

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Legionellosis - Spain - 2012 Blanes outbreak

Opening date: 20 September 2012

Latest update: 20 September 2012

An outbreak of Legionnaires' disease is affecting the Spanish town Blanes in Catalonia, on Costa Brava, involving Spanish residents and tourists from several EU member states. As of 27 September 2012, the official number of cases is 11. The media report 14 cases.

→Update of the week

No new cases have been reported since the last update.

Salmonella Stanley - Multistate(EU) - 2012 outbreak

Opening date: 19 July 2012

Latest update: 20 August 2012

On 9 July, Belgium reported an outbreak of *Salmonella enterica* serovar Stanley (*S. Stanley*) through the Epidemic Intelligence Information System for food and water borne diseases. Subsequently, Austria, Czech Republic, Germany, Hungary, Slovak Republic and Italy have reported cases of *S. Stanley* sharing the same PFGE pattern as the Belgian outbreak strain. The descriptive epidemiology indicates transmission from a persistent common source or multiple sources in the EU. Contamination early in the production chain of a widely distributed food item is a likely scenario. Food and veterinary investigations are ongoing in Member States and at EU level to identify the source of the outbreak.

→Update of the week

Since 1 August 2011, EU Member States have reported 429 cases of *S. Stanley* on the Epidemic Intelligence Information System (EPIS). Of reported cases, 169 are confirmed to have indistinguishable XbaI-PFGE patterns. The number of new cases per month has been rising progressively since April 2012. The first cases were reported in August 2011.

Malaria - Greece - 2012

Opening date: 31 May 2012

Latest update: 28 September 2012

Since June 2012, nine autochthonous cases of malaria, caused by *Plasmodium vivax* infection, have been reported from Greece. Local control measures have been implemented in accordance with national guidelines.

→Update of the week

This week a new autochthonous case was reported by KEELPNO in Xanthi, a district where local cases have not been reported in recent years.

West Nile virus - Multistate (Europe) - Monitoring season 2012

Opening date: 21 June 2012

Latest update: 7 September 2012

West Nile virus is a mosquito-borne disease causing severe neurological symptoms in a small proportion of infected people. During the West Nile virus transmission season (between June and November), ECDC monitors the situation in the EU Member States and in neighbouring countries in order to identify significant changes in the epidemiology of the disease. In 2011, 130 probable and confirmed cases of West Nile fever were reported from the EU Member States and 207 cases in neighbouring countries. The 2012 transmission season is ongoing, with 204 probable and confirmed cases reported in the EU, and 458 cases in neighbouring countries so far.

→Update of the week

Between 20 and 27 September, Greece has reported ten new cases, and one newly affected area - Arta; Hungary have reported four new cases in three newly affected counties - Vas, Pest, and Baranya; Italy have reported six new cases including two new areas - Gorizia province and Pordenone province, both in Friuli Venezia Giulia Region. In countries neighbouring the EU: the former Yugoslav Republic of Macedonia reported four cases - the first in 2012; Croatia reported one new case; 14 new cases were notified by various federal regions of Russia; and Israel and the occupied Palestinian territory reported nine new cases.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 12 September 2012

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many countries of Europe due to a decrease in the uptake of immunisation. More than 30 000 cases were reported in EU Member States in each of the last two years. However, so far in 2012, the number of outbreaks and reported cases in the Member States are significantly lower than during 2010 and 2011. As of 31 July, 5 037 cases of measles were reported to The European Surveillance System in 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 91% of the reported cases.

→Update of the week

No new outbreaks were detected in EU Member States since the last update.

Rubella - Multistate (EU) - Monitoring European outbreaks

Opening date: 7 March 2012

Latest update: 19 September 2012

Rubella, caused by the rubella virus and commonly known as German measles, is a usually mild and self-limiting disease and 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

No new outbreaks were detected in EU Member States during the past week.

Non EU Threats

New! Novel Coronavirus associated with severe respiratory disease - Multistate

Opening date: 24 September 2012

Latest update: 28 September 2012

Since June 2012, two patients who presented with symptoms of severe acute respiratory syndrome with disease onset separated by three months, and a history of travel to the Middle East, have tested positive for a novel coronavirus. Tests indicate that the viruses isolated share significant sequence homology. The novel coronavirus is not genetically similar to the SARS-CoV, and to date the infection has not followed the same epidemiological pattern. No secondary cases have been detected so far.

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

Opening date: 15 June 2005

Latest update: 27 August 2012

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

WHO reported no new cases of human infection with avian influenza A(H5N1) virus since the last update.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 28 September 2012

Dengue fever is one of the most prevalent vector-borne diseases in the world, affecting an estimated 50 to 100 million people each year, mainly in the tropical regions of the world. There are no significant recent developments in global dengue epidemiology. However, the identification of sporadic autochthonous cases in non-endemic areas in 2010 and 2011 highlights the risk of occurrence of locally acquired cases in EU countries where the competent vectors are present.

→Update of the week

There have been no reports of confirmed autochthonous dengue infections in Europe so far in 2012. The previously reported potential autochthonous case of dengue in the Agrinio region of Greece has now been shown not to have suffered from dengue infection.

Intense dengue activity is reported from Central America and in part of the Caribbean region.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 27 September 2012

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. So far in 2012, 150 cases have been reported worldwide compared to 409 cases during the same period last year.

→Update of the week

During 22-28 September, five polio cases were reported by WHO.

Chikungunya - Multistate (world) - Monitoring seasonal epidemics

Opening date: 7 July 2005

Latest update: 26 September 2012

ECDC monitors reports of chikungunya outbreaks worldwide through epidemic intelligence activities in order to identify significant changes in epidemiological patterns. Chikungunya, a viral disease transmitted mainly by *Aedes albopictus* and *Aedes aegypti* has a potential to be established in Europe, due to the presence of these vectors in southern parts of Europe.

→Update of the week

Since the beginning of the year, no autochthonous cases have been reported in Europe.

II. Detailed reports

Legionellosis - Spain - 2012 Blanes outbreak

Opening date: 20 September 2012

Latest update: 20 September 2012

Epidemiological summary

The Spanish local health authorities are currently investigating an outbreak of Legionnaires' disease affecting Blanes on Costa Brava in Catalonia. The event was reported at the beginning of September by the [media](#). As of 27 September, the officially reported number of cases is 11 including three cases from the Netherlands, one case from Latvia and one case from the [United Kingdom](#). The initially detected cases were Dutch tourists on holiday at a campsite in Blanes. Cases were later reported in local residents in the same community. According to recent reports in the [media](#) the number of cases is now 14.

Preliminary investigations point to a community acquired outbreak. The source of the outbreak is still under investigation. The potential sources identified (a campsite water system, two cooling towers close to the campsite and a group of beach showers) have been disinfected and environmental samples have been taken.

ECDC assessment

This is likely a community acquired outbreak affecting also tourists. Local control measures are taken and further investigations are ongoing.

Salmonella Stanley - Multistate(EU) - 2012 outbreak

Opening date: 19 July 2012

Latest update: 20 August 2012

Epidemiological summary

There are 429 cases of *S. Stanley* on the Epidemic Intelligence Information System (EPIS) reported by EU Member States, 169 of which are confirmed as having an indistinguishable XbaI-PFGE pattern. The number of cases rose progressively and continuously each month from April to August 2012.

Retrospective investigations have revealed that the first cases with the outbreak strain (PFGE profile) were notified in Hungary in August 2011. This was followed by an increase of new cases in January 2012 and a second peak in May 2012.

The median age among probable and confirmed cases is 17 years (range 0 to 87 years), 53% of whom are male. No cases have been reported travelling outside the EU/EEA countries prior to infection.

In Belgium, all the cases are reported from the northern part of the country while the majority of the regions in Austria, Germany, Czech Republic and Hungary have reported cases. Cases have also been reported from Slovak Republic and Italy.

ECDC assessment

The outbreak of *S. Stanley* infections reported is not related to international travel. As cases do not have travel history outside the EU within their period of potential exposure, it strongly suggests a multistate outbreak with exposure currently taking place in the EU. The descriptive epidemiology and the microbiological evidence indicate a transmission originating from a persistent common source or multiple sources in the EU that are contaminated with a single clone of *S. Stanley*. The most recent cases have onset of disease in August; therefore, the outbreak may still be ongoing.

Food and veterinary investigations conducted in Austria, Belgium, Germany, Czech Republic, Poland and Hungary identified an indistinguishable XbaI-PFGE fingerprint and a common resistance to nalidixic acid with concomitant decreased susceptibility to ciprofloxacin, among isolates originating from the turkey production chain (turkeys and turkey meat). Isolates with indistinguishable PFGE patterns were also detected in some cases from broiler flocks (breeding and fattening chicken flocks) and meat from other animal species (broiler meat, beef and pork.)

The epidemiological and microbiological information gathered through the public health and food and veterinary investigations strongly suggest that the turkey production chain is the source of the outbreak. However, the contribution of other food and animal sources, such as beef, pork and broiler meat, to the outbreak cannot be ruled out.

As control measures have not yet been implemented to remove the source of infection and potential food vehicles from the market, it is likely that additional human cases of *S. Stanley* infections will be reported in the EU Member States.

It is important to highlight that persons working in the food chain at all levels (from production to catering) as well as consumers should be very strict with personal (hand washing) and food hygiene (avoid cross contamination between ready-to-eat and raw meat) when handling raw turkey meat.

ECDC, EFSA and the EU Salmonella Reference Laboratory are encouraging all Member States to perform PFGE analysis on food, animal and human *S. Stanley* isolates from 2011 and 2012 and to submit their data to ECDC (fwd@ecdc.europa.eu). This will provide information on the diversity of *S. Stanley* in the EU, allowing a more accurate assessment of the situation.

Actions

ECDC updated its rapid risk assessment on 29 August, which was circulated to public health authorities through the Early Warning Response System.

At the EU level, ECDC is facilitating a coordinated response for the investigation related to humans cases by gathering the available epidemiological and microbiological information, supporting investigations in the Member States and liaising with the European Commission, EFSA and competent food safety partners in the EU.

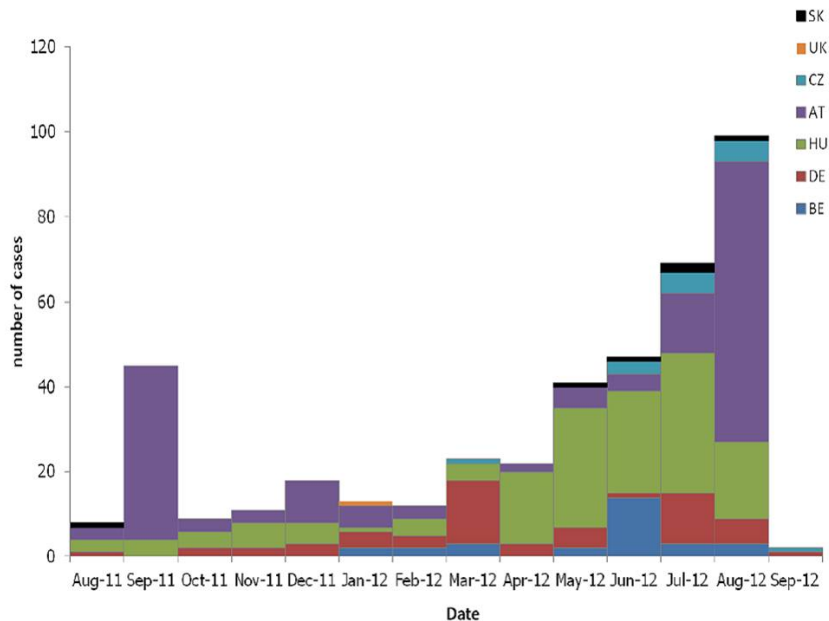
Investigations are ongoing regarding the possible source by relevant national food safety/veterinary authorities in close collaboration with the public health authorities. Food safety investigations are coordinated by the European Commission directorate general for health and consumers in collaboration with EFSA and the EU reference laboratory for Salmonellosis. The investigations focus on:

- comparison by molecular testing of isolates found in humans, feed, food and animals;
- epidemiological links in the food production chain.

A joint risk assessment has been prepared between EFSA and ECDC and was [published](#) on 20 September.

Distribution of cases of Salmonella Stanley by affected Member State and month*, confirmed and probable cases, 1 August 2011 - 18 September 2012 (N=419**)

ECDC

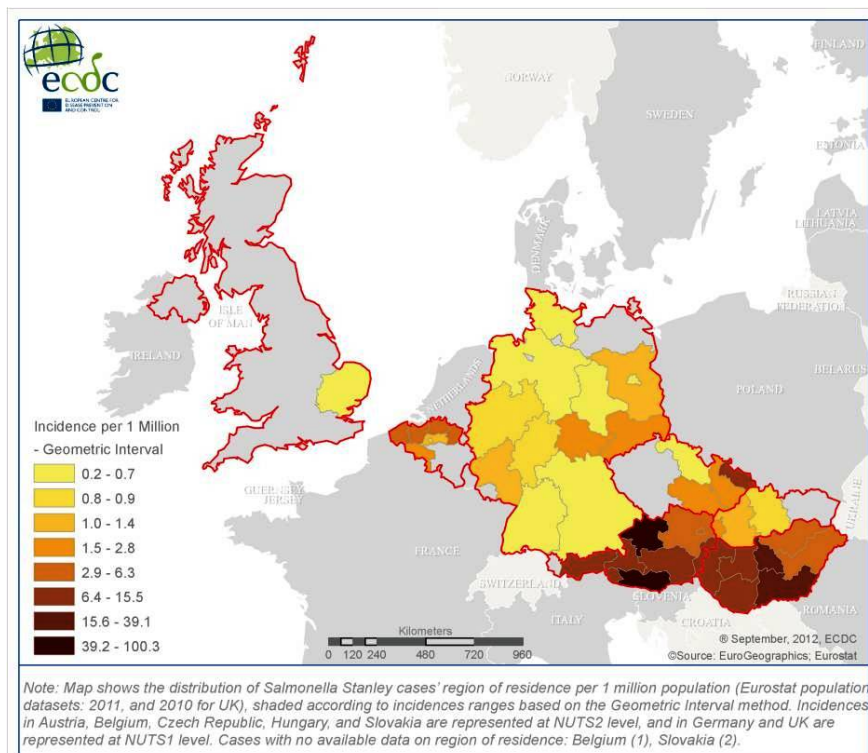


* Month represents month of onset when available, otherwise month of reception of sample at lab if available, otherwise month of diagnosis.

** Date is missing for one confirmed and one probable cases

Rates of confirmed and probable cases of Salmonella Stanley by EU Member State, 1 August 2011 to 18 September 2012 (N=418)

Joint ECDC/EFSA RRA



Malaria - Greece - 2012

Opening date: 31 May 2012

Latest update: 28 September 2012

Epidemiological summary

On 22 June, Greece reported the first case this season in a Greek resident who did not report a history of travel to endemic areas in the past five years. He is believed to have been infected during a stay at his summer house in the Marathon area. Onset of symptoms was around 7 June. Laboratory investigation revealed *P. vivax*, confirmed by molecular biology (PCR).

A second case was reported by Greece on 17 July, in a resident of the municipality of Evrotas, Lakonia, the same area where most cases were reported in 2011. Laboratory investigation revealed *Plasmodium vivax*, confirmed by PCR. The patient reported onset of symptoms on 29 June and had not travelled to a malaria-endemic area during the last five years.

On 2 August two new cases of *P. vivax* malaria were notified to ECDC. These involved patients resident in East Attica, in the Marathon and Markopoulo areas. Subsequently, on 7 August, Greece informally notified ECDC of its fifth and sixth cases, in residents of Evrotas, Lakonia. These four cases were all Greek citizens without travel to malaria endemic countries in the last five years.

Two new locally acquired cases of malaria were reported on 3 September, involving a Moroccan resident of Lakonia and a Greek resident of Markopoulo, East Attica.

A new autochthonous case was reported on 26 September in Xanthi, a district not affected in recent years. The area is in the north of the country, close to the border with Bulgaria. The reported onset of symptoms was week 34.

There are now nine autochthonous cases reported so far this year in Greece, all of them *Plasmodium vivax* infections in Laconia (four), Attica (four) and Xanthi (one).

Forty-one cases are reported as imported ones in 2012, from Laconia (14), Attica (16), Rethymno (one), Karion (one), Corfu (one), Thessaloniki (two), Boeotia (one), Ioannina (two), Argolis (one), Aetolia-Acarnania (one) and Karditsa (one). All these cases are *Plasmodium vivax* infections as well.

According to the Greek authorities, active screening of neighbours and seasonal immigrants is being carried out to detect malarial infection, and vector control measures are being implemented.

In 2011, autochthonous transmission of malaria was reported from Greece. Between 21 May and 9 December 2011, 63 cases of *P. vivax* infection were reported in Greece, of whom 33 were Greek citizens without travel history to an endemic country. The main affected area was Evrotas, located in the district of Lakonia in Pelloponese, southern Greece. Cases were also reported from the municipalities of Attica, Evoia, Viotia and Larissa. In addition, 30 cases of *P. vivax* infection in migrant workers were reported from the area of Evrotas.

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Web sources: [KEELPNO malaria page](#) | [KEELPNO update 10 September 2012](#) (in English) | [KEELPNO update 26 September 2012](#) (in Greek) | [ECDC Epidemiological update: Local case of malaria in Greece](#) | [Eurosurveillance autochthonous Plasmodium vivax malaria Greece 2011](#)

ECDC assessment

The Marathon and Evrotas areas are environments well suited for malaria transmission, combining humid zones and intensive agricultural activities. Climatic conditions are now considered favourable for local vector development. Frequent migration and travel patterns from endemic areas of the world provide opportunities for introduction of the parasite into the area. Also in 2011 autochthonous cases occurred in these locations.

The case reported this week in Xanthi represent the first local case reported in recent years in this district, where no imported cases have been confirmed in 2012. Since mid August 2012, this particular area has been the centre of WNV outbreak in northern Greece.

Considering the time of infections last year, it is possible that more cases will be detected in the coming months.

Actions

ECDC has been requested to provide technical support to the Hellenic Centre for Disease Control and Prevention and is in close communication with them to see where this can best be provided.

ECDC has contacted the Greek health authorities in order to get more details about the latest locally acquired case reported, resident in Xanthi.

Greece is currently implementing a "Strategic work programme for malaria control in Greece 2012-2015".

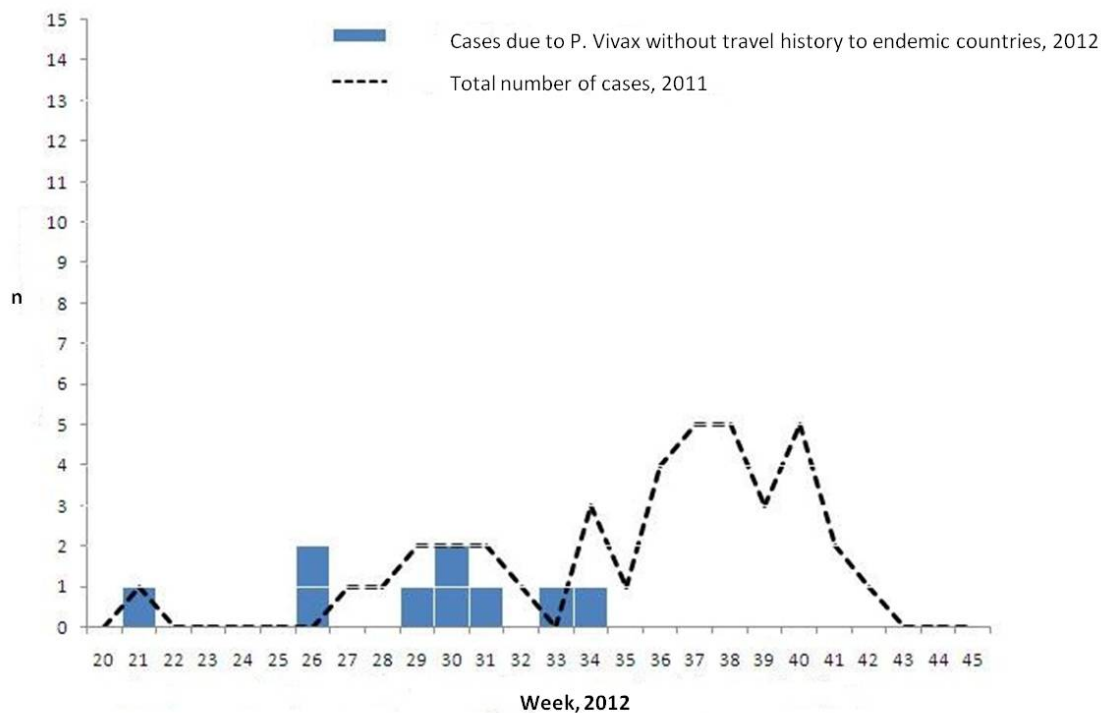
Greece, malaria 2012: place of residence of locally acquired cases

KEELPNO



Greece, malaria 2012: locally acquired cases by week of onset of symptoms

KEELPNO



West Nile virus - Multistate (Europe) - Monitoring season 2012

Opening date: 21 June 2012

Latest update: 7 September 2012

Epidemiological summary

As of 20 September 2012, 204 probable and confirmed human cases of West Nile fever (WNF) have been reported in the EU this season and 458 cases in neighbouring countries.

EU Member States*Greece*

Between 7 July and 27 September, Greece reported 152 autochthonous WNF cases in 14 former prefectures. There have been ten WNV associated deaths. One case involves an immuno-compromised patient infected through blood transfusion.

Hungary

Four cases were reported by Hungary this week. The counties of Vas, Pest, and Baranya are newly affected. A total of eight cases have been reported in Hungary in 2012. Other affected counties are Csongrád, Hajdú-Bihar, Somogy and Tolna.

Italy

So far this year, the Italian Ministry of Health has notified 22 neuroinvasive cases of WNF - 18 in the Veneto region; two in Sardinia; and two in Friuli Venezia Giulia Region. Additionally, enhanced seasonal surveillance within the Veneto Region, including testing of patients reporting fevers and systematic screening of blood donors, has identified eight more cases of confirmed WNV infection. RNA of WNV lineage 1A was detected in several cases. So far this year, affected provinces are: Treviso, Venezia, and Vicenza in Veneto region; Oristano in Sardinia; and the Gorizia and Pordenone provinces of Friuli Venezia Giulia Region.

Romania

Romania have reported 14 WNF cases this year. Affected areas include: Braila county, Bucuresti municipality, Giurgiu county, Ialomita county, Iasi county, and Ilfov county.

Neighbouring countries*Croatia*

Croatia have reported five cases of WNF in 2012 - this is the first year that human cases have been reported in Croatia. Affected areas include: Osjecko-Baranjska county, Vukovarsko-Srijemska county, and Brodsko-Posavska county.

the former Yugoslav Republic of Macedonia

the former Yugoslav Republic of Macedonia have reported four autochthonous cases of WNV in the last week (one confirmed and three probable). These are the first cases reported from FYROM for 2012. The confirmed case is from Lipkovo municipality; and the probable cases from Skopje region, Struga municipality, and Krusevo municipality.

*Kosovo**

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Kosovo has reported one fatal case of probable WNF in 2012. The patient was from the Pristina, Kosovski region.

Serbia

To date in 2012, Serbia have reported a total of 44 probable and confirmed WNF cases, including six deaths. ECDC has previously excluded five of these cases, either due to a recent travel history or laboratory results not being consistent with recent infection. Further details are pending on the new cases reported by Serbia in the last week, therefore at present ECDC consider the occurrence of 30 WNF cases in Serbia. Known affected areas include: Grad Beograd, Juzno-Banatski district, and Sremski district.

Russia

As of 26 September, regional health authorities have reported 366 cases of WNF in Russia in 10 federal subjects including: Adygeya republic, Astrakhanskaya oblast, Belgorodskaya oblast, Lipetskaya oblast, Novosibirskaya oblast, Rostovskaya oblast, Saratovskaya oblast, Tatarstan republic, Volgogradskaya oblast, and Voronezhskaya oblast.

Israel and the occupied Palestinian territory

As of 20 September, 46 cases of WNF have been reported from Israel and two cases from the occupied Palestinian territory. Affected areas include: Central district, Haifa district, Northern district, Southern district, and Tel Aviv district; and the Ariha (Jerico) and Ramallah districts of the occupied Palestinian territory.

Tunisia

To date in 2012 Tunisia have reported four cases of WNF through the EpiSouth network. Affected areas include: Kebili Nord, Kebili governorate; and Zarmedine and Ksar Helal, Monastir governorate.

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Websources: [ECDC West Nile fever risk maps](#) | [ECDC Rapid Risk Assessment \(13 July\)](#) | [MedISys West Nile Disease](#) | [ECDC summary of the transmission season 2011](#) | [Official Journal of the EU - Notifiable Diseases](#) | [European Commission Case Definitions](#) | [EU Blood Directive](#)

ECDC assessment

West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures by the national health authorities are considered important for ensuring blood safety when human cases of West Nile fever occur. In accordance with the EU Blood Directive, efforts should be made to defer blood donations from affected areas that have ongoing virus transmission.

Actions

On 13 July, ECDC updated its [Rapid Risk Assessment](#) concerning the epidemiological situation of West Nile virus infection in the European Union. ECDC produces weekly [West Nile fever risk maps](#) to inform blood safety authorities regarding affected areas.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 12 September 2012

Epidemiological summary

EU Member States

No new outbreaks or updates were identified this week.

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

ECDC assessment

Considerably fewer measles cases have been reported in 2012 than during the same period in 2011 primarily due to the dramatic decrease in the number of cases reported from France. There was no increase in the number of cases during the peak transmission season from February to June and there have been very few outbreaks detected by epidemic intelligence methods so far in 2012.

ECDC closely monitors measles transmission and outbreaks in the EU and neighbouring countries in Europe through enhanced surveillance and epidemic intelligence activities. The countries in the WHO European Region, which include all EU Member States, have committed to eliminate measles and rubella transmission by 2015. 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: 19 September 2012

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Epidemiological summary

No new outbreaks were identified since the last update.

From 1 January to 31 July 2012, 18 297 cases of rubella were reported by the 26 EU/EEA countries contributing to the enhanced surveillance for rubella compared to 3 672 cases during the same period in 2011. Poland and Romania accounted for 99% of all reported rubella cases. Romania in particular has experienced a significant increase in the number of reported cases compared to the same period in 2011 from 87 to 13 708 cases. Other countries who reported an increased number of rubella cases in 2012 include the UK, Spain and Sweden.

Web sources: [ECDC measles and rubella monitoring](#) | [WHO epidemiological brief summary tables](#) | [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 be born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. CRS surveillance plays an important role but because rubella virus can cause a wide range of conditions from mild hearing impairment to complex malformations which are incompatible with life, such surveillance is biased towards the severe end of the spectrum. Routine control of immunity during antenatal care is important for identifying susceptible women who can be immunised after giving birth and for surveillance of the size of the susceptible female population.

The increase in the number of rubella cases reported so far in 2012 compared to 2011 and the potential for an increase in the number of babies born with CRS are of concern.

Actions

ECDC closely monitors rubella transmission in Europe by analysing the cases reported to The European Surveillance System (TESSy) 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 for the achievement of the 2015 rubella and congenital rubella elimination target.

New! Novel Coronavirus associated with severe respiratory disease - Multistate

Opening date: 24 September 2012

Latest update: 28 September 2012

Epidemiological summary

A first case, reported on Thursday 20 September through ProMED, was a 60 year old patient in Jeddah, Kingdom of Saudi Arabia, from whom a novel coronavirus was isolated. He was admitted to hospital on 13 June with severe pneumonia, having had a seven day history of symptoms. He developed acute renal failure, and died on 24 June. Post mortem lung tissue tests were negative for influenza virus A, influenza virus B, parainfluenza virus, enterovirus and adenovirus. Testing with a pancoronavirus RT-PCR was positive for a coronavirus and the virus genome was later sequenced in Erasmus Medical Centre, Rotterdam, and identified as a putative novel beta-coronavirus, closely related to bat coronaviruses.

A second case was reported on Saturday 22 September, by the UK Health Protection Agency (HPA). The case is a 49 year old Qatari with no underlying health conditions and a history of travel to Mecca, Saudi Arabia. He developed respiratory symptoms on 3 September, and on 7 September was admitted to an intensive care unit (ICU) in Doha, Qatar, where he subsequently developed renal failure. He was transferred by air ambulance to an ICU in the UK on 11 September. Laboratory tests were performed between 17 and 20 September on upper and lower respiratory samples and tested negative for respiratory viruses including influenza A (H1/H3/H1N1pdm09), influenza B, hMPV, RSV, and specific tests for the human coronaviruses NL63, 229E, OC43 and SARS-CoV. On 21 September, tests using a pancoronavirus RT-PCR test were positive from two lower respiratory tract samples only. A nucleotide BLAST search in the UK revealed 80% homology to bat coronaviruses. A 250bp PCR fragment was compared by the Erasmus Medical Centre to Case 1's isolate, and a 99.5% sequence homology was identified.

These are currently the only two known cases where these homologous coronaviruses have been identified.

The HPA reports that the UK is actively following-up contacts of Case 2, including healthcare workers in the UK. No illness has been reported amongst contacts of the laboratory confirmed case, and there is no evidence of these healthcare workers developing relevant symptoms. The UK has also contacted the medical evacuation company that transferred the patient from Qatar.

On 27 September SSI in Denmark posted an update on their [website](#) according to which they developed a rapid test (real-time PCR) specific for the new corona virus.

Diagnostic tests are being developed by the Erasmus Medical Centre and at HPA.

HPA has named the novel virus tentatively "London1_novel CoV 2012".

Web sources: [Interim case definition -WHO](#) | [HPA infection control advice](#) | [Partial genetic sequence information](#)

ECDC assessment

A novel coronavirus has been identified in two patients with severe respiratory and renal disease. The two viruses are 99.5% homologous for a 250 nucleotide region of the polymerase gene, which means that they are similar, but does not prove that they are identical. The fatal case was resident in Saudi Arabia and developed disease there. The other case had visited Saudi Arabia but had returned to Qatar more than 10 days before onset of symptoms. No secondary cases have been detected to date and there is no evidence of person-to-person transmission to close contacts, including healthcare workers and relatives. There is no indication that this novel coronavirus is closely related to the SARS coronavirus which caused the 2003 outbreak. In addition, to date, the epidemiological behaviour of the infections is very different from that seen in 2003. A causal relationship between the viruses and severe disease has not been proven. As yet, the source and disease reservoir, transmission route, incubation period, and capacity for asymptomatic infection are unknown. Zoonotic infection cannot be ruled out.

Based on the available information, ECDC assesses the current risk as low. Information for visitors to The Kingdom of Saudi Arabia for the pilgrimage to Mecca (Hajj) can be found through [WHO website](#) and The [Kingdom of Saudi Arabia website](#).

Actions

An internal response team has been convened and is actively monitoring this event. A case definition for finding cases has been collaboratively developed by international infectious disease control agencies and the concerned national authorities and all cases meeting the definition will be reported through the Early Warning and Response System (EWRS). An algorithm is also being prepared regarding investigation and management of possible cases.

ECDC has prepared a rapid risk assessment the public version of which was posted on the ECDC [website](#).

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

Opening date: 15 June 2005

Latest update: 27 August 2012

Epidemiological summary

No new cases of human A(H5N1) infection were reported last week.

Worldwide, 30 cases (including 19 deaths) have been notified to WHO since the beginning of 2012.

Web sources: [ECDC Rapid Risk Assessment](#) | [WHO Avian Influenza](#) | [Avian influenza on ECDC website](#) | [WHO H5N1 Table](#)

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.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006

Latest update: 28 September 2012

Epidemiological summary

Europe: There have been no reports of confirmed autochthonous dengue infections in Europe so far in 2012. Seasonal surveillance activities are ongoing in several regions in southern France but only imported cases have been reported so far. Further investigations and retesting have shown that the earlier reported fatal case in Greece who was suspected to have dengue infection did not have dengue (was PCR negative for both flaviviruses and DENV).

Asia: In the Western Pacific Region of WHO dengue activity is variable. Vietnam and Lao PDR continue to see high activity while

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the trend is declining in all the other countries and remains overall low in Malaysia. In the rest of the continent the dengue situation is still of concern in some areas of Thailand, in particular in the southern region. Local outbreaks are reported in other countries, in particular in India (Mumbai, West Bengal) and Pakistan (Punjab). Honk Kong authorities are closely following the situation in Macau, where local cases keep being confirmed.

Latin America: Intense activity is reported in Central America, particularly in Mexico and in El Salvador, where a national alert is in place. For the rest of the region a high, variable but not unexpected situation is reported in almost all countries, with a recent increase in Paraguay (the Asuncion area).

Caribbean: There have been an increase in the number of cases reported in Puerto Rico during the past weeks. According to US CDC the current level of reporting is significantly above the historical average representing years 1986-2011 and is reaching the epidemic threshold. All four strains are reported. In the Dominican Republic the media reports recent increases, as well as in Cuba but there is no recent official report available.

Pacific Ocean: No relevant updates this week.

Web sources:

[DengueMap CDC/HealthMap](#) | [MedISys dengue](#) | [KEELPNO report potential dengue case](#) | [WPRO dengue latest update](#) | [ProMED latest update Americas 23 Sept 2012](#) | [Latest PAHO/AMRO update](#) | [US CDC update Puerto Rico 21 Sept 2012](#) | [ProMED latest update Asia 23 Sept 2012](#) | [ECDC dengue fever factsheet](#) | [Global Strategy for Dengue Prevention and Control WHO](#)

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. Local transmission of dengue was reported for the first time in France and Croatia in 2010 and imported cases are detected in other European countries, highlighting the risk of locally acquired cases occurring in countries where the competent vectors are present.

Actions

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

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 27 September 2012

Epidemiological summary

Since the last update five new cases of polio were reported, all WPV1, one from Afghanistan, two from Pakistan and two from Nigeria.

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

ECDC assessment

ECDC follows reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and to identify events that increase the risk of re-introduction of wild poliovirus (WPV) into the EU.

The WHO European Region is polio-free. The last polio cases in the European Union occurred in 2001 when three young Bulgarian children of Roma ethnicity developed flaccid paralysis from 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.

Chikungunya - Multistate (world) - Monitoring seasonal epidemics

Opening date: 7 July 2005

Latest update: 26 September 2012

Epidemiological summary

No autochthonous cases have been reported in 2012 so far in Europe. Outside of Europe, no unusual activity has been detected this week.

Web sources: [MedISys Chikungunya](#) | [ECDC chikungunya fact sheet](#) |

ECDC assessment

Although the geographic range of the virus is primarily in Africa and Asia, there has been a rapid expansion of epidemics over the past decade to new regions of the world due to the worldwide distribution of the main vectors, *Aedes albopictus* and *Aedes aegypti*, combined with increased human travel. There is a risk of further importation of the chikungunya virus into previously unaffected areas of the EU by infected travellers.

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