



# 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

November 29, 2007  
Vol. 4; No. 48

### New updates in this issue:

- **Michigan Surveillance:** Influenza-like illness activity continues at low levels across the state.
- **National Surveillance:** Influenza activity remains low; Florida and Hawaii are at local levels.
- **Avian Influenza:** H5N1 in poultry in Saudi Arabia, Romania and Myanmar.

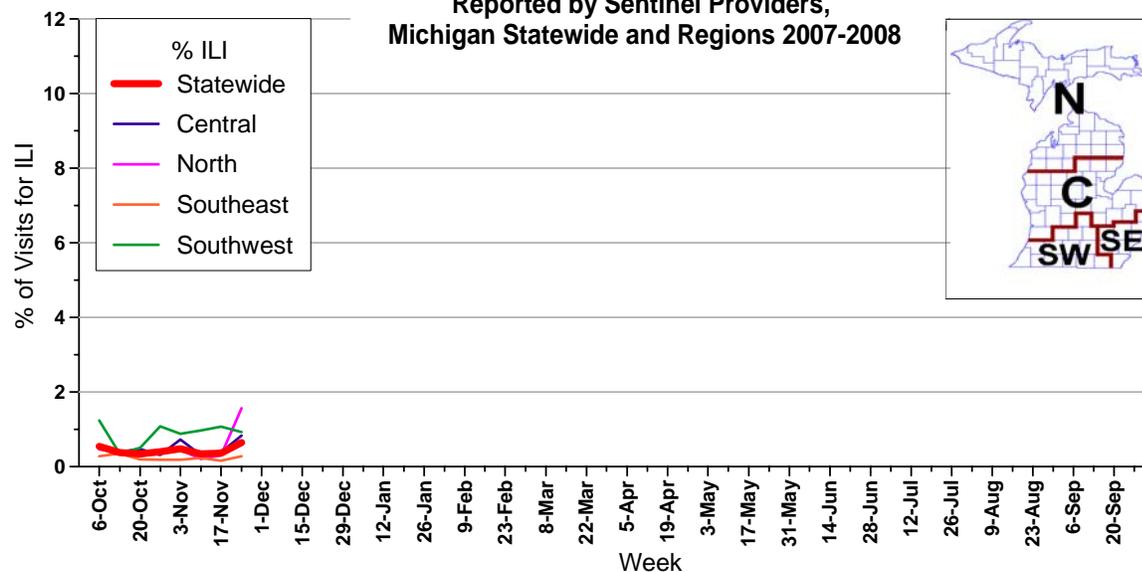
**Michigan Disease Surveillance System:** The week ending November 24 saw both individual influenza reports and aggregate flu-like illness reports holding steady near last week's levels. Both aggregate and individual reports are consistent with levels seen at this time last year.

**Emergency Department Surveillance:** Emergency department visits due to respiratory complaints increased slightly this past week, while constitutional complaints decreased slightly. Both constitutional and respiratory complaints are consistent with numbers seen this time last year. Eight constitutional alerts in the C(4), N(2) and SW(2) Influenza Surveillance Regions and seven respiratory alerts in the C(3), N(1), SE(2) and SW(1) Influenza Surveillance Regions were generated last week.

**Over-the-Counter Product Surveillance:** OTC product sales activity was steady overall last week; the only change being a slight decrease in thermometer sales. The indicators levels are comparable to those seen at this time last year, except for chest rubs, which are slightly higher.

**Sentinel Surveillance (as of November 29):** During the week ending November 24, 2007, the proportion of visits due to influenza-like illness (ILI) in Michigan increased slightly from last week to 0.6% of all visits. This represents 38 cases of ILI out of 5864 total patient visits; thirty sentinels provided data for this report. By region, the proportion of visits due to ILI was: 0.8%, Central; 1.6%, North; 0.3%, Southeast; and 0.9% Southwest. 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 2007-2008



As part of pandemic influenza preparedness, CDC and MDCH highly encourage and recommend 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 November 29):** The MDCH Bureau of Laboratories has not culture confirmed any cases of influenza for the 2007-2008 influenza season, which started on October 1.

\*\*\*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.

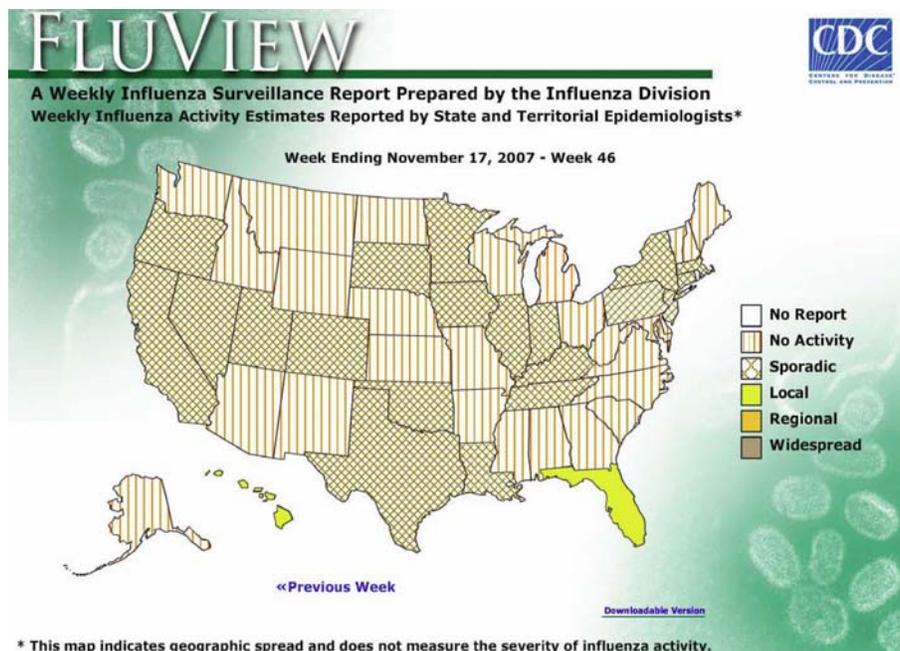
**Influenza-Associated Pediatric Mortality (as of November 29):** For the 2007-2008 season, there are no confirmed reports of influenza-related pediatric mortality in Michigan. A final report on a pediatric death investigation by MDCH and CDC on a 15 year old from the Southwest surveillance region from the 2006-2007 season could not confirm an association with influenza.

\*\*\*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](http://www.michigan.gov/documents/fluletter_107562_7.pdf) for the complete protocol. It is important to immediately call MDCH to ensure that appropriate clinical specimens can be obtained.

**Congregate Settings Outbreaks (as of November 29):** There have been no reports for the 2007-2008 influenza season.

**National (CDC [edited], November 27):** During week 46 (November 11-17, 2007), a low level of influenza activity was reported in the United States. During week 46, WHO and NREVSS laboratories reported 2,265 specimens tested for influenza viruses, 64 (2.8%) of which were positive, including 10 influenza A (H1) viruses (Mountain, New England, and Pacific regions), one influenza A (H3) virus (West South Central region), and 53 influenza A viruses that were not subtyped (East North Central, Mountain, Pacific, South Atlantic, and West South Central regions). The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold. The proportion of outpatient visits for influenza-like illness (ILI) and acute respiratory illness (ARI) was below national baseline levels. The Mountain region reported ILI slightly above their region-specific baseline. Two states reported local activity; 20 states and the District of Columbia reported sporadic influenza activity; and 28 states 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 (Weekly Epidemiological Record, November 20):** During weeks 44–45, the level of overall influenza activity in the world remained low with sporadic activity observed in some countries.

During weeks 44-45, sporadic influenza activity was detected in Belgium (B), Canada (A predominant, B), Chile (B), China (B predominant, H1), Hong Kong Special Administrative Region of China (B predominant, H3), Japan (H1, H3), Madagascar (H1), Mexico (A), Poland (B) Sri Lanka (A), Sweden (A), Tunisia (H1,B), United Kingdom (H1) and United States of America (A predominant, B).

Czech Republic, Denmark, Finland, France, Islamic Republic of Iran, Latvia, Mongolia, Norway, Philippines, Portugal, Romania, Slovenia, Spain and Switzerland reported no influenza activity.

---

MDCH reported **NO INFLUENZA ACTIVITY** to the CDC for the week ending November 24, 2007.

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 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, Poultry (China Daily, November 24):** South Korea's 1st bird flu outbreak in 8 months forced the slaughter of thousands of ducks in the country's south Saturday [24 Nov 2007], although the deadly H5N1 virus was not involved, the government said.

The virus that caused the latest outbreak was a "low pathogenic" H7 strain that has not been known to spread to humans, said an official at the Ministry of Agriculture and Forestry.

Quarantine workers slaughtered about 17,000 ducks at the farm in Gwangju, about 330 km (205 miles) southwest of the capital, Seoul, the official said on condition of anonymity, citing office policy. The outbreak, South Korea's first since March, was confirmed on Friday [23 Nov 2007], the ministry official said.

A total of 7 outbreaks of the lethal H5N1 virus hit poultry farms across South Korea between November 2006 and March this year [2007], resulting in the slaughter of about 2.8 million birds.

The country declared itself free of bird flu in June [2007] after reporting no new outbreaks for 3 months. The latest outbreak does not affect South Korea's bird flu-free status because it involves a "low pathogenic" virus, the ministry official said.

Since H5N1 re-emerged in 2003, it has led to the death or slaughter of hundreds of millions of birds and has killed 206 people worldwide, according to the World Health Organization.

**International, Poultry (VOA News [edited], November 24):** Officials in Burma say a new outbreak of bird flu has been detected among chickens in an eastern district near the Chinese border.

The state-run New Light of Myanmar newspaper said Saturday [24 Nov 2007] that the outbreak was found at a farm in Kentung township in eastern Shan state on 18 Nov 2007, after a farmer reported an unusual number of deaths in his chickens.

Officials culled an unknown number of birds at the farm.

A statement from the Myanmar Livestock and Veterinary Department urged people to prevent the entry of poultry and birds from neighboring countries into Burma.

**International, Poultry (Reuters [edited], November 26):** More cases of a deadly strain of bird flu have been found at a poultry farm in Saudi Arabia just weeks before Muslims travel to Mecca for the annual Haj pilgrimage, the Ministry of Agriculture said on Monday [26 Nov 2007]. A statement published in the official Saudi Press Agency said all birds at the farm at al-Kharj, 150 km (94 miles) south of Riyadh were culled on Thursday after the H5N1 strain was found there. It gave no more details.

Saudi authorities killed 50 000 birds in al-Kharj earlier this month [November 2007] after 1500 birds died of unspecified causes, and inspection teams have since then culled thousands more at markets around the capital of around 4 million people.

The discovery comes just a few weeks before nearly 2 million faithful arrive for the Haj pilgrimage season in Mecca.

The Saudi government says it has large stocks of Tamiflu anti-flu tablets in case the virus spreads to humans.

In March 2007, Saudi Arabia said the deadly H5N1 strain of bird flu had been discovered in peacocks, turkeys, ostriches and parrots at a house in the east of the kingdom and that an unspecified number of birds in the area had been culled.

**International, Poultry (Agence France-Presse, November 28):** Bird flu has been detected in a village on the Danube delta in south-east Romania, the national veterinary service ANSVSA announced Wednesday.

The potentially deadly H5N1 strain of the virus was found in a number of birds on a breeding farm in the village of Murighiol, ANSVSA said.

"The institute of diagnostics and animal health confirmed the presence of the H5N1 bird flu virus at a farm in Murighiol, where the owner has 85 birds," said ANSVSA president Radu Roatis.

"After it was confirmed, the birds were slaughtered, the area disinfected and protection filters put in place" on the roads leading in and out of the village, Roatis said.

According to authorities, the birds at the breeding farm were chickens, ducks and geese.

The local sale and transport of poultry has been banned and veterinary checks stepped up in the wake of the incident.

Romania was among the European countries worst hit by bird flu, with some 55 outbreaks of the disease in 2005, including in the Danube delta, and another 150 in May 2006 in breeding farms in the centre of the country.

Health authorities responded by slaughtering over one million birds to prevent the disease from spreading further.

The virus is regarded as a global threat because scientists fear it could mutate into a form that is easily spread among humans, leading to a pandemic with the potential to kill millions.

Worldwide the H5N1 virus has killed 192 people out of 319 infected patients since reappearing in late 2003, according to a World Health Organisation toll published in July.

**International, Wild Birds (Hong Kong Government website, November 21):** Preliminary testing of a little egret found in Tuen Mun has indicated a suspected H5 avian flu case, the Agriculture, Fisheries & Conservation Department says. This is the 1st wild bird suspected to be infected by the virus at the onset of this winter season [2007-2008].

The bird was collected in Tuen Mun Park 18 Nov 2007 and died the next day. There are no chicken farms within 3 km of where the bird was found. Poultry farmers have been reminded to take precautionary and biosecurity measures against bird flu. Farmers, pet bird shop owners, pet poultry license holders, and racing pigeon owners have been informed to take proper precautions.

The department will inspect poultry farms and the wholesale market to ensure proper precautions against bird flu have been implemented. Close surveillance of wild birds will continue. While vigilance over imported poultry and live poultry stalls will continue, illegal poultry and bird imports will be deterred and health education bolstered.

As the threat of avian flu remains, people should take precautions against the disease. For more details, see <http://www.info.gov.hk/info/flu/eng/index.htm>.

**Michigan Wild Bird Surveillance (USDA, as of November 29):** For the 2007 testing season, 1412 Michigan samples have been taken so far, comprised of 100 live bird samples, 878 hunter-killed birds, 159 morbidity/mortality samples, and 275 environmental samples. Three recent samples from Michigan have been entered into the HEDDS system: a mallard from Bay County on 10/30/07, an American black duck from Saint Clair County on 10/31/07, and an American black duck from Tuscola County on 11/4/07. All samples have preliminarily tested positive for the North American H5N1 strain (unrelated to current outbreaks in the Eastern Hemisphere), and confirmatory testing is underway.

H5N1 subtype H5N1 has not been recovered from any Michigan samples tested to date, or from the 59,226 birds or environmental samples tested nationwide. The 2007 testing season will run from April 1, 2007-March 31, 2008. 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](mailto:VagaskyS@Michigan.gov) with any questions regarding this newsletter or to be added to the weekly electronic mailing list.**

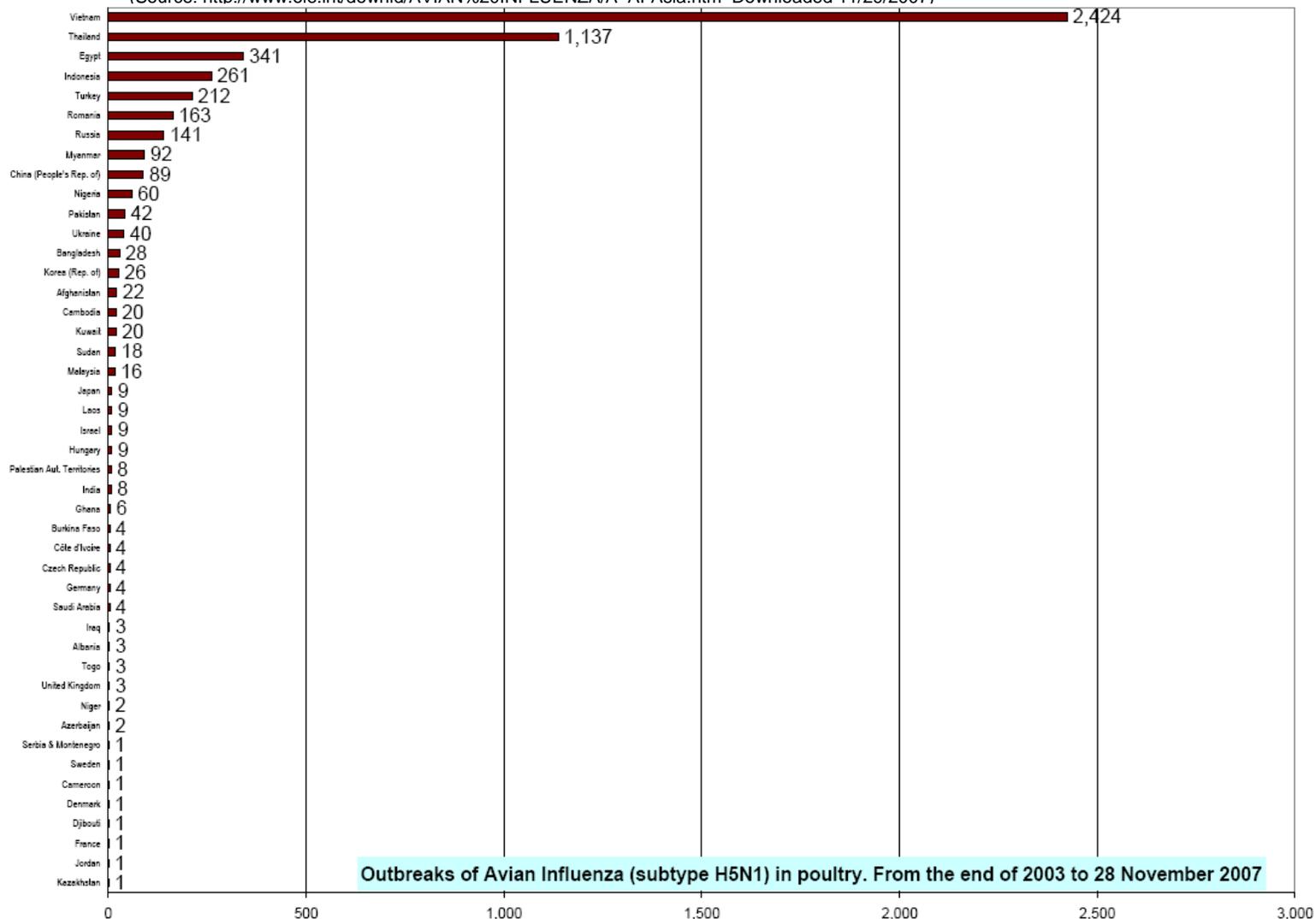
**Contributors**

**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 November 28, 2007)**

(Source: [http://www.oie.int/downld/AVIAN%20INFLUENZA/A\\_AI-Asia.htm](http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm) Downloaded 11/29/2007)



**Outbreaks of Avian Influenza (subtype H5N1) in poultry. From the end of 2003 to 28 November 2007**

**Table 2. H5N1 Influenza in Humans (Cases up to November 12, 2007)**

([http://www.who.int/entity/csr/disease/avian\\_influenza/country/cases\\_table\\_2007\\_11\\_12/en/index.html](http://www.who.int/entity/csr/disease/avian_influenza/country/cases_table_2007_11_12/en/index.html) Downloaded 11/13/2007)

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

Country	2003		2004		2005		2006		2007		Total	
	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths
Azerbaijan	0	0	0	0	0	0	8	5	0	0	8	5
Cambodia	0	0	0	0	4	4	2	2	1	1	7	7
China	1	1	0	0	8	5	13	8	3	2	25	16
Djibouti	0	0	0	0	0	0	1	0	0	0	1	0
Egypt	0	0	0	0	0	0	18	10	20	5	38	15
Indonesia	0	0	0	0	20	13	55	45	38	33	113	91
Iraq	0	0	0	0	0	0	3	2	0	0	3	2
Lao PDR	0	0	0	0	0	0	0	0	2	2	2	2
Nigeria	0	0	0	0	0	0	0	0	1	1	1	1
Thailand	0	0	17	12	5	2	3	3	0	0	25	17
Turkey	0	0	0	0	0	0	12	4	0	0	12	4
Viet Nam	3	3	29	20	61	19	0	0	7	4	100	46
<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>72</b>	<b>48</b>	<b>335</b>	<b>206</b>