



COMMUNICABLE DISEASE THREATS REPORT

Week 9, 28 February-5 March 2016

All users

CDTR

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary EU Threats

Influenza - Multistate (Europe) - Monitoring 2015-2016 season

Opening date: 2 October 2015

Influenza transmission in Europe shows a clear seasonal pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the <u>Flu News Europe website</u>.

→Update of the week

During week 8/2016, 25 out of 45 Member States in the WHO European Region reported widespread influenza activity. As only five countries reported high-intensity activity, influenza may have peaked in some parts of the region, as indicated by reports of decreasing or stable trends in 33 countries.

Latest update: 4 March 2016

Thirty-six countries reported influenza virus detections in 47% of specimens from sentinel sources, which is similar to previous weeks. Influenza B virus constituted 47% of influenza virus detections in sentinel samples, indicating a gradual shift towards influenza B. Influenza A(H1N1)pdm09 viruses remained the predominant virus detected through sentinel surveillance, accounting for 85% of the A viruses subtyped. Cases of severe disease were fewer than in previous weeks, but varied between countries. Most severe cases were associated with A(H1N1)pdm09 and were in people aged 15–64 years.

From the 17 countries or regions reporting to the European monitoring of excess mortality for public health action project (EuroMOMO), there is a pattern suggesting excess all-cause mortality due to influenza among those aged 15 to 64 years.

Haemolytic uraemic syndrome (HUS) cases in young children -Romania

Opening date: 16 February 2016

Latest update: 4 March 2016

The Ministry of Health in Romania reports that 15 children aged 5 to 38 months were hospitalised in Bucharest and Pitesti between 29 January and 24 February while presenting with symptoms of vomiting and diarrhoea, with or without dehydration, and suspected haemolytic uraemic syndrome (HUS). The dates of onset were between 25 January and 14 February. Three of the cases have died. *E. coli* O26 has been identified in several cases.

→Update of the week

Following initial environmental investigations, *E. coli* O26 has been identified in a soft cheese sample produced by a local company that sells traditional dairy items in the affected Arges district. The cheese was prepared from unpasteurised milk. The factory has been closed and the product is no longer available on the market.

Non EU Threats

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015

Latest update: 3 March 2016

Zika virus infections are spreading in previously unaffected areas of the world. Since the beginning of 2014, autochthonous Zika cases have been reported in the Pacific region. In addition, autochthonous transmission of Zika virus has been reported in Brazil since April 2015. As of 4 March 2016, 41 countries and territories have reported autochthonous cases of Zika virus infection in the past nine months. Possible links between Zika virus infection in pregnancy and microcephaly of the foetus have been under investigation since October 2015, when the Brazilian Ministry of Health reported an unusual increase in cases of microcephaly following the Zika virus outbreak in the north-eastern states. French Polynesia reported an increase in cases of central nervous system malformations during 2014–2015 following the Zika virus infection outbreak from September 2013 to March 2014. Investigations of a link between Zika virus infection and Guillain–Barré syndrome (GBS) are ongoing. On 1 February 2016, WHO declared Zika a Public Health Emergency of International Concern (PHEIC), following the first meeting of the Emergency Committee convened by the Director-General under the International Health Regulations 2005, regarding clusters of microcephaly cases and other neurological disorders in some areas affected by Zika virus.

Considering the growing body of evidence of adverse pregnancy outcomes associated with Zika virus infection, ECDC recommends that pregnant women postpone non-essential travel to Zika-affected areas.

→Update of the week

Since last week, New Caledonia on 3 March confirmed the first autochthonous case in 2016.

According to the <u>media</u> on 27 February 2016, the French authorities reported a case of Zika virus due to sexual transmission in a woman who was not pregnant.

On 3 March 2016 the <u>Ministry of Health</u> of New Zealand announced that they are investigating a possible case of sexual transmission of Zika virus in New Zealand. A man became ill after visiting a country where Zika virus is currently being actively transmitted, and has tested positive for the virus. His female partner, who has not recently travelled to a Zika-affected country, has also tested positive for Zika.

On 26 February 2016, the first autochthonous case of Zika was reported in an adult woman in <u>Argentina</u>, who has no travel history but had contact with a man who had travelled to Colombia.

On 26 February 2016, a second sexually transmitted Zika case was reported from the US.

Publications

A case-control study published in <u>The Lancet</u> provides evidence of Zika virus infection causing Guillain-Barré syndrome in French Polynesia during the Zika epidemic between October 2013 and April 2014.

On 3 March 2016, <u>Eurosurveillance</u> published a report of two cases of Guillain–Barré syndrome who had concomitant Zika virus viruria. This viruria persisted for longer than 15 days after symptom onset. The cases occurred on Martinique in January 2016, at the beginning of the Zika virus outbreak.

On 3 March 2016, <u>PLoS Neglected Tropical Diseases</u> published the outcome of the laboratory study on the susceptibility to Zika virus of *Aedes aegypti* and *Aedes albopictus* mosquitoes from the Americas.

Update on the observed increase of congenital malformations and other central nervous system complications Brazil

According to the <u>Ministry of Health</u>, since October 2015 and as 27 February 2016, there have been 5 909 suspected cases of microcephaly from 1 143 municipalities across 25 states in Brazil. This is an increase of 269 suspected cases since the last weekly update on 23 February (data as of 20 February). As of 27 February 2016, 641 of the cases have been confirmed to have microcephaly and/or other central nervous system findings suggestive of congenital infection. Of these cases, 82 have been confirmed positive for Zika virus by PCR.

There have been 139 intrauterine or neonatal deaths reported among children notified to have microcephaly and/or central nervous system malformations. Of these, 31 cases were investigated and confirmed to have microcephaly and/or central nervous system malformations. Ninety-six cases are still under investigation and 12 cases have been discarded.

Panama

On 2 March 2016, the <u>media</u>, quoting the Ministry of Health, reported the first confirmed case of Guillain-Barré syndrome (GBS) possibly linked to Zika infection.

Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 3 March 2016

Europe is experiencing its largest influx of refugees since the Second World War. According to the UN Refugee Agency (UNHCR), more than 944 000 refugees arrived in Europe in 2015. To date, there have been reports of cases of acute respiratory tract infections, louse-borne relapsing fever, cutaneous diphtheria, scabies, measles, meningococcal meningitis, shigellosis, typhoid fever, hepatitis A, tuberculosis and malaria among refugees. While these cases do not represent a significant disease burden for the host countries, the diseases pose a potential threat, particularly to the health of the refugees themselves. The health conditions of the refugees may worsen with the wintry weather due to low temperatures and overcrowding in shelters.

→Update of the week

No new events relating to migrants have been detected during the past week.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 26 February 2016

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, and up to 3 March 2016, 722 cases have been reported to WHO, including 283 deaths. No autochthonous cases have been reported outside China. Most cases are isolated and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak.

→Update of the week

During the past week, no new confirmed cases have been reported to WHO.

According to the <u>United Nations Food and Agriculture Organization</u> the number of A(H7N9) cases in humans has risen to 736 confirmed cases with at least 283 deaths since February 2013. Over 2 000 virological samples, mainly from live bird markets, vendors and some commercial or breeding farms, have tested positive for A(H7N9) from the environment, chickens, pigeons, ducks and a tree sparrow.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 3 March 2016

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 25 November 2015, the Temporary Recommendations in relation to the PHEIC were extended for another three months. WHO recently declared wild poliovirus type 2 eradicated worldwide. The type 2 component of the oral polio vaccine is no longer needed and there are plans for a globally synchronised switch in April 2016 from the trivalent to bivalent oral polio vaccine which no longer contains type 2.

→Update of the week

During the past week, three new wild poliovirus type 1 (WPV1) cases were reported to WHO from Pakistan.

On 1 March, <u>WHO</u> published a statement following the eighth IHR Emergency Committee meeting regarding the international spread of poliovirus. The Committee unanimously agreed that the international spread of polio remains a Public Health Emergency of International Concern (PHEIC) and recommended the extension of the temporary recommendations for a further three months.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 4 February 2016

Dengue fever is one of the most prevalent vector-borne diseases in the world. It affects an estimated 50 to 100 million people each year, mainly in the tropical regions of the world. The identification of sporadic autochthonous cases in non-endemic areas in recent years has already highlighted the risk of locally-acquired cases occurring in EU countries where the competent vectors are present.

→Update of the week

There are several ongoing outbreaks of dengue fever across the globe.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013

Latest update: 3 March 2016

Chikungunya virus infections are reported from increasingly wider areas of the world. An outbreak of chikungunya virus infection started in the Caribbean in December 2013, later spreading to the Americas and the Pacific region. In 2015, there remained ongoing outbreaks in these regions (especially in the Pacific region), but at a lower level compared with the same period last year. So far this year, no autochthonous cases of chikungunya virus infection have been detected in Europe. Introduction of the disease in Europe in areas where there is a competent vector is possible.

→Update of the week

Ongoing outbreaks are reported in the Caribbean, the Americas and the Pacific region.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2016

Opening date: 22 March 2014

Latest update: 3 March 2016

The largest ever epidemic of Ebola virus disease (EVD) affected West Africa from December 2013 to January 2016, 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). As of 2 March 2016, WHO has reported 28 603 cases of Ebola virus disease related to the outbreak in West Africa, including 11 301 deaths. The number of cases in the most affected countries peaked in autumn 2014 and has been slowly decreasing since then. Sierra Leone was declared Ebola-free by WHO on 7 November 2015, Guinea on 29 December 2015 and Liberia on 14 January 2016. On 15 January 2016, WHO reported a new sporadic case in Sierra Leone, and on 20 January, a second case, epidemiologically linked to the previous one.

→ Update of the week

According to the latest <u>WHO situation report</u>, no new confirmed cases have been reported since 20 January 2016.

According to a <u>hospital press release</u>, the Scottish nurse who was initially diagnosed with Ebola virus disease in December 2014, and then re-admitted for the third time on 23 February to the Royal Free Hospital in London due to a late complication from her previous infection by the Ebola virus, was released on 28 February 2016. According to the hospital statement, she was not 'infectious'.

II. Detailed reports

Influenza - Multistate (Europe) - Monitoring 2015-2016 season

Opening date: 2 October 2015

Latest update: 4 March 2016

Epidemiological summary

So far, a predominance of influenza A(H1N1)pdm09 viruses has characterised the 2015–2016 influenza season in most countries in the region. This subtype may cause more severe disease and deaths in people aged under 65 years than A(H3N2) viruses.

Since week 52/2015, several European countries with sentinel surveillance systems for severe acute respiratory infection (SARI) have reported increasing numbers of cases associated with A(H1N1)pdm09 infection. Similarly, countries reporting laboratory-confirmed influenza cases in hospitals and intensive care units (ICUs) have detected influenza A virus in the majority of cases since the start of the season, with A(H1N1)pdm09 being the dominant subtype.

ECDC assessment

Most of the viruses characterised so far have been similar to those recommended for inclusion in the trivalent or quadrivalent vaccines for this season in the northern hemisphere. Recommendations for vaccine composition for the 2016–2017 season in the northern hemisphere are to include a virus of the B/Victoria lineage in the trivalent vaccine and a more recent A(H3N2) virus.

Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its report weekly on the <u>Flu News Europe</u> <u>website</u>. Season risk assessments are available from <u>ECDC</u> and <u>WHO</u>.

Haemolytic uraemic syndrome (HUS) cases in young children –Romania

Opening date: 16 February 2016

Latest update: 4 March 2016

Epidemiological summary

Since January 2016, there has been an outbreak of haemolytic uraemic syndrome (HUS) cases in Romania involving 15 children aged 5 to 38 months hospitalised in Bucharest, Pitesti and Iasi. The dates of onset were between 25 January and 22 February. Three of the cases have died. Six of the reported cases tested positive for *E. coli* O26 by serology.

Web sources: Ministry of Health Romania

ECDC assessment

This is an outbreak of VTEC O26. Romanian authorities identified soft cheese prepared from unpasteurised milk as the vehicle.

Actions

ECDC is monitoring this event. Two ECDC experts and one EPIET fellow were deployed to support the outbreak investigation upon request from the Romanian Ministry of Health.

Zika - Multistate (world) - Monitoring global outbreaks

Opening date: 16 November 2015

Latest update: 3 March 2016

Epidemiological summary

As of 4 March, no autochthonous Zika virus transmission has been reported in the continental EU. ECDC is collecting data regarding imported cases through the media and official government communication lines. As of 4 March 2016, ECDC has recorded 209 imported cases in 16 EU/EEA countries: Austria (1), Czech Republic (2) Denmark (1), Finland (2), France (81), Germany (26), Ireland (3), Italy (9), Malta (1), Netherlands (30), Portugal (7), Slovakia (1), Slovenia (1), Spain (32), Sweden

(2), and the UK (10). Eleven of the imported cases are pregnant women. This list may not be exhaustive.

Several countries in the Americas, Caribbean and the Pacific continue to report an increase in autochthonous cases of Zika virus infection including outermost EU regions.

Martinique: From December 2015 to 3 March 2016, 9 240 suspected cases have been reported, this is an increase of 1 710 suspected cases since the last update on 25 February 2016.

French Guiana: From December 2015 to 3 March 2016, 1 405 suspected and 118 laboratory confirmed cases have been reported, an increase of 370 suspected and 14 laboratory-confirmed cases since the last update on 25 February 2016.

Guadeloupe: As of 3 March 2016, 474 suspected and 66 laboratory-confirmed cases have been reported, this is an increase of 85 suspected and 31 laboratory-confirmed cases since the last update on 25 February 2016.

Saint Martin: As of 3 March, 72 suspected and 17 laboratory-confirmed cases have been reported, this is an increase of 14 suspected and 6 laboratory-confirmed cases since the last update on 25 February 2016.

As of 4 March 2016, several countries or territories have reported confirmed autochthonous cases of Zika virus infection in the past nine months: American Samoa, Aruba, Barbados, Bolivia, Brazil, Bonaire, Cape Verde, Colombia, Costa Rica, Curaçao, Dominican Republic, Ecuador, El Salvador, Fiji, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Maldives, Marshall Islands, Martinique, Mexico, New Caledonia, Nicaragua, Panama, Paraguay, Puerto Rico, Saint Martin, Saint Vincent and the Grenadines, Samoa, Sint Maarten, Solomon Islands, Suriname, Thailand, Tonga, Trinidad and Tobago, Vanuatu, Venezuela and the US Virgin Islands.

Thirty EU/EEA countries have issued travel advice for people travelling to Zika-affected areas. Of these, 28 have advised pregnant women to consider postponing travel to countries affected by the Zika epidemic.

Web sources: <u>ECDC Zika Factsheet</u> | <u>WHO DON</u> | <u>PAHO</u> | <u>Colombian MoH</u> | <u>Brazilian MoH</u> | <u>Brazilian microcephaly case</u> <u>definition</u>

ECDC assessment

There is growing evidence that transplacental infections with Zika virus can cause severe central nervous system damage and microcephaly. Several studies have documented steps in the chain of an intrauterine infection, from symptomatic Zika-like infection in a pregnant mother residing in a Zika-affected area, to detection of microcephaly with brain calcifications in the foetus, and detection of Zika virus either in the amniotic fluid, in the cerebrospinal fluid of the newborn, or in the central nervous system of an aborted foetus or a dead newborn. However, a causal link between intrauterine Zika virus infection and adverse pregnancy outcomes has not yet been firmly confirmed.

The magnitude of the risk that Zika virus infection during pregnancy will result in malformations in the foetus is under investigation, but remains unknown at present.

Considering the growing body of evidence of adverse pregnancy outcomes associated with Zika virus infection, ECDC recommends that pregnant women postpone non-essential travel to Zika-affected areas. In addition, in order to protect pregnant women, male travellers returning from affected areas should consider using a condom with a pregnant partner until the end of pregnancy, or for six months with partners at risk of getting pregnant. This precautionary advice is based on limited evidence and will be revised as more information becomes available.

The spread of the Zika virus epidemic in the Americas is likely to continue as the vectors (*Aedes aegypti* and *Aedes albopictus* mosquitoes) are widely distributed there. There is a significant increase in the number of babies born with microcephaly in the north-eastern states of Brazil. However, the magnitude and geographical spread of the increase have not yet been well characterised.

As neither treatment nor vaccines are available, prevention is based on personal protection measures similar to those that are applied against dengue and chikungunya infections.

Actions

ECDC publishes an <u>epidemiological update</u> every Friday and daily <u>maps</u> with information on countries or territories which have reported confirmed autochthonous cases of Zika virus infection.

ECDC published an update of the rapid risk assessment on 23 February 2016 and has updated the ECDC Zika page with

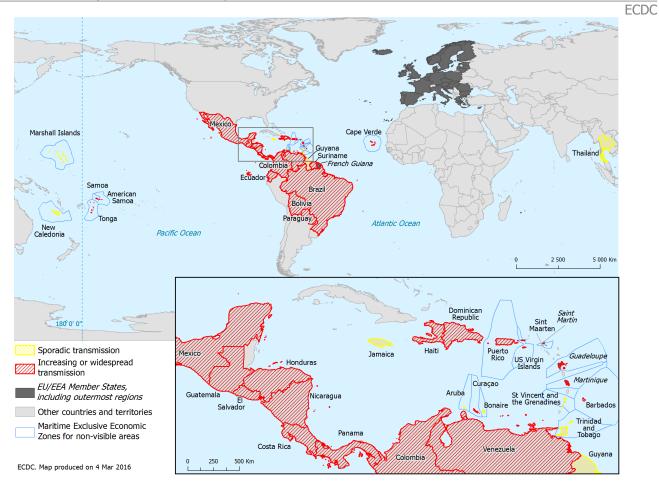
Frequently Asked Questions.

Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past nine months and past two months, as of 4 March 2016

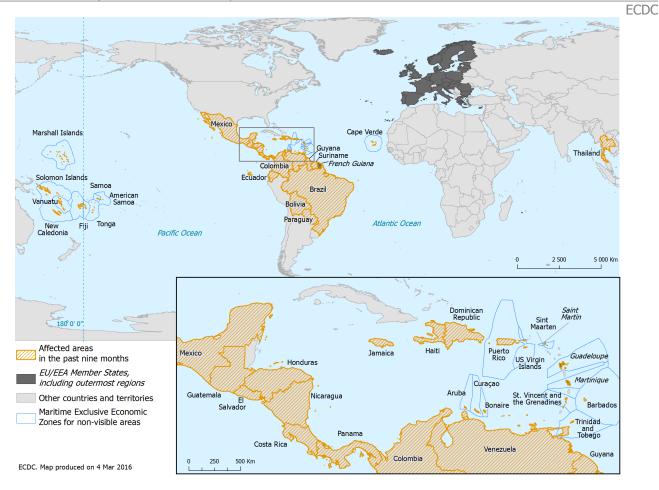
EC	
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	Affected in	
	the past 2 months	the past 9 months
American Samoa	Increasing or widespread transmission	Yes
Aruba	Sporadic transmission	Yes
Barbados	Increasing or widespread transmission	Yes
Bolivia	Increasing or widespread transmission	Yes
Brazil	Increasing or widespread transmission	Yes
Bonaire	Sporadic transmission	Yes
Cape Verde	Increasing or widespread transmission	Yes
Colombia	Increasing or widespread transmission	Yes
Costa Rica	Increasing or widespread transmission	Yes
Curaçao	Increasing or widespread transmission	Yes
Dominican Republic	Increasing or widespread transmission	Yes
Ecuador	Increasing or widespread transmission	Yes
El Salvador	Increasing or widespread transmission	Yes
Fiji	No	Yes
French Guiana	Increasing or widespread transmission	Yes
Guadeloupe	Increasing or widespread transmission	Yes
Guatemala	Increasing or widespread transmission	Yes
Guyana	Sporadic transmission	Yes
Haiti	Increasing or widespread transmission	Yes
Honduras	Increasing or widespread transmission	Yes
Jamaica	Sporadic transmission	Yes
Marshall Islands	Sporadic transmission	Yes
Martinique	Increasing or widespread transmission	Yes
Mexico	Increasing or widespread transmission	Yes
New Caledonia	Sporadic transmission	Yes
Nicaragua	Increasing or widespread transmission	Yes
Panama	Increasing or widespread transmission	Yes
Paraguay	Increasing or widespread transmission	Yes
Puerto Rico	Increasing or widespread transmission	Yes
Saint Martin	Increasing or widespread transmission	Yes
Saint Vincent and the Grenadines	Sporadic transmission	Yes
Samoa	Increasing or widespread transmission	Yes
Sint Maarten	Sporadic transmission	Yes
Solomon Islands	No	Yes
Suriname	Increasing or widespread transmission	Yes
Thailand	Sporadic transmission	Yes
Tonga	Increasing or widespread transmission	Yes
Trinidad and Tobago	Sporadic transmission	Yes
Vanuatu	No	Yes
Venezuela	Increasing or widespread transmission	Yes
US Virgin Islands	Increasing or widespread transmission	Yes

Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past two months, as of 4 March 2016



Countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past nine months, as of 4 March 2016



Public health risks - Multistate - Refugee movements

Opening date: 4 November 2015 Latest update: 3 March 2016

Epidemiological summary

There have been reports of emerging episodes of communicable diseases affecting the refugee population, including acute respiratory tract infections, louse-borne relapsing fever, cutaneous diphtheria, scabies, measles, meningococcal meningitis, shigellosis, typhoid fever, hepatitis A, tuberculosis and malaria.

ECDC assessment

Refugees are currently not a threat to Europe with respect to communicable diseases, but they are a priority group for communicable disease prevention and control efforts as they are more vulnerable. The risk that refugees arriving in Europe will contract communicable diseases has increased because of the current overcrowding at reception facilities.

While the risk of mosquito-borne diseases has been reduced as a result of the winter, the risk of infection from diseases whose spread is facilitated by overcrowding and lower temperatures has increased. It is therefore expected that the incidence of

respiratory and gastrointestinal conditions will increase in the coming months.

Low vaccination coverage for some diseases, along with low immunity for others, may result in susceptible refugees developing diseases such as measles and chicken pox, given their high incidence in some regions of the EU.

<u>WHO, UNHCR and UNICEF</u> jointly recommend that refugees, asylum seekers and migrants should have non-discriminatory, equitable access to healthcare services, including vaccines, irrespective of their legal status. They should be provided with timely immunisation against vaccine-preventable diseases, particularly measles and polio. All countries should have effective disease surveillance and reporting systems, outbreak investigation ability and case management and response capacity.

The risk to European residents of being affected by outbreaks occurring among refugee populations remains extremely low because overcrowding, limited access to clean water and poor hygiene levels are only encountered in certain reception facilities for refugees.

Actions

An <u>ECDC expert opinion</u> on the public health needs of irregular migrants, refugees or asylum seekers across the EU's southern and south-eastern borders was published on the ECDC website in September 2015.

ECDC prepared:

- an RRA on the risk of communicable disease outbreaks in refugee populations in the EU/EEA
- an updated RRA on louse-borne relapsing fever amongst migrants in the EU/EEA
- an <u>RRA</u> on cutaneous diphtheria among recently arrived refugees and asylum seekers in the EU
- an <u>RRA</u> on the risk of importation and spread of malaria and other vector-borne diseases associated with the arrival of migrants in the EU
- an <u>RRA</u> on shigellosis among refugees in the EU.

ECDC, in collaboration with Member States, the European Commission and WHO, continues to closely monitor the situation to rapidly identify and assess potential communicable disease threats.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 26 February 2016

Epidemiological summary

Cases reported by China since March 2013 have the following geographical distribution: Zhejiang (208), Guangdong (187), Jiangsu (85), Fujian (66), Shanghai (50), Hunan (27), Anhui (33), Hong Kong (14), Xinjiang Uygur Zizhiqu (10), Jiangxi (12), Beijing (6), Shandong (6), Guangxi (4), Henan (4), Taiwan (4), Jilin (2), Guizhou (2), Hubei (1) and Hebei (1). Three imported cases have also been reported: one in Malaysia and two in Canada.

Web sources: Chinese CDC | WHO | WHO FAQ page | ECDC | WHO avian influence updates

ECDC assessment

This outbreak is caused by a novel reassortant avian influenza virus capable of causing severe disease in humans. This is a 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.

In the past 12 months, there have been continued avian influenza A(H7N9) virus detections in the animal population in several provinces of China, indicating that the virus persists in the poultry population. If the pattern of human cases follows the trends seen in previous years, the number of human cases may rise over the coming months. Further sporadic cases of human infection with avian influenza A(H7N9) virus are therefore expected in areas that are already affected and in neighbouring areas.

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.

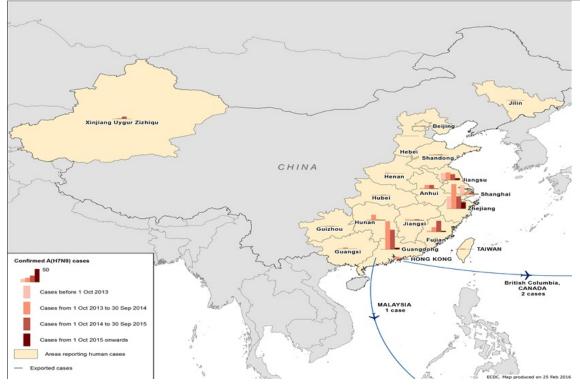
Actions

The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, and scientific research.

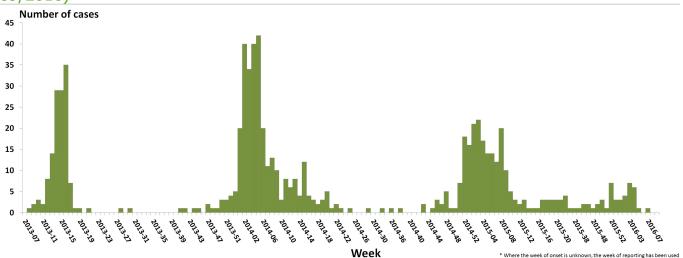
ECDC published an updated Rapid Risk Assessment on 3 February 2015.

ECDC published a guidance document <u>Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in</u> <u>Europe</u> for laboratories on 24 April 2013.

Distribution of confirmed cases of A(H7N9) by four periods of reporting (weeks 07/2013 to 09/2016)



Distribution of confirmed cases of A(H7N9) by first available date (weeks 07/2013 to 09/2016)



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 March 2016

Epidemiological summary

In 2016, five cases of wild poliovirus type 1 (WPV1) have been reported, compared with 14 cases for the same period in 2015.

As of 1 March 2016, two cases of circulating vaccine-derived poliovirus (cVDPV) have been reported to WHO this year. The emergency outbreak response is continuing in Laos. However, no new cases were reported in the past week.

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

ECDC assessment

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

References: <u>ECDC latest RRA</u> | <u>Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA</u> | <u>Wild-type</u> <u>poliovirus 1 transmission in Israel - what is the risk to the EU/EEA?</u> <u>|RRA Outbreak of circulating vaccine-derived poliovirus type 1</u> (<u>cVDPV1</u>) in Ukraine

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 <u>risk assessment</u>. ECDC has also prepared a background document with travel recommendations for the EU.

Following the detection of the cases of circulating vaccine-derived poliovirus type 1 in Ukraine, ECDC published a rapid risk

assessment on its website.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 4 February 2016

Epidemiological summary

Europe

No autochthonous dengue cases have been reported so far in 2016. In **Sweden**, the number of imported dengue cases nearly doubled in January 2016 compared with corresponding periods in 2015 and 2014, according to the <u>Swedish Public Health agency</u>. In total, 44 cases were reported in January, compared with 26 in January 2015 and 20 in January 2014. However, in February a similarly large increase has not been observed.

Asia

In **Thailand**, the number of dengue cases has more than doubled so far this year compared to the same time period last year (8 651 cases in 2016 compared to 4 263 cases in 2015), according to <u>media</u> quoting the Ministry of Health. **Singapore** continues to report high dengue activity in 2016 compared to the same period last year. The <u>National Environmental Agency (NEA)</u> estimates that the number of cases in 2016 may exceed 30 000 (higher than the record in 2013 when 22 170 cases were recorded) unless immediate measures are taken to suppress the *Aedes* mosquito population.

Caribbean

Jamaica reported increased dengue activity in the week leading up to 21 February, according to <u>media</u> quoting the Ministry of Health.

Americas

In **Mexico**, the number of probable and laboratory-confirmed dengue fever cases has reached more than 10 000 (as of 15 February), according to <u>media</u> quoting the Ministry of Health. The states reporting the highest number of cases to date include Jalisco (1 601), Nuevo Leon (1 290) and Guerrero (1 060). All four dengue serotypes have been reported across Mexico with DENV-1 being the most common circulating serotype.

In South America, the National IHR Focal Point (IHR NFP) of **Uruguay** notified <u>PAHO/WHO</u> of a case of dengue fever in a 31year-old woman from Montevideo with no travel history. If confirmed, this would be the first case of autochthonous dengue fever detected in Uruguay. In **Brazil**, more than 100 000 cases were reported across the country during January. The Midwest and Southeast regions have the highest incidence which follows the same trend as 2015. Among states, Mato Grosso do Sul has the highest reported incidence followed by Tocantins, Espírito Santo and Minas Gerais. In addition, there have been seven confirmed deaths from dengue nationally. All four dengue virus serotypes have been reported in 2016 with DENV-1 being the most common circulating serotype. **Argentina** has recorded nearly 5 000 cases of dengue fever nationally and around 70% of these cases are locally acquired, according to media quoting the Ministry of Health. The provinces of Buenos Aires, Cordoba, Misones and Santa Fe all reported increased dengue activity during February. In Chile, there is an ongoing dengue outbreak on **Easter Island** with 17 cases reported to date, according to <u>media</u> quoting the Ministry of Health.

Pacific Islands and Australia

There is an ongoing DENV-1 outbreak in **French Polynesia** with 50 confirmed cases and one death reported for the week ending 21 February 2016. **Fiji** is reporting increased dengue activity with 94 confirmed cases recorded since the start of the year. The highest number of cases are in the Northern Health Division, according to <u>media</u> quoting the Ministry of Health. There are ongoing outbreaks of DENV-1 in **New Caledonia** and DENV-3 in **American Samoa** and **Solomon Islands**, according to the Pacific Public Health Surveillance Network (PACNET).

As of 26 February, 260 cases of dengue fever have been laboratory confirmed on **Hawaii Island**, according to the Department of Health. Of the confirmed cases, 235 are Hawaii Island residents and 25 are visitors. In addition, 214 were adults and 46 children. Onset of illness ranged between 11 September 2015 and 13 February 2016.

In **Australia**, 155 laboratory-confirmed dengue cases were reported nationally up to 31 January 2016. This is the lowest number of cases reported within this period for the last five years. There is currently an ongoing DENV-2 outbreak in Townsville (northern Queensland), according to Queensland Health.

Africa

In **Sudan**, the cumulative number of suspected dengue fever cases reported since the beginning of the outbreak in August 2015 stands at 612 cases, including 106 deaths. Darfur remains the most affected region, accounting for 96% of all reported cases (558) and 97% of deaths (101 deaths), according to media quoting the <u>UN Office for the Coordination of Humanitarian Affairs</u>.

Web sources: ECDC Dengue | Healthmap Dengue | MedISys | ProMed Asia, Americas and Pacific |

ECDC assessment

Introduction and autochthonous transmission of dengue fever in Europe is possible where and when competent vectors are present. This underlines the importance of surveillance and vector control in European countries that have competent vectors.

Actions

ECDC has published a technical <u>report</u> on the climatic suitability for dengue transmission in continental Europe and <u>guidance for</u> <u>the surveillance of invasive mosquitoes</u>.

ECDC monitors the dengue situation worldwide on a monthly basis.

Chikungunya- Multistate (world) - Monitoring global outbreaks

Opening date: 9 December 2013 Latest update: 3 March 2016

Epidemiological summary

Europe

No autochthonous cases of chikungunya virus infection have been reported in EU Member States so far in 2016.

Americas

During the past month, the number of new chikungunya cases continued to steadily increase across the Americas and Caribbean region with 12 307 new suspected and confirmed cases reported between 5 and 26 February 2016, according to the latest data published by the <u>WHO Pan American Health Organization</u> (WHO PAHO). During the past four weeks, **Honduras** reported the largest increase in the number of suspected and confirmed cases (3 348) followed by **Colombia** (3 336) and **El Salvador** (3 236).

Since the beginning of the year and as of 26 February, 18 472 confirmed and suspected chikungunya cases have been reported in the Americas and Caribbean. No chikungunya-related deaths have been reported so far in 2016.

Pacific region

Between 20 and 26 February 2016 there were two cases of chikungunya in returning travellers from **Fiji** and one case in a returning traveller from the **Solomon Islands** reported by the New Zealand ESR (Institute of Environmental Science and Research Ltd), according to the Pacific Public Health Surveillance Network (PPHS).

Web sources: PAHO update | ECDC Chikungunya | WHO Factsheet | Medisys page |

ECDC assessment

Outbreaks are still ongoing in the Caribbean, Americas and Pacific but at a lower level compared with the same period last year, especially in the Pacific region. Continued vigilance is needed to detect imported cases of chikungunya in tourists returning to the EU from these regions.

Europe is vulnerable to the autochthonous transmission of chikungunya virus. The risk for onward transmission in Europe is linked to importation of the virus by viraemic patients in areas with competent vectors (*Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on Madeira). Autochthonous transmission from an imported viraemic chikungunya case is possible during the summer season in the EU.

Actions

ECDC published an <u>epidemiological update</u> on 16 September regarding the false positive case of chikungunya in Valencia province, Spain. Despite the fact that autochthonous transmission has not been confirmed in Spain, the conclusions of ECDC's <u>rapid risk assessment</u> published on 24 August remain valid.

ECDC monitors the global chikungunya situation on a monthly basis.

Ebola Virus Disease Epidemic - West Africa - 2014 - 2016

Opening date: 22 March 2014 Latest update: 3 March 2016

Epidemiological summary

Distribution of cases as of 2 March 2016:

- Liberia: 10 675 cases, including 4 809 deaths. Liberia was declared EVD-free on 3 September 2015. However, a family cluster occurred in the week leading up to 22 November 2015.
- **Sierra Leone**: 14 124 cases, including 3 956 deaths. The country was declared EVD-free on 7 November 2015. However, two epidemiologically linked sporadic case were reported on 14 and 20 January 2016.
- Guinea: 3 804 cases including 2 536 deaths. Guinea was declared EVD-free on 29 December 2015.

If no new cases are reported, transmission linked to the latest cluster of cases will be declared to have ended on 17 March in Sierra Leone.

Seven countries have reported an initial case or localised transmission: Nigeria, Senegal, the USA, Spain, Mali, the UK and Italy.

Web sources:ECDC Ebola page | ECDC Ebola and Marburg fact sheet | WHO situation summary | WHO Roadmap | WHO Ebola
Factsheet | CDC | Ebola response phase 3: Framework for achieving and sustaining a resilient zero | ReEBOV Antigen Rapid Test
Kit | Institut Pasteur will open a lab in Conakry | Emergency Operation Centres in the three affected countries | Entry screening in
US

ECDC assessment

The detection of a new case in Sierra Leone in January 2016 was not an unexpected event and highlighted the importance of maintaining heightened surveillance in the coming months as the risk of additional small outbreaks remains. Sporadic cases have been identified previously and are likely to be the result of the virus persisting in survivors even after recovery.

Actions

In 2015, ECDC deployed 95 experts (on a rotating basis) from within and outside the EU in response to the Ebola outbreak. This included an ECDC-mobilised contingent of experts to Guinea.

On 16 October 2015, ECDC published the latest (13th) update of the rapid risk assessment.

On 16 October 2015, ECDC published Recent development on sexual transmission of Ebola virus.

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 <u>Scientific report assessing risk related to household pets in contact with Ebola</u> 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

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.

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