



MI FluFocus

Influenza Surveillance and Avian Influenza Update

Bureau of Epidemiology
Bureau of Laboratories

Michigan Department
of Community Health



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New updates in this issue:

- **Michigan Surveillance:** MDCH Bureau of Laboratories culture-confirmed cases from the previous week have been updated as influenza A/H1N1 and B/Florida/4/2006-like.
- **National Surveillance:** Overall influenza activity is low; one state reported local activity during week 45.
- **Avian Influenza:** Suspect cluster of human avian influenza cases in Indonesia ruled out.

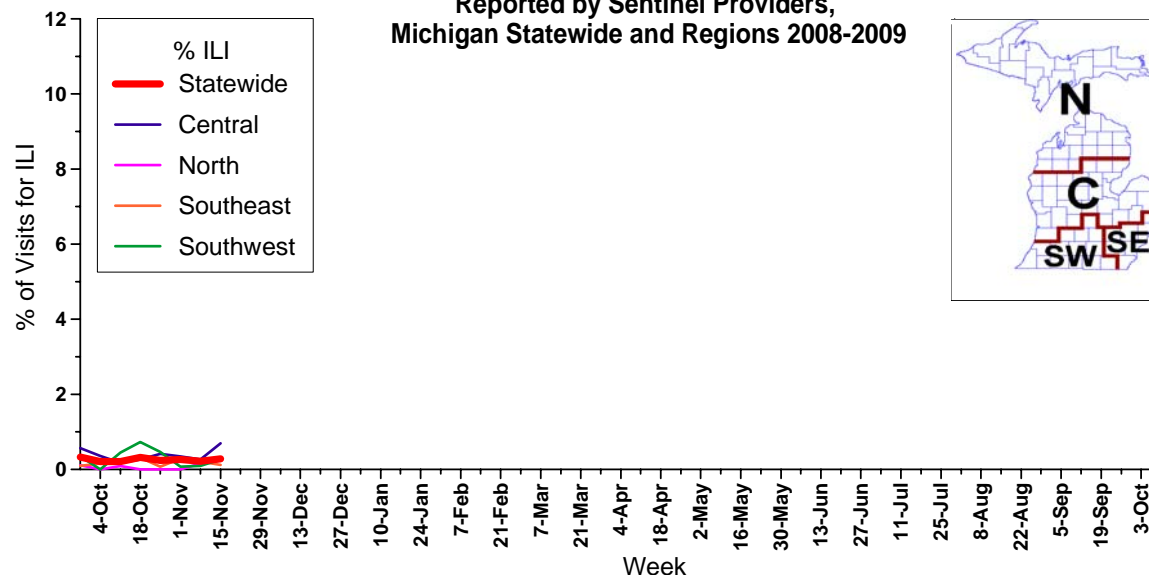
Michigan Disease Surveillance System: The week ending November 15 saw a very slight increase in individual influenza reports last week, while aggregate numbers held close to what was seen last week. Individual reports are consistent with levels seen at this time last year, while aggregate numbers are slightly lower.

Emergency Department Surveillance: Emergency department visits from respiratory complaints remained steady near last week's levels, while constitutional complaints saw a very slight increase. The numbers from both categories are slightly lower than what was seen this time last year. Eight constitutional alerts in the C(1), N(6) and SW(1) Influenza Surveillance Regions and three respiratory alerts in the C(2) and SE(1) Influenza Surveillance Regions were generated last week.

Over-the-Counter Product Surveillance: Overall, OTC product sales were mixed last week. Only cough and cold medication remained near last week's numbers. The remaining indicators increased slightly in sales over the week. All indicators, except cough and cold, seem to be showing a slight trend upward over the last few weeks. Indicator levels are comparable to those seen at this time last year.

Sentinel Provider Surveillance (as of November 20): During the week ending November 15, 2008, the proportion of visits due to influenza-like illness (ILI) remained at a low level, 0.3% overall; 29 patient visits due to ILI were reported out of 10,315 office visits. This level of ILI activity is consistent with that reported in fall during prior years' surveillance. Thirty sentinels provided data for this report. Note that these rates may change as additional reports are received.

Percentage of Visits for Influenza-like Illness (ILI)
Reported by Sentinel Providers,
Michigan Statewide and Regions 2008-2009



As part of pandemic influenza preparedness, CDC and MDCH highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Rachel Potter at 517-335-9710 or potterr1@michigan.gov for more information.

Laboratory Surveillance (as of November 20): No new isolates were identified at the MDCH Bureau of Laboratories (BOL) during the past week. For the 2008-2009 influenza season, MDCH BOL has identified two influenza isolates:

- 1 A/H1N1
- 1 B/Florida/4/2006-like. B/Florida/4/2006-like matches the influenza B component of this season's Northern Hemisphere influenza vaccine.

One sentinel laboratory from the Southeast region and one from the North region are reporting isolated influenza B positives. Low numbers of positive parainfluenza, RSV and adenovirus tests are also being reported in the southern portion of the state.

***As a reminder, the positive predictive value of influenza rapid tests decreases during times of low influenza prevalence. 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.

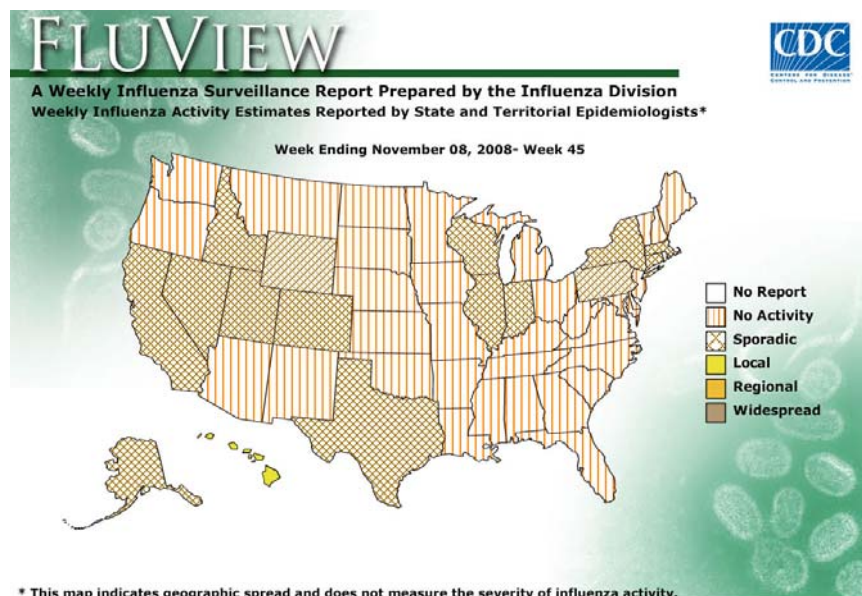
Influenza-Associated Pediatric Mortality (as of November 20): No influenza-associated pediatric mortalities have been reported to MDCH for the 2008-2009 influenza season.

***The CDC has asked all states to collect information on any pediatric death associated with influenza infection. This includes not only any death in a child (<18 years) resulting from a compatible illness confirmed to be influenza by an appropriate diagnostic test, but also any unexplained death with evidence of an infectious process in a child. Please immediately call MDCH to ensure that proper clinical specimens are obtained. View the complete MDCH protocol online at http://www.michigan.gov/documents/mdch/ME_pediatric_influenza_guidance_v2_214270_7.pdf.

Congregate Settings Outbreaks (as of November 20): No congregate setting outbreaks due to influenza have been reported to MDCH for the 2008-2009 influenza season.

National (CDC [edited], November 14): During week 45 (November 2-8, 2008), a low level of influenza activity was reported in the United States. Forty (1.7%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, and reported to CDC/Influenza Division, were positive for influenza. The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold. The proportion of outpatient visits for influenza-like illness (ILI) was below national and region-specific baseline levels. One state reported local influenza activity; 15 states and Puerto Rico reported sporadic influenza activity; 34 states and the District of Columbia reported no influenza activity.

To access the entire CDC weekly surveillance report throughout the influenza season, visit <http://www.cdc.gov/flu/weekly/fluactivity.htm>



International (WHO, November 20): During the weeks 45-46, the level of overall influenza activity in the world remained low with sporadic activity observed in some countries.

Between weeks 45-46 sporadic influenza activity was detected in Argentina (A), Belarus (A), Brazil (A), Cameroon (H1, B), Canada (A,B), Chile (A, B), China (H1, B), China, Hong Kong Special Administrative Region (H1,H3,B), Denmark (H3), Egypt (H3), France (H3), the Islamic Republic of Iran (H1, H3), Italy (H3), Japan (B), Kenya (A), Norway (H3,B), Portugal (H3), Romania (H3), Russian Federation (H3,B), Switzerland (A), Tunisia (H1), the United Kingdom of Great Britain and Northern Ireland (H3, H1) and the United States of America (H1, H3, B).

Belgium, Bulgaria, Finland, Greece, Latvia, Oman, Poland, Senegal, and Slovenia reported no influenza activity.

MDCH reported **SPORADIC INFLUENZA ACTIVITY** to the CDC for the week ending Nov. 15, 2008.

For stakeholders interested in additional information regarding influenza vaccination and education, the MDCH publication *Michigan FluBytes* is available online at http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_22779_40563-125027--,00.html. *FluBytes* is published weekly during the 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, Human (Reuters Alertnet, November 20): Bird flu has been ruled out as the cause of illness in 17 people from the same neighbourhood of Makasar in Sulawesi, Indonesia, a health ministry official said on Thursday.

The 17 were hospitalised this month after falling sick shortly after a rash of unexplained chicken deaths in the area.

"The result of the tests is negative," said Lily Sulistyowati, spokeswoman of the ministry, without giving details.

Suspected outbreaks raise concerns about rare human-to-human transmission or that the virus might have mutated into a form that can pass easily among people.

The country's largest known cluster of bird flu cases in humans occurred in May 2006 in the Karo district of North Sumatra province, when as many as seven people in an extended family died.

The World Health Organisation said at the time that limited human-to-human transmission could not be ruled out but that the virus samples from the scene did not show any significant genetic mutations.

Bird flu remains mainly an animal disease, but experts fear the H5N1 virus might mutate into a pandemic strain that would sweep the globe, possibly killing millions and hobbling economies.

Indonesia has the highest toll of any nation. Some 112 people have died because of the disease.

Last week, a health official said a 15-year-old Indonesian girl had died of bird flu in central Java, but Chandra Yoga Adhitama, acting director-general of communicable disease control, said tests showed bird flu was not responsible.

Michigan Wild Bird Surveillance (USDA, as of November 20): For the 2008 testing season, 1879 Michigan samples have been taken so far, comprised of 327 live birds, 1070 hunter-killed birds, 32 morbidity or mortality samples and 450 environmental samples.

H5N1 subtype H5N1 has not been recovered from any Michigan samples tested to date, or from the 60,153 birds or environmental samples tested nationwide for the 2008 testing season, which will run from

April 1, 2008 - March 31, 2009. For more information, visit the National HPAI Early Detection Data System website at <http://wildlifedisease.nbio.gov/ai/>.

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.

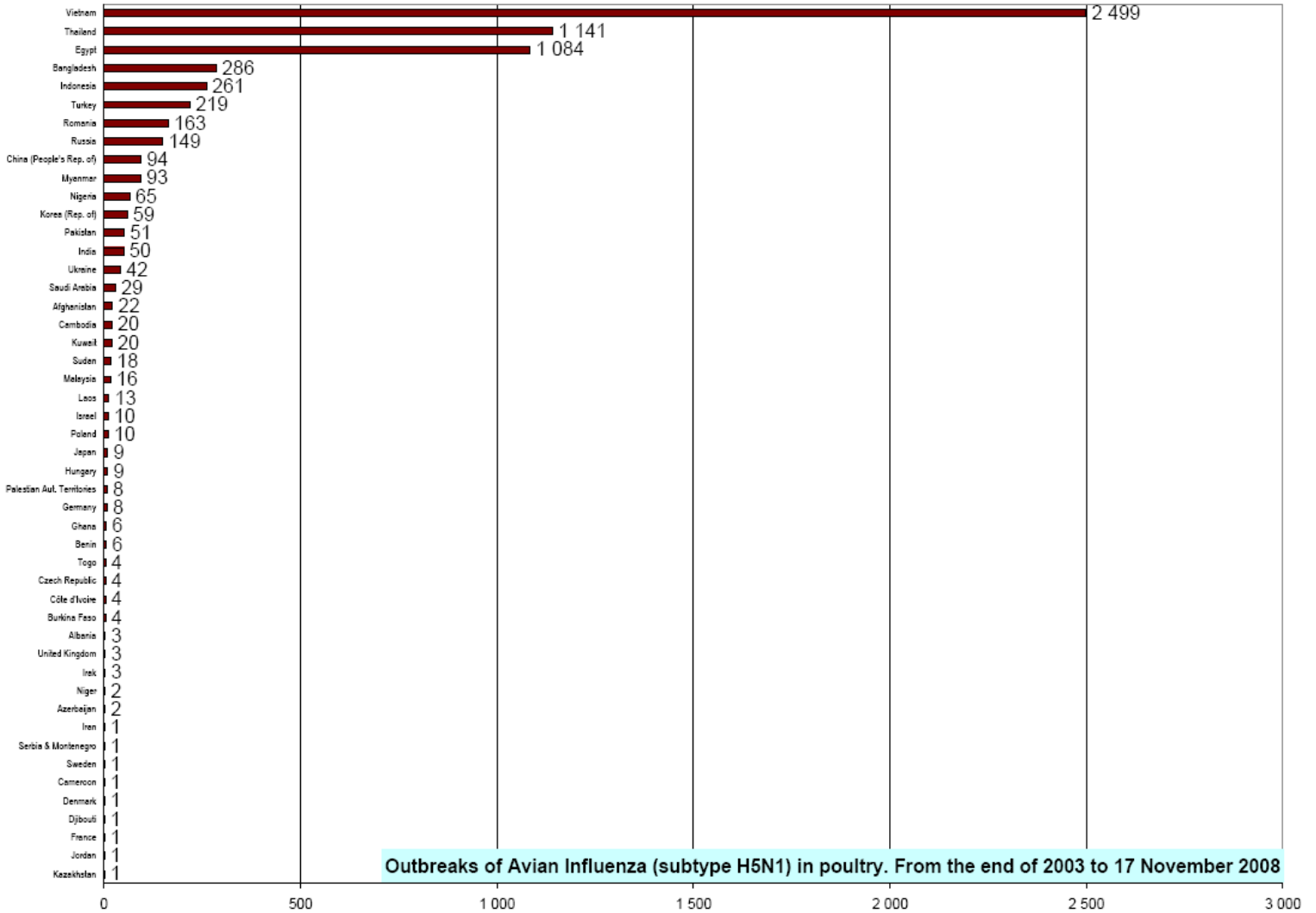
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Table 1. H5N1 Influenza in Poultry (Outbreaks up to November 17, 2008)

(Source: http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm Downloaded 11/17/08)



Outbreaks of Avian Influenza (subtype H5N1) in poultry. From the end of 2003 to 17 November 2008

Table 2. H5N1 Influenza in Humans (Cases up to September 10, 2008)

(http://www.who.int/csr/disease/avian_influenza/country/cases_table_2008_09_10/en/index.html Downloaded 9/10/2008)

Cumulative number of lab-confirmed human cases reported to WHO. Total number of cases includes deaths.

Country	2003		2004		2005		2006		2007		2008		Total	
	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths
Azerbaijan	0	0	0	0	0	0	8	5	0	0	0	0	8	5
Bangladesh	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Cambodia	0	0	0	0	4	4	2	2	1	1	0	0	7	7
China	1	1	0	0	8	5	13	8	5	3	3	3	30	20
Djibouti	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Egypt	0	0	0	0	0	0	18	10	25	9	7	3	50	22
Indonesia	0	0	0	0	20	13	55	45	42	37	20	17	137	112
Iraq	0	0	0	0	0	0	3	2	0	0	0	0	3	2
Lao PDR	0	0	0	0	0	0	0	0	2	2	0	0	2	2
Myanmar	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Nigeria	0	0	0	0	0	0	0	0	1	1	0	0	1	1
Pakistan	0	0	0	0	0	0	0	0	3	1	0	0	3	1
Thailand	0	0	17	12	5	2	3	3	0	0	0	0	25	17
Turkey	0	0	0	0	0	0	12	4	0	0	0	0	12	4
Viet Nam	3	3	29	20	61	19	0	0	8	5	5	5	106	52
Total	4	4	46	32	98	43	115	79	88	59	36	28	387	245