COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 45, 4-10 November 2012

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012 Latest update: 8 November 2012

On 3 October 2012, the public health authorities of Portugal reported two cases of authoctonous dengue infection in patients residing in the Autonomous Region of Madeira. This signalled the onset of the first recorded outbreak of dengue in Madeira. The outbreak has not yet reached its peak and more cases are expected both in the resident population and in returning tourists. The presence of the *Aedes egypti* vector in Madeira has been documented since 2005. It is as yet too early to predict if dengue will become endemic to Madeira.

➔Update of the week

As of 4 November 2012, there are 1 148 reported cases of dengue fever of which 517 are laboratory confirmed. Nineteen cases of dengue were reported among returning European travellers from the island.

Malaria - Greece - 2012

Opening date: 31 May 2012 Latest update: 28 September 2012

Since June 2012, 16 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

No new cases have been reported since the last CDTR.

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

Opening date: 21 June 2012 Latest update: 26 October 2012

West Nile fever (WNF) is a mosquito-borne disease causing 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 identify significant changes in the epidemiology of the disease. In 2011, 130 probable and confirmed cases of WNF were reported from EU Member States and 207 cases in neighbouring countries. The 2012 transmission season is ongoing, with 235 probable and confirmed cases reported in the EU, and 582 cases in neighbouring countries so far.

➔Update of the week

During 1-8 November Italy reported three new WNF cases: one case in previously affected Pordenone; one case in each of the newly affected provinces of Udine and Matera. Tunisia reported, through EpiSouth, 10 new cases including three from the newly affected governorates of Bizerte (Bizerte and Menzel Bourguiba municipalities) and Sousse (Sousse municipality). These cases were included in the WNF maps published on the ECDC website on 5 November.
In addition, there are media reports of up to 20 cases of WNF in the Ukraine, mainly from Poltavs'ka and Donets'ka oblasts; 12 cases from Poltavs'ka oblast have been confirmed by official sources.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 22 October 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, the number of outbreaks and reported cases in Member States so far in 2012 are significantly lower than during 2010 and 2011. As of 31 August, 5 360 cases of measles were reported to The European Surveillance System in 2012. France, Italy, Romania, Spain and the United Kingdom accounted for 92% of the reported cases.

➔Update of the week

There were no outbreaks detected 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 usually a 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.

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 (EPIS/FWD). Subsequently, Austria, Czech Republic, Germany, Italy, Greece, Hungary, Slovak Republic, Sweden, and the United Kingdom () 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

No new relevant updates were detected between 1 and 8 November.

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

Opening date: 2 December 2011 Latest update: 24 May 2012

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

➔Update of the week

During week 44/2012, all 26 reporting countries experienced low intensity of clinical influenza activity.

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Non EU Threats

Vaccine supply issues - Multistate (global) - 2012-2013 Influenza vaccines

Opening date: 30 October 2012 Latest update: 30 October 2012

The Italian regulatory agency AIFA has stopped the distribution and sales of Novartis' influenza vaccines after the company informed Italian authorities of a build-up of particles in its products. Six EU countries (Austria, France, Germany,Italy, Spain, UK) and Switzerland have taken similar precautionary action, based on AIFAs decision and stopped the use and/or distribution of Novartis' influenza vaccines because of possible quality problems. These regulatory actions follow a voluntary recall of influenza vaccines produced by Crucell and the decision of the Finnish public health authority to use the influenza vaccine produced by GlaxoSmithKline only in adults older than 65 years of age.

➔Update of the week

Switzerland lifted the ban on Novartis flu vaccine on 31 October after Novartis had provided evidence that the flucculation in the vials consist of aggregated proteins normally present in the vaccine and were not caused by contamination.
Canada lifted the ban on 31 October after reviewing the safety documentation
In Austria, France, Germany, Italy and Spain the ban remains in place.
UK: Recalled two batches of Novartis Agrippal vaccine

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 has not reported a new case of human infection with avian influenza A(H5N1) virus since 10 August 2012.

Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012 Latest update: 5 November 2012

Since June 2012, three patients who presented with symptoms of severe acute respiratory syndrome and a history of travel to or residence in the Middle-East, have tested positive for a novel coronavirus. The novel coronavirus is not genetically similar to the SARS-CoV, and to date the infection has not followed the same epidemiological pattern.

➔Update of the week

On 4 November, a new case was reported in Saudi Arabia which is the third confirmed case so far due to the novel virus.

Marburg virus - Uganda - 2012 Outbreak in Kabale

Opening date: 25 October 2012

An outbreak of Marburg virus disease has been reported in Kabale district, South West Uganda in October 2012. The outbreak has now spread to a further five districts. This is a disease previously reported in Uganda. US CDC and WHO are working closely with the Ugandan Ministry of Health and other partners including Medecins sans Frontieres (MSF) to control the outbreak.

➔Update of the week

As of 5 November 2012, 20 cumulative cases (eight probable, 12 confirmed) have been reported including eight fatalities.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 6 November 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. The identification of sporadic autochthonous cases in non-endemic areas in recent years already highlighted the risk of the occurrence of locally acquired cases in EU countries where the competent vectors are present. The detection of a dengue outbreak in the Autonomous Region of Madeira, Portugal, underlines even more the importance of surveillance and vector control in other European countries (see separate section).

➔Update of the week

There is an ongoing outbreak of dengue in the Autonomous Region of Madeira, Portugal described in a separate section of this report with some imported cases reported from other EU member states.

No autochthonous cases were reported in any other European country so far this year.

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Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 8 November 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, 181 cases have been reported worldwide compared to 505 cases during the same period last year.

➔Update of the week

Four new polio cases were reported to WHO during the week leading up to 6 November.

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II. Detailed reports

Dengue - Portugal - Madeira outbreak

Opening date: 10 October 2012 Latest update: 8 November 2012

Epidemiological summary

On 3 October 2012, the Portuguese public health authorities reported two cases of dengue infection confirmed in patients residing in the Autonomous Region of Madeira which is a Portuguese archipelago of 801 km² with a population of 268 000 located around 650 km from the African coast, 1 000 km from the European continent and 400 km from the Canary Islands.

As of 4 November, according to an update from the Portuguese Ministry of Health, 1 148 probable cases of dengue infection have been reported from the public health sector in Madeira, out of which 517 were laboratory confirmed. Fifty-seven cumulative hospitalisations were registered. Three patients remain in hospital. No deaths were recorded. The sequence analysis of viral genomes (600 nucleotides) from several positive human samples indicates high sequence similarity with DENV-1 circulating in Venezuela and Colombia, strongly suggesting a Latin American origin.

The majority of confirmed cases are from the city of Funchal, which is the main port on Madeira island. Cases have also been reported on Porto Santo, the other inhabited island within the Autonomous Region of Madeira. The island of Madeira has an established mosquito vector population of *Aedes aegypti*, the main vector of dengue in tropical and subtropical countries.

Nineteen patients have been so far diagnosed with dengue after returning from Madeira in Portugal (eight), the UK (six), Germany (two), Sweden (one) and France (two).

Web sources: ECDC fact sheet for health professionals | PT Directorate-General of Health | National Institute of Health Dr. Ricardo Jorge | ECDC Rapid Risk Assessment | WHO | Madeira Institute of Health Admisnistration and Social Affairs

ECDC assessment

This is the first known occurrence of locally transmitted dengue infection in the Autonomous Region of Madeira, and consequently a new geographical area reporting autochthonous cases in the EU.

This is a significant public health event but not entirely unexpected because of the known presence of *Aedes aegypti*, a competent mosquito vector for dengue. The updated figures indicate that the outbreak is ongoing and more cases among the island's population as well as returning tourists should be expected. The risk of transmission can be decreased by an efficient vector control program and personal protective measures against mosquito bites. The cases of dengue among returning travellers from the island highlight the need for travellers to the island of Madeira to take measures to reduce mosquito bites during the day. Travellers experiencing febrile symptoms with severe headache, retro-orbital pain, myalgia, arthralgia and maculo-papular rash in the 14 days after visiting the island of Madeira are advised to seek medical advice.

Neighbouring geographical areas (e.g. Canary Islands) and other EU Member States need to assess the risk for the establishment of *Aedes* mosquito populations and introduction of dengue. The epidemiological situation does not imply the need for any trade or travel restriction beyond the disinfestation currently implemented.

Actions

ECDC is providing technical assistance to the health authorities in Madeira in their efforts to control the outbreak. A team of ECDC experts has been deployed since 22 October to assess the epidemiological and entomological situation and provide advice for prevention and control activities. The epidemiological case definition has been revised and an automated surveillance system has been set up with the support from ECDC.

The entomological and epidemiological findings from the ECDC mission are currently being analysed and will form the basis for ECDC's recommendations for dengue control in Madeira in the short and long term.

ECDC has published a rapid risk assessment concerning the autochthonous dengue cases in Madeira. The latest epidemiological update was posted on the ECDC website on 8 November.

Portuguese authorities have published recommendations regarding personal protective measures, and measures for the safety of blood, cells, tissues and organ donations.

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Malaria - Greece - 2012

Opening date: 31 May 2012 Latest update: 28 September 2012

Epidemiological summary

Since 22 June 2012, Greece has reported 16 cases of malaria so far this year due to *Plasmodium Vivax* infection in patients who did not have a history of travel to endemic areas. Eight of the autochthonous cases are residents in Laconia, four in Attica, two in Karditsa and one in Xanti and Viotia each. Fifty-nine cases are reported as imported in 2012. 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.

Autochthonous transmission of malaria was reported from Greece in 2011 as well. Between 21 May and 9 December 2011, 63 cases of *P. vivax* infection were reported, of whom 33 were affecting 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.

Web sources: KEELPNO malaria page | 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.

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

A joint ECDC-WHO mission is currently in Greece to assess the malaria and West Nile Fever situation in the country.

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

Opening date: 21 June 2012 Latest update: 26 October 2012

Epidemiological summary

EU and neighbouring countries

As of 7 November, 235 probable and confirmed cases of WNF have been reported in the EU in 2012. In neighbouring countries 582 cases have been reported. Within the EU, Greece, Italy, Romania and Hungary are affected. This is the third consecutive year for these countries to be affected, however the geographic distribution in each country has expanded to affect new areas. Seventeen WNF associated deaths have been reported in the EU (16 in Greece, one in Romania). Outside of the EU, affected countries include Croatia, Serbia, Kosovo*, the former Yugoslav Republic of Macedonia, the Russian Federation, Israel and the occupied Palestinian territory, Algeria and Tunisia. This is the first year that human cases of WNF have been reported from Croatia, Serbia, and Kosovo. However WNV circulation in horses was demonstrated through serological studies in Serbia in 2009-2010, and in Croatia in 2010-2011. A detailed breakdown of affected countries and areas, and maps which also illustrate the recent historical distribution, is available on the ECDC website.

Only one case within the EU is reported to have been acquired through blood products in 2012. This case occurred in Greece and involved an immuno-compromised patient, where both the blood donation and the transfusion occurred before the first case of WNF for 2012 was reported. In Italy, as per a 2012 national directive, nucleic acid amplification test (NAT) screening of blood

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donations is implemented from 15 July to 30 November in areas which were affected in 2011. Notably, a infected donation was detected in Italy on 15 July, the first day of screening. Four other cases of asymptomatic WNF were detected by NAT screening of blood donations in Italy.

Rest of the World
United States
As of 6 November, 5 054 cases of WNF, including 228 deaths, have been reported to the CDC. This year remains the worst affected season since 2003. Over a third of cases come from the state of Texas.

* 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 | Italian Weekly update | KEELPNO weekly epidemiological report | Institut de Veille Sanitaire| EpiSouth

ECDC assessment

The epidemiology of WNV in Europe is still evolving and is not yet fully understood. It is unclear if the increase in cases reported this year, the earlier season, and the geographic expansion, is due to a true epidemiological change, or a reflection of increased awareness amongst clinicians and the enhanced surveillance implemented in some areas.

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 WNF. Taking into account the EU WNV and blood safety preparedness plan and the EU blood directive, the main measures of prevention of transmission through blood products should be geographical donor deferral or the implementation of systematic NAT screening of blood donors or visitors from affected areas. ECDC provides a weekly updated overview of affected areas in order to support this activity.

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: 22 October 2012

Epidemiological summary

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

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

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Opening date: 7 March 2012 Latest update: 19 September 2012

Epidemiological summary

No new outbreaks were identified since the last update.
From 1 January to 31 August 2012, 25 570 cases of rubella were reported by the 26 EU/EEA countries contributing to the enhanced surveillance for rubella compared to 30 128 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. Other countries that 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 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.

Salmonella Stanley - Multistate(EU) - 2012 outbreak

Opening date: 19 July 2012 Latest update: 20 August 2012

Epidemiological summary

There are 517 cases of *S.* Stanley on the Epidemic Intelligence Information System (EPIS) reported in EU Member States. 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, Italy, Greece and Sweden.

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.

Considering that the number of cases reported in September remains higher than the background level, the outbreak is still ongoing and ECDC will continue monitoring the situation on a monthly basis.

At this point the conclusions and recommendations of the Joint ECDC-EFSA rapid risk assessment remain unchanged.

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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 have encouraged 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. Analysis of PGFE data is ongoing.

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, the European Food Safety Authority (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 report summarising the results of the investigations has been distributed to the European Commission.

A joint risk assessment has been prepared between EFSA and ECDC and was published on 20 September.

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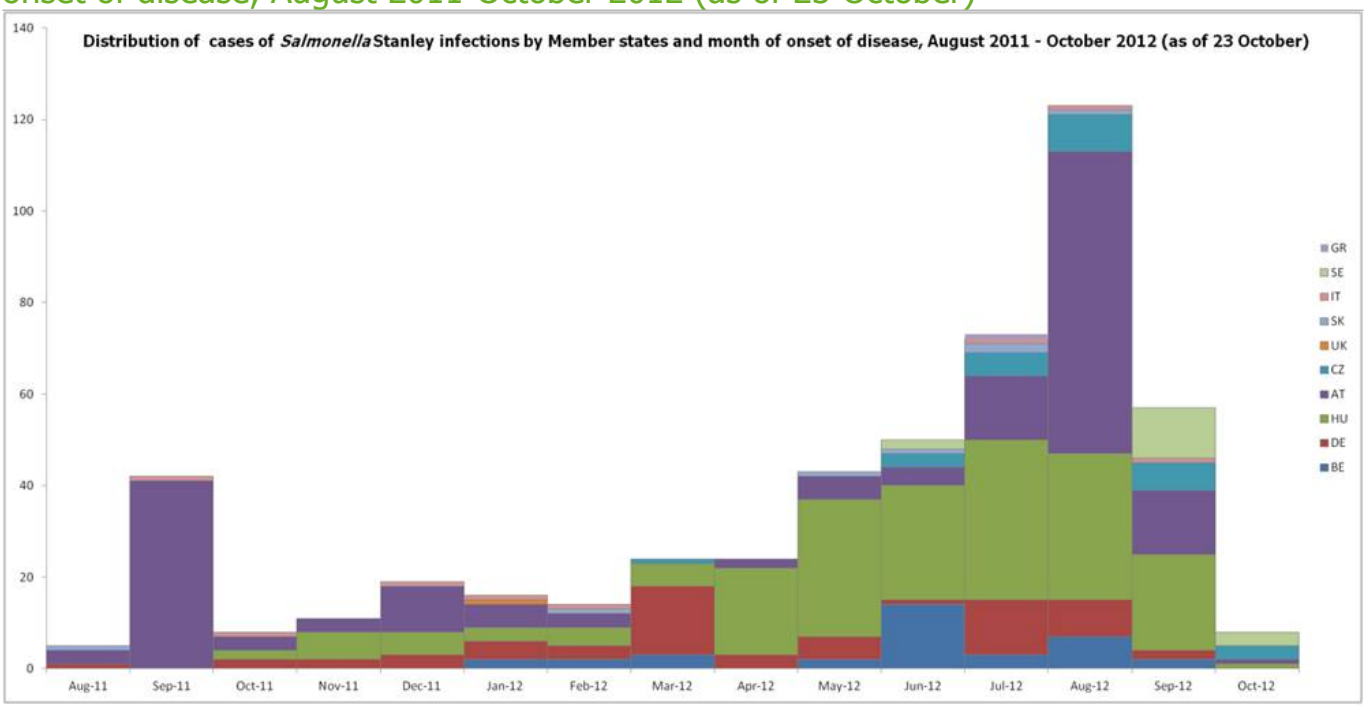
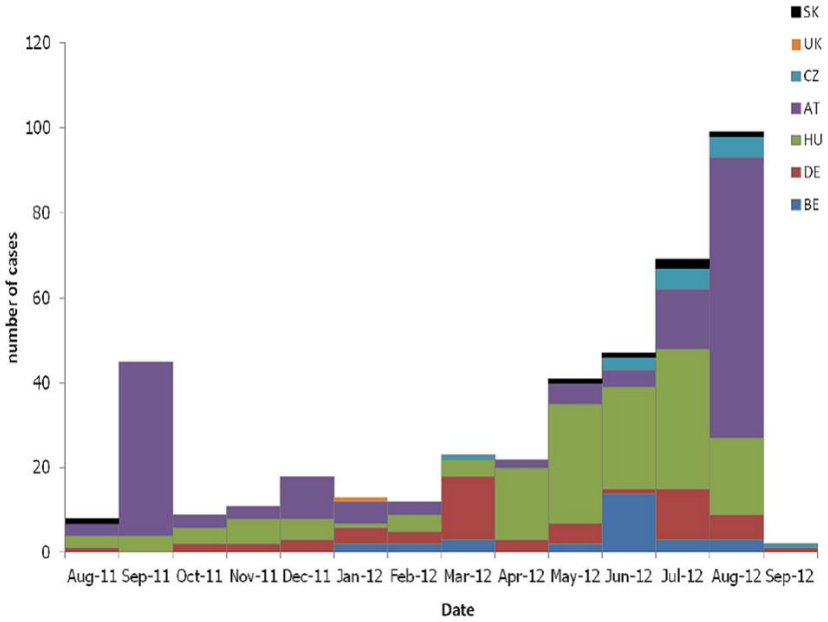
Distribution of cases of Salmonella Stanley infections by Member states and month of onset of disease, August 2011-October 2012 (as of 23 October)



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)

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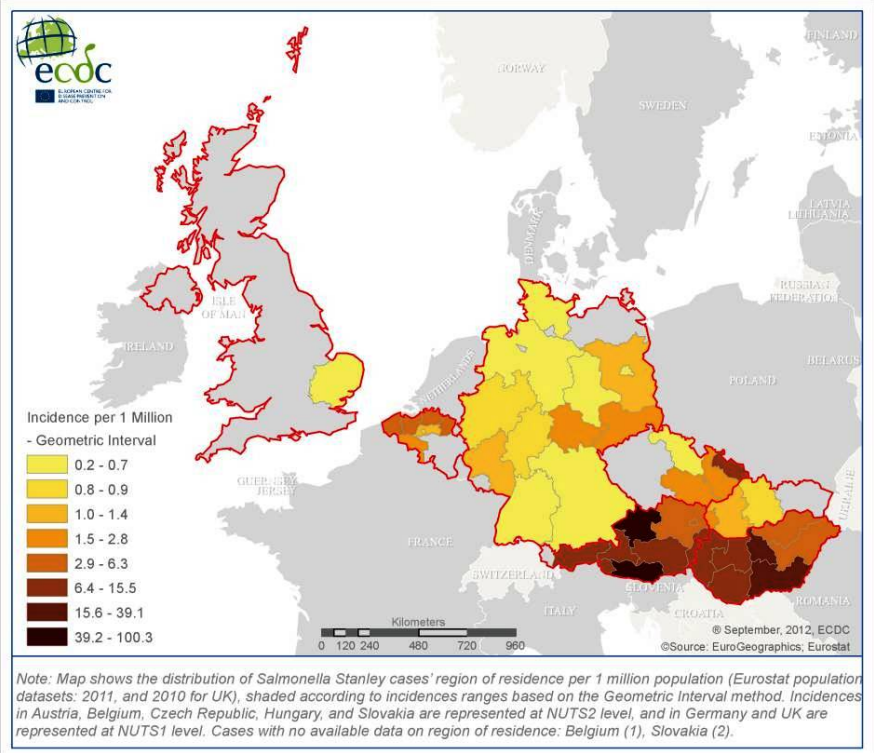
Joint ECDC/EFSA RRA



Note: Map shows the distribution of Salmonella Stanley cases' region of residence per 1 million population (Eurostat population datasets: 2011, and 2010 for UK), shaded according to incidences ranges based on the Geometric Interval method. Incidences in Austria, Belgium, Czech Republic, Hungary, and Slovakia are represented at NUTS2 level, and in Germany and UK are represented at NUTS1 level. Cases with no available data on region of residence: Belgium (1), Slovakia (2).

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

Opening date: 2 December 2011 Latest update: 24 May 2012

Epidemiological summary

Weekly reporting on influenza surveillance for the 2012-2013 season started in week 40/2012 in Europe. In week 44/2012, all 26 reporting countries experienced low intensity of clinical influenza activity. Out of 279 sentinel specimens tested in 19 countries, only two were positive for influenza virus. No hospitalised influenza laboratory-confirmed case were reported. Five weeks into the surveillance season for influenza, there has been no evidence of sustained transmission in EU/EAA countries.

Web source: ECDC Weekly Influenza Surveillance Overview

ECDC assessment

At present there is no evidence of significant influenza activity in Europe.

Vaccine supply issues - Multistate (global) - 2012-2013 Influenza vaccines

Opening date: 30 October 2012 Latest update: 30 October 2012

Epidemiological summary

The Italian regulatory agency AIFA stopped the use of Novartis AG's influenza vaccines after the company informed Italian authorities of a build-up of particles in its products, Agrippal (Also marketed as Agrippal S1 (Italy), Chiroflu (Portugal and Spain), Begripal (Germany) and Sandovac (Austria)) and Fluad (also marketed as Grip Guard (France) and Chiromas (Spain). There have been no reports of extra adverse events following immunisation (AEFIs) associated with the vaccines.

As of 31 October, six EU countries (Austria, France, Germany, Italy, Spain and the UK) have taken similar precautionary action, based on AIFAs decision and stopped the use and/or distribution of Novartis AG's influenza vaccines because of possible quality problems. The Greek Ministry of Health has corrected media rumours and announced that the two products have not been marketed in Greece. Health Canada and the MRA in Switzerland lifted a temporary ban on the use of these products on 31 October. The action of countries ranges from whole brand recall, lot recall, voluntary request to the company to suspend

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distribution and recommendation to health professionals not to use the vaccines. There is no evidence of any adverse events reported.

Earlier this month, distribution of another seasonal influenza vaccine - Inflexal V (also marketed as Inflexal V, Isiflu V and Viroflu) from Crucell Switzerland AG - was suspended by the company after unexpected growth of bacteria in two lots of production. The company took the decision to put the whole distribution on hold, although there is no indication that the quality and integrity of other lots were compromised. The company has asked customers to seek alternative supply.

On 10 October, the Finnish public health authorities recommended not using Fluarix from GlaxoSmithKline for people under 65 years of age as a precautionary measure pending results of immunological research into the association between pandemic influenza vaccinations and narcolepsy.

Web sources: EMA | WHO Euro | MHO Italy | BMFG Austria| MOH France | MOH Germany | MRA Spain | Health Canada | NPHI Finland | MHRA UK

ECDC assessment

Several Member States are affected by the reduced number of available seasonal influenza vaccine doses in the EU and are yet to see the impact this will have on seasonal influenza vaccination campaigns in Member States that were planning to use these vaccines. It is still peak immunising season and the impact on the immunisation programmes could be considerable with many people missing vaccination.

Actions

The Directorate-General for Health and Consumers has requested the European Commission and European Medicines Agency to work collaboratively to ensure coordination and adequate information exhange between Member States, European Commission and agencies. The European Medicines Agency has done a survey of authorisation/marketing of the Novartis vaccines in Member States and the effects of recalls and sale bans on vaccine supply.

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.

Novel Coronavirus - Multistate - Severe respiratory syndrome

Opening date: 24 September 2012 Latest update: 5 November 2012

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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-corononavirus, 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.

A third case due to the novel coronavirus was reported on 4 November by Saudi Arabia. The patient was admitted to hospital in Riyadh due to pneumonia and was subsequently diagnosed with the novel coronavirus by RT-PCR. He is out of intensive care and is currently recovering. He had no epidemiological link to the two earlier reported novel coronavirus cases. He has no recent travel history. He reports having visited a farm one week prior to disease onset. Preliminary investigations of family members and contacts including health care workers have not identified secondary cases. However, these investigations are still on-going.

Web sources: Interim case definition -WHO |HPA infection control advice |Partial genetic sequence information |ProMed link to third reported case

ECDC assessment

A novel coronavirus has been identified in three patients with severe respiratory and, in two of the cases, renal disease. 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.

Actions

ECDC has prepared a rapid risk assessment the public version of which was posted on the ECDC website.
An epidemiological update was published on 6 November 2012.

Marburg virus - Uganda - 2012 Outbreak in Kabale

Opening date: 25 October 2012

Epidemiological summary

An outbreak of Marburg virus disease has been reported in Kabale district, South West Uganda.
As of 5 November 2012, 20 cumulative cases (eight probable, 12 confirmed) have been reported including eight fatalities. The outbreak affects five districts: Kabale; Kampala (city); Ibanda; Mbarara; and Kabarole. One of the deaths reported was a health worker. As of 31 October, 13 patients were admitted to hospital and the latest confirmed case was admitted on 26 October 2012. An investigation into the outbreak is ongoing.

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Earlier outbreaks in Uganda include three cases in mineworkers in 2007, and two cases in 2008 in a Dutch tourist and a tourist from the US after returning from holiday in Uganda. To date, the source of the exposure for those cases has not been confirmed, although it is known that they independently visited the Python Cave, a bat cave in Queen Elizabeth National Park in western Uganda where bats were present. All Marburg cases up till now occurred in western Uganda.

Web sources: MOH Uganda| US CDC Travel Notice| WHO |

ECDC assessment

This outbreak has now spread to more than one district and further cases are expected to occur. WHO does not recommend that any travel or trade restrictions be applied to Uganda with regards to this outbreak.

Actions

The Epidemic Intelligence team at ECDC is monitoring this event.

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 6 November 2012

Epidemiological summary

Europe: There have been no reports of other confirmed autochthonous dengue infections in Europe so far in 2012 besides the ongoing dengue outbreak in Madeira.

Asia: Dengue activity is variable. From the WHO Western Pacific Region update, Australia, Cambodia, Lao PDR, Malaysia, Philippines and Vietnam have reported more cases in 2012 than for the same time period in 2011. There is a declining trend in Australia, Cambodia, Philippines and Vietnam, whilst current levels remain low overall in Malaysia and Singapore. For the rest of Asia, the dengue epidemic in India shows an increasing trend across all states in India. Media attention is focusing on New Delhi, which has now reported almost 1 300 cases, and health authorities believe that the mosquito, *Aedes albopictus*, could be responsible for the recent spike in cases.

Latin America: High activity is reported in all of Central America. Mexico has an upward trend across most states and has reported over 24 000 dengue cases nationally. Of note is the 50% DHF rate nationally which is extremely high and there is now the arrival of DENV- 4 in Yucatan State. In Paraguay, the Ministry of Health is warning of a dengue epidemic if people do not help eliminate mosquito breeding sites.

The Caribbean: High activity continues to be reported in Puerto Rico. Latest figures from CDC show over 6 500 suspected cases, 25 confirmed cases of DHF with DENV-1 and DENV-4 pre-dominant serotypes. In Jamaica, the Health Ministry has reported significantly less dengue cases in this year's outbreak compared to the corresponding period in 2010 but despite this the government continues to increase funding in dengue and vector control programmes. There is a continued epidemic affecting the Dominican Republic with the Ministry of Health reporting over 6 000 suspected cases nationally.

Web sources:
HealthMap | MediSys | ProMED Asia update| ProMED Americas update|PAHO/AMRO | WPRO | CDC | ECDC | 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.

Assessment in relation with the outbreak in Madeira: see separate section.

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.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 8 November 2012

Epidemiological summary

During the period 3 to 9 November 2012, four new polio cases were reported to WHO, all in endemic countries. Two cases in Nigeria (WPV1 and WPV3), and one case in Pakistan and Afganistan each (both WPV1).

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.

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

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