

Avian Influenza Report

Avian Influenza Report is a weekly report produced by the Surveillance Division of the Communicable Disease Branch of the Centre for Health Protection. This report highlights global avian influenza activity in humans and birds.

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<u>Reporting period: Jan 10, 2021 – Jan 16 2021 (Week 03)</u> (Published on Jan 19, 2021)

Summary

- 1. Since the previous issue of Avian Influenza Report (AIR), there were no new human cases of avian influenza A(H7N9). Since March 2013 (as of Jan 16, 2021), there were a total of 1568 human cases of avian influenza A(H7N9) reported globally (all were reported in the past seven waves between 2013 and September 2019). The latest case was reported on April 5, 2019.
- 2. Since the previous issue of AIR, there were no new human cases of avian influenza A(H5N6). Since 2014 (as of Jan 16, 2021), there were 26 human cases of avian influenza A(H5N6) reported globally and all occurred in Mainland China. The latest case was reported on December 25, 2020.
- 3. Since the previous issue of AIR, there were no new human cases of avian influenza A(H5N1). From 2011 to 2020, 0 to 145 confirmed human cases of avian influenza A(H5N1) were reported to WHO annually (according to onset date).* The latest case was reported on November 6, 2020.

^{*} Since November 21, 2012, WHO only publishes information on human cases with avian influenza A(H5N1) infection in "<u>Influenza at human - animal interface: Monthly Risk Assessment Summary</u>". 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 December, 2020.

This week's highlights

(Sources: WHO, NHC, Mainland health authorities, Ministry of Agriculture of the People's Republic of China, Centre for Health Protection (CHP) and World Organisation for Animal Health (OIE))

Table 1. Hong Kong: Confirmed human cases of avian influenza A(H5N1 / H5N6 / H7N9) since previous issue of AIR

| | No. of H5 cases (No. of deaths) | No. of H7N9 cases (No. of deaths) | Details |
|--------------------------------|------------------------------------|--------------------------------------|---------|
| In this reporting period | 0(0) | 0(0) | - |

Table 2. Outside Hong Kong: Confirmed human cases of avian influenza A(H5N1 / H5N6 / H7N9) since previous issue of AIR

| Date of report | Country | Province / Region | District / City | Sex | Age | Condition at time of reporting | Subtype of virus |
|----------------|---------|----------------------|--------------------|-----|-----|--------------------------------|------------------|
| - | - | - | - | - | - | 1 | - |

Table 3. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHC since 2003 (by onset date) \S

| Year | Cases | Deaths | Case fatality rate |
|---------|-------|--------|--------------------|
| 2003 | 4 | 4 | 100% |
| 2004 | 46 | 32 | 69.6% |
| 2005 | 98 | 43 | 43.9% |
| 2006 | 115 | 79 | 68.7% |
| 2007 | 88 | 59 | 67.0% |
| 2008 | 44 | 33 | 75.0% |
| 2009 | 73 | 32 | 43.8% |
| 2010 | 48 | 24 | 50.0% |
| 2011 | 62 | 34 | 54.8% |
| 2012 | 32 | 20 | 62.5% |
| 2013 | 39 | 25 | 64.1% |
| 2014 | 52 | 22 | 42.3% |
| 2015 | 145 | 42 | 29.0% |
| 2016 | 10 | 3 | 30.0% |
| 2017 | 4 | 2 | 50.0% |
| 2018 | 0 | 0 | 0% |
| 2019 | 1 | 1 | 100% |
| 2020 | 1 | 0 | 0% |
| Overall | 862 | 455 | 52.8% |

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

Table 4. Confirmed human cases of avian influenza A(H5N1) reported to WHO / NHC since 2003 (by date of reporting)

| Countries /Areas | Cumulative no. of cases (December 2003 to January 2021) | No. of recent cases (September 2020 to January 2021) |
|--|---|---|
| Azerbaijan | 8 | 0 |
| Bangladesh | 8 | 0 |
| Cambodia | 56 | 0 |
| Canada | 1 | 0 |
| Mainland China | 53# | 0 |
| Djibouti | 1 | 0 |
| Egypt | 359 | 0 |
| Indonesia | 200 | 0 |
| Iraq | 3 | 0 |
| Lao People's Democratic Republic | 3 | 1 |
| Myanmar | 1 | 0 |
| Nepal | 1 | 0 |
| Nigeria | 1 | 0 |
| Pakistan | 3 | 0 |
| Thailand | 25 | 0 |
| Turkey | 12 | 0 |
| Vietnam | 127 | 0 |
| Overall | 862 | 1 |

[#] Including two cases from Mainland China detected in Hong Kong

 ${\it Table~5.} \quad \textbf{Cumulative numbers of confirmed cases of human infection with avian influenza~A(H5N6) since 2014 and since January 2021 respectively}$

| been rep | H5N6 human cases have orted in the following ountries / areas | Cumulative no. of cases since 2014 (26 cases in total) (as of Jan 16, 2021) | Cumulative no. of cases since January 2021 (0 case in total) (as of Jan 16, 2021) |
|----------|---|--|--|
| | Guangdong Province | 8 | 0 |
| | Guangxi Zhuang Autonomous Region | 4 | 0 |
| | Hunan Province | 4 | 0 |
| | Yunnan Province | 2 | 0 |
| Mainland | Anhui Province | 1 | 0 |
| China | Beijing Municipality | 1 | 0 |
| | Fujian Province | 1 | 0 |
| | Hubei Province | 1 | 0 |
| | Jiangsu Province | 2 | 0 |
| | Sichuan Province | 1 | 0 |
| | Jiangxi Province | 1* | 0 |

^{*} Imported case from Guangdong

Cumulative numbers of confirmed cases of human infection with avian Table 6. influenza A(H7N9) since 2013 and since October 2020 respectively

| been re | d H7N9 human cases have ported in the following countries / areas | Cumulative no. of cases since 2013 (1568 cases in total) (as of Jan 16, 2021) | Cumulative no. of cases since October 2020 (0 case in total) (as of Jan 16, 2021) |
|----------|---|--|--|
| | Zhejiang Province | 310 | 0 |
| | Guangdong Province | 259 | 0 |
| | Jiangsu Province | 252 | 0 |
| | Fujian Province | 108 | 0 |
| | Anhui Province | 99 | 0 |
| | Hunan Province | 95 | 0 |
| | Shanghai Municipality | 57 | 0 |
| | Jiangxi Province | 52 | 0 |
| | Sichuan Province | 38 | 0 |
| | Beijing Municipality | 35 | 0 |
| | Guangxi Zhuang Autonomous Region | 31 | 0 |
| | Hubei Province | 31 | 0 |
| | Hebei Province | 29 | 0 |
| Mainland | Henan Province | 28 | 0 |
| China | Shandong Province | 28 | 0 |
| | Guizhou Province | 20 | 0 |
| | Xinjiang Uygur Autonomous Region | 14 | 0 |
| | Chongqing Municipality | 9 | 0 |
| | Yunnan Province | 8 | 0 |
| | Shaanxi Province | 7 | 0 |
| | Gansu Province | 6 | 0 |
| | Liaoning Province | 5 | 0 |
| | Tianjin Municipality | 5 | 0 |
| | Jilin Province | 3 | 0 |
| | Shanxi Province | 3 | 0 |
| | Tibet Autonomous Region | 3 | 0 |
| | Inner Mongolia Autonomous Region | 2 | 0 |
| | Hong Kong | 21* | 0 |
| | Taiwan | 5* | 0 |
| | Canada | 2* | 0 |
| | Macao | 2# | 0 |
| | Malaysia | 1* | 0 |

^{*} All cases imported from Mainland China *The latest case imported from Mainland China

Table 7. Confirmed human cases of avian influenza A infections other than avian influenza A(H5N1 / H5N6 / H7N9) reported in the past 6 months (as of January 18, 2021)

| | Place of occurrence | No. of cases (No. of deaths) | Details |
|--|---------------------|------------------------------------|--|
| In this reporting period | Mainland China | 2(0) | Avian influenza A(H9N2): Guangdong Province: A 16-month-old boy with onset on December 28, 2020. Fujian Province: A 52-year-old woman with onset on January 2, 2021. |
| Previously reported cases (onset/ reported in the past 6 months) | Mainland China | 2(0) | Avian influenza A(H9N2): Guangdong Province: A 4-year-old girl with onset on August 3, 2020. A 3-year-old girl with onset on October 12, 2020. |

Table 8. Hong Kong: Confirmed reports of avian influenza A(H5) or avian influenza A(H7N9) in poultry / wild birds / environmental samples since 2015

| | No. of reports of H5 in poultry / wild birds / environmental samples | No. of reports of H7N9 in poultry / wild birds / environmental samples | Details |
|---|--|--|---|
| In this reporting period | 1* | 0 | Avian influenza A(H5N8): Two samples of faecal droppings taken from Mai Po Nature Reserve were tested positive for avian influenza A(H5N8). |
| Previously reported cases since 2015 (before this reporting period) | 16* | 1# | - |

^{*} Carcass of a peregrine falcon found in Yuen Long on April 9, 2015 (H5N6)

Carcass of an oriental magpie robin found in Sai Kung on April 29, 2015 (H5N6)

Carcass of an oriental magpie robin found in Kwai Chung on November 17, 2015 (H5N6)

Carcass of a great egret found in Wong Tai Sin on December 31, 2015 (H5N6).

Chicken carcass found in Tuen Mun on February 14, 2016 (H5N6)

Chicken carcass found in Tai O on February 18, 2016 (H5N6)

Samples of faecal droppings collected at Mai Po Nature Reserve on November 25, 2016 (H5N6)

A sample of faecal droppings collected at Mai Po Nature Reserve on November 30, 2016 (H5N6)

A dead red-whiskered bulbul collected at Kowloon City on April 7, 2017 (H5N6)

A dead oriental magpie robin found in Tseung Kwan O on December 21, 2017 (H5N6)

A dead black-faced spoonbill found in the Hong Kong Wetland Park in Tin Shui Wai on December 21, 2017 (H5N6) An environmental swab of a chopping board and skin swabs of a chilled duck sample taken from a fresh provision shop

in Wan Chai on 2 January & 9 January, 2018 (H5N6)

An oropharyngeal swab from a batch of chilled chicken taken at a fresh provision shop in Mong Kok, reported on 23 January, 2018 (H5N6)

A black-headed gull carcass found in Ngau Hom Tsuen, Lau Fau Shan on February 8, 2018 (H5N6)

A dead crested myna was found at Kun Lung Wai, Fanling tested positive for H5N6 virus on April 9, 2018

A swab sample taken from a bird cage housing a hill myna at a pet bird shop in Yuen Po Street Bird Garden in Mong Kok on 7 April, 2018 (H5N6)

Samples of faecal droppings collected at Mai Po Nature Reserve reported on January 14, 2021 (H5N8)

Table 9. Outside Hong Kong: Confirmed avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds / environmental samples reported in this week – number of reports for various subtypes of virus

| Subtype of virus | No. of reports |
|------------------|----------------|
| H5 | 3 |
| H5N1 | 6 |
| H5N3 | 1 |
| H5N5 | 1 |
| H5N6 | 1 |
| H5N8 | 21 |

Table 10. Outside Hong Kong: Confirmed avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds / environmental samples reported in this week – details of reports

| Places of occurrence | Details | OIE Report Date |
|----------------------|---|--------------------------------------|
| Ireland | Samples from birds in Cavan and Wicklow were tested positive for highly pathogenic avian influenza A(H5N8). | January 8, 2021 |
| Italy | Samples from birds in Veneto were tested positive for highly pathogenic avian influenza A(H5N1) and A(H5N8). | January 11, 2021 January 13, 2021 |
| Italy | Samples from birds in Friuli-Venezia Giulia were tested positive for highly pathogenic avian influenza A(H5N1). | January 11, 2021 |
| France | Samples from poultry in Gers were tested positive for low pathogenic avian influenza A(H5N3). | January 12, 2021 |
| Iran | Samples from poultry in South Khorasan were tested positive for highly pathogenic avian influenza A(H5N8). | January 12, 2021 |

[#] A sample of faecal droppings of live poultry taken from a poultry stall in Yan Oi Market in Tuen Mun was tested positive for H7N9 virus on June 5, 2016.

| Korea | Samples from birds in Chungcheongbuk-Do, Jeollanam-Do, Seoul Metropolitan City, Gyeongsangnam-Do, Busan Metropolitan City and Daegu Metropolitan City were tested positive for highly pathogenic avian influenza A(H5N8). | January 12, 2021 |
|-----------|---|--------------------------------------|
| Kolca | Samples from poultry in Chungcheongnam-Do, Sejong, Jeollabuk-Do, Chungcheongbuk-Do, Jeollanam-Do, Gyeongsangnam-Do and Gyeonggi-Do were tested positive for highly pathogenic avian influenza A(H5N8). | January 12, 2021 |
| Russia | Samples from birds in Respublika Severnaya Osetiya - Alanya were tested positive for highly pathogenic avian influenza A(H5N8). | January 12 2021 |
| Russia | Samples from poultry in Krasnodarskiy Kray were tested positive for highly pathogenic avian influenza A(H5N8). | January 18 2021 |
| Commonwe | Samples from poultry in Mecklenburg-Vorpommern and Niedersachsen were tested positive for highly pathogenic avian influenza A(H5N8). | January 13, 2021 January 15, 2021 |
| Germany | Samples from birds in Hessen, Schleswig-Holstein, Brandenburg and Hamburg were tested positive for highly pathogenic avian influenza A(H5N8). | January 15, 2021 January 18, 2021 |
| Poland | Samples from poultry in Kujawsko-Pomorskie, Warminsko-Mazurskie and Lubuskie were tested positive for highly pathogenic avian influenza A(H5N8). | January 13, 2021 |
| Taiwan | Samples from poultry in Pingtung County and Yunlin County were tested positive for highly pathogenic avian influenza A(H5N5). | January 13, 2021 |
| Cambodia | Samples from poultry in Battambang were tested positive for highly pathogenic avian influenza A(H5N1). | January 14, 2021 |
| Hungary | Samples from poultry in Bacs-Kiskun were tested positive for highly pathogenic avian influenza A(H5N8). | January 14, 2021 |
| Romania | Samples from birds in Constanta were tested positive for highly pathogenic avian influenza A(H5). | January 14, 2021 |
| Vietnam | Samples from poultry in Phu Yen, Bac Ninh, Ha Noi and Quang Ninh were tested positive for highly pathogenic avian influenza A(H5N6). | January 14, 2021 |
| vicuidili | Samples from poultry in Soc Trang, Bac Lieu, Tien Giang and Long An were tested positive for highly pathogenic avian influenza A(H5N1). | January 17, 2021 |
| Belgium | Samples from birds in Liège were tested positive for highly pathogenic avian influenza A(H5). | January 15, 2021 |

| India | Samples from poultry in Haryana were tested positive for highly pathogenic avian influenza A(H5N8). | January 15, 2021 |
|----------|--|------------------|
| | Samples from poultry in Madhya Pradesh and Maharashtra were tested positive for highly pathogenic avian influenza A(H5N1). | January 16, 2021 |
| United | Samples from birds in England were tested positive for highly pathogenic avian influenza A(H5N1) and A(H5N8). | January 15, 2021 |
| Kingdom | Samples from poultry in Northern Ireland were tested positive for highly pathogenic avian influenza A(H5N8). | January 15, 2021 |
| Ukraine | Samples from poultry in Nikolayev were tested positive for highly pathogenic avian influenza A(H5). | January 16, 2021 |
| Slovakia | Samples from birds in Bratislava were tested positive for highly pathogenic avian influenza A(H5N8). | January 18, 2021 |

For cumulative reports of avian influenza A(H5) or other highly pathogenic avian influenza in poultry / wild birds, please refer to the <u>OIE</u> website.

Table 11. Countries / areas with documented human infection with avian influenza A(H7N9) or highly pathogenic avian influenza (including infections in humans/birds and relevant environmental samples) in the past 6 months (as of January 18, 2021)

| Countries / Areas | Human cases | | Poultry cases / other related samples | | Wild bird cases / other related samples | |
|--|------------------|--|---------------------------------------|---|---|--|
| | Subtype of virus | Date of last report / onset of last reported case (Subtype in this report) | Subtype of virus | Date of last report (Subtype in this report) | Subtype of virus | Date of last report (Subtype in this report) |
| Australia | - | - | H7 | 25/08/2020 (H7N7) | - | - |
| Belgium | - | - | Н5 | 27/11/2020 (H5N5) | Н5 | 04/12/2020 (H5N8) 15/01/2021* |
| Cambodia | - | - | H5 | 14/01/2021 (H5N1) | = | - |
| Croatia | - | - | H5 | 21/11/2020 (H5N8) | - | - |
| Denmark | - | - | Н5 | 10/12/2020 (H5N8) | Н5 | 06/11/2020 (H5N5) 17/12/2020 (H5N8) |
| Egypt | - | - | Endemic (H5) | Endemic (H5N1) | - | - |
| France | - | - | Н5 | 08/01/2021 (H5N8) | Н5 | 01/12/2020* 30/12/2020 (H5N8) |
| Germany | - | - | H5 | 11/11/2020 (H5N5) 15/01/2021 (H5N8) | Н5 | 21/12/2020 (H5N3) 22/12/2020 (H5N5) 28/12/2020* 18/01/2021 (H5N8) |
| Hong Kong Special Administrative Region | - | - | - | - | Н5 | 14/01/2021 (H5N8) |
| Hungary | - | - | H5 | 14/01/2021 (H5N8) | Н5 | 11/01/2021 (H5N8) |
| India | - | - | Н5 | 15/01/2021 (H5N8) 16/01/2021 (H5N1) | - | - |
| Indonesia | - | - | Endemic (H5) | Endemic (H5N1) | - | - |
| Iran | - | - | H5 | 12/01/2021 (H5N8) | Н5 | 14/12/2020 (H5N8) |
| Ireland | - | - | H5 | 11/12/2020 (H5N8) | Н5 | 08/01/2021 (H5N8) |
| Israel | - | - | H5 | 27/12/2020 (H5N8) | Н5 | 06/12/2020 (H5N8) |
| Italy | - | - | - | - | Н5 | 27/11/2020* 16/12/2020 (H5N5) 11/01/2021 (H5N1) 13/01/2021 (H5N8) |
| Japan | - | - | H5 | 04/01/2021 (H5N8) | H5 | 04/01/2021 (H5N8) |
| Kazakhstan | - | - | H5 | 16/11/2020* | H5 | 16/09/2020* |

| Countries / Areas | Human cases | | Poultry cases / other related samples | | Wild bird cases / other related samples | |
|-------------------------------------|------------------|--|---------------------------------------|---|---|---|
| | Subtype of virus | Date of last report / onset of last reported case (Subtype in this report) | Subtype of virus | Date of last report (Subtype in this report) | Subtype of virus | Date of last report (Subtype in this report) |
| Korea | - | - | H5 | 12/01/2021 (H5N8) | Н5 | 12/01/2021 (H5N8) |
| Lao People's Democratic Republic | Н5 | 13/10/2020 (H5N1) | Н5 | 13/11/2020 (H5N1) | - | - |
| Lithuania | - | - | H5 | 08/01/2021 (H5N8) | Н5 | 08/01/2021 (H5N8) |
| Mainland China | | | | | | |
| Hunan | Н5 | 13/12/2020 (H5N6) | - | - | - | - |
| Jiangsu | Н5 | 16/11/2020 (H5N6) | - | - | - | - |
| Shanxi | - | - | - | - | H5 | 29/11/2020 (H5N8) |
| Netherlands | - | - | Н5 | 16/12/2020 (H5N1) 06/01/2021 (H5N8) | Н5 | 27/11/2020 (H5N5) 23/12/2020 (H5N1) 04/01/2021 (H5N8) |
| Norway | - | - | - | - | H5 | 23/12/2020 (H5N8) |
| Philippines | - | - | H5 | 22/09/2020 (H5N6) | - | - |
| Poland | - | - | H5 | 13/01/2021 (H5N8) | H5 | 21/12/2020 (H5N8) |
| Romania | - | - | - | - | H5 | 14/01/2021* |
| Russia | - | - | Н5 | 28/09/2020* 03/11/2020 (H5N5) 18/01/2021 (H5N8) | Н5 | 23/12/2020* 12/01/2021 (H5N8) |
| Senegal | - | - | H5 | 06/01/2021 (H5N1) | - | - |
| Slovakia | - | - | - | - | Н5 | 18/01/2021 (H5N8) |
| Slovenia | - | - | - | - | Н5 | 15/12/2020 (H5N8) 04/01/2021 (H5N5) |
| South Africa | - | - | H5 | 24/07/2020 (H5N8) | = | - |
| Spain | - | - | - | - | H5 | 27/11/2020 (H5N8) |
| Sweden | - | - | Н5 | 04/01/2021 (H5N8) | Н5 | 09/12/2020 (H5N5) 23/12/2020 (H5N8) |
| Taiwan | - | - | Н5 | 24/08/2020 (H5N2) 13/01/2021 (H5N5) | Н5 | 31/12/2020* |
| United Kingdom | - | - | Н5 | 18/12/2020 (H5N1) 15/01/2021 (H5N8) | Н5 | 08/01/2021 (H5N5) 15/01/2021 (H5N8) 15/01/2021 (H5N1) |
| Ukraine | - | - | Н5 | 16/01/2021* | - | - |
| Vietnam | - | - | H5 | 14/01/2021 (H5N6) | - | - |

| | Human cases | | Poultry cases / other related samples | | Wild bird cases / other related samples | |
|-------------------|------------------|--|---------------------------------------|---|---|---|
| Countries / Areas | Subtype of virus | Date of last report / onset of last reported case (Subtype in this report) | Subtype of virus | Date of last report (Subtype in this report) | Subtype of virus | Date of last report (Subtype in this report) |
| | | | | 17/01/2021 (H5N1) | | |

Sources: WHO, OIE, NHC and other official websites * without further subtype information