

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Influenza – Multistate (Europe) – Monitoring 2014–2015 season

Opening date: 9 October 2014

Latest update: 23 January 2015

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes the results on its website in the weekly Flu News Europe.

→ Update of the week

In week 03/2015, the number of countries in the WHO European Region with increased influenza activity continued to rise, particularly in the west and north, and the proportion of sentinel specimens testing positive for influenza virus increased to 40% from 35% in the previous week.

Although influenza activity remained low in most countries in the Region, 15 of 39 countries reported medium activity.

Influenza A(H3N2) viruses continued to predominate in most countries, according to data from primary care, the numbers of laboratory-confirmed hospitalised cases and other information.

Non EU Threats

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 23 January 2015

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission stops and the world is polio-free.

Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014 due to concerns regarding the increased circulation and the international spread of wild poliovirus during 2014. On 14 November, the Temporary Recommendations in relation to PHEIC were extended for a further three months.

→ Update of the week

During the past week, seven cases of wild poliovirus have been reported to WHO from Pakistan. Six of the cases had onset of disease in 2014 and one case in 2015.

Middle East respiratory syndrome – coronavirus (MERS CoV) – Multistate

Opening date: 24 September 2012

Latest update: 22 January 2015

Since April 2012, 981 cases of MERS-CoV have been reported by local health authorities worldwide, including 399 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East, or have returned from this area. The source of the virus remains unknown, but the pattern of transmission and virological studies points towards dromedary camels in the Middle East being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

→Update of the week

Since the last CDTR, [Saudi Arabia](#) has reported seven new cases of MERS-CoV infection.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 23 January 2015

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, mainly affecting Guinea, Liberia and Sierra Leone. The situation in the affected countries remains serious. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC).

→Update of the week

Since the last CDTR published on 16 January 2015, and as of 18 January 2015, WHO has reported 297 additional confirmed, probable and suspected EVD cases in the affected countries and 182 additional deaths.

As of 20 January 2015, [WHO](#) has reported 21 759 confirmed, probable, and suspected cases of Ebola virus disease, with 8 668 deaths, in three affected countries (Guinea, Liberia and Sierra Leone) and five previously affected countries (Nigeria, Senegal, Spain, the United States of America and Mali).

On 18 January 2015, the Government of Mali and [WHO](#) declared the country Ebola free, 42 days after the last patient tested negative on 6 December 2014.

According to the [WHO latest Situation Report](#) case incidence continues to fall in Guinea, Liberia, and Sierra Leone, with a halving time of 1.4 weeks in Guinea, 2.0 weeks Liberia, and 2.7 weeks in Sierra Leone. A combined total of 145 confirmed cases were reported from the three countries in the week ending 18 January: 20 in Guinea, 8 in Liberia, and 117 in Sierra Leone.

On 21 January, [WHO](#) published a statement following the fourth meeting of the IHR Emergency Committee regarding the Ebola outbreak in West Africa. It was the unanimous view of the Committee that the event continues to constitute a Public Health Emergency of International Concern (PHEIC). The Committee reviewed the temporary recommendations previously issued and stated that all previous temporary recommendations should remain in effect. The Committee expressed concern that additional measures affecting travel, transport and trade that go beyond the temporary recommendations have been put in place in more than 40 countries.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 22 January 2015

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, 485 cases have been reported including 185 deaths. No autochthonous cases have been reported from outside of China. Most cases have been unlinked, and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak. Sustained person-to-person transmission has not been documented and transmission peaked during the winter of 2013-2014. The reason for this pattern is not obvious.

→Update of the week

Since the last update of 15 January 2015, WHO has reported 15 additional laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus, including three deaths, in China from previously affected areas: Onset dates of confirmed cases range from 11 to 26 December 2014. Cases have been reported in the provinces of Fujian (5), Jiangsu (4), Xinjiang (1), Zhejiang (4) and Guangdong (1). All cases but one had known exposure to poultry prior to falling ill.

II. Detailed reports

Influenza – Multistate (Europe) – Monitoring 2014–2015 season

Opening date: 9 October 2014

Latest update: 23 January 2015

Epidemiological summary

Overall, influenza A(H3N2) viruses have been the predominant viruses detected across all surveillance systems, although some countries reported either influenza A(H1N1)pdm09 or influenza B virus.

In addition, most of the A(H3N2) viruses characterised genetically belong to genetic subgroups containing viruses that have drifted antigenically compared to the A(H3N2) virus used in the 2014–2015 northern hemisphere influenza vaccine.

Web sources: [Flu News Europe](#) | [ECDC Influenza](#) |

ECDC assessment

The influenza season is underway, mainly in western and northern European countries: the overall proportion of influenza-positive sentinel specimens was above 10% for the fifth consecutive week, despite most countries still reporting low intensity of influenza activity.

Actions

ECDC and WHO produce the [Flu News Europe](#) bulletin weekly.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 23 January 2015

Epidemiological summary

Worldwide in 2014, 356 cases had been reported to WHO, compared with 416 in 2013. In 2014, nine countries reported cases: Pakistan (303 cases), Afghanistan (28 cases), Nigeria (6 cases), Equatorial Guinea (5 cases), Somalia (5 cases), Cameroon (5 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case). There has been one case reported so far in 2015 (compared with 4 for the same period in 2014).

After the declaration of a PHEIC, WHO issued a set of Temporary Recommendations that call for the vaccination of all residents in, and long-term visitors to, countries with polio transmission prior to international travel.

Web sources: [Polio Eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#) | [Temporary Recommendations to Reduce International Spread of Poliovirus](#)

ECDC assessment

Europe is polio-free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

The confirmed circulation of WPV in several countries and the documented exportation of WPV to other countries support the fact that there is a potential risk for WPV being re-introduced to the EU/EEA. The highest risk of large poliomyelitis outbreaks occurs in areas with clusters of unvaccinated populations and in people living in poor sanitary conditions, or a combination of the two.

References: [ECDC latest RRA](#) | [Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA](#) | [Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA?](#) | [WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus, 5 May 2014](#) | [WHO statement on the third meeting of the International Health Regulations Emergency Committee regarding the international spread of wild poliovirus, 14 November 2014](#)

Actions

ECDC follows reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being re-introduced to the EU.

Following the declaration of polio as a PHEIC, ECDC updated its [risk assessment](#). ECDC has also prepared a background document with travel recommendations for the EU.

On 4 September 2014, [ECDC](#) published a news item regarding the WHO IHR Emergency Committee decision to add Equatorial Guinea as a wild-poliovirus-exporting country and the renewal of the WHO PHEIC recommendations.

Middle East respiratory syndrome – coronavirus (MERS CoV) – Multistate

Opening date: 24 September 2012

Latest update: 22 January 2015

Epidemiological summary

Since April 2012 and as of 22 January 2015, 981 cases of MERS-CoV have been reported by local health authorities worldwide, including 399 deaths. The distribution is as follows:

Confirmed cases and deaths by region:

Middle East

Saudi Arabia: 842 cases/363 deaths
United Arab Emirates: 73 cases/9 deaths
Qatar: 9 cases/4 deaths
Jordan: 19 cases/6 deaths
Oman: 4 cases/3 deaths
Kuwait: 3 cases/1 death
Egypt: 1 case/0 deaths
Yemen: 1 case/1 death
Lebanon: 1 case/0 deaths
Iran: 5 cases/2 deaths

Europe

Turkey: 1 case/1 death
UK: 4 cases/3 deaths
Germany: 2 cases/1 death
France: 2 cases/1 death
Italy: 1 case/0 deaths
Greece: 1 case/1 death
Netherlands: 2 cases/0 deaths
Austria: 1 case/0 deaths

Africa

Tunisia: 3 cases/1 death
Algeria: 2 cases/1 death

Asia

Malaysia: 1 case/1 death
Philippines: 1 case/0 deaths

Americas

United States of America: 2 cases/0 deaths

Web sources: [ECDC's latest rapid risk assessment](#) | [ECDC novel coronavirus webpage](#) | [WHO](#) | [WHO MERS updates](#) | [WHO travel health update](#) | [WHO Euro MERS updates](#) | [CDC MERS](#) | [Saudi Arabia MoH](#) | [ECDC factsheet for professionals](#)

ECDC assessment

The source of MERS-CoV infection and the mode of transmission have not been identified. Dromedary camels are a host species for the virus, and many of the primary cases in MERS-CoV clusters have reported direct or indirect camel exposure. Almost all of

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the recently reported secondary cases, many of whom are asymptomatic or have only mild symptoms, have been acquired in healthcare settings. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East. International surveillance for MERS-CoV cases is essential.

The risk of secondary transmission in the EU remains low and can be reduced further by screening for exposure among patients presenting with respiratory symptoms (and their contacts), and strict implementation of infection prevention and control measures for patients under investigation.

Actions

ECDC published an [epidemiological update](#) on 6 November 2014.

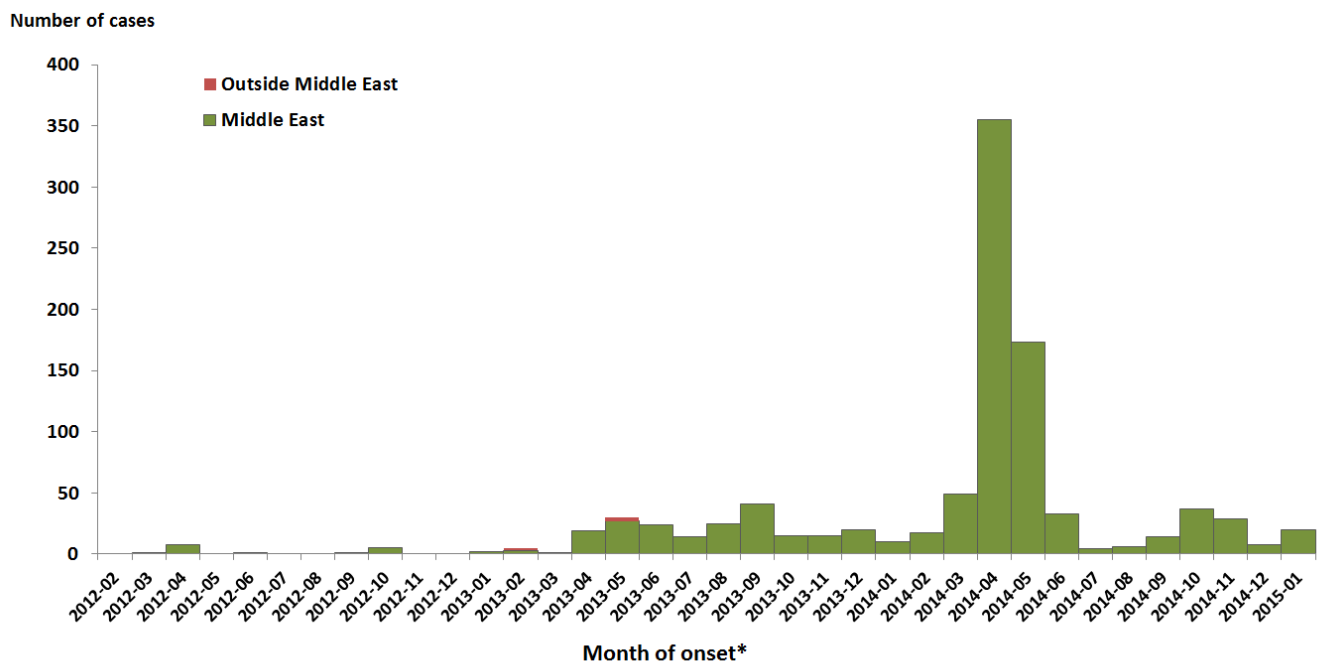
The last [rapid risk assessment](#) was updated on 21 January 2015.

ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.

ECDC published a [factsheet for health professionals regarding MERS-CoV](#) on 20 August 2014.

Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 22 January 2015 (n=981)

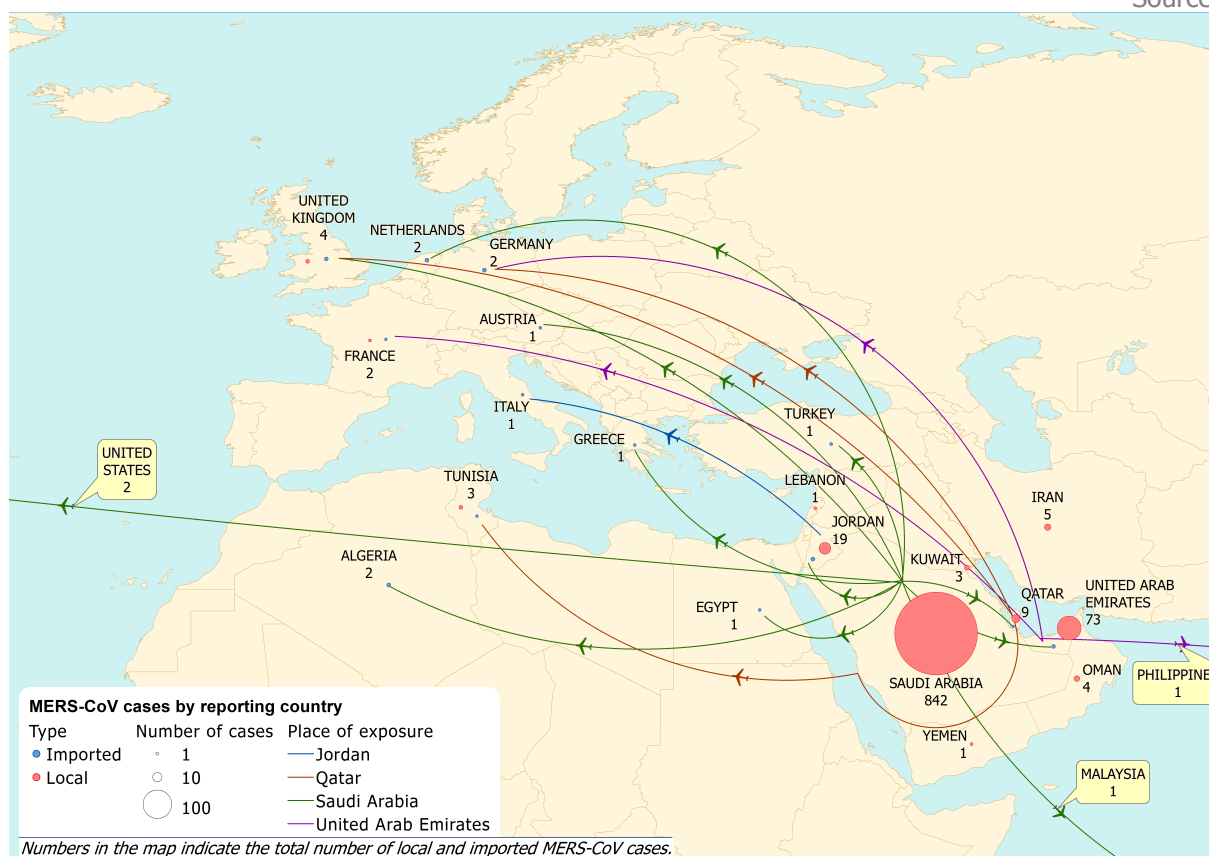
Source: ECDC



* Where the month of onset is unknown, the month of reporting has been used

Geographical distribution of confirmed MERS-CoV cases and place of probable infection, worldwide, as of 22 January 2015 (n=981)

Source: ECDC



Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 23 January 2015

Epidemiological summary

Distribution of cases as of 20 January:

Countries with intense transmission:

- Guinea: 2 873 cases and 1 879 deaths (as of 19 January 2015).
- Liberia: 8 524 cases and 3 636 deaths (as of 20 January 2015)
- Sierra Leone: 10 362 cases and 3 153 deaths (as of 19 January 2015).

Countries with an initial case or cases, or with localised transmission:

- United Kingdom: one confirmed case on 29 December 2014.
- Mali, Nigeria, Senegal, Spain and the United States have been declared free of EVD after having cases related to the current epidemic in West Africa.

Situation in specific West African countries

According to WHO, case incidence continues to fall in all the transmission-intense countries and all three have sufficient capacity to isolate and treat patients, with more than two treatment beds per reported confirmed, probable and suspected case. The planned numbers of beds in each country has now been reduced in accordance with falling case incidence.

Between 89% and 99% of registered contacts are being monitored in the three countries with intense transmission, though the number of contacts traced per EVD case remains lower than expected in many districts. Since the beginning of 2015, around 53% of new confirmed cases in Guinea and Liberia arose from known contacts; equivalent data are not yet available for Sierra Leone.

The cumulative case-fatality rate in the three transmission-intense countries among hospitalised patients is between 57 and 59%.

According to WHO, as an indication of community engagement, 71% of districts in Guinea and 100% of districts in Sierra Leone have a list of key religious leaders who promote safe and dignified burials. No data are available for Liberia.

Mali

On 18 January 2015, the Government of Mali and WHO declared the country Ebola free, 42 days after the last patient tested negative on 6 December 2014.

Situation among healthcare workers

On 18 January 2015, 846 healthcare workers (HCWs) are known to have been infected with EVD, 506 of whom have died.

Distribution of cases: 162 HCWs in Guinea, 370 HCWs in Liberia, 296 HCWs in Sierra Leone, two HCWs in Mali, 11 HCWs infected in Nigeria, one HCW infected in Spain while treating an EVD-positive patient, one HCW in the UK who became infected in Sierra Leone, and three HCWs in the USA (one HCW infected in Guinea, and two HCWs infected during the care of a patient in Texas).

Situation outside of West Africa**The United Kingdom**

On 18 January 2015, all flight contacts of the UK healthcare worker who returned from Freetown, Sierra Leone via Casablanca, Morocco and London Heathrow, UK to Glasgow on 28 December 2014 (while asymptomatic) and who was confirmed to be Ebola virus positive in Glasgow on 29 December 2014, have now completed their 21-day monitoring period. The National IHR Focal Points of Morocco and the UK have not been informed of any contacts having developed symptoms or being diagnosed with Ebola during this 21-day follow-up period.

Medical evacuations and repatriations from EVD-affected countries

Thirty-one individuals have been evacuated or repatriated from the EVD-affected countries. As of 21 January, there have been 13 medical evacuations of confirmed EVD-infected patients to Europe (three to Germany, three to Spain, two to France, one to the UK, one to Norway, one to Italy, one to the Netherlands and one to Switzerland). Six persons exposed to Ebola who then tested negative have been repatriated to Europe (two to the Netherlands, one to Sweden, one to Denmark, one to Germany and one to Switzerland).

On 16 January, Public Health England (PHE) confirmed that as a highly precautionary measure, a volunteer who had potential contact with the Ebola virus while working in Sierra Leone has been transported to the UK for assessment and monitoring. An additional volunteer in Sierra Leone, who had potential contact in a separate incident, was also evacuated. The individuals have not been diagnosed with Ebola and do not currently have any symptoms so their risk of developing the infection remains low, according to PHE.

A Swedish healthcare worker who was potentially exposed to the Ebola virus was repatriated from Sierra Leone on 15 January, according to a press release from the Swedish Red Cross. The healthcare worker was in contact with a local colleague who later became ill and died.

Figures

First epi-curve: distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Nigeria, Mali and Senegal, weeks 48/2013 to 04/2015 **

* In week 45/2014, WHO carried out retrospective correction in the data, resulting in 299 fewer cases being reported, which resulted in a negative value for new cases in week 45 which is not plotted.

** According to WHO, the marked increase in the cumulative total number of cases in week 43 is due to a more comprehensive assessment of patient databases, leading to 3 792 additional reported cases. However, these cases have occurred throughout the epidemic period.

Second epi-curve: Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 04* 2015.

* The marked increase in the number of cases reported in Sierra Leone (week 44) and Liberia (week 43) resulted from a more comprehensive assessment of patient databases. The additional 3 792 cases have occurred throughout the epidemic period.

** In week 45/2014, WHO reported -476 cases in Sierra Leone due to retrospective corrections.

§ In week 44/2014, WHO reported zero cases for Liberia.

Web sources: [ECDC Ebola page](#) | [ECDC Ebola and Marburg fact sheet](#) | [WHO Ebola Factsheet](#) | [CDC](#) | [WHO Roadmap](#) | [UK Medical evacuation](#) | [Sweden Medical evacuation](#) | [Mali Ebola free](#) |

ECDC assessment

This is the largest ever documented epidemic of EVD in terms of numbers and geographical spread. The evolving epidemic of EVD increases the likelihood that EU residents and travellers to the EVD-affected countries will be exposed to infected or ill persons. The risk of infection for residents and visitors in the affected countries through exposure in the community is considered low if they adhere to the recommended precautions. Residents and visitors to the affected areas run a risk of exposure to EVD in healthcare facilities. The level of this risk is related to how well the infection control measures are being implemented in these settings and the nature of the care required. As the epidemic is still evolving and more international staff are deployed to the affected countries to support the epidemic control, there remains a risk of importation of EVD cases to the EU. The risk of Ebola virus spreading from an EVD patient who arrives in the EU as result of a planned medical evacuation is considered to be low when appropriate measures are strictly adhered to, but cannot be excluded in exceptional circumstances. If a symptomatic case of EVD presents in an EU Member State, secondary transmission to caregivers in the family and in healthcare facilities cannot be excluded. The highest risk is at an early stage of the disease, before the risk of EVD has been recognised, and at the late stage of the disease when patients have very high viral loads and undergo invasive therapeutic procedures.

Actions

An epidemiological update is published weekly on the [EVD ECDC page](#).

On 4 December 2014, EFSA-ECDC published a [Scientific report assessing Risk related to household pets in contact with Ebola cases in humans](#).

On 18 November 2014, ECDC published an updated [rapid risk assessment](#).

On 10 September 2014, ECDC published an EU [case definition](#).

On 22 September 2014, ECDC published [assessment and planning for medical evacuation by air to the EU of patients with Ebola virus disease and people exposed to Ebola virus](#).

On 6 October 2014, ECDC published [risk of transmission of Ebola virus via donated blood and other substances of human origin in the EU](#).

On 13 October 2014, ECDC published [Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures](#).

On 22 October 2014, ECDC published [Assessing and planning medical evacuation flights to Europe for patients with Ebola virus disease and people exposed to Ebola virus](#).

On 23 October 2014, ECDC published [Public health management of persons having had contact with Ebola virus disease cases in the EU](#).

On 29 October 2014, ECDC published a training tool on the [safe use of PPE and options for preparing for gatherings in the EU](#)

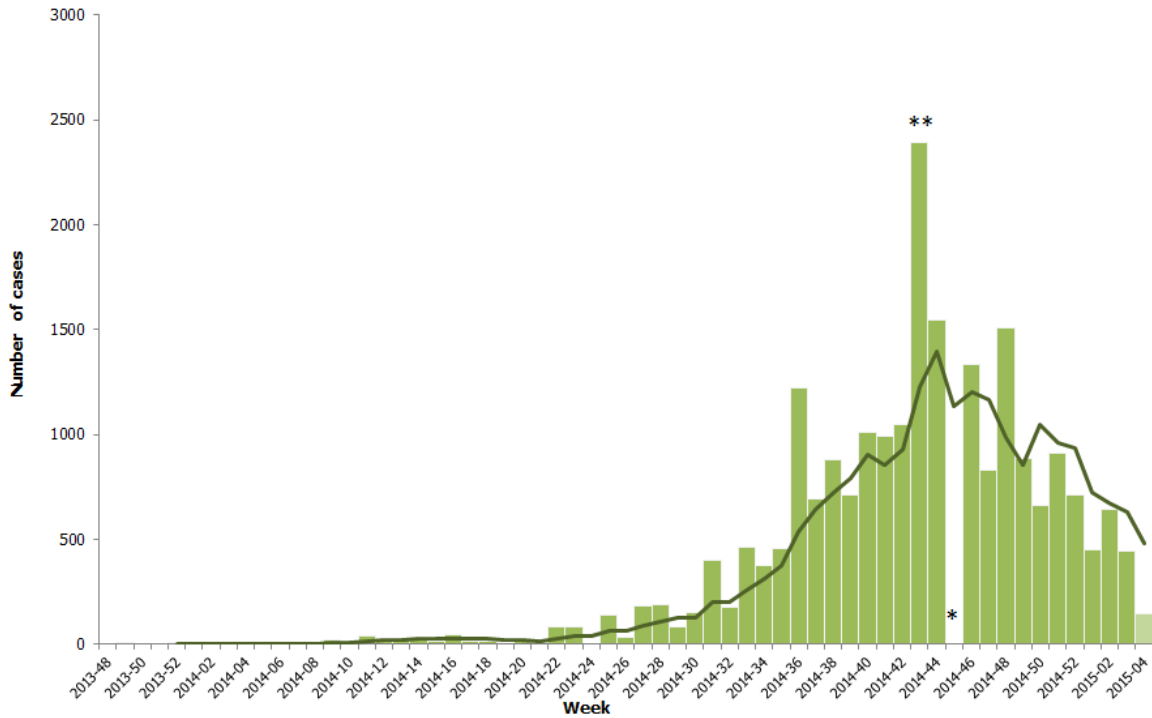
Distribution of cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (as of week 03/2015)

Source: Adapted from national situation reports



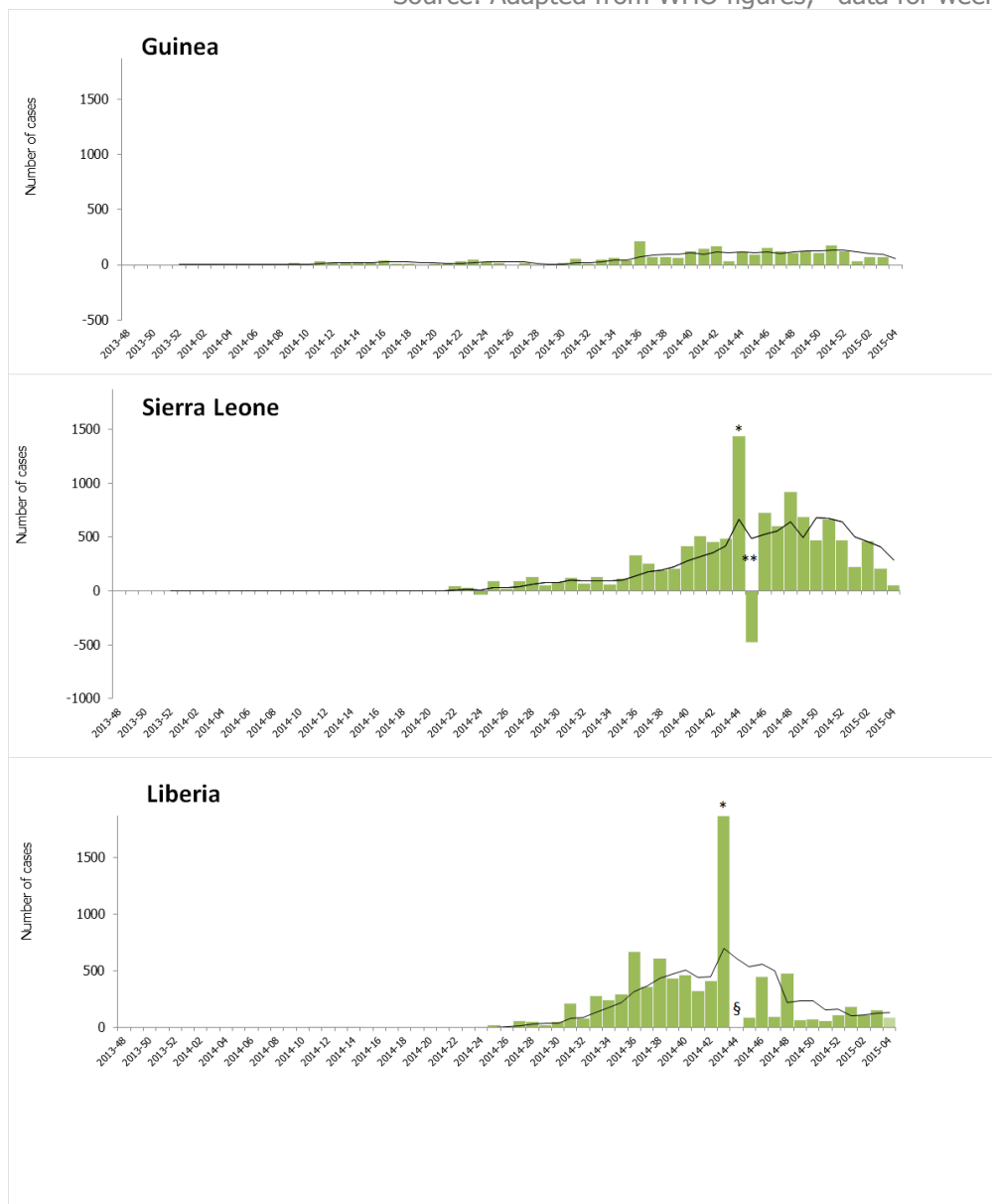
Distribution of reported cases of EVD by week of reporting in Guinea, Sierra Leone, Liberia, Mali, Nigeria and Senegal, weeks 48/2013 to 04*/2015

Source: Adapted from WHO figures; *data for week 04/2015 are



Distribution of cases of EVD by week of reporting in the three countries with widespread and intense transmission, as of week 04* 2015

Source: Adapted from WHO figures; *data for week 04/2015 are incomplete



Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 22 January 2015

Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, human cases have continued to be reported, and as of 22 January 2015, there were 485 cases including 185 deaths: Zhejiang (145), Guangdong (112), Jiangsu (63), Shanghai (43), Fujian (28), Hunan (24), Anhui (18), Jiangxi (6), Henan (4), Beijing (5), Guangxi (4), Shandong (4), Hebei (1), Guizhou (1), Jilin (2), Xinjiang Uygur Autonomous Region (9), Hong Kong (11), Taiwan (4) and one imported case in Malaysia.

Most cases have developed severe respiratory disease.

Web sources: [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [ECDC](#) | [WHO DON 30 December](#)

ECDC assessment

This outbreak is caused by a novel reassortant avian influenza virus capable of causing severe disease in humans. Currently, the most likely scenario is that this remains a local, although geographically widespread, zoonotic outbreak, in which the virus is transmitted sporadically to humans in close contact with the animal reservoir, similar to the influenza A(H5N1) situation. It is expected that there may be further sporadic cases of human infection with the virus in affected and possibly neighbouring areas in China. Affected provinces and municipalities continue to maintain surveillance and response activities.

Imported cases of influenza A(H7N9) may be detected in Europe. However, the risk of the disease spreading among humans following an importation to Europe is considered to be very low. People in the EU presenting with severe respiratory infection and a history of potential exposure in the outbreak area will require careful investigation in Europe.

Actions

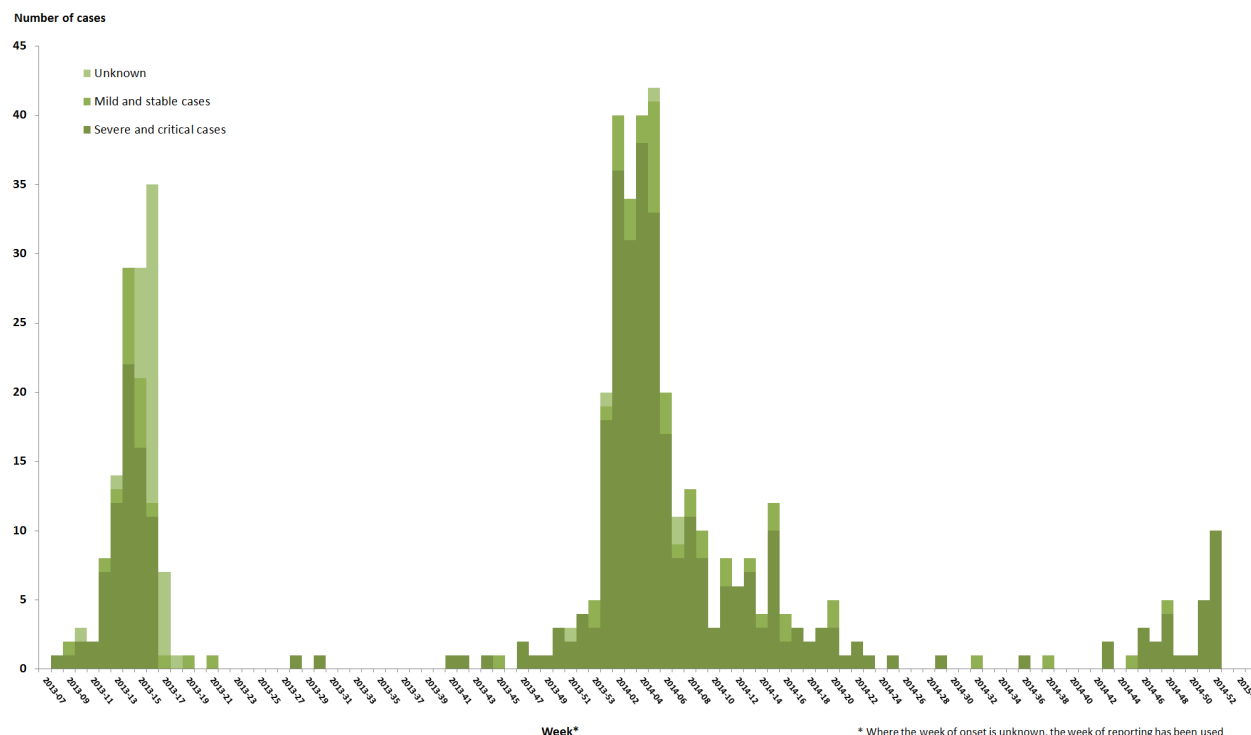
The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, including scientific research. ECDC is monitoring developments and updates reports on a monthly basis.

ECDC published an updated [Rapid Risk Assessment](#) on 26 February 2014.

ECDC published a guidance document [Supporting diagnostic preparedness for detection of avian influenza A\(H7N9\) viruses in Europe](#) for laboratories on 24 April 2013.

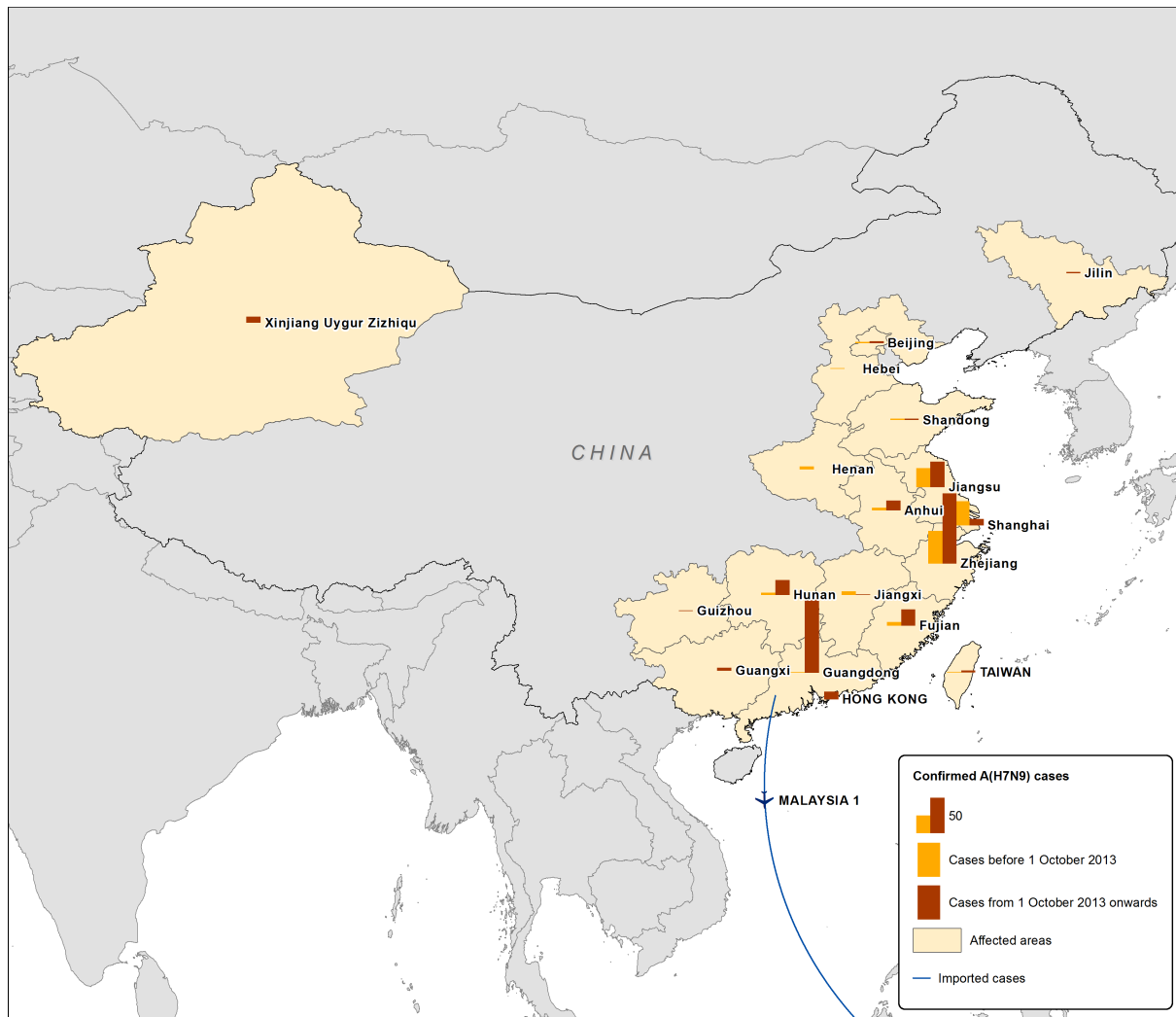
Distribution of avian influenza A(H7N9) cases by first available week*, as of 22 January 2015 (n=485)

ECDC



Distribution of cumulative number of human cases of avian influenza A(H7N9), by province and date, China, week 14/2013 to week 4/2015

ECDC



The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.