

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 5 May 2014

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many EU countries in which vaccination uptake remains below the level required to interrupt the transmission cycle. ECDC monitors measles transmission and outbreaks in the EU and neighbouring countries in Europe on a monthly basis through enhanced surveillance and epidemic intelligence activities. Elimination of measles requires consistent vaccination uptake above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures.

→Update of the week

Since the last CDTR, outbreaks have been reported by Belgium, the Czech Republic and Ireland.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 28 March 2014

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease and is an infection which often passes unnoticed. The main reason for immunising against rubella is the high risk of congenital malformations associated with rubella infection during pregnancy. All EU Member States recommend vaccination against rubella with at least two doses of vaccine for both boys and girls. The vaccine is given at the same intervals as the measles vaccine as part of the MMR vaccine.

→Update of the week

No new outbreaks detected during the past month.

Non EU Threats

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

Opening date: 24 September 2012

Latest update: 28 May 2014

Since April 2012, 693 laboratory-confirmed cases, including 219 deaths, of acute respiratory disease caused by Middle East respiratory syndrome coronavirus (MERS-CoV) have been reported by national health authorities. 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 points towards an animal reservoir in the Middle East from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission to close contacts and in hospital settings has occurred, but there is no evidence of sustained transmission among humans. MERS-CoV is genetically distinct from the coronavirus that caused the SARS outbreak.

→Update of the week

Since the previous CDTR, 33 new cases have been reported. Twenty-five cases were reported by Saudi Arabia, three cases in the United Arab Emirates, one case in Jordan, two cases in Iran and two cases from Algeria.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 22 May 2014

Polio, a crippling and potentially fatal vaccine-preventable disease that mainly affects children, is close to being eradicated as a result of global public health efforts. Polio transmission currently occurs in 10 countries of the world.

Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014 by the World Health Organization (WHO) Director-General. As a result of the PHEIC, WHO issued temporary recommendations for controlling the spread of polioviruses from polio-transmitting countries.

→Update of the week

During the past week, two new infections with Wild poliovirus 1 (WPV1) were reported, one in Pakistan and one in Iraq. The case in Mada'in district in Baghdad-Resafa province, Iraq, is the second case this year in Iraq (with none in 2013).

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 23 May 2014

On 6 December 2013, France reported two laboratory-confirmed autochthonous cases of chikungunya in the French part of the Caribbean island of Saint Martin. Since then, local transmission has been confirmed in the Dutch part of Saint Martin, on Martinique, Saint Barthélemy, Guadeloupe, British Virgin Islands, Dominica, Anguilla, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, the Dominican Republic, Haiti, Antigua and Barbuda and French Guiana. Aruba has only reported imported cases. This is the first documented outbreak of chikungunya with autochthonous transmission in the Americas. There have been more than 60 000 probable and confirmed cases in the region. At least 13 fatalities have been reported so far.

→Update of the week

[Media](#) reported the first locally infected cases in the Co-operative Republic of Guyana, in Berbice, near the border with Suriname. With this, Guyana became the second country on the mainland of South America with local transmission, after French Guyana.

Health officials in Puerto Rico, have [reported](#) a first confirmed case in Puerto Rico, in a 16 year-old resident of the capital, San Juan. They are conducting an investigation to establish where the case was infected.

In the last week, media have also reported:

- two imported cases in [Panama](#), ex Haiti and Dominican Republic,
- an imported case in Venezuela, ex Dominican Republic (Promedmail),
- an imported case in [Tahiti, French Polynesia](#), ex Guadeloupe.

Other islands already earlier with confirmed cases are Saint Martin/Sint Maarten, Martinique, Saint Barthélemy, Guadeloupe, British Virgin Islands, Anguilla, Dominica, Aruba, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Dominican Republic, Haiti, Antigua and Barbuda. (WHO). In most of the territories of the French Antilles, the health authorities decided, given the caseload, not to seek laboratory confirmation for all suspected cases.

In the French Antilles, the number of suspected clinical cases in Saint-Martin and Saint-Barthélemy is stable and low, but the epidemic is expanding in Martinique, Guadeloupe and French Guiana.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014

Latest update: 22 May 2014

An ongoing outbreak of Ebola virus disease (EVD) in West Africa has been affecting Guinea, Liberia and Sierra Leone since early February 2014.

→Update of the week

Since 28 May 2014, there have been 33 new clinical cases in Guinea, the number of clinical cases has risen to 50 in Sierra Leone and one new suspected case has been reported in Liberia.

II. Detailed reports

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 5 May 2014

Epidemiological summary

Belgium

In April 2014 an outbreak of measles occurred in a kindergarten in Antwerp (Flanders). The date of onset of rash ranged from 27 March 2014 to 14 April 2014.

There were 84 suspected cases of which 32 were laboratory confirmed. Of the laboratory confirmed cases 28 were kindergarten children. There were four secondary cases (two mothers and two personnel). Twelve children have been hospitalised. There were no cases of encephalitis and no deaths were reported.

The age of affected children ranged from 2 -14 months and all were unvaccinated. Affected adults were in the age group 20-29 years. No connection with foreign travel or import was found. Genotype D8 was identified. The outbreak was considered to be over on 27 May 2014.

The Czech Republic

There is an ongoing outbreak of measles in the region Usti nad Labem in the Czech Republic. As of 27 May, 216 cases were reported, of which 86 cases were laboratory confirmed. Three samples had been sent for genotyping to Robert Koch Institute in Berlin, in two of them genotype B3 was confirmed.

Ireland

Fifteen cases were reported among university students in Galway prompting authorities to reinforce the need for measles vaccination throughout the country.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC/Euronews documentary](#) | [WHO Epidemiological Briefs](#) | [MedISys Measles page](#) | [EU-VAC-net ECDC](#) | [ECDC measles factsheet](#)

ECDC assessment

In the past two months seven countries have reported measles outbreaks. The target year for measles elimination in Europe is 2015. The current situation suggests that endemic measles transmission continues in many EU Member States and the prospect of achieving the 2015 objective is diminishing.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 28 March 2014

Epidemiological summary

The 27 EU/EEA countries reported 38 847 rubella cases during the most recent 12-month period between January 2013 and December 2013. Twenty countries reported consistently for the 12-month period. Poland accounted for 99% of all reported rubella cases in the 12-month period; 88% of these cases were either unvaccinated or had an unknown vaccination status. Less than 1% of the cases had a positive result in a rubella laboratory test. In 14 countries the rubella notification rate was rate less than one case per million population during the last 12 months.

Web sources: [ECDC measles and rubella monitoring](#) | [ECDC rubella factsheet](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#) | [Progress report on measles and rubella elimination](#) | [Towards rubella elimination in Poland](#)

ECDC assessment

As rubella is typically a mild and self-limiting disease with few complications, the rationale for eliminating rubella would be weak if it were not for the virus' teratogenic effect. When a woman is infected with the rubella virus within the first 20 weeks of pregnancy, the foetus has a 90% risk of being born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. The increase in the number of rubella cases reported in Romania and Poland during the last two years and the number of babies born with CRS are cause for concern. Rubella occurs predominantly in age and sex cohorts historically not

4/12

included in vaccination recommendations. To achieve rubella elimination, supplemental immunisation activities in these cohorts are needed.

Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to the European Surveillance System and through its epidemic intelligence activities on a monthly basis. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella monitoring is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness and the achievement of the 2015 rubella and congenital rubella elimination target.

An ECDC report is available online: [Survey on rubella, rubella in pregnancy and congenital rubella surveillance systems in EU/EEA countries](#)

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

Opening date: 24 September 2012

Latest update: 28 May 2014

Epidemiological summary

Summary: Since April 2012 and as of 2 June 2014, 693 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 219 deaths.

Confirmed cases and deaths by region:

Middle East:

Saudi Arabia: 568 cases/189 deaths
United Arab Emirates: 70 cases/9 deaths
Qatar: 7 cases/4 deaths
Jordan: 17 cases/5 deaths
Oman: 2 cases/2 deaths
Kuwait: 3 cases/1 death
Egypt: 1 case/0 deaths
Yemen: 1 case/1 death
Lebanon: 1 case/0 deaths
Iran: 2 cases/1 death

Europe:

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

Africa:

Tunisia: 3 cases/1 death
Algeria: 2 cases/ 0 deaths

Asia:

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

Americas:

United States of America: 2 cases/0 deaths

A previously 'probable case', with initial positive serological tests, has been discarded. Additional tests, including a neutralising antibody test, concluded that the person was not infected with MERS-CoV.

Source: CDC

Twenty one cases have been reported from outside the Middle East: the UK (4), France (2), Tunisia (3), Germany (2), USA (2), Italy (1), Malaysia (1), Philippines (1), Greece (1), Netherlands (2) and Algeria (2). In France, Tunisia and the UK, there has been local transmission among patients who had not been to the Middle East, but had been in close contact with laboratory-confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities.

ECDC notes the decision of Margaret Chan, the Director General of WHO, on 14 May 2014 not to call the MERS-CoV outbreak a Public Health Emergency of International Concern (PHEIC) as the conditions have not yet been met. This decision was based on the advice of the WHO Emergency Committee under the international health regulations on MERS-CoV. However the committee indicated that, based on current information, 'the seriousness of the situation had increased in terms of public health impact, but that there is no evidence of sustained human-to-human transmission.'

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](#) | [Eurosurveillance article 26 September](#) |

ECDC assessment

The source of MERS-CoV infection and the mode of transmission have not been identified, but the continued detection of cases in the Middle East indicates that there is a persistent source of infection in the region. Dromedary camels are likely to be an important host species for the virus, and many of the primary cases in clusters have reported direct or indirect camel exposure. Almost all of 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, and international surveillance for MERS-CoV cases is essential. An international case-control study has been designed and proposed by WHO. Results of this or similar epidemiological studies in order to determine the initial exposures and risk behaviour among the primary cases are urgently needed.

The risk of secondary transmission in the EU remains low and can be reduced further through 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.

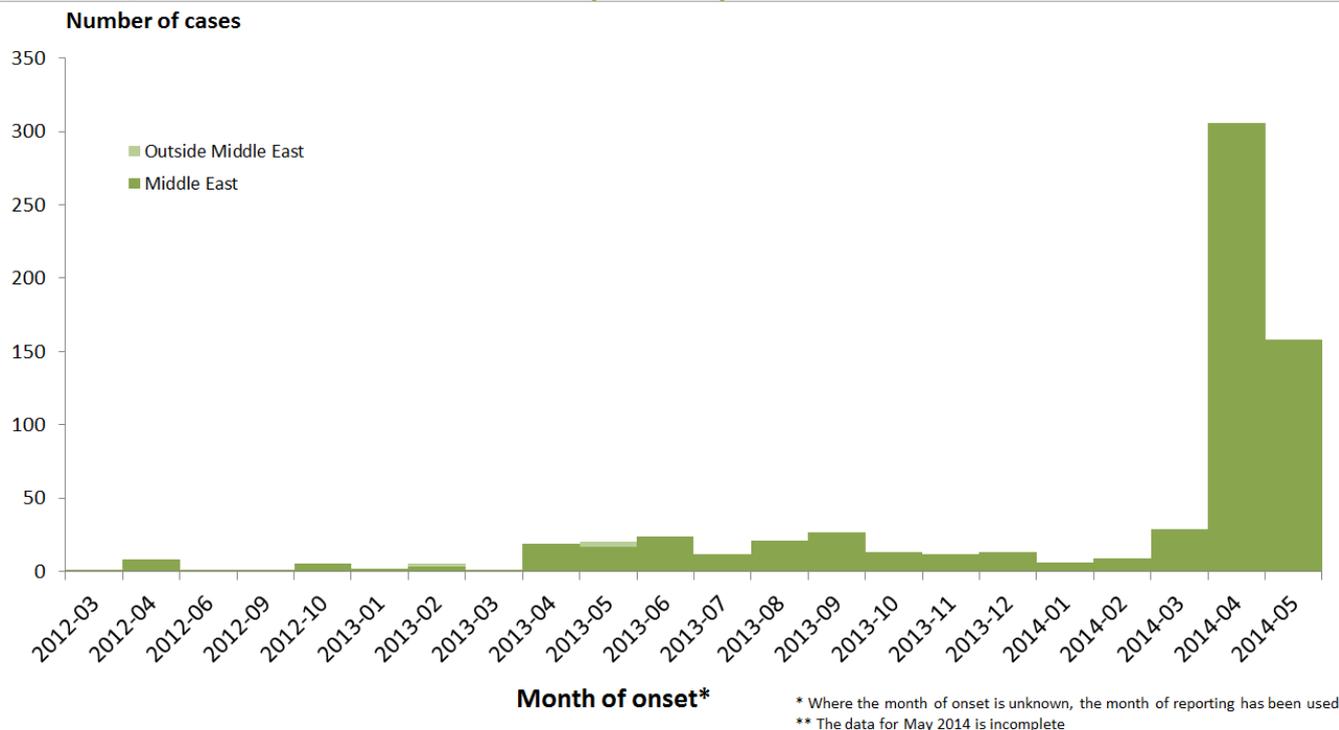
Actions

ECDC published an [epidemiological update](#) on 16 May 2014.

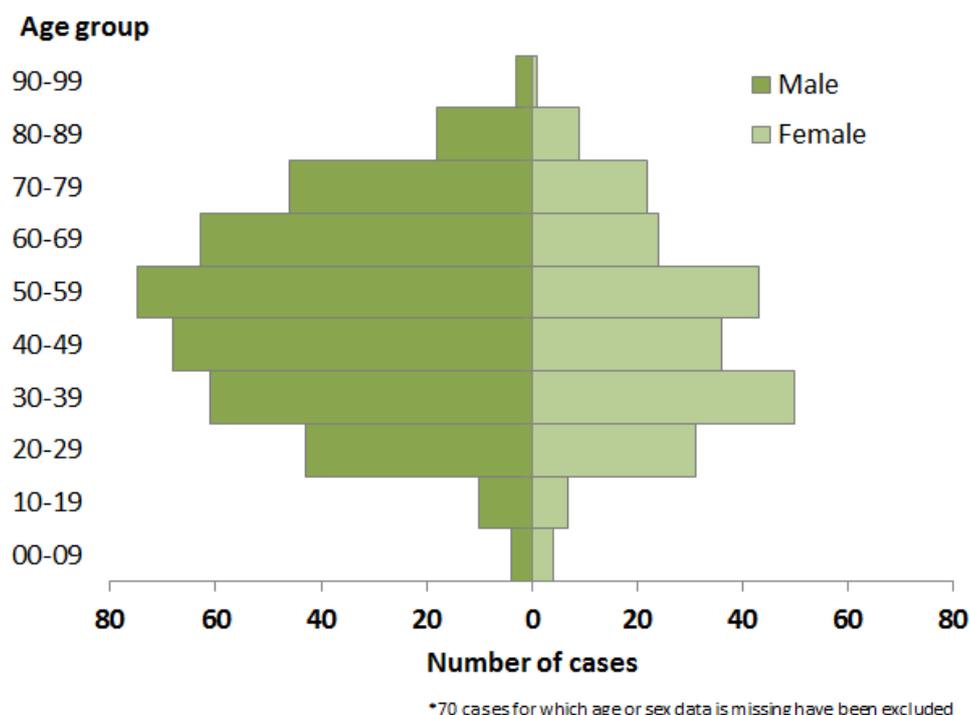
The last [rapid risk assessment](#) was published on 25 April 2014 and ECDC has prepared an update.

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

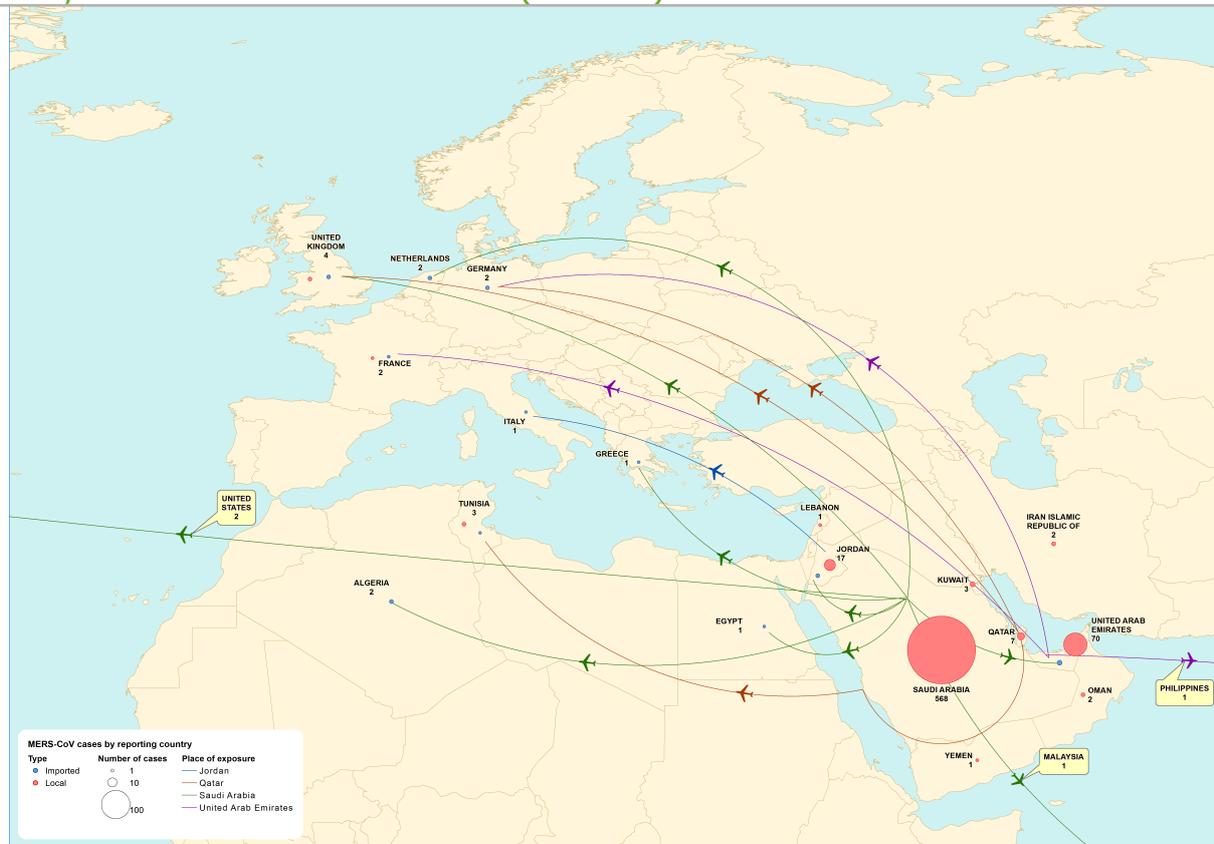
Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - 02 June 2014 (n=693*)



Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 02 June 2014 (n=623*)



Distribution of confirmed cases of MERS-CoV by place of reporting and place of probable infection, March 2012 - 02 June 2014 (n=693*)



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 22 May 2014

Epidemiological summary

Worldwide, 84 cases have been reported to WHO in 2014, compared with 41 for the same time period in 2013. The most affected country is Pakistan (67 cases this year).

The Government of Pakistan announced that it had initiated implementation of the recently issued WHO Temporary Recommendations to reduce the international spread of wild poliovirus. Health facilities across Pakistan are now vaccinating prospective travellers and issuing the required vaccination certificates.

Web sources: [Polio Eradication: weekly update](#) | [MedISys Poliomyelitis](#) | [ECDC Poliomyelitis factsheet](#)

ECDC assessment

Europe is polio-free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. This was an imported outbreak, and it was demonstrated that the WPV originated from India. An outbreak in the Netherlands, in a religious community opposed to vaccination, caused two deaths and 71 cases of paralysis in 1992.

The last indigenous WPV case in the WHO European Region was in Turkey in 1998. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

There is an ongoing polio outbreak in Syria with onset in 2013, and until 15 May 2014, 36 confirmed cases of Acute Flaccid Paralysis (AFP) caused by WPV-1 **had** been reported from across the country (35 in 2013 and 1 in 2014).

WPV-1 originating from Pakistan has been circulating in Israel since early 2013 without causing any cases of AFP. The circulation was detected through routine environmental surveillance of sewage for polioviruses. Israel has responded with vaccination campaigns, first with IVP later followed by OPV, and has reintroduced a single dose of OPV in addition to IPV into the routine vaccination schedule for children.

There are indications that the transmission of WPV is increasing in Pakistan, and the number of new AFP cases during the first four months of 2014 increased ten-fold compared to the same period in 2013.

On 5 May 2014, the Director-General of WHO, Dr Margaret Chan, acted on the recommendation of the International Health Regulations Emergency Committee and declared that the spread of wild-type poliovirus in 2014 constitutes a Public Health Emergency of International Concern (PHEIC) in accordance with the International Health Regulations (IHR). WHO has issued Temporary Recommendations for controlling the international spread of polioviruses out of the remaining ten polio-infected countries in the world. Three of the countries, Cameroon, Pakistan and Syria, are required to ensure that all people leaving these countries after staying for more than four weeks must have received a dose of polio vaccine within 12 months to four weeks prior to departure.

References: [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 position paper on polio vaccines, January 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 re-introduction of wild poliovirus into the EU.

Following the declaration of polio as a PHEIC, ECDC is updating its risk assessment. ECDC has also prepared a background document of travel recommendations for the EU.

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 23 May 2014

Epidemiological summary

Cases reported as of 30 May 2014:

- Anguilla, 33 confirmed cases;
- Antigua and Barbuda, 4 cases;
- Aruba, 1 imported case originating from Sint Maarten;
- Dominica, 1 817 suspected cases and 122 confirmed cases;
- Dominican Republic, 8 017 suspected and 17 confirmed cases;
- French Guiana, 176 confirmed or probable cases 70% of which autochthonous;
- Guadeloupe, 18 000 suspected and 1 328 confirmed or probable cases, one death;
- Haiti, 632 confirmed cases;
- Martinique, 26 670 suspected and 1 515 confirmed or probable cases, 9 deaths;

- Saint Barthélemy, 510 suspected and 135 confirmed or probable cases;
- Saint Lucia, 5 confirmed cases;
- Saint Martin (FR), 3 280 suspected and 793 confirmed or probable cases, 3 deaths;
- Saint Vincent and the Grenadines, 110 suspected cases and 57 confirmed cases;
- Sint Maarten (NL), 325 suspected and 301 confirmed cases;
- St. Kitts and Nevis, 21 confirmed case;
- Virgin Islands (UK), 20 confirmed cases.

Web sources: [ECDC Chikungunya](#) | [CDC Factsheet](#) | [Medisys page](#) |

ECDC assessment

Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is expanding. An increasing number of cases have been observed from most of the affected areas. The vector is endemic in the region, where it also transmits dengue virus. Vigilance is recommended for the occurrence of imported cases of chikungunya in tourists returning to the EU from the Caribbean, including awareness among clinicians, travel clinics and blood safety authorities.

Actions

ECDC published a [rapid risk assessment](#) on 12 December 2013 and [epidemiological updates](#) on 10 January and [7 February](#) 2014.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014

Latest update: 22 May 2014

Epidemiological summary

Guinea:

WHO reports, as of 28 May 2014, that the cumulative number of clinical cases is 291, including 193 deaths. The number of confirmed cases is 172 and confirmed deaths is 108. The geographical distribution is as follows: Conakry (53 cases, including 27 deaths), Guéckédou (179/133), Macenta (40/23), Kissidougou (7/5), Dabola (4/4), Djinguiraye (1/1) and Boffa (4/0).

The total number of cases in isolation is 13 (9 in Guéckédou, 3 in Telimele and one in Conakry). The number of contacts under follow-up is 493 (275 in Guéckédou, 125 in Macenta and 93 in Telimele).

Sierra Leone:

The number of clinical cases has risen to 50 (14 confirmed, three probable, and 36 suspected) including six deaths (two confirmed, three probable and one suspected). The geographical distribution of these cases and deaths are as follows: Kailahun (37 cases and six deaths), Kenema (1/0), Koinadugu (1/0), Bo (1/0), Moyamba (1/0).

Liberia:

Twelve cases (six confirmed, two probable, and four suspected) and 11 deaths had already been reported. One new case, that died in Foya district and whose body was transported to and buried in Sierra Leone, was reported by 29 May 2014.

No cases have been detected among returning travellers in Europe.

Web sources: [WHO/AFRO outbreak news](#) | [WHO Ebola Factsheet](#) | [ECDC Ebola health topic page](#) | [ECDC Ebola and Marburg fact sheet](#) | [Risk assessment guidelines for diseases transmitted on aircraft](#) | [NEJM 16 April article](#)

ECDC assessment

This is the first Ebola virus disease outbreak in Guinea, Sierra Leone and Liberia. The origin of the outbreak is unknown. The outbreak now clearly shows a new wave, affecting the three countries and a wide range of local districts.

The risk of infection for travellers is considered very low since most human infections result from direct contact with the bodily fluids or secretions of infected patients, particularly in hospitals (nosocomial transmission) and as a result of unsafe procedures, use of contaminated medical devices (including needles and syringes) and unprotected exposure to contaminated bodily fluids.

Actions

ECDC has published an updated [rapid risk assessment](#) and provided guidance to Member States for [EU travellers](#) to and from the affected countries.

ECDC is preparing an epidemiological update and is closely monitoring this event.

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