

**2013-04-30-035 Avian influenza, human (59): H7N9 update**  
**To: (06) Virology, general; (07) Zoonoses, general;**

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**AVIAN INFLUENZA, HUMAN (59): H7N9, UPDATE**

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A ProMED-mail post  
<<http://www.promedmail.org>>  
ProMED-mail is a program of the  
International Society for Infectious Diseases <<http://www.isid.org>>

In this update:

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- [1] WHO Update
- [2] CIDRAP report
- [3] Nature editorial

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**[1] WHO update**

Date: Tue 23 Apr 2013  
Source: WHO CSR, Disease Outbreak News [edited]  
<[http://www.who.int/csr/don/2013\\_04\\_23/en/index.html](http://www.who.int/csr/don/2013_04_23/en/index.html)>

As of 23 Apr 2013 (14:30 CET), the National Health and Family Planning Commission (NHFPC) notified WHO of an additional 4 laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus. The 1st patient is an 84-year-old man from Zhejiang province who became ill on 15 Apr 2013; the 2nd patient is a 62-year-old man from Zhejiang province who became ill on 15 Apr 2013; the 3rd patient is a 91-year-old man from Anhui province who became ill on 14 Apr 2013; and the 4th patient is a 36-year-old man from Shandong province who became ill on 16 Apr 2013. Additionally, a patient earlier reported from Zhejiang province has died.

To date, a total of 108 laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus in China, including 22 deaths, have been reported to WHO. Contacts of the confirmed cases are being closely monitored. National authorities continue to implement prevention and control measures.

Investigations into the possible sources of infection and reservoirs of the virus are ongoing. Until the source of infection has been identified, it is expected that there will be further cases of human infection with the virus in China. So far, there is no evidence of ongoing human-to-human transmission. WHO does not advise special screening at points of entry with regard to this event, nor does it recommend that any travel or trade restrictions be applied.

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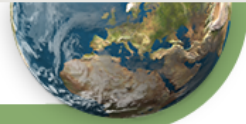
Communicated by:  
ProMED-mail Rapporteur Marianne Hopp

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**[2] CIDRAP report**

Date: Tue 23 Apr 2013  
Source: CIDRAP News [abbreviated & edited]  
<<http://www.cidrap.umn.edu/cidrap/content/influenza/avianflu/news/apr2313china.html>>

Infections with the novel H7N9 avian flu virus have hospitalized 3 more people in China, with one additional fatality reported, nudging the overall total to 108 cases and 22 deaths. All of the newly reported cases are in older men from eastern China, according to an update today [23 Apr 2013] from the World Health Organization (WHO).



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Two are from Zhejiang province, an 84-year-old and a 62-year-old, who both started having symptoms on 15 Apr 2013. The 3rd patient is from Anhui province, a 91-year-old man who became ill on 14 Apr 2013. An update today [23 Apr 2013] from Hong Kong's Centre for Health Protection (CHP) said the 2 patients from Zhejiang province are in critical condition, while the man from Anhui province is in serious condition. The WHO said the latest death is in a patient from Zhejiang province whose illness was reported earlier.

Today's [23 Apr 2013] totals from the WHO and CHP include a 36-year-old man from Shandong province whose H7N9 infection was 1st announced by provincial officials and picked up by the media yesterday [22 Apr 2013]. His lab findings have now been confirmed by the China Center for Disease Control and Prevention (China CDC). His illness was Shandong province's 1st confirmed case.

During a media briefing, the daughter of a Shanghai woman and man who were both infected with the virus, her mother fatally, spoke out and requested that her 56-year-old father, who is still hospitalized, receive convalescent serum therapy, according to the report. She told the Daily that a Shanghai health official told her after the briefing that the serum can't be used clinically.

In other developments, Chinese officials recently submitted more human and animal genetic sequences of the H7N9 virus to the GISAID database, according to Twitter posts from 21-22 Apr 2013 from GISAID AI Digest.

Sequences from human cases were deposited by Hangzhou health officials in Zhejiang province. The animal sequences are from 2 poultry detections in Jiangsu province.

[Byline: Lisa Schnirring]

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**[3] Nature editorial**

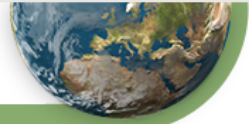
Date: 25 Apr 2013

Source: Nature 496, 397 doi:10.1038/496397a p [edited] <[http://www.nature.com/news/the-fight-against-bird-flu-1.12850?WT.ec\\_id=NATURE-20130425](http://www.nature.com/news/the-fight-against-bird-flu-1.12850?WT.ec_id=NATURE-20130425)>

China's well-handled response to outbreaks of H7N9 avian influenza belies the country's bad reputation from its past dealings with disease. But there are still improvements to be made. China deserves credit for its rapid response to the outbreaks of H7N9 avian influenza and its early openness in the reporting and sharing of data. A bad reputation is difficult to shake. A decade ago, China failed to report early cases of severe acute respiratory syndrome (SARS) and fumbled its initial response to the threat. Today, some commentators view its reaction to H7N9 with mistrust. But from all the evidence so far, China's response to the virus, which had caused 104 confirmed human cases and 21 deaths as Nature went to press, is next to exemplary.

China reported the H7N9 outbreak to the World Health Organization (WHO) on 31 Mar 2013, just 6 weeks after the 1st known person fell ill. On the same day, it published the genomic sequences of viruses from the 3 human cases then identified on the database of the Global Initiative on Sharing Avian Influenza Data (GISAID). It has also shared all the sequences with the WHO, and live virus with the WHO and other laboratories. This has allowed scientists to identify the virus's mutations, trace its origins and develop crucial diagnostic tests. China continues to report new cases daily, and its media discusses H7N9 fairly openly. Chinese and other researchers have quickly published detailed analyses of the virus in journals (R. Gao N. Engl. J. Med. <<http://doi.org/k7r>>; 2013). Chinese President Xi Jinping added political clout last week when he called for an effective response, and said that the government must ensure the release of accurate information about the outbreaks.

China's response to the epidemic has also been brisk. Diagnostic tests have been distributed to hospitals and research labs across the country. The response, spearheaded by the Chinese Center for



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Disease Control and Prevention in Beijing, has united clinicians, virologists, and epidemiologists. Live-bird markets at which H7N9 has been found have been shut down and birds culled. The agriculture ministry has tested tens of thousands of birds and other animals for the virus to try to pin down the sources of human infections and explain their occurrence in cities hundreds of km apart, no mean task given that China has some 6 billion domestic fowl and half a billion pigs, which can also carry the virus. So far, however, apart from birds at the live markets, the sources of infection remain elusive. To help track them down and to collaborate in efforts to control H7N9, China has invited a team of WHO scientists and international flu experts to the country. They arrived last week and are expected to report their preliminary conclusions this week.

Yet, suspicions linger. Some critics have questioned, for example, the time between the 1st person falling ill on 19 Feb 2013 and China's 1st announcement about the virus and have asked whether the announcement was deliberately delayed. This is unfair. With just a handful of severe pneumonia cases caused by the virus by mid-March 2013, it is impressive that China realized as quickly as it did that something was amiss. It took the United States, which has one of the world's most advanced disease-surveillance systems, an almost identical amount of time to identify a novel H3N2 swine virus that caused serious illness in a child in 2011.

China has made a good start, but it is crucial for the country to continue its openness over the H7N9 outbreaks. In particular, it must promptly report any evidence of human-to-human spread. There are also areas for improvement: data made public on human cases are often limited to basic facts such as age, sex, date of onset of illness and location. Epidemiologists also need more detailed data, including possible exposures to infection and underlying medical conditions. Case reports should be published in full in journals or online as quickly as possible.

It is also important that sequences from as many cases as possible be submitted to publicly accessible databases, because sequence data are important in tracking evolutionary changes such as new mutations that could allow the virus to spread between humans more easily. They can also provide clues to the source of infection. Even as the Chinese authorities are being open and transparent on H7N9, some scientists are hoarding epidemiological and other data because of intense competition to be the 1st to publish. Competition can be healthy, but in the face of a virus that has the potential to cause a pandemic, researchers have a duty above all else to share important data.

Journals must be ready and willing, as in any public-health emergency, to fast-track peer review of H7N9 papers and not let rapid publication of preprints stand in the way of considering papers for publication.

Meanwhile, observers should continue to scrutinize China's response to H7N9, but they should also give credit where credit is due. It is time to recognize that China has changed.

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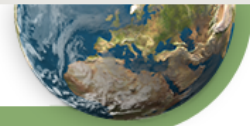
[The WHO daily reports lag 24 hours behind events, and it is likely that the total number of cases and fatalities will have increased by the time this update is posted. Indeed, the preceding ProMED-mail report of an H7N9 human case involving a person recently returned to Taiwan from mainland China is not included in the WHO update -- see ProMED archive below. - Mod.CP

A HealthMap/ProMED-mail map can be accessed at:  
<<http://healthmap.org/r/2O6O>>, <<http://healthmap.org/r/1ucF>>, <<http://healthmap.org/r/6s8f>>.]

[see also:

Avian influenza, human (58): (Taiwan ex China) H7N9 update  
20130424.1669273

Avian influenza, human (57): H7N9 update 20130423.1667644 Avian influenza, human (55): H7N9  
update 20130421.1662410 Avian influenza, human (54): H7N9 update 20130420.1660408 Avian  
influenza, human (53): H7N9 update 20130419.1658187 Avian influenza, human (52): H7Nx  
sequence analysis 20130419.1657126 Avian influenza, human (51): H7N9 update 20130418.1655610  
Avian influenza, human (50): China H7N9 update 20130417.1653194 Avian influenza, human (48):



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China H7N9 update 20130416.1650582 Avian influenza, human (47): China H7N9 update 20130415.1647864 Avian influenza, human (46): China: H7N9 stealth virus 20130415.1647713  
Avian influenza, human (45): China: H7N9, update 20130414.1645270 Avian influenza, human (44): China (HE), H7N9 20130413.1643923 Avian influenza, human (43): China, H7N9 update 20130413.1643270 Avian influenza, human (42): China (BJ), H7N9 20130413.1642086 Avian influenza (35): China, LPAI H7N9, update 20130412.1641185 Avian influenza, human (41): China H7N9 update 20130412.1641464 Avian influenza, human (40): China H7N9 update 20130411.1638767 Avian influenza, human (39): China (SH, JS, ZH) H7N9 update 20130410.1636073  
Avian influenza, human (38): China (SH, JS) H7N9 update 20130409.1633860 Avian influenza, human (35): China (SH, JS) H7N9 update 20130408.1630825  
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Avian influenza, human (28): China H7N9, WHO 20130406.1626360 Avian influenza (28): China (SH) H7N9, OIE, update 20130405.1624901 Avian influenza, human (27): H7N9 update, more fatalities 20130405.1624260 Avian influenza, human (26): China H7N9 case list & map 20130404.1623110  
Avian influenza, human (25): China (SH) H7N9, update 20130404.1622647 Avian influenza (27): China (SH) H7N9, avian case 20130404.1621938 Avian influenza (26): China, H7N9, RFI 20130403.0666 Avian influenza, human (24): China (ZJ) H7N9 update 20130404.1621801 Avian influenza, human (22): China (SH) H7N9, fatal: correction 20130404.1621799  
Avian influenza, human (22): China (SH) H7N9 fatal 20130404.1621700 Avian influenza, human (20): China (JS) H7N9 patient details 20130403.1617279]

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