



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:

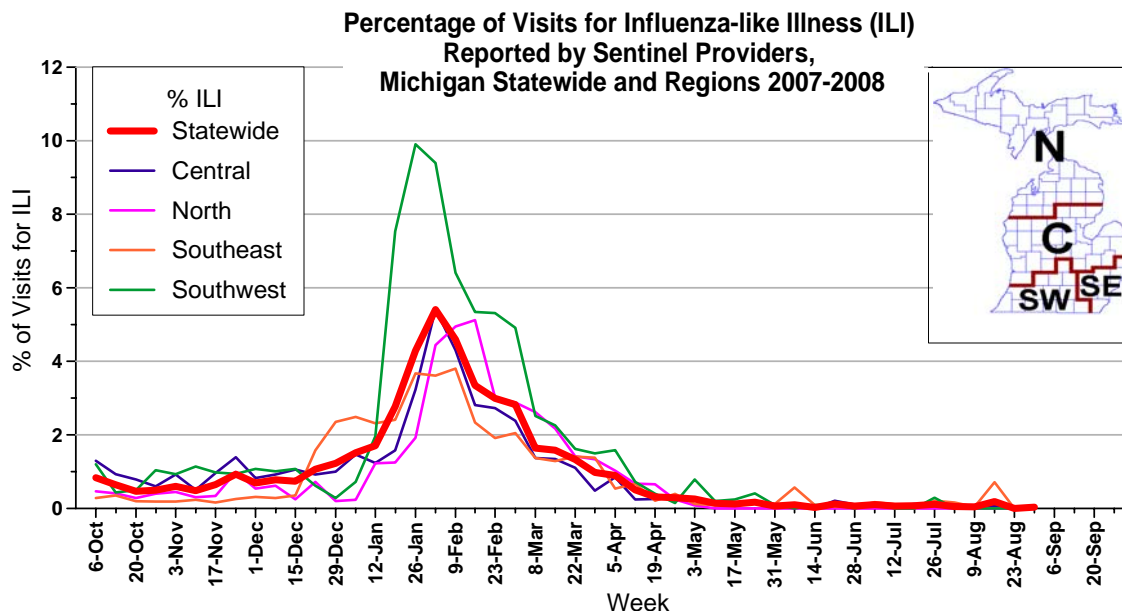
- **Avian Influenza:** Idaho reports low pathogenic avian influenza in a gamebird farm.

Michigan Disease Surveillance System: The week ending August 30 saw both aggregate flu-like disease and individual influenza reports remain steady near last week's levels. Both aggregate flu-like illness and individual influenza reports are expected to fluctuate near baseline levels until the fall.

Emergency Department Surveillance: Emergency department visits from constitutional complaints remained steady near last week's levels, while respiratory complaints increased slightly. Both constitutional and respiratory complaints are consistent with numbers seen this time last year. Seven constitutional alerts in the C(6) and SW(1) Influenza Surveillance Regions and twelve respiratory alerts in the C(5), N(2), SE(3) and SW(2) Influenza Surveillance Regions, including one statewide alert, were generated last week.

Over-the-Counter Product Surveillance: Overall, OTC product sales were mixed last week. Thermometers showed a slight drop in sales, children's electrolytes saw an upswing towards the end of the week, and the remainder held relatively steady near last week's levels. Indicator levels are comparable to those seen at this time last year.

Sentinel Surveillance (as of September 4): During the week ending August 30, 2008, less than 0.1% of all office visits reported by Michigan influenza sentinel sites were due to influenza-like illness (ILI). This represents 1 case out of 2927 total patients seen. Thirteen practices provided data for this report. Note that these rates may change as additional reports are received.



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 September 4): For the 2007-2008 influenza season, the MDCH Bureau of Laboratories has identified 249 influenza isolates:

- 190 A/H3N2: Central (58); Southwest (51); Southeast (49); North (32)
- 4 A/H1N1: Southeast (2); North (2)
- 2 A subtyping unable to be performed: Southeast (2)
- 53 B: Southeast (30); North (10); Southwest (6); Central (6); Indiana (1). 51 have been typed as B/Shanghai/361/2002-like and 2 were B/Malaysia/2506/2004-like (SE).

***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 September 4): For the 2007-2008 season, MDCH has confirmed one influenza-related pediatric mortality in Michigan. The case was a 13 year-old from the Central region with an influenza A/H3N2 and MRSA co-infection; disease onset was in late February.

***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. See www.michigan.gov/documents/fluletter_107562_7.pdf for the complete protocol. Please immediately call MDCH to ensure that proper clinical specimens are obtained.

Congregate Settings Outbreaks (as of September 4): Congregate setting outbreaks have been reported in all regions of the state, peaking in the first two weeks of February. 7 outbreaks have been culture-confirmed at MDCH; 6 as influenza A/H3N2 and 1 as influenza B for the 2007-2008 season.

Michigan Influenza Season Summary: The 2007-2008 Michigan Influenza Season Summary is now available online at www.michigan.gov/influenza. Overall, this influenza season was moderate in activity with peak activity occurring in early February and was dominated by influenza A/H3N2.

National (CDC): To access the entire CDC weekly surveillance report throughout the influenza season, visit <http://www.cdc.gov/flu/weekly/fluactivity.htm>. The 2007-2008 national influenza season summary is available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5725a5.htm?s_cid=mm5725a5_e.

International (WHO, August 29): During weeks 33–34, the overall influenza activity in the southern hemisphere declined. Except for New Zealand, where a widespread outbreak was reported. Activity was low in the rest of the world.

China, Hong Kong Special Administrative Region. A decline in the activity of influenza A(H3) and A(H1) viruses was observed. Among the influenza B viruses detected, the majority were of the B/Yamagata lineage.

New Zealand. Influenza activity remained widespread with influenza B viruses predominating and A(H3) co-circulating.

South Africa. Influenza activity declined from regional to sporadic with A(H1) and B viruses detected.

Between weeks 33 to 34, sporadic influenza activity was detected in Canada (H1,B), Chile (B,A) and New Caledonia (H1). Belgium, Cameroon, Germany, Honduras, the Islamic Republic of Iran, Norway, Poland, Portugal, Slovenia and Switzerland reported no influenza activity.

Seasonal influenza reporting to the CDC has ended for the 2007-2008 influenza season.

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 biweekly during the summer months.

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.

National, Poultry (Idaho State Department of Agriculture, September 4): The Idaho State Department of Agriculture (ISDA) Bureau of Animal Industries is investigating a confirmed detection of a low-pathogenic avian influenza virus (LPAI) at a southwestern Idaho gamebird farm. It is NOT the highly pathogenic H5N1 virus that has spread through birds in Asia, Europe and Africa. LPAI often is found in wild birds and typically causes only minor sickness or no noticeable symptoms. LPAI poses little to no risk to human health; no human illness have been associated with this occurrence.

ISDA has quarantined the farm and initiated its avian influenza response plan in conjunction with the U.S. Department of Agriculture's Animal Plant Health Inspection Service (APHIS). The plan includes epidemiological investigations, further testing of the flock and contacting neighboring gamebird and poultry farms.

ISDA encourages all poultry producers to be aware of the signs of illness in their birds, including: coughing, sneezing, respiratory distress, decreased egg production, swelling of the head, comb and wattles and sudden death. If a producer notices any of these symptoms, they should contact Dr. Bill Barton, ISDA State Veterinarian by calling 208-332-8540.

Additional information about avian influenza can be found at <http://www.ars.usda.gov/News/docs.htm?docid=11244>

Michigan Wild Bird Surveillance (USDA, as of September 4): For the 2008 testing season, 616 Michigan samples have been taken so far, comprised of 238 live birds, 339 hunter-killed birds, 14 morbidity/mortality samples and 25 environmental samples.

H5N1 subtype H5N1 has not been recovered from any Michigan samples tested to date, or from the 19,819 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 H5N1 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.

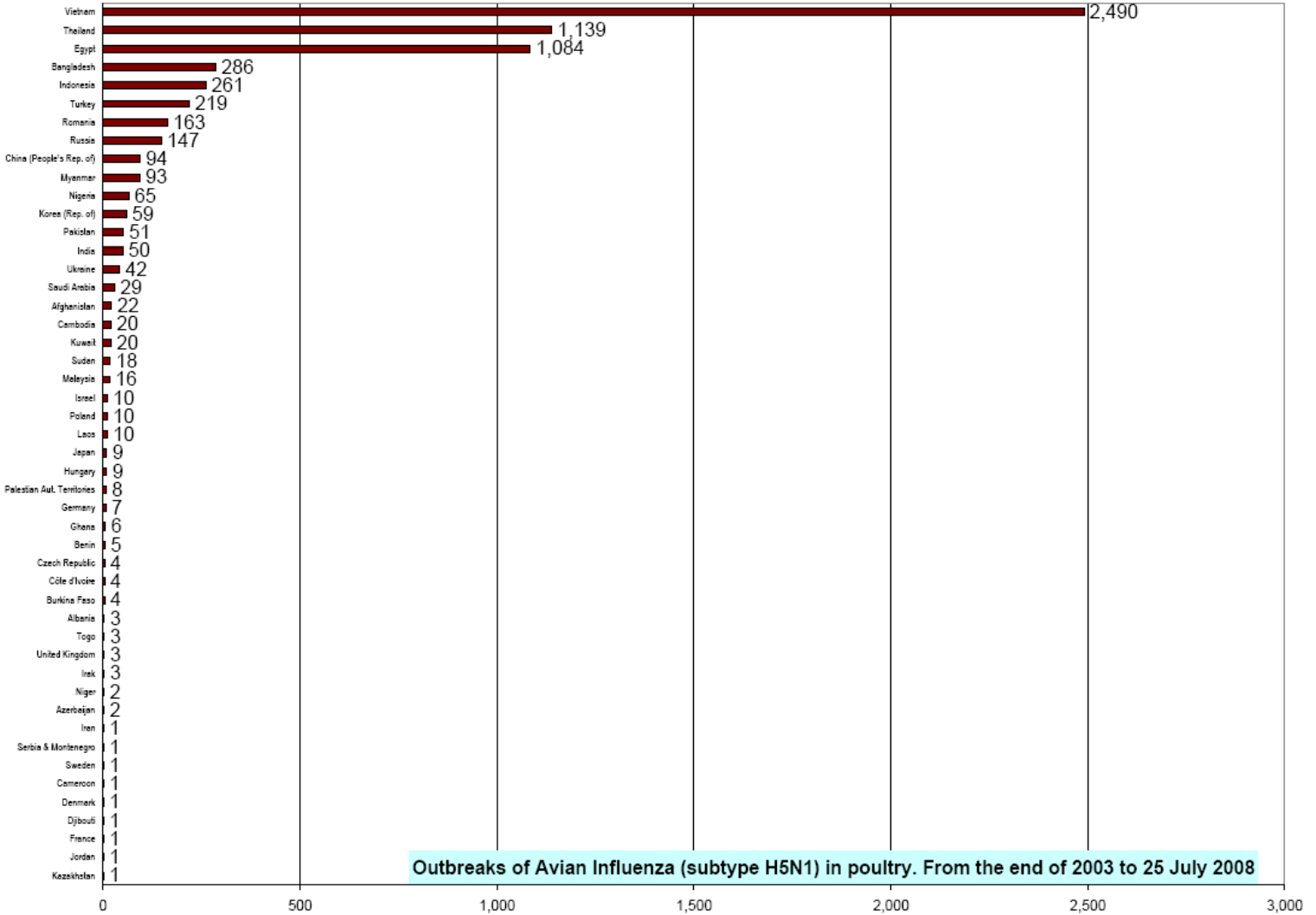
Contributors

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Table 1. H5N1 Influenza in Poultry (Outbreaks up to July 25, 2008)

(Source: http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm Downloaded 7/29/08)



Outbreaks of Avian Influenza (subtype H5N1) in poultry. From the end of 2003 to 25 July 2008

Table 2. H5N1 Influenza in Humans (Cases up to June 19, 2008)

(http://www.who.int/csr/disease/avian_influenza/country/cases_table_2008_06_19/en/index.html Downloaded 6/19/2008)

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	18	15	135	110
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	34	26	385	243