COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 36, 30 August-5 September 2015

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

West Nile virus - Multistate (Europe) - Monitoring season 2015

Opening date: 2 June 2015 Latest update: 3 September 2015

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the June-to-November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities of WNF-affected areas and identify significant changes in the epidemiology of the disease.

➔Update of the week

During the past week, Austria reported three new cases, one from the already affected area of Wien and two where the place of infection is still under investigation. Hungary reported a new case in the newly affected county of Bacs-Kiskun. Italy reported 21 new cases, seven cases in already affected provinces: Cremona (2), Parma (2), Reggio nell'Emilia (3), and 14 cases in six newly affected provinces: Como (1), Ferrara (1), Lodi (3), Mantova (2), Modena (3) and Pavia (4). Portugal reported its first case in the Algarve municipality. Romania reported two new cases in the newly affected area of Bucuresti.

In neighbouring countries, Israel reported nine new cases from already affected districts: Central district (3), Haifa (3), Tel Aviv (3). One case was reported in Palestine*. Russia reported its first cases of the current transmission season, nine cases in three oblasts: Astrakhanskaya (6), Samarskaya (1) and Saratovskaya (2).

*This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.

Other news:

In France, West Nile virus has been detected in horses in Bouches-du-Rhone and Gard, according to the World Organization for Animal Health (OIE).

Monitoring environmental suitability of Vibrio growth in the Baltic Sea – Summer 2015

Opening date: 6 July 2015 Latest update: 3 September 2015

ECDC has developed a model to map the environmental suitability for *Vibrio* growth in the Baltic Sea (ECDC E3 Geoportal).

➔Update of the week

As of 3 September 2015, the environmental conditions for *Vibrio* growth for the next 5 days are considered suitable at a very low level in the Gulf of Riga and the coast of Klaipeda.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu

Non EU Threats

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 September 2015

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission of the virus has completely stopped and the world becomes 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 international spread of wild poliovirus during 2014. On 17 August 2015, the Temporary Recommendations in relation to PHEIC were extended for another three months.

➔Update of the week

During the past week, in Ukraine, a circulating vaccine-derived poliovirus type 1 (cVDPV1) outbreak has been confirmed. For further details please see a separate threat in this report.

No new wild poliovirus type cases have been reported in the past week to WHO.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 3 September 2015

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

➔Update of the week

As of 30 August 2015, WHO has reported 28 109 cases of Ebola virus disease related to the outbreak in West Africa, including 11 305 deaths.

According to the latest WHO situation report published on 2 September 2015, three confirmed cases of EVD were reported in the week up to 30 August, two reported from Guinea and one from Sierra Leone.

On 3 September 2015, WHO declared Liberia free of Ebola virus transmission in the human population. Forty-two days have passed since the second negative test on 22 July 2015 of the last laboratory-confirmed case. Liberia now enters a 90-day period of heightened surveillance.

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

Opening date: 24 September 2012 Latest update: 3 September 2015

Since April 2012 and as of 3 September 2015, 1 549 cases of MERS have been reported by local health authorities worldwide, including 590 deaths. The source of the virus remains unknown but the pattern of transmission and virological studies point 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 27 August, Saudi Arabia has reported 28 additional cases and 10 deaths in previously reported cases. Jordan has reported four additional cases.

On 3 September 2015, WHO reported that members of the IHR Emergency Committee agreed that the situation does still not constitute a Public Health Emergency of International Concern (PHEIC). At the same time, they emphasised that they have a heightened sense of concern about the overall MERS situation. The Committee reiterated the importance of following recommendations to notify asymptomatic cases that have tested positive as this has not been completely followed. The findings from the recent mission in Saudi Arabia in light of a hospital-cluster, identified overcrowding in emergency rooms, movements of undiagnosed patients and failures in IPC procedures as contributing factors to the spread of the virus as well as insufficient engagement by all the parties involved.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Influenza A(H5N1) and other strains of avian flu - Multistate (world) - Monitoring globally

Opening date: 15 June 2005 Latest update: 3 September 2015

The influenza A(H5N1) virus, commonly known as bird flu, is fatal in about 60% of human infections. Sporadic cases continue to be reported, usually after contact with sick or dead poultry from certain Asian and African countries. No human cases have been reported from Europe.

➔Update of the week

According to WHO, as of 17 July 2015, there have been 136 cases and 39 deaths in Egypt, five cases and one death in China, and two cases and two deaths in Indonesia due to A(H5N1) in 2015.
According to a media report on 24 August 2015, quoting the local health authorities in Egypt, there have been two deaths and eight cases in Egypt. This has not been confirmed by WHO.

Outbreak of vaccine-derived poliovirus type 1 (cVDPV1) - August 2015 – Ukraine

Opening date: 28 August 2015 Latest update: 3 September 2015

On 28 August 2015, two cases of circulating vaccine-derived poliovirus type 1 (cVDPV type 1) were confirmed in south-western Ukraine in two children aged 10 months and 4 years respectively.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

II. Detailed reports

West Nile virus - Multistate (Europe) - Monitoring season 2015

Opening date: 2 June 2015 Latest update: 3 September 2015

Epidemiological summary

As of 3 September 2015, 41 cases of West Nile fever in humans have been reported in the EU Member States: Italy (29), Romania (5), Hungary (2), Portugal (1), and Austria (4). Thirty-six cases have been detected in neighbouring countries: Israel (25), Russia (9), Palestine (1) and Serbia (1) since the beginning of the 2015 transmission season.

Web sources: ECDC West Nile fever | ECDC West Nile fever risk assessment tool | ECDC West Nile fever maps | WHO fact sheet

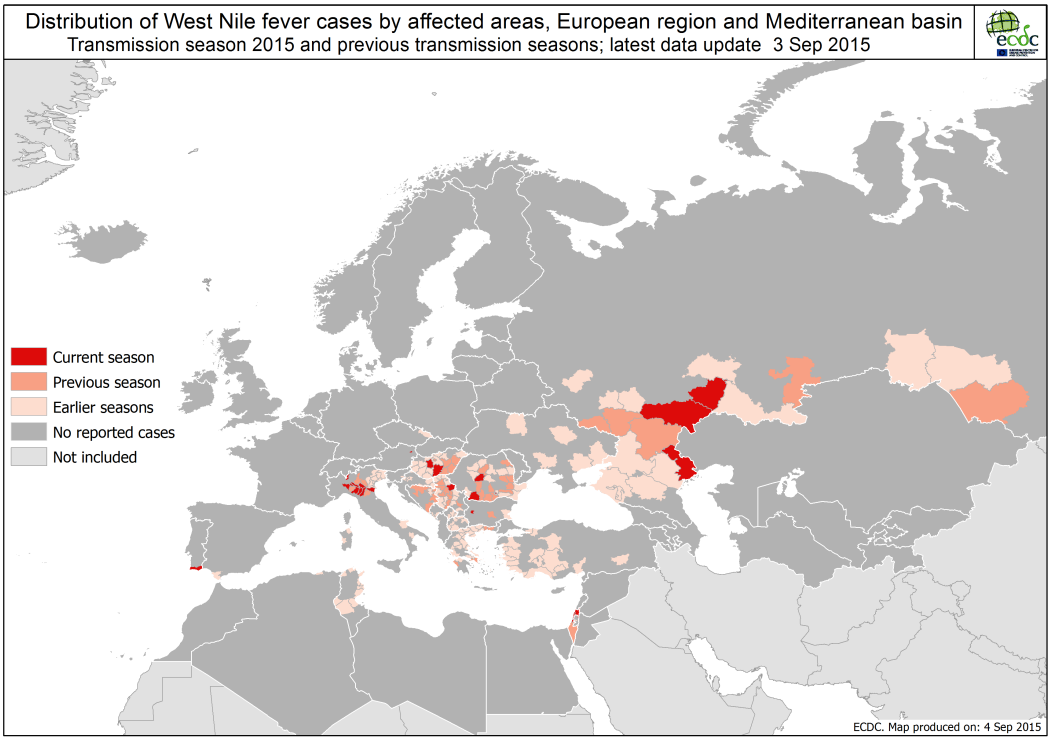
ECDC assessment

WNF in humans is a notifiable disease in the EU. The implementation of control measures is considered important for ensuring blood safety by the national health authorities when human cases of WNF fever occur. According to the EU Blood Directive, efforts should be made to defer blood donations from affected areas with ongoing virus transmission unless donations are tested using individual nucleic acid amplification testing (NAAT).

Actions

ECDC produces weekly WNF maps during the transmission season (June to November) to inform blood safety authorities of WNF affected areas.

Source: ECDC



Monitoring environmental suitability of Vibrio growth in the Baltic Sea – Summer 2015

Opening date: 6 July 2015 Latest update: 3 September 2015

Epidemiological summary

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

In late June 2015, the *Vibrio* suitability tool on the ECDC E3 Geoportal helped ECDC to ascertain favourable environmental factors for *Vibrio* growth.
On 3 July 2015, ECDC launched an Urgent Inquiry in EPIS-FWD after detecting elevated sea surface temperatures (according to the National Oceanic and Atmospheric Administration, NOAA) in the Baltic Sea (as of 2 July 2015).

ECDC assessment

Elevated sea surface temperatures in marine environments with low salt content provide 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. In contrast, open ocean environments do not offer appropriate growth conditions for these bacteria due to the high salt content, low temperatures, and limited nutrient content. These *Vibrio* species, particularly *V. parahaemolyticus, V. vulnificus* and non-toxigenic *V. cholera,* can cause vibriosis infections.
Vibriosis in humans caused by these species in the Baltic region have occurred in the past during hot summer months, particularly when the sea surface temperature has been elevated. The most common clinical manifestations are gastroenteritis (with nausea, vomiting, and diarrhoea), wound infections (exposure of a cut, wound, or abrasion to contaminated seawater), primary septicaemia, and otitis externa (swimmer's ear). Risk factors for illness include consumption of shellfish, particularly raw oysters and contact with natural bodies of water, especially marine or estuarine waters.

Actions

ECDC launched an Urgent Inquiry in EPIS-FWD to inform the FWD network about the elevated surface water temperatures measured in the Baltic Sea, which create a favourable environment for the growth of *Vibrio* bacteria. ECDC will monitor this threat on a weekly basis during the summer of 2015 and report on increased environmental suitability for growth of *Vibrio* bacteria.

The *Vibrio* suitability tool is available on the ECDC E3 Geoportal. Please note that this model has been calibrated to the Baltic region in northern Europe and might not be compatible with other regional settings prior to validation.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 September 2015

Epidemiological summary

Worldwide in 2015, 37 wild poliovirus type 1 (WPV1) cases have been reported to WHO so far, compared with 148 for the same period in 2014. Since the beginning of the year, two countries have reported cases: Pakistan (29 cases) and Afghanistan (8 cases).

In 2015, 12 cases (nine in Madagascar, one in Nigeria and two in Ukraine) of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO so far, compared with 34 for the same period in 2014.

On 17 August, WHO announced that the international spread of polio remains a Public Health Emergency of International Concern (PHEIC) and the Temporary Recommendations (as revised) were extended for three more months.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet | Temporary Recommendations to Reduce International Spread of Poliovirus | WHO Statement on the Sixth Meeting of the International Health Regulations Emergency Committee on Polio

ECDC assessment

Europe is polio-free. The last locally acquired wild-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 wild poliovirus in several countries and the documented exportation of wild poliovirus to other countries support the fact that there is a potential risk of wild poliovirus 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 both.

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? |

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Actions

ECDC monitors 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 into 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.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 3 September 2015

Epidemiological summary

Distribution of cases as of 30 August 2015:

Countries with intense transmission:

- **Guinea:** 3 792 cases, of which 3 337 were confirmed; 2 529 deaths.
- **Sierra Leone:** 13 609 cases, of which 8 698 were confirmed; 3 953 deaths.
- **Liberia:** 10 672 cases, of which 3 157 are confirmed as of 20 August. Six confirmed cases including two deaths have been reported since the end of June 2015 when the country was declared Ebola free.

Countries that have reported an initial case or localised transmission:

- Nigeria, Senegal, the USA, Spain, Mali, the UK and Italy.

Situation in West African countries

In **Guinea**, WHO reported two new confirmed cases (all identified in Ratoma area, Conakry) in the week up to 30 August, compared with three in the previous week. The first case was a nine-month-old girl. She was not a registered contact and WHO reported she had onset of symptoms in Dubreka but died in Ratoma. The second case, 56 year-old-male is a registered contact of a previous confirmed case.
According to WHO, 450 contacts were under follow-up on 30 August in three prefectures (Conakry, Dubreka, and Forecariah).

In **Sierra Leone**, in the past week, WHO reported one new confirmed case, identified after post-mortem testing in a 60-year-old female who died in Kambia (region bordering Guinea/prefecture Forecariah). Kambia had not reported a confirmed case for 48 days, and Sierra Leone had not reported new cases for two weeks. The origin of infection remains under investigation. WHO reported that the Phase 3 efficacy trial of the VSV-EBOV vaccine has now been extended from Guinea to Sierra Leone. Contacts, and contacts of contacts associated with the confirmed case in Kambia are being offered the vaccine. Contacts associated with all other chains of transmission in Sierra Leone have now completed follow-up.

Media report that fifty contacts of the recently confirmed EVD case in Kambia have been placed in quarantine. Of these, three people isolated in Sella Kafta in the region of Kambia (northwest) are considered as high-risk contacts.

Liberia has officially been declared free of Ebola virus transmission in the human population by WHO. Forty-two days have passed since the second negative test on 22 July 2015 of the last laboratory-confirmed case. Liberia now enters a 90-day period of heightened surveillance.

Situation among healthcare workers

No new infections among health workers have been reported by WHO in the week up to 30 August. Since the start of the outbreak there have been 881 confirmed health worker infections reported from Guinea, Liberia, and Sierra Leone with 513 deaths.

Outside of the three most affected countries, 2 Ebola-infected healthcare workers were reported in Mali, 11 in Nigeria, 1 in Spain (infected while caring for an evacuated EVD patient), 2 in the UK (both infected in Sierra Leone), 6 in the USA (2 infected in Sierra Leone, 2 in Liberia, and 2 infected while caring for a confirmed case in Texas) and 1 in Italy (infected in Sierra Leone).

Medical evacuations and repatriations from EVD-affected countries

Since the beginning of the epidemic and as of 4 September 2015, 65 individuals were evacuated or repatriated worldwide from the EVD-affected countries. Of these, 38 individuals were evacuated or repatriated to Europe. Thirteen were medical evacuations of confirmed EVD-infected patients to: Germany (3), Spain (2), France (2), UK (2), Norway (1), Italy (1), the Netherlands (1) and Switzerland (1). Twenty-five asymptomatic persons were repatriated to Europe as a result of exposure to Ebola in West Africa: UK

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

(13), Denmark (4), Sweden (3), the Netherlands (2), Germany (1), Spain (1) and Switzerland (1).
Twenty-seven persons were evacuated to the United States.
No new medical evacuations have taken place since 18 March 2015.

Images
- Epicurve 1: the epicurve shows the confirmed cases in the three most affected countries. In order to better represent the tail of the epidemic, only the data for 2015 are shown.
- Epicurve 2: the epicurve shows the confirmed cases in Guinea and Sierra Leone. In order to better represent the tail of the epidemic, only the data for 2015 are shown.
- Map: this map is based on country situation reports and shows only confirmed cases of EVD in the past six weeks.

Web sources: ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO situation summary | WHO Roadmap | WHO Ebola Factsheet | CDC | WHO declares Liberia Ebola free | Guinea Ring Vaccination trial extended to Sierra Leone to vaccinate contacts of new Ebola case | A suspect case in Serbia tested negative | Media reporting quarantined contacts in Sierra Leone

ECDC assessment

This is the largest-ever documented epidemic of EVD, both in terms of numbers and geographical spread. The 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 risk of importing EVD into the EU and the risk of transmission within the EU following an importation, remains low or very low as a result of the range of risk reduction measures that have been put in place by the Member States and by the affected countries in West Africa. However, continued vigilance is essential. 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.

According to WHO, case incidence has held at three confirmed cases per week for five consecutive weeks. There remains a risk of short-term increases in case incidence as a result of isolated, high-risk cases, and rapid-response teams are on alert to deal with any such cases.

The introduction of an EVD case into unaffected countries remains a risk as long as cases exist in any country. With adequate preparation, however, such an introduction can be contained through a timely and effective response.

Actions

As of 4 September 2015, ECDC has deployed 93 experts (on a rotating basis) from within and outside the EU in response to the Ebola outbreak. This includes an ECDC-mobilised contingent of experts to Guinea. Furthermore, additional experts are already confirmed for deployment to Guinea over the next few months.

ECDC is looking for additional French-speaking experts with field epidemiology experience from EU Member States to join the ECDC-coordinated contingent in response to the Ebola outbreak in Guinea. For further information, please contact Valeria Pelosi at valeria.pelosi@ecdc.europa.eu with copy to support@ecdc.europa.eu.

An epidemiological update is published weekly on the EVD ECDC page.

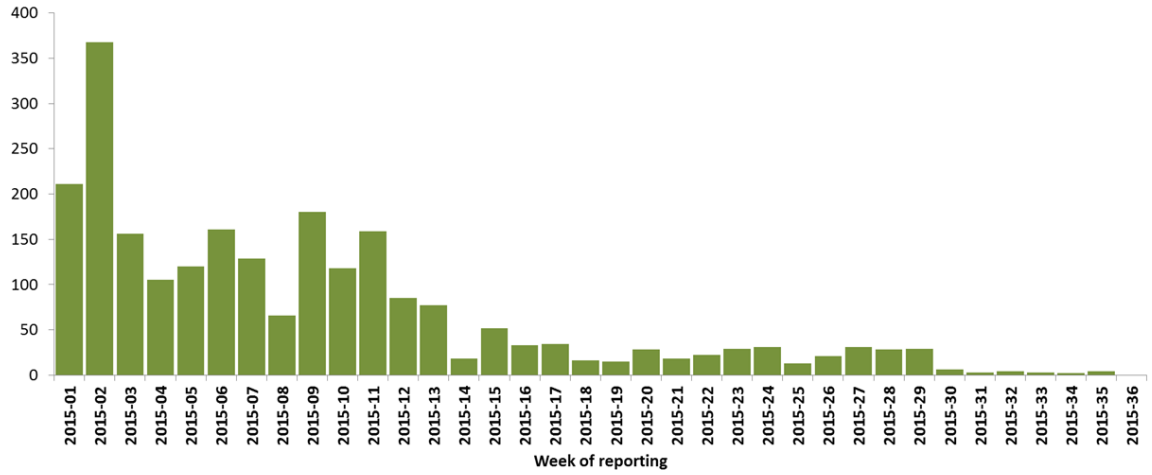
The latest (12th) update of the rapid risk assessment was published on 1 July 2015.
On 31 July 2015, ECDC published Positive preliminary results of an Ebola vaccine efficacy trial in Guinea.
On 22 January 2015, ECDC published Infection prevention and control measures for Ebola virus disease. Management of healthcare workers returning from Ebola-affected areas.
On 4 December 2014, EFSA and ECDC published a Scientific report assessing Risk related to household pets in contact with Ebola cases in humans.
On 29 October 2014, ECDC published a training tool on the safe use of PPE and options for preparing for gatherings in the EU.
On 23 October 2014, ECDC published Public health management of persons having had contact with Ebola virus disease cases in the EU.
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 13 October 2014, ECDC published Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures.
On 6 October 2014, ECDC published risk of transmission of Ebola virus via donated blood and other substances of human origin in

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

the EU.
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 10 September 2014, ECDC published an EU case definition.

Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 01/2015 to 36/2015)

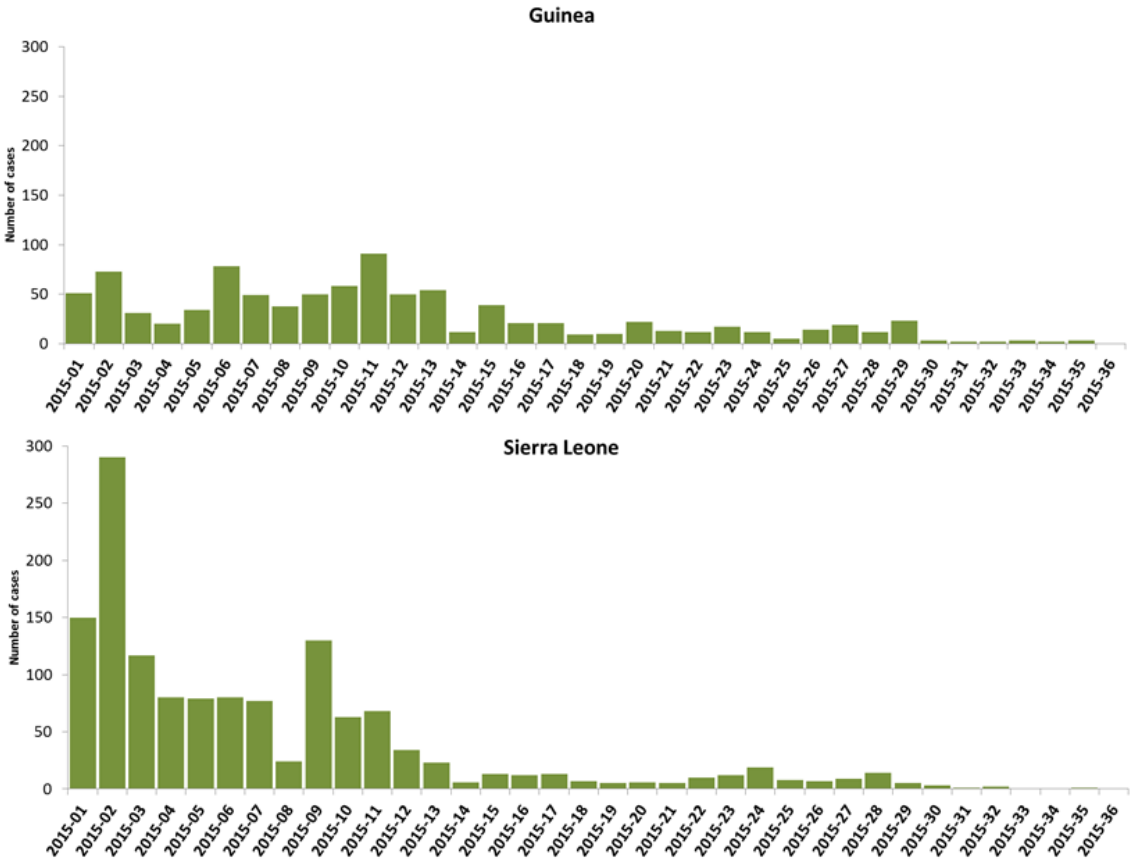
Adapted from WHO figures; *data for week 36/2015 are incomplete



European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (weeks 01/2015 to 36/2015)

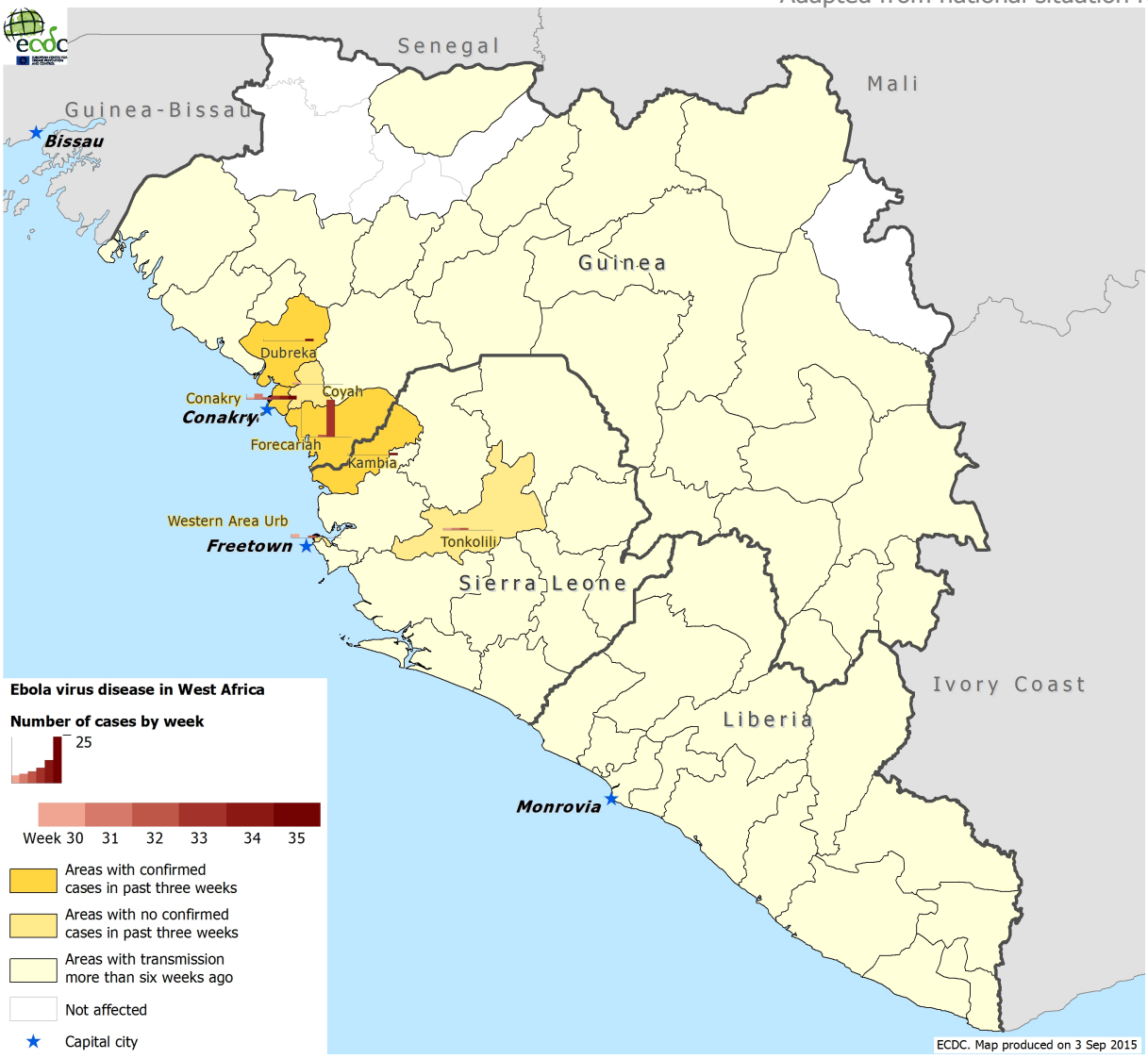
Adapted from WHO figures; *data for week 36/2015 are incomplete



European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (as of week 35/2015)

Adapted from national situation reports



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

Opening date: 24 September 2012 Latest update: 3 September 2015

Epidemiological summary

Since April 2012 and as of 3 September, 1 549 cases of MERS-CoV have been reported by local health authorities worldwide, including 590 deaths.

Saudi Arabia: Since the last publication of the Rapid Risk Assessment on 27 August 2015, Saudi Arabia has reported 34 additional cases. Thirty-one of these cases occurred in the Riyadh region and three in Najran. Twenty-five of the 34 cases had contact with a previously confirmed or suspected case either in the community or in a healthcare setting. Eight of the 34 cases are healthcare workers.

The distribution is as follows:
Confirmed cases and deaths by region:

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Middle East
Saudi Arabia: 1 199 cases/512 deaths
United Arab Emirates: 81 cases/11 deaths
Qatar: 13 cases/5 deaths
Jordan: 25 cases/8 deaths
Oman: 6 cases/3 deaths
Kuwait: 3 cases/1 death
Egypt: 1 case/0 deaths
Yemen: 1 case/1 death
Lebanon: 1 case/0 deaths
Iran: 6 cases/2 deaths

Europe
Turkey: 1 case/1 death
UK: 4 cases/3 deaths
Germany: 3 cases/2 deaths
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: 3 cases/0 deaths
South Korea: 185 cases/36 deaths
China: 1 case/0 deaths
Thailand: 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 | Saudi Arabia statement |ECDC factsheet for professionals

ECDC assessment

According to ECDC experts, the MERS outbreak poses a low risk to the EU. Efforts to contain the nosocomial clusters in the affected countries are vital to prevent wider transmission. Although sustained human-to-human community transmission is unlikely, secondary transmission to unprotected close contacts, especially in healthcare settings, remains possible, as documented in South Korea.

Countries should advise travellers returning from all countries affected by MERS to seek medical attention if they develop a respiratory illness with fever and cough during the two weeks after their return and to disclose their recent travel history to the healthcare provider. The travellers, especially those with pre-existing medical conditions, should be reminded of the importance of good hand and food hygiene, and to avoid contact with sick people. In addition, travellers to the Arabian Peninsula should avoid close contact with camels, visiting farms and consuming unpasteurised camel milk, urine or improperly cooked meat.

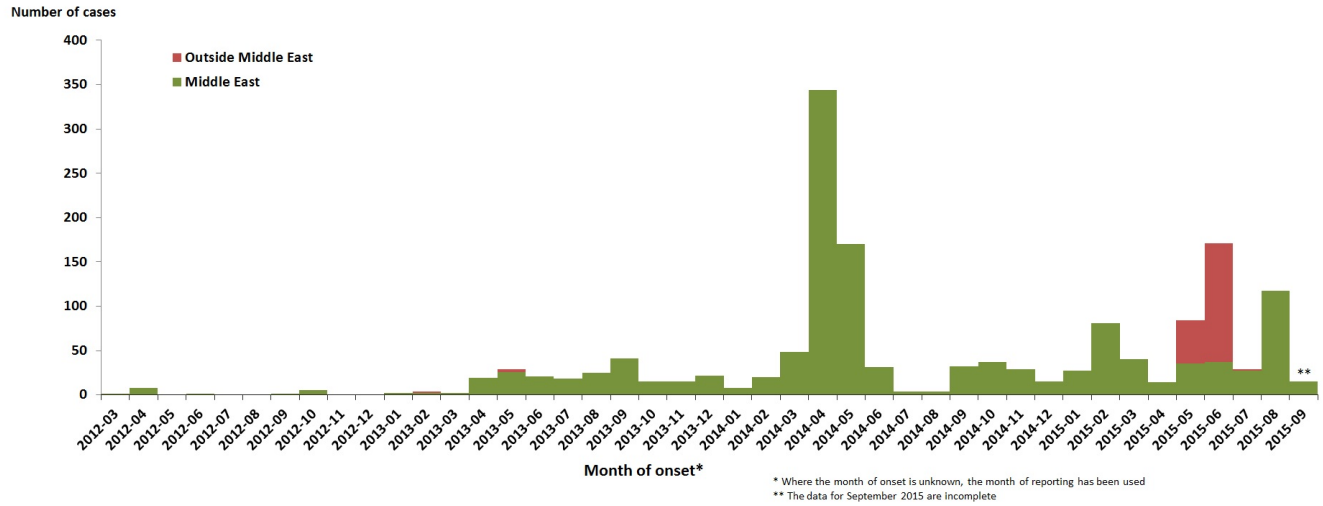
Actions

ECDC published a rapid risk assessment on 27 August 2015 and an epi-update on 2 September 2015.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

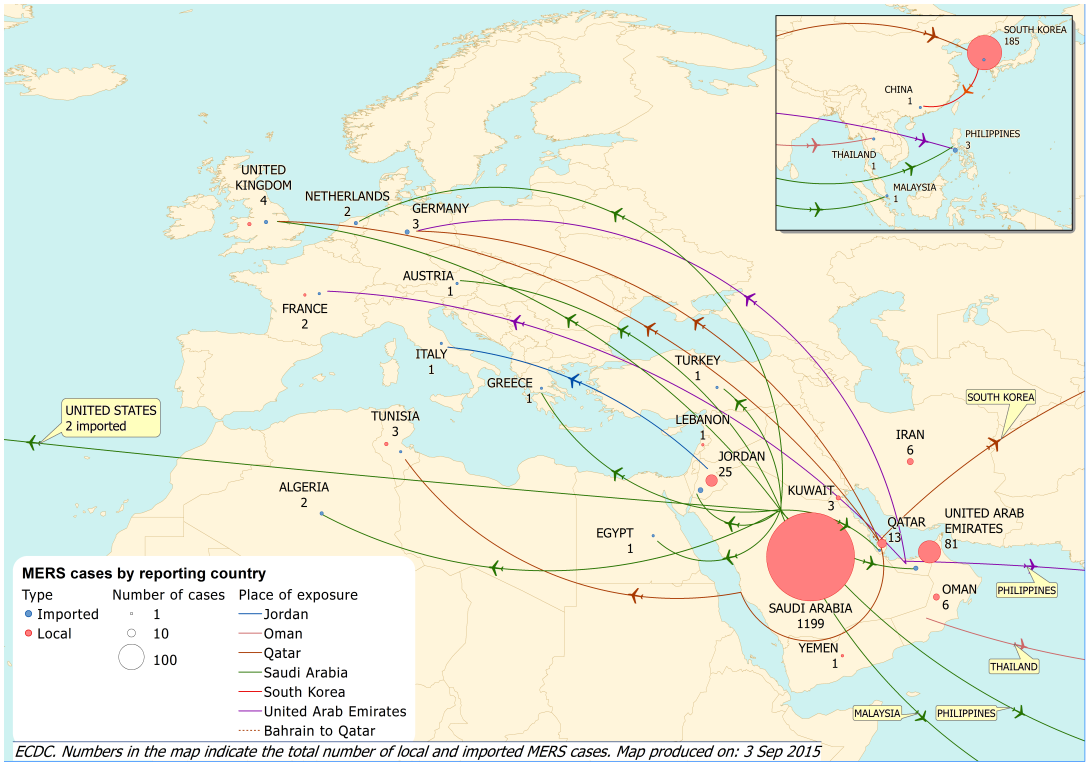
Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 3 September 2015 (n=1 549)

Source: ECDC



Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 – 3 September 2015 (n=1 579)

Source: ECDC



ECDC. Numbers in the map indicate the total number of local and imported MERS cases. Map produced on: 3 Sep 2015

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Influenza A(H5N1) and other strains of avian flu - Multistate (world) - Monitoring globally

Opening date: 15 June 2005 Latest update: 3 September 2015

Epidemiological summary

Update: No new update from WHO on human cases of influenza A(H5N1) virus since 17 July 2015.

Human cases of avian flu
According to WHO, as of 17 July 2015, there have been 136 cases and 39 deaths in Egypt, five cases and one death in China, and two cases and two deaths in Indonesia due to A(H5N1) in 2015.

Since 2003, there have been 844 human cases of A(H5N1) reported from 16 countries. Of these, 449 have died.

According to a media report on 24 August 2015, quoting the local health authorities in Egypt, there have been two deaths and eight cases in Egypt. This has not been confirmed by WHO.

Outbreaks detected in poultry
According to the latest update from the World Organization for Animal Health (OIE) on 6 August 2015 and as of 2 September 2015, there have been several outbreaks of avian influenza in chicken farms and backyard flocks in Ivory Coast (HPAI H5N1), Nigeria (HPAI H5N1), Ghana (HPAI H5N1), Taiwan (HPAI H5N2), China (HPAI H5N6, HPAI H5N2), Vietnam (HPAI H5N6, HPAI H5N1) and Mexico (LPAI H5N2).

Highly pathogenic H5N1 avian influenza virus has been detected in Russia in wild birds, in the districts of Dovolensky, Barabinsky and Zdvinsky in Novosibirskaya Oblast, according to OIE.

Web sources: ECDC Rapid Risk Assessment | Avian influenza on ECDC website |EMPRES | OIE | WHO

ECDC assessment

Most human infections of A(H5N1) are the result of direct contact with infected birds or contaminated environments, and countries with large poultry populations in close contact with humans are considered to be most at risk of bird flu outbreaks. Therefore, additional human cases are not unexpected. There are currently no indications of a significant change in the epidemiology associated with any clade or strain of the A(H5N1) virus from a human health perspective. However, vigilance for avian influenza in domestic poultry and wild birds in Europe remains important.

Although an increased number of animal-to-human infections was reported by Egypt during 2015, this increase is not thought to be related to virus mutations but rather to more people becoming exposed to infected poultry.

Various influenza A(H5) and A(H7) subtypes, such as influenza A(H5N1), A(H5N2), A(H5N3), A(H5N6), A(H5N8) and A(H7N3), have recently been detected in birds in West Africa, Asia, Europe, and North America, according to the World Organisation of Animal Health (OIE). Although these influenza viruses might have the potential to cause disease in humans, to date, there have been no reported human infections with these viruses with the exception of human infections with influenza A(H5N1) and A (H5N6) viruses. The risk to people from these infections in wild birds, backyard flocks and commercial poultry is considered to be low.

A highly pathogenic influenza virus A(H5N9) detected in poultry in live-bird markets in China in 2013 is a novel reassortant of avian influenza viruses H5N1, H7N9 and H9N2, all of which have already been transmitted to humans and caused moderate to severe disease. So far, no human cases infected with this new avian influenza variant have been detected. The potential of this virus for transmission to humans is considered to be very low.

Actions

ECDC monitors the worldwide A(H5N1) situation through epidemic intelligence activities on a weekly basis in order to identify significant changes in the epidemiology of the virus. ECDC re-assesses the potential of a changing risk for A(H5N1) to humans on a regular basis.
ECDC published a Rapid Risk Assessment covering A(H5N1) in Egypt on 13 March 2015.
ECDC published an epidemiological update about A(H5N1) in Egypt on 10 April 2015.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

Outbreak of vaccine-derived poliovirus type 1 (cVDPV1) - August 2015 – Ukraine

Opening date: 28 August 2015 Latest update: 3 September 2015

Epidemiological summary

On 28 August 2015, two cases of cVDPV type 1 were confirmed in Ukraine. The cases, a 4-year-old child and a 10 month old infant, had onset of paralysis on 30 June and 7 July respectively and the positive stool samples were collected from 5 to 10 July 2015. The genetic similarity between the isolates indicates active transmission of cVDPV1. Both are from the Zakarpatskaya oblast, in south-western Ukraine, bordering Romania, Hungary, Slovakia and Poland.

ECDC assessment

Vaccine-derived polio viruses are genetically mutated OPV strains that have lost key attenuating mutations and resemble WPVs biologically. Circulating VDPVs (cVDPV) are strains that have taken on the neurovirulence and transmissibility of WPV. A cVDPV is associated with person-to-person transmission.The key factors favouring cVDPV emergence and spread are the same as for WPV circulation: low polio vaccine coverage rates or poorly conducted supplementary immunisation activities in areas where OPV use continues.

The risk of a polio outbreak, as well as the risk of outbreaks of other vaccine preventable diseases, have been very high in Ukraine for several years as routine vaccination coverage has continued to fall short of targets and the susceptible population has continued to grow. In 2014, only 50% of children were fully immunised against polio and other vaccine-preventable diseases. An outbreak of cVDPV is a serious public health event and can be of the same severity as an outbreak of wild polio virus.

Actions

The WHO Regional Office for Europe, with the full support of the WHO office in Ukraine, and the Global Polio Eradication Initiative (GPEI) partners, deployed an outbreak response manager to Ukraine on 30 August, along with an epidemiologist and a surveillance advisor to accompany the Ministry of Health in their case investigation in Zakarpatskaya. By 6 September, the rapid response team will be accompanied with a laboratory / surveillance officer and a communications advisor. In partnership with UNICEF, WHO advised the Ministry of Health on standard operating procedures for mounting a robust outbreak response.

ECDC has prepared a rapid risk assessment.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu
Epidemic Intelligence duty email: support@ecdc.europa.eu

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

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 171 83 Stockholm, Sweden
Visiting address: Tomtebodavägen 11a, Solna, Sweden
www.ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu