



# MI FluFocus

## Influenza Surveillance and Avian Influenza Update

Bureau of Epidemiology  
Bureau of Laboratories

Michigan Department  
of Community Health



Jennifer M. Granholm, Governor  
Janet Olszewski, Director

Editor: Susan Vagasky, DVM  
Surveillance and Infectious Disease Epidemiology  
VagaskyS@Michigan.gov

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### New updates in this issue:

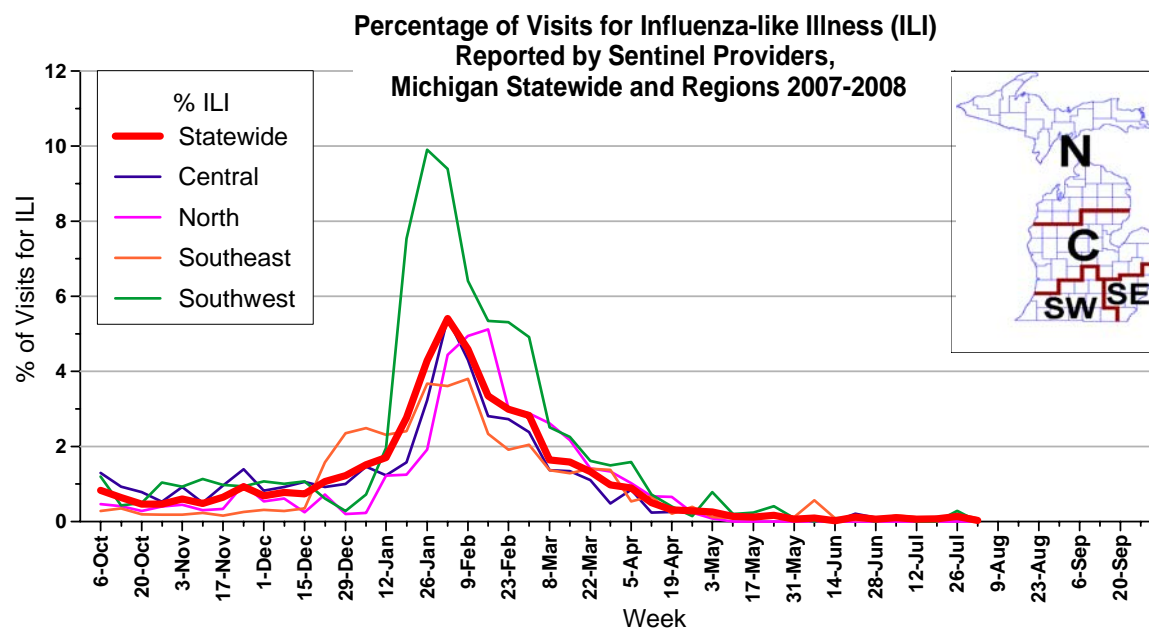
- **Avian Influenza:** Additional poultry outbreaks of H5N1 reported in Vietnam.

**Michigan Disease Surveillance System:** The week ending August 2 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 continued to decrease slightly. Both constitutional and respiratory complaints are consistent with numbers seen this time last year. Seven constitutional alerts in the C(3), N(1), SE(1) and SW(2) Influenza Surveillance Regions and two respiratory alerts in the N(2) Influenza Surveillance Region were generated last week.

**Over-the-Counter Product Surveillance (as of July 31):** Overall, OTC product sales were mixed last week. Children's electrolytes showed a slight drop in sales, cough and cold medication held steady near last week's levels and the remainder increased slightly. Indicator levels are comparable to those seen at this time last year.

**Sentinel Surveillance (as of August 8):** During the week ending August 2, 2008, less than 0.1% of all office visits reported by Michigan influenza sentinel sites were due to influenza-like illness (ILI). This represents 2 cases out of 5908 total patients seen. These cases were reported in the Southeast surveillance regions. Twenty-three 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](mailto:potterr1@michigan.gov) for more information.

**Laboratory Surveillance (as of August 7):** For the 2007-2008 influenza season, the MDCH Bureau of Laboratories has identified 248 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)
- 52 B: Southeast (29); North (10); Southwest (6); Central (6); Indiana (1). 51 have been typed as B/Shanghai/361/2002-like and 1 was 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 August 7):** 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](http://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 August 7):** Congregate setting outbreaks have been reported in all regions of the state, peaking in the first two weeks of February. Seven outbreaks have been culture-confirmed at MDCH; six as influenza A/H3N2 and one 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](http://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](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5725a5.htm?s_cid=mm5725a5_e).

**International (WHO, July 24):** During weeks 28–29, the level of overall influenza activity in the world increased. In the southern hemisphere, a considerable increase in both influenza activity and detection of influenza viruses was observed. Influenza A (H1), A(H3) and influenza B circulated. Widespread outbreaks were reported in New Zealand and South Africa. Countries in the northern hemisphere reported sporadic or no activity.

**Argentina.** Regional influenza activity was reported. Mostly influenza A viruses were detected and influenza B also circulated.

**China, Hong Kong Special Administrative Region.** Increase in influenza activity continued, with circulation of A (H3) and A (H1) viruses. All viruses detected from influenza B were of B/Yamagata lineage.

**New Zealand.** Widespread influenza activity was reported, with mostly influenza A (H3) viruses circulating. Influenza B viruses were also detected.

**South Africa.** Widespread influenza activity was reported. Influenza A viruses predominated. Influenza A(H1) virus circulated. Regarding Influenza B, viruses from B/Yamagata lineage and B-Victoria lineage were detected.

Between weeks 28 and 29, sporadic influenza activity was detected in Canada (A), Chile (A, B), Panama (A, B), Poland (B), and Uruguay (A, B).

Brazil and Sri Lanka reported sporadic influenza activity, but no influenza cases were laboratory confirmed.

Cameroon, Estonia, Germany, the Islamic Republic of Iran, Mexico, Mongolia, Oman, Portugal, and Slovenia reported no influenza activity.

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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](http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_22779_40563-125027--,00.html). *FluBytes* is published biweekly during the summer months.

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## End of Seasonal Report

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### 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, Poultry (China Daily, August 5):** Bird flu has stricken Vietnam's central Quang Ngai province, raising the total number of affected localities in the country to three, according to a local veterinary agency on Tuesday.

Late last month, bird flu killed 70 ducks and sickened 150 others raised by a household in the province's Binh Son district, whose specimens have recently been tested positive to bird flu virus strain H5N1, the Department of Animal Health under the Ministry of Agriculture and Rural Development said, adding that the whole duck flock has been culled.

Now, bird flu is hitting southern Dong Thap province, and Nghe An and Quang Ngai in the central region.

Bird flu outbreaks in Vietnam, starting in December 2003, have killed and led to the forced culling of dozens of millions of fowls in the country.

**Michigan Wild Bird Surveillance (USDA, as of August 7):** 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 12,967 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.nbii.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](mailto:VagaskyS@Michigan.gov) with any questions regarding this newsletter or to be added to the weekly electronic mailing list.

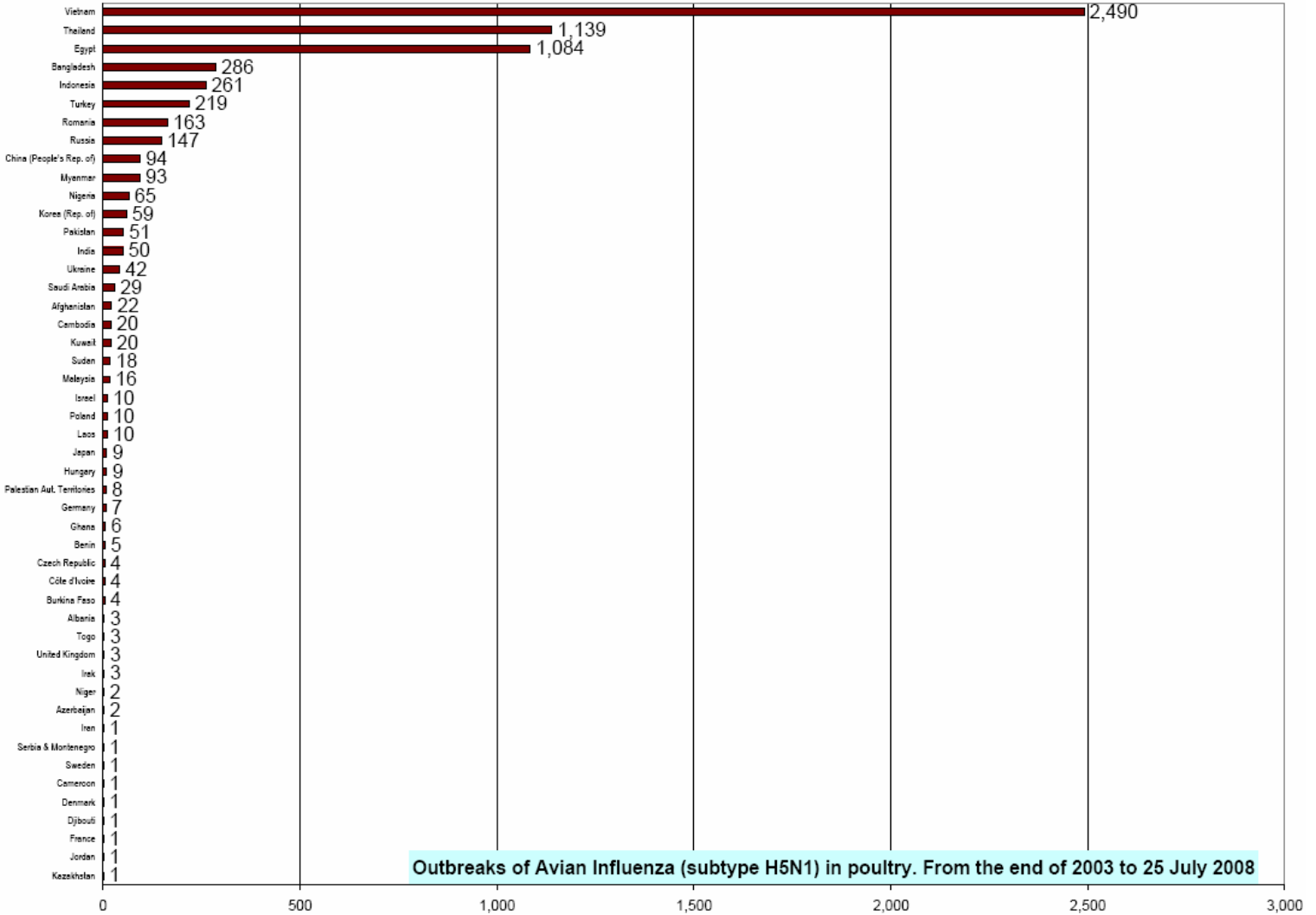
Contributors

MDCH Bureau of Epidemiology - Sally Bidol, MPH; Edward Hartwick, MS; Elizabeth Lewis, MHS; Rachel Potter, DVM, MS

MDCH Bureau of Laboratories – Patricia Clark, MPH

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

(Source: [http://www.oie.int/downld/AVIAN%20INFLUENZA/A\\_AI-Asia.htm](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](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
<b>Total</b>	<b>4</b>	<b>4</b>	<b>46</b>	<b>32</b>	<b>98</b>	<b>43</b>	<b>115</b>	<b>79</b>	<b>88</b>	<b>59</b>	<b>34</b>	<b>26</b>	<b>385</b>	<b>243</b>