



MI FluFocus

Influenza Surveillance and Avian Influenza Update

Michigan Department of Community Health
Bureau of Epidemiology
Bureau of Laboratories

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New updates in this issue:

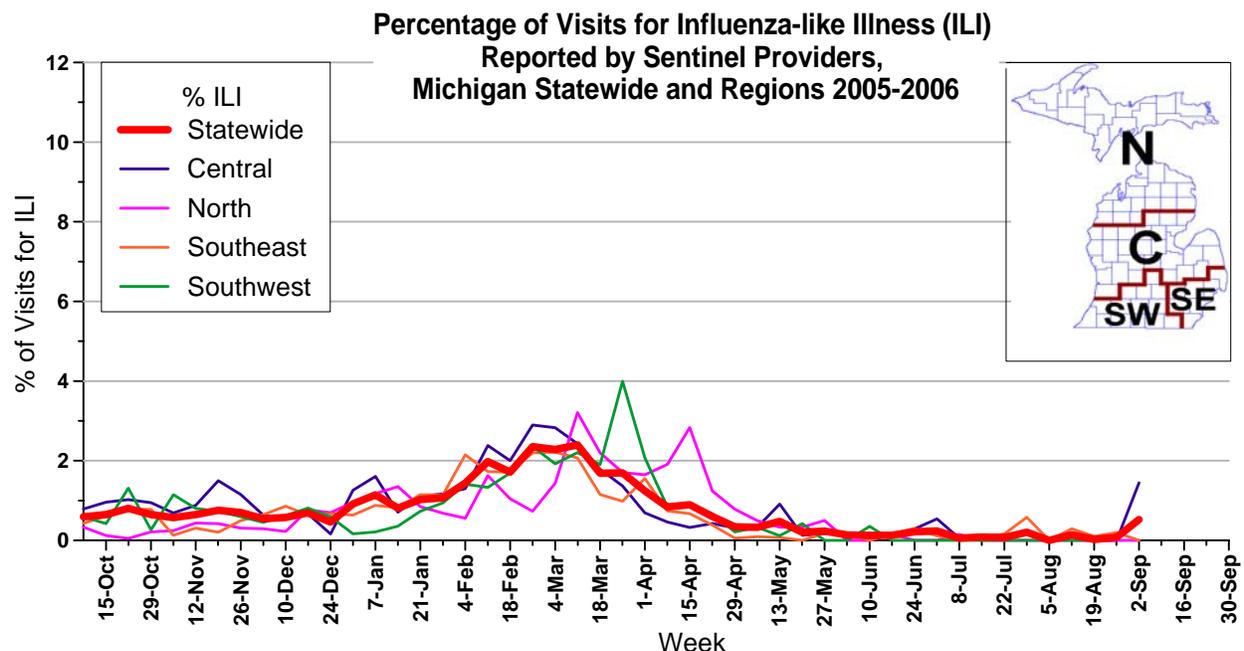
- **Sentinel Surveillance:** Updated ILI data for the week ending September 2.
- **Michigan Update:** Hand-washing signs scam
- **Avian Influenza:** Low-pathogenicity H5N1 found in wild birds in Maryland and Pennsylvania

Michigan Disease Surveillance System: No recent aberrations have been detected in flu-like illness activity. It continues to remain very low and is comparable to last year at this time.

Emergency Department Surveillance: No recent aberrations have been detected in the level of either respiratory or constitutional emergency department visits. Both indicators remain low and are comparable to last year at this time.

Over-the-Counter Product Surveillance: A general increasing trend has been seen in sales of both cough and cold medications and chest rubs. Antifever medication sales decreased from the previous week. Thermometer sales have stabilized but are at an increased level compared to this time last year. These indicators will continue to be monitored. No recent aberrations have been detected in the level of the remaining indicators, all of which remain very low and are comparable to last year at this time.

Sentinel Surveillance (as of September 7, 2006): During the week ending September 2, 2006, the proportion of visits due to influenza-like illness (ILI) increased slightly from last week to 0.5% of all visits. The Central region saw an increase from 0.0% to 1.4% of all visits during the past week. Low levels of ILI activity were reported in all other regions; the percentage of visits due to ILI by region was 1.4%, Central; 0.0%, North; 0.4%, Southeast; and 0.5%, Southwest.



As part of pandemic influenza preparedness, CDC and MDCH highly encourage and recommend year-round participation from all sentinel providers. Data that we obtain over the summer will help us to establish a baseline level of activity during months that are not typically associated with high levels of influenza activity. New practices are encouraged to join influenza sentinel surveillance program today! Contact Rachel Potter at 517-335-9710 or potterr1@michigan.gov for more information.

Laboratory Surveillance (as of September 7): No reports were received for the past week. The MDCH laboratory has confirmed 138 influenza cases in Michigan over the 2005-2006 season, of which 132 were influenza A (H3N2) and 6 were influenza B.

As a reminder, the positive predictive value of influenza rapid tests decreases during times of low influenza prevalence, such as the summer months. MDCH suggests that during periods of low influenza activity in your community, all positive rapid tests results be confirmed by sending in a specimen for viral culture; this can be arranged through your local health department.

Influenza-Associated Pediatric Mortality (as of September 7): There were no new reports this week. For the 2005-2006 influenza season, Michigan had one confirmed influenza-associated pediatric death from region 2S. During October 2, 2005 – May 20, 2006, CDC received reports of 35 influenza-associated pediatric deaths, 33 of which occurred during the current influenza season.

***Reminder: The CDC has asked all states to continue to collect information on any pediatric death associated with influenza infection. This includes not only any death in a child less than 18 years of age resulting from a clinically compatible illness confirmed to be influenza by an appropriate laboratory or rapid diagnostic test, but also unexplained death with evidence of an infectious process in a child. Refer to http://www.michigan.gov/documents/fluletter_107562_7.pdf for the complete protocol. It is important to immediately call or fax information to MDCH to ensure that appropriate clinical specimens can be obtained.

Congregate Settings Outbreaks (as of September 7): No reports were received during the past reporting week. A total of two congregate setting outbreaks have been reported to MDCH this season; one in Southwest Michigan in late February and one in Southeast Michigan in late March. Both outbreaks were MDCH laboratory confirmed as due to influenza A (H3N2).

Michigan Update (MDCH, September 1): The Michigan departments of Community Health (MDCH) and Agriculture are warning Michigan businesses to be aware of misleading flyers being distributed by two companies that claim to encourage compliance with a "new hand washing posting advisory." The mailings, which could be mistaken for official notification, have the potential of intimidating businesses into purchasing the companies' signs rather than risk being fined or closed.

Companies calling themselves the Michigan Center for Disease Education (MCDE) and the Food Service Compliance Center (FSCC) have mailed flyers to businesses to promote the sale of "approved hand washing posters." It should be noted that the MCDE and FSCC are NOT state agencies, and not affiliated with the state of Michigan. The flyers incorrectly quote sections of the Michigan Food Code and Food Law, as well as US Code of Federal Regulations, and imply that an operator may be closed down or fined up to \$2,500 if they fail to have signs that meet "exact specifications." Signs are then offered for sale for \$19.95 each plus shipping.

While hand-washing signs are required for food establishments, they are not required at other businesses. For food establishments, the Michigan Food Code specifies only that the signs be legible and in the correct place. The Michigan Department of Community Health strongly encourages routine hand hygiene to promote good health in all settings. Hand washing signs suitable for a variety of settings are available, free of charge, from the Centers for Disease Control and Prevention website www.cdc.gov/cleanhands, or by contacting your local health department. For more information, please contact T.J. Bucholz at (517) 241-2112.

International (WHO, as of August 30): During weeks 31- 33, with the exception of New Zealand, where regional influenza A(H3N2) activity continued, overall influenza activity in both northern and southern hemispheres was low. In Australia, localized influenza activity continued to be reported during weeks 31–33. Influenza A and B viruses co-circulated. During weeks 31-33, influenza A activity in New Zealand

remained similar to previous weeks and was reported as regional. Low influenza activity was reported in Argentina (H1, A and B), Hong Kong, Special Administrative Region of China (H1, H3 and B), Japan (H1), Madagascar, South Africa (H3 and B), and Uruguay (H1, A and B). Sweden reported an A(H3N2) case imported from China during week 33. Mexico, Portugal and Slovenia reported no influenza activity.

Weekly influenza activity reporting to the CDC is finished for the 2005-2006 influenza season.

End of Seasonal Report

Avian Influenza Activity

WHO Pandemic Phase: Phase 3 - Human infection(s) with a new subtype, but no human-to-human spread or rare instances of spread to a close contact.

International Update (Reuters, September 5): A fresh outbreak of bird flu has been confirmed in ducks in eastern Cambodia, officials said on Tuesday. Tests confirmed the deadly H5N1 virus in live and dead ducks in the Bateay district of the eastern province of Kampong Cham where 700 birds died last week, they said. "We sent our vets to cull the rest of the live ducks after the result was confirmed on Saturday," senior agriculture official Yim Voeunthan told Reuters. The virus could have spread from a nearby village where a bird flu outbreak killed nearly 2000 ducks last month, said Ku Chanthan, a veterinarian in Kampong Cham. In early August, the virus was also found among 1300 ducks that died in the province of Prey Veng, 70 km (45 miles) southeast of Phnom Penh. Authorities said that infected ducks that survived the outbreak in Prey Veng may have been smuggled to Kampong Cham, where surveillance efforts against the virus have been stepped up. "We are worried that more bird flu will be found in ducks because our survey experience showed that up to 15 percent of live ducks carried the virus," Yim Voeunthan said.

National Wild Bird Surveillance (USDA, September 2): USDA and the Department of the Interior announced the presence of the H5N1 avian influenza subtype in fecal samples from wild birds in Maryland. Testing has ruled out the possibility of this being the highly pathogenic H5N1 strain that has spread through birds in Asia, Europe and Africa. Test results thus far indicate this is low pathogenic avian influenza (LPAI), which poses no threat to human health. The fecal samples were collected on August 2 from resident wild ducks in Queen Anne's County, Maryland, as part of a research project conducted by Ohio State University. The fecal samples came from mallards that showed no signs of sickness, which also suggests that this is LPAI. Because of the nature of the research project and because there was no sign of illness in the birds, the samples were not prioritized for testing. On August 24, 2006, USDA's National Veterinary Services Laboratories (NVSL) in Ames, Iowa received the samples. On August 31, 2006, NVSL tests indicated that nine samples were positive for the H5N1 avian influenza subtype. Today, genetic analysis of the virus was completed, which suggests that this virus is similar to low pathogenic strains that have been found previously in North America.

LPAI commonly occurs in wild birds, where it typically causes only minor symptoms or no noticeable symptoms. These strains of the virus are not a human health concern. Additional testing at NVSL will confirm the pathogenicity of the virus. These results will be made public when completed. It should be noted that wild birds are known to harbor many influenza viruses, and the finding of these viruses during routine testing is not unusual.

Recognizing that LPAI is endemic in wild bird populations, commercial poultry operators, including those in Maryland, employ extensive biosecurity measures to prevent exposure to wild birds and have done so for more than ten years. According to guidelines issued by the World Organization for Animal Health there should be no trade restrictions imposed due to detection of avian influenza in wild birds. There is no known health risk to hunters or hunting dogs from contact with low pathogenic forms of avian influenza virus. Nevertheless, hunters are always encouraged to use common sense sanitation practices, such as hand washing and thorough cooking, when handling or preparing wildlife of any kind. DOI has issued guidelines for safe handling and preparation of wild game.

In addition, USDA and DOI announced that H5 and N1 avian influenza subtypes were found in samples from wild mallard ducks in Pennsylvania. Testing has ruled out the possibility of this being the highly

pathogenic H5N1 strain. Test results thus far indicate this is also LPAI. The ducks were sampled August 28 in Crawford County, Pennsylvania. The ducks showed no signs of sickness, which also suggests this is LPAI. The samples were taken by Pennsylvania Game Commission personnel under a cooperative agreement with USDA. As a result of this expanded testing program, USDA and DOI expect to identify additional cases of common strains of avian influenza in birds, which is not cause for concern. It is possible that these birds were not infected with an H5N1 strain, but instead with two separate avian influenza viruses, one containing H5 and the other containing N1. The confirmatory testing underway at NVSL will clarify whether one or more strains of the virus are present, the specific subtype, as well as confirm the pathogenicity. These results will be made public when completed.

Michigan Wild Bird Surveillance: To learn about avian influenza surveillance in Michigan wild birds or to report dead waterfowl, go to Michigan's Emerging Disease website at <http://www.michigan.gov/emergingdiseases>.

Please contact Susan Vagasky at VagaskyS@Michigan.gov with any questions regarding this newsletter or to be added to the weekly electronic mailing list.

Table 1. H5N1 Influenza in Poultry (Outbreaks up to September 4, 2006)

(Source: http://www.oie.int/download/AVIAN%20INFLUENZA/A_AI-Asia.htm Downloaded 9/7/2006)

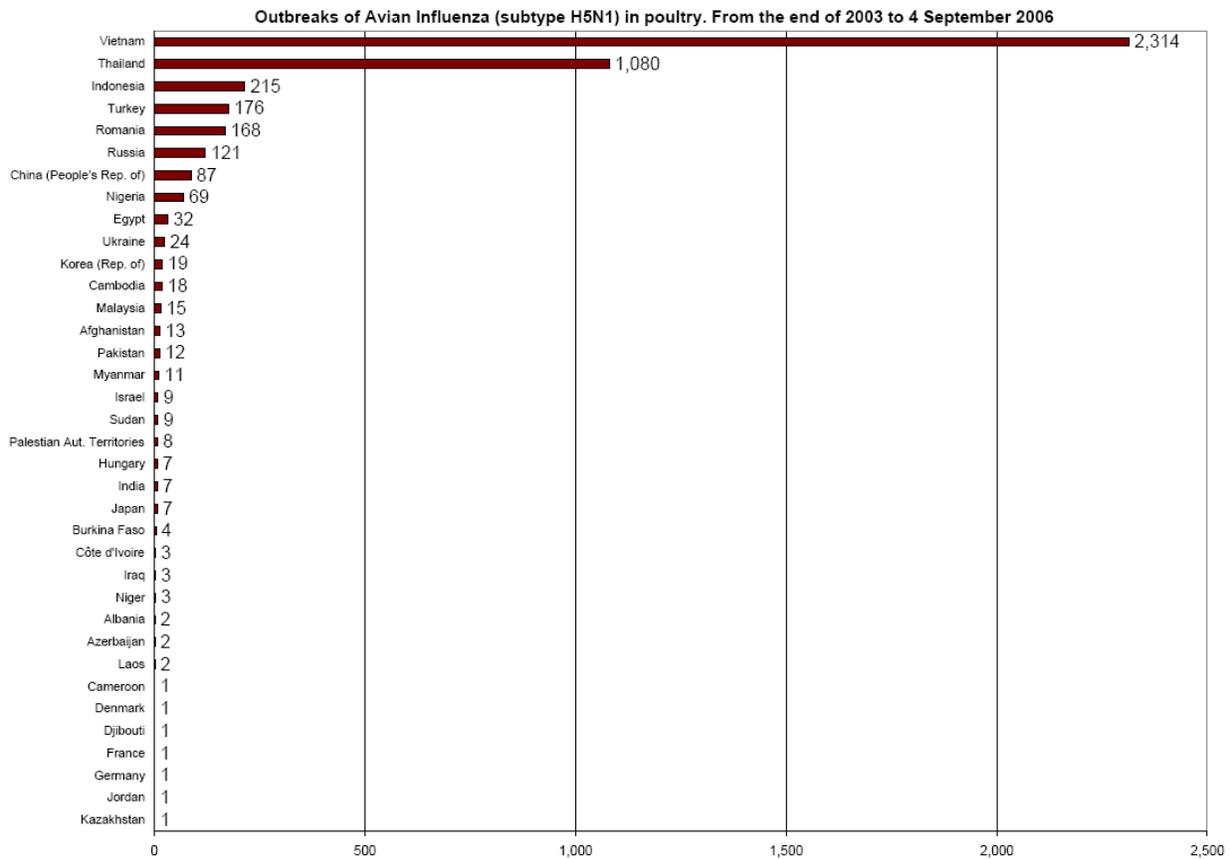


Table 2. H5N1 Influenza in Humans (Cases up to August 23, 2006)

(http://www.who.int/entity/csr/disease/avian_influenza/country/cases_table_2006_06_06/en/index.html Downloaded 8/23/2006)

Cumulative number of confirmed human cases of Avian Influenza A(H5N1) reported to WHO. The total number of cases includes number of deaths. WHO only reports laboratory-confirmed cases.

Country	2003		2004		2005		2006		Total	
	cases	deaths								
Azerbaijan	0	0	0	0	0	0	8	5	8	5
Cambodia	0	0	0	0	4	4	2	2	6	6
China	1	1	0	0	8	5	12	8	21	14
Djibouti	0	0	0	0	0	0	1	0	1	0
Egypt	0	0	0	0	0	0	14	6	14	6
Indonesia	0	0	0	0	17	11	43	35	60	46
Iraq	0	0	0	0	0	0	2	2	2	2
Thailand	0	0	17	12	5	2	2	2	24	16
Turkey	0	0	0	0	0	0	12	4	12	4
Viet Nam	3	3	29	20	61	19	0	0	93	42
Total	4	4	46	32	95	41	96	64	241	141