COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 35, 27 August-2 September 2017

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: 1 September 2017

Romania and Italy have been experiencing large outbreaks of measles in 2017. Cases continue to be reported despite ongoing reinforced vaccination activities at the national level. All EU/EEA countries have reported measles cases this year, except for Latvia, Liechtenstein, Malta and Norway.

➔Update of the week

This week, updates are provided for Germany, Ireland, Italy, Romania and the United Kingdom. According to national public health authorities, measles has caused 41 deaths in EU countries in 2016 and 2017. In 2016, 12 deaths occurred in Romania and one in the UK. In 2017, deaths were reported from Romania (21), Italy (3), Bulgaria (1), Germany (1), Portugal (1) and France (1).

West Nile virus – Multistate (Europe) – Monitoring season 2017

Opening date: 30 May 2017 Latest update: 1 September 2017

During the West Nile virus transmission season, from June to November, ECDC monitors the occurrence of cases of West Nile fever in EU Member States and neighbouring countries in order to inform the blood safety authorities about areas with ongoing virus transmission. In 2016, 225 human cases of West Nile fever were reported in EU Member States and 267 cases in the neighbouring countries.

➔Update of the week

Between 24 and 31 August 2017, Hungary reported three cases in previously affected areas. Italy reported 24 cases in previously affected areas. Ten cases in previously affected areas were reported by Romania. Two cases were reported by Austria, and Serbia reported eight cases, all in previously affected areas. Romania reported six deaths, and Greece reported three deaths so far in 2017.

In addition, Italy reported 17 West Nile fever Equidae cases through the Animal Disease Notification System (ADNS) of the European Commission. One Equidae case was reported in an area where human WNF was already reported. Greece reported two new Equidae WNF cases, both in newly Equidae WNF affected areas.

Source: ADNS | TESSy | National Health Authority

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Chikungunya - France - 2017

Opening date: 11 August 2017 Latest update: 1 September 2017

As of 30 August 2017, France has reported six confirmed autochthonous chikungunya cases and one probable case of chikungunya in the Var Department in southern France. All cases live in the same neighbourhood in Cannet-des-Maures (Var) and had onset of symptoms between 28 July and 19 August 2017.

Source: France | Chikungunya factsheet | VectorNet map

➔Update of the week
Since the last CDTR and as of 30 August 2017, two additional confirmed cases have been identified, both from the same neighbourhood in Cannet-des-Maures (Var).

Non EU Threats

New! Mass gathering - Hajj - Saudi Arabia - 2017

Opening date: 28 August 2017 Latest update: 1 September 2017

This year, the Hajj takes place between 30 August and 4 September. More than one million pilgrims travel every year to Saudi Arabia for the Hajj. In August 2016, 1 325 372 foreign and 537 537 domestic pilgrims took the Hajj. According to a media report, in 2017 there is an increase by 32% of foreign pilgrims and as of 28 August, 1 724 000 foreign pilgrims have arrived mainly through airports. Due to the vaccination requirements prior to travel to Mecca, and the preparedness plans addressing the management of health hazards during and after the Hajj, the overall risk of acquiring infectious diseases during the Hajj 2017 in Saudi Arabia is considered to be low.

Sources: ECDC rapid risk assessment | Ministry of Health of Saudi Arabia | Ministry of Hajj of Saudi Arabia |

➔Update of the week
Since 28 August and as of 31 August 2017, no outbreaks related to the Hajj have been detected.

According to a ProMed posting, 39 confirmed dengue fever are detected in Bahrah, 19 of the cases occurred in August 2017. In addition there are 60 suspected cases, and 15 cases are pending laboratory confirmation. Vector control mesures are implemented.

Malaria – Cape Verde- 2017

Opening date: 10 August 2017 Latest update: 1 September 2017

In July 2017, Cape Verde reported a sudden increase in the number of malaria cases. The island country is a 'very limited risk of malaria transmission area', with limited local transmission from September to November, coinciding with the rainy season.

➔Update of the week
In 2017, as of 30 August, Cape Verde reported 110 autochthonous cases and no fatalities. A media source quoting the Ministry of Health referred to 127 malaria cases during the same period of time. According to the same media source, 119 are autochthonous cases reported since mid-July. The epicentre of the outbreak is located in the capital city of Praia in Santiago Island. According to WHO, the causative agent is *Plasmodium falciparum*.

Source: WHO

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

Opening date: 24 September 2012 Latest update: 1 September 2017

Since the disease was first identified in Saudi Arabia in September 2012, approximately 2 000 MERS-CoV cases have been detected in over 20 countries. In Europe, eight countries have reported confirmed cases, all with direct or indirect connection with the Middle East. The majority of MERS-CoV cases continue to be reported from the Middle East. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East as 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

During the month of August, Saudi Arabia reports 33 MERS-CoV cases. Twenty of the cases are from Domat Aljande, located in north-western Saudi Arabia in the Al Jawf Province, indicating a cluster. Nine of the cases in Domat Aljande, are due to nosocomial transmission, including seven healthcare workers. Eight cases are household contacts. Of the 20 cases, 13 are asymptomatic.

Of the 33 cases reported during August in Saudi Arabia, three had camel contact.

On 28 August 2017, WHO reported a case in Al Ain, in the United Arab Emirates. The case had onset of symptoms in July and is currently in ICU.

Sources: WHO | MoH Saudi Arabia

Chikungunya, dengue and Zika – Multistate (World) – Monitoring global outbreaks

Opening date: 27 January 2017 Latest update: 1 September 2017

Chikungunya, dengue and Zika virus infections are vector-borne diseases that affect 50 to 100 million people each year. In the past decade, all three diseases have been reported across an increasing number of countries. Chikungunya virus infection is being reported in Asia, Africa and, since 2013/2014, in the Caribbean, the Americas and the Pacific. Dengue fever is present in Asia, the Pacific, the Caribbean, the Americas and Africa. Zika virus circulation is reported in Asia, the Pacific, the Caribbean, the Americas and Africa. In 2017, as of 29 August, no autochthonous dengue or Zika cases related to vector-borne transmission were detected in EU/EEA Member States. In August 2017, France has reported a cluster of six confirmed cases and one probable locally-acquired case of chikungunya in Var department, in southern France.

➔Update of the week

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This month, the significant events for dengue, chikungunya and Zika are:

Dengue and chikungunya:
This month, France has reported a cluster of six confirmed cases and one probable locally-acquired case of chikungunya in Var department, in southern France. The dates of onset of the cases range from 28 July to 19 August 2017. All cases have been reported in Cannet-des-Maures. For additional information, please refer to the Rapid Risk Assessment and the epi update.

In 2017, Saudi Arabia has reported 39 confirmed dengue cases, 60 suspected cases and 15 cases pending laboratory confirmations in Mecca. Among the confirmed cased, 19 have occurred in August 2017.

Zika:
Since the last Zika monthly update in the CDTR on 28 July 2017, the changes in the Zika map are:
Americas
- In **Argentina**, the state of Tucuman changed from "areas with virus transmission following virus new/re introduction (WHO Cat. 1)" to "areas with interrupted transmission (WHO Cat. 3)".
- In **Brazil, Rio de Janeiro** changed from "areas with virus transmission following previous virus circulation (WHO Cat. 2)" to "WHO Cat. 2 areas with new documented intense transmission".
- In **Brazil, Rio Grande do Norte** changed from "areas with virus transmission following virus new/re introduction (WHO Cat. 1)" to "WHO Cat. 2 areas with new documented intense transmission".
- **Colombia** changed from "areas with virus transmission following virus new/re introduction (WHO Cat. 1)" to "WHO Cat. 2 areas with new documented intense transmission".
- In **Mexico, the State of Mexico,** has been added as "areas with virus transmission following virus new/re introduction (WHO Cat. 1)".

Asia-Pacific
- **Fiji** changed from "areas with virus transmission following virus new/re introduction (WHO Cat. 1)" to "areas with virus transmission following previous virus circulation (WHO Cat. 2)".
- **Maldives** changed from "areas with virus transmission following virus new/re introduction (WHO Cat. 1) to "areas with virus transmission following previous virus circulation (WHO Cat. 2)".

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II. Detailed reports

Measles – Multistate (EU) – Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 1 September 2017

Epidemiological summary

Epidemiological summary for EU/EEA countries, with updates since last week

Germany has reported 32 cases since 18 August 2017. In 2017, as of 30 August, Germany reported 860 measles cases. During the same time period in 2016, Germany reported 224 cases.

Ireland has reported two cases in the week ending 26 August 2017. In 2017, as of 26 August, Ireland has reported eight measles cases. During the same period in 2016, Ireland reported 42 cases.

Italy has reported 108 cases since 18 August 2017. In 2017, as of 29 August, Italy reported 4 328 cases, including three deaths. Of these cases, 288 are healthcare workers. The median age is 27 years; 88% of the cases were not vaccinated, and 7% received only one dose of vaccine. In 2016, Italy reported 861 cases.

Romania has reported 134 cases and one death since the previous report on 25 August 2017. Since 1 January 2016 and as of 25 August 2017, Romania reported 8 937 cases, including 33 deaths. Of these, 1 969 cases were reported in 2016, and 6 968 cases were reported in 2017.

United Kingdom: On 29 August 2017, media sources reported one additional case related to the outbreak in Newport and Torfaen, Wales, bringing the number of cases related to this outbreak to 17.

ECDC assessment

Measles outbreaks continue to occur in EU/EEA countries. There is a risk of spread and sustained transmission in areas with susceptible populations. Vaccination with at least two doses remains the most effective measure.

ECDC link: Measles page

Actions

EU/EEA countries report measles cases on a monthly basis to ECDC who publishes them monthly. Since 10 March 2017, ECDC has been reporting on measles outbreaks in Europe on a weekly basis. ECDC also monitors worldwide outbreaks on a monthly basis through epidemic intelligence activities. ECDC published a rapid risk assessment on 6 March 2017.

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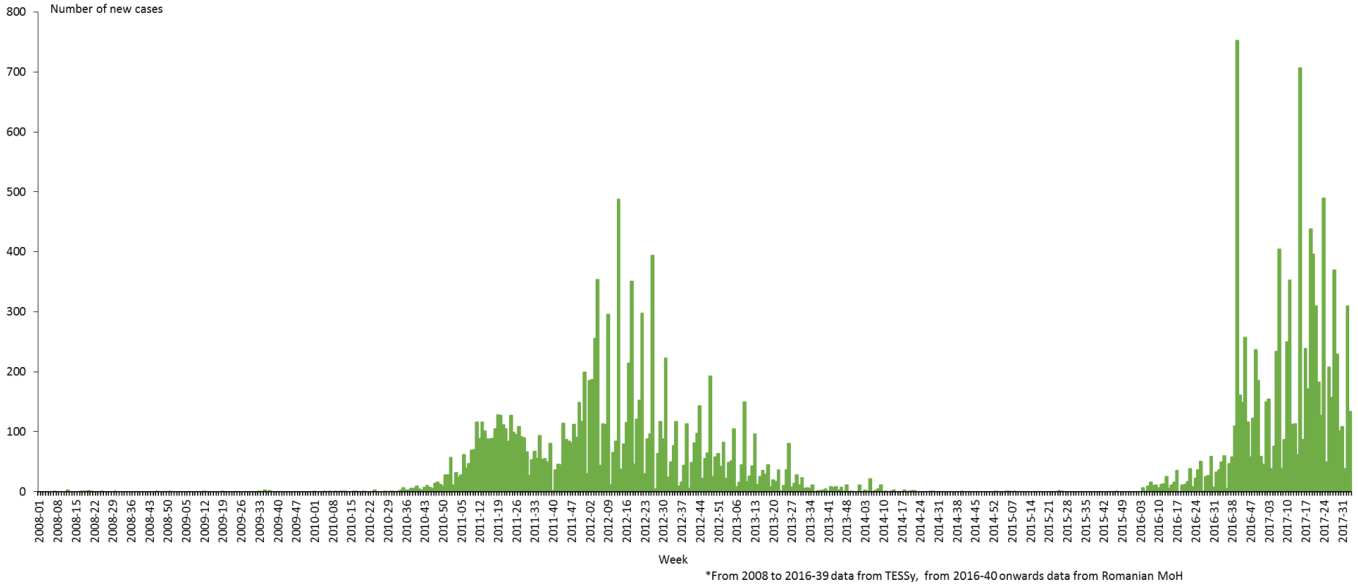
New measles cases per week of reporting, week 2008-1 to 2017-34, Romania

Data source: National Institute of Public Health Romania and TESSy (ECDC)



West Nile virus – Multistate (Europe) – Monitoring season 2017

Opening date: 30 May 2017 Latest update: 1 September 2017

Epidemiological summary

Since the beginning of the 2017 transmission season and as of 31 August 2017, Greece has reported 37 human cases of West Nile fever, Italy reported 27 cases, Romania reported 16 cases, six cases were reported by Austria and five cases by Hungary. Israel reported four cases and Serbia twelve cases.

In Equidae, Member States reported 46 West Nile fever cases through ADNS, 36 in Italy and ten in Greece.

Source: ECDC WNF page | ADNS | TESSy

ECDC assessment

The current West Nile fever epidemiological situation is consistent with observations of seasonal virus transmission from previous years. According to the Commission Directive 2014/110/EU, prospective donors should be deferred for 28 days after leaving a risk area of locally-acquired West Nile virus unless an individual nucleic acid test (NAT) is negative.

Actions

Since 2011, ECDC has been producing weekly maps displaying the areas (NUTS 3 level) where human West Nile fever cases are detected during the transmission season. The aim of these maps is to inform blood safety authorities of West Nile fever-affected areas to support the implementation of the blood safety directive.

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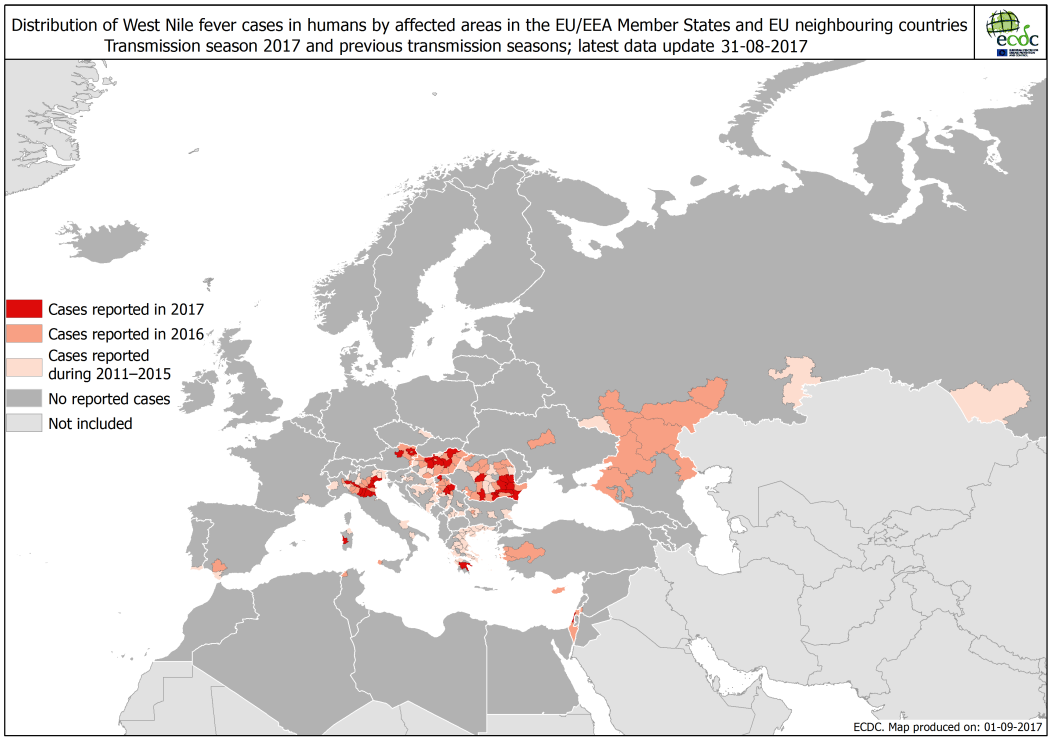
Distribution of West Nile fever cases by affected areas as of 31 August.

ECDC



Chikungunya - France - 2017

Opening date: 11 August 2017 Latest update: 1 September 2017

Epidemiological summary

Since the last CDTR and as of 30 August 2017, two additional confirmed cases have been identified from the same neighbourhood in Cannet-des-Maures (Var).

On 11 August 2017, France gave a notification of an autochthonous case of chikungunya virus infection detected in the Var department in southern France through the Early Warning and Alert System (EWRS). As of 30 August 2017, France has reported six confirmed autochthonous chikungunya cases and one probable case all living in the same neighbourhood in Cannet-des-Maures (Var). The dates of onset of the cases range from 28 July to 19 August 2017. There are no reports of imported chikungunya cases in the Var or Alpes-Maritimes Departments that could account for the introduction of the virus into the area.

French authorities have implemented successive vector control campaigns, case finding, blood safety measures, community measures for personal protection and vector control, and widely sensitised the public and physicians to this cluster of chikungunya cases.

Sources: EWRS | France

ECDC assessment

Aedes albopictus is established in the southern part of France and in regions of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Italy, the former Yugoslav Republic of Macedonia, Malta, Montenegro, Romania, Slovenia, Spain and Switzerland (see VectorNet map).

The report of a cluster of autochthonous chikungunya cases in areas of Europe where *Aedes albopictus* is established is not unexpected during the summer months, when environmental conditions are favourable for mosquitoes. In previous years, France detected several autochthonous clusters of chikungunya and dengue and has acquired experience in managing such clusters. This cluster is currently limited to cases infected within a 200-metre radius during a period of three weeks. The identification of additional cases associated with this cluster through active surveillance is possible. However, further transmission in the area is unlikely as a result of the vector control measures implemented in the affected area. The risk for a large expansion of the transmission area is very low.

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The conclusion of the latest ECDC rapid risk assessment published the 24 august 2017on the "Cluster of autochthonous chikungunya cases in France" remains valid.

Actions

ECDC published the rapid risk assessment on the "Cluster of autochthonous chikungunya cases in France" on 24 August 2017 and an epi update.

New! Mass gathering - Hajj - Saudi Arabia - 2017

Opening date: 28 August 2017 Latest update: 1 September 2017

Epidemiological summary

According to the Mecca region health authority, the number of dengue fever cases in Bahrah has reached 39 confirmed cases in 2017, 19 cases of which have occurred in August 2017, plus 60 suspected cases and 15 cases pending laboratory confirmations. Vector control efforts are ongoing.

Source: ProMed

ECDC assessment

Due to the vaccination requirements prior to travel to Mecca, Saudi Arabia, and the preparedness plans addressing the management of health hazards during and after the Hajj, the overall risk of acquiring infectious diseases during the Hajj 2017 in Saudi Arabia is considered to be low.

The risk of communicable disease outbreaks is highest for food- and waterborne diseases and respiratory illnesses due to crowding, but the risk is not considered higher than can generally be expected for international mass gatherings of this size. MERS-CoV activity continues to be reported in the Arabian Peninsula, specifically from Saudi Arabia, and therefore imported cases may be detected in Europe following the Hajj. The risk of transmission of vaccine-preventable and vector-borne diseases is considered to be low.

The national health authorities from countries from where Muslims embark on the Hajj pilgrimage to Mecca should apply appropriate strategies for the prevention and control of communicable diseases before, during and after the completion of the Hajj.

Actions

ECDC prepared a rapid risk assessment on 10 August 2017 and will monitor this event through epidemic intelligence between 28 August and 4 September 2017, when the Hajj ends.

Malaria – Cape Verde- 2017

Opening date: 10 August 2017 Latest update: 1 September 2017

Epidemiological summary

In July 2017, a sudden and significant increase in the incidence of malaria in Cape Verde was reported. In 2017, as of 30 August, Cape Verde reported 110 autochthonous cases and no fatalities. A media source quoting the Ministry of Health referred to 127 malaria cases during the same time period. According to the same media source, 119 are autochthonous cases reported since mid-July. The epicentre of the outbreak is located in the capital city of Praia in Santiago Island. According to WHO, the causative agent is *Plasmodium falciparum.*

On 31 August 2017, Portuguese health authorities issued a statement recommending chemoprophylaxis for travellers to the city of Praia (capital) on the Island of Santiago. They also recommend that pregnant women postpone their travel to Praia. US CDC has updated its recommendations for travellers regarding Cape Verde and now recommend a chemoprophylaxis with atovaquone-proguanil, doxycycline or mefloquine.

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Background: The risk of malaria for Cape Verde is considered as type A (very limited risk of malaria transmission) according to WHO. The most recent major outbreak were reported in 1999 with 140 cases and 2001 with 95 cases. In the last 10 years, the autochthonous cases in Praia have not exceeded 30.

Source: WHO | media | media | CDC

ECDC assessment

Cape Verde has been a low malaria transmission country, eligible for elimination of the disease. The large increase of autochthonous malaria cases in Cape Verde since mid-July 2017 is of concern. As the rainy season is expected to last until November, more cases are likely to be reported in the coming weeks. There is a high risk of the disease spreading within the archipelago, given the presence of *Anopheles gambiae* throughout Santiago and neighbouring islands and in the context of the upcoming rainy season.
Malaria due to Plasmodium falciparum may cause severe diseases with fatal outcome in travellers without malaria premonition and not taking prophylaxis. Therefore, European travellers should consult their travel clinic prior to their journey to Cape Verde to assess their risk and obtain the latest travel recommendations related to malaria chemoprophylaxis. Member States should consider to reinforce malaria prevention measures for travellers.

Actions

ECDC is monitoring this event through epidemic intelligence.

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

Opening date: 24 September 2012 Latest update: 1 September 2017

Epidemiological summary

Since April 2012 and as of 31 August 2017, 2 061 cases of MERS-CoV, including 782 deaths, have been reported by health authorities worldwide.

Web sources: ECDC's latest rapid risk assessment | ECDC novel coronavirus webpage | WHO | WHO MERS updates | CDC MERS | Saudi Arabia MoH | ECDC factsheet for professionals | MoH Lebanon

ECDC assessment

The risk of sustained human-to-human transmission in Europe remains very low. ECDC's conclusion continues to be that the MERS-CoV outbreak poses a low risk to the EU, as stated in a rapid risk assessment published on 21 October 2015, which provides details on the last case reported in Europe.

Actions

ECDC published the 21st update of its MERS-CoV rapid risk assessment on 21 October 2015.

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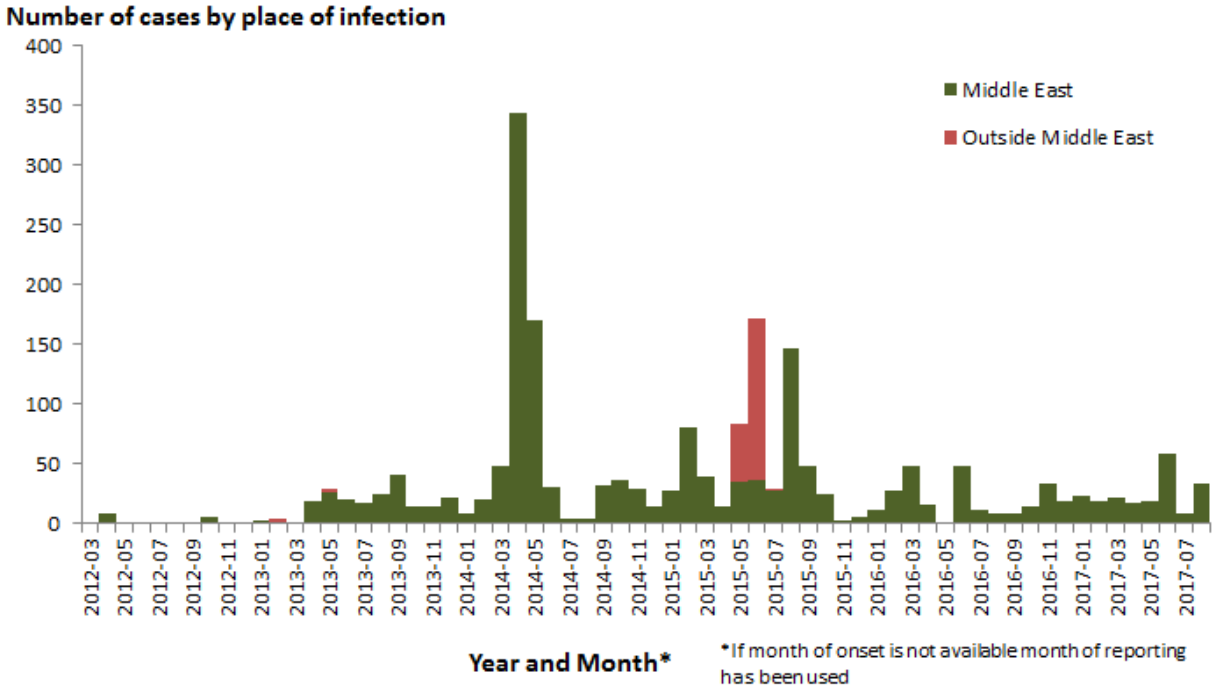
Distribution of confirmed cases of MERS-CoV by place of infection and month of onset, March 2012 – 31 August 2017

ECDC



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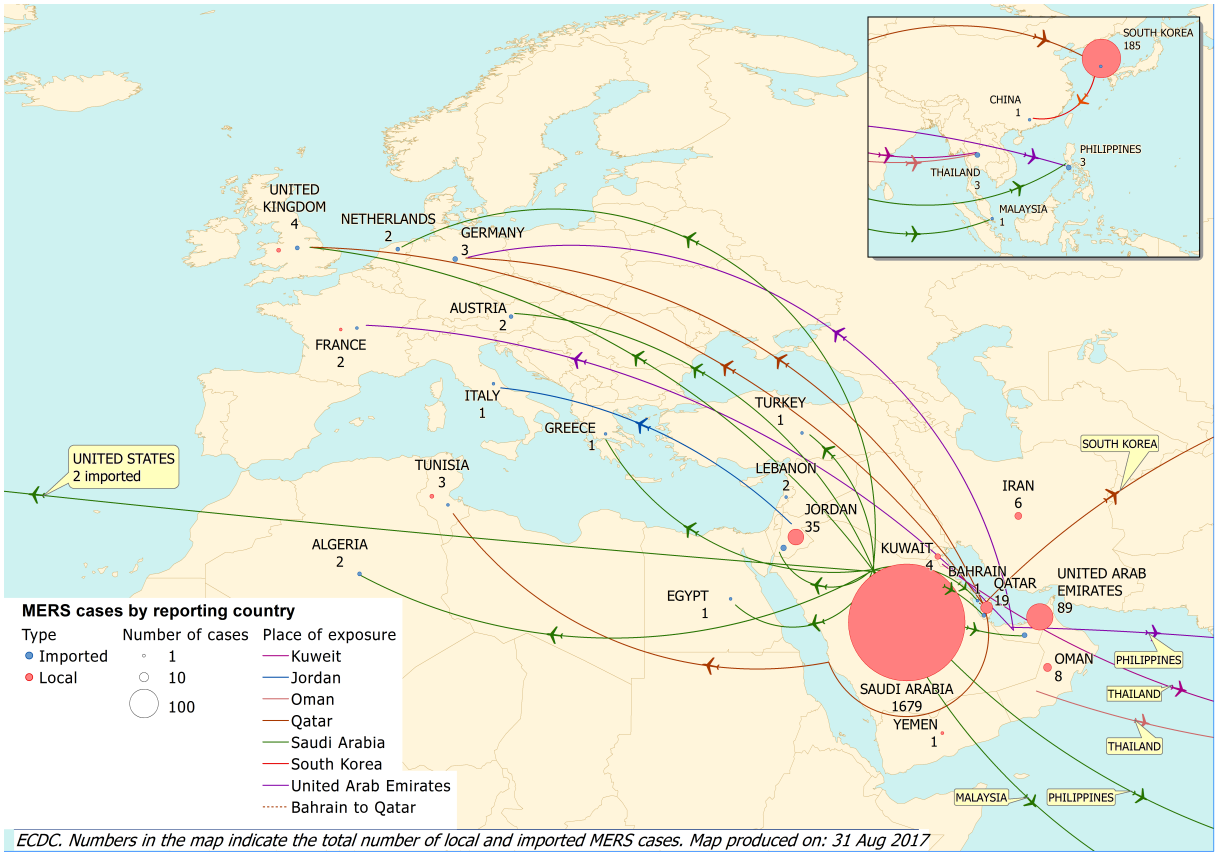

ECDC. Numbers in the map indicate the total number of local and imported MERS cases. Map produced on: 31 Aug 2017

Chikungunya, dengue and Zika – Multistate (World) – Monitoring global outbreaks

Opening date: 27 January 2017 Latest update: 1 September 2017

Epidemiological summary

Europe European Union (EU)/European Economic Area (EEA)/European Neighbourhood Policy (ENP) partner countries:

Dengue and chikungunya:
This month, France has reported a cluster of six confirmed cases and one probable locally-acquired case of chikungunya in the Var Department, in southern France. The dates of onset of the cases range from 28 July to 19 August 2017. All cases have been reported in Cannet-des-Maures. For additional information, please refer to the threat.
No autochthonous cases of dengue virus infection have been reported in EU/EEA Member States in 2016 and 2017.

Zika:

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No mosquito-borne Zika virus transmission has been reported in EU/EEA Member States in 2016 and 2017.

In 2017, as of 29 August 2017, 12 countries (Austria, Belgium, the Czech Republic, Denmark, Finland, France, Ireland, the Netherlands, Norway, Spain, Sweden and the United Kingdom) have reported 96 travel-associated Zika virus infections through The European Surveillance System (TESSy). The most recent cases with known place of infection had onset of symptoms in week 22, 23 and 28 and travel history to Ecuador, Costa Rica and Cuba, respectively.

In 2017, as of 29 August 2017, six EU/EEA Member States reported 13 Zika cases among pregnant women.

Americas and the Caribbean

Chikungunya:

In 2017, as of 25 August, the Pan American Health Organization (PAHO) has reported more than 172 000 suspected and confirmed chikungunya cases in the Americas and Caribbean region. This is an increase by 83 000 cases since the last monthly update on 28 July. Brazil represents 94% of the 172 000 cases reported in Americas since the beginning of the year. In 2016, as of 2 September, PAHO reported more than 252 000 cases.

Dengue:

In 2017, as of 18 August, PAHO has reported more than 370 000 suspected and confirmed dengue cases, including 193 deaths. This is an increase by almost 70 000 cases since the previous CDTR on 28 July 2017. Most cases are reported by Brazil (192 123), Peru (71 133), Nicaragua (33 434) and Colombia (18 235). In 2016, PAHO reported nearly 2.3 million confirmed and probable cases, including 830 deaths in the Americas and Caribbean region during the same period.

Zika:

From 18 July to 13 August 2017, Argentina has reported ten additional locally-acquired cases of Zika virus infection in Formosa Province. This brings the figure to 112 locally-acquired confirmed cases reported in 2017. The provinces that report cases are: Salta Province (56), Chaco Province (40) and Formosa Province (16).

As of 9 July 2017, Mexico reported the first five cases of Zika virus infection the State of Mexico. As of 13 August 2017, 11 cases have been reported. In 2017, as of 13 August, Mexico reported 805 cases of Zika virus infection. The majority of the cases are reported by the states of Nayarit (171), Tamaulipas (146) and San Luis Potosi' (123), located in the central area of the country.

In 2017, as of 20 August, Colombia reported 1 545 Zika cases. Between 14 and 20 August 2017, 16 cases have been reported compared to 326 in the same week of 2016.

In 2017, as of 20 August 2017, Peru reported 6 256 Zika cases compared with 1 651 cases during the entire 2016. Of the 6 256 cases, 714 are laboratory confirmed. The most affected departments remain Ica, southern of Lima and Loreto, in the northern part of the country.

On 21 August 2017, according to media, Sint Maarten reported the first microcephaly case potentially associated with Zika virus infection. The baby was born to a woman living in Saba.

Asia

Chikungunya:

Chikungunya fever cases are reported from Bangladesh and India.

In August 2017, Bangladesh reported 84 chikungunya cases bringing the number of cases to 2 784 since the beginning of the year.

In 2017, as of 20 August, India has reported almost 23 000 chikungunya suspected cases, compared with 64 057 suspected cases during the entire 2016 and 27 553 in 2015. Among the 23 000 cases, more than 7 000 are reported from 16 July to 20 August.

Dengue:

In 2017, the most affected countries in Asia are Sri Lanka, Vietnam, Malaysia and the Philippines. Sri Lanka, Laos, the Philippines, Vietnam and Myanmar have reported more dengue cases than the previous year during the same period, while Malaysia, Cambodia and Singapore have reported less cases.

In 2017, as of 25 August, Sri Lanka has reported 144 000 suspected dengue cases, including 350 deaths. This is an increase of 39 000 cases since the previous CDTR on 28 July. Approximately 44% of dengue cases were reported from the Western province. The highest numbers of dengue cases (10 590) were reported during week 2017-29 (17-23 July) and a deceasing trend is now observed in the past four weeks with 3 825 cases reported during week 2017-33 (14-20 August). In 2016, Sri Lanka reported approximately 39 000 cases between January and August. Preliminary laboratory results have identified DENV 2 as the circulating

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strain in this outbreak. Although all four DENV have been co-circulating in Sri Lanka for more than 30 years and DENV 2 has been infrequently detected since 2009.

In 2017, as of 4 August, Laos has reported 5 740 dengue cases, compared with 2 719 cases in 2016, as of 12 August.

In 2017, as of 18 August, Vietnam has reported more than 90 000 dengue cases, including 24 deaths. This is an increase by almost 40 000 cases since the previous CDTR on 28 July. In 2016, as of 31 August, more than 63 000 dengue cases, including 20 deaths, were reported.

In 2017, as of 1 July, the Philippines has reported almost 44 000 cases, compared with 25 527 cases during the same period in 2016. Among the 44 000 cases, 250 deaths were reported, compared to 334 in the same period in 2016.

In 2017 as of 22 July, Myanmar has reported almost 15 000 cases, including 81 deaths The number of cases reported in 2017 is higher than reported in 2016 and lower than in 2015.

In 2017, as of 21 August, Thailand has reported more than 18 000 dengue cases from 77 provinces. This is an increase by 5 800 cases since the previous CDTR on 28 July.

In 2017, as of 20 August, India has reported more than 36 000 dengue cases, including 58 deaths, compared with 129 166 cases, including 245 deaths, during the entire year 2016.

In 2017, as of 31 July, China has reported 503 dengue cases, which is comparable to the same period in 2016. As of 23 August 2017, south China's Guangdong Province has reported 171 dengue fever cases this year.

On 7 august 2017, Hong Kong reported the first local dengue case, a 45-year-old-man. A second local case is under investigation.

In 2017, as of 22 August, Macau has reported six local dengue cases.

On 3 August 2017, Taiwan reported two additional local dengue cases Kaohsiung City. The cases are family members of the first local case reported on July 27.

In 2017, as of 8 August, Cambodia has reported 1 604 suspected dengue cases in 2017, which is lower than during the same period in 2014–2016.

In 2017, as of 5 August, Malaysia has reported almost 60 000, compared with 67 437 cases during the same period in 2016.

In 2017, as of 24 August, Singapore has reported 1 877 dengue cases in 2017, which is lower than during the same period in 2013–2016.

In 2017, as of 24 August, Pakistan has reported 738 dengue cases from Khyber Pakhtunkhwa province located in Northwest Pakistan, including five deaths.

In 2017, Saudi Arabia has reported 39 confirmed cases in Mecca, of which 19 cases have occurred in August 2017, plus 60 suspected cases and 15 cases pending laboratory confirmations.

In 2017, as of 27 August, Nepal has reported 10 dengue cases. In 2016, more than 1 500 cases of dengue were reported. Of those, 800 cases were reported from Chitwan district close to Bharatpur, the fifth largest city of Nepal.

In 2017, as of 11 August, Indonesia has reported 37 dengue cases in Papua (eastern part of Indonesia, bordered by Papua New Guinea).

Zika:
In 2017, as of 24 August, Singapore has reported 63 cases of Zika virus infection.

Australia and the Pacific
Chikungunya:
No outbreaks detected.

Dengue:
In 2017, as of 31 July, Australia reported 695 laboratory-confirmed dengue cases in 2017, which are fewer cases than during the same time period in 2012–2016. The number of cases refer to both imported and non–imported cases. In Australia, non-imported cases occur only in Queensland.

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Between 31 July and 13 August 2017, French Polynesia reported 22 dengue cases, of which 17 were confirmed as DENV 1 infection.

In 2017, as of 22 August, New Caledonia reported 4 479 dengue cases. The circulating serotypes are of type DENV 1, DENV 2 and DENV 3. The weekly number of cases is decreasing.

In 2017, As of 21 August, Palau has reported 440 dengue cases, including five deaths. The outbreak is now declining. In 2016, 53 cases were recorded.

In 2017, as of 14 August 2017, Samoa has reported 30 dengue cases, including two deaths.

In 2017, as of 17 August 2017, American Samoa has reported 182 confirmed cases, DENV 2 has been identified as the circulating strain.

In 2017, as of 4 August, Fiji has reported 2 395 dengue cases, including six deaths. DENV 2 has been identified as the circulating strain. The weekly number of cases is decreasing.

Zika:
No outbreaks detected.

Africa
Chikungunya:
No outbreaks detected.

Dengue:
In 2017, as of 25 July, Ivory Coast has reported 858 suspected dengue cases, of which 375 are confirmed. Two deaths have been reported. Three of the four dengue virus (DENV) subtypes have been identified: DENV 2 (174 cases), DENV 3 (76 cases) and DENV 1 (13 cases). Most of the cases have occurred in Abidjan.

In 2017, as of 31 July, Kenya has reported 1 305 dengue cases. The outbreak has been reported in Mombasa (1 223), and in Wajir county (82) counties. One death has been reported.

Between mid-December 2015 and as of 6 August 2017, Seychelles has reported 3 689 suspected dengue cases including three deaths. Of these cases 1 295 were laboratory confirmed, with DENV 2 predominating. The outbreak peaked in week 2016-24 (13-19 June). A second smaller peak was observed between 15 May and 11 June 2017.

In 2017, as of 23 August, La Reunion has reported 69 locally-acquired dengue cases, which presents currently a low activity.

Zika:
No outbreaks detected.

ECDC assessment

Chikungunya: Outbreaks are still ongoing in the Americas and in Asia.
In France, the report of a cluster of autochthonous chikungunya cases in areas of Europe where *Aedes albopictus* is established is not unexpected during the summer months, when environmental conditions are favourable for mosquitoes. The risk of new clusters of local transmission emerging in the EU is currently considered moderate for chikungunya and dengue, as these diseases are endemic in large areas of the intertropical zone, repeated introductions occur through viraemic travellers returning from these areas, and weather conditions are currently suitable for *Aedes albopictus* activity in areas where it is established. More information is available on the RRA published on 23 August 2017.

Dengue: Dengue is widely spread in tropical and subtropical regions.

Zika: Despite the decrease in intensity of Zika virus transmission after the 2016 wave, cases are still reported in the Americas and Asia where the vectors, *Aedes* mosquitoes, are widely distributed. As neither treatment nor vaccines are available, prevention is based on personal protection measures. Pregnant women should consider postponing non-essential travel to Zika-affected areas.

Europe is vulnerable to the autochthonous transmission of arboviruses. The risk of onward transmission in Europe is linked to importation of the virus by viraemic patients in areas with competent vectors (*Aedes albopictus* in mainland Europe, primarily around the Mediterranean, and *Aedes aegypti* on Madeira). Autochthonous transmission from an imported viraemic case is

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possible during the summer season in the EU/EEA. Continued vigilance is needed to detect imported cases in tourists returning to the EU/EEA from affected regions.

Actions

ECDC monitors these threats through epidemic intelligence and reports on a monthly basis. ECDC published the tenth update of its rapid risk assessment on Zika virus disease epidemic on 4 April 2017.
ECDC published a rapid risk assessment on Chikungunya in France on 23 August 2017

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