



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 26, 22-28 June 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary EU Threats

West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014

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 regarding WNF-affected areas and identify significant changes in the epidemiology of the disease.

→Update of the week

During the past week, Bosnia and Herzegovina reported four new cases of West Nile fever from Republika Srpska, in the newly affected municipalities of Bosanski Novi, kljuc, Mrkonjic Grad and Teslic. All cases were WNV IgM positive.

Latest update: 27 June 2014

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 26 June 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 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 monthly update, there has been an update on the ongoing outbreak in the Czech Republic. The outbreak in Catalonia in Spain has been declared to be over.

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

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 26 June 2014

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

→Update of the week

During the past week, three new infections with wild poliovirus 1 (WPV1) were reported, one each in Pakistan, Nigeria and Equatorial Guinea.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 26 June 2014

An ongoing and evolving outbreak of Ebola virus disease (EVD) in West Africa has been affecting Guinea, Liberia and Sierra Leone since December 2013. Since week 22 of 2014, a new wave of transmission is unfolding in all three affected countries.

→Update of the week

In the past week, 69 cases have been reported from Sierra Leone, 29 from Liberia, and no new cases have been reported from Guinea, according to WHO figures. In the same period, additional deaths in previously reported cases have been reported: six from Guinea, 13 from Liberia and none from Sierra Leone. In the past few weeks a new wave of transmission has unfolded in all the affected countries after a period with relatively few reported cases. The situation in Sierra Leone is particularly worrying raising concerns about the effectiveness of the containment and control measures.

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013

Latest update: 26 June 2014

An outbreak of chikungunya virus infection has been ongoing in the Caribbean since December 2013. There have been more than 190 000 probable and confirmed cases in the region. At least 21 fatalities have been reported so far.

→Update of the week

Most of the areas previously involved continue to report increasing number of cases, with a substantial increease of cases in Hispaniola island (Haiti and the Dominican Republic). El Salvador in Central America declared a national emergency with at least 1200 suspected cases (laboratory confirmation of the cases is pending). Press quoting the national health authorities reports of 17 confirmed cases in Suriname and local health authorities report of the first imported case in Mexico. Several other countries have recently reported imported chikungunya infection in patients with travel history to the affected areas: the US (more than 88 cases in several states), Barbados, Bonaire, Brazil, Chile, Cuba, France (including Tahiti), Italy, the Netherlands, Panama, Peru, Spain, Trinidad and Tobago, Turks and Caicos Islands and Venezuela (8 imported cases so far). Costa Rica reported a confirmed case, but it is not clear if it is imported or autochthonous.

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

Opening date: 24 September 2012 Latest update: 26 June 2014

Since April 2012, 838 cases of MERS-CoV infection have been reported by local health authorities worldwide, including 322 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East, or have returned from this area. The source of the virus remains unknown but the pattern of transmission points towards an animal reservoir in the Middle East from which humans sporadically become infected through zoonotic transmission.

→Update of the week

Since the last CDTR, five additional cases have been reported by Saudi Arabia.

Mass gathering monitoring- Brazil- FIFA World Football Cup 2014

Opening date: 9 June 2014 Latest update: 26 June 2014

ECDC is enhancing its epidemiological intelligence surveillance during the FIFA World Cup 12 June – 13 July 2014 in Brazil to detect threats to public health that could represent a threat to the EU or to EU visitors. Routine epidemic intelligence activities will be enhanced by expanding the information sources monitored, using a targeted and systematic screening approach and tailored tools (i.e. MediSys).

→Update of the week

During the past week, no new major public health threats posing a risk for EU travellers have been identified.

II. Detailed reports

West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014 Latest update: 27 June 2014

Epidemiological summary

As of 26 June 2014, no human cases of West Nile fever have been reported in the EU while two cases have been reported in neighbouring countries since the beginning of the 2014 transmission season.

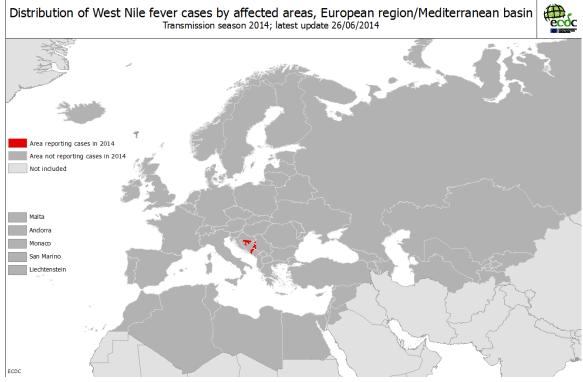
Web sources: ECDC West Nile fever | ECDC West Nile fever risk assessment tool | West Nile fever maps |

ECDC assessment

West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures are considered important for ensuring blood safety by the national health authorities when human cases of West Nile fever occur. According to the <u>EU blood directive</u>, efforts should be made to defer blood donations from affected areas with ongoing virus transmission.

Actions

From week 23 onwards, ECDC produces weekly West Nile fever (WNF) risk maps during the transmission season to inform blood safety authorities regarding WNF affected areas.



Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 26 June 2014

Epidemiological summary

EU Member States

Spain

The outbreak in Catalonia that started in January 2014 is <u>declared</u> to be over. The index case was infected in the Philippines. Most of the cases were unvaccinated adults 20 to 44 years old and occurred in the counties of Barcelona and Girona. Of the 126 reported cases, five were sporadic cases unrelated to the original outbreak but have coincided in time. Twenty-four per cent of affected persons were healthcare personnel. A large number of transmissions occurred within healthcare facilities, particularly in waiting rooms. Almost 30 percent of patients were hospitalised.

The Czech Republic

There is an ongoing outbreak of measles in the Czech Republic that started in a hospital in Usti nad Labem in February 2014. The index case was a traveller returning from India. The majority of cases in the hospital outbreak were healthcare workers. According to the media, the outbreak has spread to Teplice, a neighbouring town in the area. As of 8 June 2014, there have been 250 cases reported since the beginning of the outbreak.

Rest of the world

U.S.

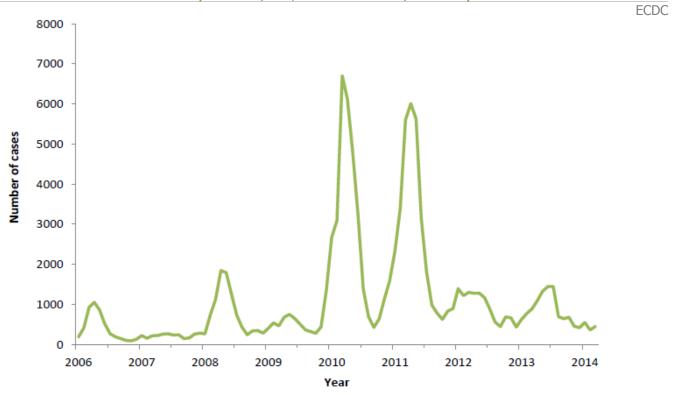
During 1 January-20 June 2014 there have been 514 confirmed cases in the U.S. reported to <u>CDC</u>'s National Center for Immunization and Respiratory Diseases (NCIRD) involving 20 states. This is the highest number of cases since measles elimination was documented in the U.S. in 2000.

Web sources: ECDC measles and rubella monitoring | ECDC/Euronews documentary | WHO Epidemiological Briefs | MedISys Measles page | EUVAC-net ECDC | ECDC measles factsheet | ECDC measles fac

ECDC assessment

During 2014, seven EU Member States 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.

Number of measles cases by month, EU/EEA countries, January 2006-March 2014



Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 28 March 2014

Epidemiological summary

Twenty-eight EU/EEA countries reported 30 743 rubella cases over April 2013 to March 2014. Poland accounted for 99.2% of all reported rubella cases in the 12-month period, including 911 in March 2014. Germany, who has now started reporting data to TESSy (The European Surveillance System), reported 46 cases of rubella in 2014. In 16 countries the rubella notification rate was 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 included in vaccination recommendations. To achieve rubella elimination, supplemental immunisation activities in these cohorts are needed.

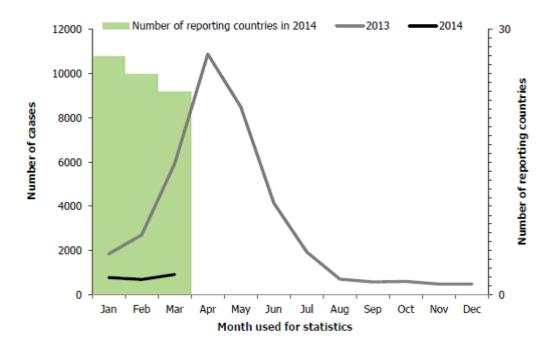
Actions

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

Number of rubella cases in 2013 and 2014 and number of European countries reporting in 2014, by month





Note: Belgium and France do not have rubella surveillance with national coverage. Of the countries that have rubella surveillance with national coverage, only Italy did not report data for all months in 2013

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 26 June 2014

Epidemiological summary

Worldwide, 106 cases have been reported to WHO in 2014, compared with 77 for the same time period in 2013.

In 2014, there are ten polio-affected countries: Pakistan (83 cases), Afghanistan (6 cases), Equatorial Guinea (5 cases), Cameroon (3 cases), Nigeria (4 cases), Iraq (2 cases), Somalia (1 case), Syria (1 case), Ethiopia (1 case).

On 18 June, Brazil reported that wild poliovirus type 1 (WPV1) had been detected in a sewage sample collected in March 2014 at Viracopos International Airport in Sao Paolo state. No cases of paralytic polio have been reported in Brazil and there is no evidence of transmission within the population of that country. Genetic sequencing of the virus indicated that it is most closely related to the virus that is circulating in Equatorial Guinea, linked to an ongoing WPV1 outbreak in Cameroon. WHO has recently elevated the risk of international spread of polio from Cameroon to very high due to continued poliovirus circulation in the country, gaps in surveillance, and the influx of vulnerable refugee populations from the Central African Republic.

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. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

The recent importation event in Brazil from Equatorial Guinea demonstrates that all regions of the world continue to be at risk of exposure to wild poliovirus until polio eradication is completed globally.

The confirmed circulation of WPV in 10 countries and the documented exportation of WPV to other countries support the fact that there is a potential risk for WPV being re-introduced into the EU/EEA. The highest risk of large outbreaks of poliomyelitis are in areas where unvaccinated populations are geographically clustered or live in poor sanitary conditions, or a combination of the two.

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

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

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 26 June 2014

Epidemiological summary

Guinea

The cumulative number of cases and deaths reported from Guinea is 390 (270 confirmed, 89 probable and 31 suspected) and 273 deaths. No new cases were reported in the past week, however six deaths were reported.

I iheria

The cumulative number of cases is 62 (of which 35 confirmed), including 37 deaths. There were 29 new cases reported in the last week, mainly from Lofa and Montserrado. Montserrado county includes the capital city, Monrovia. The European Community Humanitarian Office (ECHO) on site and media both report cases in greater Monrovia.

Sierra Leone

The cumulative confirmed number of cases is 166 (156 of which confirmed), including 47 deaths. In the past week an increase of 69 cases has been reported mainly from Kailahun and Kenema. The number of deaths reported in Sierra Leone is underestimated due to difficulties in reporting from the field.

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 largest outbreak of EVD reported and is also the first outbreak of EVD in West Africa. The origin of the outbreak is unknown. The outbreak, after a period of appearing to slow down, seems to be spreading again. There has been an upsurge of EVD cases in Sierra Leone and Liberia during the past week, although the situation in Guinea seems to have improved. Community resistance, inadequate treatment facilities and insufficient human resources in certain affected areas are among challenges currently faced by the three countries in responding to the EVD outbreak, according to WHO.

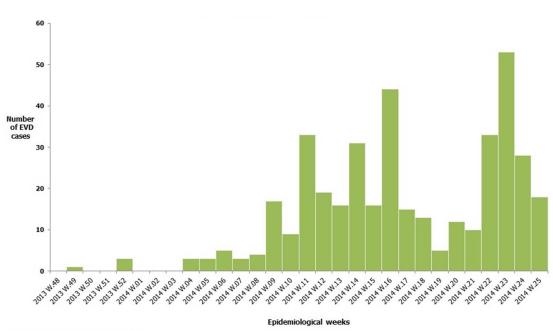
The risk of infection for international travellers is considered very low since most human infections result from direct contact with the bodily fluids or secretions of infected patients, particularly in hospitals (nosocomial transmission) and as a result of unsafe procedures, use of contaminated medical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

Actions

ECDC published an update of its rapid risk assessment <u>rapid risk assessment</u> on 9 June. ECDC provided guidance to Member States for <u>EU travellers</u> to and from the affected countries.

Distribution of EVD cases by week of reporting, Guinea, Week 48-2013 to Week 25*-2014





*: Data for week 25 up to 20 June 2014

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 26 June 2014

Epidemiological summary

As of 26 June 2014, there have been more than 190 000 confirmed and suspected cases in the region with at least 21 fatalities. The numbers may be underestimated due to the difficulty of testing and reporting in some countries.

Cases officially reported as of 26 June 2014:

Anguilla, 33 confirmed cases;

Antigua and Barbuda, 4 cases;

Aruba, 1 imported case originating from Sint Maarten;

Costa Rica, 1 confirmed;

Cuba, 6 confirmed imported cases;

Dominica, 2 492 suspected cases and 129 confirmed cases;

Dominican Republic, 89 720 suspected, 18 confirmed cases and 3 deaths;

El Salvador, 1 200 suspected cases;

French Guiana, 390 confirmed or probable cases 60% of which autochthonous;

Guadeloupe, 40 400 suspected and 1 328 confirmed or probable cases, 3 deaths;

Guyana, 16 confirmed cases;

Haiti, 11 802 suspected and 14 confirmed cases;

Martinique, 37 600 suspected and 1 515 confirmed or probable cases, 12 deaths;

Puerto Rico, 23 confirmed cases;

Saint Barthélemy, 620 suspected and 142 confirmed or probable cases;

Saint Kitts and Nevis, 22 confirmed cases;

Saint Lucia, 214 suspected and 30 confirmed cases;

Saint Martin (FR), 3 430 suspected and 793 confirmed or probable cases, 3 deaths;

Saint Vincent and the Grenadines, 212 suspected cases and 67 confirmed cases;

Sint Maarten (NL), 360 suspected and 301 confirmed cases;

Suriname, 17 confirmed cases;

Turks and Caicos Islands, 6 confirmed; Virgin Islands (UK), 20 confirmed cases; Virgin Islands (US), 3 confirmed authochtonous cases.

In most of the territories of the French Antilles, given the caseload, the health authorities decided not to seek laboratory confirmation for all suspected cases.

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

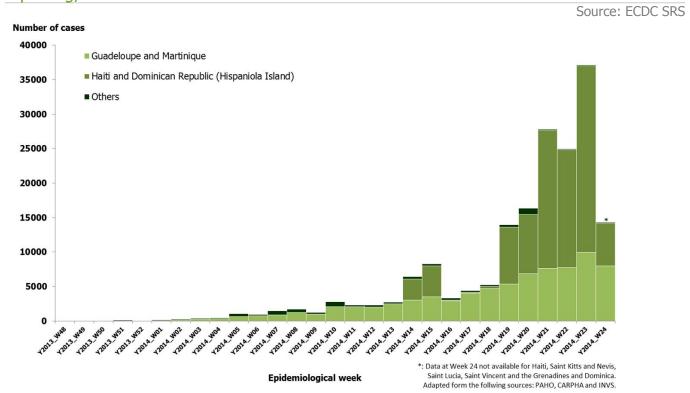
ECDC assessment

Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is still expanding and reached Central and South America. 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 updated its Rapid Risk Assessment and published it on the website on 27 June.

Distribution of suspected and confirmed cases of Chikungunya by week and place of reporting, Week 48-2013 to Week 24-2014



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

Opening date: 24 September 2012 Latest update: 26 June 2014

Epidemiological summary

Since April 2012 and as of 26 June 2014, 838 cases of MERS-CoV have been reported by local health authorities worldwide, including 322 deaths.

Confirmed cases and deaths by region Middle East

Saudi Arabia: 710 cases/292 deaths United Arab Emirates: 71 cases/9 deaths

Qatar: 7 cases/4 deaths Jordan: 18 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: 3 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/1 death

Asia

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

Americas

United States of America: 2 cases/0 deaths

Web sources: ECDC's latest rapid risk assessment | ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | CDC MERS | Saudi Arabia MoH

ECDC assessment

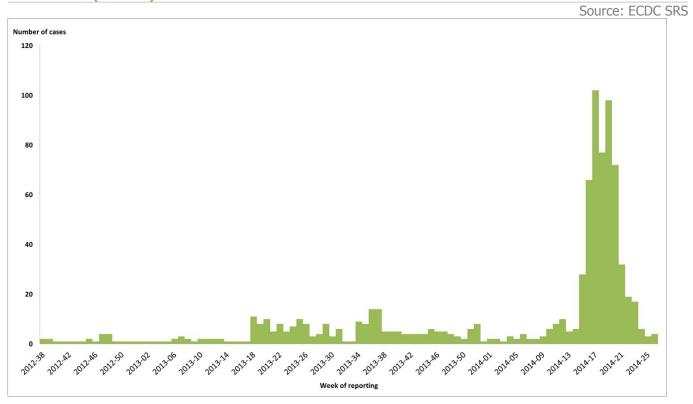
The source of MERS-CoV infection and the mode of transmission have not been identified, but the continued detection of cases in the Middle East indicates that there is a persistent source of infection in the region. Dromedary camels are a host species for the virus, and many of the primary cases in clusters 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.

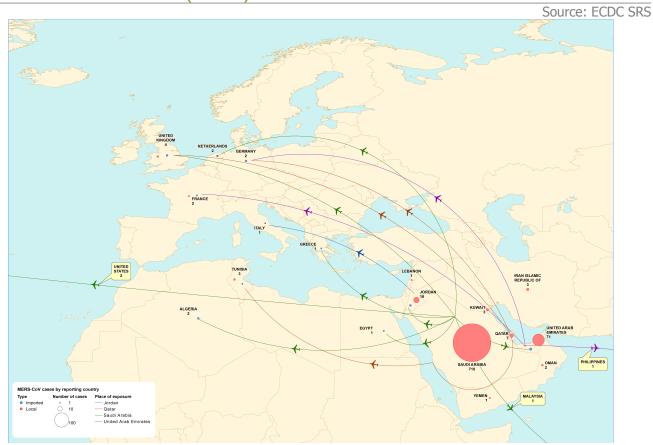
Actions

ECDC published an <u>epidemiological update</u> on 5 June 2014. The last <u>rapid risk assessment</u> was published on 2 June 2014. ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.

Distribution of confirmed cases of MERS-CoV by week of reporting, March 2012 - 26 June 2014 (n=838)



Distribution of cases of MERS-CoV by place of reporting and place of probable infection, March 2012 - 26 June 2014 (n=838)



Mass gathering monitoring- Brazil- FIFA World Football Cup 2014

Opening date: 9 June 2014 Latest update: 26 June 2014

Epidemiological summary

Wild poliovirus in sewage - Sao Paulo

Source: IHR

On 18 June, the Brazil IHR reported the isolation of wild poliovirus type 1 (WPV1) from sewage samples collected in March 2014 at Viracopos international Airport, in Campinas municipality in the State of Sao Paulo, Brazil. The virus has been detected in sewage only. Sewage samples collected from the same site subsequent to the detection of WPV1 have been either negative or only positive for Sabin strains or non-polio enteroviruses. To date, no case of paralytic polio has been reported. The isolate was detected through routine environmental surveillance testing of sewage water; there is no evidence of transmission of WPV1. Genetic sequencing indicated a close match with a strain of WPV1 that was recently isolated from a case of polio in Equatorial Guinea. Additional epidemiological investigations are ongoing.

Dengue- Belo Horizonte

Source: Media

The Municipal Secretariat of Health (SAMSA) provided a dengue update on the situation in Belo Horizonte. To date, 1 668 cases have been reported. Nearly 2 500 cases are still under investigation. The State Department of Health (SES) indicated that as of 13 June, Minas Gerais has reported 26 258 confirmed cases of dengue in 2014.

Dengue-Sao Paulo

Source: Municipality Health Department

According to the Municipal Health Department, 11 392 confirmed cases (including 8 deaths) of dengue fever reported so far this year in Sao Paulo. More than half (56.3%) of these cases were reported between 23 March and 19 April. São Paulo city has an incident rate of 101.2 cases per 100 thousand inhabitants. The Municipal Health Department indicated that currently the incidence rate of dengue is not considered low but medium, based on the Ministry of Health criteria.

Leptospirosis- Jaraguá do Sul

Source: Media

Media reports 21 suspected cases of Leptospirosis in Jaraguá do Sul, following recent floods. Patients who showed symptoms have been treated in the past two weeks. Laboratory investigations are pending. Two cases have been hospitalised. From January to June 2014, the local authorities recorded 72 suspected cases, with 17 confirmed. In Guaramirim, there have been eight suspected cases since 8 June, all patients have been treated and test results are pending, no patients are hospitalised.

ECDC assessment

EU citizens visiting the 2014 World Cup in Brazil are most at risk of gastrointestinal illness and vector-borne infections. Therefore, they should pay attention to standard hygienic measures to reduce the risk of gastrointestinal illness and protect themselves against mosquito and other insect bites using insect repellent and/or wearing long-sleeved shirts and trousers in regions where vector-borne diseases are endemic. Visitors to Brazil should consult the advice for vaccinations issued by the Brazilian health-gauthorities and WHO Pan American Health Organization (PAHO).

Actions

ECDC published <u>a risk assessment</u> on 5 June 2014. ECDC is sharing information regarding this event with the relevant public health partners including the European Commission, WHO and the Brazilian Ministry of Health.

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