COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 24, 9-15 June 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: 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 among international travellers since the last update.

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

There is no update on this threat this week.

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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 the Netherlands. The outbreaks in Munich and Berlin are still on-going. The outbreak in Silkeborg, Denmark was reported to be over.

From now on ECDC will report on this threat on a monthly basis unless significant events are reported.

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 14 June 2013, no new outbreaks were detected.

From now on ECDC will report on this threat on a monthly basis unless significant events are reported.

Non EU Threats

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.

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.

➔Update of the week

During the past week, no new cases have been reported from EU/EEA and neighbouring countries.

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

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

Between April 2012 and 13 June 2013, 58 laboratory-confirmed cases, including 33 deaths, of an acute respiratory disease caused by a novel coronavirus have been notified to WHO. The new virus, now named Middle East respiratory syndrome coronavirus (MERS-CoV), is genetically distinct from the coronavirus that caused the SARS outbreak. Cases have originated in Saudi Arabia, Qatar, Jordan and the United Arab Emirates. Cases have occurred in Germany, the United Kingdom, Tunisia, France and Italy in patients who were either transferred for care of the disease or returned from the Middle East. The reservoir of the novel coronavirus has not been established, nor is it clear how transmission has occurred from one sporadic case to another.

➔Update of the week

Between 6 and 13 June 2013, four new cases have been reported in Kingdom of Saudi Arabia, two of these cases were fatal.

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 (34), Jiangsu (26), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (5), Hunan (3), Jiangxi (5) 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 6 June and 13 June 2013, no new cases were reported.

From 4 June the China Ministry of Health is releasing information on this threat monthly.

Influenza A(H5N1) - Multistate (world) - Monitoring human cases

Opening date: 15 June 2005 Latest update: 10 June 2013

The influenza A(H5N1) virus, commonly known as bird flu, is fatal in about 60% of human infections, and sporadic cases continue to be reported, usually after contact with sick or dead poultry from certain Asian and African countries. No human cases have been reported from Europe.

➔Update of the week

Between 26 April and 04 June 2013, WHO acknowledged two new laboratory-confirmed human cases with influenza A(H5N1) virus infection from Cambodia (one) and Egypt (one, reported as fatal). According to WHO investigations it was concluded that they were sporadic cases and that the appearance of these sporadic cases are expected and will likely occur in the future.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 13 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 13 June 2013, eleven new polio cases were reported to WHO, ten wild poliovirus type 1 (WPV1) and one vaccine-derived poliovirus type 2 (cVDPV2).

From now on ECDC will report on this threat on a monthly basis.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 13 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

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

From now on ECDC will report on this threat every other week.

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II. Detailed reports

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 among 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 the 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 with mixed frozen berries as the vehicle.

On 17 May 2013, a RASFF notification was issued 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 .

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.

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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.

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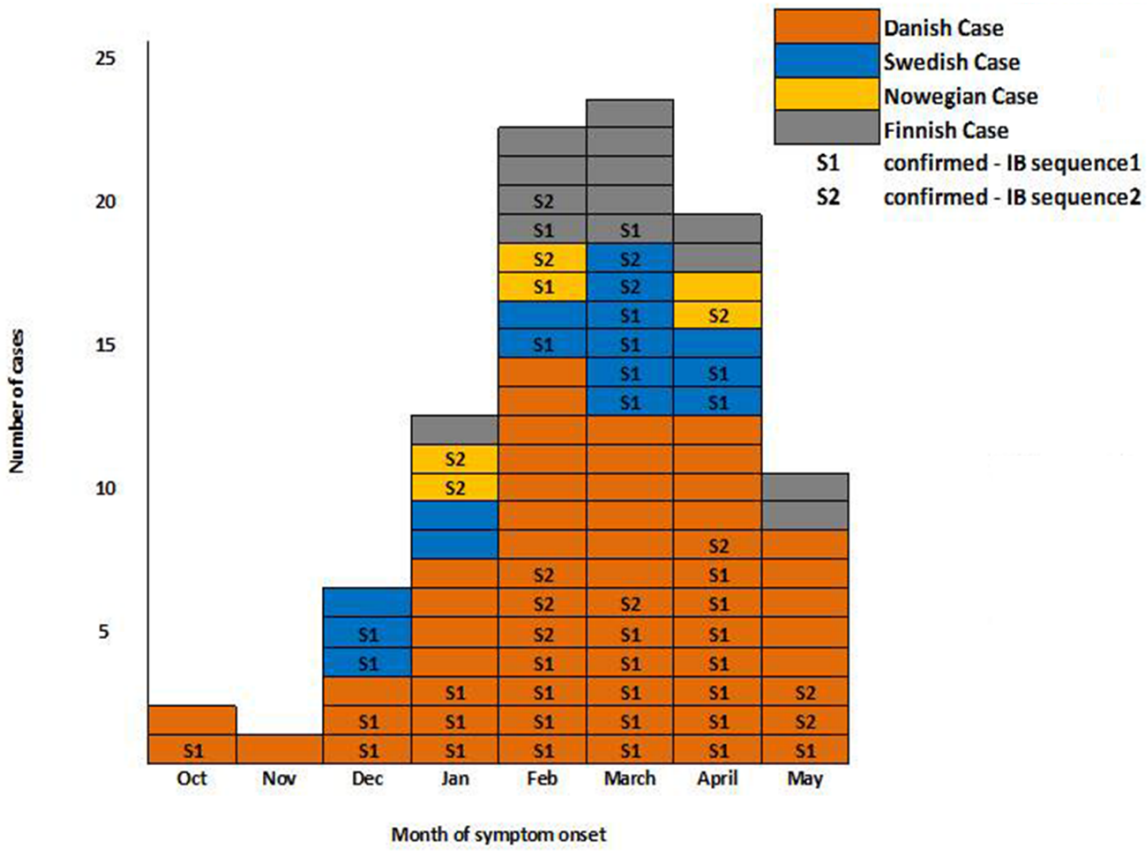
Distribution of HAV cases, by month of onset, country and sequence, October 2012 to May 2013



*When date of symptom onset is unknown either date of diagnosis, testing or hospitalisation has been used

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. 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.

In Berlin, local health authorities reported that during the ongoing outbreak, 338 measles cases have been reported. Half of the cases are over 16 year old.

Italy

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

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Denmark
The national public health authorities reported the outbreak in Silkeborg to be over. A total of 14 cases were reported linked to this outbreak in 2013. The last case was not infectious after week 18.

The Netherlands
An outbreak mainly affecting unvaccinated children in the "Bible belt" region of the country was reported. As of 12 June 30 cases have been reported to national public health authorities.

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 | SSI | RIVM

ECDC assessment

The transmission season for measles persists in Europe. Although there are several on-going outbreaks, the number of aggregated cases is less than in previous years.
So far in 2013, Sweden, Denmark, Germany, Italy, the UK, Lithuania and the Netherlands 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

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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 - 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 having 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 among 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 under way.

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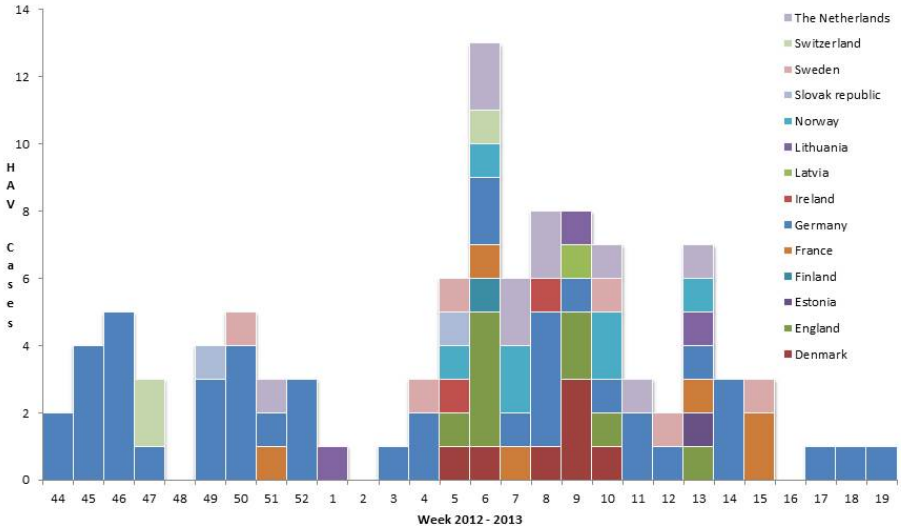
Hepatitis A cases among travellers coming back from Egypt

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)



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

Opening date: 3 June 2013

Epidemiological summary

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

Outside the EU, the Astrakhanskaya oblast in the Russian Federation reported four laboratory confirmed cases of WNV on 31 May 2013. The cases were reported in the city of Astrakhan (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 Astrakhanskava oblast in 2010, 2011 and 2012, but the transmission season has started earlier this year with the first WNV cases detected in early May compared to early June in 2012.

Actions

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

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

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

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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 13 June 2013, 58 laboratory confirmed cases have been reported worldwide: Saudi Arabia (43), Jordan (two), Germany (two), United Kingdom (four), France (two), Italy (three) and Tunisia (two). Thirty-three 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 healthcare 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 months to 94 years (age is unknown for four cases). Sixteen cases are female and 41 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 07 June 2013. A 83-year-old man with underlying medical conditions, who became ill on 27 May 2013 and died on 31 May 2013. He is from Al-Ahsa.

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 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 07 June

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 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 tested negative for some patients who were later confirmed to be infected by MERS-CoV in samples collected 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.

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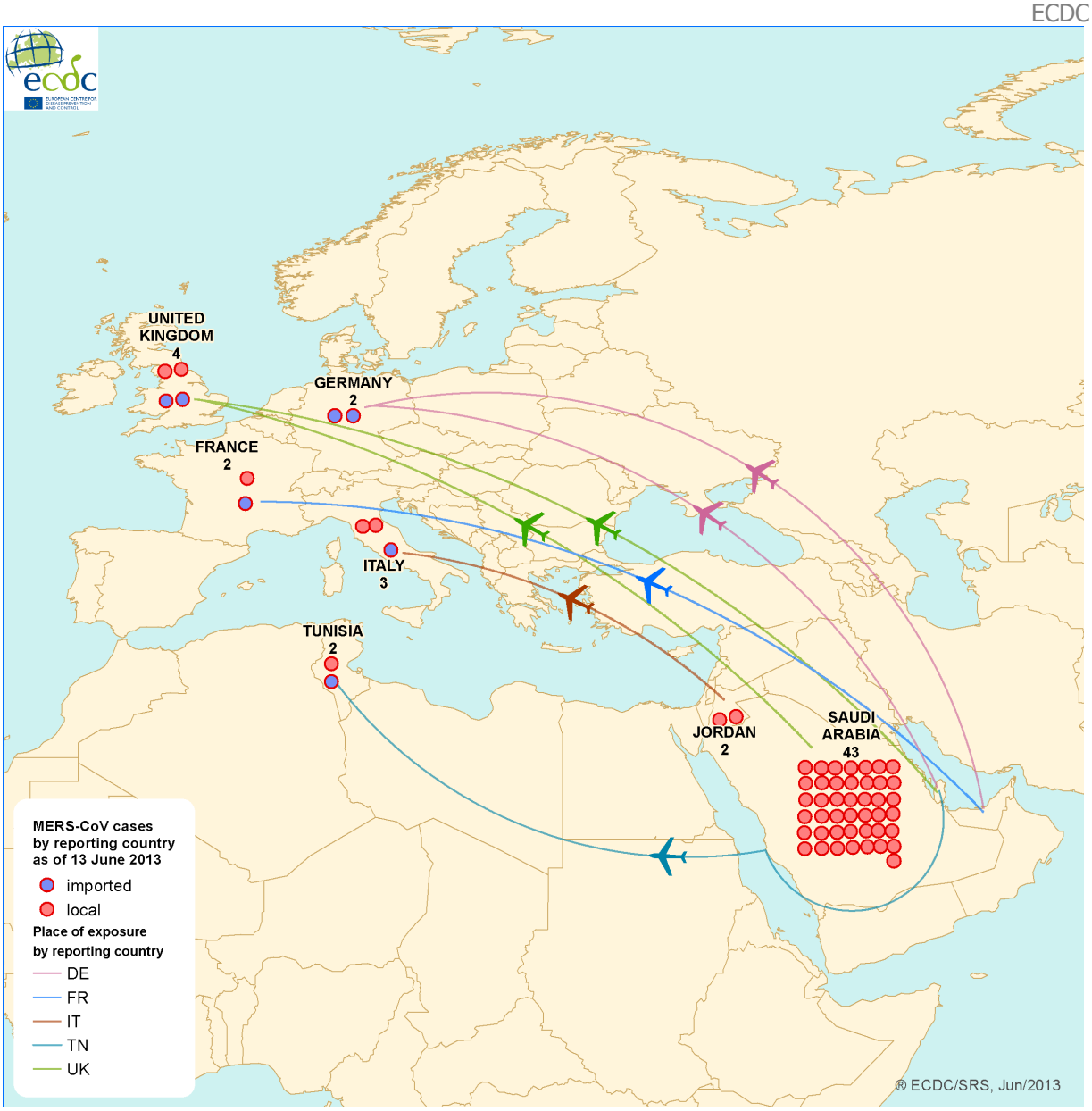
MERS-CoV by reporting country and transmission route as of 13 June 2013

ECDC WHO



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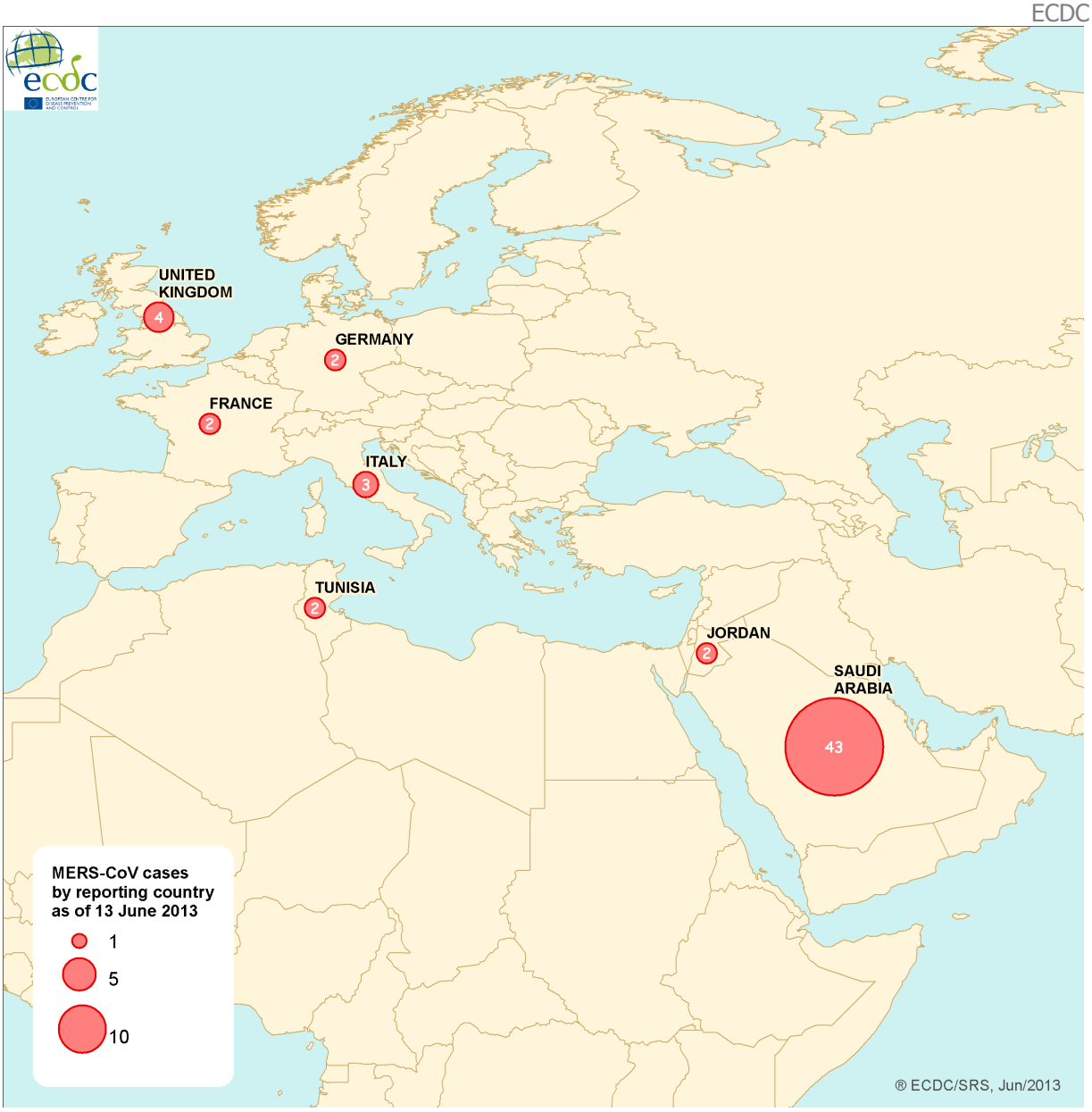
MERS-CoV cases by reporting country as of 13 June 2013

ECDC WHO



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 (34), Jiangsu (26), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (5), Hunan (3), Jiangxi (5) 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.

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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.

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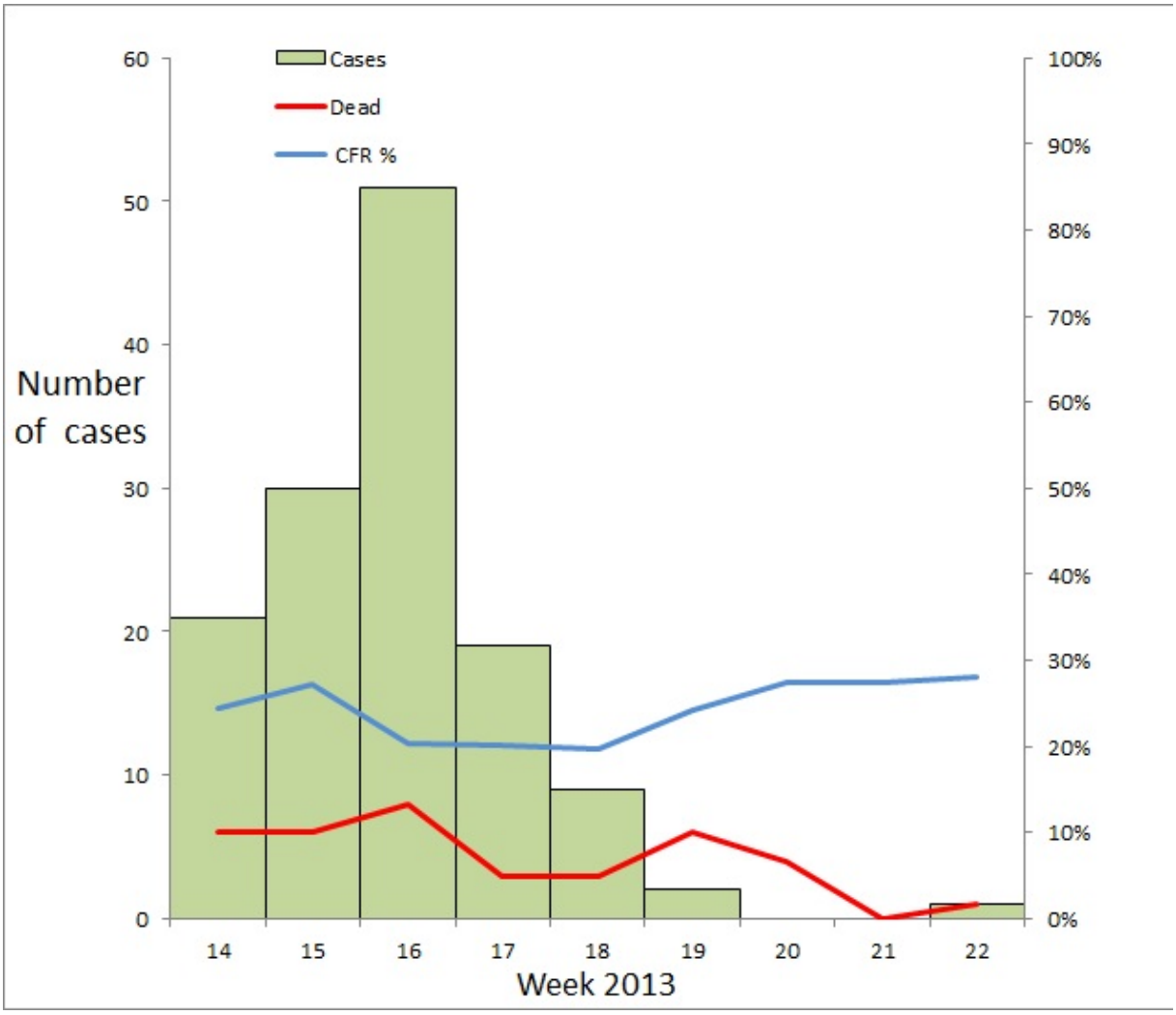
Distribution of cases and deaths, and cumulative case-fatality ratio by week of reporting, as of 13 June 2013 (cases =132, fatalities=37, CFR=28%)

WHO



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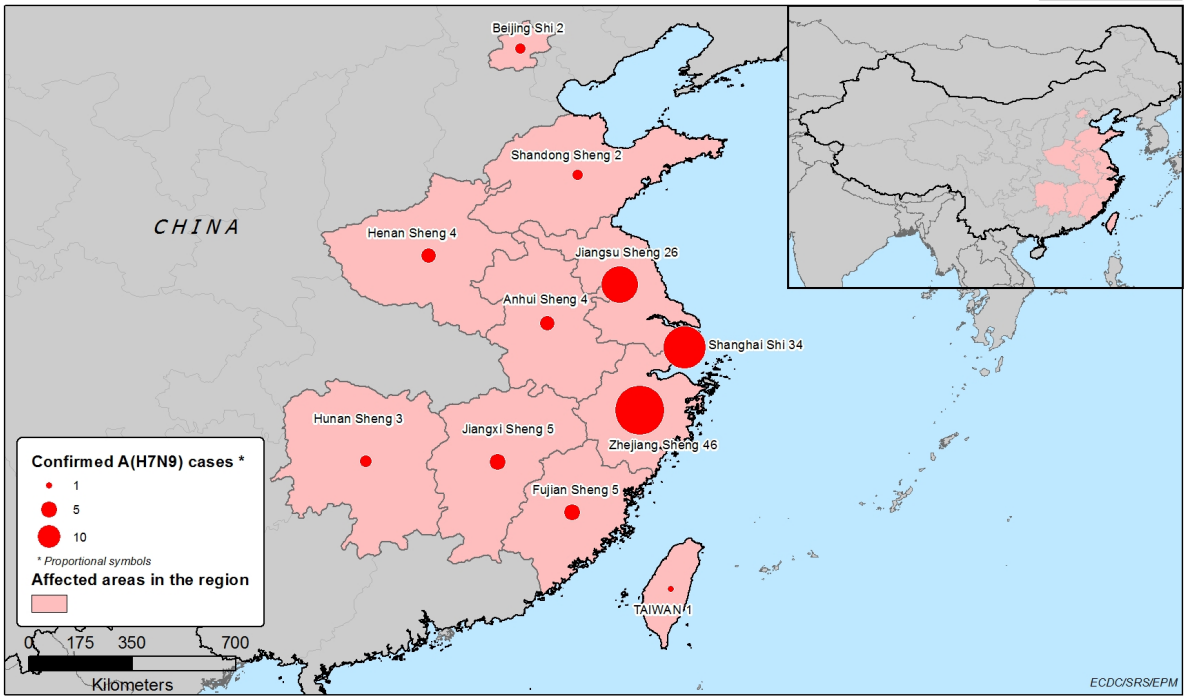
WHO ECDC

Reported cumulative number of confirmed cases of novel influenza A(H7N9) by province in China, as of 12 June 2013, 15.00 CEST



Influenza A(H5N1) - Multistate (world) - Monitoring human cases

Opening date: 15 June 2005 Latest update: 10 June 2013

Epidemiological summary

The latest WHO update on 04 June 2013 acknowledged two new laboratory-confirmed human cases with influenza A(H5N1) virus infection from Cambodia and Egypt. The investigations into these cases concluded that they were sporadic cases and that the appearance of sporadic cases is expected and likely to occur in the future.

Since the beginning of 2013, Cambodia has reported eleven human cases with influenza A(H5N1) virus infection including eight fatal cases. These cases come from five provinces all located in southern Cambodia. These cases do not seem to have a direct epidemiological link and most had contact with sick poultry in their villages. The clade 1.1 viruses that have been isolated from cases are very similar to those isolated from poultry in the region. Investigations around these cases did not detect additional cases. This evidence suggests sporadic infections from exposure to infected poultry or contaminated environments, rather than human-to-human transmission. It has been suggested that the A(H5N1) virus is circulating endemically in poultry in Cambodia and so additional sporadic human cases might be expected.

From 2003 through to 04 June 2013, 630 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have

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been officially reported to WHO from 15 countries, of which 375 have died.

Web sources: ECDC Rapid Risk Assessment | Avian influenza on ECDC website | WHO updates

ECDC assessment

Hong Kong reported the world's first recorded major outbreak of bird flu among humans in 1997, when six people died. Most human infections are the result of direct contact with infected birds, and countries with large poultry populations in close contact with humans are considered to be most at risk of bird flu outbreaks. ECDC follows the worldwide A(H5N1) situation through epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. ECDC re-assesses the potential of a changing risk for A(H5N1) to humans on a regular basis. There are currently no indications that from a human health perspective there is any significant change in the epidemiology associated with any clade or strain of the A(H5N1) virus. This assessment is based on the absence of sustained human-to-human transmission, and on the observation that there is no apparent change in the size of clusters or reports of chains of infection. However, vigilance for avian influenza in domestic poultry and wild birds in Europe remains important.

Actions

WHO is now reporting H5N1 cases on a monthly basis. ECDC will continue monthly reporting in the CDTR to coincide with WHO reporting.

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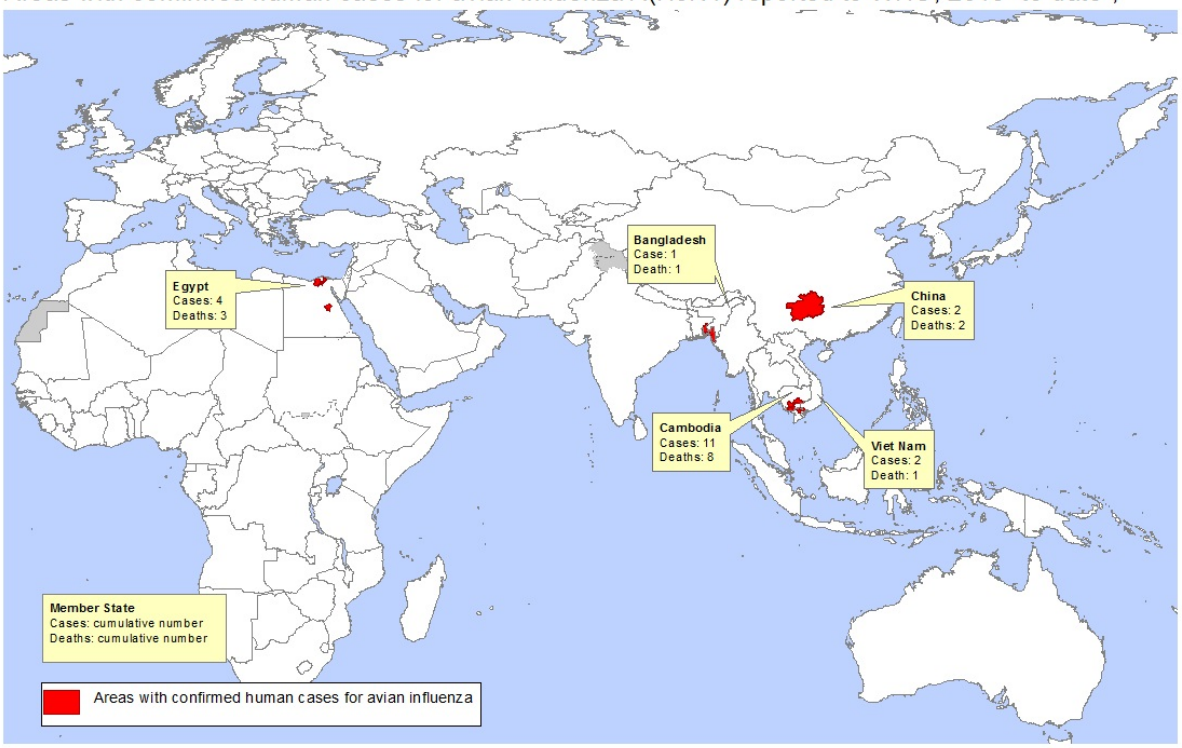
Distribution of avian influenza A(H5N1) cases in humans by country in 2013

Source: WHO

Areas with confirmed human cases for avian influenza A(H5N1) reported to WHO, 2013- to-date*,



*All dates refer to onset of illness
Data as of 04 June 2013
Source: WHO/GIP

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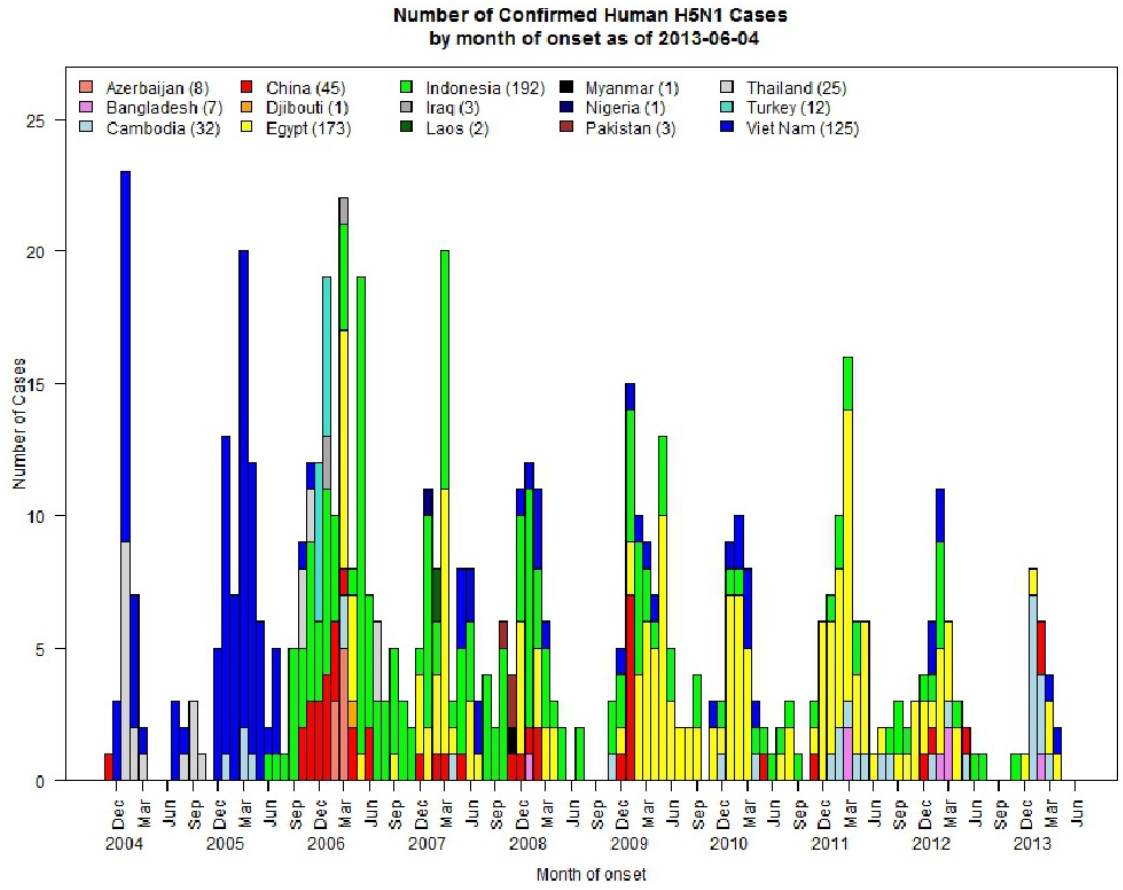
Number of avian influenza A(H5N1) cases in humans by country and month of onset

Source: WHO



Poliomyelitis - Multistate (world) - Monitoring global outbreaks

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

Epidemiological summary

During the past week, ten WPV1 cases were reported to WHO: four cases in Pakistan, two cases in Somalia, one case in Nigeria and three in Kenya. This brings the number of WPV1 cases in the Horn of Africa to fourteen. One vaccine-derived poliovirus type 2 (cVDPV2) was reported in Pakistan.

Globally 55 cases have been reported so far in 2013 compared with 73 for the same period in 2012.

WHO Regional Office for the Eastern Mediterranean hosted a two-day emergency meeting in Cairo, Egypt, from 9 to 10 June 2013, on the response to the polio outbreak in the Horn of Africa. The objectives of the meeting were to review the current status, risks for poliovirus circulation and response and coordination measures in Somalia, Kenya, Ethiopia and Yemen.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet | WHO EMRO

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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. From week 24 on ECDC will report on polio on a monthly basis.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 13 June 2013

Epidemiological summary

Asia: Lao PDR, Singapore and Vietnam have reported more cases in 2013 than 2012 for the same time period. The recent dengue trend has increased sharply in Singapore. The National Environment Agency (NEA) in Singapore reported 820 dengue cases in the last week alone. In total, more than 9 300 cases have been recorded since the beginning of the year. However, despite an increase in the number of dengue cases, fewer deaths and fewer cases of severe dengue fever have been reported this year compared to the 2005 outbreak, according to the Ministry for Environment and Water Resources.

The recent dengue trend has increased slightly in Cambodia, decreased in Australia and remained stable in the Philippines. In Thailand, the Department for Disease Control are warning citizens that this could potentially be the largest dengue epidemic ever, with nearly 40 000 cases and 40 deaths already reported so far this year.

The Caribbean: The dengue epidemic in the Dominican Republic is on-going with more more than 4 800 cases and 34 deaths reported to date, according to the Ministry of Health. Dengue activity remains active in the French overseas department, Martinique, but all of the epidemiological surveillance indicators remain at low levels and below the maximum values expected for the season, according to InVS.

Pacific: Sustained dengue activity is reported in New Caledonia. As of 27 May 2013, the cumulative number of dengue cases has reached 9 613 since the outbreak began in April 2012. In total, four dengue-related deaths have been recorded. In the Solomon Islands, the number of dengue cases has risen to 5 569 and six deaths. The majority of cases have been recorded in Honiara.

Central and South America: In Central America, Costa Rica is experiencing strong dengue activity with more than 12 000 cases reported so far in 2013 which is four times higher than for the same time period last year, according to official figures. In South America, an increasing number of dengue cases are reported in Paraguay, Peru, Colombia and Argentina.

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

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ECDC has published a technical report on the climatic suitability for dengue transmission in continental Europe and guidance for invasive mosquitoes' surveillance. From week 24 on ECDC will monitor dengue on a biweekly basis.

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

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