

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

#### Meningococcal disease - multistate (Europe) - 2013 clusters

Opening date: 28 June 2013

Latest update: 26 July 2013

Clusters of invasive meningococcal disease (IMD) caused by *Neisseria meningitidis* serogroup C have been reported among men who have sex with men (MSM) in three EU Member States. As of 23 July, nine cases have been notified since February 2013. Initial typing results suggest that the cases are due to a strain which is similar to that in an outbreak in New York that began in 2010.

→Update of the week

During the past week, no new cases were reported.

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

Opening date: 10 May 2013

Latest update: 17 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. Italian authorities also reported an increase in HAV cases in 2013 at the national level and in the implicated area. In addition, Ireland reported ten cases whose isolates share a sequence identical to that of the Italian outbreak. As the exposure of the cases occurred in Italy and Ireland, this suggests that cases have been exposed to the same contaminated vehicle of infection distributed in at least these two countries. Epidemiological, microbiological and environmental investigations indicate mixed frozen berries as the most likely vehicle of infection for these outbreaks. 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

In the past week, seven additional cases were reported in Ireland bringing the number of hepatitis A virus cases to ten since April with the same strain. The last date of onset of disease was on 1 July 2013. Descriptive epidemiology point to the consumption of frozen and fresh berries as a vehicle of infection for these cases.

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

Opening date: 3 June 2013

Latest update: 25 July 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 identify significant changes in the epidemiology of the disease. In the 2012 transmission season, 237 probable and confirmed cases have been reported in the EU, and 670 cases in neighbouring countries.

### →Update of the week

During the past week, three new human cases of WNF were detected in the EU: Greece reported one probable case in East Attiki and two cases (one probable and one confirmed) in Thessaloniki. In neighbouring countries, the Former Yugoslav Republic of Macedonia (FYROM) reported its first case of the year in Kocani (Eastern Macedonia). The Russian Federation reported four cases in Volgograd oblast and three cases in Astrakhanskaya oblast.

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

Opening date: 9 February 2011

Latest update: 18 July 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 EU and EEA countries reported 8 127 cases of measles during the last 12-month period from April 2012 to March 2013.

### →Update of the week

Since the last update on 5 July 2013, outbreaks were reported or detected in Spain, Bulgaria and the United Kingdom. The outbreak in the Netherlands is still on-going and is increasing.

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

Opening date: 7 March 2012

Latest update: 3 July 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

Since the last update on 5 July 2013, a new outbreak was reported in the Netherlands.

## Non EU Threats

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

Opening date: 24 September 2012

Latest update: 25 July 2013

Between April 2012 and 25 July 2013, 90 laboratory-confirmed cases, including 45 deaths, of an acute respiratory disease have been notified to WHO. The new virus, 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 (UAE). In addition, 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 MERS-CoV reservoir has not been established, nor is it clear how transmission occurs.

### →Update of the week

During the past week, WHO announced two new laboratory-confirmed cases of MERS-CoV reported from Saudi Arabia. Both cases are currently critically ill and hospitalised in ICU. The first case is a 41-year-old Saudi male in Riyadh who presented to the hospital with symptoms on 15 July. The second patient is a 59-year-old Saudi female in the Al-Ahsa governorate. She presented with symptoms on 11 July. Both patients have underlying medical conditions, but neither patient has had contact with known MERS-CoV confirmed cases or animals.

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

Opening date: 15 June 2005

Latest update: 19 July 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

On 4 July, three new laboratory-confirmed human cases with influenza A(H5N1) virus infection were reported to WHO from Cambodia (2) and Indonesia (1). Two of these cases died.

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

Opening date: 31 March 2013

Latest update: 25 July 2013

A novel avian influenza A(H7N9) virus was detected in patients in China in March 2013. The outbreak has since spread to 11 Chinese provinces and Taiwan. The virus reservoir and the mode of transmission to humans have not been 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

Since the last update on 21 June 2013, two new confirmed cases of A(H7N9) infection have been reported by WHO. A retrospective case was reported on 4 July, a 15-year-old boy, from Jiangsu province who became ill on 25 April 2013 and was discharged on 2 May 2013.

The second case was reported on 20 July. The patient is a 61 year old woman who had exposure to a poultry market prior to onset of symptoms on 10 July. She was transferred to Beijing for treatment on the 18 July and remains in a critical condition.

This is the first confirmed human case of avian influenza A(H7N9) virus since 29 May 2013 and the first case in Hebei province.

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

Opening date: 20 April 2006

Latest update: 25 July 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 recent dengue outbreak in the Autonomous Region of Madeira, Portugal 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 in January.

## II. Detailed reports

### Meningococcal disease - multistate (Europe) - 2013 clusters

Opening date: 28 June 2013

Latest update: 26 July 2013

#### Epidemiological summary

On 25 June 2013, Germany reported three cases of invasive meningococcal disease (IMD) among men who have sex with men (MSM) caused by *N. meningitidis* serogroup C. All three isolates were serogroup C, PorAVR1: 5-1; PorA-VR2: 10-8 and FetA: 3-6 and confirmed as ST-11/ET-15. On 26 June, Belgium retrospectively reported a single case of IMD in a MSM diagnosed in March 2013; infection was due to a strain of the same sequence type as the German strain. On 26 June, France reported three cases of IMD among MSM living in the Paris area. The three isolates were also of the same sequence type as the German and Belgian strains.

Germany identified two additional cases in Berlin with the same strain of *Neisseria meningitidis* as the earlier reported cases through retrospective investigation. They were reported in a [Eurosurveillance](#) article published on 11 July. One case was notified in February 2013, the other case in October 2012. Both were in their late 20s. The latter case developed signs of sepsis and died.

Three similar outbreaks have been previously reported among MSM in Canada and the USA. The last one involved 22 cases in New York between 2010 and 2013. All cases were caused by *Neisseria meningitidis* serogroup C.

**Websites:** [NYC Department of Health](#)

#### ECDC assessment

The occurrence of clusters of invasive meningococcal disease among MSM in European metropolitan centres caused by a strain that has been associated with a similar outbreak with a high case-fatality rate in New York City indicates an increased risk of IMD among MSM in such settings in Europe. Increased travel and international contact in these settings, including sexual contact with partners from abroad, also in the context of Gay Pride and other festivals, may be factors facilitating the spread of the disease among MSM.

Further microbiological studies are needed to provide laboratory evidence of direct or indirect transmission between the European cases, as well as between the European and US cases. Member States should consider retrospective investigations of cases of serogroup C IMD in young men in order to identify similar cases in the past. Increasing awareness among MSM, through the use of social media and community networks, as well as among healthcare providers is essential for the prevention and early identification of further cases.

More epidemiological studies and better understanding of common risk factors in the European clusters is needed in order to identify groups of MSM at higher risk. Enhanced surveillance over the summer period should be considered at the European level in order to quickly detect possible spread and to coordinate any required response.

Vaccination with conjugate meningococcal vaccine against serogroup C constitutes an effective prevention intervention, and Member States should consider vaccination as a means of outbreak control where clusters in specific target populations are identified.

#### Actions

ECDC published a [rapid risk assessment](#) on 4 July 2013.

The available information has been shared through both EPIS-VPD and EPIS-STI to inform colleagues working with MSM and meningococcal disease and to identify further cases.

From now on this threat will be monitored by ECDC through EPIS-VPD only and will not be included in the CDTR, unless significant developments are occurring.

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

Opening date: 10 May 2013

Latest update: 17 June 2013

## Epidemiological summary

Since 1 January 2013, 16 laboratory-confirmed cases of hepatitis A virus (HAV) infection have been reported in Germany, the Netherlands and Poland. All cases have a history of travel to the autonomous provinces of Trento and Bolzano in northern Italy during the exposure period. During the same period, Italy experienced an increase in cases of HAV infection, both in the province of Trento and at national level. In the first six months of 2013, Italy reported more than 200 cases in excess of the mean number of cases reported in the same period for the last three years. This increase in cases is likely to be associated with this outbreak.

Additionally, Ireland reported ten cases whose isolates share a sequence identical to that of the Italian outbreak. These cases had onset of illness during April-July 2013 in Ireland and only two had a travel history, one to Poland and one to Rome.

As the exposure of the cases occurred in Italy and Ireland, this suggests that cases have been exposed to the same contaminated vehicle of infection distributed in at least these two countries. Epidemiological, microbiological and environmental investigations indicate mixed frozen berries as the most likely vehicle of infection for these outbreaks. Investigations are ongoing regarding identification of the source of the outbreak.

In May 2013, following rapid alert system for food and feed (RASFF) notifications by Italian food authorities regarding HAV contamination found in a frozen berry mix originating in Italy, with raw berry material from Bulgaria, Canada, Poland and Serbia, the product was voluntarily withdrawn from the national market.

## ECDC assessment

Despite the withdrawal of the incriminated food product, it is likely that additional cases will be identified and reported in Italy, and possibly in Ireland, because of the long shelf-life of such frozen products. ECDC invites Member States to raise awareness of a possible increase in HAV cases associated with the Italian outbreak strain, to report all new cases in EPIS-FWD, to use the common epidemic case definition and questionnaire to interview recent cases and to sequence a subset of viral specimens in order to disclose possible links with the current outbreak in Italy.

The newly reported HAV cases in Ireland were not unexpected and do not change the conclusions of the updated ECDC-EFSA risk assessment

## Actions

A joint [ECDC-EFSA assessment](#) was published on this outbreak on 29 May 2013 and updated on 9 July.

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

Opening date: 3 June 2013

Latest update: 25 July 2013

## Epidemiological summary

As of 25 July, four human cases of WNF have been reported in the EU and seventeen cases in neighbouring countries.

### EU Member States

#### *Greece*

As of 24 July, Greece has reported four autochthonous cases of WNF. The regions affected are East Attiki (2) and Thessaloniki (2). Both East Attiki and Thessaloniki have reported one probable and one confirmed case each respectively, according to the EU case definition.

### Neighbouring countries

#### *Russian Federation*

Between 31 May and 23 July, twelve cases of WNF were reported in the Russian Federation: seven cases in Astrakhanskaya oblast and five cases in Volgograd oblast.

#### *the former Yugoslav Republic of Macedonia*

On 24 July, the former Yugoslav Republic of Macedonia reported its first case of the year in Kocani (Eastern Macedonia).

#### *Israel*

On 20 June 2013, Israel reported four cases of WNF. The places of infection were the Central district (2), Haifa district (1) and Tel-Aviv district (1).

**Websources:** [ECDC West Nile fever risk maps](#) | [ECDC West Nile fever risk assessment tool](#) | [Keelpno Greece](#) | [Astrakhanskaya oblast](#) | [Volgograd oblast](#) | [Israel MoH](#) |

## ECDC assessment

West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures are considered important for ensuring blood safety by the national health authorities when human cases of West Nile fever occur. According to the [EU blood directive](#), efforts should be made to defer blood donations from affected areas with ongoing virus transmission.

## Actions

ECDC produces weekly [West Nile fever risk maps](#) during the transmission season to inform blood safety authorities regarding affected areas.

ECDC published a West Nile fever [risk assessment tool](#) on 3 July 2013.

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

Opening date: 9 February 2011

Latest update: 18 July 2013

### Epidemiological summary

#### EU Member States

##### The Netherlands - update

Since May 2013 and as of 24 July 2013, the number cases reported in the outbreak, which mainly affects unvaccinated children aged 4 to 12 years around reformatory schools [in the Netherlands](#), has reached 613. The actual number of patients is thought to be ten times higher as not all patients are seen at healthcare facilities. Given the low vaccination coverage in the orthodox communities, it is likely that the outbreak has not yet reached its peak.

The first dose of MMR is scheduled to be given at 14 months of age in the Netherlands. Now, in response to the outbreak, children aged 6 to 14 months in municipalities where MMR vaccination coverage is below 90% are invited for vaccination through a letter sent to their home. The latest measles epidemic in the country occurred in 1999/2000 and affected the same area. During this epidemic three children died and around 150 children were hospitalised as a result of measles infection.

##### The UK - update

[Public Health England](#) reports that cases of measles in England are currently at their highest recorded levels since 1994, with the number of confirmed measles cases so far in 2013 (January-May) at 1 168, compared to 712 for the same period in 2012. In Lancashire, there were 350 notifications of measles up until the end of June, of which 96 cases were confirmed. This is higher than the 92 cases that affected people in Lancashire during the whole of last year. In Gloucestershire, 62 cases of measles have been recorded so far this year compared to just three for the same period last year.

There is an on-going catch-up programme and around 56 000 of the targeted 120 000 previously unvaccinated 10-16 year olds in England have received a first dose of MMR. Around the same number of partially vaccinated children have also received an extra dose of MMR. Cases declined in May with 188 confirmed cases compared to 299 for April, suggesting that the MMR catch-up programme may be having an impact.

##### Bulgaria

Three small outbreaks were reported by the media from Sofia (ten cases), Nova Zagora (two cases) and Razgrad (one case). Nine of the patients are Roma, and only one had a history of measles immunisation. In order to prevent the spread of infection among risk groups the Ministry of Health began an immunisation campaign in the affected and nearby areas in July. The campaign is conducted with the active assistance of mediators who will help to search for non-immunised individuals and those without a GP.

##### Spain

There is an [outbreak in Catalonia](#) with 29 confirmed cases. Most of the cases are adults who were unvaccinated or had not completed their vaccination. Half of the cases needed hospitalisation. The outbreak is suspected to have originated at the Sonar Festival mass gathering event. Twenty of the 29 confirmed cases had direct or indirect contact to the festival. There has also been an outbreak with 12 cases in a kindergarten in Palma de Mallorca in June 2013 in addition to 24 reported cases there this summer.

#### Neighbouring countries

## Switzerland

There is an increase in the number reported measles cases in [central Switzerland](#). During the last month 69 cases were reported, of which 20 were reported during the last week alone. As of 22 July, there have been [101 cases notified](#) so far this year in the whole country. Army personnel are being vaccinated against measles in response to the outbreak as one soldier had got infected while on holidays. The vaccination coverage for measles in Switzerland is 82 per cent.

### *Bosnia – lack of vaccines*

[The media](#) report that for months there has been a lack of MMR vaccines together with polio, Hib and tetanus vaccines in Bosnia and children are missing out on their routine vaccinations.

### *Georgia - update*

According to [WHO EURO](#), there are over 9 200 measles cases in the Caucasus and Turkey since the beginning of 2013. Georgia and Turkey have reported the majority of these cases. [The media](#) report that the number of measles cases in Georgia is now over 6 000 including nearly 2 000 hospitalisations due to complications. The mostly affected age group is the 20 to 29 year olds. Fourteen per cent of cases are infants below one year.

## Publication

In a recent article, published in [PLOS one](#), the authors performed an estimation of the total number of Subacute sclerosing panencephalitis (SSPE) cases in Germany for the period 2003 to 2009 and calculated the risk of SSPE after an acute measles infection. For the period 2003 to 2009, 31 children with SSPE who were treated at German hospitals were identified. The risk of developing SSPE for children contracting measles infection below 5 years of age was calculated as 1:1700 to 1:3300. This risk is in the same order of magnitude as the risk of a fatal acute measles infection.

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](#) | [RIVM](#)

## ECDC assessment

The transmission season for measles persists in Europe. Although there are several on-going outbreaks, the number of aggregated cases is lower 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. In the EU neighbourhood, the large outbreak affecting Georgia gives cause for concern.

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.

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

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

Opening date: 7 March 2012

Latest update: 3 July 2013

### Epidemiological summary

#### *The Netherlands*

There is a rubella [outbreak in the Netherlands](#) affecting the same low coverage area as the current measles outbreak. As of 18 July 2013, there were 50 reported cases, an increase by 11 since the previous week. All the cases are linked to a reformatory school in the Dutch-Central region.

#### *Italy*

[The media](#) referring to data from the Institute of Health report that between 2005 and 2012 there were 95 cases of rubella during

pregnancy which led to 23 interruptions of pregnancy, 24 cases of congenital rubella syndrome and a stillborn baby.

**Web sources:** [ECDC measles and rubella monitoring](#) | [ECDC rubella factsheet](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#)

## ECDC assessment

As rubella is typically a mild and self-limiting disease with few complications, the rationale for eliminating rubella would be weak if it were not for the virus' teratogenic effect. When a woman is infected with the rubella virus within the first 20 weeks of pregnancy, the foetus has a 90% risk of being born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. The increase in the number of rubella cases reported in 2012 and 2013 compared with 2011 and the potential for an increase in the number of babies born with CRS in EU countries are both cause for concern.

## Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to the European Surveillance System and through its epidemic intelligence activities. Twenty-four EU and two EEA countries contribute to the enhanced rubella surveillance. The purpose of the enhanced rubella monitoring is to provide regular and timely updates on the rubella situation in Europe in support of effective disease control, increased public awareness and the achievement of the 2015 rubella and congenital rubella elimination target.

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

An ECDC report is available online: [Survey on rubella, rubella in pregnancy and congenital rubella surveillance systems in EU/EEA countries](#)

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

Opening date: 24 September 2012

Latest update: 25 July 2013

### Epidemiological summary

As of 25 July 2013, 90 laboratory-confirmed cases of MERS-CoV, including 45 deaths, have been reported worldwide. All cases have either occurred in the Middle East or have had direct links to a primary case that was infected in the Middle East. Saudi Arabia has reported 70 cases, including 38 deaths, UAE five cases and Jordan two cases, both of which died. Thirteen cases have been reported from outside the Middle East in: UK (4), Italy (3), France (2), Germany (2) and Tunisia (2). In France, Italy, Tunisia and the United Kingdom, there has been local transmission among patients who have not been to the Middle East but had been in close contact with laboratory confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities, but, with the exception of a nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Eight asymptomatic cases were reported by Saudi Arabia and two by UAE. Six of these cases were healthcare workers.

Recently published modelling of MERS-CoV transmission in [The Lancet](#) indicates that the virus currently has a low potential for pandemic spread.

On 9 July, WHO established the [Emergency Committee](#) to advise WHO's Director-General on the status of the current situation concerning MERS-CoV. On 17 July, the [second meeting of the Emergency Committee](#) under the International Health Regulations (2005) was held by teleconference. It concluded unanimously that with the information now available, and using a risk assessment approach, the conditions for a Public Health Emergency of International Concern have not been met at present.

The Ministry of Health of Saudi Arabia updated its [Health Regulations](#) for travellers to Saudi Arabia for the Umrah and Hajj pilgrimage regarding MERS-CoV and now recommends that the elderly, those with chronic diseases and pilgrims with immune deficiency, malignancy and terminal illnesses, pregnant women and children coming for Hajj and Umrah this year should postpone their journey.

WHO published a [travel advice](#) on MERS-CoV for pilgrimages on 25 July 2013.

**Web sources:** [ECDC RRA Update 22 July](#) | [ECDC novel coronavirus webpage](#) | [WHO](#) | [WHO MERS updates](#) | [InVS 25 June](#)

## ECDC assessment

The continued notification of MERS-CoV cases in the Middle East indicates that there is an ongoing source of infection present in the region. There is therefore a continued risk of cases occurring in Europe associated with travel to the area. Surveillance for cases is essential, particularly with expected increased travel to Saudi Arabia for Ramadan in July and the Hajj in October.

The risk of secondary transmission in the EU remains low and could be reduced further through screening for exposure among patients presenting with respiratory symptoms and their contacts, and strict implementation of infection prevention and control measures for patients under investigation.

## Actions

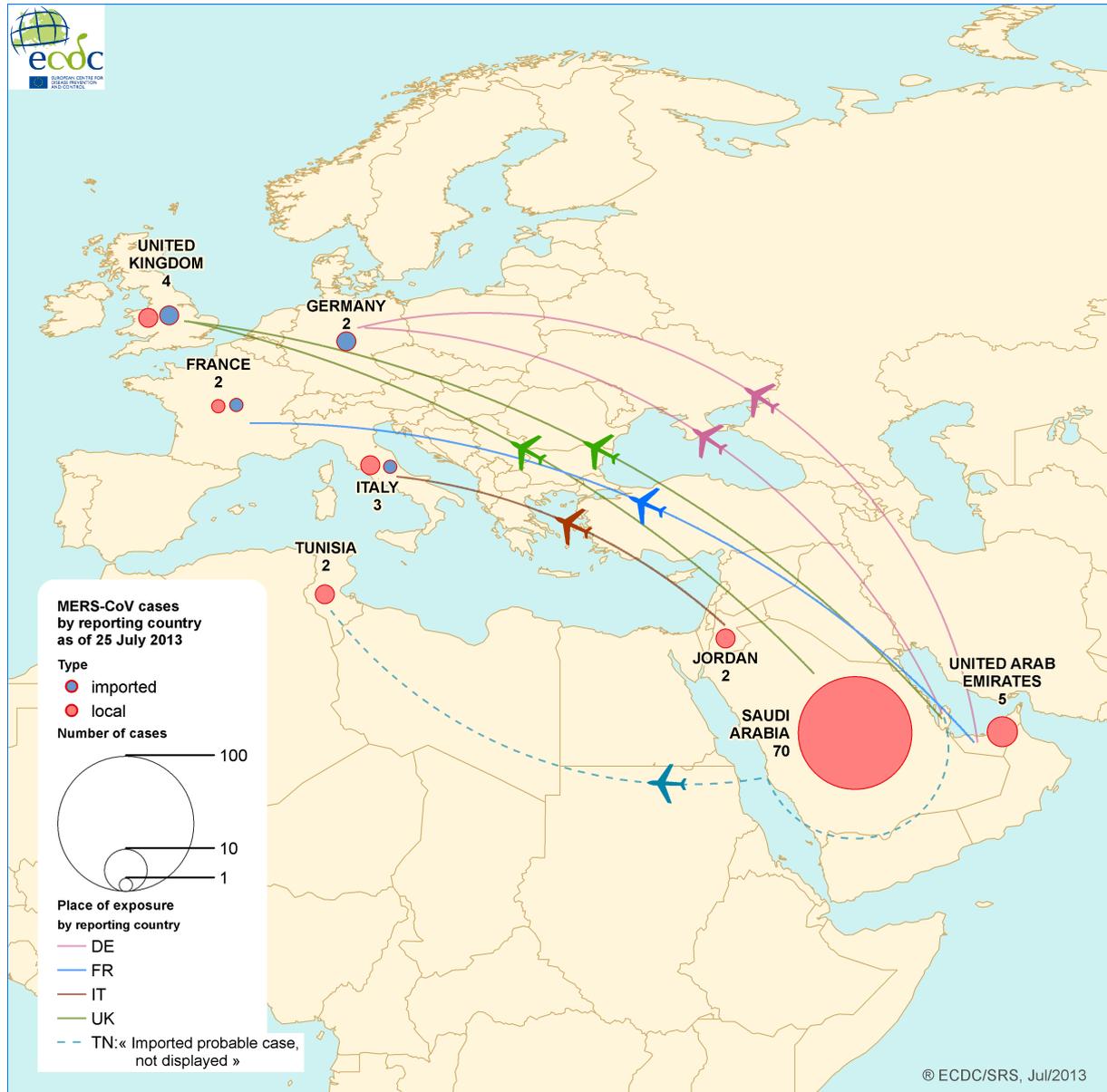
The latest ECDC [rapid risk assessment](#) was published on 22 July 2013.

The results of an ECDC coordinated survey on laboratory capacity for testing the MERS-CoV in Europe were published in [EuroSurveillance](#).

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

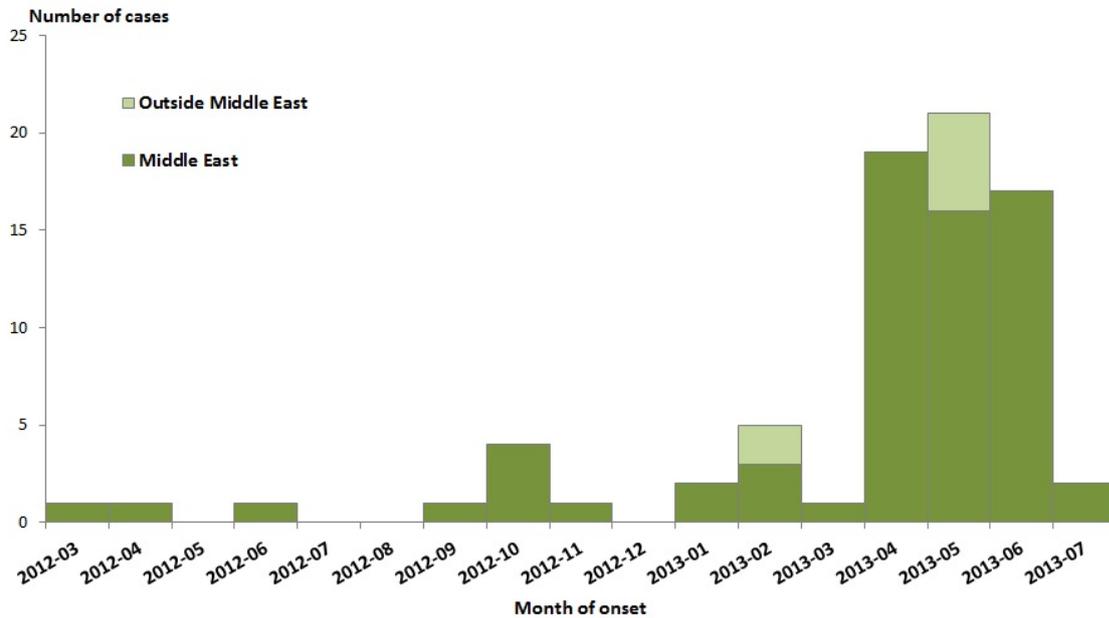
Distribution of confirmed cases of MERS-CoV by place of reporting as of 25 July

ECDC SRS



## Distribution of confirmed cases of MERS-CoV by month of onset of symptoms and probable place of infection, March 2012 - July 2013

ECDC



## Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - July 2013

ECDC SRS \*11 cases for which age or sex data is missing have been excluded



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

Opening date: 15 June 2005

Latest update: 19 July 2013

### Epidemiological summary

Since the last update on 4 June 2013, WHO has acknowledged three new laboratory-confirmed human cases with influenza A(H5N1) virus infection from Cambodia (2) and Indonesia (1).

Cambodia reported one recent fatal case in a 6-year old girl from Kampot province, and one retrospective diagnosis in a 58-year old man from Phnom Penh province who had onset of disease on 4 January 2013. Indonesia reported one new case in a 2-year-old boy from West Java. This was the first case of human infection with influenza A(H5N1) reported from Indonesia in 2013. All cases are considered to be sporadic, with no evidence of community-level transmission.

From 2003 through to 3 July 2013, 633 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported to WHO from 15 countries, of which 377 have died.

12/18

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.

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

Opening date: 31 March 2013

Latest update: 25 July 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 in two separate provinces, 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, 134 cases of human infection with influenza A(H7N9) have been reported from eastern China and Taiwan: Zhejiang (46 cases), Shanghai (34), Jiangsu (27), Henan (4), Anhui (4), Beijing (2), Shandong (2), Fujian (5), Hunan (3), Jiangxi (5), Hebei (1) 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 10 July 2013. The date of disease onset is currently unknown for fifteen patients. Most cases have developed severe respiratory disease. Forty three patients have died (case-fatality ratio=32%). The median age is 58 years ranging between four and 91 years; 38 of 134 patients are female, gender is unknown in five cases.

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, Zhejiang and Hebei provinces. Authorities have closed markets and culled poultry in affected areas.

Web sources: [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [OIE](#) | [Chinese MOA](#) |

## ECDC assessment

Influenza A(H7N9) is a zoonotic disease that has spread in poultry in parts of eastern China causing a severe disease in humans. 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.

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

13/18

donor selection procedures.

Apart from the new case last week, there has been no reported cases since 29 May 2013. The decline in the number of cases is 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.

It is not possible to determine at this point whether this case marks the resurgence of the outbreak. The new case reported last week does not change ECDC's assessment that, until the source is identified, further human cases of infection are expected in China.

## Actions

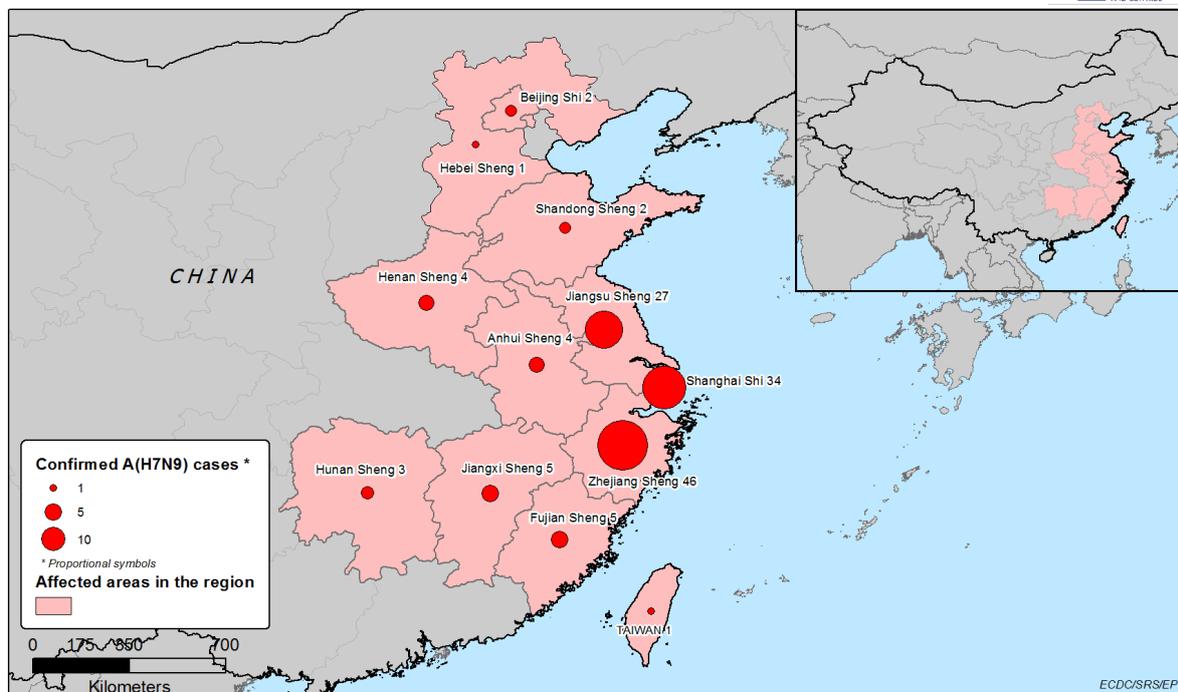
ECDC is closely monitoring developments.

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.

## Reported cumulative number of confirmed cases of novel influenza A(H7N9) by province in China, as of 24 July 2013, 15.00 CEST



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

Opening date: 20 April 2006

Latest update: 25 July 2013

### Epidemiological summary

**Asia:** As of 24 July, Lao PDR, Malaysia and Singapore have reported more cases in 2013 than 2012 for the same time period. The recent trend has increased in Cambodia and Vietnam and continues to be high in Lao PDR. A decreasing trend was observed in Singapore although cases are still above the epidemic threshold. The recent trend has decreased in Malaysia, Philippines and Australia.

Dengue cases continue to rise in Thailand with more than 6 000 cases reported from 9-16 July, bringing the number of cases to almost 74 000 so far in 2013, which is three times higher than for the same period last year, according to the Ministry of Public Health. In China, sixty-three autochthonous cases of dengue fever have been reported in Zhongshan City in Guangdong Province, according to a media report quoting local health authorities.

**Caribbean:** In Puerto Rico, 169 suspected dengue cases were reported in week 20, bringing the number of suspected cases to 5 909 so far this year. DENV-1 is the predominant serotype followed by DENV-4. The dengue epidemic in Guadeloupe has intensified with a widespread increase in the number of suspected clinical cases during the first week of July. In June, the circulation of DENV-4 became more prominent as this serotype has only been circulating at low levels since 2005, according to

15/18

InVS.

**Pacific:** Recent dengue trends have declined to low levels in the Solomon Islands. Local health authorities are on alert in New Caledonia following the detection of an imported case of DENV-2 in Noumea, as this serotype has not been circulating in the country during the last 14 years.

**Central and South America:** In Central America, 51 000 confirmed cases of dengue fever have been reported so far in 2013; an 85% increase compared to the same time period last year. In Mexico, 8-10 states have issued public health alerts following a recent rise in dengue cases. Costa Rica has declared a public health emergency after recording nearly 15 000 confirmed cases and three deaths since the start of the year.

In South America, Brazil is still affected by numerous outbreaks, notably in Mato Grosso State with nearly 39 000 cases and 24 deaths reported so far this year. Both DENV-1 and DENV-4 serotypes are co-circulating.

**Africa:** In Angola, 882 dengue cases have been reported since 12 March 2013. The majority of cases have been recorded in Luanda province although Manlanje and Kwanza Sul have also notified cases. In addition to the outbreak in Angola, an additional case of dengue has been reported in Mombasa, Kenya, according to a ProMed report.

**Web sources:**

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

## ECDC assessment

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

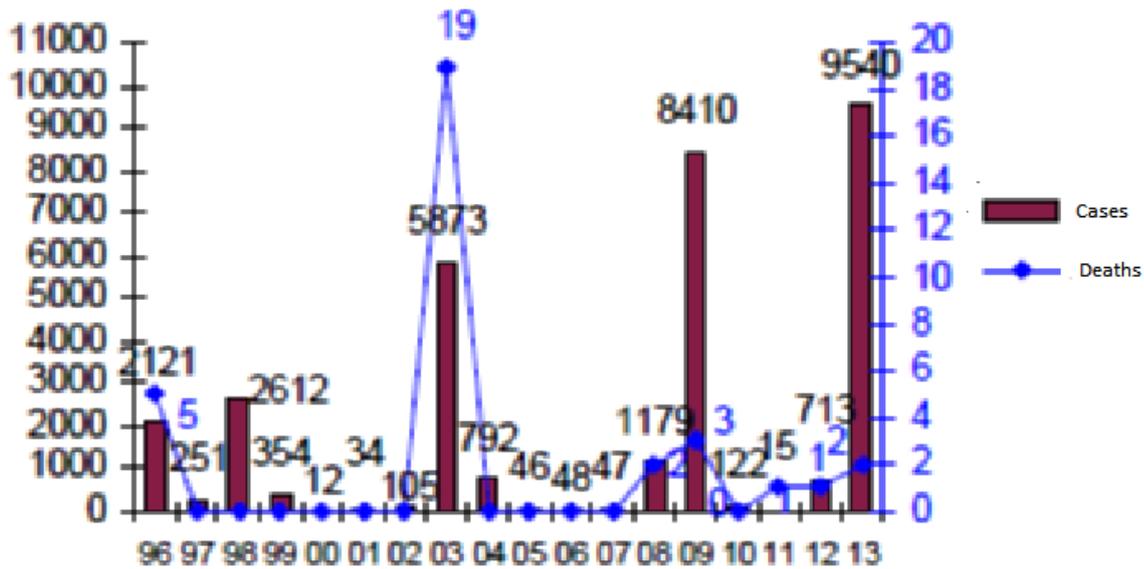
## Actions

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

From week 28 onwards, ECDC will monitor dengue on a biweekly basis.

Number of cases and deaths of dengue fever per year, New Caledonia, as of 21 May 2013

Direction des Affaires Sanitaires et Sociales de Nouvelle Calédonie



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