COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 24, 8-14 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 Latest update: 12 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, no human cases of West Nile fever have been detected in EU Member States or neighbouring countries.

Non EU Threats

New! Mass gathering monitoring- Brazil- FIFA World Football Cup 2014

Opening date: 9 June 2014 Latest update: 13 June 2014

ECDC is enhancing its epidemiological intelligence surveillance during the FIFA World Cup 12 June – 13 July 2014 in Brazil so that public health threats can be detected early and timely interventions made. 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.

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

Opening date: 24 September 2012 Latest update: 12 June 2014

Since April 2012, 828 cases of MERS-CoV infection have been reported by local health authorities worldwide, including 318 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, eleven additional cases have been reported by the local health authorities in the Middle East.

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Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 13 June 2014

An outbreak of chikungunya is ongoing in the Caribbean since December 2013. There have been almost 150 000 probable and confirmed cases in the region. At least 14 fatalities have been reported so far.

➔Update of the week

Most of the affected areas continue to report increasing number of cases, Haiti and the Dominican Republic in particular. The Virgin Island (US) have reported the first autochthonous case. Several countries have recently reported imported chikungunya infection in patients with travel history to the affected areas: the US (several states), Barbados, Brazil, Chile, Cuba, France (including Tahiti), Italy, Panama, Trinidad and Tobago and Venezuela.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 13 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 seems to be unfolding in Guinea and Sierra Leone.

➔Update of the week

Since the last CDTR, additional cases have been reported from Guinea, Liberia and Sierra Leone.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 12 June 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, five new infections with Wild poliovirus 1 (WPV1) were reported, four in Pakistan and one in Equatorial Guinea.

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II. Detailed reports

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

Opening date: 3 June 2014 Latest update: 12 June 2014

Epidemiological summary

So far in 2014, no cases of WNF have been reported in EU Member States or neighbouring countries.

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 EU blood directive, 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.

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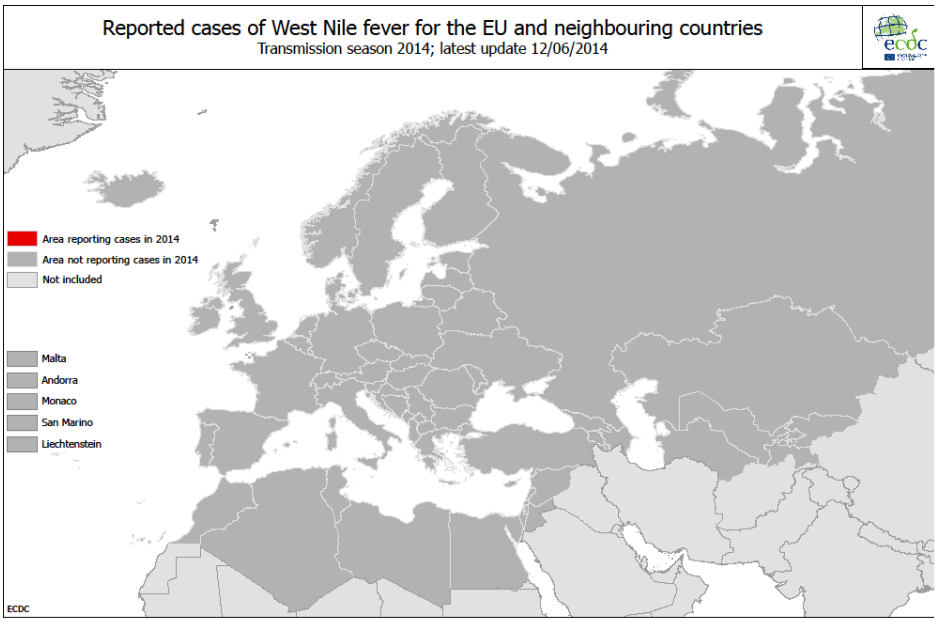

New! Mass gathering monitoring- Brazil- FIFA World Football Cup 2014

Opening date: 9 June 2014 Latest update: 13 June 2014

Epidemiological summary

Dengue- Sao Paulo
Source: Media
São Paulo city has recorded the highest increase in the number of confirmed dengue cases since April. According to data published by the Municipal Health Department on 5 June, there was a 23% increase in dengue cases compared to the previous week. In total, 8 508 confirmed cases (a record number since 2010) and eight deaths have been reported so far this year.

Imported cases of chikungunya – Brazil ex Haiti
Source: Media
São Paulo has confirmed six imported cases of chikungunya among army soldiers returning from a UN peacekeeping mission in Haiti.

Pertussis- Sorocaba, São Paolo state
Source: Media
Thirty-one cases of pertussis have been confirmed in Sorocaba as of 30 May 2014, with three deaths reported. The incidence rate

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per 100 000 inhabitants is 4.93 and the case-fatality ratio is 9.7%. Throughout 2013, 161 suspected cases of pertussis were reported in the city, with 50 confirmed cases and two deaths. The incidence rate per 100 000 inhabitants was 7.95 and the case-fatality ratio was 4.0%. The two indices were higher compared to the whole state of São Paulo in the previous year.

Cowpox- São José dos Quatro Marcos (about 300 km from Cuiaba)
Source: Media
The media is reporting one human and three animal cases of cowpox in São José dos Quatro Marcos. According to the Global Infectious Disease and Epidemiology Network (GIDEON), cowpox is endemic in Brazil with few human cases reported each year. This event does not represent a risk for visitors.

Web sources: ECDC FIFA World Cup Brazil

ECDC assessment

EU citizens visiting the 2014 World Cup in Brazil will be 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 authorities and WHO Pan American Health Organization (PAHO).

Actions

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

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

Opening date: 24 September 2012 Latest update: 12 June 2014

Epidemiological summary

Summary: Since April 2012 and as of 13 June 2014, 828 cases of MERS-CoV have been reported by local health authorities worldwide, including 318 deaths.

Cases and deaths by region:

Middle East:
Saudi Arabia: 700 cases/287 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

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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

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.

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 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 epidemiological update on 05 June 2014.

The last rapid risk assessment was published on 02 June 2014.

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

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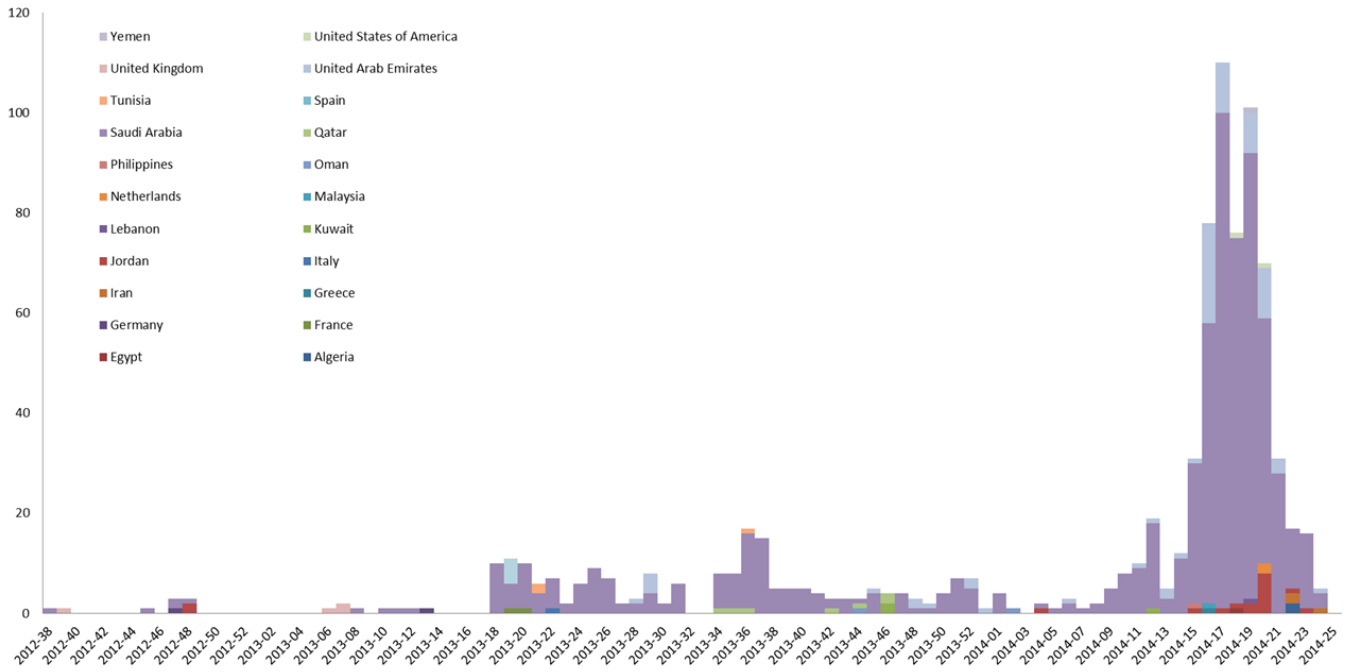
MERS-CoV cases by first week available and place of reporting

Source ECDC



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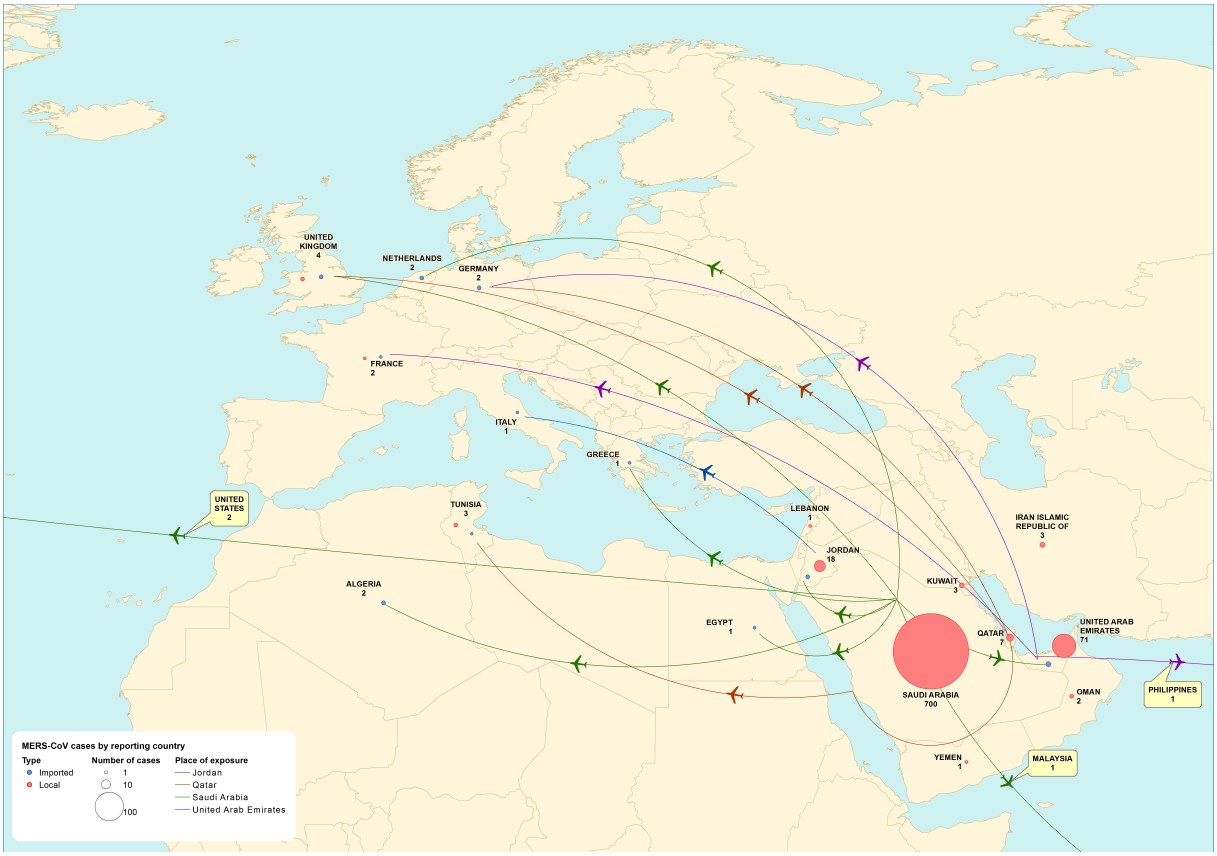
Distribution of cases of MERS-CoV by place of reporting and place of probable infection, March 2012 - 12 June 2014 (n=828)

Source: ECDC SRS



Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 13 June 2014

Epidemiological summary

As of 12 June 2014, there have been almost 150 000 suspected cases in the region with at least 14 fatalities.

Cases officially reported as of 9 June 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, 52 976 suspected, 17 confirmed cases and one death;
French Guiana, 318 confirmed or probable cases 58% of which autochthonous;
Guyana, 16 confirmed cases;
Guadeloupe, 35 000 suspected and 1 328 confirmed or probable cases, one death;

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Haiti, 11 802 suspected and 14 confirmed cases;
Martinique, 35 000 suspected and 1 515 confirmed or probable cases, 9 deaths;
Puerto Rico, one confirmed case;
Saint Barthélemy, 570 suspected and 135 confirmed or probable cases;
Saint Kitts and Nevis, 22 confirmed cases;
Saint Lucia, 214 suspected and 30 confirmed cases;
Saint Martin (FR), 3 380 suspected and 793 confirmed or probable cases, 3 deaths;
Saint Vincent and the Grenadines, 212 suspected cases and 67 confirmed cases;
Sint Maarten (NL), 325 suspected and 301 confirmed cases;
Virgin Islands (UK), 20 confirmed cases;
Virgin Islands (US), 1 confirmed authochtonous case.

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

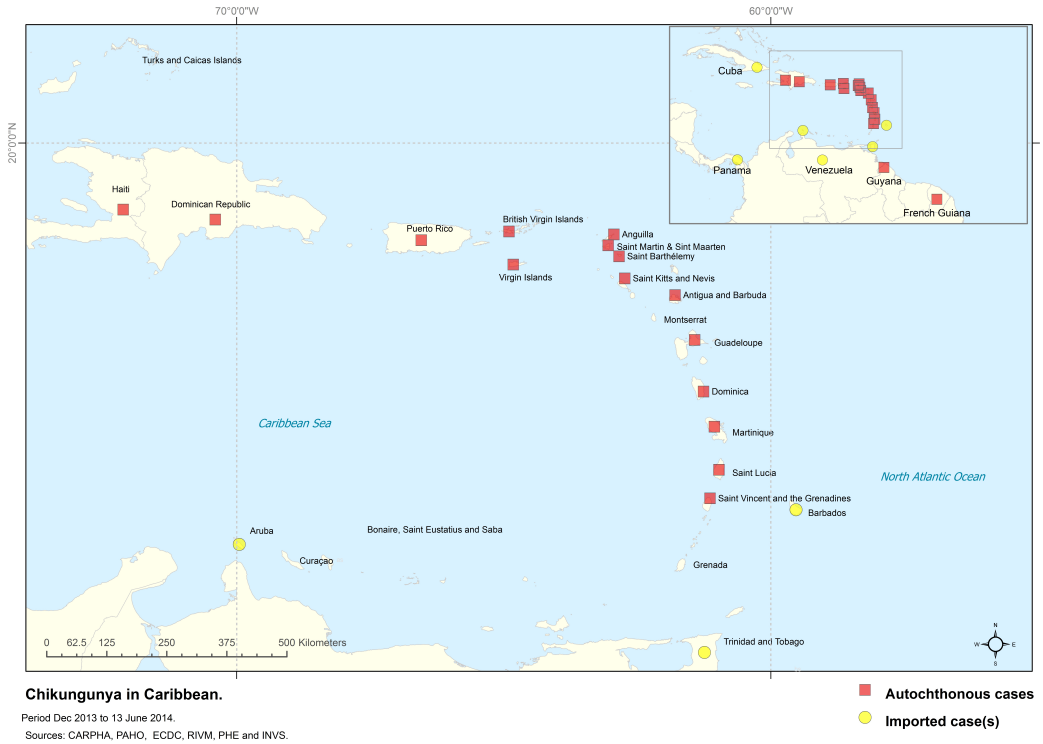
Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is still expanding. An increasing number of cases have been observed from most of the affected areas. The vector is endemic in the region, where it also transmits dengue virus. Vigilance is recommended for the occurrence 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 an epidemiological update on 05 June 2014.

Local chikungunya transmission and imported cases in the Caribbean region, December 2013, June 2014

ECDC



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Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 13 June 2014

Epidemiological summary

Guinea
The cumulative number of cases is 372 (219 laboratory-confirmed), including 236 deaths. On 8 June, 987 contacts were identified across Guinea, 99 % of which were effectively monitored in Guéckédou, Macenta, Télimélé and Boffa.

Sierra Leone
As of 9 June, the cumulative confirmed number of cases is 42, including 12 deaths, all from Kailahun district, which borders the Guéckédou province in Guinea.

Liberia
Two new suspected cases on 8 June are under observation in Lofa, which also borders Guéckédou province. The cumulative number of cases is 16 (seven confirmed), including ten deaths.

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 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 and is affecting new districts in Guinea. There has been an upsurge of EVD cases in Sierra Leone during the past week and the outbreak affects seven regions of the country. 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 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 rapid risk assessment on 9 June. ECDC provided guidance to Member States for EU travellers to and from the affected countries.

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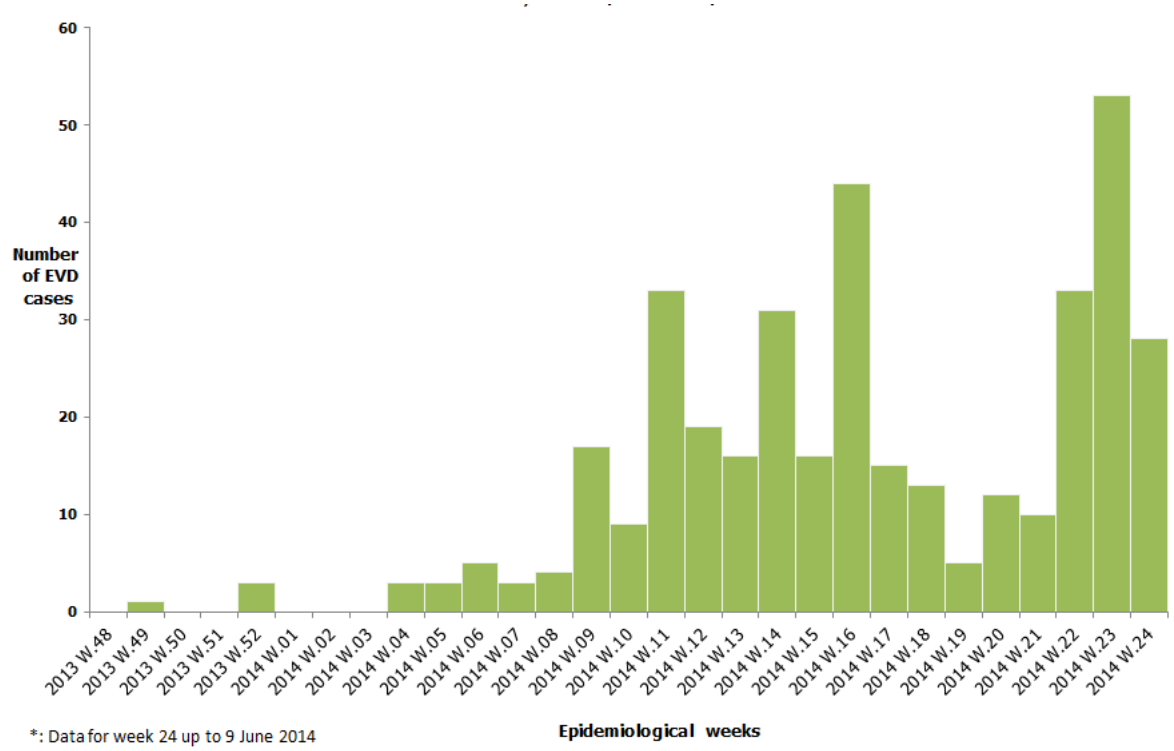
Distribution of EVD cases in Guinea, as of 9 June 2014*

Source: ECDC



*: Data for week 24 up to 9 June 2014

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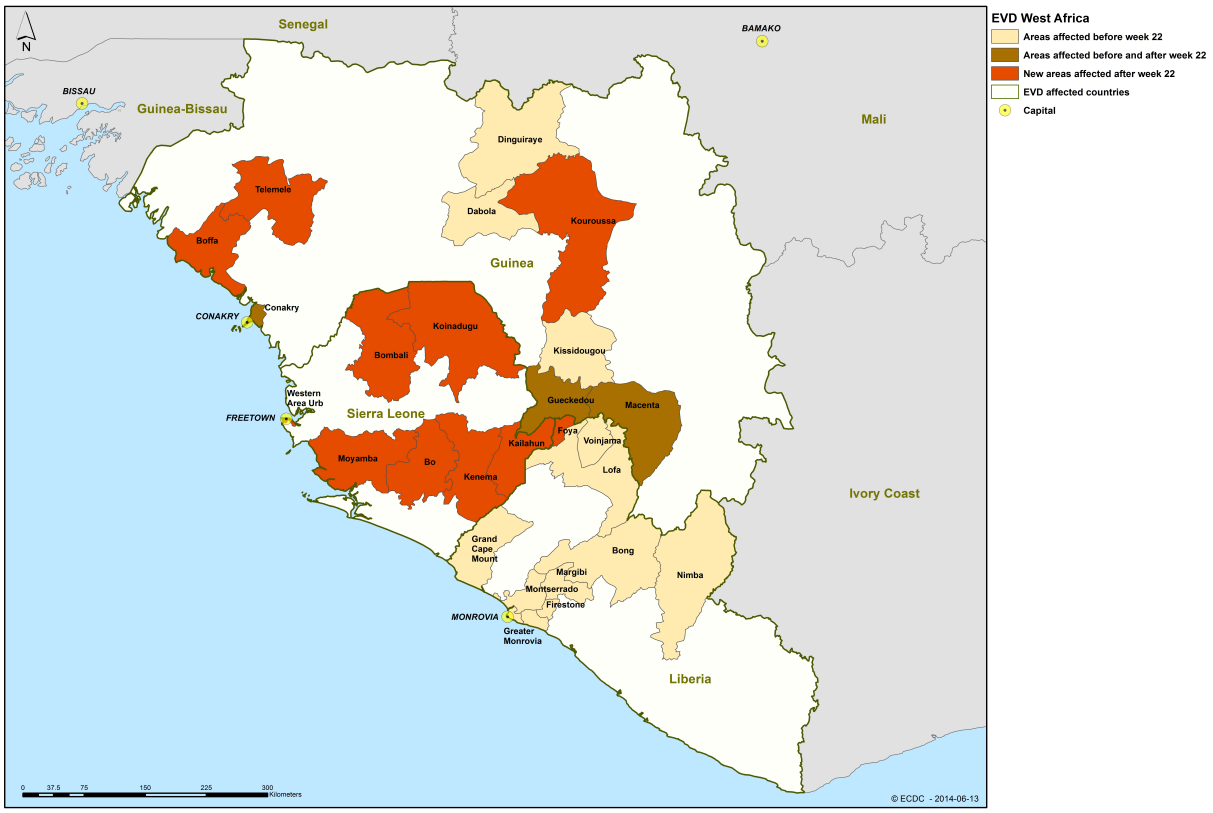
Distribution of suspected and confirmed cases of EVD by week, Guinea, Liberia and Sierra Leone, week 48/2013 to 24/2014 (last update 9 June 2014)

Source: ECDC. ECHO,WHO



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 12 June 2014

Epidemiological summary

Worldwide, 84 cases have been reported to WHO in 2014, compared with 55 for the same time period in 2013. The most affected country is Pakistan (75 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

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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 polio viruses. Israel has responded with vaccination campaigns, first with inactivated polio vaccine (IVP) later followed by oral polio vaccine (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.

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

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