



#### **COMMUNICABLE DISEASE THREATS** REPORT

# CDTR Week 21, 19-25 May 2013

All users

This weekly bulletin provides updates on threats monitored by ECDC.

# I. Executive summary **EU Threats**

## Hepatitis A -Multistate (Europe)- ex Italy

Opening date: 10 May 2013 Latest update: 23 May 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 preliminary investigations point to frozen berries as the vehicle of infection.

# Hepatitis A - Multistate (Europe) - 2013 outbreak Opening date: 9 April 2013 Latest update: 23 May 2013

Between 1 October 2012 and 23 May 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, 89 cases have so far been reported associated with this outbreak, of which 42 are confirmed. The source of the outbreak has not been identified 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 23 May 2013, four new cases and eight previously reported cases were found associated with the unique outbreak strains.

## Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 23 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. There have been no measles-related deaths during the reporting period, but six cases were complicated by acute measles encephalitis. During the last 12-month period, France, Italy, Germany, Romania, Spain and the United Kingdom accounted for 95% of the measles cases. Measles is targeted for elimination in Europe by 2015. Fourteen countries met the elimination target of less than one case of measles per million population during the last 12 months.

→Update of the week

There is an on-going measles outbreak in the UK.

## Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 23 May 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 23 May, no new outbreaks were detected.

### Influenza - Multistate (Europe) - Monitoring 2012-2013 season

Opening date: 2 December 2011 Latest update: 24 May 2013

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

Weekly reporting on influenza surveillance in Europe for the 2012–2013 season started in week 40/2012 and reverted to fortnightly reporting after week 16/2013.

Active influenza transmission began around week 49/2012, with influenza-like illness/acute respiratory infection rates peaking in almost all countries between weeks 52/2012 and 8/2013.

→Update of the week

During week 19 and 20 of 2013, low intensity transmission was reported by all reporting countries for the fourth consecutive week.

#### Non EU Threats

### **Hepatitis A - Multistate - Travel to Egypt**

Opening date: 22 April 2013 Latest update: 23 May 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 18 cases from three of the affected countries confirms a multinational outbreak. The source of the outbreak is still unknown but the descriptive epidemiology 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

As of 23 May 2013, 20 confirmed cases of hepatitis A have been reported from six countries.

## Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 23 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 (1), Shandong (2), Fujian (5), Hunan (2), Jiangsi (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 confirmed.

#### →Update of the week

Between 16 May and 23 May 2013, there were no additional confirmed human cases of influenza A(H7N9) virus reported. Since the beginning of the outbreak there have been 131 confirmed cases, including 36 deaths.

### Novel Coronavirus (MERS-CoV) - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012 Latest update: 23 May 2013

Between April 2012 and 23 May 2013, 44 laboratory-confirmed cases, including 22 deaths, of an acute respiratory disease caused by a novel coronavirus have been notified to WHO. The new virus is genetically distinct from the coronavirus that caused the SARS outbreak. Cases have occurred in Saudi Arabia, Qatar, Jordan, United Arab Emirates, the United Kingdom and France. The reservoir of the novel coronavirus has not been established, nor is it clear how transmission is sustained from one sporadic case to another.

#### →Update of the week

Between 16 and 23 May 2013, the Ministry of Health in Saudi Arabia reported two new cases, one in Al-Hasa governorate and one from Al-Qaseem.

On 21 May 2013, three cases were reported by the Ministry of Health of Tunisia. The probable index case, who died on 10 May 2013, was a 66-year-old man with underlying health conditions and a recent travel history to Qatar and Saudi Arabia. Infection with MERS-CoV was not confirmed. The two laboratory confirmed cases, a 34-year-old man and a 35-year-old woman, who are siblings and children of the index case, both had mild respiratory illness, but neither required hospitalisation.

On 16 May 2013, the Coronavirus Study Group of the International Committee on Taxonomy of Viruses decided to call the new virus Middle East respiratory syndrome coronavirus (MERS-CoV) in order to provide uniformity and to facilitate communication about the disease.

## Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 23 May 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 sporadic cases in Madeira.

# Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 23 May 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 24 May 2013, one new polio case was reported to WHO, a wild poliovirus type 1 (WPV1) from Kenya, a non-endemic country.

# II. Detailed reports

## Hepatitis A -Multistate (Europe)- ex Italy

Opening date: 10 May 2013 Latest update: 23 May 2013

## **Epidemiological summary**

On 8 May 2013, Germany reported seven cases of hepatitis A virus (HAV) infection associated with a ski holiday in the autonomous provinces of Trento and Bolzano in northern Italy.

Following the German report, the Netherlands reported one case and Poland five cases with travel history in the province of Trento. All cases reported by Poland stayed in Italy during the period 16-22 March 2013 and the latest case had onset of symptoms on 2 May 2013. Information on genotype (sub-genotype 1A) and sequence is only available for the Dutch case. From the preliminary information available, a food item (frozen berries) seems to be the most likely vehicle of infection for this outbreak.

Following the alert, Italy reported an increase in HAV cases in 2013 both at the national level and in the province of Trento compared to 2011 and 2012. Italy also reports a national increase in HAV notifications. Local authorities visited the accommodation reported by cases and interviewed the staff. The hotels are currently closed due to the mid-season break.

#### **ECDC** assessment

As the route of transmission of hepatitis A is fecal-oral and the food investigation is still on-going, the risk for EU citizens is uncertain. The distribution of the onset of symptoms over time suggests a common source outbreak with the majority of cases infected around mid-March.

#### **Actions**

Public health authorities in the affected countries and ECDC are actively collaborating to identify the vehicle of the infection in order to prevent the occurrence of additional cases.

## Hepatitis A - Multistate (Europe) - 2013 outbreak

Opening date: 9 April 2013 Latest update: 23 May 2013

## Epidemiological summary

From 1 October 2012 until 23 May 2013, Denmark, Finland, Norway and Sweden reported 42 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. There are 47 additional, non-travel-related cases of HAV reported in the four countries for which the sequence is not known. Overall, 89 cases have been reported to be associated with this outbreak, of which 42 are confirmed.

Epidemiological investigations in Denmark and Sweden point towards strawberries as the vehicle of infection. On 22 May 2013, the Swedish Institute for Infectious Disease Control (SMI) published a <u>press release</u> 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.

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 identified, but epidemiological investigations in Denmark and Sweden point towards strawberries as vehicle of infection.

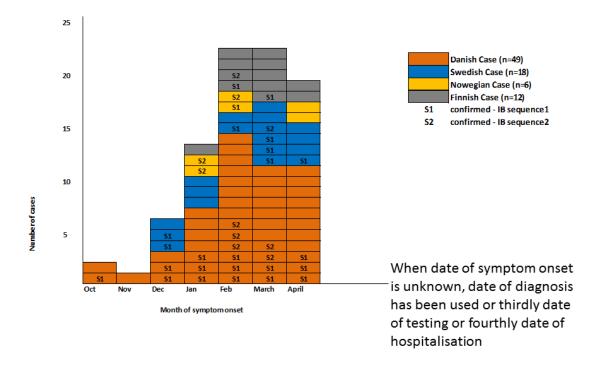
#### **Actions**

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=85)

**ECDC** 



## Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 23 May 2013

## **Epidemiological summary**

In Wales less cases per week are being reported in the ongoing outbreak. Thirty three new cases were reported since last week, bringing the total number of cases to 1 325 since November 2012.

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

There was a significant reduction in notified cases in 2012 compared to the two previous years, indicating that the incidence within the EU/EEA had returned to the level before the 2010-2011 outbreaks. However, this is just one single annual incidence figure and does not signify a longer-term downward trend in measles notifications. Endemic measles transmission continues in a number of EU countries and the risk of new outbreaks increases as the unvaccinated population grows over time. In endemic areas, measles incidence fluctuates in multi-annual cycles which are determined by the vaccination uptake over time and the size of the susceptible population.

#### Actions

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. ECDC closely monitors measles transmission and outbreaks in the EU and neighbouring countries in Europe through enhanced surveillance and epidemic intelligence activities.

## Rubella - Multistate (EU) - Monitoring European outbreaks

Latest update: 23 May 2013 Opening date: 7 March 2012

## **Epidemiological summary**

No new outbreaks have been identified since the last update.

The 27 EU and EEA countries contributing to enhanced rubella surveillance together reported 12 958 cases during the last 12 -month period from April 2012 to March 2013. Poland and Romania accounted for 99% of all reported rubella cases in the 12 -month period. Romania has reported an average of seven cases per month since August 2012, indicating that the nationwide epidemic that affected more than 20 000 people is now over. Poland is experiencing a nationwide rubella epidemic. Since August 2012, Poland has reported over 95% of all rubella cases in the EU/EEA.

Between June and November 2012, ECDC conducted an overview of surveillance systems of rubella, rubella in pregnancy and congenital rubella in 29 EU/EEA countries. In 2012, EU/EEA countries reported just over 27 000 rubella cases to ECDC.

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 compared with 2011 and the potential for an increase in the number of babies born with CRS in EU countries are of serious 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

## Influenza - Multistate (Europe) - Monitoring 2012-2013 season

Latest update: 24 May 2013 Opening date: 2 December 2011

### **Epidemiological summary**

In weeks 19 and 20/2013, all twenty-five participating countries reported low-intensity transmission, for the fourth consecutive week. The proportion of influenza-positive sentinel specimens (5%) has continued to decrease since the peak observed in week 5/2013 (61%). Since week 40/2012, 47% of sentinel surveillance specimens testing positive for influenza virus have been type A and 53% type B. Of the influenza A viruses subtyped, the proportion of A(H1)pdm09 viruses was 62%.

Web source: ECDC Weekly Influenza Surveillance Overview

#### **ECDC** assessment

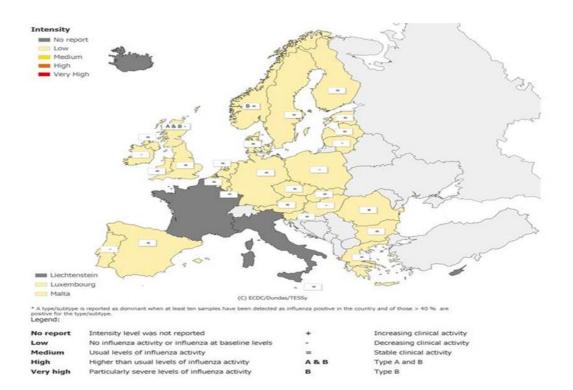
The 2012-2013 influenza season is now over.

#### **Actions**

ECDC updated its influenza website for the start of the season and published its annual risk assessment for seasonal influenza 2012-2013 in early February based on data up to week 3/2013. A new seasonal influenza communication toolkit is now available on the ECDC website. It contains campaign materials that can be adapted and reused for national communication initiatives to tackle seasonal influenza.

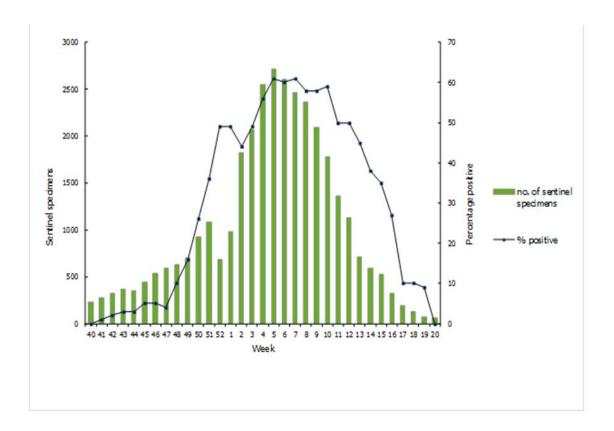
# Geographic spread for week 20/2013

**ECDC WISO** 



## Proportion of sentinel specimens positive for influenza virus, weeks 40/2012-20/2013

**ECDC WISO** 



## **Hepatitis A - Multistate - Travel to Egypt**

Opening date: 22 April 2013 Latest update: 23 May 2013

## **Epidemiological summary**

Fourteen EU/EEA countries have reported 106 cases with hepatitis A infections among travellers returning from Egypt. Of these, 20 cases share an identical RNA sequence. The dates of onset of symptoms (or laboratory testing date for those with no available onset dates) range from 1 November 2012 until 24 April 2013. Interviewed cases reported having travelled to at least two different locations in the Red Sea region (Sharm-El-Sheikh and Hurghada) 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 source outbreak - potentially food-borne - the source of which has not yet

been identified.

#### **Actions**

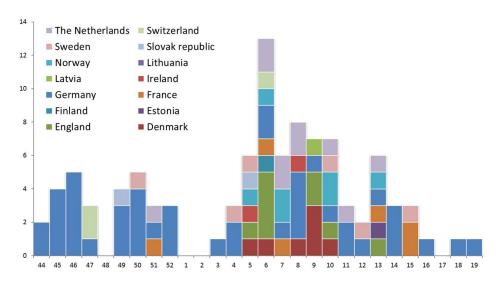
ECDC has published a <u>rapid risk assessment</u>. Public health authorities in the affected countries, ECDC and WHO are actively collaborating to detect the source of the infection in order to prevent the occurrence of additional cases. ECDC is coordinating this investigation. Interviews with some of the cases using a trawling questionnaire have been performed and analysed. 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** 

## Distribution of cases by date of onset\*

N=100; six cases missing info about date of onset or week of notification



\*Date of notification was used when date of onset was not available

## Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 23 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) had subtyped and sequenced the viruses and found them to be of almost identical low pathogenic avian origin.

Since 31 March 2013, 131 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 (1), Shandong (2), Fujian (5), Hunan (2), Jiangsi (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 29 April 2013. The date of disease onset is currently unknown for fifteen patients. Most cases have developed severe respiratory disease. Thirty six patients have died (case-fatality ratio=27%). The median age is 61 years ranging between four and 91 years; 37 of 131 patients are female.

The Chinese health authorities are responding 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 four 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 slowed down and there has been a decline in the number of cases during the last week, possibly due to the closure of urban live bird markets in China. However, many unanswered questions remain 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.

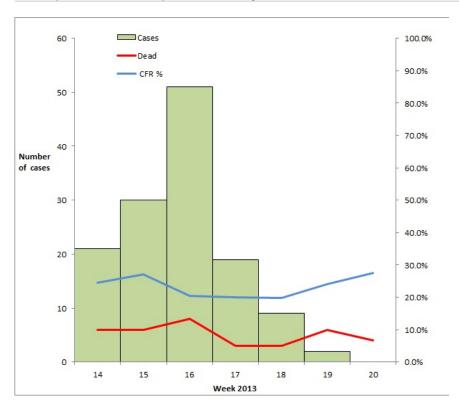
ECDC published an updated Rapid Risk Assessment on 8 May 2013.

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

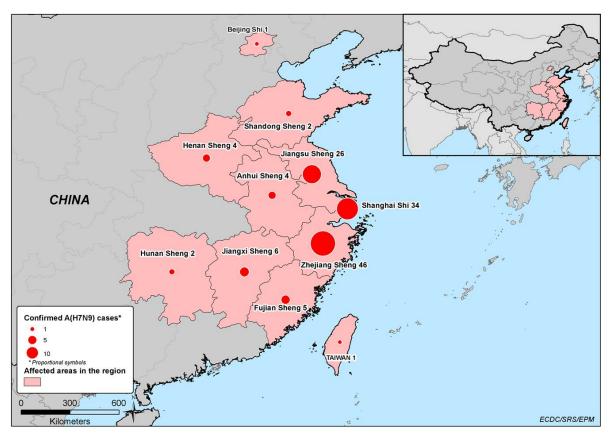
ECDC guidance for <u>Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in Europe</u> for laboratories was published on 24 April 2013.

# Distribution of influenza A(H7N9) cases by week of reporting, as of 23 May 2013 (cases =131, fatalities=36, CFR=27%)





# Distribution of cumulative number of influenza A(H7N9) cases, 19 February-23 May 2013



# Novel Coronavirus (MERS-CoV) - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012 Latest update: 23 May 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 23 May 2013, 44 laboratory confirmed cases have been reported by; Saudi Arabia (32), Jordan (two), Germany (two), United Kingdom (four), France (two) and Tunisia (two). Twenty two of these cases have died. All cases worldwide remain associated (including indirect association following secondary person-to-person transmission in the UK and France) with transmission in the Arabian Peninsula. The age of cases ranges from 24 to 94 years (age is unknown for four cases). Ten cases are female and 33 are male (gender is unknown for one case).

Since the beginning of May 2013, the Ministry of Health in Saudi Arabia has reported 22 cases including ten deaths. All cases were from the eastern provinces. The outbreak is primarily linked to a health care facility. Two patients are healthcare workers who were exposed to patients with confirmed MERS-CoV.

On 21 May 2013 three cases were reported by the Ministry of Health of Tunisia. The probable index case, who died on 10 May 2013, was a 66-year-old man with underlying health conditions and a recent travel history to Qatar and Saudi Arabia. Infection with MERS-CoV was not confirmed. The two laboratory confirmed cases, a 34-year-old man and a 35-year-old woman, who are siblings and children of the index case, both had mild respiratory illness and neither required hospitalisation. (These cases are not displayed on the map.)

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

#### ECDC assessment

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

The first French case, described in week 20, ECDC CDTR, who presented with diarrhoea is a reminder of the possibility that presentations may not include respiratory symptoms initially, especially in those with immunosuppression or underlying chronic conditions. This needs be taken into account when revising case-finding strategies. The imported case in France is the second nosocomial transmission in Europe following one in the UK in February 2013, highlighting the risk of onward transmissions 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.

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 recent imported cases reported by Germany and France, following medical evacuation and travel, indicate that more imported cases may be expected in the EU in the immediate future.

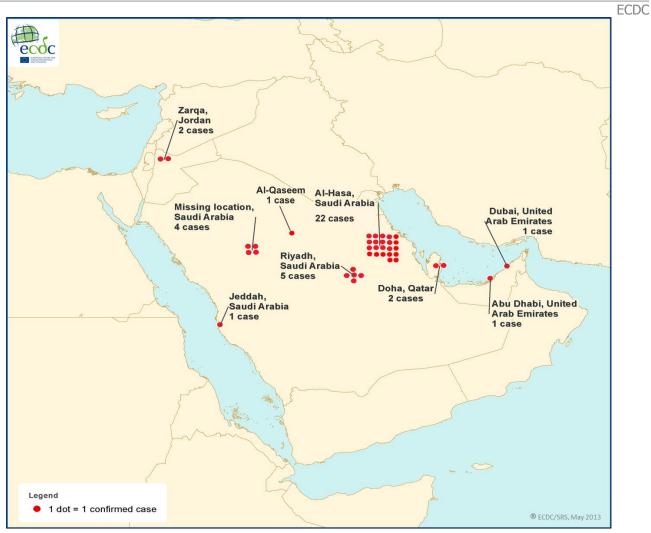
Due to the large number of guest workers in Saudi Arabia attention must also be drawn to the possible importation of MERS-CoV to the South East and Pacific Asia.

#### **Actions**

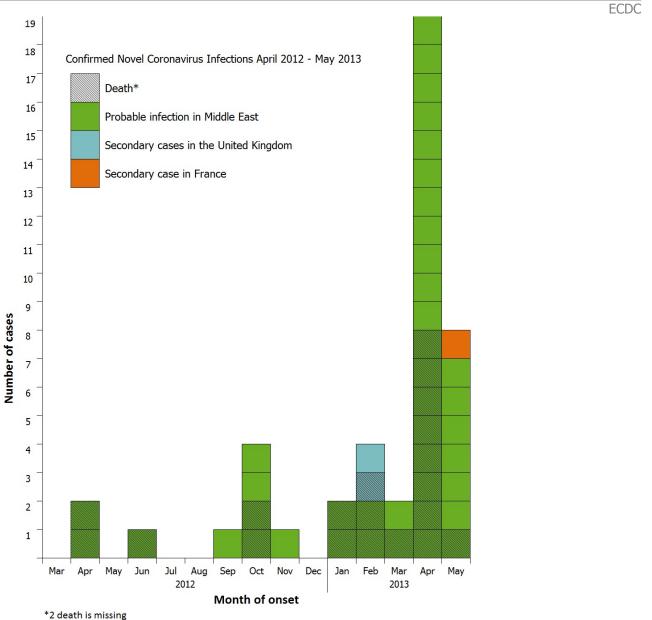
ECDC published an updated <u>rapid risk assessment</u> on 17 May 2013 and an <u>epidemiological update</u> on 23 May 2013. The results of an ECDC-coordinated survey on laboratory capacity for testing the novel coronavirus in Europe were published in EuroSurveillance.

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

# Cumulative cases of MERS-CoRV reported in the Arabian Peninsula and Jordan, as of 23 May 2013



# Distribution of cases of novel coronavirus reported worldwide by month of disease onset, outcome and place of infection, as of 23 May (n=44, 2 deaths missing)



# Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 23 May 2013

### **Epidemiological summary**

**Europe:** There have been no reports of confirmed autochthonous dengue infections in Europe in 2013, besides the dengue outbreak in Madeira.

**Asia:** The number of dengue cases in Singapore has risen to nearly 7 000 which is higher than the total number of cases reported for the whole of 2011 and 2012.

**The Caribbean:** The Ministry of Health in Jamaica has confirmed 475 suspected dengue cases and two dengue-related deaths since the start of the year. In week 16, Puerto Rico recorded 162 suspected dengue cases which is a level still above the epidemic threshold. In total, Puerto Rico has reported 5 251 suspected dengue cases so far in 2013 with DENV-1 the predominant serotype, according to the US CDC.

**Central and South America:** El Salvador has reported more cases in 2013 than in 2012 for the same time period. In South America, an increasing trend of cases is reported nationally across Ecuador, Paraguay and Peru. Brazil is still experiencing very high dengue activity. The dengue epidemic continues in French Guiana and the weekly number of confirmed cases has remained high since the middle of March. All four serotypes are co-circulating, with DENV-2 predominant serotype.

**Africa:** According to the Ministry of Health in Angola, there have been 301 confirmed dengue cases in the provinces of Luanda and Malanje since March 2013. There are media reports that the dengue outbreak in Luanda province has killed four persons. In addition to the dengue outbreak in Angola, the Kenya Medical Research Institute has confirmed that as of the end of April more than 140 cases of dengue have been reported in Mombassa.

#### Web sources:

HealthMap | MedISys | ProMED Asia update | ProMED Americas update | WPRO | CDC | 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. Of specific concern this week is the potential for imported cases from Angola and Kenya.

#### **Actions**

ECDC has published a technical <u>report</u> on the climatic suitability for dengue transmission in continental Europe and <u>guidance for invasive mosquitoes' surveillance</u>.

## Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 23 May 2013

### **Epidemiological summary**

During the past week, one case of WPV1 was confirmed in Kenya. This is the first WPV in the country since July 2011. The child is a four-month-old girl. Two healthy contacts of the child tested positive for WPV1. The location is a refugee camp in the Dadaab area, close to the border with Somalia, where a child was paralysed by polio near the capital Mogadishu on 18 April. Dadaab hosts several large refugee camps, housing nearly 500 000 people from across the Horn of Africa, including from Somalia. An emergency outbreak response is being planned in the Dabaab area to reach nearly 440 000 children aged less than 15 years using bivalent OPV.

Globally 34 cases have been reported so far in 2013 compared with 60 for the same period in 2012.

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.

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