



MI FluFocus

Influenza Surveillance and Avian Influenza Update

Bureau of Epidemiology
Bureau of Laboratories

Michigan Department
of Community Health



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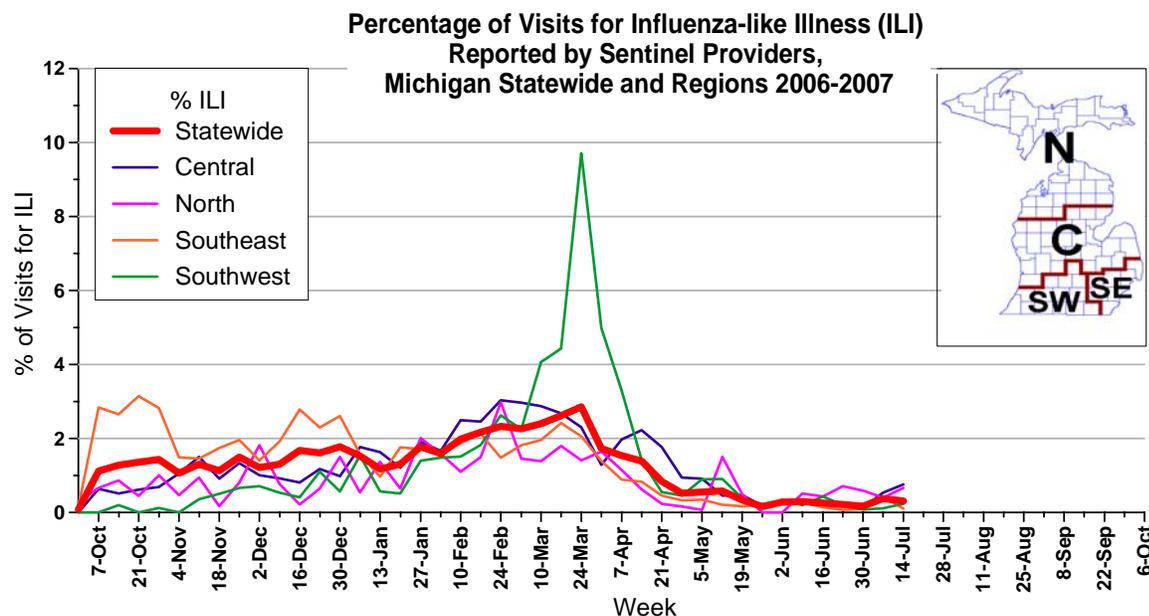
New updates in this issue:

- **Michigan Surveillance:** Influenza-like illness remains at low, off-season levels statewide.
- **Avian Influenza:** Egypt announces its 38th human case of H5N1 avian influenza.

Michigan Disease Surveillance System: Last week's surveillance showed both aggregate flu-like illness reports and individual influenza reports holding steady near the previous week's levels. These indicators are expected to continue to fluctuate at baseline levels until fall.

Emergency Department Surveillance: Emergency department visits due to constitutional complaints fluctuated slightly but remained steady overall this past week, while respiratory complaints decreased slightly. Reported levels are consistent with levels from this time last year. Six constitutional alerts in Regions 2S(1), 3(2), 5(1), 6(1), and 7(1) and four respiratory alerts in Regions 2S(1), 5(1) and 7(2) were generated last week.

Sentinel Surveillance (as of July 26): During the week ending July 21, 2007, the proportion of visits due to influenza-like illness (ILI) in Michigan remained at low a low level; 0.2% of all visits. This represents 9 cases of ILI out of 4728 total patient visits; twenty-two sentinels provided data for this report. By surveillance region, the proportion of visits due to ILI was 0.1%, Central; 0.5%, North; 0.0%, Southeast; and 0.5%, Southwest. Note that these rates may change as additional reports are received.



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 for more information.

Laboratory Surveillance (as of July 26): For the 2006-2007 influenza season, there have been 158 culture-confirmed cases from the MDCH Lab:

- 70 A:H1N1 (Southeast (23), Southwest (21), Central (16), North (10))
- 34 A:H3N2 (North (12), Southeast (12), Central (7), Southwest (3))
- 54 B (Southeast (18), Central (17), Southwest (12), North (7))

All influenza B cultures have been B/Malaysia, except for six B/Shanghai results from the Southeast region.

***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 July 26): For the 2006-2007 season, there are no confirmed reports of influenza-related pediatric mortality in Michigan. MDCH and CDC are currently investigating two possible influenza-associated pediatric mortalities from March, one in the Southwest region and one in the Southeast region.

***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 July 26): There has been one report of an influenza A outbreak from a Central region extended care facility for the 2006-2007 influenza season.

National: For CDC weekly surveillance report archives, visit <http://www.cdc.gov/flu/weekly/fluactivity.htm>.

International (WHO, as of March 29): Overall influenza activity in the northern hemisphere remained moderate in weeks 8–11. In North America, influenza activity declined in general, while in Europe and some Asian countries and areas, widespread activity continued, with influenza A(H3N2) viruses predominating. Influenza A(H1N1) viruses circulated in the United States and in a few eastern European countries. Influenza B viruses circulated at low levels.

For influenza activity from individual countries, please visit the full WHO article “Seasonal Influenza Activity in the World, 2007” at <http://www.who.int/csr/disease/influenza/update/en/>.

Weekly reporting to the CDC has concluded for the 2006-2007 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 (WHO, July 25): The Ministry of Health and Population of Egypt has announced a new human case of avian influenza A(H5N1) virus infection. The case is a 25-year-old female from Damietta Governorate. Her infection has been confirmed by the Egyptian Central Public Health Laboratory and by the WHO H5 Reference Laboratory, US Naval Medical Research Unit No.3 (NAMRU-3). She developed symptoms on July 20 and was hospitalized the following day.

She is receiving treatment and is in a stable condition. Investigations into the source of her infection indicate exposure to sick and dead poultry in the week prior to onset of symptoms. Of the 38 cases confirmed to date in Egypt, 15 have been fatal.

International, Poultry (Viet Nam News, July 19): Bird flu has hit the southern province of Dong Thap for the second time this year, according to Viet Nam's Animal Health Department. The province, which was declared free of the virus several weeks ago, reported fresh outbreaks in Tan Hoi Trung Commune in Cao Lanh District, said department officials yesterday [July 18].

Tests confirmed the deadly H5N1 strain was responsible for killing 120 chickens on 4 farms. Local veterinarians have slaughtered the remaining 280 birds and disinfected the sites.

Officials were worried because these chickens were already vaccinated against the virus, said provincial authorities. They are currently conducting an investigation to find out whether the birds were given a faulty vaccine or were perhaps missed.

Another commune in the northern province of Dien Bien also reported a new outbreak of bird flu on Monday [July 16], despite the fact that the area was not considered a high-risk region, said Hoang Van Nam, deputy head of the department. Bird flu was responsible for the deaths of 120 ducks in Noong Het Commune, located in Dien Bien District. The remaining ducks were slaughtered and the farm was sprayed to prevent the virus' return, said department officials.

With fresh outbreaks in Dong Thap, the number of bird flu-infected provinces remains at 6, with Nghe An Province the latest removed from the list. In addition, Bac Giang, Thai Binh, and Ca Mau Provinces are also well on their way to clearing their names as they approach the 21-day period without a fresh occurrence of the virus. At a meeting with the National Steering Committee for Avian Flu Control and Prevention on Tuesday [July 17] in Ha Noi, delegates discussed the importance of vaccinating all poultry.

Tony Forman, the Food and Agriculture Organization (FAO) representative in the country, said it was an important way to fight bird flu in Viet Nam. The FAO recommended that poultry farmers comply with department regulations on vaccinating their flocks and closely monitor the illegal trafficking of waterfowl.

The organization commended the Government for its recent orders to close egg hatcheries and slaughterhouses that fail to meet food safety and sanitation standards.

International, Wild Birds (Russian News and Information Agency, July 17): Experts have discovered bird flu antibodies in migrant birds in five Siberian regions, a spokesman for the local veterinary regulator said Tuesday. "Out of over 4,000 samples taken in the area this year, samples from 50 wild birds were found to contain genetic material of A-H5 virus and antibodies in their blood serum," the spokesman said.

The spokesman said the presence of antibodies meant that either the birds had survived avian influenza, or remained infected but it had not spread in an open form, and could be transmitted to other birds. He said no local bird flu cases had been registered this year. "About 6 million poultry are currently in high risk areas. Nearly 4.6 million of them have been vaccinated and over 2.3 million revaccinated," he said.

Michigan Wild Bird Surveillance (USDA, July 26): For the 2007 testing season, 224 Michigan samples have been taken so far, comprised of 100 live bird samples, 99 hunter-killed birds and 25 morbidity/mortality samples.

According to the National HPAI Early Detection Data System website, HPAI subtype H5N1 has not been recovered from any Michigan samples tested to date, or from the 7172 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 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.

Contributors

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Table 1. H5N1 Influenza in Poultry (Outbreaks up to July 20, 2007)

(Source: http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm Downloaded 7/25/2007)

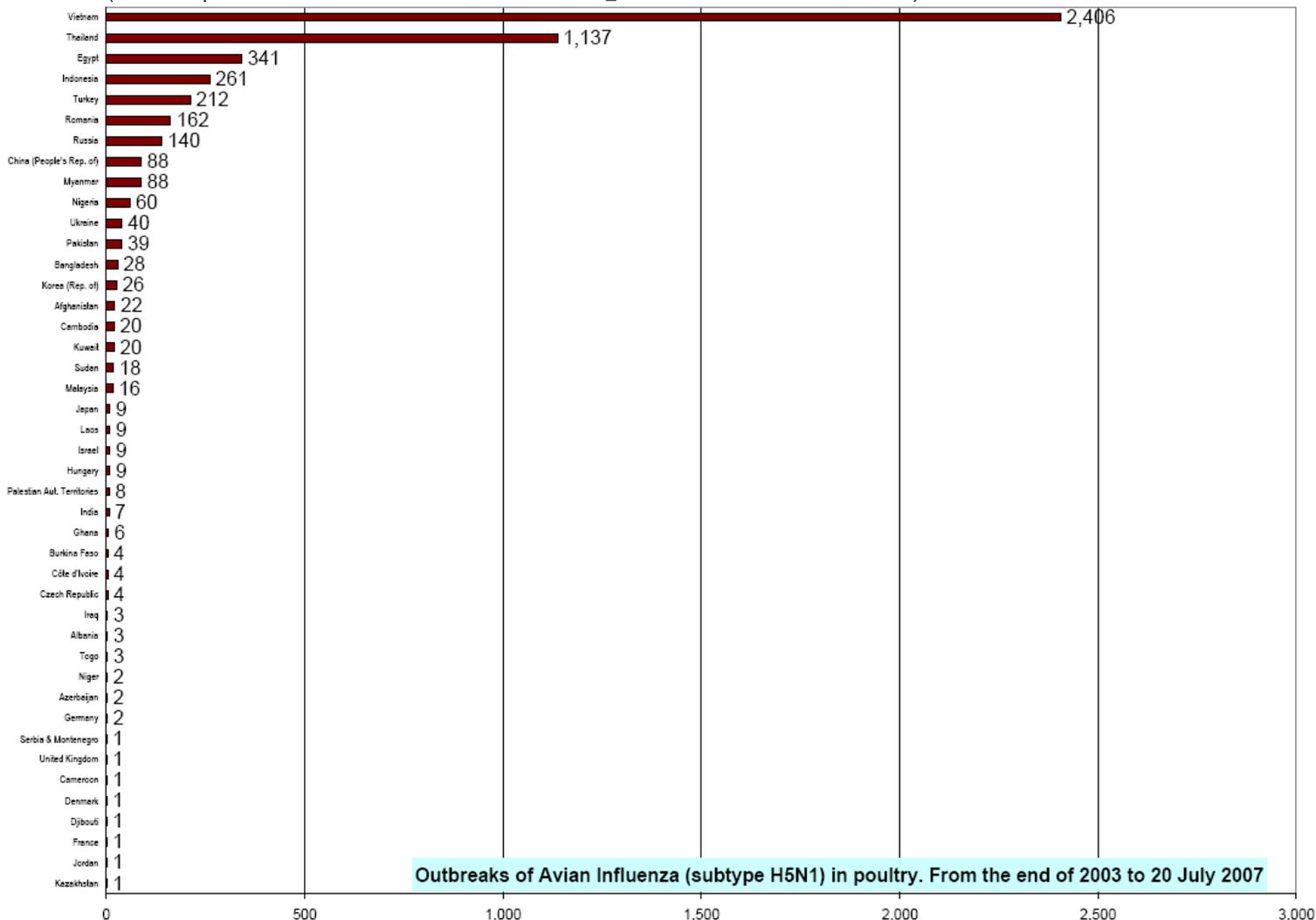


Table 2. H5N1 Influenza in Humans (Cases up to July 25, 2007)

(http://www.who.int/entity/csr/disease/avian_influenza/country/cases_table_2007_07_25/en/index.html Downloaded 7/25/2007)

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										
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	27	23	102	81
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	2	0	95	42
Total	4	4	46	32	98	43	115	79	54	33	319	192