maine (2), Iowa (3), and West Virginia (1); some of these cases have been in clusters or are epi-linked to each other.

The median age of cases is 3 years (range 11 months-58 years). Clinical illness has ranged from mild to severe and preliminarily have presented as an influenza-like illness (fever of 100.1°F or greater with a cough and/or a sore throat). Three of 11 cases were hospitalized; all hospitalized cases had underlying medical conditions. The incubation period appears to be two to four days.

Four cases had direct swine exposure, two cases had indirect swine exposure, and five cases had no swine exposure. Limited human-to-human transmission of this virus is thought to have occurred. The potential for sustained human-to-human transmission is unknown at this time.

This novel virus is substantially different from currently circulating seasonal (human) influenza A (H3N2) viruses, but is distantly related to human influenza viruses that circulated among people in the 1990s. For that reason, some adults may have some residual immunity against this virus. This might help explain why 10 of the 11 cases that have been detected have occurred in children. This virus is susceptible to the antiviral medications oseltamivir and zanamivir and resistant to amantadine and rimantadine. Additional research is taking place to determine what populations are at risk of infection from this virus. Seasonal influenza vaccine would be expected to provide limited cross-protection against the novel A (H3N2) virus. You should continue to vaccinate with the 2011-12 seasonal flu vaccine as it remains our most effective tool for preventing seasonal flu viruses which are likely to circulate in upcoming weeks.

Outside of the cases mentioned above, no ongoing community-wide transmission of this virus has been detected in the United States. CDC is taking this situation very seriously, and surveillance surrounding reported cases is being further enhanced. As a precaution, a vaccine virus has been developed and provided to manufacturers for them to begin vaccine production should that become necessary.

**No novel influenza A (H3N2) cases have been identified in Michigan at this time.** Current influenza activity is very low, both in Michigan and nationwide.

The Michigan Department of Community Health (MDCH) is conducting surveillance for cases of novel influenza A (H3N2) infection. Healthcare providers, clinical laboratories, hospitals and local health departments are asked to assist with this surveillance effort. Additional guidance documents for these groups will be distributed.

Questions can be directed to the MDCH Division of Communicable Disease at (517) 335-8165.

Future MDCH updates will be available online at [www.michigan.gov/flu](http://www.michigan.gov/flu).  
CDC updates are available online at <http://www.cdc.gov/media/haveyouheard/>.