



MI FluFocus

Influenza Surveillance and Avian Influenza Update

Bureau of Epidemiology
Bureau of Laboratories

Michigan Department
of Community Health



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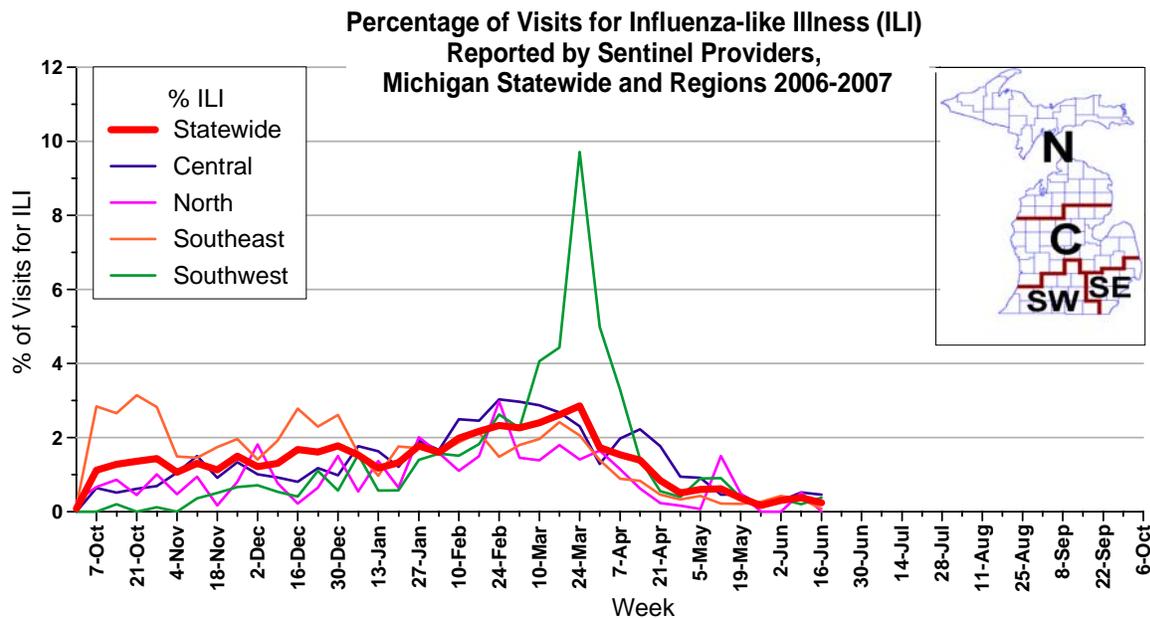
New updates in this issue:

- **Michigan Surveillance:** All influenza activity indicators are low.
- **Avian Influenza:** New human case of H5N1 avian influenza in Indonesia.

Michigan Disease Surveillance System: Last week saw a drop in aggregate flu-like illness reports with individual influenza reports holding steady near the previous week's levels. A drop in aggregate reporting is expected as the school year comes to a close. These indicators are expected to continue to fluctuate at baseline levels until next fall.

Emergency Department Surveillance: Emergency department visits due to constitutional complaints remained steady and respiratory complaints decreased slightly this past week. Reported levels are consistent with levels from this time last year. Four constitutional alerts in Regions 1(2), 2S(1) and 8(1) and three respiratory alerts in Regions 2N(1), 5(1) and 7(1) were generated last week.

Sentinel Surveillance (as of June 22): During the week ending June 16, 2007, the proportion of visits due to influenza-like illness (ILI) in Michigan remained at low a low level; 0.3% of all visits. This represents 12 cases of ILI out of 4103 total patient visits; sixteen sentinels provided data for this report. By surveillance region, the proportion of visits due to ILI was 0.5%, Central; 0.6%, North; 0.1%, Southeast; and 0.4%, 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 June 21): For the 2006-2007 influenza season, there have been 157 culture-confirmed cases from the MDCH Lab:

- 69 A:H1N1 (Southeast (22), 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 June 21): For the 2006-2007 season, there are no confirmed reports of influenza-related pediatric mortality in Michigan. MDCH and CDC are currently investigating a possible influenza-associated pediatric mortality in the Southeast region from March.

***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 June 21): An investigation is underway of a mild respiratory disease outbreak in an extended care facility in the Central region. 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, June 15): The Ministry of Health of Indonesia has announced a new case of human infection of H5N1 avian influenza. A 26-year-old male from Riau Province developed symptoms on June 3, was hospitalized on June 6 and died in hospital on June 12. Investigations into the source of his infection indicate exposure to sick and dead poultry.

Of the 100 cases confirmed to date in Indonesia, 80 have been fatal.

International, Poultry (The Daily Star, Bangladesh, June 17): Some 5205 chickens and ducks were culled at Narayanpur village and surrounding areas in Panchbib Upazila, following detection of bird flu Saturday [June 16] night.

The chickens were culled in the presence of Additional Deputy Commissioner M Al Amin. District livestock office sources said that since some chickens in Narayanpur village died due to unknown causes on Thursday [June 14], he took one of the dead chickens to the livestock disease laboratory at the district headquarters for testing. As the lab detected bird flu virus in the chicken, it was sent to the livestock disease laboratory in Dhaka for confirmation.

As tests confirmed avian influenza in the chicken, a 16-member team was formed, led by the Deputy Commissioner, to check the spread of bird flu. They culled 5205 chickens and ducks in the village and surrounding areas.

International, Poultry (Reuters Alertnet, June 18): Bird flu, which has killed one person since it re-emerged in Viet Nam in early May 2007, has flared up on several farms in a northern province despite efforts by the government to stop it from spreading.

The Animal Health Department said on Monday [June 18] that 690 ducks and chickens died last Thursday and Friday [June 14,15] at 8 farms in Bac Giang province, and officials slaughtered the remaining birds after tests found the dead birds had the H5N1 avian flu virus.

"Bird flu virus is widely present in the environment and has infected many poultry flocks. Therefore, it can happen anywhere now," a government statement quoted Deputy Agriculture Minister Bui Ba Bong as telling a meeting on Saturday.

At the same meeting, Prime Minister Nguyen Tan Dung approved an order to import another batch of 200 million doses of bird flu vaccine to battle the outbreaks that have struck 16 provinces, including Bac Giang, and two cities.

"It is not encouraged to develop the waterfowl flock. Unvaccinated ducks are not allowed to roam on fields, and a tight control must be imposed on (the country's) 70 million ducks," the statement quoted Dung as saying at the meeting.

The World Health Organization (WHO) described the government as "committed and alert" to the dangers of bird flu's spread but that carrying out all effective measures in the provinces was still a challenge. "There might be a bit of complacency now, and that would be of concern," Viet Nam representative for the U.N. health agency, Hans Troedsson, said on Monday.

Viet Nam's program of poultry vaccination and other measures has been described by international health experts as a model for keeping the H5N1 virus at bay, but this year, it has spread nationwide in ducks and chickens.

Health officials on Saturday confirmed bird flu killed a 20-year-old man on June 10. Troedsson said he was "not surprised and it was not unexpected" to see human cases again because "we have to remember the virus never disappeared." He said none of the 5 infections, including the death reported by Viet Nam's health authorities, had been confirmed by WHO reference labs. The cases so far were isolated, but he said that "if we start to see clusters, that would be more of a concern."

Globally, the H5N1 virus has killed 191 people out of 313 known cases, according to a tally by the WHO. Hundreds of millions of birds have died or been slaughtered.

International, Poultry (CeskeNoviny News Agency, June 20): A bird flu virus has emerged in a poultry flock for the 1st time in the Czech republic, the State Veterinary Administration said. The virus was confirmed in a turkey flock in Usti nad Orlici, east Bohemia, this afternoon [June 20]. Part of the flock of 6000 birds has died. The results of control checks expected on Thursday, will confirm what type of virus has appeared.

The Regional Veterinary Office is preparing stringent precautions including a ban on any future transfers of birds from the afflicted flock and checks of the previous transfers of the poultry. A 3-km inner protection zone and a 10-km outer surveillance zone will also soon be in force.

The security council of the Pardubice region, east Bohemia, will hold a special meeting, deputy regional governor, Roman Linek, told CTK (Czech News Agency) today.

The remaining birds in the afflicted flock in the village of Tisova will be culled.

The 1st case of bird flu in the Czech Republic was reported in March 2006, when 13 cases of the disease were registered. In all cases, they were swans that were infected by the H5N1 virus.

International, Wild Birds (Itar-tass, June 19): Wild ducks that had been infected with bird flu, but recovered from it, were registered in the Altai territory, the Tomsk region, Buryatia and the Ust-Ordyn Buryat autonomous district, a regional department of the Russian agriculture watchdog told Itar-Tass on Tuesday [June 19].

"These birds either had contact with infected birds or carried the virus themselves to recover," the source said. "47 probes exposed genetic material of the virus and presence of antibodies in blood serum."

Measures are being taken throughout Siberia to prevent a bird flu outbreak. As of June 19, 2007, no bird flu cases of poultry have been registered so far," the source said.

Around 6 million poultry are located in high-risk zones of the Siberian federal district. Around 4.4 million of them have already been vaccinated.

International, Pet Bird (Reuters, June 17): Hong Kong is keeping a close watch on pet shops after finding the deadly H5N1 strain of bird flu in the feces of a daurian starling in a city store.

In a statement issued late on Saturday, the Hong Kong government said it had closed the pet shop in the Mong Kok district, put a cluster of nearby bird shops under strict surveillance, and ordered them to undergo cleansing.

The infected bird was still alive and had been taken for further tests at a government animal management centre, a government spokesman said.

Authorities collected the infected sample on June 4 under a routine avian influenza surveillance program. Hong Kong has found bird flu in 16 wild birds this year.

Bird flu re-emerged in Hong Kong in 2003, and although there have been no human fatalities in the city, the virus has since killed 191 people around the world out of 313 known cases.

Michigan Wild Bird Surveillance (USDA, June 21): For the 2007 testing season, 126 Michigan samples have been taken so far, comprised of 98 live bird samples and 28 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 1969 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 June 18, 2007)

(Source: http://www.oie.int/download/AVIAN%20INFLUENZA/A_AI-Asia.htm Downloaded 6/19/2007)

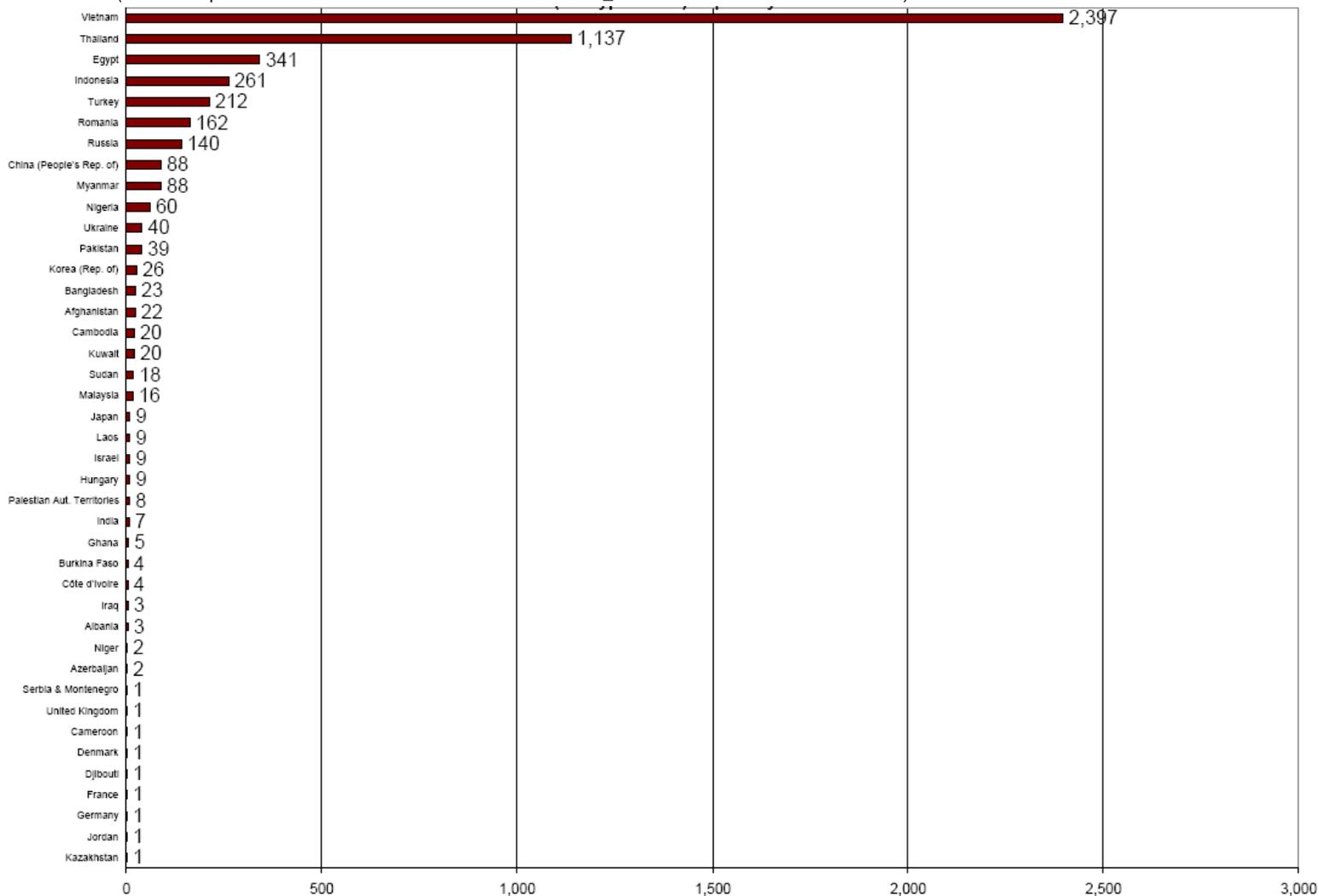


Table 2. H5N1 Influenza in Humans (Cases up to June 15, 2007)

(http://www.who.int/entity/csr/disease/avian_influenza/country/cases_table_2007_06_15/en/index.html Downloaded 6/15/2007)

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	18	5	36	15
Indonesia	0	0	0	0	20	13	55	45	25	22	100	80
Iraq	0	0	0	0	0	0	3	2	0	0	3	2
Lao People's Democratic Republic	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	0	0	93	42
Total	4	4	46	32	98	43	115	79	50	33	313	191