



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 26, 23-29 June 2013

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary EU Threats

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 27 June 2013

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. ECDC now reports on this threat on a monthly basis unless significant events are reported.

→Update of the week

During the week leading up to 28 June 2013, no new outbreaks were detected in EU Member States. Since October 2012, Japan is experiencing an outbreak of rubella with close to 10 000 reported cases.

Non EU Threats

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

Opening date: 24 September 2012 Latest update: 27 June 2013

Between April 2012 and 27 June 2013, 77 laboratory-confirmed cases, including 40 deaths, of an acute respiratory disease caused by a novel coronavirus have been notified to WHO. The new virus, now named Middle East respiratory syndrome coronavirus (MERS-CoV), is genetically distinct from the coronavirus that caused the SARS outbreak. Cases have originated in Saudi Arabia, Qatar, Jordan and the United Arab Emirates. Cases have occurred in Germany, the United Kingdom, Tunisia, France and Italy in patients who were either transferred for care of the disease or returned from the Middle East. The reservoir of the novel coronavirus has not been established, nor is it clear how transmission has occurred from one sporadic case to another.

→Update of the week

Between 20 and 27 June 2013, thirteen new cases were reported in Saudi Arabia and two fatalities were reported during the same time period.

West Nile virus - Multistate (Europe) - Monitoring season 2013

Opening date: 3 June 2013 Latest update: 28 June 2013

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the transmission season between June and November, ECDC monitors the situation in EU Member States and in neighbouring countries in order to inform blood safety authorities regarding WNF affected areas and eventually 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 the EU/EEA. However, four cases were reported from Israel (no mention of the district of infection).

II. Detailed reports

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 27 June 2013

Epidemiological summary

Since October 2012, Japan is experiencing an outbreak of rubella with close to 10 000 reported cases. Numbers of cases have been highest in Osaka, Tokyo Metropolis, Kanagawa, and Kagoshima Prefectures but cases are being reported from all over the country. Ten cases of congenital rubella syndrome (CRS) have been reported since onset of the outbreak compared to three cases nationwide during 2008–2011.

During 1999–2007, rubella surveillance in Japan consisted of approximately 3 000 paediatric medical facilities. In January 2008, the sentinel surveillance systems were replaced by a mandatory nationwide and mandatory case-based surveillance system of any clinically diagnosed or laboratory-confirmed rubella infections, and in April 1999 nationwide, case-based surveillance for CRS was added.

Starting in 1976 the national immunization program targeted only girls with a single-antigen rubella vaccine. MMR was introduced in 1989 targeting all children aged 12–72 months. In 2006, the MR combined vaccine was introduced, with a 2-dose schedule administered at 1–2 years and 5–7 years. After a large measles outbreak in 2007 and 2008, a catch-up MR vaccination program was implemented, targeting two age cohorts (those aged 12 years and those aged 17 years) each year during 2008–2013 to ensure high population immunity among persons aged 12–22 years in 2013.

The peak period for rubella is spring to summer in Japan and it is expected that cases will continue to increase. The paradoxical increased risk of CRS as a result of targeted rubella vaccination of girls has been described from other countries and is not an unexpected consequence of the outbreak in Japan. Visitors to Japan (especially women of child bearing age and immuno-compromised persons) should make sure that they are protected against rubella through vaccination with the rubella containing MMR vaccine.

Web sources: Japan: CDC MMWR | Graphs on Rubella - NIID | CDC advice to travellers | Europe: ECDC measles and rubella monitoring | ECDC rubella factsheet | WHO epidemiological brief summary tables | WHO epidemiological briefs

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 2012 and 2013 compared with 2011 and the potential for an increase in the number of babies born with CRS in EU countries are both cause for concern.

Actions

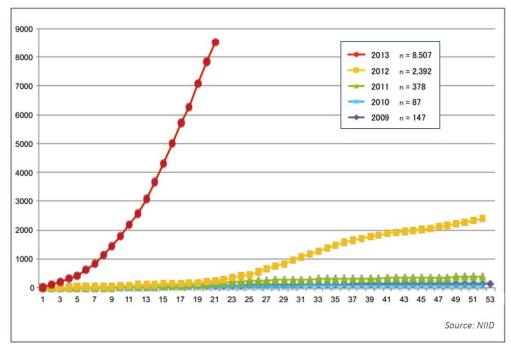
ECDC closely monitors rubella transmission in Europe by analysing the cases reported to the European Surveillance System and through its epidemic intelligence activities. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella monitoring 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 Japan

Japanese National Institute of Infectious Diseases

Cumulative number of rubella cases by week, 2009-2013 (week1-21) (based on diagnosed week as of May 29, 2013).



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

Opening date: 24 September 2012 Latest update: 27 June 2013

Epidemiological summary

Between April 2012 and 27 June 2013, 77 laboratory-confirmed cases, including 40 deaths, have been notified to WHO. Up to the present time, Saudi Arabia has reported 62 cases of which 34 were fatal. Other countries have also reported cases: Jordan (two cases and two deaths), Germany (two cases and one death), United Kingdom (four cases and two deaths), France (two cases and one death), Tunisia (two cases) and Italy (three cases). In France, Italy, Tunisia and the United Kingdom, 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.

Between 20 and 27 June 2013, thirteen new cases and two fatalities were reported in Saudi Arabia.

An article from the <u>New England Journal of Medicine</u> describes a family case cluster of MERS-CoV infection and its limited transmission from person to person. The findings also suggest that there is a reduced risk of disease transmission during the early stages of infection.

Web sources: ECDC RRA Update 17 June | ECDC novel coronavirus webpage | WHO | WHO MERS updates | InVS 25 june

ECDC assessment

The continued reporting of novel coronavirus cases by the Saudi Arabian authorities indicates an ongoing source of infection present in the Arabian Peninsula. There is therefore a continued risk of cases in Europe associated with travel to the area. Surveillance for cases is essential, particularly with expected increased travel to Saudi Arabia for the month of Ramadan in July and the Hajj in October.

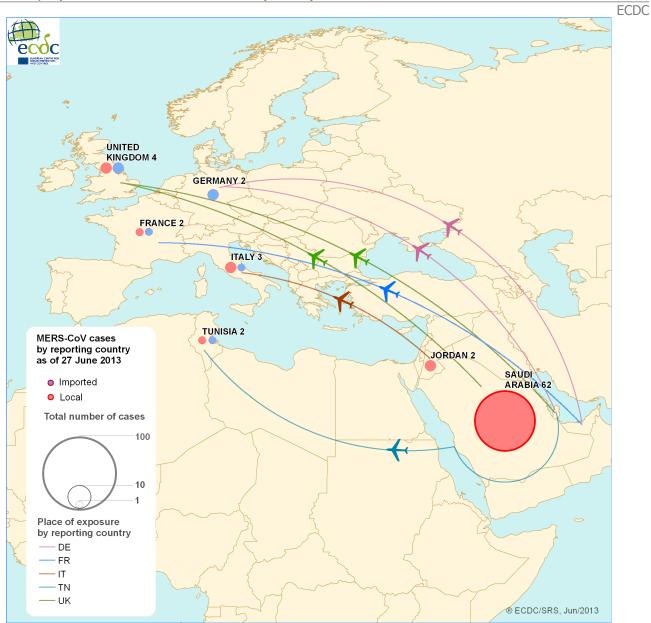
Actions

ECDC published an updated <u>rapid risk assessment</u> on 17 June 2013. The results of an ECDC-coordinated survey on laboratory capacity for testing the novel coronavirus in Europe were published in EuroSurveillance.

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

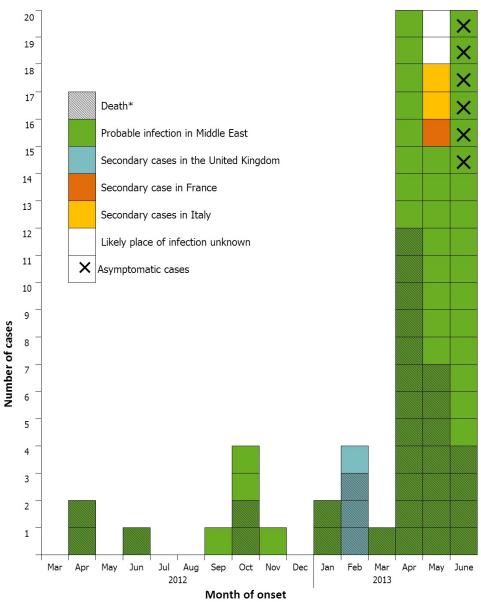
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Distribution of confirmed cases of MERS-CoV by place of reporting and place of exposure, April 2012 to 27 June 2013 (n=77)



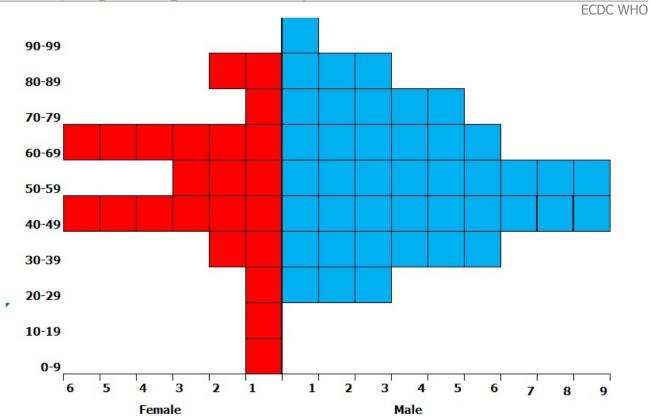
Distribution of confirmed cases of MERS-CoV reported worldwide, by month of disease onset, outcome and place of infection, April 2012 - 27 June 2013





^{*}The month of onset for 5 deaths is missing.

Distribution of cases of MERS-CoV by gender and age, April 2012 – 27 June 2013 (gender and/or age missing of twelve cases)



West Nile virus - Multistate (Europe) - Monitoring season 2013

Opening date: 3 June 2013 Latest update: 28 June 2013

Epidemiological summary

So far in 2013, no cases of WNF have been reported in EU Member States.

Outside the EU, the Astrakhanskaya oblast in the Russian Federation reported four laboratory confirmed cases of WNV on 31 May 2013. The cases were reported in the city of Astrakhan (one), Volga region (two) and Kamyzyaksky district (one). Two of the cases are children aged 3-5 years. Two of the cases have recovered and been discharged from hospital.

This week, four cases were reported from Israel (no mention of the district of infection).

As of today, eight cases have been notified in neighbouring countries (Russia and Israel).

Websources: ECDC West Nile fever risk maps | Astrakhanskaya oblast |

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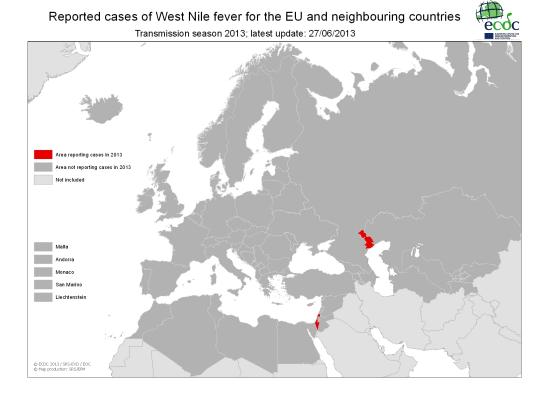
ECDC assessment

Cases of WNV were reported in the Astrakhanskava oblast in 2010, 2011 and 2012, but the transmission season has started earlier this year with the first WNV cases detected in early May compared to early June in 2012.

Actions

ECDC produces weekly West Nile fever risk maps during the transmission season to inform blood safety authorities regarding WNF affected areas. This supports national authorities in implementing control measures to prevent the transmission of WNF through blood products. Appropriate control measures as per the EU WNV and blood safety preparedness plan and the EU blood directive include either geographical donor deferral or the implementation of systematic Nucleic Acid Tests (NAT) screening of blood donors or visitors from affected areas.

ECDC



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