COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 17, 20-26 April 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013 Latest update: 24 April 2014

Following the 2009 pandemic, influenza transmission in Europe has returned to its seasonal epidemic pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes the results on its website in the Weekly Influenza Surveillance Overview.

➔Update of the week

Overall, the influenza activity and circulation of influenza viruses in reporting countries are declining.

Non EU Threats

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

Opening date: 24 September 2012 Latest update: 24 April 2014

Since April 2012, 370 laboratory-confirmed cases, including 113 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 had 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, 95 new cases have been reported. Eighty-four cases have been reported from Saudi Arabia including 11 healthcare workers and 14 were asymptomatic. Nine cases were reported from United Arab Emirates (all from Abu Dhabi). One of the nine cases was a close contact of a previously laboratory-confirmed case reported on 14 April 2014. Two of the nine cases were asymptomatic and three are in critical condition. One case was reported from Jordan.

The first case of MERS-CoV with recent travel history to Saudi Arabia, has been reported by Greece.

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Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 17 April 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, Dominican Republic and French Guiana. Aruba only reported imported cases. This is the first documented outbreak of chikungunya with autochthonous transmission in the Americas. As of 25 April 2014, there have been around 30 000 probable and confirmed cases in the region. Six fatalities have been reported.

➔Update of the week

During the past week, new cases have been reported in most of the affected areas. In the French Antilles, the number of new cases is generally decreasing or constant. In French Guiana, the number of autochthonous cases is increasing, but the virus circulation is moderate. The Department of Health of the Dominican Republic has reported cases of chikungunya on the island affecting mostly the province of San Cristobal with 17 laboratory confirmed cases and 767 suspected cases.
The number of cases is also increasing in Dominica (WHO). To date, islands 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 and French Guiana in mainland South America. 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.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 24 April 2014

An outbreak of Ebola Virus Disease (EVD) is currently evolving in West Africa, affecting Guinea (208 cases) and Liberia (34 cases). The first cases were reported from Guéckédou prefecture in Guinea, near the border with Liberia and Sierra Leone. Results from sequencing showed 97% identity to *ebolavirus* strains from the Democratic Republic of Congo and Gabon. This is the first such outbreak in this region.

➔Update of the week

During the past week, eighteen new clinical cases have been reported: Guinea (11) and Liberia (7).

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 24 April 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 remains endemic in Afghanistan, Pakistan and Nigeria.

➔Update of the week

During the past week, five new cases from Pakistan were reported to WHO.

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II. Detailed reports

Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013 Latest update: 24 April 2014

Epidemiological summary

For week 16/2014:

- Low intensity was reported by all 27 reporting countries and local or sporadic activity was reported by 19 countries.
- Of 161 sentinel specimens that were tested across 18 countries, 32 (20%) were positive for influenza virus. Twenty-seven (84%) of them were influenza A viruses.
- Twenty-three hospitalised laboratory-confirmed influenza cases were reported by four countries, nine (39%) of which were admitted to intensive care units.

Overall, the influenza activity and circulation of influenza viruses in reporting countries are declining.

Web sources: WISO | ECDC Seasonal influenza | US-CDC health advisory | CDC Seasonal influenza | FluWatch, Canada | FluView, USA

ECDC assessment

The influenza season started in EU/EEA countries in week 2/2014.

Actions

ECDC will continue to produce the weekly influenza surveillance overviews during the northern hemisphere influenza season.

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

Opening date: 24 September 2012 Latest update: 24 April 2014

Epidemiological summary

Since April 2012 and as of 24 April 2014, 370 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide, including 113 deaths and 76 healthcare workers. The following countries have reported MERS-CoV cases:

Saudi Arabia: 296 cases / 87 deaths
United Arab Emirates: 42 cases / 9 deaths
Qatar: 7 cases / 4 deaths
Jordan: 5 cases / 3 deaths
Oman: 2 cases / 2 deaths
Kuwait: 3 cases / 1 death
UK: 4 cases / 3 deaths
Germany: 2 cases / 1 death
France: 2 cases / 1 death
Italy: 1 case / 0 deaths
Tunisia: 3 cases / 1 death
Malaysia: 1 case / 1 death
Philippines: 1 case / 0 deaths (media quoting Ministry of Health)
Greece: 1 case / 0 deaths

Fifteen cases have been reported from outside the Middle East: the UK (4), France (2), Tunisia (3), Germany (2), Italy (1), Malaysia (1), Philippines (1) and Greece (1). 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.

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In the first 24 days of April 2014, 163 cases (44%) have been reported, 43 of whom are healthcare workers (26%) and 37 are asymptomatic cases. Of the 163 cases, 133 were reported by Saudi Arabia (Jeddah - 84, Riyadh - 36, Mecca - 6, Medina - 5, Najran - 1, Tabuk - 1), 25 by United Arab Emirates, two cases by Jordan and one case each from Greece, Malaysia and the Philippines.

The first case of MERS-CoV was reported by Greece, a 69 year-old male who is a Greek citizen, residing in Jeddah, Saudi Arabia. The patient returned to Greece on 17 April 2014. In Jeddah, the patient consulted a hospital on 8 and 10 April for a febrile illness with diarrhoea and received a probable diagnosis of typhoid fever. His wife was hospitalised from 31 March to 5 April in the same hospital for a confirmed typhoid fever.

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 an ongoing source of infection in the region. Dromedary camels are likely an important host species for the virus, and many of the primary cases in clusters have reported direct or indirect camel exposures. 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 to determine the initial exposures and risk behaviours 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. The case detected in Malaysia had participated in the muslim pilgrimage Umrah. However, more details are needed on possible and suspected exposure events and it is possible that these cases were also infected when visiting healthcare facilities in the region.

The Malaysian authorities have asked all passengers travelling on the flights with the case detected in Malaysia on 29 March to be screened for health complaints. The Philippines authorities have asked all passengers travelling with the Filipino case detected on 15 April to be screened for signs and symptoms of MERS-CoV infection, while the department of health is also actively contact tracing passengers.

Actions

ECDC is finalising an updated rapid risk assessment.

ECDC published an epidemiological update on 23 April 2014.

The last update of a rapid risk assessment was published on 7 November 2013.

The first 133 cases are described in Eurosurveillance published on 26 September 2013.

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

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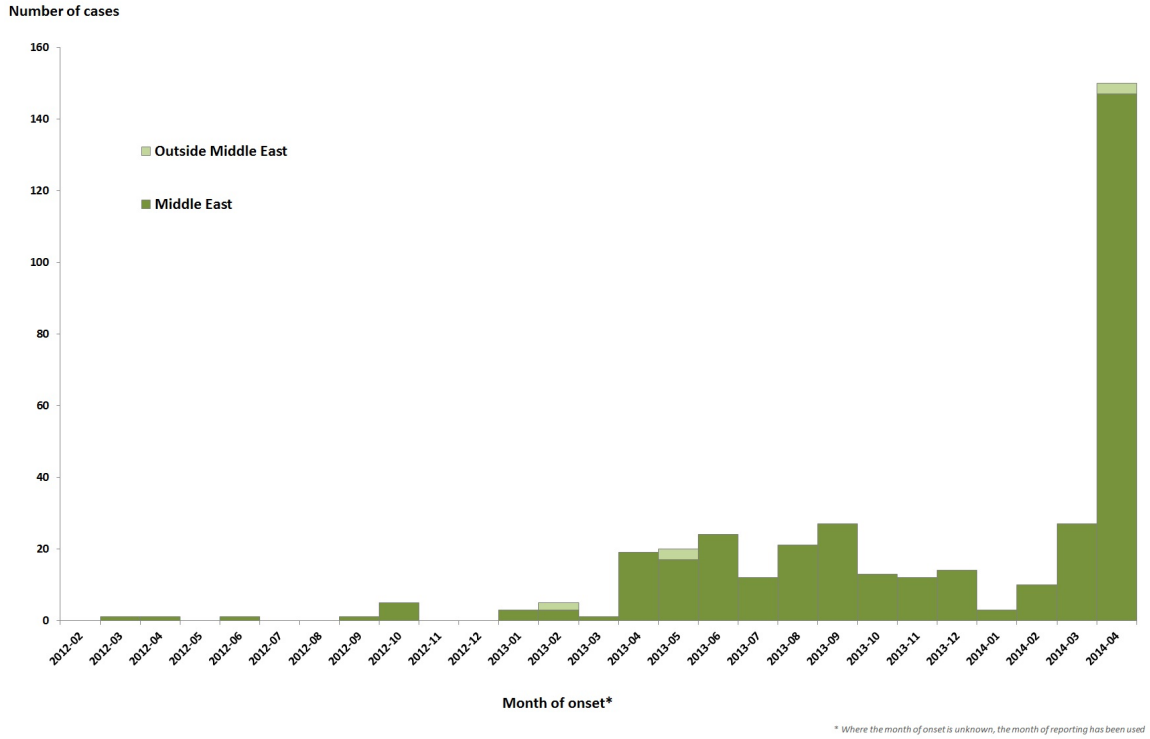
Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - 24 April 2014 (n=370*)

Source: ECDC SRS



Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 24 April 2014 (n=305*)

Source: ECDC SRS

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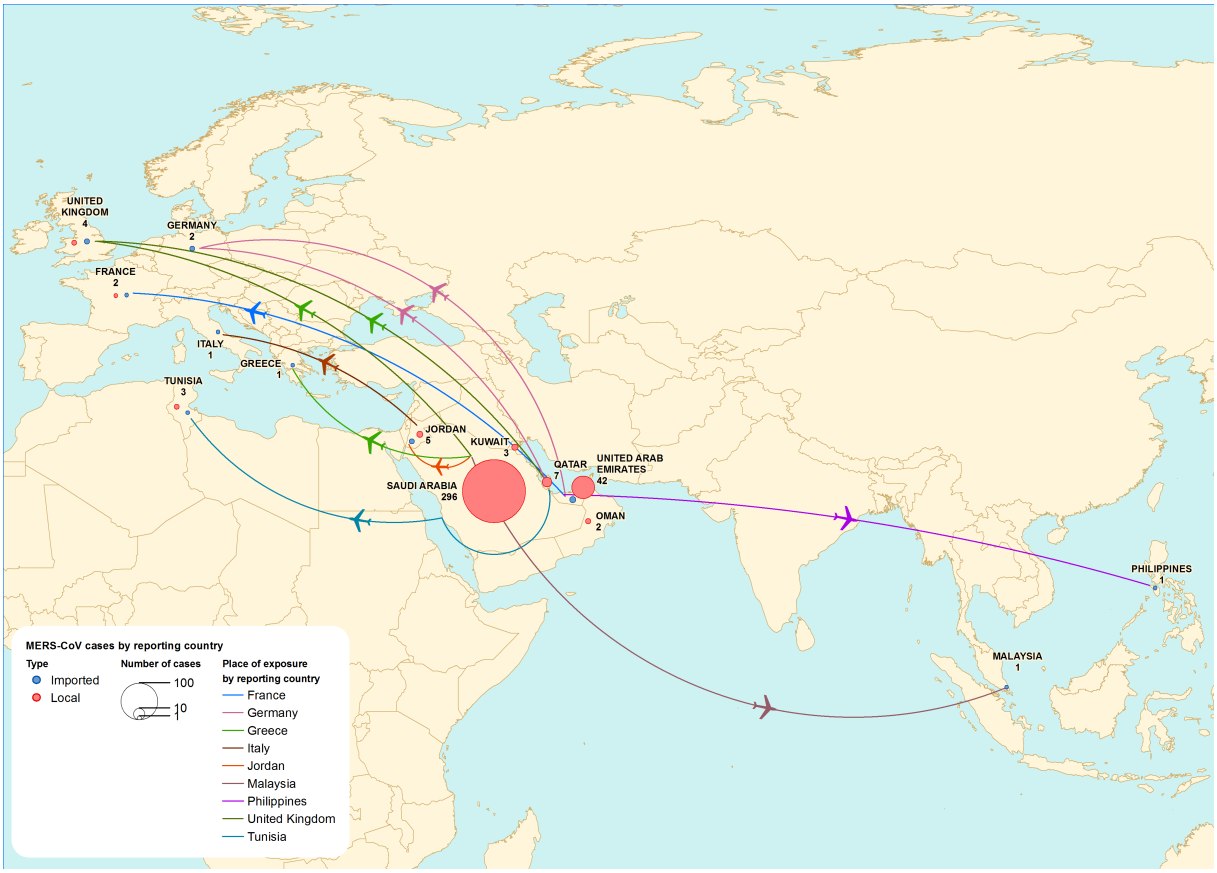
Distribution of confirmed MERS-CoV cases by place of reporting, March 2012 - 24 April 2014 (n=370)

Source: ECDC SRS



Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 17 April 2014

Epidemiological summary

Cases reported as of 25 April 2014:

- Virgin Islands (UK), 9 confirmed cases;
- Saint Martin (FR), 3 030 suspected and 793 confirmed or probable cases, 3 deaths;
- Sint Maarten (NL), 301 confirmed autochthonous cases;
- Martinique, 17 630 suspected and 1 515 confirmed or probable cases, 2 deaths;
- Saint Barthélemy, 480 suspected and 135 confirmed or probable cases;

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- Guadeloupe, 6 000 suspected and 1 328 confirmed or probable cases, one death;
- Dominica, 1 063 suspected cases and 98 confirmed cases;
- French Guiana, 36 confirmed autochthonous cases and 18 imported cases;
- Anguilla, 33 confirmed cases on the island with one case probably originating from Saint Martin;
- Aruba, one imported case originating from Sint Maarten;
- Saint Lucia, one confirmed case;
- St. Kitts and Nevis, one confirmed case;
- Dominican Republic, 767 suspected and 17 confirmed cases.
- Saint Vincent and the Grenadines, three confirmed cases (media quoting the Ministry of Health).

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. The autochthonous cases in French Guiana are the first autochthonous chikungunya cases in mainland South America.

Actions

ECDC published a rapid risk assessment on 12 December 2013 and an epidemiological update on 10 January and on 7 February 2014.

The Caribbean islands

Wikipedia

Outbreak of Ebola Virus Disease - West Africa - 2014

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Epidemiological summary

In **Guinea**, as of 20 April 2014, the Ministry of Health has reported 208 clinical cases, including 136 deaths. This is an increase of 11 cases and 14 deaths since the last ECDC update on 18 April 2014. To date, 112 cases have been laboratory confirmed, 69 of whom have died.

In **Liberia**, the Ministry of Health of Liberia has reported 34 clinical cases including 6 confirmed, 2 probable and 26 suspected cases. The number of deaths has been revised from 13 to 11 as one of the deaths had been counted in the EVD statistics for Guinea and one death occurred in a discarded case.

In **Sierra Leone**, the Ministry of Health reports that 19 suspected cases tested negative for *ebolavirus*.

Control activities supported by WHO, UNICEF, Médecins Sans Frontières and other stakeholders are being implemented in Guinea, including contact tracing, enhanced surveillance and strengthening of infection control practices. Information and education materials have been developed and distributed, and communication campaigns are underway. A team of EU scientists have set up a field laboratory to test suspected cases near the borders with Sierra Leone and Liberia.

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 time an EVD outbreak has been reported in Guinea. The origin of this outbreak is currently unknown. The outbreak is still evolving and new cases may be reported in the coming weeks in Guinea and Liberia and also possibly in bordering countries in the region. However, control measures, such as isolation of cases and active monitoring of contacts, currently implemented with the support of international partners should be able to control this outbreak and prevent further spread of the disease. 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 the safe handling of bush meat, as well as for travellers in and out of the affected countries. ECDC has published information for EU travellers on its website.

ECDC is closely monitoring this event.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 24 April 2014

Epidemiological summary

During week 17, five new cases were reported from Pakistan (two wild poliovirus type 1 – WPV1, and three circulating vaccine-derived poliovirus type 2 – cVDPV2).

Worldwide, 62 cases have been reported to WHO in 2014, compared with 22 for the same time period in 2013. The most affected country is Pakistan (49 cases this year).

WPV1-positive samples have been detected by environmental surveillance in Israel since 3 February 2013 and continue to be detected in 2014 (13 positive samples collected this year, the most recent of which was collected on 16 March; in 2013, 134 positive samples were collected).

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

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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.

The recent detection of WPV in environmental samples in Israel, and the confirmed and ongoing outbreaks in Syria and Somalia, highlight the risk of re-importation into Europe. Recommendations are provided in the recent ECDC risk assessments:

- 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?

Due to continued poliovirus circulation in Cameroon, gaps in surveillance quality and influx of vulnerable populations from Central African Republic, WHO had elevated the risk assessment of international spread of polio from Cameroon to 'very high' in March of 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.

Due to the current polio situation, the threat is being followed weekly.

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