COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 35, 25-31 August 2019

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Monitoring environmental suitability of Vibrio growth in the Baltic Sea – Summer 2019

Opening date: 3 June 2019 Latest update: 30 August 2019

Elevated sea surface temperatures (SST) in marine environments with low salt content offer optimal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. ECDC has developed a model to map the environmental suitability for *Vibrio* growth in the Baltic Sea (ECDC Vibrio Map Viewer).

➔Update of the week

As of 29 August 2019, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium to high in Szczecin Lagoon (Germany and Poland), Koszalin and Ustka (Poland) and on the coast bordering Kaliningrad (Russia) and Klaipeda (Lithuania).

For the next five days, the environmental suitability for *Vibrio* growth will increase in the monitored area. It is considered to be medium to high in Arkona Basin (Denmark and Germany), all of Poland's coastline, Gdansk Bay (Poland and Russia), the Eastern Gotland Basin (Latvia and Lithuania) and Pärnu (Estonia).

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West Nile virus - Multistate (Europe) - Monitoring season 2019

Opening date: 3 June 2019 Latest update: 30 August 2019

During the transmission season, expected to be from June–November 2019, ECDC monitors the occurrence of infections in EU/EEA Member States and EU neighbouring countries and publishes weekly epidemiological updates to inform blood safety authorities of areas at NUTS 3 (Nomenclature of Territorial Units for Statistics 3) or GAUL 1 (Global Administrative Unit Layers 1) level where at least one locally acquired human infection meeting the EU case definition (Commission Implementing Decision (EU) 2018/945) has been reported.

During the 2018 transmission season, 2 083 human cases were reported by EU Member States and EU neighbouring countries. In the same period, EU Member States reported 285 outbreaks among equids.

➔Update of the week

From 22–29 August 2019, EU Member States reported 52 human cases in Greece (38), Romania (7), Hungary (4), Cyprus (2) and Bulgaria (1). An additional four cases were reported in the EU neighbouring Serbia. All human cases were reported from areas that have been affected during previous transmission seasons. This week seven deaths were reported in Greece.

From weeks 33–35, seven outbreaks in equids were reported in the Animal Disease Notification System by Greece (5), Italy (1) and Hungary (1).

Listeriosis – Spain – 2019

Opening date: 23 August 2019 Latest update: 30 August 2019

The Spanish Ministry of Health has reported an outbreak of listeriosis associated with the consumption of roasted pork meat produced by a company in Seville. Cases linked to this outbreak have been reported in different regions in Spain, with the majority of cases reported in Andalusia.

➔Update of the week

As of 29 August 2019 and since the previous CDTR report on 23 August 2019, 29 additional confirmed cases, including two additional deaths, linked to the outbreak have been reported in Spain. Cases previously notified in Catalonia have tested negative.

On 29 August 2019, the Spanish Agency for Consumer Affairs, Food Safety and Nutrition extended the alert to other products commercialised under the brand 'La Mechá' that were not previously notified.

On 23 August 2019, according to the Spanish Ministry of Health, France has reported a case of listeriosis, a UK citizen who consumed roasted pork meat in Seville, Spain. The product was consumed by four other people who also fell ill after the meal.

According to a media report citing local health authorities, on 21 August 2019, the Spanish company that produced the roasted pork meat informed health authorities that a small proportion of the product was also sold as a white label and that these products were recalled on 23 August 2019.

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Non EU Threats

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018-2019

Opening date: 1 August 2018 Latest update: 30 August 2019

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo declared the 10th outbreak of Ebola virus disease in the country. The outbreak affects North Kivu, South Kivu and Ituri Provinces in the northeast of the country close to the border with Uganda. In 2019, several imported cases from the Democratic Republic of the Congo were detected in Uganda. However, Uganda has not reported autochthonous transmission as of 29 August 2019. On 17 July 2019, the International Health Regulations (IHR) Emergency Committee convened and afterwards the WHO Director-General declared that the outbreak meets all the criteria for a public health emergency of international concern (PHEIC) under the IHR.

➔Update of the week

Since the previous CDTR and as of 28 August 2019, WHO and the Ministry of Health of the Democratic Republic of the Congo have reported 70 additional confirmed cases. During the same period, 41 confirmed deaths were reported. Among the new reported cases in the past week, two were healthcare workers. On 28 August 2019, the total number of confirmed and probable cases passed 3 000 cases, with over 2 000 confirmed and probable deaths reported since the beginning of the outbreak.

On 29 August 2019, one new imported case was confirmed in Bwera, Kasese District in Uganda. The case is a nine-year-old girl of Congolese origin who travelled with her mother to Uganda to seek medical care. She was detected as symptomatic at the point of entry and directly taken to an Ebola treatment unit, where she was isolated. A rapid response team has been dispatched to the affected area to assist with response measures such as contact tracing and case management. The Ugandan Minister of Health stated on 30 August 2019 that upon the request of the government of the Democratic Republic of the Congo, both mother and child will be repatriated back to the Democratic Republic of the Congo to receive treatment there. This case is not yet displayed in the map below.

As of 28 August 2019, two new confirmed cases have been reported in Mwenga Health Zone, South Kivu Province since the last CDTR. Both cases were relatives of the cases reported last week and already listed as contacts. There are now a total of six confirmed cases reported in Mwenga Health Zone. In Mwenga, vaccination activities have continued and also been offered to the first line workers.

On 22 August, Nyiragongo Health Zone on the outskirts of Goma completed 21 days of follow-up for all contacts without additionally confirmed cases reported. Surveillance and response activities will continue as the risk of further introduction of Ebola virus disease from active areas remains high.

From 1 January-25 August 2019, 11% of Ebola virus disease infections are thought to be due to possible nosocomial infection.

Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006 Latest update: 30 August 2019

Several countries in Africa, the Americas and Asia have reported cholera outbreaks. Major ongoing outbreaks are reported in the Democratic Republic of the Congo, Haiti and Yemen.

➔Update of the week

Since the last update on 26 July 2019, new cholera cases have been reported worldwide and countries such as Chad and Nepal have reported new outbreaks.

The countries reporting the majority of new cases since the previous update are Yemen (93 284 cases, 81 deaths), the Democratic Republic of the Congo (1 931 cases, seven deaths), Somalia (691 cases) and Nigeria (518 cases, three deaths).

Additionally, WHO has closed the events for outbreaks in Mozambique and Tanzania during this period.

Influenza A(H5N6) – China – Monitoring human cases

Opening date: 17 January 2018 Latest update: 30 August 2019

Animal influenza viruses that cross the animal-human divide to infect people are considered novel to humans and have the potential to become pandemic threats. In 2014, a novel avian influenza A(H5N6) reassortant causing a human infection was detected in China.

➔Update of the week

One new human case of avian influenza A(H5N6) was reported in August 2019 from China. The case is a 59-year-old woman from Beijing who was hospitalised in critical condition on 11 August 2019. This is the first human case of A(H5N6) reported from Beijing and the first reported case in 2019.

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II. Detailed reports

Monitoring environmental suitability of Vibrio growth in the Baltic Sea – Summer 2019

Opening date: 3 June 2019 Latest update: 30 August 2019

Epidemiological summary

As of 29 August 2019, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium to high in Szczecin Lagoon (Germany and Poland), Koszalin and Ustka (Poland) and on the coast bordering Kaliningrad (Russia) and Klaipeda (Lithuania).

For the next five days, the environmental suitability for *Vibrio* growth will increase in the monitored area. It is considered to be medium to high in Arkona Basin (Denmark and Germany), all of Poland's coastline, Gdansk Bay (Poland and Russia), the Eastern Gotland Basin (Latvia and Lithuania) and Pärnu (Estonia).

Sources: ECDC Vibrio Map Viewer | National Environmental Satellite, Data and Information Service

The model has been calibrated to the Baltic region in northern Europe and may not apply to other worldwide settings prior to validation. For the Baltic Sea, the model parameters to be used in the map are the following values: number colour bands (20) scale method linear, legend range minimum value: 0 and maximum value: 28.

ECDC assessment

Elevated SSTs in marine environments with low salt content offer ideal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. Open ocean environments do not offer appropriate growth conditions for these bacteria due to high salt content, low temperatures and limited nutrient content. These *Vibrio* species can cause vibriosis infections, particularly *V. parahaemolyticus*, *V. vulnificus* and non-toxigenic *V. cholera*.

Vibriosis in humans caused by these species in the Baltic region has occurred in the past during hot summer months, particularly when SSTs are elevated (above 20 degrees Celsius). The most common clinical manifestations are gastroenteritis with nausea, vomiting and diarrhoea, wound infections when a cut has been exposed, infected wounds or abrasions due to contaminated seawater, primary septicaemia and otitis externa. Risk factors for illness apart from contact with natural bodies of waters, especially marine or estuarine waters, also include the consumption of shellfish, particularly raw oysters.

Actions

ECDC monitors this threat on a weekly basis during the summer of 2019 and reports on increased environmental suitability for the growth of *Vibrio* species.

West Nile virus - Multistate (Europe) - Monitoring season 2019

Opening date: 3 June 2019 Latest update: 30 August 2019

Epidemiological summary

From 22–29 August 2019, EU Member States reported 52 human cases in Greece (38), Romania (7), Hungary (4), Cyprus (2) and Bulgaria (1). An additional four cases were reported in the EU neighbouring Serbia. All human cases were reported from areas that have been affected during previous transmission seasons. This week seven deaths were reported in Greece.

From weeks 33–35, seven outbreaks in equids were reported in the Animal Disease Notification System by Greece (5), Italy (1) and Hungary (1).

Since the beginning of the 2019 transmission season and as of 29 August 2019, EU Member States and EU neighbouring countries reported 184 human infections. EU Member States reported 170 cases in Greece (126), Romania (19), Cyprus (11), Hungary (7), Italy (3), Bulgaria (2), Austria (1) and France (1). Fourteen cases have been reported by Serbia (7) and Turkey (7) in EU neighbouring countries.

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To date, 17 deaths due to West Nile virus infection have been reported by Greece (13), Romania (2), Cyprus (1) and Serbia (1).

During the current transmission season, 14 outbreaks among equids have been reported by Greece (11), Italy (2) and Hungary (1).

ECDC link: West Nile virus infection atlas
Sources: TESSy | Animal Disease Notification System

ECDC assessment

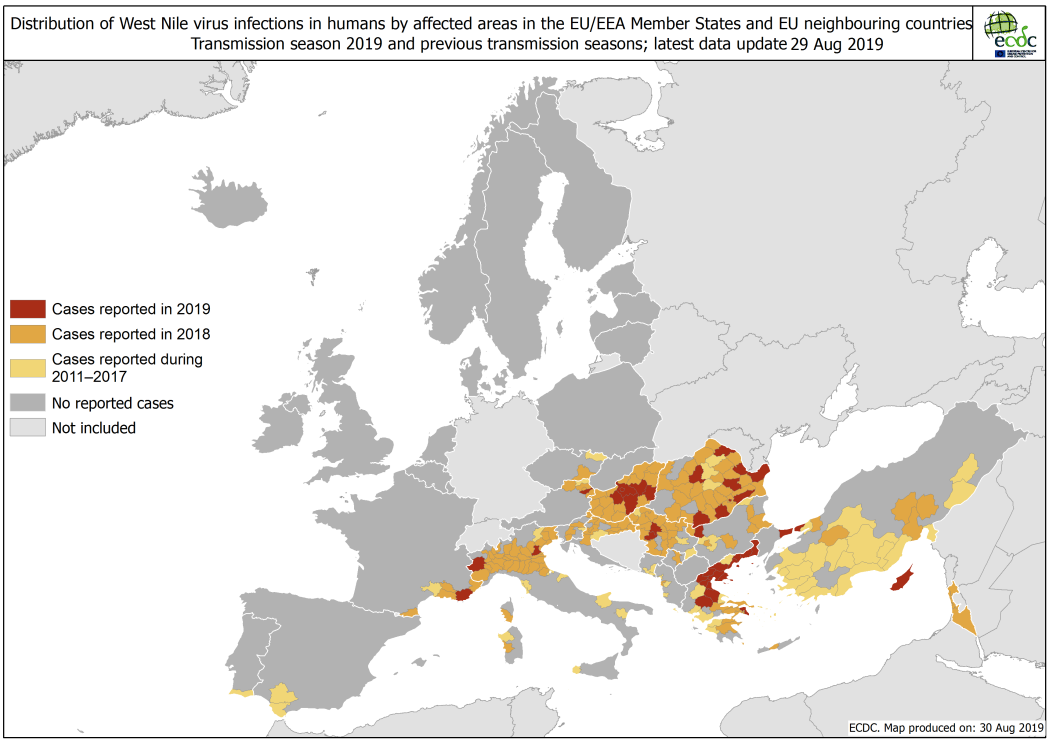
Human infections have been reported in EU Member States with known persistent transmission of West Nile virus in previous years. All human cases reported during the current transmission season have been reported in previously affected countries. In accordance with European Commission Directive 2014/110/EU, prospective donors should be deferred for 28 days after leaving a risk area for locally acquired infections unless the results of an individual nucleic acid test are negative.

Actions

During the transmission season, ECDC publishes West Nile virus infection maps together with an epidemiological summary every Friday.

Distribution of human West Nile virus infections by affected areas as of 29 August 2019.

ECDC



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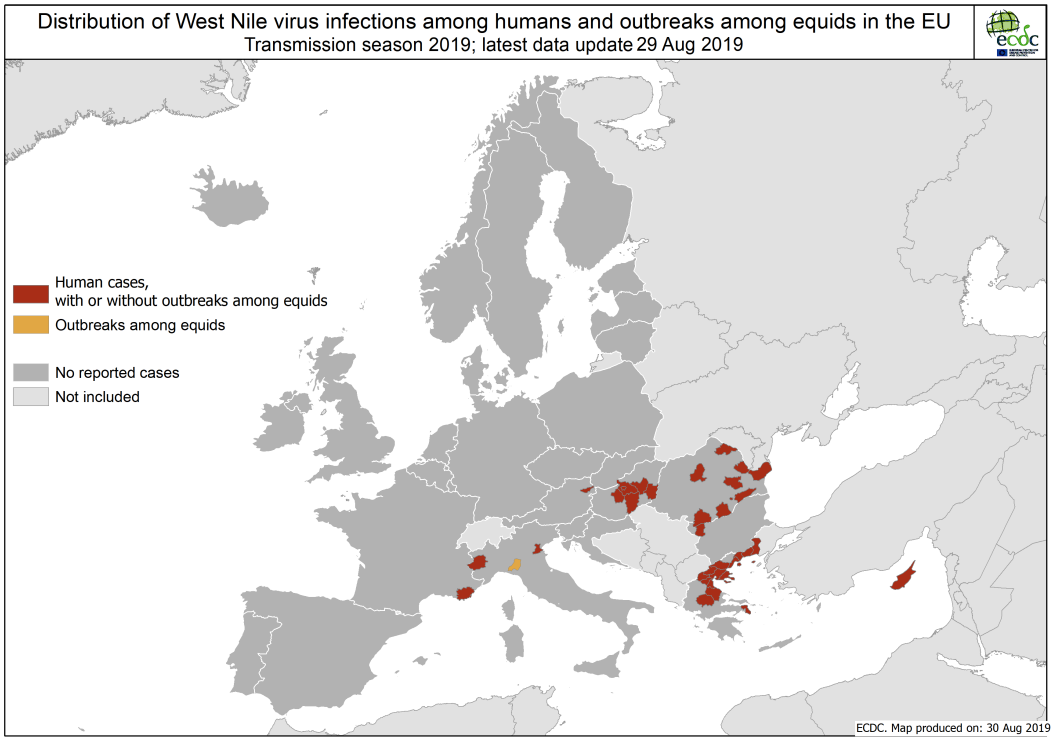
Distribution of West Nile virus infections among humans and outbreaks among equids in the EU as of 29 August 2019.

ECDC and ADNS



Listeriosis – Spain – 2019

Opening date: 23 August 2019 Latest update: 30 August 2019

Epidemiological summary

On 16 August 2019, regional health authorities in Andalusia reported an outbreak of listeriosis associated with the consumption of roasted pork meat produced by a company in Seville, Spain. The product was commercialised under the brand 'La Mechá' and a small proportion of the product was also sold as a white label.

As of 29 August 2019, 204 confirmed cases linked to this outbreak have been reported in Spain. Three deaths among confirmed cases have been reported in patients with underlying conditions and the cause of death is under investigation. So far, cases have been reported in Andalusia (197), Aragon (3), Extremadura (2), Castile and León (1) and Madrid (1). In addition, 62 probable and 52 suspected cases have been reported in different Spanish regions and are under investigation.

As of 29 August 2019 and according to Spanish authorities, the implicated product was distributed mainly in Andalusia, but also in Madrid, Castilla–La Mancha, Castile and León, Extremadura and the Canary Islands. According to the same sources, the company has recalled all products manufactured since May 2019 and discontinued production.

On 29 August 2019, the Spanish Agency for Consumer Affairs, Food Safety and Nutrition extended the alert to other products commercialised under the brand 'La Mechá' that were not previously notified.

Source: Spanish Ministry of Health | Spanish Agency for Consumer Affairs, Food Safety and Nutrition | El País | Spanish Agency for Consumer Affairs, Food Safety and Nutrition

ECDC assessment

A large outbreak of listeriosis associated with the consumption of contaminated roasted pork meat is ongoing in Spain, mostly in the southern region of Andalusia. In addition, a UK citizen identified in France is suspected to be associated with the same outbreak. Whole-genome sequencing analysis of the Spanish and French sequences may confirm or discard the association of this later case to the outbreak.

As of 28 August 2019 and according to the Spanish Agency for Consumer Affairs, Food Safety and Nutrition and the Spanish

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Ministry of Health, the implicated product has been withdrawn and recalled from the market. Such a measure decreases the risk of new infections. However, due to the expiration date of the product and long incubation period of listeriosis (up to 70 days), new cases are expected to be identified in the coming weeks. Since the area is a popular tourist destination, additional cases may also be identified outside of Spain.

More information regarding listeriosis is available on ECDC's website.

Actions

ECDC will monitor this event through epidemic intelligence activities and report again if relevant epidemiological updates become available.

Ebola virus disease - tenth outbreak - Democratic Republic of the Congo - 2018 -2019

Opening date: 1 August 2018 Latest update: 30 August 2019

Epidemiological summary

In the Democratic Republic of the Congo, since the beginning of the outbreak a year ago and as of 28 August 2019, there have been 3 004 cases (2 899 confirmed, 105 probable), including 2 006 deaths (1 901 confirmed, 105 probable), according to WHO and the Ministry of Health of the Democratic Republic of the Congo. This includes the three cases and three deaths that were previously reported as having travelled to Uganda. Beni and Mandima are currently the most active health zones.

As of 28 August 2019, 156 healthcare workers have been infected.

Twenty-nine health zones in three provinces have reported confirmed or probable Ebola virus disease cases: Mwenga in South Kivu Province, Alimbongo, Beni, Biena, Butembo, Goma, Kalunguta, Katwa, Kayna, Kyondo, Lubero, Mabalako, Manguredjipa, Masereka, Mutwanga, Musienene, Nyiragongo, Oicha, Pinga and Vuhovi Health Zones in North Kivu Province and Ariwara, Bunia, Mambasa, Nyankunde, Komanda, Lolwa, Mandima, Rwampara and Tchomia Health Zones in Ituri Province.

Public health emergency of international concern (PHEIC): On 17 July 2019, the WHO Director-General declared the Ebola virus disease outbreak in the Democratic Republic of the Congo a PHEIC. This declaration followed the fourth IHR Emergency Committee for Ebola virus disease in the Democratic Republic of the Congo on 17 July 2019. The declaration was made in response to the geographic spread observed in recent weeks, as well as the need for a more intensified and coordinated response in order to end the outbreak.

Sources: Ebola dashboard Democratic Republic of the Congo | CMRE | Ministry of Health of the Democratic Republic of the Congo | WHO | WHO Regional Office for Africa

ECDC assessment

ECDC assessment: The detection of cases that have travelled to a bordering province or country as Uganda is not unexpected. However, the use of crowded public transport over a long distance and possible nosocomial transmission are of concern in regards to the risk of onward transmission.

Implementing response measures remains challenging in affected areas because of the prolonged humanitarian crisis, unstable security situation and resistance among several sectors of the population. A substantial proportion of cases is detected among individuals not previously identified as contacts, stressing the need to maintain enhanced surveillance and identify the chains of transmission.

The fact that the outbreak is ongoing in areas with cross-border population flow with Rwanda, South Sudan, Burundi and Uganda remains of particular concern. So far, the identification of these imported cases to previously non-affected areas or the PHEIC does not change the overall risk for the EU/EEA, which remains very low.

WHO assessment: As of 29 August 2019, the WHO assessment for the Democratic Republic of the Congo states that the risk of spread remains low at the global level and very high at national and regional levels. There is cause for concern linked to the increased risk of geographical spread, both within the Democratic Republic of the Congo and to neighbouring countries.

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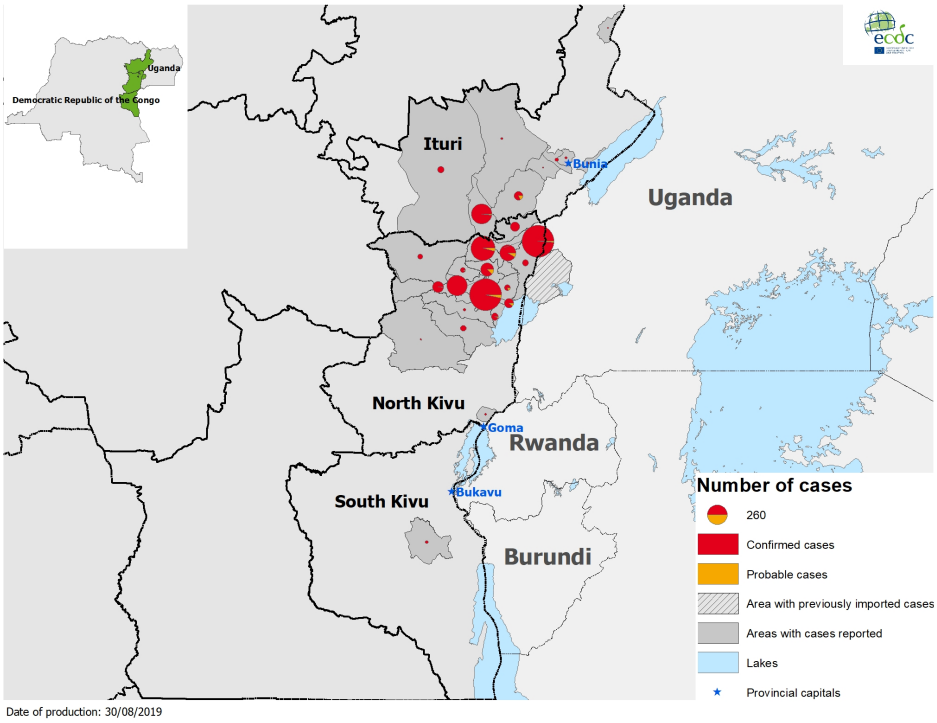
Actions

ECDC published an epidemiological update on 13 June 2019 and updated its rapid risk assessment on 7 August 2019.

Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu, South Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 28 August 2019

Source: ECDC



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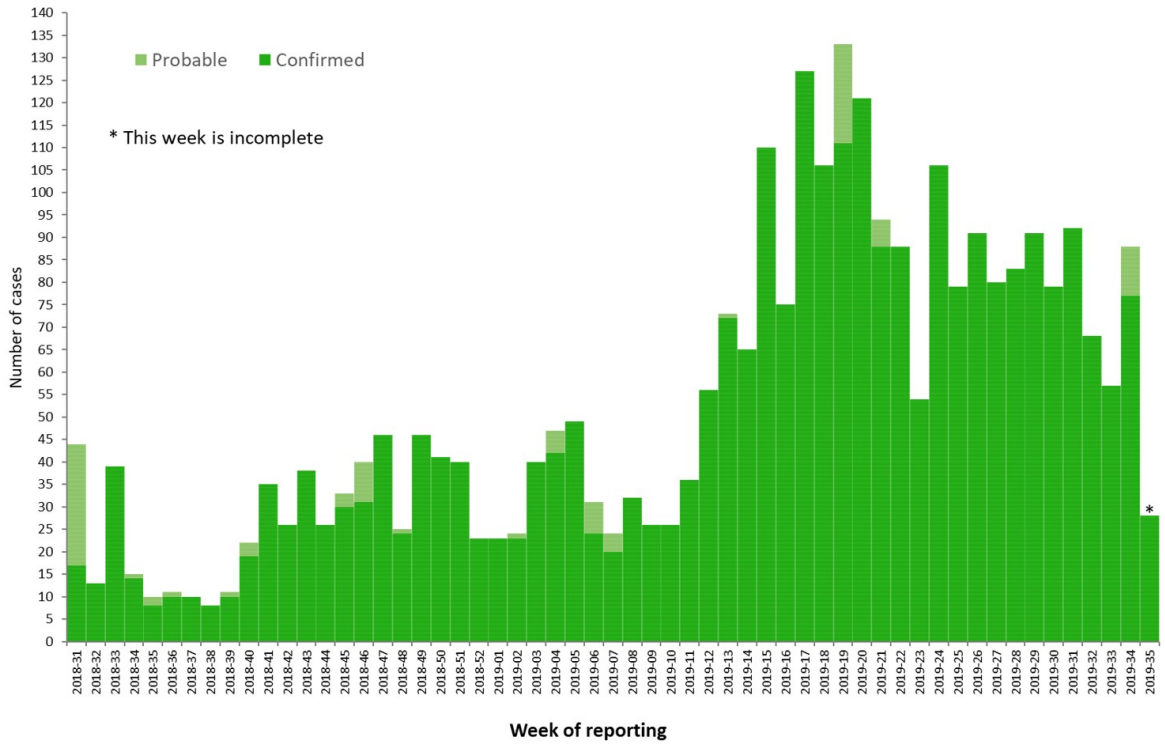
Distribution of confirmed and probable cases of Ebola Virus Disease, North Kivu, South Kivu and Ituri, Democratic Republic of the Congo, as of 28 August 2019

Source: ECDC



Ebola Virus Disease case distribution in DRC as of 28 August 2019

Source: ECDC

	Number of confirmed cases	Number of probable cases	Confirmed and probable cases	Number of deaths	Conf/Prob cases in past 7 days
Democratic_Republic_of_the_Congo	2899	105	3004	2006	
North-Kivu	2545	92	2637	1807	
Alimbongo	5	0	5	2	
Beni	659	9	668	426	ACTIVE
Biena	16	1	17	13	
Butembo	277	0	277	332	ACTIVE
Goma	1	0	1	1	
Kalunguta	160	15	175	80	ACTIVE
Katwa	645	23	668	475	ACTIVE
Kayna	22	0	22	8	ACTIVE
Kyondo	20	4	24	17	
Lubero	31	2	33	6	
Mabalako	371	17	388	292	ACTIVE
Manguredjipa	18	0	18	12	
Masereka	50	6	56	23	
Musienene	81	1	82	34	
Mutwanga	27	0	27	10	ACTIVE
Nyiragongo	3	0	3	1	
Oicha	55	0	55	24	ACTIVE
Pinga	1	0	1	0	
Vuhovi	103	14	117	51	
Ituri	348	13	361	197	
Ariwara	1	0	1	1	
Bunia	4	0	4	4	
Komanda	42	9	51	35	ACTIVE
Lolwa	3	0	3	1	ACTIVE
Mambasa	27	0	27	9	ACTIVE
Mandima	260	4	264	141	ACTIVE
Nyakunde	1	0	1	1	
Rwampara	8	0	8	3	
Tchomia	2	0	2	2	
South-Kivu	6	0	6	2	
Mwenga	6	0	6	2	ACTIVE
Cumulative Total	**2899**	**105**	**3004**	**2006**	

Cholera – Multistate (World) – Monitoring global outbreaks

Opening date: 20 April 2006 Latest update: 30 August 2019

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Epidemiological summary

Americas

Dominican Republic: No new cases have been reported in the Dominican Republic since the last update on 26 July 2019. So far in 2019 and as of 3 August 2019, the Dominican Republic has reported 12 cases and no associated deaths. During the same period in 2018, the Dominican Republic reported 18 cases.

Haiti: In 2019 and as of 3 August 2019, Haiti has reported 511 cases, including three deaths (CFR: 0.6%), an increase of 53 cases and no deaths since the previous CDTR update. In 2018, Haiti reported 3 777 cases, including 41 deaths (CFR: 1.1%). Since the beginning of the outbreak in 2010 and as of 3 August 2019, Haiti has reported 820 288 suspected cases, including 9 792 deaths (CFR: 1.2%).

Africa

Benin: In July 2019, an outbreak was reported in Benin. As of 22 August 2019, 40 cases with no associated deaths have been reported in Atlantique and Littoral Departments. Among these cases, 17 have been confirmed for *Vibrio cholerae* O1. This represents an increase of 31 cases since the previous CDTR update.

Burundi: In June 2019, a cholera outbreak was reported in Burundi. As of 28 July, 199 cases, including one associated death (CFR: 0.5%) have been reported in Bujumbura Mairie and Cibitoke Provinces. Among these cases, 32 have been confirmed for *Vibrio cholerae* Ogawa. This represents an increase of 75 cases and one death since the previous CDTR update.

Cameroon: From February–August 2019, Cameroon reported 467 cases, including 23 associated deaths (CFR: 4.9%), in the North and Far North Regions. Among these cases, 91 were laboratory-confirmed.

Chad: In July 2019, a new outbreak was reported in Youe health district in southwestern Chad bordering Cameroon. As of 24 July 2019, 15 cases, including one associated death (CFR: 6.7%), have been reported. Among these cases, two have been confirmed for *Vibrio cholerae* O1 Inaba.

Democratic Republic of the Congo: In 2019 and as of 4 August 2019, the Democratic Republic of the Congo has reported 15 331 suspected cases, including 287 deaths (CFR: 1.9%), an increase of 1 931 cases and seven deaths since the previous CDTR update. According to the same sources, the majority of these cases were reported in North Kivu and South Kivu Provinces. In all of 2018, 31 387 cases, including 1 042 deaths, were notified across the country (CFR: 3.3%).

Ethiopia: As of 11 August 2019 and since the beginning of the outbreak in May 2019, 1 097 cases, including 11 associated deaths (CFR: 1%), have been reported in Ethiopia, an increase of 409 cases since the previous CDTR update. Among these cases, 42 were confirmed. Five regions and two administrative cities are reporting cases: Addis Ababa, Afar, Amhara, Dire Dawa, Oromia, Somali and Tigray.

Kenya: In 2019 and as of 18 August, 3 710 cases including 26 associated deaths (CFR: 0.7%) have been reported. An outbreak remains active in Garissa, Kajiado, Mandera, Nairobi and Wajir Counties. This represents an increase of 277 cases and two deaths since the previous CDTR update.

Mozambique: WHO considers the outbreak in Mozambique closed. The outbreak was declared after Cyclones Idai and Kenneth in March and April respectively this year. As of 25 June 2019, WHO reported 7 052 cases, including eight associated deaths (CFR: 0.1%), in Mozambique.

Nigeria: Since the beginning of the outbreak in May 2019 and as of 23 August 2019, Nigeria has reported 674 cases, including four associated deaths (CFR: 0.6%). Among these cases, 149 were laboratory-confirmed. Cases have been reported in four regions: Girei, Song, Yola North and Yola South. This represents an increase of 518 cases and three deaths since the previous CDTR update.

Somalia: As of 4 August 2019, WHO has reported 8 493 suspected cases, including 46 associated deaths (CFR: 0.5%), since December 2017, an increase of 691 cases and no deaths since the previous CDTR update.

Tanzania: WHO considers the cholera outbreak in Tanzania closed. Since the outbreak was declared in January 2019, Tanzania has reported 424 cases, including eight associated deaths (CFR: 1.9%). The last case reported in Zanzibar was on 11 July 2017.

Uganda: As of 14 July 2019, 46 cases, including one associated death, have been reported in Bududa District near Kenya. This represents an increase of 35 cases and one death since the previous CDTR update. An outbreak was declared in the country on 24 June 2019 by the Ministry of Health.

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Asia

India: According to the Indian National Centre for Disease Control, cholera cases have reported in different locations across India during June 2019. According to the source, cholera cases were reported in Punjab (141, including four confirmed cases), Delhi (4) and Gujarat (3).

Nepal: According to media sources citing health authorities, a new cholera outbreak has been reported in Dadeldhura District, West Nepal, which borders India. According to these sources, since the first cases were reported on 29 July 2019 and as of 20 August 2019, nine confirmed cases and no associated deaths have been reported.

Yemen: Since the beginning of the outbreak and as of 24 August 2019, Yemen has reported 1 986 992 suspected cases and 3 567 deaths (CFR: 0.2%), an increase of 93 284 cases and 81 deaths since the last CDTR update.

N.B: Data presented in this report originate from several sources, both official public health authorities and non-official, such as media.
Data completeness depends on the availability of reports from surveillance systems and their accuracy, which varies between countries.
All data should be interpreted with caution as there may be areas of under-reporting and figures may not reflect the actual epidemiological situation.

ECDC assessment

Cholera cases continue to be reported in East Africa, the Gulf of Aden and the Horn of Africa over the past few months. Cholera outbreaks have also been notified in West and southern Africa. Despite the number of cholera outbreaks reported worldwide, few cases are reported each year among returning EU/EEA travellers. In this context, the risk of cholera infection in travellers visiting these countries remains low even though sporadic importation of cases in the EU/EEA is possible. In 2017, 17 cases were reported in the EU/EEA Member States, while 23 cases were reported in 2016 and 24 in 2015. All cases had travel history to cholera-affected areas.

According to WHO, vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers.

Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing hands with soap, eating thoroughly cooked food and avoiding the consumption of raw seafood products.

Actions

ECDC monitors cholera outbreaks globally through epidemic intelligence activities in order to identify significant changes in epidemiology and inform public health authorities. Reports are published on a monthly basis.

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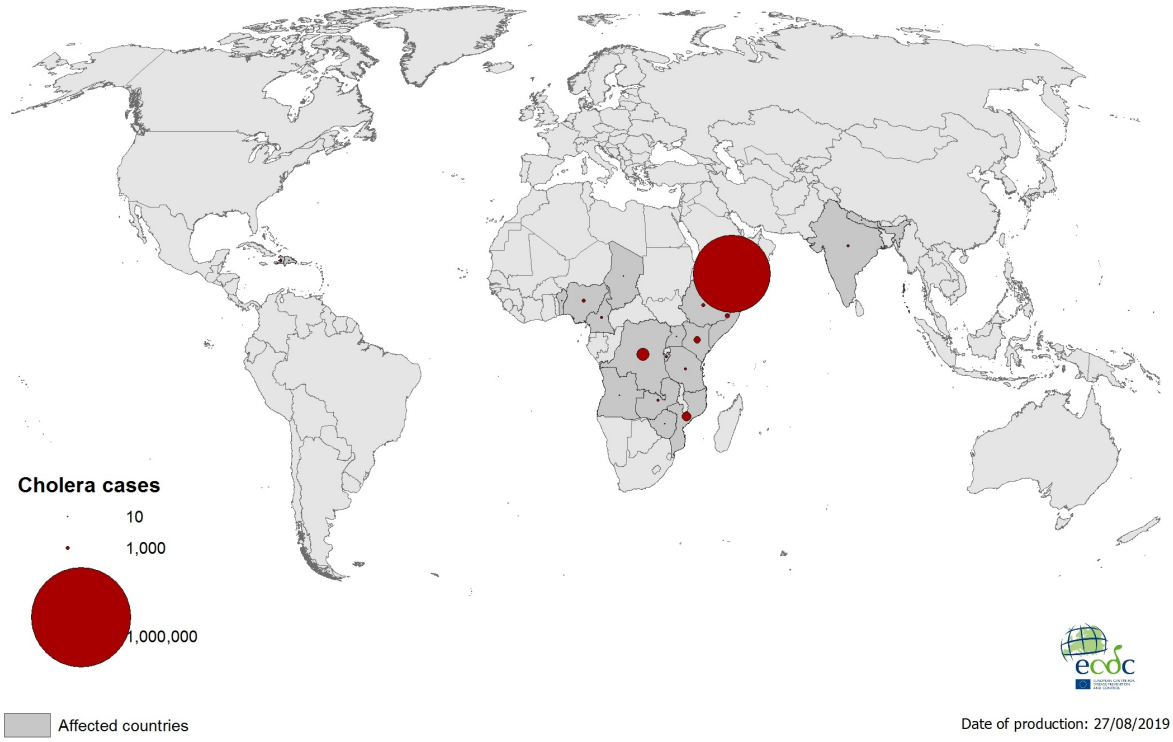
Geographical distribution of cholera cases reported worldwide in 2019

Source: ECDC



European Centre for Disease Prevention and Control (ECDC)
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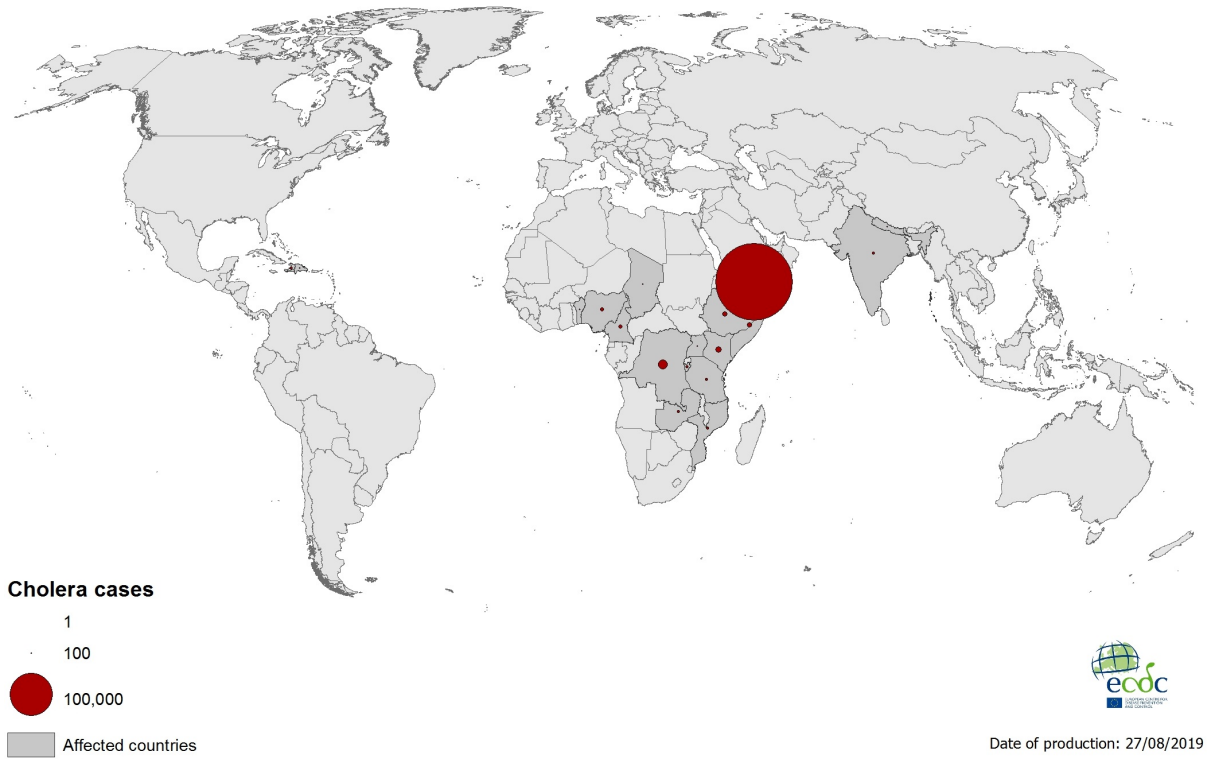
Geographical distribution of new cholera cases reported worldwide between June to August 2019

Source: ECDC



Influenza A(H5N6) – China – Monitoring human cases

Opening date: 17 January 2018 Latest update: 30 August 2019

Epidemiological summary

Since 2014 and as of 28 August 2019, China has reported 24 human cases of influenza A(H5N6). The cases have occurred in Anhui (1), Fujian (1), Guangdong (8), Hubei (1), Hunan (4), Sichuan (1), Jiangsu (1) and Yunnan Provinces (2), Guangxi Zhuang Autonomous Region (4) and Beijing (1). Of the cases, 16 have died. All cases had exposure to live poultry or live poultry markets, except for five cases where the exposure source was not reported. No clustering of cases has been reported.

Additionally, one case with year of onset in 2015 has been reported in literature. The case is not included in the above data.

Sources: ECDC Avian influenza page | WHO Avian and other zoonotic influenza page | WHO Avian Influenza Weekly Update | ECDC/EFSA joint report: Avian influenza overview November 2018 - February 2019 | Government of Hong Kong Special Administrative Region

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ECDC assessment

Although avian influenza A(H5N6) has caused severe infection in humans, human infections remain rare and no sustained human-to-human transmission has been reported. However, characterisation of the virus is ongoing and its implication to the evolution and potential emergence of a pandemic strain is unknown. According to WHO, the risk of international disease spread is considered to be low.

The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to remain very low. As the likelihood of zoonotic transmission of newly introduced or emerging reassortant avian influenza viruses is unknown, the use of personal protective measures for people exposed to avian influenza viruses will minimise the remaining risk.

Assessment related to outbreaks in poultry in Europe

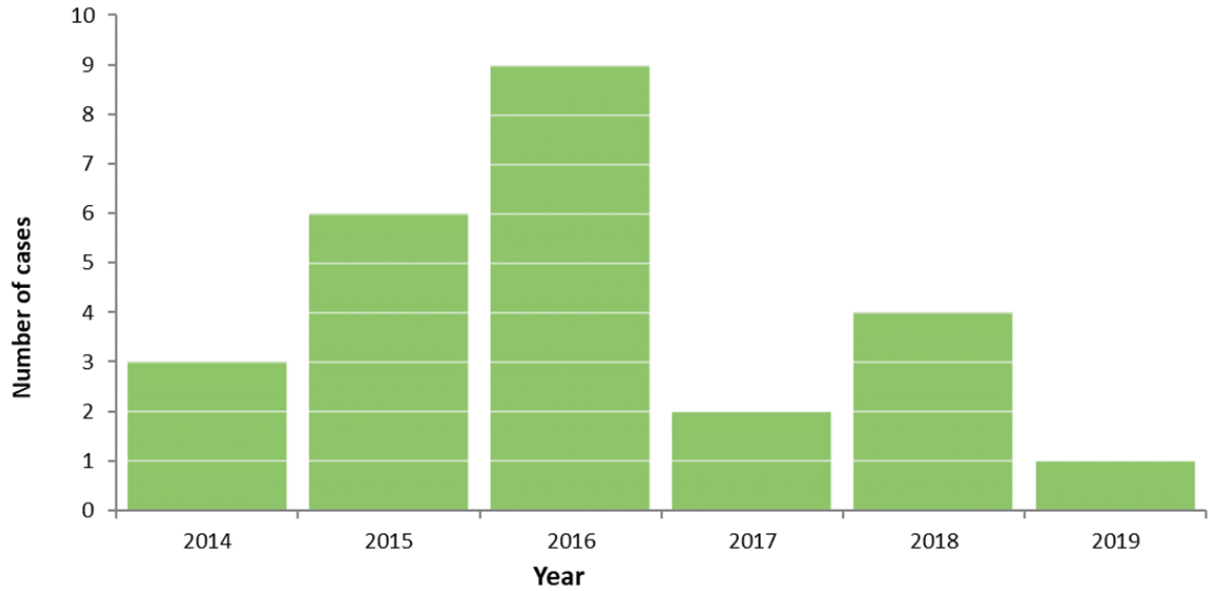
The World Organisation for Animal Health/Food and Agriculture Organization/EU reference laboratory for avian influenza at the Animal and Plant Health Agency Weybridge has conducted a detailed genetic analysis of a small number of H5N6 highly pathogenic avian influenza viruses recently detected in both Europe and Asia. The European strains can be differentiated from those associated with zoonotic infection in Asia. Furthermore, they do not carry any virulence markers strongly associated with human infection risk. In addition, there have been no reported human infections with this particular genetic sublineage of H5N6 highly pathogenic avian influenza to date.

Actions

ECDC monitors outbreaks of avian influenza in humans through epidemic intelligence.

Distribution of confirmed cases of A(H5N6) by year of onset 2014 – 2019 (n=25)

Hong Kong



*If the date of onset is not available the date of reporting has been used

** the epicurve includes one case reported in the literature with year of onset in 2015

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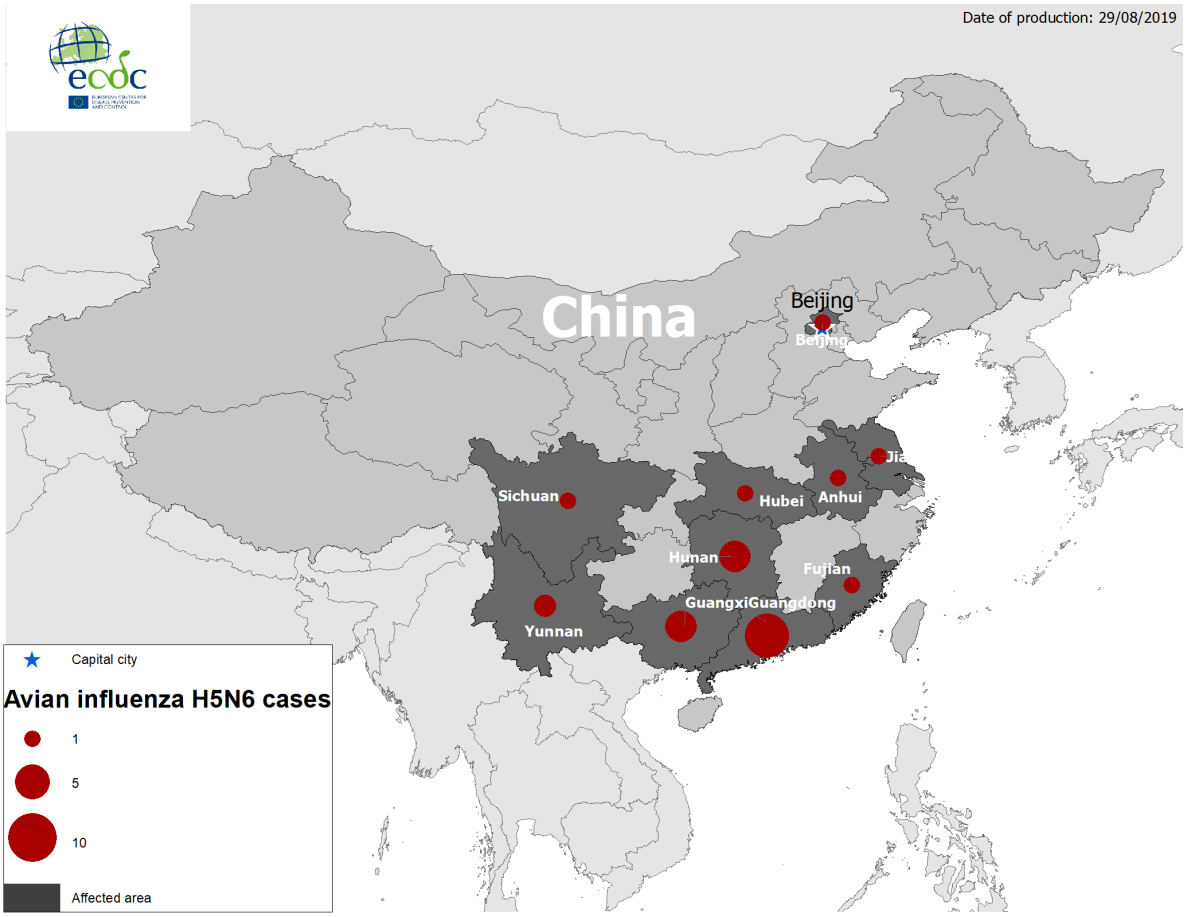
Geographical distribution of confirmed cases of A(H5N6), China, 2014 – 2019

Hong Kong



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