COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 19, 5-11 May 2013

All users

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: 2 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 8 499 cases of measles during the last 12-month period from March 2012 to February 2013. There have been no measles-related deaths during the reporting period, but seven cases were complicated by acute measles encephalitis. During the last 12-month period France, Italy, Romania, Spain and the United Kingdom accounted for 94% of the measles cases. Measles is targeted for elimination in Europe by 2015. Sixteen countries met the elimination target of less than one case of measles per million population during the last 12 months.

➔Update of the week

The outbreak of measles in Wales is ongoing with 1 170 notified cases. Five cases of measles have been reported in Scotland.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012 Latest update: 2 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 8 May, no new outbreaks were detected.

Hepatitis A - Multistate (Europe) - 2013 outbreak

Opening date: 9 April 2013 Latest update: 25 April 2013

Between 1 October 2012 and 8 May 2013, Denmark, Finland, Norway and Sweden reported 28 hepatitis A cases due to genotype 1b with two related sequences. None of the cases have travel history outside the EU within the period of their potential exposure. There are 52 additional non-travel-related cases of hepatitis A reported in the four countries for whom the sequence is not known. The source of the outbreak has not been identified but epidemiological investigations in the affected countries point towards frozen berries as vehicle of infection.

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

Opening date: 2 December 2011 Latest update: 25 April 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 2012–13 season started in week 40/2012 and has reverted to fortnightly reporting since week 16/2013. Active influenza transmission began around week 49/2012, with ILI/ARI rates peaking in almost all countries between weeks 52/2012 and 8/2013.

➔Update of the week

During week 17 and 18 of 2013, low -intensity transmission and decreasing or stable trends were reported by almost all reporting countries.

Non EU Threats

Hepatitis A - Multistate - Travel to Egypt

Opening date: 22 April 2013 Latest update: 2 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 16 cases from three of the affected countries confirms a multinational outbreak. The source of infection is still unknown. On-going investigations will provide more information.

Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012 Latest update: 13 May 2013

Between April 2012 and 9 May 2013, 33 laboratory-confirmed cases (including 18 deaths from an acute respiratory disease caused by nCov) were notified. 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 and the United Kingdom. There have been three clusters of cases with evidence of human-to-human transmission, one in Jordan, one in Saudi Arabia and one in the United Kingdom, where the index case is believed to have been infected during a visit to Saudi Arabia. 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 3 and 9 May 2013, the Ministry of Health in Saudi Arabia reported eight new cases, two of which were fatal. All cases originated from Al-Ahsa governorate. On 8 May 2013, the first case was reported by France.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 13 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 8 May 2013, two new polio cases were reported to WHO. The two cases are from Nigeria.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 8 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 the occurrence of locally acquired cases in EU countries where the competent vectors are present. The detection of a dengue outbreak in the Autonomous Region of Madeira, Portugal, 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 other European countries.

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Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 7 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), Shanghai (33), Jiangsu (27), Henan (4), Anhui (4), Beijing (1), 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 confirmed.

➔Update of the week

Between 2 May and 8 May 2013, three additional confirmed human cases of influenza A(H7N9) virus, including five deaths, were reported. Since the beginning of the outbreak there have been 131 confirmed cases, including 31 deaths.

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II. Detailed reports

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 2 May 2013

Epidemiological summary

There are 1 039 cases of measles reported in the Abertawe Bro Morgannwg, Hywel Dda and Powys areas in Wales among which 85 cases have been hospitalised. Across Wales the number of notified cases is 1 170. Although more than 33 000 non-routine vaccinations have been given across Wales during the outbreak. It is estimated that 43 000 people remain unvaccinated in Wales.

There is a media report about a small cluster of five measles cases that has been identified in the Ayrshire and Arran region in Scotland during the last few weeks. Health authorities report that although these cases are linked there is no connection with the ongoing outbreaks in the UK.

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 at EU/EEA level was back at 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

Opening date: 7 March 2012 Latest update: 2 May 2013

Epidemiological summary

No new outbreaks have been identified since the last update.

The 26 EU and EEA countries contributing to enhanced rubella surveillance together reported 21 549 cases during the last 12 -month period from March 2012 to February 2013. Poland and Romania accounted for 99% of all reported rubella cases in the 12 -month period. Since August 2012, Poland alone contributed over 90% of cases, due to the decreasing trend in Romania.

Web sources: ECDC measles and rubella monitoring | WHO epidemiological brief summary tables | WHO epidemiological briefs | ECDC rubella factsheet

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

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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.

Hepatitis A - Multistate (Europe) - 2013 outbreak

Opening date: 9 April 2013 Latest update: 25 April 2013

Epidemiological summary

Between 1 October 2012 and 8 May 2013, Denmark, Finland, Norway and Sweden have reported 28 hepatitis A cases due to genotype 1b with two related sequences. None of the cases have travel history outside the EU within the period of their potential exposure. There are 52 additional non-travel-related cases of hepatitis A reported in the four countries for whom the sequence is not known.

Epidemiological investigations in Denmark, Finland and Sweden revealed that all the patients had consumed berries, in particular frozen berries in smoothies. Strawberries were the food item with the strongest association with the disease. No hepatitis A virus (HAV) could be isolated from food samples so far. 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. Case definition of confirmed cases has been changed and includes now "a probable case typed with HAV subgenotype IB and an RNA sequence less than 3% different from the "Danish outbreak strain" have been included as confirmed cases.

Following epidemiological investigations, the food authorities in all four countries 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 distribution of cases over time suggests a persistent source with possibly one or more vehicles of infections. As the most recent cases had onset in April 2013, the outbreak is most likely still on-going.

Actions

Swedish authorities have initiated a case-control study and questionnaires have been sent out to the controls.

In order to strengthen the information for source identification Danish authorities have done a product distribution analysis and shared it with food authorities in the four countries.

ECDC and EFSA published a joint rapid outbreak assessment on 16 April.

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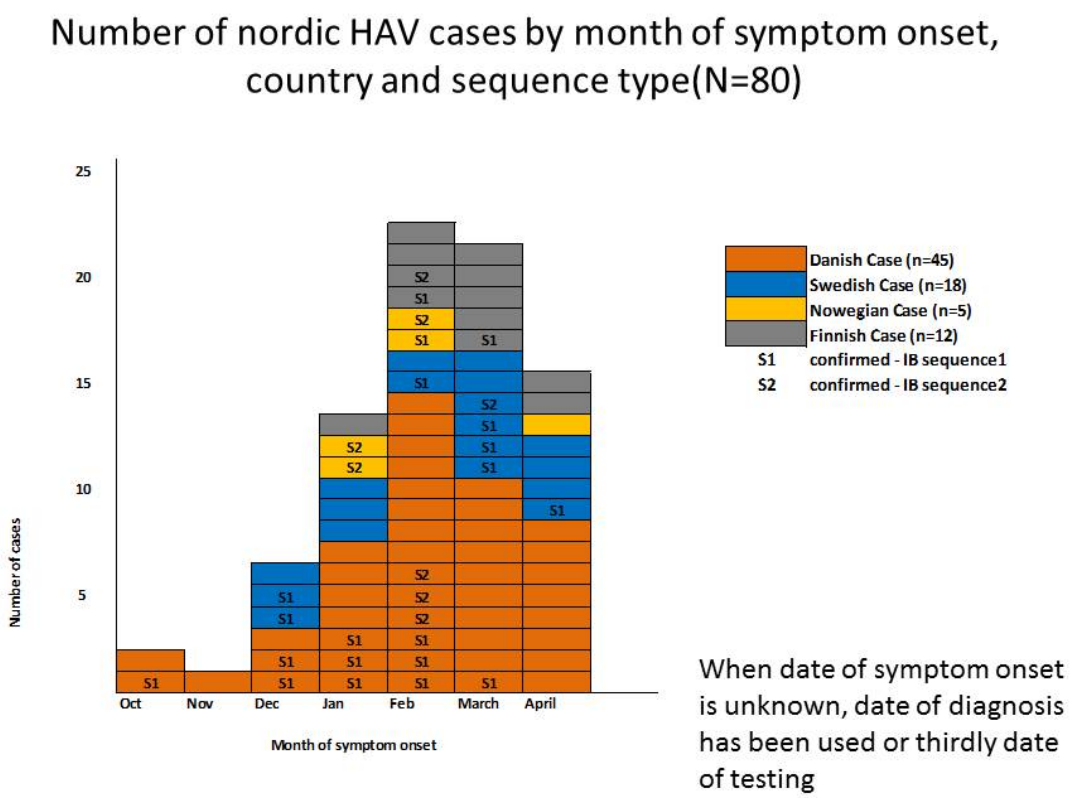
Number of nordic HAV cases by month of symptom onset, country and sequence type(N=80)



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

Opening date: 2 December 2011 Latest update: 25 April 2013

Epidemiological summary

In weeks 17 and 18/2013, all twenty-five reporting countries, reported low-intensity transmission and decreasing or stable trends. The proportion of influenza-positive sentinel specimens (8%) 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%.
Of the 3 273 hospitalised laboratory-confirmed influenza cases reported since week 40/2012, 1 988 (61%) cases were related to influenza type A and 1 285 (39%) to type B.
With influenza activity continuing to decline or having already returned to baseline levels in all reporting countries after more than three months of active transmission, the 2012–13 influenza season is coming to an end.

Web source: ECDC Weekly Influenza Surveillance Overview |

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ECDC assessment

With influenza activity continuing to decline or having already returned to baseline levels in all reporting countries after more than three months of active transmission, the 2012–2013 influenza season is now coming to a close.

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.

Geographic spread for week 182013

ECDC WISO

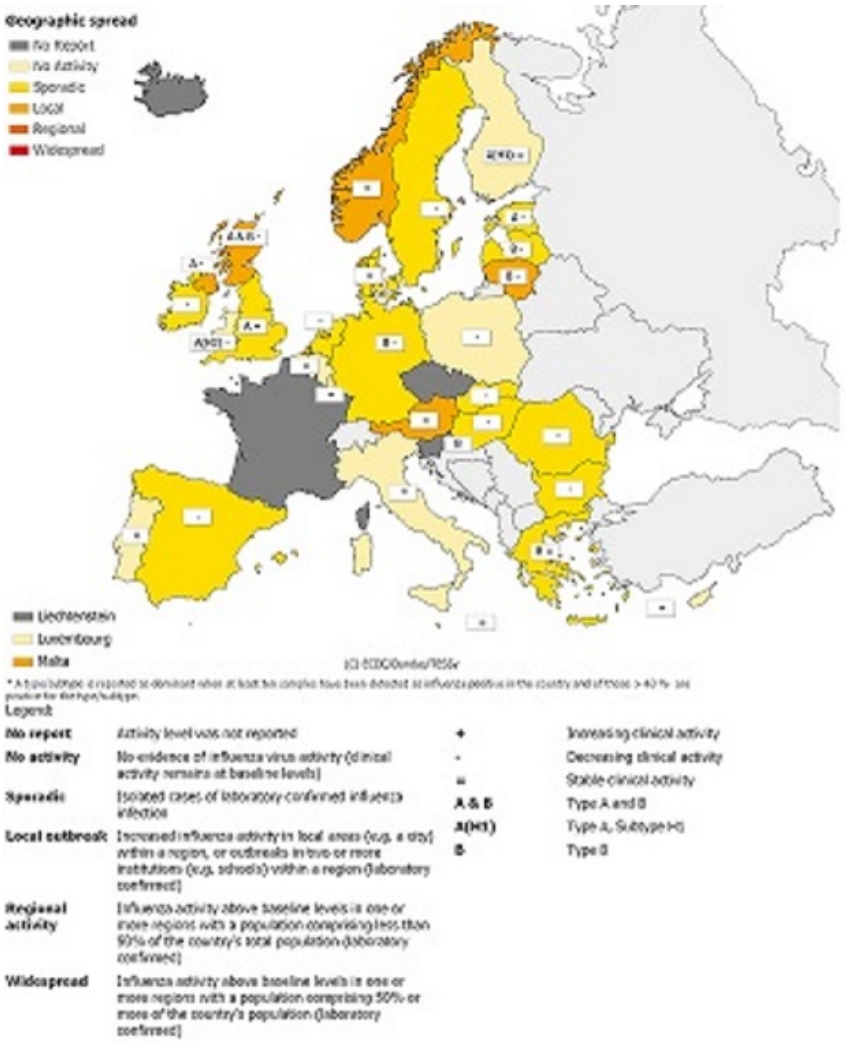

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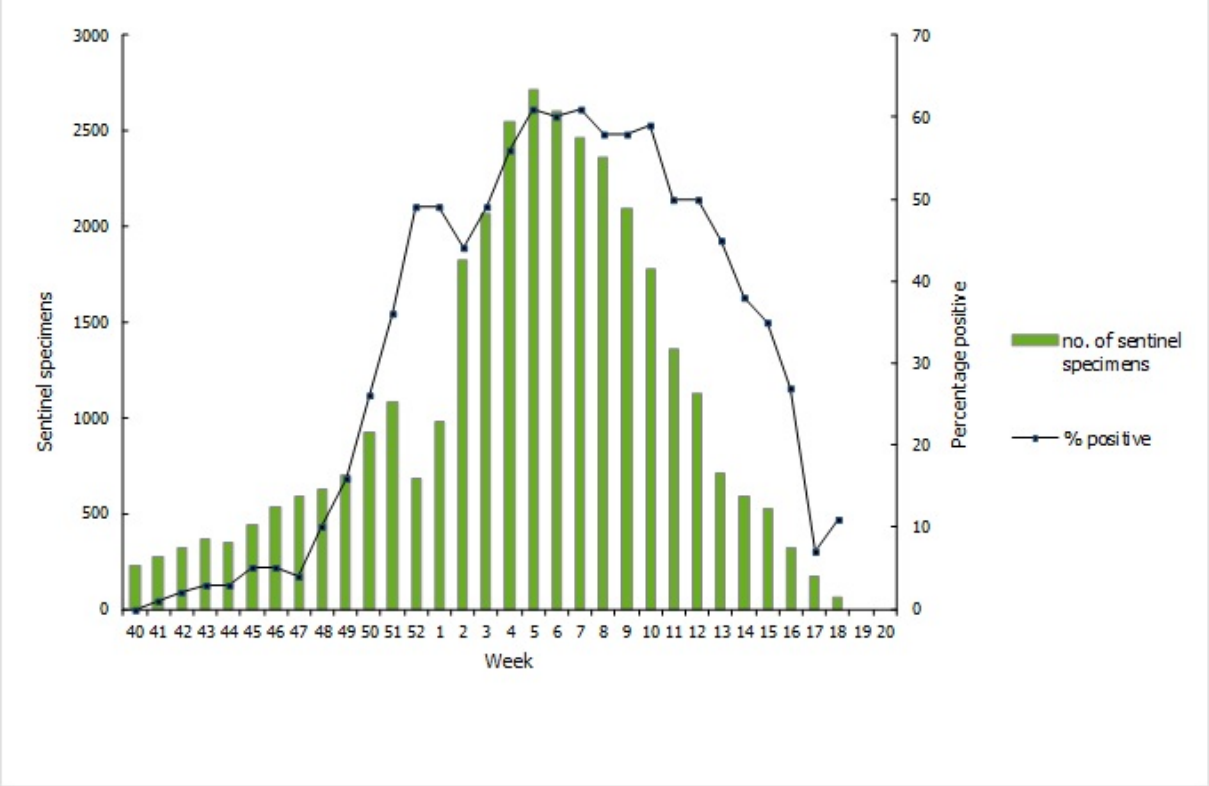
Figure 1. Proportion of sentinel specimens positive for influenza virus, weeks 40/2012–18/2013

ECDC WISO



Hepatitis A - Multistate - Travel to Egypt

Opening date: 22 April 2013 Latest update: 2 May 2013

Epidemiological summary

Fifteen EU/EEA countries have reported 100 cases with hepatitis A infections among travellers returning from Egypt. Of these, 16 cases share an identical RNA sequence. The dates of onset of symptoms (or laboratory testing date for those with no available onset dates) were between 1 November 2012 and 24 April 2013. Interviewed cases reported having travelled to at least three different locations in the Red Sea region (Sharm-El-Sheikh, Hurghada and Marsa Alam) and stayed at several hotels and resorts.

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 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.

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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.

Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012 Latest update: 13 May 2013

Epidemiological summary

The first described case of novel coronavirus 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 and named Human Coronavirus-Erasmus Medical Centre (HCoV-EMC/2012). In September 2012, a second case was reported, a Qatari man, who was transferred to Europe for care. In November 2012, additional cases with similar symptomatology were diagnosed in Qatar and Saudi Arabia. These included a family cluster of three confirmed and one probable case. Subsequently, two fatal cases were confirmed retrospectively by testing stored samples from a cluster of 11 cases of lower respiratory infection linked to a hospital in Jordan in April 2012.

In February 2013, a cluster of novel coronavirus cases was reported from the United Kingdom where the index case had travelled to Pakistan and Saudi Arabia ten days before symptom onset and where contact tracing identified two secondary cases among family members without recent travel. One person died and the other had a self-limiting influenza-like illness which did not require hospitalisation. Three additional sporadic cases have been reported since February, all from Saudi Arabia and all fatal.

On 25 March 2013, Robert Koch Institute (RKI), Germany, reported the second imported case from the country. The patient, a 73 year-old male with underlying clinical conditions, had been hospitalised in the United Arab Emirates and transferred to a hospital in Germany (Munich) for specific clinical care where subsequent diagnosis of nCoV infection was confirmed. The patient died on 26 March 2013.

On 1 May 2013, the Ministry of Health in Saudi Arabia reported seven recent cases, five of which were fatal. All fatal cases were from the eastern Al Ahsa governorate.

Between 3 and 9 May 2013, the Ministry of Health in Saudi Arabia reported eight new cases, two of which were fatal. All cases originated from Al-Ahsa governorate.

On 8 May 2013, the first case in France was reported. The patient has recent travel history to the United Arab Emirates.
He was hospitalised on 23 April in intensive care and placed in isolation.
In France, three probable cases are under investigation, a physician and a nurse who treated the patient, and a patient who shared a ward with the nCoV patient and has also presented symptoms which require a special infectious diseases consultation.
This brings the number of cases to 33 globally, including 18 deaths.

Web sources: WHO | ECDC RRA 19 February | ECDC novel coronavirus website | RKI risk assessment 26 March | WHO update 2 May| MoH France 08 May |Media

ECDC assessment

The additional recent coronavirus cases reported by the Saudi Arabian authorities and the recent imported cases reported by Germany and France indicate clearly an ongoing source of infection present in the Arabian Peninsula.
The recent cases of imported infections reported by the two EU countries following medical evacuation and travel are not unexpected and more cases may be identified in the EU.

Despite extensive contact tracing amongst previous contacts, only one mild symptomatic secondary case has been detected to date in the EU. However, there is still some concern that milder cases could be present in exposed populations. Further work to document the spectrum of illness and the route of transmission is still needed.

There are no detected expanding clusters of cases to community transmission or super-spreading events (such as observed in SARS) to date. This indicates the possibility of person-to-person transmission is still limited for this virus.

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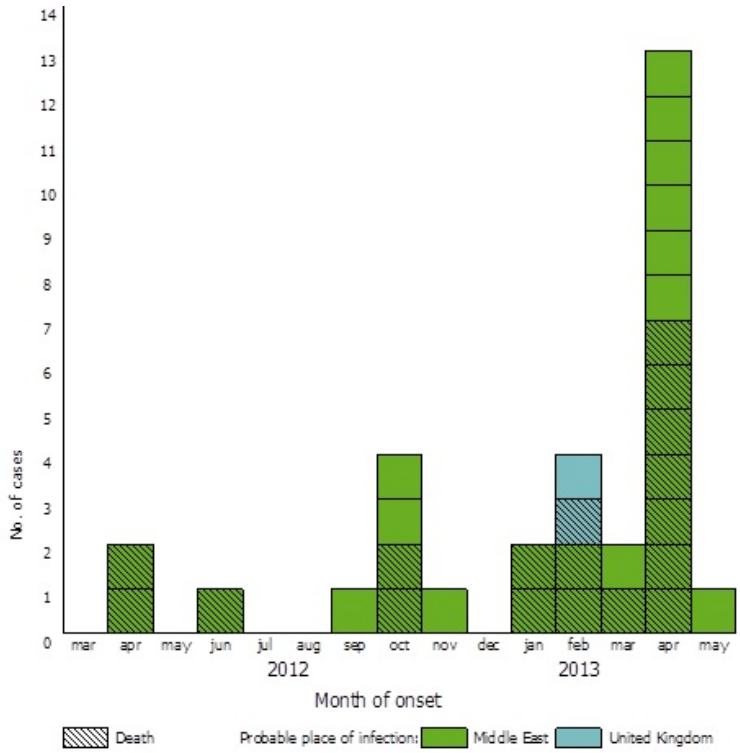
Actions

ECDC will update the rapid risk assessment, and published an epi-update on 7 May (Epidemiological update ECDC). The results of an ECDC coordinated survey on laboratory capacity for testing for the novel coronavirus in Europe were published in EuroSurveillance. On 6 May, WHO posted technical guidance- infection prevention and control on their website.

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

Figure 1: Number of cases of novel coronavirus reported worldwide by month of disease onset and probable place of infection, data as of 7 May (n=31)

ECDC



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 13 May 2013

Epidemiological summary

During the past week, two new polio cases were reported to WHO, both are WPV1. The two cases were from Nigeria.

Globally 26 cases have been reported so far in 2013 compared with 53 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.

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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: 8 May 2013

Epidemiological summary

Asia: Cambodia, Lao PDR, Singapore and Vietnam have all reported more cases in 2013 than 2012 for the same time period. The trend of dengue continues to be high and sustained in Singapore. Dengue cases are declining in Cambodia. In the Middle East, the number of dengue cases in Jeddah, Saudi Arabia, has exceeded previous record levels in 2006 with around 300 cases reported up until the end of April.

The Caribbean: In Puerto Rico 4 750 dengue cases have been reported in 2013. The Ministry of Health of the Dominican Republic has confirmed that both the number of dengue cases and dengue related deaths has tripled this year compared to the same time period last year. More than 4 500 dengue cases have been recorded in 2013, including 29 deaths.

Central and South America: In Mexico and Venezuela dengue cases are increasing. According to the Ministry of Health in Honduras more than 7 000 suspected dengue cases including three deaths have been reported in 2013. In South America, high dengue activity is reported across Ecuador, Venezuela, Colombia, Brazil and Paraguay. The dengue epidemic in French Guiana continued during April with levels remaining high and close to the maximum levels reached in late March, according to InVS. DENV-1, DENV-2, DENV-3 and DENV-4 serotypes are all co-circulating, with DENV-2 the predominant serotype.

Pacific: The Solomon Islands continue to see sustained dengue activity. As of 25 April, 3 749 cases and five deaths have been reported since January 2013. While the number of reported cases has been the highest since the outbreak began, hospitalisation rates have declined.

Web sources:
HealthMap | MediSys | ProMED Asia update| ProMED Americas update| WPRO | CDC | RFM| 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 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 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: 7 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 Center for Disease Control and Prevention (CCDC) had subtyped and sequenced the viruses and found to be of almost identical low pathogenic avian origin.

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Since 31 March 2013, 131 cases of human infection with influenza A(H7N9) have been reported from eastern China and Taiwan: Zhejiang (46), Shanghai (33), Jiangsu (27), Henan (4), Anhui (4), Beijing (1), Shandong (2), Fujian (5), Hunan (2), Jiangxi (6) and Taiwan (1). In addition, the virus has been detected in one asymptomatic case in Beijing. Onset of disease was 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 one patients have died (case-fatality ratio=24%). 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. It is a severe disease to humans because of its lethal effect in around 20% of human cases. At this time there is no evidence of 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.

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.

This epidemiological update does not change the conclusions and recommendations of the updated rapid risk assessment published on 12 April 2013. ECDC published an epidemiological update on A(H7N9) on 29 April 2013.

A case detection algorithm and an EU case definition has been developed and shared with EU Member states. The documents will also be published on the ECDC website in the coming days.

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

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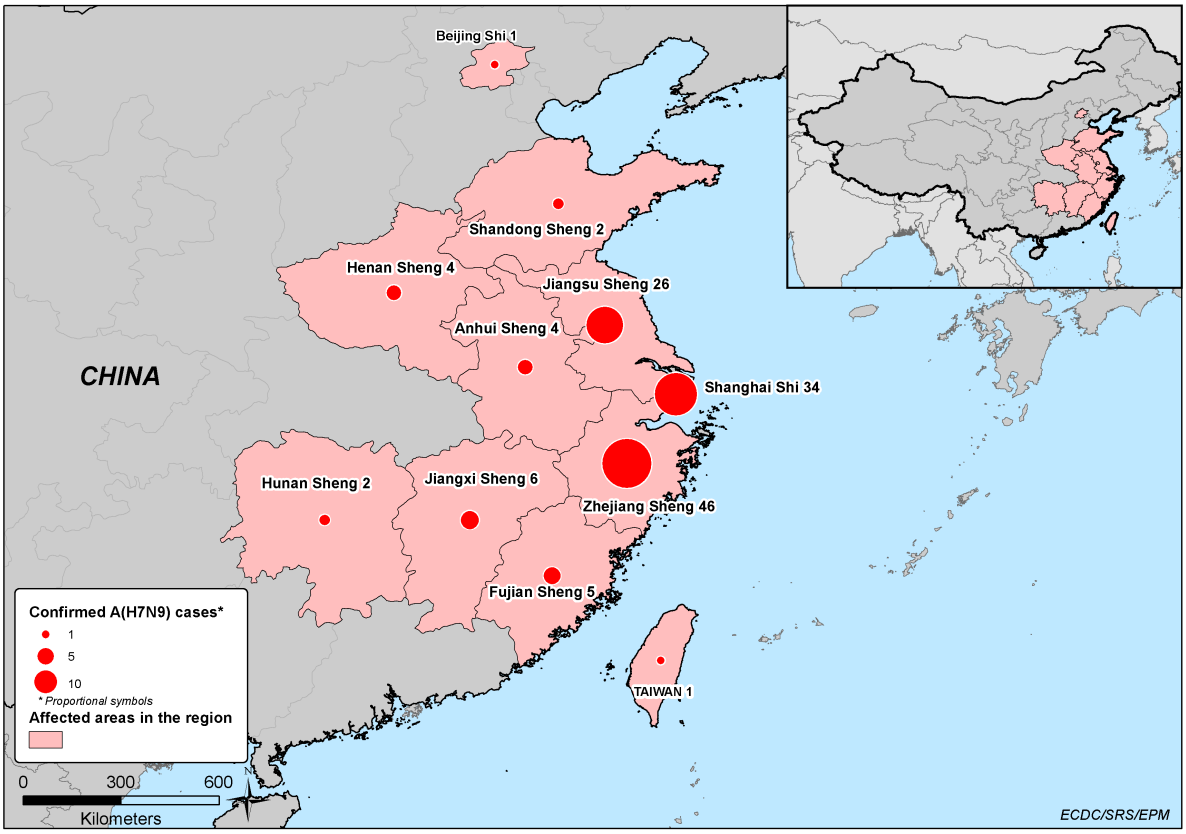
Distribution of cumulative number of Influenza A(H7N9) cases



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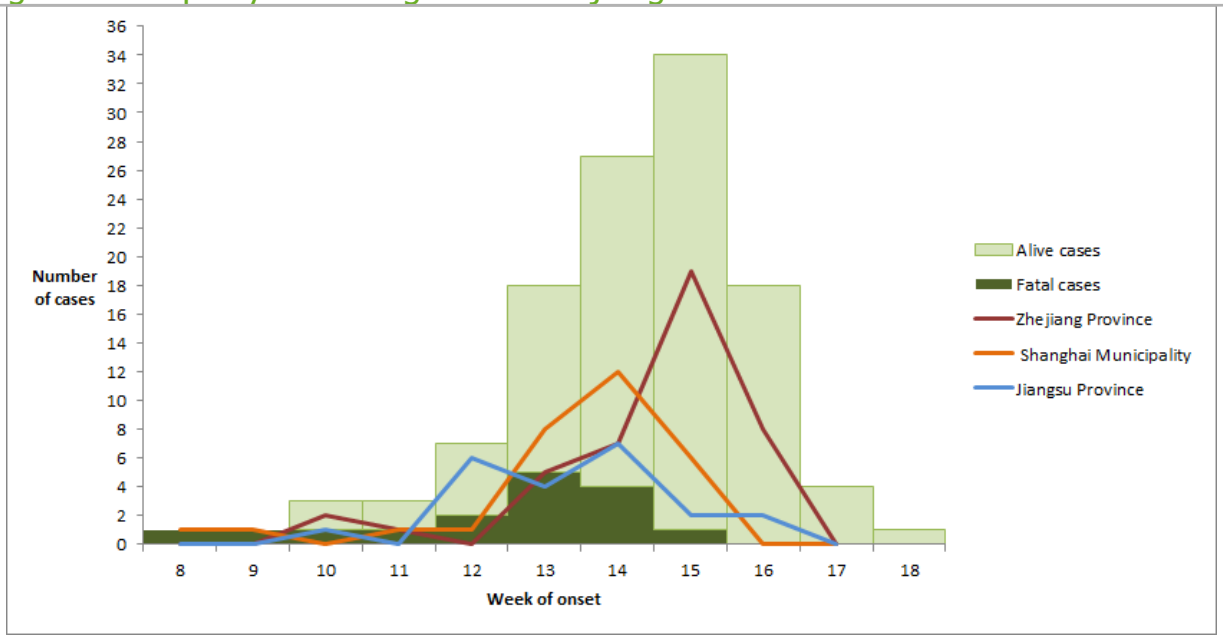
. Distribution of influenza A(H7N9) cases by week of onset of symptoms, displaying Shanghai municipality and Jiangsu and Zhejiang Provinces



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

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