I. Executive summary

EU Threats

New! Gastroenteritis - Germany - 2012 School outbreak
Opening date: 2 October 2012

A large gastroenteritis outbreak (more than 10 600 cases) has affected kindergarten and school children in Germany in five federal states (länder) in eastern Germany: Brandenburg, Berlin, Thuringia and Sachsen and Sachsen-Anhalt. More than 100 schools and child-care facilities are involved. The peak of the outbreak was 26 and 27 September. The symptoms, diarrhoea and vomiting, are mainly mild and have a short duration. The causative agent is still not identified. To date all cases have a link with kindergartens/schools catered by a large, multinationally operating catering company. Human health and food safety authorities are collaborating to identify the vehicle and to prevent further cases. Several schools and child-care facilities have been closed. According to RKI, there is mounting evidence that the outbreak is over.

Update of the week
Currently, at least 10 680 cases in five German Länder are known. No cases from neighbouring countries have been reported. According to RKI this is the largest known foodborne outbreak in Germany, but there is mounting evidence that the outbreak is over.

New! Salmonella Thompson - Multistate - 2012 outbreak
Opening date: 1 October 2012  Latest update: 1 October 2012

The Netherlands is reporting an increase in the number of Salmonella Thompson cases since the last week of August. From week 30 up till the end of September, 190 cases of S. Thompson have been reported in the Netherlands with 75 in week 38, three times the number of cases reported the previous week. The cases from the outbreak have the same PFGE pattern and reside all over the country. Most of the cases are female (74%). The median age is 55 (range=2-91). A case-control study performed last week showed a relation with consumption of smoked fish and with buying groceries in certain supermarkets.

In parallel, the United States and Canada are currently investigating an outbreak of S. Thompson with 113 and 105 cases respectively identified in each country since the end of June. The PFGE pattern causing the outbreak in the Netherlands and in the US and Canada are indistinguishable. No links between the cases in North America and the Netherlands have identified yet, investigations are ongoing.
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, 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 441 cases of *S. Stanley* on the Epidemic Intelligence Information System (EPIS). Of reported cases, 177 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
No new cases were reported since the last CDTR.

West Nile virus - Multistate (Europe) - Monitoring season 2012
Opening date: 21 June 2012  Latest update: 4 October 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 214 probable and confirmed cases reported in the EU, and 503 cases in neighbouring countries so far.

➤ Update of the week
Between 28 September and 4 October Italy has reported eight new WNF cases, including one new area - Padua province; and Greece reported two new cases. In countries neighbouring the EU: 13 new cases were notified by various federal regions of Russia, including one new area - Chelyabinsk oblast; three new cases were reported from Kosovo*; and Serbia reported 15 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! Crimean Congo Haemorrhagic Fever - Scotland ex Afghanistan**
Opening date: 4 October 2012

On 5 October 2012 the Scottish health authorities informed the public about a 38 year old man in Glasgow diagnosed with Crimean Congo Viral Haemorrhagic Fever after returning to Scotland on a connecting flight from Dubai. The case was hospitalised a few hours after his arrival and control measures are ongoing at national and international level.

**Novel Coronavirus - Multistate - Severe respiratory syndrome**
Opening date: 24 September 2012 Latest update: 5 October 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 further cases and no secondary cases have been detected so far.

› Update of the week
No new cases have been reported.

**Dengue - Multistate (world) - Monitoring seasonal epidemics**
Opening date: 20 April 2006 Latest update: 4 October 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 recent years highlights the risk of occurrence of locally acquired cases in EU countries where the competent vectors are present.

› Update of the week
This week the Portuguese health authorities reported two confirmed cases in Madeira archipelago that could be locally acquired. In Greece, the previously reported potential autochthonous has been definitively confirmed to be a false positive. In the rest of the world intense activity is reported from Central America, in part of the Caribbean region and in some areas of south-east Asia. The US authorities have reported this week the first locally acquired case for 2012 in Florida.

**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.

**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 cases of human infection with avian influenza A(H5N1) virus since 10 August 2012.

**Poliomyelitis - Multistate (world) - Monitoring global outbreaks**
Opening date: 8 September 2005 Latest update: 4 October 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, 154 cases have been reported worldwide compared to 429 cases during the same period last year.

› Update of the week
Since the previous CDTR, four polio cases were reported by WHO.
II. Detailed reports

**New!** Gastroenteritis - Germany - 2012 School outbreak
Opening date: 2 October 2012

Epidemiological summary
On the 04 October 2012, 10 680 cases in five German länder have been reported. They are mostly children and teenagers, as well as support staff from facilities (child care, schools) affected, the cases are spread over a total of 473 facilities. The first new cases started on the evening of 25 September 2012. The vast majority of illnesses occurred between 26 and 27 September. Since 29 September are only few new cases were reported. Subsequently there has been a sharp decrease in reports.

The main symptoms have been diarrhea and vomiting. The onset of illness was rapid, short lasting and uncomplicated. Only 28 patients have been hospitalised so far. There are only few indications of the occasional occurrence of secondary infections in contacts.

The cases occurred mainly in canteens of care facilities for children and adolescents. According to the länder almost all affected facilities were supplied by a common supplier. The cause of the disease is still unclear. Possible causative agents include norovirus and toxins from toxin-producing bacteria (eg *Staphylococcus aureus, Bacillus cereus, Clostridium perfringens*).

Due to the seasonal increase in background activity of norovirus in some regions it can't be ruled out that there are two or more different epidemic events occurring. Human and food samples are still being investigated. Control measures include food hygiene education and in some cases the facilities have been closed.

Web sources: RKI latest update 04 Oct 2012

**ECDC assessment**
According to the Robert Koch Institute this is the largest known foodborne outbreak in Germany, but there is mounting evidence that the outbreak is over.

**New!** Salmonella Thompson - Multistate - 2012 outbreak
Opening date: 1 October 2012 Latest update: 1 October 2012

Epidemiological summary
The Netherlands is reporting an increase in the number of *Salmonella* Thompson cases since the last week of August. From week 30 up till the end of September, 190 cases of *Salmonella* Thompson have been reported in the Netherlands with 75 in week 38, three times the number of cases reported the previous week. The cases from the outbreak have the same PFGE pattern and reside all over the country. Most of the cases are female (74%). The median age is 55 (range=2-91). A case-control study has been performed having analysed 70 cases and 100 control questionnaires which showed a relation with consumption of smoked fish and with buying groceries in certain supermarkets. The smoked salmon in these supermarkets is provided by a large fish company in the Netherlands. Samples of these smoked salmon were subsequently investigated by the NVWA, and revealed to be contaminated with S. Thompson. Fingerprinting laboratory investigation confirmed the S. Thompson of the patients and the smoked salmon as identical. Therefore the source of the outbreak very likely is the smoked salmon. A recall for the smoked salmon has already been initiated on Friday September 28th.

A rapid alert system for food and feed (RASFF) alert notification was sent out on 01 October 2012 about Salmonella Thompson detected in smoked salmon notified by the Netherlands mentioning a Greek supplier. This is the only RASFF notification concerning Salmonella Thompson for 2012 so far.

The Belgian NRC has received seven isolates of Salmonella Thompson since 13 July 2012. The PFGE typing will be performed.

In Finland, 16 S. Thompson cases have been reported in 2012. Five cases were domestic, and the rest had a travel history (six different countries).

In Scotland, six isolates of the serovar Thompson, or monophasic group C1 with a Thompson associated PFGE profile were reported.

The United Kingdom has identified significantly less seasonal cases of S. Thompson in 2012, particularly between June and August (four cases versus 14 and 11 in 2010 and 2011 respectively). Two of these cases are travel associated (Turkey and Thailand). In Scotland, six isolates of the serovar Thompson, or monophasic group C1 with a Thompson associated PFGE profile were reported.

*Possible causative agents include norovirus, *Staphylococcus aureus*, *Bacillus cereus*, *Clostridium perfringens*, and *Staphylococcus aureus*, *Bacillus cereus*, *Clostridium perfringens*. According to the Robert Koch Institute this is the largest known foodborne outbreak in Germany, but there is mounting evidence that the outbreak is over.*

10 680 cases in five German länder have been reported. They are mostly children and teenagers, as well as support staff from facilities (child care, schools) affected, the cases are spread over a total of 473 facilities. The first new cases started on the evening of 25 September 2012. The vast majority of illnesses occurred between 26 and 27 September. Since 29 September are only few new cases were reported. Subsequently there has been a sharp decrease in reports.

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Fourteen EU/EEA countries have not recently detected this serotype or report cases within the normal range in 2012.

Regarding the RASFF database, the most recent notification was in 2009. According to the database, S. Thompson was previously identified in infant formula, soybean meal, organic rape cake, leather fish paste, dried mushrooms, rucola salad, broccoli, sweet basil, chili powder, fresh peppermint and frozen chicken meat.

According to TESSy data, there were 227 cases of S. Thompson infection in 2011 in the EU/EEA, 111 of them were autochthonous.

In parallel, the United States are currently investigating an outbreak of S. Thompson with 113 cases identified since the end of June. The PFGE pattern causing the outbreak in the Netherlands and in the US are indistinguishable. No source has been identified yet; investigations are ongoing.

Canada has reported 105 confirmed cases of S. Thompson with highly similar PFGE pattern combinations to the Dutch outbreak. Based on the information recovered from the epidemiological investigation, smoked salmon is not indicated as a source of infection.

Links: RIVM

ECDC assessment

Sporadic cases of S. Thompson infection in the EU are not unexpected (see TESSy data).

Investigations in the Netherlands have identified smoked salmon contaminated with the same molecular typing profile than the human cases. All the products have been recalled.

So far, no clear source/vehicle has been identified in the US and Canada and a link with the Dutch outbreak cannot be established.

Except from the Netherlands, no other EU/EEA Member State is currently experiencing an outbreak.

Since the contaminated food item has been identified and the contaminated batches recalled, the occurrence of associated cases in other countries is not expected.

The information is currently exchanged through EPIS-FWD and ECDC is supporting the Netherlands by facilitating the communication exchange.

Salmonella Stanley - Multistate(EU) - 2012 outbreak

Opening date: 19 July 2012

Latest update: 20 August 2012

Epidemiological summary

There are 441 cases of S. Stanley on the Epidemic Intelligence Information System (EPIS) reported in EU Member States, 177 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, 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 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, 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 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**)

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

Malaria - Greece - 2012
Epidemiological summary

On 22 June, Greece reported a Greek resident who did not have a history of travel to endemic areas in the past five years as the first case this season. 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 additional 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 Peloponese, southern Greece. Cases were also reported from the municipalities of Attica, Evoia, Viota 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 | KEELPNO update 12 September 2012 (in English) | 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

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

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

Opening date: 21 June 2012  Latest update: 4 October 2012
Epidemiological summary

As of 4 October 2012, 214 probable and confirmed human cases of West Nile fever (WNF) have been reported in the EU this season and 503 cases in neighbouring countries.

EU Member States

**Greece**

Between 7 July and 2 October, Greece reported 154 autochthonous WNF cases in 14 former prefectures. There have been 13 WNF associated deaths. One case involves an immuno-compromised patient infected through blood transfusion.

**Hungary**

Eight cases have been reported in Hungary in 2012. Affected counties are Csongrád, Hajdú-Bihar, Somogy, Tolna, Vas, Pest, and Baranya.

**Italy**

This week eight non-neuroinvasive WNF cases were reported by Italy, with one case being from Padua province, which is newly affected for 2012. These cases were detected through the enhanced seasonal surveillance in operation within the Veneto Region, including testing of patients reporting fevers and systematic screening of blood donors. To date in 2012 Italy has reported 38 cases of WNF (22 neuroinvasive, 11 non-neuroinvasive cases, and five cases in asymptomatic blood donors). Affected provinces are: Padua, Treviso, Venezia, and Vicenza in Veneto region; Oristano in Sardinia; and the Gorizia and Pordenone provinces of Friuli Venezia Giulia Region.

**Romania**

Romania has 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 has 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 has reported four autochthonous cases of WNF in 2012. Affected areas include: Lipovo municipality; and the Struga and Krusevo municipalities of Skopje region.

**Kosovo**

On the 27 September three new cases of WNF were reported through the EpiSouth Network, with Gjilan and Prizren municipalities in Prizren region being newly affected. A total of four cases have been reported in Kosovo in 2012; Pristina city was previously affected.

**Serbia**

To date in 2012, Serbia has reported a total of 59 probable and confirmed WNF cases, including seven deaths. Known affected areas include: Grad Beograd, Juzno-Banatski district, and Sremski district.

**Russia**

As of 4 October, regional health authorities have reported 379 cases of WNF in Russia in 11 federal subjects including: Adygeya republic, Astrakhanskaya oblast, Belgorodskaya oblast, Chelyabinsk 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 has 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


**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**

**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.
**Novel Coronavirus - Multistate - Severe respiratory syndrome**

**Opening date:** 24 September 2012  **Latest update:** 5 October 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.

**Web sources:** [Interim case definition -WHO](http://www.who.int/csr/disease/last_update)  |  [HPA infection control advice](http://www.hpa.org.uk)  |  [Partial genetic sequence information](http://www.ecdc.europa.eu)
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
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 was also prepared regarding investigation and management of possible cases. Information on diagnostics has been provided to the ECDC National Microbiology Focal Points and published on ECDC website, and a link to this has been added to the rapid risk assessment. A case reporting form for EWRS has been prepared and can be activated if the situation requires it.

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 coronavirus. The Robert Koch Institute (Germany) has informed the ECDC that they are also able to detect the new coronavirus and are willing to assist Member States if required.

ECDC has prepared a rapid risk assessment the public version of which was posted on the ECDC website.

Dengue - Multistate (world) - Monitoring seasonal epidemics
Opening date: 20 April 2006 Latest update: 4 October 2012

Epidemiological summary

Europe: On 3 October the Portuguese health authorities reported two laboratory confirmed cases in the Autonomous Region of Madeira, an archipelago located at around 500 km from the African coast and 1 000 km from the European continent. The cases are suspected to be autochthonous however epidemiological investigations are still ongoing to confirm this possibility. National and local authorities are collaborating on control measures, including active case finding and disinfestations of all departing planes. Information campaigns to public and health professionals are ongoing. The media are reporting additional 22 suspected cases. The Portuguese health authorities will update the information about this event on DGS website.

Greek authorities confirmed that further investigations and re-testing have shown that the case reported at the beginning of September was a false positive laboratory result: detailed information about the investigation has been shared with ECDC.

There have been no reports of confirmed autochthonous dengue infections in the rest of Europe so far in 2012, however seasonal surveillance activities are ongoing in several regions, with only imported cases have been reported so far.

Asia: In the Western Pacific Region of WHO, the activity has been variable for several weeks, with a general declining trend. Local outbreaks have been reported recently in the southern and central provinces of Thailand. High activity is reported in Lao PDR and Viet Nam, with Hanoi experiencing a recent increase in cases. Local outbreaks are reported in other countries, in particular in Pakistan (Karachi) and in Yemen (Taiz).

North America: A locally acquired case was confirmed this week in Florida by health authorities of Dade County (Miami). This is the first local case reported in 2012 in Florida, where autochthonous cases were reported for the first time in 2009 after more than 70 years. The US authorities are regularly updating the information about imported and local cases nationwide.

Latin America: Intense activity is reported in all Central America, in particular in Mexico (nationwide) and in El Salvador (mainly in the department of San Salvador). A recent increase has been reported in Honduras. For the rest of the region a high, variable but not unexpected situation is reported.
Caribbean: Puerto Rico is still experiencing a significant outbreak, with a level of reported cases that has reached the local epidemic threshold in the last weeks. The health authorities of the Dominican Republic are considering declaring a national alert after a further increase in cases during the last few days.

Pacific Ocean: No relevant updates this week.

Web sources: HealthMap | MedISys | DGS Portugal | Eurosurveillance | KEELPNO | Miami Dade county health authorities | USGS | MMWR | ProMED | PAHO/AMRO | WPPO | 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.

Madeira has never experienced local cases of dengue. However, the presence of competent vectors, including *Aedes aegypti*, is known since 2004 and vector control measures are in place since 2005. In particular, during the last years, measures regarding the application of aerosol sprays for the disinsection of aircrafts has been put in place for all planes departing from the island. If confirmed after epidemiological investigations, this would be the first known occurrence of locally-transmitted dengue infection in Madeira, and consequently a new geographical area reporting such cases in the EU: further information is expected. However, this would not be entirely unexpected considering the proved presence in the archipelago of *Aedes aegypti*, the primary vector for the disease.

The first autochthonous case for 2012 confirmed this week in Miami, Florida (US) is not unexpected as local cases in this areas are regularly reported every summer since 2009, when the first cases have been reported after more than 70 years.

Actions
ECDC contacted the Portuguese national health authorities to request more details and offered support on laboratory, epidemiological and entomological activities. A rapid risk assessment is being prepared by ECDC and will be finalised in collaboration with the local and national authorities in Portugal.

ECDC recently published a technical report on the climatic suitability for dengue transmission in continental Europe and guidance for invasive mosquitoes’ surveillance.

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, a large outbreak was reported in the Philippines, a country with previously known outbreaks.

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.

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.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 | Latest update: 4 October 2012

Epidemiological summary

Since the last update four new cases of polio were reported, all WPV1, one from Afghanistan and three from Pakistan.

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