

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: 29 May 2013

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many countries of Europe due to a decrease in the uptake of immunisation. According to the latest enhanced measles surveillance data retrieved from the European Surveillance System, the 30 contributing countries (29 EU and EEA countries and Croatia) reported 8 127 cases of measles during the last 12-month period from April 2012 to March 2013.

→Update of the week

During the past week one new measles outbreak was detected in Italy. The outbreak in Munich is still on-going.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 5 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.

→Update of the week

During the week leading up to 7 June 2013, no new outbreaks were detected.

Hepatitis A - Multistate (Europe) - 2013 outbreak

Opening date: 9 April 2013

Latest update: 31 May 2013

Between 1 October 2012 and 6 June 2013, Denmark, Finland, Norway and Sweden reported hepatitis A (HAV) cases due to genotype 1b with two related sequences. None of the cases had travel history outside the EU within the period of their potential exposure. Overall, 96 cases have so far been reported associated with this outbreak, of which 50 are confirmed. The source of the outbreak has not been confirmed but epidemiological investigations in Denmark and Sweden point towards frozen strawberries as the vehicle of infection.

→Update of the week

During the week leading up to 6 June 2013, five new cases were reported, four from Denmark and one from Finland.

Hepatitis A -Multistate (Europe)- ex Italy

Opening date: 10 May 2013

Latest update: 5 June 2013

An outbreak of hepatitis A (HAV) involving German, Polish and Dutch travellers returning from northern Italy was reported through the Early Warning and Response System. Local Italian authorities also reported an increase in HAV cases in 2013 both at the national level and in the implicated area. The source of the outbreak has not yet been identified but investigations point to frozen berries as the vehicle of infection.

Travellers to areas reporting HAV outbreaks should be reminded of the availability of vaccination to prevent the risk of HAV transmission while travelling.

→Update of the week

There are no new cases reported in international travellers since the last update.

Non EU Threats

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

Opening date: 3 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.

Hepatitis A - Multistate - Travel to Egypt

Opening date: 22 April 2013

Latest update: 5 June 2013

From November 2012 to May 2013, several EU Members States reported hepatitis A virus (HAV) infections affecting travellers returning from Egypt. The identification of the same HAV sequence in 20 cases from six of the affected countries confirms a multinational outbreak. The source of the outbreak is still unknown but the descriptive epidemiology and the analysis of the trawling questionnaires received suggests a possible persistent common source of infection in Egypt. This outbreak is a reminder that travellers should be made aware of the importance of HAV vaccination before travelling to HAV endemic areas.

→Update of the week

During the past week, no new cases were reported.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 6 June 2013

Polio, a crippling and potentially fatal vaccine-preventable disease mainly affecting children under five years of age, is close to being eradicated from the world after a significant global public health investment and effort. The WHO European Region is polio-free.

→Update of the week

During the week leading up to 6 June 2013, four new polio cases were reported to WHO, all wild poliovirus type 1 (WPV1).

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 5 June 2013

Dengue fever is one of the most prevalent vector-borne diseases in the world, affecting an estimated 50-100 million people each year, mainly in the tropical regions of the world. The identification of sporadic autochthonous cases in non-endemic areas in recent years has already highlighted the risk of locally-acquired cases occurring in EU countries where the competent vectors are present. The dengue outbreak in the Autonomous Region of Madeira, Portugal that started in October 2012 further underlines the importance of surveillance and vector control in other European countries.

→Update of the week

So far in 2013, no autochthonous dengue cases have been reported in European countries apart from the cases in Madeira.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 29 May 2013

On 31 March 2013, the Chinese health authorities announced the identification of a novel avian influenza A(H7N9) virus in three seriously ill patients in Shanghai. The outbreak has since spread to Zhejiang (46 cases), Shanghai (33), Jiangsu (27), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (5), Hunan (2), Jiangxi (6) and Taiwan (1). The source of infection and the mode of transmission are yet to be determined. Zoonotic transmission from poultry to humans is the most likely scenario. There is no epidemiological link between most of the cases and sustained person-to-person transmission has not been observed.

→Update of the week

Between 31 May and 6 June 2013, no new cases were reported. The media reported the death of one of the earlier notified cases in Shanghai. This has not yet been acknowledged by WHO.

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

Opening date: 24 September 2012

Latest update: 5 June 2013

Between April 2012 and 6 June 2013, 54 laboratory-confirmed cases, including 30 deaths, of an acute respiratory disease caused by a novel coronavirus have been notified to WHO. The new virus, officially 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 1 and 6 June 2013, five new cases have been reported, three cases from Italy and two cases from Saudi Arabia. Three previously reported cases in a hospital outbreak in Al-Ahsa have died.

II. Detailed reports

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 29 May 2013

Epidemiological summary

EU Member States

Germany - update

There is an on-going measles outbreak in the [Munich region](#). In the last week almost 100 new cases have been notified and there are now nearly 220 cases affecting mainly 15 to 45-year-olds. Sixty per cent of the cases needed hospitalisation.

The Standing Committee on Vaccination at the Robert Koch Institute is recommending MMR vaccination for people born after 1970 with no vaccination, unknown vaccination status or vaccination with a single dose.

Italy

There is an on-going outbreak in the Bolzano area (South Tyrol) with an as yet unknown number of cases.

Rest of the world

Syria

The [World Health Organization](#) (WHO) is deeply concerned about the increasing cases of communicable diseases inside Syria and among displaced Syrians in neighbouring countries in the region, including measles. There were no measles cases in Syria before and at present there are 139 confirmed cases due to a drop in national vaccination coverage from 95% in 2010 to an estimated 45% in 2013. At least 35% of the country's public hospitals are out of service, and in some governorates, up to 70% of the health workforce has fled, resulting in severe shortages in qualified health personnel. Measles, tuberculosis and cutaneous leishmaniasis have been reported among displaced Syrians in Jordan, Lebanon, Iraq and Turkey.

US - update

The measles transmission in [Brooklyn](#), New York, in the Orthodox Jewish community is continuing. As of 5 June 2013, there have been 48 confirmed cases. Additional suspected cases are being investigated. In recent weeks, cases have begun occurring in younger children. During the past month, the median age of cases has declined to two years (age range 10 months – 17 years) with 19% aged less than 12 months, 52% aged 12 months to four years, and 29% aged between 5 – 18 years.

All cases were in persons who were unvaccinated at the time of exposure, because they were too young to have been vaccinated or because their parents delayed or refused vaccination for their children. Over 2 000 identified people have been exposed to measles. The Health Department now recommends that the first dose of the MMR vaccine be given at six months of age to all Orthodox Jewish children living in the area and to non-Orthodox children receiving medical care in practices that serve predominantly Orthodox Jewish patients.

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

ECDC assessment

The transmission season for measles persists in Europe. Although there are several on-going outbreaks, the aggregated cases are less than in previous years.

So far in 2013, Sweden, Denmark, Germany, Italy, the UK and Lithuania have reported outbreaks. The largest outbreak has been in Wales where more than 1 300 cases, including one death, have been notified so far. In the EU neighbourhood, a large outbreak of more than 4 000 cases is reported from Georgia. This may result in some imported cases in EU/EEA countries.

The target year for measles elimination in Europe is 2015. The current outbreaks suggest that endemic measles transmission continues in many EU Member States and the prospect of achieving the 2015 objective is diminishing. During the period April 2012-March 2013, 14 EU/EEA countries met the elimination target of less than one case of measles per million population.

Actions

ECDC closely monitors measles transmission and outbreaks in the EU and neighbouring countries in Europe through enhanced surveillance and epidemic intelligence activities. Elimination of measles requires consistent vaccination coverage above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 5 June 2013

Epidemiological summary

No new outbreaks have been identified since the last update.

As reported earlier, Poland is experiencing a nationwide rubella epidemic. According to the National Institute of Public Health during 1 January - 31 May 2013, 29 741 cases were reported, including two cases of congenital rubella syndrome, (notification rate 77.18 cases per 100 000 population) compared to 3 256 cases (8.45 cases per 100 000 population) during the same time period in 2012. This situation requires immediate public health action to prevent further congenital rubella syndrome cases. Since August 2012, Poland has reported over 95% of all rubella cases in the EU/EEA.

Web sources: [ECDC measles and rubella monitoring](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#) | [ECDC rubella factsheet](#) | [Survey on rubella, rubella in pregnancy and congenital rubella](#)

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.

ECDC published a new report on its website: [Survey on rubella, rubella in pregnancy and congenital rubella surveillance systems in EU/EEA countries](#)

Hepatitis A - Multistate (Europe) - 2013 outbreak

Opening date: 9 April 2013

Latest update: 31 May 2013

Epidemiological summary

From 1 October 2012 until 6 June 2013, Denmark, Finland, Norway and Sweden reported 50 HAV cases due to genotype 1b with two related sequences. None of the cases had travel history outside the EU within the period of their potential exposure. Overall, 96 cases have been reported to be associated with this outbreak, of which 50 are confirmed.

Epidemiological investigations in Denmark and Sweden point towards frozen strawberries as the vehicle of infection.

On 22 May 2013, the [Swedish Institute for Infectious Disease Control](#) (SMI) published a press release indicating that frozen strawberries of non-domestic origin are likely to be the source of the Swedish outbreak. Other types of berries are no longer suspected in this outbreak. Identification of the producer and country of origin is still ongoing.

On 30 May 2013, the [Danish Food Safety Authority](#) confirmed that specific products with frozen strawberries packaged in Belgium and sold in Denmark, have been voluntarily recalled. Both epidemiological and product investigations point towards these specific products of frozen strawberries as the vehicle of infection for the ongoing hepatitis outbreak in the nordic countries.

Food authorities in the affected Nordic countries have recommended that citizens should boil frozen berries or berries of non-domestic origin before consumption.

Web sources: [ECDC HAV factsheet](#) | [Eurosurveillance 25 April 2013](#)

ECDC assessment

The identification of closely-related HAV sequences in four different countries confirms that this is a multinational food-borne outbreak. The source of the multi-country outbreak has not been confirmed, but epidemiological investigations in Denmark and Sweden point towards frozen strawberries as vehicle of infection.

Actions

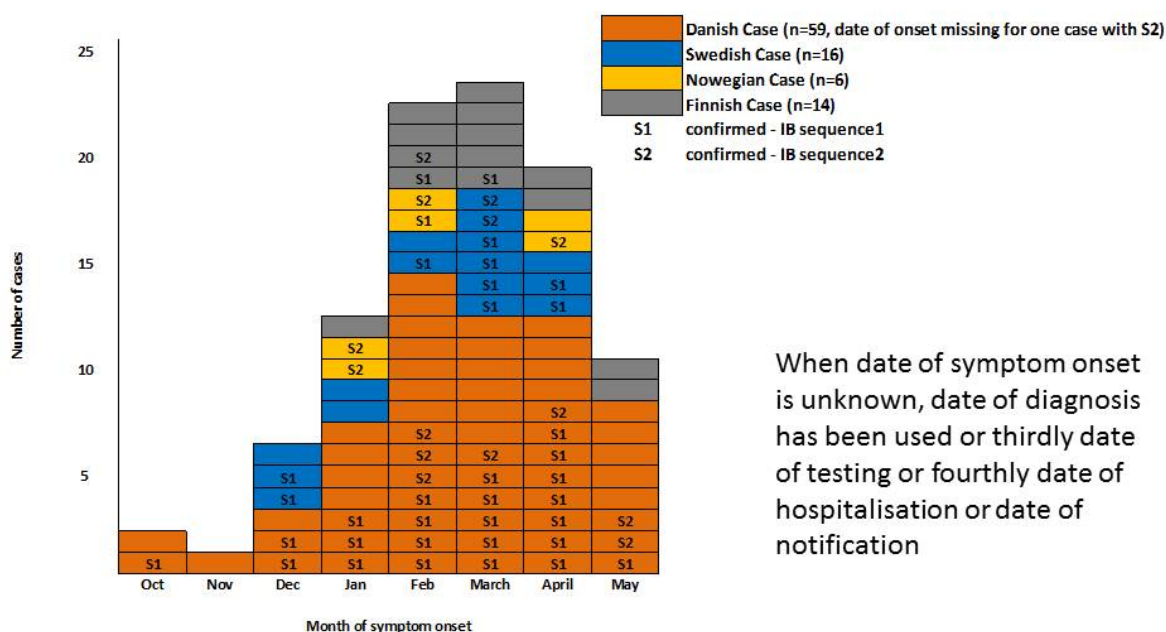
Food safety authorities and Public Health Authorities in the affected countries are actively collaborating to uncover the vehicle of infection and to prevent occurrences of additional cases.

ECDC and EFSA published a joint [rapid outbreak assessment](#) on 16 April.

Number of nordic HAV cases by month of symptom onset, country and sequence type (N=95)

ECDC

Number of nordic HAV cases by month of symptom onset, country and sequence type (N=95)



Hepatitis A -Multistate (Europe)- ex Italy

Opening date: 10 May 2013

Latest update: 5 June 2013

Epidemiological summary

Since 1 January 2013, 15 laboratory-confirmed cases of HAV infection have been reported in Germany, the Netherlands and Poland in travellers who visited the autonomous provinces of Trento and Bolzano in northern Italy during the exposure period. The latest case had onset of symptoms on 2 May 2013. Two of the travellers (one German and one Dutch traveller) had identical sequences of HAV genotype 1a.

During this same period, Italy experienced an increase in cases of HAV infection both in the province of Trento and at national level. In total, 29 cases of HAV have been reported from Trento since the beginning of 2013. During last week, in the analysed samples from cases in Trento, a 100% match was found with the sequence obtained from the Dutch and German cases.

The consumption of berries reported by many of the cases, the positive HAV findings in frozen berries taken from the supplier of the three hotels that hosted the affected tourists and the identification of mixed, frozen berries contaminated with HAV from the fridge of HAV cases point to the outbreak being food-borne.

On 17 May 2013, a RASFF notification was sent out by Italian food authorities regarding the mixed frozen berries found to be contaminated with HAV. The frozen berry mix originated from Italy, with raw berry material from Poland, Bulgaria, Canada and Serbia. Following the notification, the distributor of the mixed frozen berries voluntarily withdrew these from the national market. Investigations into the traceability of the product is currently underway together with a case control study.

ECDC assessment

The voluntary withdrawal of the mixed frozen berries by the distributor has decreased the risk of infection for residents and visitors to northern Italy. However, the specific berry type has not yet been identified and due to the long shelf life of frozen berries, it is likely that a part of the initial batch may still be circulating or will be stored in household freezers. Occurrence of further cases cannot be excluded.

Actions

A joint ECDC-EFSA assessment was published on this outbreak on 29 May 2013 on the [ECDC website](#).

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

Opening date: 3 June 2013

Epidemiological summary

This report is the first in the 2013 monitoring season. So far in 2013, no cases of WNF have been reported in EU Member States.

On 31 May 2013, the Astrakhanskaya oblast in the Russian Federation reported four laboratory confirmed cases of WNV. The cases were reported in the city of Astrakhan (1), Volga region (2) and Kamyzyaksky district (1). Two of the cases are children aged 3-5 years. Two of the cases have recovered and been discharged from hospital.

Websources: [ECDC West Nile fever risk maps](#) | [Astrakhanskaya oblast](#) |

ECDC assessment

Cases of WNV were reported in the Astrakhanskaya 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 will produce 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

7/16

blood donors or visitors from affected areas.

Hepatitis A - Multistate - Travel to Egypt

Opening date: 22 April 2013

Latest update: 5 June 2013

Epidemiological summary

Fourteen EU/EEA countries have reported 106 cases with HAV (genotype 1b) infections among travellers returning from Egypt. Of these, 20 cases share an identical RNA sequence. Interviewed cases reported having travelled to at least three different locations in the Red Sea region (Sharm-El-Sheikh, Hurghada and Taba-Sinai) and stayed at different hotels and resorts. Sixty-eight cases have information about their vaccination status and all were unvaccinated.

Web source: [ECDC rapid risk assessment](#) | [Eurosurveillance 25 April 2013](#)

ECDC assessment

HAV infections in travellers returning from Egypt have been reported in several EU Member States. The same HAV sequence was identified in cases from Denmark, France, Ireland, the Netherlands, Norway and the UK, confirming a multinational outbreak. The distribution of cases over time suggests a persistent common source outbreak - potentially food-borne - the source of which has not yet been identified.

Actions

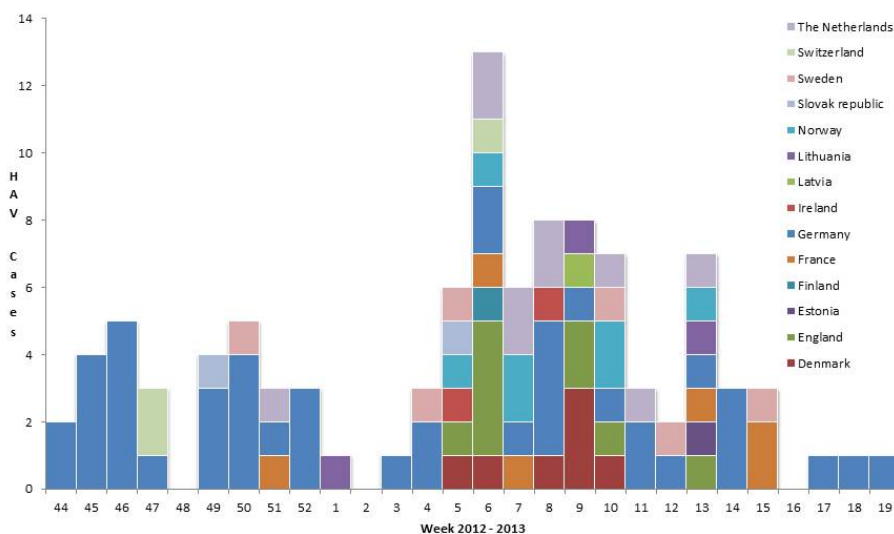
ECDC has published a [rapid risk assessment](#). Public health authorities in the affected countries, ECDC and WHO are actively collaborating to detect the source of the infection in order to prevent the occurrence of additional cases. ECDC is coordinating this investigation. Interviews with some of the cases using a trawling questionnaire have been performed and analysed. ECDC has requested Egypt to trace-back berries from four hotels with the most reported cases. A case-control study to identify the source or vehicle of infection is currently being prepared.

Hepatitis A cases among travellers coming back from Egypt

ECDC

HAV cases in EU/EEA travellers returning from Egypt by date of onset*

* Date of notification used when date of onset missing; n=103 (three cases missing information)



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

8/16

Opening date: 8 September 2005

Latest update: 6 June 2013

Epidemiological summary

During the past week, four WPV1 cases were reported to WHO: one case in Pakistan and three cases in Somalia. This brings the number of WPV1 cases in the Horn of Africa to nine.

Globally 45 cases have been reported so far in 2013 compared with 67 for the same period in 2012.

WPV1 was isolated from environmental sampling from Israel, as part of routine environmental surveillance in the country. The virus has been detected in sewage only and no case of paralytic polio has been reported. Genetic sequencing and epidemiological investigations are ongoing to determine the origin.

The Independent Monitoring Board (IMB) for polio eradication who met recently has underscored in its [report](#) that 'stopping polio transmission by end 2014 is a realistic prospect'. The IMB put forward key recommendations to address fundamental changes that are still needed:

- communications and social mobilisation across the Global Polio Eradication Initiative
- a final decision is urgently needed whether to introduce inactivated polio vaccine (IPV) early in the remaining endemic countries
- and a more focused and responsive global management approach is needed to ensure countries receive the most optimal support possible.

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

ECDC assessment

The last polio cases in the European Union occurred in 2001 when three young Bulgarian children of Roma ethnicity developed flaccid paralysis caused by WPV. Investigations showed that the virus originated from India. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when WPV1 imported from Pakistan caused an outbreak of 460 reported cases. The last indigenous WPV case in Europe was in Turkey in 1998. An outbreak in the Netherlands in a religious community opposed to vaccinations caused two deaths and 71 cases of paralysis in 1992.

Actions

ECDC follows reports on 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 (WPV) into the EU.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 5 June 2013

Epidemiological summary

Europe: There have been no reports of confirmed autochthonous dengue infections in Europe in 2013 apart from the cases in Madeira.

Asia: The dengue epidemic in Singapore continues with 756 cases reported during the last week. In total, more than 8 600 cases have been notified since the start of the year and the predominant serotype circulating is DENV-1. Nationally, both Cambodia and the Philippines have reported an increasing trend of dengue cases this week. In Armenia, health authorities have issued a dengue alert after recording 400 cases of dengue fever, according to the media.

The Caribbean: During the last two weeks of May, all epidemiological indicators showed that the dengue epidemic remains active in the French overseas territory of Saint Barthelemy, according to InVS.

Central and South America: In Central America, Mexico and Honduras are experiencing high dengue activity. In South

9/16

America, the Paraguayan Ministry of Health has reported more than 87 000 confirmed dengue cases and 66 deaths so far this year. In Chile, the government has adopted a series of urgent measures to reduce the risk of a dengue fever outbreak in Easter Island, a Polynesian island located in the Pacific Ocean, following a recent surge in dengue cases. Over the last four weeks, the number of laboratory confirmed dengue cases reported in French Guiana remained at high levels, according to InVS.

Pacific: The Solomon Island's continue to see sustained dengue activity with more than 5 500 suspected cases reported so far this year. According to the media, local health authorities are concerned that dengue may now be endemic in the country.

Web sources:

[HealthMap](#) | [MedISys](#) | [ProMED Asia update](#) | [ProMED Americas update](#) | [InVS](#)

ECDC assessment

ECDC monitors individual outbreaks, seasonal transmission patterns and inter-annual epidemic cycles of dengue through epidemic intelligence activities in order to identify significant changes in disease epidemiology. Of particular concern is the potential for the establishment of dengue transmission in Europe. Before the 2012 outbreak in the Autonomous Region of Madeira, local transmission of dengue was reported for the first time in France and Croatia in 2010. Imported cases are being detected in European countries, highlighting the risk of locally acquired cases occurring in countries where the competent vectors are present.

Actions

ECDC has published a technical [report](#) on the climatic suitability for dengue transmission in continental Europe and [guidance for invasive mosquitoes' surveillance](#).

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013

Latest update: 29 May 2013

Epidemiological summary

On 31 March 2013, Chinese authorities announced the identification of a novel reassortant A(H7N9) influenza virus isolated from three unlinked fatal cases of severe respiratory disease in eastern China, two in Shanghai and one in Anhui province. The WHO Collaborating Centre for Reference and Research on Influenza at the Chinese Centre for Disease Control and Prevention (CCDC) subtyped and sequenced the viruses and found them to be of almost identical low pathogenic avian origin.

Since 31 March 2013, 132 cases of human infection with influenza A(H7N9) have been reported from eastern China and Taiwan: Zhejiang (46 cases), Shanghai (33), Jiangsu (27), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (5), Hunan (2), Jiangxi (6) and Taiwan (1). In addition, the virus has been detected in one asymptomatic case in Beijing. The dates of onset of disease have been between 19 February and 21 May 2013. The date of disease onset is currently unknown for fifteen patients. Most cases have developed severe respiratory disease. Thirty seven patients have died (case-fatality ratio=28%). The median age is 61 years ranging between four and 91 years; 37 of 132 patients are female.

The Chinese health authorities responded to this public health event with enhanced surveillance, epidemiological and laboratory investigation and contact tracing. The animal health sector has intensified investigations into the possible sources and reservoirs of the virus. The authorities reported to the World Organisation for Animal Health (OIE) that avian influenza A(H7N9) was detected in samples from pigeons, chickens and ducks, and in environmental samples from live bird markets ('wet markets') in Shanghai, Jiangsu, Anhui and Zhejiang provinces. Authorities have closed markets and culled poultry in affected areas.

Web sources: [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [Centre for Health Protection Hong Kong](#) | [OIE](#) | [Chinese MOA](#) |

ECDC assessment

Influenza A(H7N9) is a zoonotic disease that has spread or is spreading in poultry in parts of eastern China causing a severe disease in humans. At this time there is no evidence of sustained person-to-person transmission. Close to 3 000 contacts have been followed-up and only a few are reported to have developed symptoms, as part of three small family clusters.

At present, the most immediate threat to EU citizens is to those in China who are strongly advised to avoid live bird markets. The risk of the disease spreading to Europe via humans in the near future is considered low. However, it is likely that people presenting with severe respiratory infection in the EU and a history of potential exposure in the outbreak area will require investigation in Europe.

There is no specific guidance on blood or tissue donor deferral for exposure to avian influenza. The incubation period for A(H7N9) is assumed to be 10 days or less, and there is no reason to believe that infected people will be viraemic beyond the acute disease episode. Therefore, the risk of transmission through blood transfusion can be considered very low in the context of the current donor selection procedures.

The gradual geographical extension seems to have stopped and there has been a decline in the number of cases since the beginning of May, possibly due to the closure of urban live bird markets in China. The fact that human infections with bird flu viruses tend to drop off during spring and summer in affected countries could also play a role. Many unanswered questions remain, however, regarding this outbreak, e.g. the reservoir, the route of transmission, the spectrum of disease and the reason for the unusual age–gender imbalance.

Actions

ECDC is closely monitoring developments and is continuously re-assessing the situation in collaboration with WHO, the US CDC, the Chinese CDC and other partners.

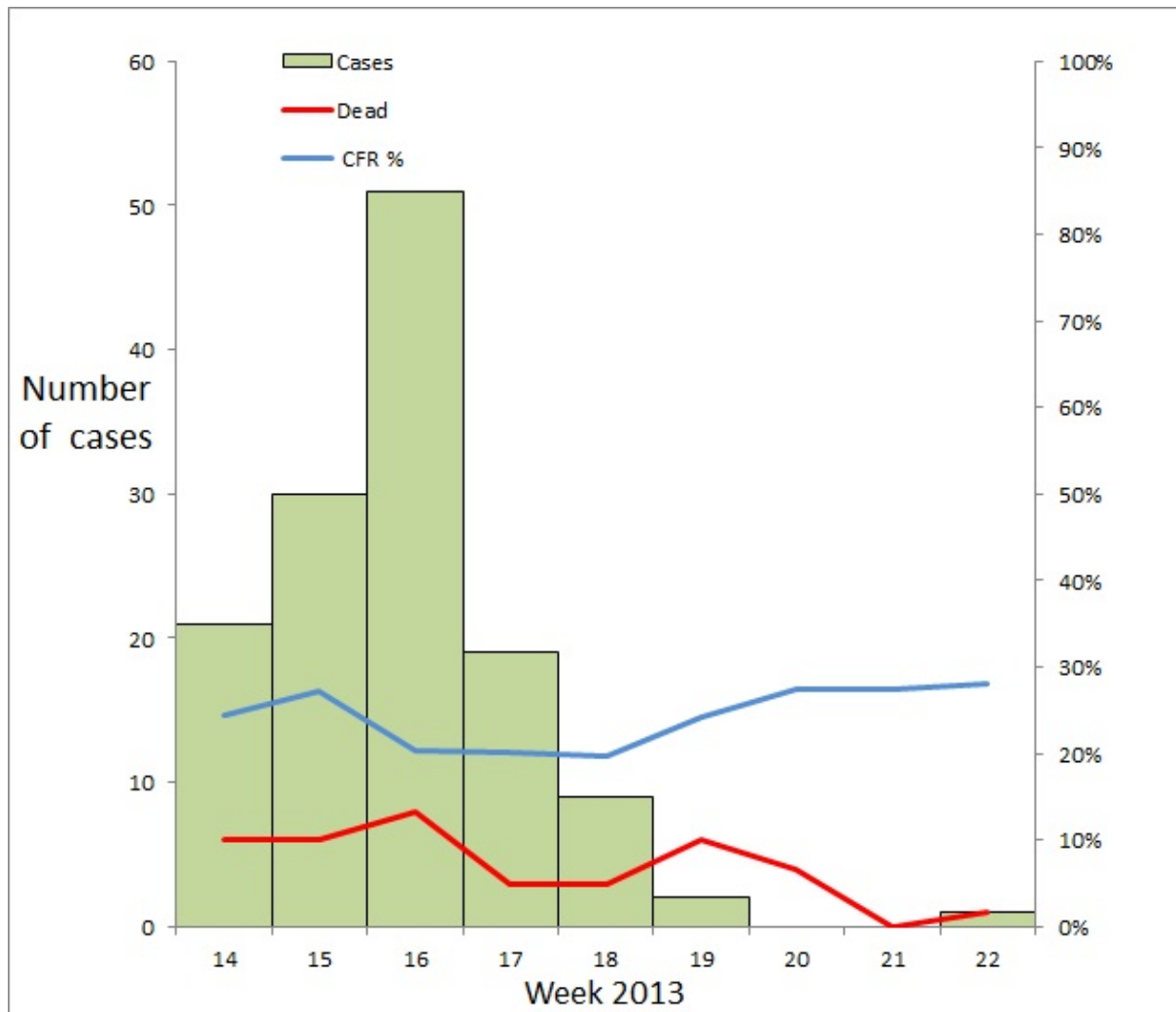
ECDC published an updated [Rapid Risk Assessment](#) on 8 May 2013.

A case detection algorithm and an EU case definition has been developed and shared with EU Member states.

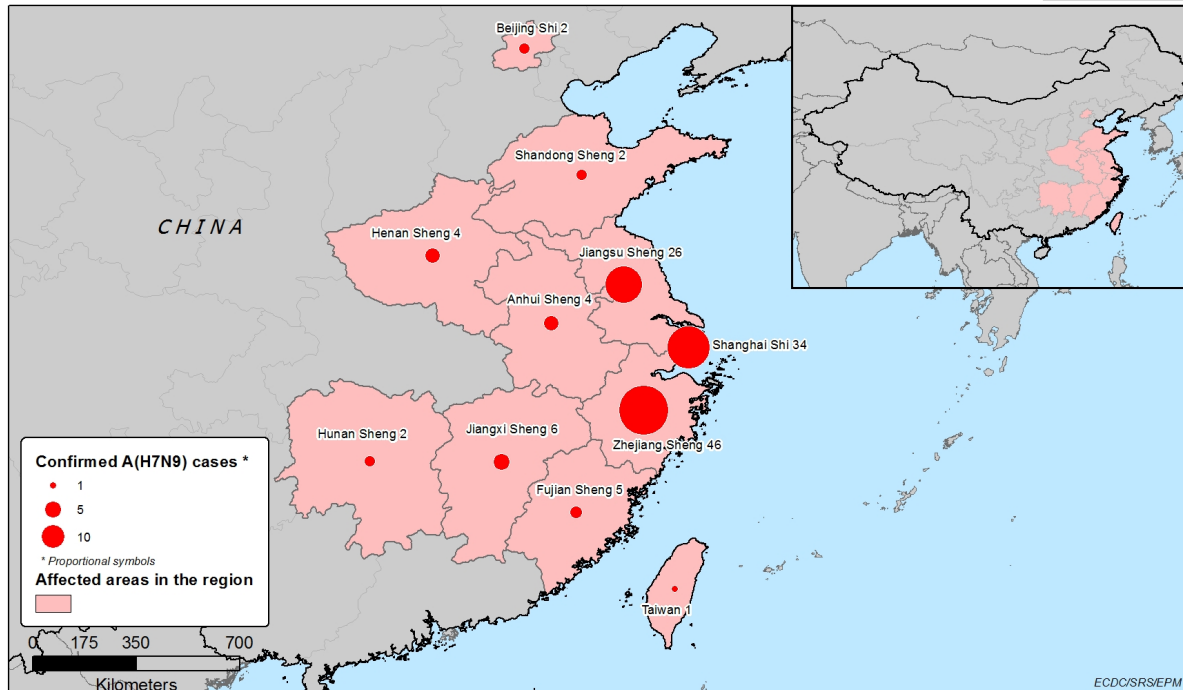
ECDC guidance for [Supporting diagnostic preparedness for detection of avian influenza A\(H7N9\) viruses in Europe](#) for laboratories was published on 24 April 2013.

Distribution of influenza A(H7N9) cases by week of reporting, as of 30 May 2013 (cases =132, fatalities=37, CFR=28%)

WHO



Reported cumulative number of confirmed cases of novel influenza A(H7N9) by province in China, as of 30 May 2013, 15.00 CEST



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

Opening date: 24 September 2012

Latest update: 5 June 2013

Epidemiological summary

The first described case of MERS-CoV infection was a 60-year-old male resident of Saudi Arabia who died of severe pneumonia complicated by renal failure in June 2012. A previously unknown coronavirus isolated from this patient was identified.

As of 6 June 2013, 54 laboratory confirmed cases have been reported worldwide: Saudi Arabia (39), Jordan (two), Germany (two), United Kingdom (four), France (two), Italy (three) and Tunisia (two). Thirty of these cases have died. All cases remain associated with transmission in the geographic area of the Arabian Peninsula. There are several clusters among the reported cases both in health care and home settings, some with evidence of limited human-to-human transmission and a few who had not been to the Middle East but had been in close contact with laboratory-confirmed or probable cases. The age-range of cases is from 14 to 94 years (age is unknown for four cases). Thirteen cases are female and 36 are male (gender is unknown for one case).

Since April 2013, all cases in Saudi Arabia were reported in the eastern provinces of the country with the majority linked to a healthcare facility in Al-Ahsa. Two patients are healthcare workers who were exposed to patients with confirmed MERS-CoV. The latest case was reported by WHO on 5 June, also from the eastern region of Saudi Arabia, but not part of the Al-Ahsa cluster. The patient is a 14 year old girl with multiple co-morbidities, presenting on 29 May with respiratory symptoms. She is in stable condition

in the isolation ward.

On 1 June 2013, Italy reported an imported case, a 45-year-old man with recent travel to Jordan. This is the first time a patient has been diagnosed with MERS-CoV in Italy. He returned to Italy on 25 May 2013 and was hospitalised on 28 May 2013. Italy has reported two additional cases on 2 June, a two year old niece and a 42 year old female co-worker of the index case. All three patients are reported to be in stable condition. Ten further contacts of the index case tested positive for MERS-CoV initially, but subsequent confirmatory tests excluded MERS-CoV infection.

Web sources: [WHO](#) | [ECDC RRA 19 February](#) | [ECDC novel coronavirus website](#) | [RKI risk assessment 26 March](#) | [WHO update 2 May](#) | [MoH France 08 May](#) | [InVS 13 May](#) | [WHO update 29 May](#)

ECDC assessment

The additional recent novel coronavirus cases reported by the Saudi Arabian authorities indicate an ongoing source of infection present in the Arabian Peninsula.

The French index case who presented with diarrhoea is a reminder of the possibility that initial presentations may not necessarily include respiratory symptoms, especially in those with immunosuppression or underlying chronic conditions. This needs to be taken into account when revising case-finding strategies. This case in France was the second nosocomial transmission in Europe following one reported in the UK in February 2013, highlighting the risk of onward transmission in Europe, in particular in healthcare settings. Both French patients had underlying conditions, and a degree of immunosuppression. One of the transmissions in the UK was also to an immunosuppressed person. These underlying conditions may be increasing the vulnerability and the risk of transmission. Specimens from the upper respiratory tract were negative taken from some patients who were later confirmed to be infected by MERS-CoV in samples from the lower respiratory tract. Therefore, specimens from patients' lower respiratory tracts should be obtained for diagnosis where possible.

Information on many of the basic epidemiological indicators required for determining effective control measures are still missing for most cases that occurred in the Middle East, e.g. the reservoir of infection, risk groups, incubation period, period of infectivity and settings where infection has occurred.

The imported cases reported by Germany, France and Italy, following medical evacuation and travel, suggest that more imported cases may be expected in the EU in the future.

Due to the large number of guest workers in Saudi Arabia attention must also be drawn to the possible importation of MERS-CoV to the South East and Pacific Asia.

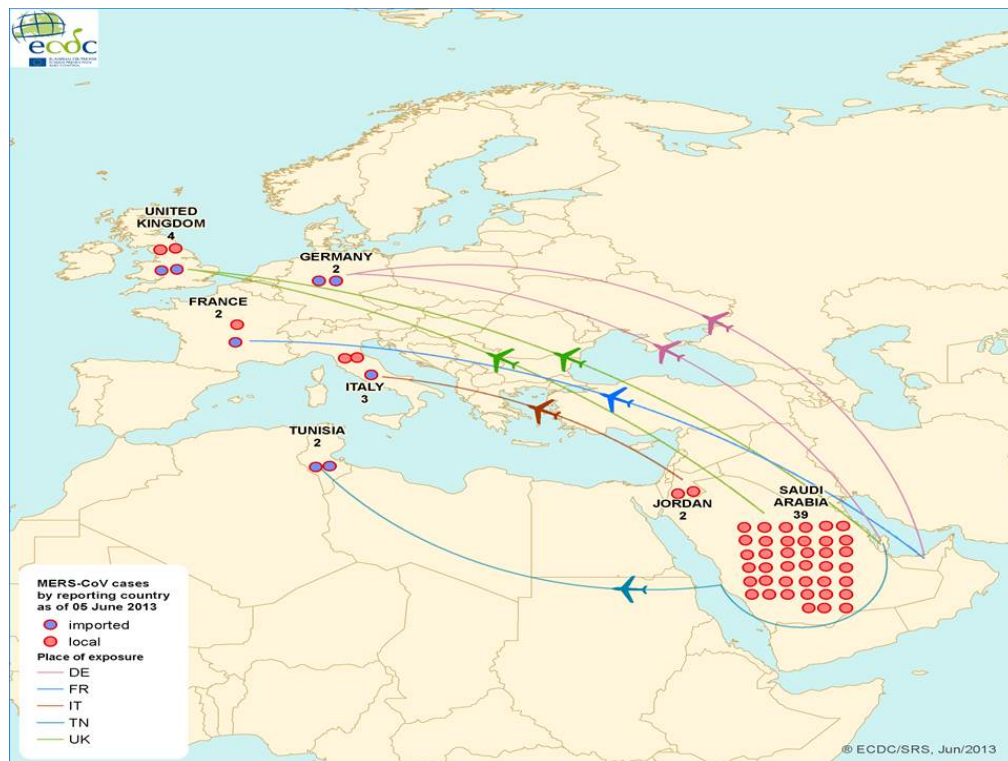
Actions

ECDC published an updated [rapid risk assessment](#) on 17 May 2013 and an updated [epidemiological update](#) on 3 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.

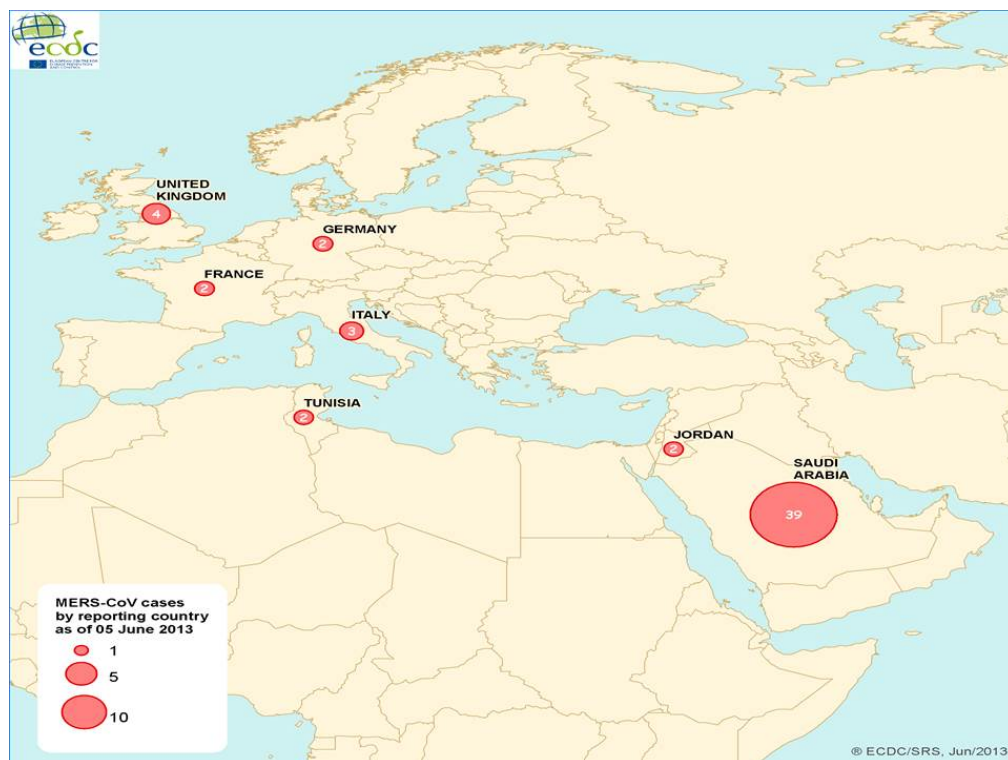
Number of confirmed MERS-CoV cases by place of exposure as of 5 June 2013

ECDC



Number of confirmed MERS-CoV cases by country of reporting

ECDC



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