Avian Influenza Report



Avian Influenza Report is a weekly report produced by the Respiratory Disease Office, Centre for Health Protection of the Department of Health. This report highlights global avian influenza activity in humans and birds.

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Summary

- 1. Since the previous issue of Avian Influenza Report (AIR), one new human case of avian influenza A(H7N9) was reported by the Health and Family Planning Commission of Anhui Province and one imported human case of avian influenza A(H7N9) was confirmed by the Centre for Health Protection (CHP) of the Department of Health. Since March 2013 (as of April 23, 2016), there were a total of 762 human cases of avian influenza A(H7N9) reported globally. Since October 2015 (as of April 23, 2016), 82 cases have been recorded in Mainland China.
- 2. Since the previous issue of AIR, one new human case of avian influenza A(H5N6) from Hubei was reported by the National Health and Family Planning Commission (NHFPC). Since 2014 (as of April 23, 2016), 11 human cases of avian influenza A(H5N6) were reported to World Health Organization (WHO) and all occurred in Mainland China.
- 3. There were no new human cases of avian influenza A(H5N1) reported by the World Health Organization (WHO). From 2011 to 2015, 32 to 145 confirmed human cases of avian influenza A(H5N1) were reported to WHO annually (according to onset date). So far, there have been 4 cases in 2016.*

^{*} Since November 21, 2012, WHO only publishes information on human cases with avian influenza A(H5N1) infection in "Influenza at human - animal interface: Monthly Risk Assessment Summary". Only cases of human infection with H5N1 involved in events that are unusual or associated with potential increased risks will be reported in Disease Outbreak News. The latest report was published in April, 2016.

This week's highlights

(Sources: WHO, NHFPC, Mainland health authorities, CHP and World Organisation for Animal Health (OIE))

Table 1. Hong Kong: Confirmed human cases of avian influenza A(H5) / avian influenza A(H7N9)

| | No. of H5 cases (No. of deaths) | No. of H7N9 cases (No. of deaths) | Details |
|--------------------------------|---------------------------------------|---|--|
| In this reporting period | 0(0) | 1(0) | Hong Kong: An 80-year-old man was confirmed positive for avian influenza A(H7N9). This imported case is the third case in Hong Kong this year. The patient, with underlying illnesses, travelled to Dongguan, Guangdong from April 1 to 5. He consulted private doctors twice after onset of illness and was subsequently hospitalized after being found confused and refusing eating. During the stay in Dongguan, the patient visited a wet market near his residence in Dongguan where he bought a live chicken and later slaughtered it. He is currently in stable condition. (<i>CHP</i> , April 19, 2016) |

Table 2. Outside Hong Kong: Confirmed cases of human infection with avian influenza A(H7N9)

| | Place of occurrence | No. of cases (No. of deaths) | Province / Region / Municipality | City / District / Area | Age (years) | Sex | Condition at time of reporting | Date of report |
|-----------|---------------------|------------------------------|--|------------------------------|----------------|-----|--------------------------------------|----------------|
| New cases | Mainland China | 1(0) | Anhui | Ma'anshan | 62 | M | critical | 20/4/2016 |

Table 3. Cumulative numbers of confirmed cases of human infection with avian influenza A(H7N9) since 2013 and since October 2015 respectively

| Confirmed H7N9 human cases have been reported in the following countries / areas | | Cumulative no. of cases since 2013 (762 cases in total) (as of April 23, 2016) | Cumulative no. of cases since October 2015 (85 cases in total) (as of April 23, 2016) |
|--|-------------------------------------|---|--|
| | Zhejiang Province | 215 | 31 |
| | Guangdong Province | 194 | 13# |
| | Jiangsu Province | 91 | 13 |
| | Fujian Province | 69 | 6 |
| | Shanghai Municipality | 52 ^{&} | 4 ^{&} |
| | Hunan Province | 34 | 8 |
| | Anhui Province | 32 | 2 |
| | Jiangxi Province | 14 | 3 |
| Mainland China | Xinjiang Uygur Autonomous Region | 10 | - |
| | Shandong Province | 8 | 1 |
| | Beijing Municipality | 6 | - |
| | Henan Province | 4 | - |
| | Guangxi Province | 3 | - |
| | Jilin Province | 2 | - |
| | Guizhou Province | 2 | - |
| | Hubei Province | 2 [@] | 1.0 |
| | Hebei Province | 1 | - |
| Canada | | 2* | - |
| Hong Kong | | 16* | 3* |
| Malaysia | | 1* | - |
| Taiwan | | 4* | - |

[#] Refer to Figure 1 for geographical distribution

Table 4. Outside Hong Kong: Confirmed cases of human infection with avian influenza A(H5N6)

| | Place of occurrence | No. of cases (No. of deaths) | Province / Region / Municipality | City / District / Area | Age (years) | Sex | Condition at time of reporting | Date of report |
|-----------|---------------------|------------------------------|--|------------------------------|----------------|-----|--------------------------------------|----------------|
| New cases | Mainland China | 1(0) | Hubei | - | 35 | M | critical | 21/4/2016 |

[&]amp; Including one case imported from Anhui

[®] Including one case imported from a neighboring province

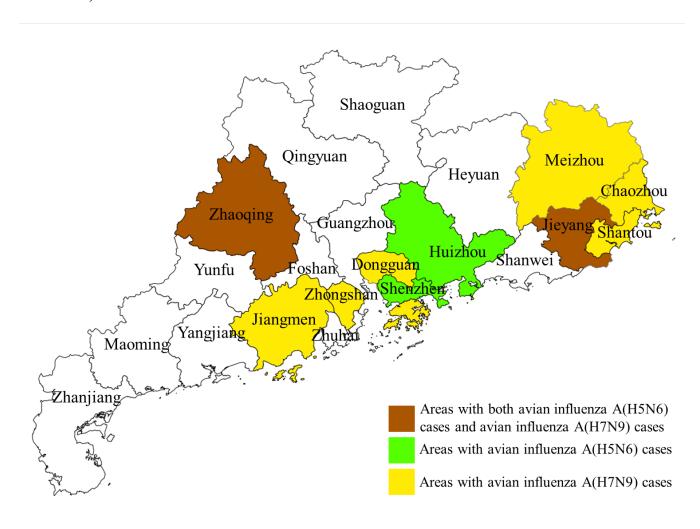
^{*} All cases imported from Mainland China

Table 5. Cumulative number of confirmed cases of human infection with avian influenza A(H5N6) reported to WHO since 2014 and since October 2015 respectively

| Confirmed H5N6 human cases have been reported in the following countries / areas | | Cumulative no. of cases since 2014 (11 cases in total) (as of April 23, 2016) | Cumulative no. of cases since October 2015 (7 cases in total) (as of April 23, 2016) |
|--|-----------|--|---|
| | Guangdong | 6 | 5# |
| Maintand | Yunan | 2 | - |
| Mainland China | Sichuan | 1 | - |
| Cillia | Jiangxi | 1* | 1* |
| | Hubei | 1 | 1 |

^{*} Refer to Figure 1 for geographical distribution

Figure 1. Geographical distribution of human cases of avian influenza A(H5N6) and avian influenza A(H7N9) in Guangdong since October 2015 (latest case was reported on 19/3/2016)



Note: Included a H5N6 case who was living in Jieyang during the incubation period and confirmed in Jiangxi Province

^{*} imported case from Guangdong

Table 6. Outside Hong Kong: Confirmed human cases of avian influenza A(H5N1)

| | Place of occurrence | No. of cases (No. of deaths) | Details |
|-----------|---------------------|---------------------------------|---------|
| New Cases | - | 0(0) | - |

For the cumulative no. of human cases by place, please refer to WHO/WPRO website.

Table 7. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHFPC since 2003 (by onset date) $^{\$}$

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | Overall |
|--------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------|
| Cases | 4 | 46 | 98 | 115 | 88 | 44 | 73 | 48 | 62 | 32 | 39 | 52 | 145 | 4 | 850 |
| Deaths | 4 | 32 | 43 | 79 | 59 | 33 | 32 | 24 | 34 | 20 | 25 | 22 | 42 | 0 | 449 |
| Case Fatality Rate | 100% | 69.6% | 43.9% | 68.7% | 67.0% | 75.0% | 43.8% | 50.0% | 54.8% | 62.5% | 64.1% | 42.3% | 29.0% | 0.0% | 52.8% |

[§] Further breakdown by countries is available at WHO website

Table 8. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHFPC since 2003 (by date of reporting)

| Country | Cumulative no. of cases (December 2003 to April 2016) | No. of recent cases (January 2016 to April 2016) | | |
|----------------|--|--|--|--|
| Azerbaijan | 8 | 0 | | |
| Bangladesh | 8 | 1 | | |
| Cambodia | 56 | 0 | | |
| Canada | 1 | 0 | | |
| Mainland China | 53 | 1 | | |
| Djibouti | 1 | 0 | | |
| Egypt | 350 | 4 | | |
| Indonesia | 199 | 0 | | |
| Iraq | 3 | 0 | | |
| Laos | 2 | 0 | | |
| Myanmar | 1 | 0 | | |
| Nigeria | 1 | 0 | | |
| Pakistan | 3 | 0 | | |
| Thailand | 25 | 0 | | |
| Turkey | 12 | 0 | | |
| Vietnam | 127 | 0 | | |
| Overall | 850 | 6 | | |

[^] Details of recent cases (January 2016 to April 2016) are listed in *Table 9*.

Table 9. **Details of the recent confirmed human cases of avian influenza A(H5N1) reported to WHO / NHFPC** (January 2016 to April 2016) (Sources: WHO, NHFPC)

| Date of report | Country | Province / Region | District / City | Sex | Age | Outcome at the time of reporting |
|----------------|-------------------|----------------------|-----------------|-----|-----|----------------------------------|
| 14/1/2016 | Mainland China | Sichuan | Chengdu | M | 42 | Critical |
| 20/1/2016 | Bangladesh | - | Mymensing M | | 60 | Recovered |
| 4/4/2016 | Egypt | Sohag | - | F | 1.5 | Recovered |
| 4/4/2016 | Egypt | Cairo | 1 | F | 7 | Recovered |
| 4/4/2016 | Egypt | Giza | - | F | 5 | Recovered |
| 4/4/2016 | Egypt | Giza | - | F | 70 | Critical |

Table 10. Outside Hong Kong: Confirmed human cases of avian influenza A infections other than avian influenza A(H5N1 / H5N6 / H7N9) reported in the past 6 months

| | Place of occurrence | No. of cases (No. of deaths) | Details | | | | |
|--|---------------------|------------------------------|---|--|--|--|--|
| In this reporting period | - | 0(0) | - | | | | |
| Previously reported cases (in the past | Mainland China | 4(0) | Avian influenza A(H9N2): Anhui Province: A 4-year-old girl reported on December 14, 2015 ⁱ Hunan Province: A two-year-old boy, a fifteen-year-old girl and a one-year-old girl reported on December 14, 2015 ⁱⁱ Sichuan Province: A 57-year-old woman reported on February 25, 2016 ⁱⁱⁱ | | | | |
| 6 months) | Bangladesh | 2(0) | Avian influenza A(H9N2): Bangladesh: A 3.5-year-old girl reported on September 4, 2015 ^{iv} Bangladesh: A 46-year-old man reported on January 20, 2016 ^v | | | | |

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ⁱ The WHO reported one confirmed human case of avian influenza A(H9N2) in Anhui Province of Mainland China in the Monthly Risk Assessment Summary in December 2015.

The WHO reported three confirmed human cases of avian influenza A(H9N2) in Hunan Province of Mainland China in the Monthly Risk Assessment Summary in December 2015.

The WHO reported one confirmed human cases of avian influenza A(H9N2) in Sichuan Province of Mainland China in the Monthly Risk Assessment Summary in February 2016.

The WHO reported one confirmed human case of avian influenza A(H9N2) in Bangladesh in the Monthly Risk Assessment Summary in September 2015.

The WHO reported one confirmed human case of avian influenza A(H9N2) in Bangladesh in the Monthly Risk Assessment Summary in January 2016.

Table 11. Hong Kong: Confirmed reports of avian influenza A(H5) or avian influenza A(H7N9) in poultry / wild birds since 2014

| | No. of reports of H5 in poultry / wild birds | No. of reports of H7N9 in poultry / wild birds | Details |
|--------------------------------------|---|---|---------|
| In this reporting period | 0 | 0 | - |
| Previously reported cases since 2014 | 6* | 2# | - |

^{*} The Government confirmed that the carcass of a peregrine falcon found at a construction site in Hung Shui Kiu, Yuen Long on April 9, 2015 was tested positive for H5N6 virus.

The Government confirmed that the carcass of an oriental magpie robin found in Sai Kung on April 29, 2015 was tested positive for H5N6 virus.

The Government confirmed that the carcass of an oriental magpie robin found in Kwai Chung on November 17, 2015 was tested positive for H5N6 virus.

The Government confirmed that the carcass of an great egret found in Diamond Hill, Wong Tai Sin on December 31, 2015 was tested positive for H5N6 virus.

The Government confirmed that a chicken carcass found in Lung Kwu Tan, Tuen Mun on February 14, 2016 was tested positive for H5N6 virus.

The Government confirmed that a chicken carcass found in Tai O on February 18, 2016 was tested positive for H5N6 virus.

The Government found on December 30, 2014 a number of samples from a consignment of live chickens from a registered farm in Huicheng District of Huizhou in Guangdong tested positive for H7N9 virus.

[#] The Government confirmed on January 27, 2014 that a number of samples from a batch of live chickens imported from a registered poultry farm in Shunde District of Foshan City in Guangdong were tested positive for H7N9 virus.

Table 12. Outside Hong Kong: Confirmed avian influenza A(H5), A(H7N9) or other highly pathogenic avian influenza in poultry / wild birds reported in this week

| Places of occurrence | No. of reports of H5N1 | | No. of reports of H5N8 | No. of reports of H5N9 | No. of reports of H7N3 | Details |
|---|---------------------------------|---|---------------------------------|---------------------------------|---------------------------------|--|
| | | | | | | Taiwan: Samples from poultry in Kaohsiung City were tested positive for highly pathogenic avian influenza A(H5N8). (<i>OIE</i> , April 19, 2016) |
| | | | | | | Taiwan: Samples from poultry in Chiayi County were tested positive for highly pathogenic avian influenza A(H5N2). (<i>OIE</i> , April 19, 2016) |
| Taiwan, | | | | | | France: Samples from poultry in Tarn Province were tested positive for highly pathogenic avian influenza A(H5N9). (<i>OIE</i> , April 19, 2016) |
| France, Mexico, Ghana, Lebanon | 2 | 1 | 1 | 1 | 1 | Mexico: Samples from poultry in Veracruz State, Puebla State, Oaxaca State and Jalisco State were tested positive for highly pathogenic avian influenza A(H7N3). (OIE, April 22, 2016) |
| | | | | | | Ghana: Samples from poultry in Eastern Region and Western Region were tested positive for highly pathogenic avian influenza A(H5N1). (<i>OIE</i> , April 22, 2016) |
| | | | | | | Lebanon: Samples from poultry in Al Biqa' were tested positive for highly pathogenic avian influenza A(H5N1). (<i>OIE</i> , April 23, 2016) |

For cumulative reports of avian influenza A(H5N1) or A(H7N9) in poultry / wild birds, please refer to the $\underline{\text{OIE}}$ website.

Table 13. Countries / areas with documented avian influenza A (H7N9) or highly pathogenic avian influenza (including H5 and other subtypes) cases in the recent 6 months

(including infections in humans/birds and relevant environmental samples) (as of April 25, 2016)

| Country/ Area | Human cases (as of Apr | | Poultry cases / environmental samples | | Wild bird cases / others | |
|------------------------------------|------------------------|---------------------------|---------------------------------------|--|--------------------------|--|
| | Subtype of virus | Date of last report | Subtype of virus | Date of last report (Subtype in this report) | Subtype of virus | Date of last report (Subtype in this report) |
| Bangladesh | H5N1 | 20/01/2016 | - | - | H5 | 15/02/2016 (H5N1) |
| Cambodia | - | - | H5 | 16/11/2015 (H5N1) | - | - |
| Cote D'Ivoire | - | - | H5 | 02/02/2016 (H5N1) | - | - |
| Egypt | - | - | Endemic | Endemic | - | - |
| France | - | - | H5 | 19/04/2016 (H5N9) | - | - |
| Ghana | - | - | H5 | 22/04/2016 (H5N1) | - | - |
| Hong Kong | H7N9 | 19/04/2016# | - | - | Н5 | 23/02/2016 (H5N6) |
| India | - | - | H5 | 19/01/2016 (H5N1) | - | - |
| Indonesia | - | - | Endemic | Endemic | - | - |
| Laos | - | - | H5 | 08/10/2015 (H5N6) | - | - |
| Lebanon | - | - | H5 | 23/04/2016 (H5N1) | - | - |
| Macau | - | - | H7 | 03/02/2016 (H7) | - | - |
| Mainland China | | | | | | |
| Anhui | H7N9 | 20/04/2016 | - | - | - | - |
| Fujian | H7N9 | 18/03/2016 | - | - | - | - |
| Guangdong | H7N9 H5N6 | 16/03/2016 15/03/2016 | Н5 | - | - | - |
| Guizhou | - | - | Н5 | 29/02/2016 (H5N6) | - | - |
| Hubei | H5N6 | 21/04/2016 | - | - | - | - |
| Hunan | H7N9 | 18/03/2016 | Н5 | 18/01/2016 (H5N6) | - | - |
| Jiangsu | H7N9 | 18/03/2016 | H5 | - | - | - |
| Jiangxi | H7N9 H5N6 | 18/04/2016 11/01/2016^ | Н5 | 11/03/2016 (H5N6) | - | - |
| Shandong | H7N9 | 18/03/2016 | - | - | - | - |
| Shanghai | H7N9 | 08/02/2016 | - | - | - | - |
| Sichuan | H5N1 | 14/01/2016 | - | - | - | - |
| Zhejiang | H7N9 | 18/03/2016 | - | - | - | - |
| Mexico | - | - | H7N3 | 22/04/2016 (H7N3) | - | - |
| Myanmar | - | - | H5 | 16/04/2016* | - | - |
| Nigeria | - | - | Н5 | 03/04/2016 (H5N1) | - | - |
| Palestinian Autonomous Territories | - | - | - | - | H5 | 15/10/2015* |
| Korea | - | - | H5 | 27/03/2016 (H5N8) | - | - |
| Taiwan | - | - | Н5 | 19/04/2016 (H5N2) 19/04/2016 (H5N8) | - | - |
| United States | - | - | H7N8 | 15/01/2016 (H7N8) | - | - |
| Vietnam | - | - | Н5 | 16/02/2016 (H5N6) 10/04/2016 (H5N1) | - | - |

Sources: WHO, OIE, NHFPC and other official websites

[#] imported case from Guangdong
^ imported case from Guangdong
* without further subtype information