



## COMMUNICABLE DISEASE THREATS REPORT

## CDTR Week 22, 24-30 May 2015

## All users

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary EU Threats

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

Opening date: 9 February 2011

Latest update: 29 May 2015

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many EU countries where vaccination uptake remains below the level required to interrupt the transmission cycle. Elimination of measles requires consistent vaccination uptake above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures.

#### →Update of the week

In the EU, since the last monthly update, the outbreak in Berlin, Germany is still ongoing as well as other outbreaks in the country. During the last month, new measles outbreaks were detected in Sweden, Denmark, Norway and the United Kingdom. In the rest of the world, measles outbreaks are reported from Australia, Taiwan, Guinea, Mali, the Democratic Republic of the Congo, Sudan and Iraq.

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

Opening date: 7 March 2012

Latest update: 29 May 2015

Rubella, caused by the rubella virus and commonly known as German measles, is usually a mild and self-limiting disease 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 outbreaks were detected in EU Member States since the last monthly update.

## **Non EU Threats**

## Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014 Latest update: 28 May 2015

An epidemic of Ebola virus disease (EVD) has been ongoing in West Africa since December 2013, mainly affecting Guinea, Liberia and Sierra Leone. On 8 August 2014, WHO declared the Ebola epidemic in West Africa a Public Health Emergency of International Concern (PHEIC). On 9 May, Liberia was declared free of Ebola virus disease.

#### →Update of the week

On 28 May 2015, <u>WHO</u> reported 27 076 cases of Ebola virus disease related to the outbreak in West Africa, including 11 155 deaths.

According to WHO, there were 12 confirmed cases of Ebola virus disease reported in the week from 18 May to 24 May: 9 from Guinea and 3 from Sierra Leone. Five districts (3 in Guinea, 2 in Sierra Leone) reported at least one confirmed case, compared with 6 districts from the previous week.

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

Opening date: 24 September 2012 Latest update: 29 May 2015

Since April 2012 and as of 29 May 2015, 1 167 cases of MERS-CoV have been reported by local health authorities worldwide, including 479 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East or have returned from this area. The source of the virus remains unknown but the pattern of transmission and virological studies point towards dromedary camels in the Middle East being a reservoir from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission is amplified among household contacts and in healthcare settings.

→Update of the week

Since the last update on 21 May, <u>Saudi Arabia</u> has reported five additional cases of MERS-CoV infection and eight deaths in previously reported cases.

On 20 May 2015, the <u>South Korean Centres for Disease Control and Prevention</u> reported a case of MERS-CoV in a 68-year-old man as well as eight secondary confirmed MERS-CoV cases among contacts of the index case.

On 29 May, <u>China</u> reported a confirmed case of MERS-CoV infection imported from South Korea. This case is a contact of the third and fourth MERS-CoV cases previously reported in South Korea and was identified in Hong Kong. This is the first case of MERS-CoV infection diagnosed in China.

On 23 May, the health authorities in Qatar reported a case of MERS-CoV in a 73-year-old male.

## Influenza A(H5N1) and other strains of avian flu - Multistate (world) - Monitoring globally

Opening date: 15 June 2005

Latest update: 29 May 2015

The influenza A(H5N1) virus, commonly known as bird flu, is fatal in about 60% of human infections. 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

Since last week, there has been no new update from WHO. On 7 May, Egypt reported an influenza A(H9) low pathogenic virus infection in a 7-year-old child.

## Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005

Latest update: 28 May 2015

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission stops and the world is polio-free. Polio was declared a Public Health Emergency of International Concern (PHEIC) on 5 May 2014 due to concerns regarding the increased circulation and the international spread of wild poliovirus during 2014. On 6 May 2015, the Temporary Recommendations in relation to PHEIC were extended for another three months.

→Update of the week

In the past week, one new case of poliovirus type 1 (WPV1) was reported in Afghanistan.

Ministers of Health from around the world adopted a landmark <u>resolution</u> to end polio once and for all at the World Health Assembly in Geneva last week. The discussions were informed by a <u>status</u> report prepared by the Global Polio Eradication Initiative.

## **II. Detailed reports**

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

Opening date: 9 February 2011

Latest update: 29 May 2015

## Epidemiological summary

#### **EU Member States**

#### <u>Sweden</u>

An outbreak involving five unvaccinated people is reported in Malmö. The primary case that was diagnosed on 30 April is thought to have been infected in Germany. Contact tracing is ongoing. Several hundred contacts have been informed about the exposure and/or were given prophylaxis.

#### Denmark

According to Statens Seruminstitut (SSI), six cases of measles have been detected in May in Nordsjælland (North Zealand). The primary case was a 3-year-old unvaccinated child. Four additional cases occurred in the same family, including three children aged 0 to 10 years, all of them unvaccinated. An additional case of measles in a younger fully vaccinated adult can be linked epidemiologically to the 3-year-old child during his hospitalisation in early May. Typing of measles virus from the latter patient is awaited. Genotyping of the virus isolated from the first case, showed type H1, which is identical to the measles virus that has given rise to a major measles outbreak in China. The genotype is almost 100% identical to genotype H1, isolated from an adult Dane who was infected with measles during a stay in China at the end of March 2015 and who became ill in early April. No contact could be established between these two cases and as more than two incubation periods have passed between the diagnoses, it is possible that there has been an intermediate patient who has not been diagnosed. Typing of the virus isolated from two of the four members of the family is also H1 genotype. There is ongoing contact tracing by the Ministry of Health in order to clarify the vaccination status among contacts.

As of week 20, nine cases of measles have been reported in 2015 in Denmark.

#### Germany - Update

Between 1 January and 30 April 2015, 1 944 measles cases have been reported to the national public health authority in Germany. Most cases can be attributed to ongoing outbreaks in Berlin, Saxony, and Thuringia according to data transmitted to Robert Koch Institute.

The outbreak of measles in Berlin is weakening but still ongoing. It is believed that the outbreak started in early October 2014 when a child asylum seeker from Bosnia and Herzegovina arrived in Berlin with the disease. The disease later spread to the city's resident population. As of 15 May 2015, 1 172 cases have been reported since calendar week 41, 2014 until 30 April 2015. Of these, 125 (10.7%) were younger than 1 year, 206 (17.6%) were children aged 1 to 4 years, and 106 (9%) were between 5 and 9 years old, 230 (19.6%) were aged between 10 and 19 years and 505 (43.1%) were adults aged 20 years and older. Eighthundred and six of the cases were laboratory confirmed, 237 were epidemiologically linked to laboratory-confirmed case and 129 cases were clinically compatible measles. Hospitalisation was reported for 284 cases (24%), of whom 162 (57%) were 20 years and older. No cases with encephalitis have been reported so far, but one unvaccinated toddler died in February due to measles. Measles virus genotype D8 (Rostov-on-Don RUS/47.13/2) and associated variants has been identified in almost all investigated cases, including the index case.

Control measures being implemented by German health authorities in the affected areas include information to health professionals, public facilities, and the population. Post-exposure vaccinations are provided by health authorities in affected institutions.

#### <u>UK</u>

Media report a measles outbreak near Plymouth with two confirmed cases in the Ashburton area and three other suspected cases nearby. Letters have been issued to parents at local schools advising them that measles is circulating in the community and to ensure their children are fully protected against the condition by having two doses of the MMR vaccine.

#### <u>Norway</u>

Media report one case of measles diagnosed in a pupil in Snåsa municipality in Nord-Trøndelag. Unvaccinated individuals are

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encouraged to get vaccinated.

#### The rest of the world

#### Australia

<u>Media</u> report on 19 May that a Queensland paramedic ill with measles attended four Brisbane hospitals for work on multiple occasions not knowing he was contagious. The 32-year-old man also visited Moreton Island during his incubation period. He has since been admitted to hospital in a serious condition. Contact tracing is ongoing.

#### Taiwan

On 21 May 2015, the Centers for Disease Control in Taipei said that four employees at a duty-free shop in Taipei who were diagnosed with measles might have contracted the disease from tourists. None of the three females and one male had travelled overseas before the onset of the disease. More than 1 200 of their identified contacts, including their families and co-workers as well as the medical personnel that treated them, will be monitored until 3 June 2015. The CDC also urged the remaining staff at the duty-free shop to get vaccinated to prevent the spread of the disease.

#### <u>Guinea – Update</u>

From the beginning of epidemiological week 20 of 2015, the surveillance system has recorded a cumulative 1 866 suspected measles cases. Seven deaths were recorded during the same period with a cumulative attack rate of 10.8 per 100 000 and a cumulative lethality of 0.4%. During this week, peaks were observed in the health districts of Macenta (19 suspected cases and zero death), Lola (9 suspected cases and zero deaths) and N'Zérékoré (9 suspected cases and zero deaths). In total, 127 samples were collected, of which 66 were tested positive for measles IgM (52% positivity). All negative cases of measles have been tested negative for rubella.

#### Democratic Republic of Congo

<u>Media</u> report that about a hundred children from zero to five years of age died since January as a result of the measles epidemic in the territory of Pweto (Katanga), an area that has not had measles outbreaks for years. The outbreak is attributed to the movement of the people of the Mayi-Mayi in the area. There is also an epidemic of measles in <u>Malemba Nkulu</u>, as well as in Katanga Province, where on average 395 cases per week have been reported during the last four weeks.

#### <u>Sudan</u>

As of 3 May, 4127 suspected cases of measles have been reported in Sudan in 2015, with 2 336 cases confirmed. The number of deaths in 2015 has risen to 35.

#### Mali

A measles epidemic is ongoing in the health districts of Tessalit and Kida with 16 confirmed cases. A temporary medical mission of WHO, which was already on the ground to support the delivery of health services, intends to organise a vaccination campaign to respond to the epidemic.

#### <u>Iraq</u>

There are outbreaks of measles in Iraq with 842 cases reported in 2015 in several districts as of 20 April 2015.

#### Publication

#### Long-term measles-induced immunomodulation increases overall childhood infectious disease mortality

Immunosuppression after measles is known to predispose people to opportunistic infections for a period of several weeks to months. Researchers show that measles has a more prolonged effect on host resistance, extending over 2 to 3 years. Their data provide an explanation for the long-term benefits of measles vaccination in preventing all-cause infectious disease. By preventing measles-associated immune memory loss, vaccination protects polymicrobial herd immunity.

**Web sources:** <u>ECDC measles and rubella monitoring</u> | <u>ECDC/Euronews documentary</u> | <u>MedISys Measles page</u> | <u>EUVAC-net ECDC</u> | <u>ECDC measles factsheet</u>

## ECDC assessment

The target year for measles elimination in Europe is not reachable for 2015 due to continuing endemic measles transmission in many EU Member States.

## Actions

ECDC monitors measles transmission and outbreaks in EU and neighbouring countries in Europe on a monthly basis through enhanced surveillance and epidemic intelligence activities.

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

Opening date: 7 March 2012

Latest update: 29 May 2015

## Epidemiological summary

Twenty-seven EU/EEA countries reported 4 394 rubella cases during the period April 2014 to March 2015. Poland accounted for 96% of all rubella cases in the 12-month period. In 23 of the 25 countries which reported consistently over the 12-month period, the rubella notification rate was the targeted less than one case per million population. Of these, fourteen countries reported zero cases.

**Web sources**: <u>ECDC measles and rubella monitoring</u> | <u>ECDC rubella factsheet</u> | <u>WHO epidemiological brief summary tables</u> | <u>WHO epidemiological briefs</u> |<u>Progress report on measles and rubella elimination</u> |<u>Towards rubella elimination in Poland</u>

### ECDC assessment

As rubella is typically a mild and self-limiting disease with few complications, the rationale for eliminating rubella would be weak if it were not for the virus' teratogenic effect. When a woman is infected with the rubella virus within the first 20 weeks of pregnancy, the foetus has a 90% risk of being born with congenital rubella syndrome (CRS), which entails a range of serious incurable illnesses. The increase in the number of rubella cases reported in Romania and Poland during the last two years and the number of babies born with CRS are cause for concern. Rubella occurs predominantly in age and sex cohorts historically not included in vaccination recommendations. To achieve rubella elimination, supplemental immunisation activities in these cohorts are needed.

## Actions

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

An ECDC report is available online: <u>Survey on rubella, rubella in pregnancy and congenital rubella surveillance systems in EU/EEA</u> <u>countries</u>

## Ebola Virus Disease Epidemic - West Africa - 2014 - 2015

Opening date: 22 March 2014

Latest update: 28 May 2015

## Epidemiological summary

Distribution of cases as of 26 May 2015:

Countries with intense transmission • **Guinea:** 3 639 cases, of which 3 214 are confirmed, and 2 423 deaths. • **Sierra Leone:** 12 735 cases, of which 8 611 are confirmed, and 3 911 deaths

Countries with previously widespread and intense transmission: • Liberia: declared Ebola-free on 9 May 2015

Countries that have reported an initial case or localised transmission: • Nigeria, Senegal, the USA, Spain, Mali, the UK and Italy (one confirmed case tested positive on 12 May 2015).

#### **Situation in West African countries**

In **Guinea**, WHO reported 9 new confirmed cases in the week up to 24 May, compared with 27 cases during the previous week. The west-Guinean prefecture of Forecariah reported the most cases of any one district, and continues to present the greatest challenge in terms of response, with multiple chains of transmission over a wide geographical area (4 sub-prefectures), and the continued occurrence of cases from unknown sources of infection. Three cases were reported in Dubreka and one in Boke.

Of the 9 cases reported by WHO in Guinea, seven cases were known contacts of a previous case, one case in Forecariah arose from an unknown source of infection, and one case was not a registered contact of a previous case but after further investigation, an epidemiological link to a known chain of transmission in Forecariah was found. During the past week, three cases were identified post-mortem and 13 unsafe burials were reported.

In **Sierra Leone**, WHO reported three new confirmed cases in the week up to 24 May. Those cases were reported from Freetown (two cases) and Port Loko (one case). The cases in Freetown were contacts of a recent case and the case in Port Loko is thought to be linked to a chain of transmission from the district of Kambia.

#### Situation among healthcare workers

According to WHO, the last healthcare worker infected in Guinea was reported on 6 April and 14 May in Sierra Leone. Overall, 869 cases and 507 deaths have been recorded among healthcare workers in Guinea (187 cases and 94 deaths), Sierra Leone (304 cases and 221 deaths) and Liberia (378 cases and 192 deaths).

Outside of the three most affected countries, two Ebola-infected healthcare workers were reported in Mali, 11 in Nigeria, one in Spain (infected while caring for an evacuated EVD patient), two in the UK (both infected in Sierra Leone), six in the USA (two infected in Sierra Leone, two in Liberia, and two infected while caring for a confirmed case in Texas) and one in Italy (infected in Sierra Leone).

#### Medical evacuations and repatriations from EVD-affected countries

Since the beginning of the epidemic and as of 29 May 2015, 65 individuals have been evacuated or repatriated worldwide from the EVD-affected countries. Of these, 38 individuals have been evacuated or repatriated to Europe. Thirteen were medical evacuations of confirmed EVD-infected patients to: Germany (3), Spain (2), France (2), UK (2), Norway (1), Italy (1), Netherlands (1) and Switzerland (1). Twenty-five asymptomatic persons have been repatriated to Europe as a result of exposure to Ebola in West Africa: UK (13), Denmark (4), Sweden (3), Netherlands (2), Germany (1), Spain (1) and Switzerland (1).

Twenty-seven persons have been evacuated to the United States.

No new medical evacuations have taken place since 18 March 2015.

#### Other news

**Guinea-Bissau:** WHO reported that investigations are ongoing to trace a contact who attended the funeral of a case in Boke and who is thought to have returned to a fishing community in Guinea-Bissau.

**Italy:** On 12 May 2015, the <u>health authorities</u> in Italy reported an EVD case in a volunteer healthcare worker who returned to Italy from Sierra Leone on 7 May. The patient developed symptoms on 10 May and was hospitalised the day after. After he was confirmed with EVD on 12 May, he was securely transferred to the National Institute for Infectious Diseases in Rome. According to the <u>medical bulletins</u> released by Spallanzani hospital in Rome, the condition of the patient is stable.

#### Images

- Epicurve 1: the epicurve shows the confirmed cases in the three most affected countries.

- Epicurve 2: the epicurve shows the confirmed cases in Guinea and Sierra Leone.
- Map: this map is based on country situation reports and shows only confirmed cases of EVD in the past six weeks.

**Web sources:** <u>ECDC Ebola page</u> | <u>ECDC Ebola and Marburg fact sheet</u> | <u>WHO situation summary</u> | <u>WHO Roadmap</u> | <u>WHO Ebola</u> <u>Factsheet</u> | <u>CDC</u> | <u>Medical bulletins from Lazzaro Spallanzani hospital</u> | <u>Italian health ministry</u> | <u>Latest situation summary</u>

## ECDC assessment

This is the largest ever documented epidemic of EVD, both in terms of numbers and geographical spread. The epidemic of EVD increases the likelihood that EU residents and travellers to the EVD-affected countries will be exposed to infected or ill persons. The risk of infection for residents and visitors in the affected countries through exposure in the community is considered low if they adhere to the recommended precautions. Residents and visitors to the affected areas run a risk of exposure to EVD in healthcare facilities.

The risk of importing EVD into the EU and the risk of transmission within the EU following an importation remain low or very low as a result of the range of risk reduction measures that have been put in place by the Member States and by the affected countries in West Africa. However, continued vigilance is essential. If a symptomatic case of EVD presents in an EU Member State, secondary transmission to caregivers in the family and in healthcare facilities cannot be excluded.

According to WHO, the number of cases has decreased in Guinea during the last week. In Sierra Leone, the number of reported cases has been stable in the past 4 weeks. In Guinea new confirmed cases are still identified among registered Ebola contacts and people continue to be diagnosed with Ebola post mortem. These patterns indicate that the disease is circulating in unrecognised chains of transmission. In order to achieve zero cases, there is a need for stronger community engagement, improved contact tracing and earlier case identification.

## Actions

As of 29 May 2015, ECDC has deployed 70 experts from within and outside the EU in response to the Ebola outbreak. This includes an ECDC-mobilised contingent of experts to Guinea. Furthermore, additional experts are already confirmed for deployment to Guinea over the next few months.

ECDC is looking for additional French-speaking experts with field epidemiology experience from EU Member States to join the ECDC-coordinated contingent in response to the Ebola outbreak in Guinea. For further information, please contact Alice Friaux at <u>alice.friaux@ecdc.europa.eu</u> with copy to <u>support@ecdc.europa.eu</u>.

An epidemiological update is published weekly on the <u>EVD ECDC page</u>.

The latest (11th) update of the rapid risk assessment was published on 11 May 2015.

On 22 January 2014, ECDC published Infection prevention and control measures for Ebola virus disease. Management of healthcare workers returning from Ebola-affected areas.

On 4 December 2014, EFSA and ECDC published a <u>Scientific report assessing Risk related to household pets in contact with Ebola</u> cases in humans.

On 29 October 2014, ECDC published a training tool on the <u>safe use of PPE</u> and <u>options for preparing for gatherings in the EU</u>. On 23 October 2014, ECDC published <u>Public health management of persons having had contact with Ebola virus disease cases in the EU</u>.

On 22 October 2014, ECDC published Assessing and planning medical evacuation flights to Europe for patients with Ebola virus disease and people exposed to Ebola virus.

On 13 October 2014, ECDC published Infection prevention and control measures for Ebola virus disease: Entry and exit screening measures.

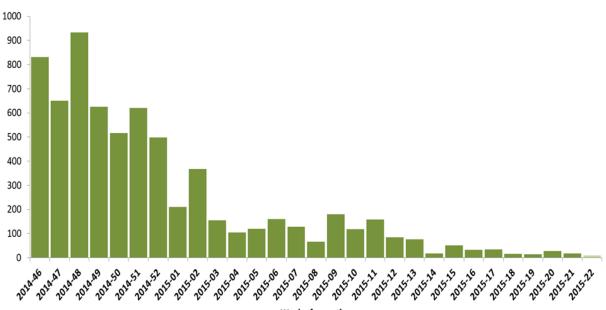
On 6 October 2014, ECDC published <u>risk of transmission of Ebola virus via donated blood and other substances of human origin in</u> <u>the EU</u>.

On 22 September 2014, ECDC published assessment and planning for medical evacuation by air to the EU of patients with Ebola virus disease and people exposed to Ebola virus.

On 10 September 2014, ECDC published an EU case definition.

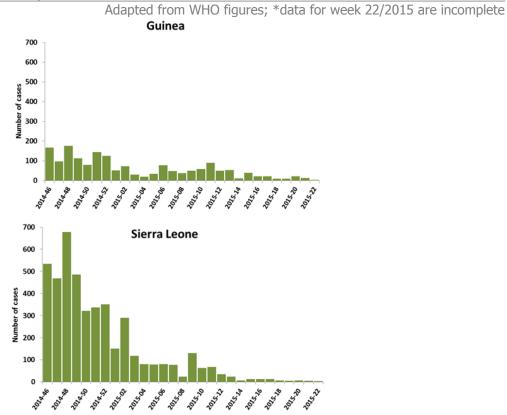
# Distribution of confirmed cases of EVD by week of reporting in Guinea, Sierra Leone and Liberia (weeks 46/2014 to 22/2015)

Adapted from WHO figures; \*data for week 22/2015 are incomplete

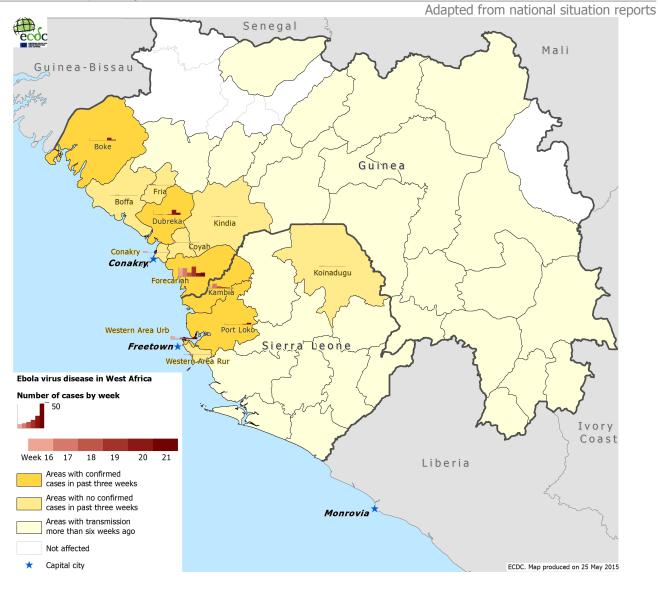


#### Week of reporting

# Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (weeks 46/2014 to 22/2015)



# Distribution of confirmed cases of EVD by week of reporting in Guinea and Sierra Leone (as of week 21/2015)



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

Opening date: 24 September 2012

Latest update: 29 May 2015

## Epidemiological summary

Since April 2012 and as of 29 May 2015, 1 167 cases of MERS-CoV have been reported by local health authorities worldwide, including 479 deaths. The distribution is as follows:

Confirmed cases and deaths by region:

### Middle East

Saudi Arabia: 1 007 cases/442 deaths

United Arab Emirates: 76 cases/10 deaths Qatar: 13 cases/4 deaths Jordan: 19 cases/6 deaths Oman: 5 cases/3 deaths Kuwait: 3 cases/1 death Egypt: 1 case/0 deaths Yemen: 1 case/0 deaths Iran: 6 cases/2 deaths

#### Europe

Turkey: 1 case/1 death UK: 4 cases/3 deaths Germany: 3 cases/1 death France: 2 cases/1 death Italy: 1 case/0 deaths Greece: 1 case/1 death Netherlands: 2 cases/0 deaths Austria: 1 case/0 deaths

#### Africa

Tunisia: 3 cases/1 death Algeria: 2 cases/1 death

#### Asia

Malaysia: 1 case/1 death Philippines: 2 cases/0 deaths South Korea: 9 cases/0 deaths China: 1 cases/ 0 deaths

#### Americas

United States of America: 2 cases/0 deaths

**Web sources**: <u>ECDC's latest rapid risk assessment</u> | <u>ECDC novel coronavirus webpage</u> | <u>WHO</u> | <u>WHO MERS updates</u> | <u>WHO</u> <u>travel health update</u> | <u>WHO Euro MERS updates</u> | <u>CDC MERS</u> | <u>Saudi Arabia MoH</u> | <u>ECDC factsheet for professionals</u>

## ECDC assessment

The majority of MERS-CoV cases are secondary cases and many result from nosocomial transmission. Dromedary camels are a host species for the virus. There is a continued risk of cases presenting in Europe following exposure in the Middle East and international surveillance for MERS-CoV cases remains essential.

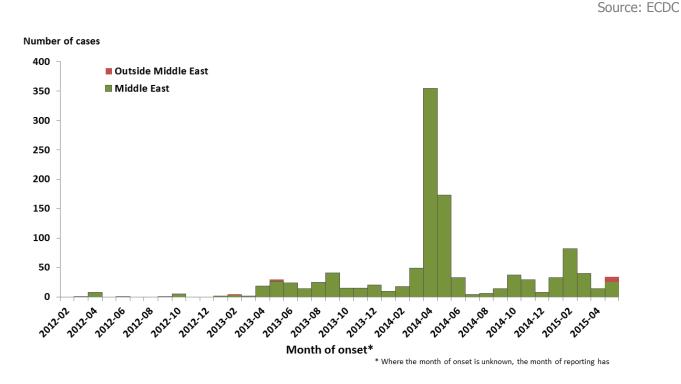
The risk of secondary transmission in the EU remains low and can be reduced further by screening for exposure among patients presenting with respiratory symptoms (and their contacts), and strict implementation of infection prevention and control measures for patients under investigation.

Family clusters and nosocomial transmission of MERS-CoV infection have been documented previously. However, this is the first time such transmission has occurred in South Korea. WHO has indicated that the virus is not behaving differently than in the past and it is direct transmission without a sustained human-to-human component.

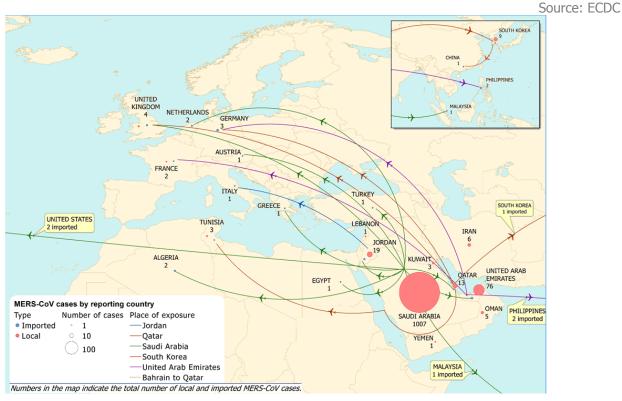
## Actions

The last <u>rapid risk assessment</u> was updated on 9 March 2015. ECDC published a <u>factsheet for health professionals regarding MERS-CoV</u> on 20 August 2014. From week 18 onwards, ECDC will monitor the situation on a monthly basis.

# Distribution of confirmed cases of MERS-CoV by first available date and place of probable infection, March 2012 - 29 May 2015 (n=1 167)



Distribution of confirmed cases of MERS-CoV by probable place of infection, March 2012 – 29 May 2015



## Influenza A(H5N1) and other strains of avian flu - Multistate (world) -Monitoring globally

Opening date: 15 June 2005

Latest update: 29 May 2015

## Epidemiological summary

### Egypt

In Egypt, as of 28 May 2015, the Ministry of Health and Population has reported 140 human cases of influenza A(H5N1), including 39 deaths in 2015. Since 2006, Egypt has reported 342 human cases, according to WHO/FAO.

### Worldwide

From 2003 to 1 May 2015, 840 laboratory-confirmed human cases of avian influenza A(H5N1) virus infection have been officially reported to WHO from 16 countries. Of these cases, 447 have died.

### Other strains of avian influenza

On 7 May, Egyptian Ministry of Health reported an influenza A(H9) low pathogenic virus infection in a 7-year-old child. The sample tested positive for RNP gene, flu A, avian H9 and flu B and was negative for all other respiratory viruses. The child presented symptoms on 29 April, was admitted to hospital and discharged alive. Before this case, since the beginning of the year, Egypt recorded two human cases of influenza low pathogenic A(H9N2), one in Aswan and one in Cairo Governorate.

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

## ECDC assessment

Most human infections of A(H5N1) are the result of direct contact with infected birds or contaminated environments, and

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countries with large poultry populations in close contact with humans are considered to be most at risk of bird flu outbreaks. Therefore additional human cases would not be unexpected. There are currently no indications of a significant change in the epidemiology associated with any clade or strain of the A(H5N1) virus from a human health perspective. However, vigilance for avian influenza in domestic poultry and wild birds in Europe remains important.

Although an increased number of animal-to-human infections have been reported by Egypt over the past few months, it is not thought to be related to virus mutations but rather to more people becoming exposed to infected poultry. Although all influenza viruses evolve over time, preliminary laboratory investigation has not detected major genetic changes in the limited number of viruses isolated from the patients and animals in Egypt compared to previously circulating isolates thus far, but further in depth analysis is ongoing.

Various influenza A(H5) and A(H7) subtypes, such as influenza A(H5N1), A(H5N2), A(H5N3), A(H5N6), A(H5N8) and A(H7N3), have recently been detected in birds in West Africa, Asia, Europe, and North America, according to OIE. Although these influenza viruses might have the potential to cause disease in humans, to date, there have been no reported human infections with these viruses with the exception of human infections with influenza A(H5N1) and A(H5N6) viruses. The risk to people from these infections in wild birds, backyard flocks and commercial poultry is considered to be low.

## Actions

ECDC monitors the worldwide A(H5N1) situation through epidemic intelligence activities on a weekly basis 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.

ECDC published a <u>Rapid Risk Assessment</u> covering A(H5N1) in Egypt on 13 March 2015. ECDC published an <u>epidemiological update</u> about A(H5N1) in Egypt on 10 April 2015.

## **Poliomyelitis - Multistate (world) - Monitoring global outbreaks**

Opening date: 8 September 2005

Latest update: 28 May 2015

## Epidemiological summary

Worldwide in 2015, 25 wild poliovirus type 1 (WPV1) cases have been reported to WHO so far, compared with 84 for the same period in 2014. Since the beginning of the year, two countries have reported cases: Pakistan (23 cases) and Afghanistan (two cases).

No circulating vaccine-derived poliovirus (cVDPV) cases have been reported so far in 2015.

**Web sources**: <u>Polio Eradication: weekly update</u> | <u>MedISys Poliomyelitis</u> | <u>ECDC Poliomyelitis factsheet</u> | <u>Temporary</u> <u>Recommendations to Reduce International Spread of Poliovirus</u> | <u>Statement on the 4th IHR Emergency Committee meeting</u> <u>regarding the international spread of wild poliovirus</u>

## ECDC assessment

Europe is polio-free. The last locally acquired wild-polio cases within the current EU borders were reported from Bulgaria in 2001. The most recent outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

The confirmed circulation of wild poliovirus in several countries and the documented exportation of wild poliovirus to other countries support the fact that there is a potential risk of wild poliovirus being re-introduced to the EU/EEA. The highest risk of large poliomyelitis outbreaks occurs in areas with clusters of unvaccinated populations and in people living in poor sanitary conditions, or a combination of both.

**References**: <u>ECDC latest RRA</u> | <u>Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA</u> | <u>Wild-type</u> <u>poliovirus 1 transmission in Israel - what is the risk to the EU/EEA?</u> |

## Actions

ECDC monitors reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being re-introduced into the EU. Following the declaration of polio as a PHEIC, ECDC updated its <u>risk assessment</u>. ECDC has also prepared a background document with travel recommendations for the EU.

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