COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 14, 30 Mar-5 April 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013 Latest update: 3 April 2014

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

➔Update of the week

In week 13 of 2014, of the 27 countries providing clinical data, Greece reported medium intensity activity and all the other countries reported low intensity activity.

The influenza activity is declining towards an inter-seasonal pattern with most of the countries reporting low level intensity, local or sporadic geographical spread and decreasing trend. The proportion of influenza positive tested specimens has substantially decreased this week with a low level co-circulation of influenza virus subtypes A(H3) and A(H1)pdm09.

Pertussis -Multistate (EU) - Monitoring European outbreaks

Opening date: 11 July 2013 Latest update: 3 April 2014

During the last three years there has been an increase in the number of reported pertussis cases, with large outbreaks being repeatedly reported in different regions of the world, even in those with sustained high vaccination coverage, including the EU. Due to the re-emergence of pertussis in several EU countries in recent years, ECDC has started to monitor the pertussis situation in EU Member States.

➔Update of the week

Media reported pertussis outbreaks in two schools in Alicante, Spain, in the first two weeks of March 2014. The outbreaks involved 16 cases.

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Non EU Threats

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

Opening date: 24 September 2012 Latest update: 3 April 2014

Since April 2012, 211 laboratory-confirmed cases, including 87 deaths, of acute respiratory disease caused by Middle East respiratory syndrome coronavirus (MERS-CoV), have been reported by national health authorities. To date, all cases have either occurred in the Middle East, have had direct links to a primary case infected in the Middle East, or have returned from the Middle East. The source of the virus remains unknown but the pattern of transmission points towards an animal reservoir in the Middle East, from which humans sporadically become infected through zoonotic transmission. Human-to-human transmission to close contacts and in hospital settings has occurred, but there is no evidence of sustained transmission among humans. MERS-CoV is genetically distinct from the coronavirus that caused the SARS outbreak.

➔Update of the week

Since the previous CDTR, five new cases have been reported in the Middle East. Four cases were reported from Saudi Arabia and one case from the United Arab Emirates.

Zika virus infection outbreak - The Pacific - 2013-2014

Opening date: 9 January 2014 Latest update: 4 April 2014

There is an ongoing outbreak of Zika virus (ZIKAV) infection in the Pacific affecting several countries, including Easter Island, a territory administered by Chile. There is a simultaneous dengue outbreak in the region (DENV 1 and 3). The French Polynesian health authorities report a concurrent significant increase in neurological syndromes and autoimmune illnesses. The cause and possible links with Zika or dengue virus infections are being investigated.

➔Update of the week

In **French Polynesia**, since October 2013 and as of 28 March 2014, 8 723 suspected Zika virus (ZIKAV) cases have been reported, of which 15 were reported during the past week, according to the Health Surveillance Bureau for French Polynesia. Overall, the epidemic is declining in all islands of French Polynesia. No Guillain-Barré syndrome or other neurological complications have been reported since week 9.

In **New Caledonia**, as of 27 March 2014, 401 cases of ZIKAV infection have been recorded since November 2013, of which 369 are autochthonous cases. Of these, eleven were reported during last week.

On the **Cook Islands**, as of 25 March 2014, there are 49 confirmed and 630 suspected cases with Zika-like symptoms. The first case was a returning traveller from Tahiti.

On **Easter Island**, a territory administered by Chile, the Ministry of Health of Chile confirmed their first locally acquired case of Zika fever in a resident of Easter Island on 28 January 2014. An additional 40 suspected cases have not yet been confirmed.

According to the Tropical Medical Bureau there is a first known imported case of Zika virus infection from Cook Islands into the northern Queensland, **Australia**, where the potential mosquito vector *Aedes aegypti* is present. This is only the second such case diagnosed within Australia.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 April 2014

Polio, a crippling and potentially fatal vaccine-preventable disease that mainly affects children, is close to being eradicated as a result of global public health efforts. Polio remains endemic in Afghanistan, Pakistan and Nigeria.

➔Update of the week

During the past week, four new cases of wild poliovirus type 1 (WPV1) were reported to WHO.

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 28 March 2014

On 6 December 2013, France reported two laboratory-confirmed autochthonous cases of chikungunya in the French part of the Caribbean island of Saint Martin. Since then, local transmission has been confirmed in the Dutch part of Saint Martin, on Martinique, Saint Barthélemy, Guadeloupe, British Virgin Islands, Dominica, Anguilla and French Guyana. Aruba only reported imported cases. Saint Lucia and the Dominican Republic are reporting cases suspected to be chikungunya. This is the first documented outbreak of chikungunya with autochthonous transmission in the Americas. As of 28 March 2014, there have been more than 20 000 probable and confirmed cases in the region. There have been five fatalities reported.

➔Update of the week

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During the past week, new cases have been reported in most of the affected areas. In Martinique and Guadeloupe almost all municipalities are now affected.
The Department of Health of the Dominican Republic reports a large febrile illness (with joint pain and maculopapular rash) outbreak suspected to be chikungunya. Specimens have been sent to CDC Atlanta for confirmation. Confirmation tests are pending.The media, quoting the local Ministry of Health, reports of suspected cases of chikungunya in Saint Lucia.
To date, islands with confirmed cases are Saint Martin/Sint Maarten, Martinique, Saint Barthélemy, Guadeloupe, Virgin Islands (UK), Anguilla, Dominica, Aruba, Saint Kitts and Nevis and French Guiana in mainland South America. In most of the territories of the French Antilles, given the load of cases, the health authorities decided not to seek laboratory confirmation for all suspected cases.

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 3 April 2014

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, 406 cases have been reported from China, including 121 deaths. No autochthonous cases have been reported from outside of China. Most cases have been unlinked and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak. Sustained person-to-person transmission has not been documented. Transmission has peaked in two distinct waves; during the winter months in 2013 and during the winter of 2013-2014. The reason for this pattern is not obvious. Since October 2013, 271 cases have been reported and the majority of these cases were reported from previously affected provinces or in patients who visited these provinces prior to onset of illness.

➔Update of the week
Between 27 March and 03 April 2014, five new cases of influenza A(H7N9) infection were reported in China: Jiangsu (2) Guangdong province (1), Hunan province (1) and Fujian (1).

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 3 April 2014

Dengue fever is one of the most prevalent vector-borne diseases in the world, affecting an estimated 50-100 million people each year, mainly in the tropical regions of the world. The identification of sporadic autochthonous cases in non-endemic areas in recent years has already highlighted the risk of locally acquired cases occurring in EU countries where the competent vectors are present. The dengue outbreak in the Autonomous Region of Madeira, Portugal, in October 2012 further underlines the importance of surveillance and vector control in other European countries.

➔Update of the week
During 2014, no autochthonous dengue cases have been reported in Europe.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 3 April 2014

An outbreak of Ebola Virus Disease (EVD) is currently evolving in West Africa, with onset in early February 2014, affecting Guinea and Liberia. The first cases were reported from the Forested Region of south-eastern Guinea in Guéckédou prefecture near the border with Liberia and Sierra Leone. Results from sequencing showed strongest homology of 98% with *Zaïre ebolavirus* (ZEBOV), last reported in 2009 in Kasai-Occidental Province of the Democratic Republic of Congo.

This is the first such outbreak in this region. Multidisciplinary teams have been deployed to the field to actively search and manage cases, trace and follow-up contacts, and to sensitise communities on the outbreak prevention and control.

➔Update of the week
Guinea: As of 2 April 2014, the Ministry of Health in Guinea reported 134 clinically compatible cases of EVD, of which 35 are laboratory confirmed by PCR. Eighty-four of these patients died (case fatality ratio 63%). This is an increase by 31 cases and 18 deaths since the last ECDC report on 28 March 2014.

Liberia: As of 2 April, 14 confirmed or suspected cases have been identified including six fatalities. The Liberian Ministry of Health officially announced an outbreak of EVD in a press release on 1 April 2014.

Sierra Leone: Sierra Leone has enhanced its surveillance activities following the death of two probable cases of EVD who died in Guinea and whose bodies were repatriated to Sierra Leone.

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II. Detailed reports

Influenza - Multistate (Europe) - Monitoring 2013-2014 season

Opening date: 4 October 2013 Latest update: 3 April 2014

Epidemiological summary

For week 13/2014:
- Of the 27 countries providing clinical data, Greece reported medium intensity activity and all other countries reported low intensity activity.
- Of the 718 sentinel specimens tested across 25 countries, 121 (17%) were positive for influenza virus. Of these, 117 (97%) were type A, 67 subtyped as A(H3) and 27 A(H1)pdm09, and nine (3%) were type B.
- Five countries reported 92 hospitalised laboratory-confirmed influenza cases including 51 cases admitted to intensive care units.

Web sources: WISO | ECDC Seasonal influenza | US-CDC health advisory | CDC Seasonal influenza | FluWatch, Canada | FluView, USA

ECDC assessment

The influenza season started in EU/EEA countries in week 2/2014.

Actions

ECDC will continue to produce the weekly influenza surveillance overviews during the northern hemisphere influenza season.

Pertussis -Multistate (EU) - Monitoring European outbreaks

Opening date: 11 July 2013 Latest update: 3 April 2014

Epidemiological summary

Web sources:
ECDC Annual Epidemiological Report2012 | ECDCPertussis| MedISys| WHO| Ireland |HPS Scot | PHE |THL | BMG| SMI |Hungary | Media

ECDC assessment

Over the last 20 years, the epidemiology of pertussis has changed remarkably with a shift from mainly paediatric cases (normally children <10 years of age) towards adolescents, adults and infants too young to have been fully vaccinated. Infants are at highest risk of complications and death from pertussis, and immediate interventions should focus on protecting this group. Pertussis is generally under-reported in adults but this population group is the source of infection to young children.

Pertussis P3 serotypes emerged globally after 1988, and now predominate in many EU/EEA countries. They produce more pertussis toxin which appear to suppress immunity and reduce the duration of immunity among vaccinated or naturally infected individuals. There is evidence that duration of immunity induced by the current DTaP vaccine may be shorter than that induced by the previous DTwP vaccine. Case-based pertussis data are reported to the European Surveillance System annually.

Actions

ECDC monitors pertussis transmission in Europe on a monthly basis through its epidemic intelligence activities.

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

Opening date: 24 September 2012 Latest update: 3 April 2014

Epidemiological summary

As of 3 April 2014, 211 laboratory-confirmed cases of MERS-CoV have been reported by local health authorities worldwide,

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including 87 deaths. The following countries have reported MERS-CoV cases:

Saudi Arabia: 166 cases / 64 deaths
United Arab Emirates: 18 cases / 7 deaths
Qatar: 7 cases / 4 deaths
Jordan: 3 cases / 3 deaths
Oman: 2 cases / 2 deaths
Kuwait: 3 cases / 1 death
UK: 4 cases / 3 deaths
Germany: 2 cases / 1 death
France: 2 cases / 1 death
Italy: 1 case / 0 death
Tunisia: 3 cases / 1 death

Twelve cases have been reported from outside the Middle East: the UK (4), France (2), Tunisia (3), Germany (2) and Italy (1). In France, Tunisia and the UK, there has been local transmission among patients who had not been to the Middle East, but had been in close contact with laboratory-confirmed or probable cases. Person-to-person transmission has occurred both among close contacts and in healthcare facilities. However, with the exception of a possible nosocomial outbreak in Al-Ahsa, Saudi Arabia, secondary transmission has been limited. Twenty-four asymptomatic cases have been reported by Saudi Arabia and three by the United Arab Emirates.

Web sources: ECDC's latest rapid risk assessment| ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | CDC MERS | Saudi Arabia MoH | Eurosurveillance article 26 September |

ECDC assessment

The source of MERS-CoV infection and the mode of transmission have not been identified, but the continued detection of cases in the Middle East indicates that there is an ongoing source of infection in the region. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East, and surveillance for MERS-CoV cases is essential.

The risk of secondary transmission in the EU remains low and could be reduced further through 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.

Actions

ECDC's latest epidemiological update was published on 25 November 2013.

The latest update of a rapid risk assessment was published on 7 November 2013.

The first 133 cases are described in Eurosurveillance published on 26 September 2013.

ECDC is closely monitoring the situation, in collaboration with WHO and EU Member States.

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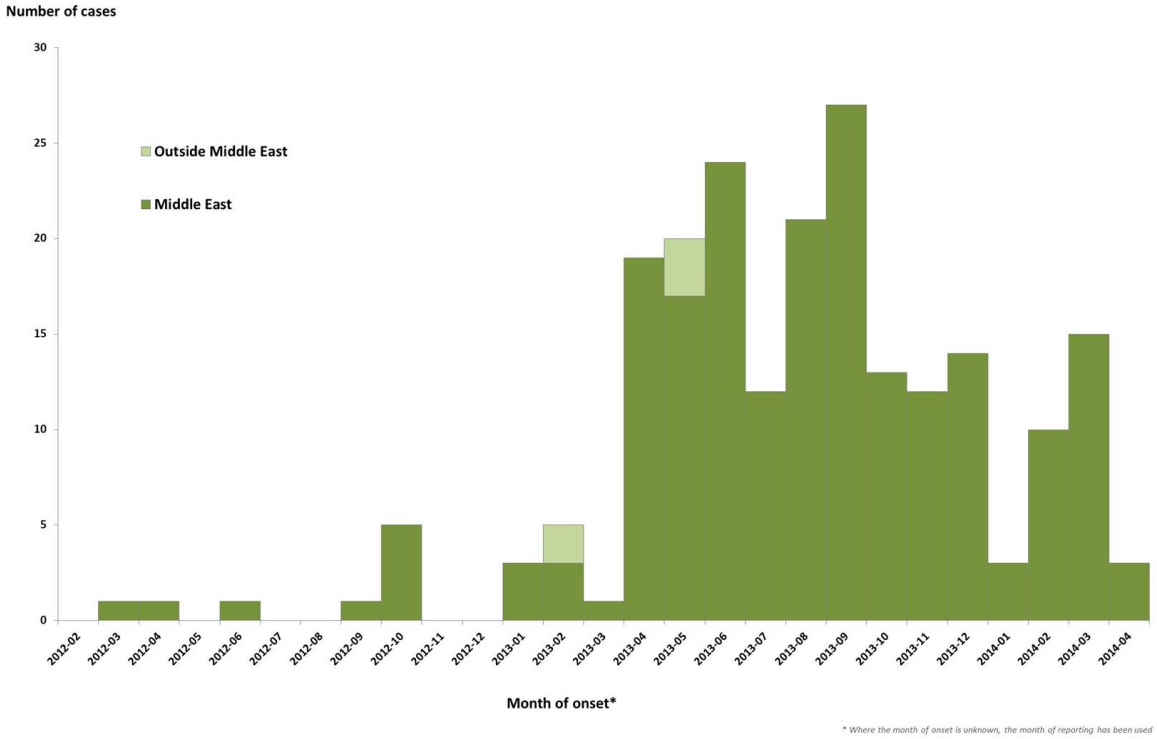
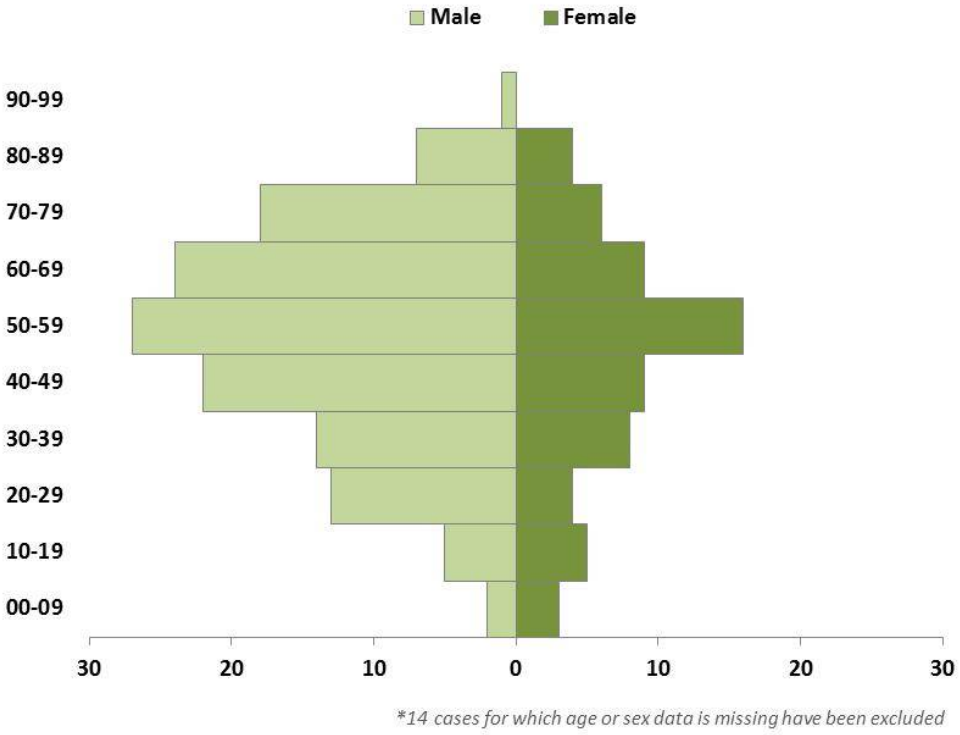
Distribution of confirmed cases of MERS-CoV by month of onset and place of probable infection, March 2012 - 3 April 2014 (n=211*)

ECDC SRS



Distribution of confirmed cases of MERS-CoV by gender and age group, March 2012 - 3 April 2014 (n=197*)

ECDC SRS



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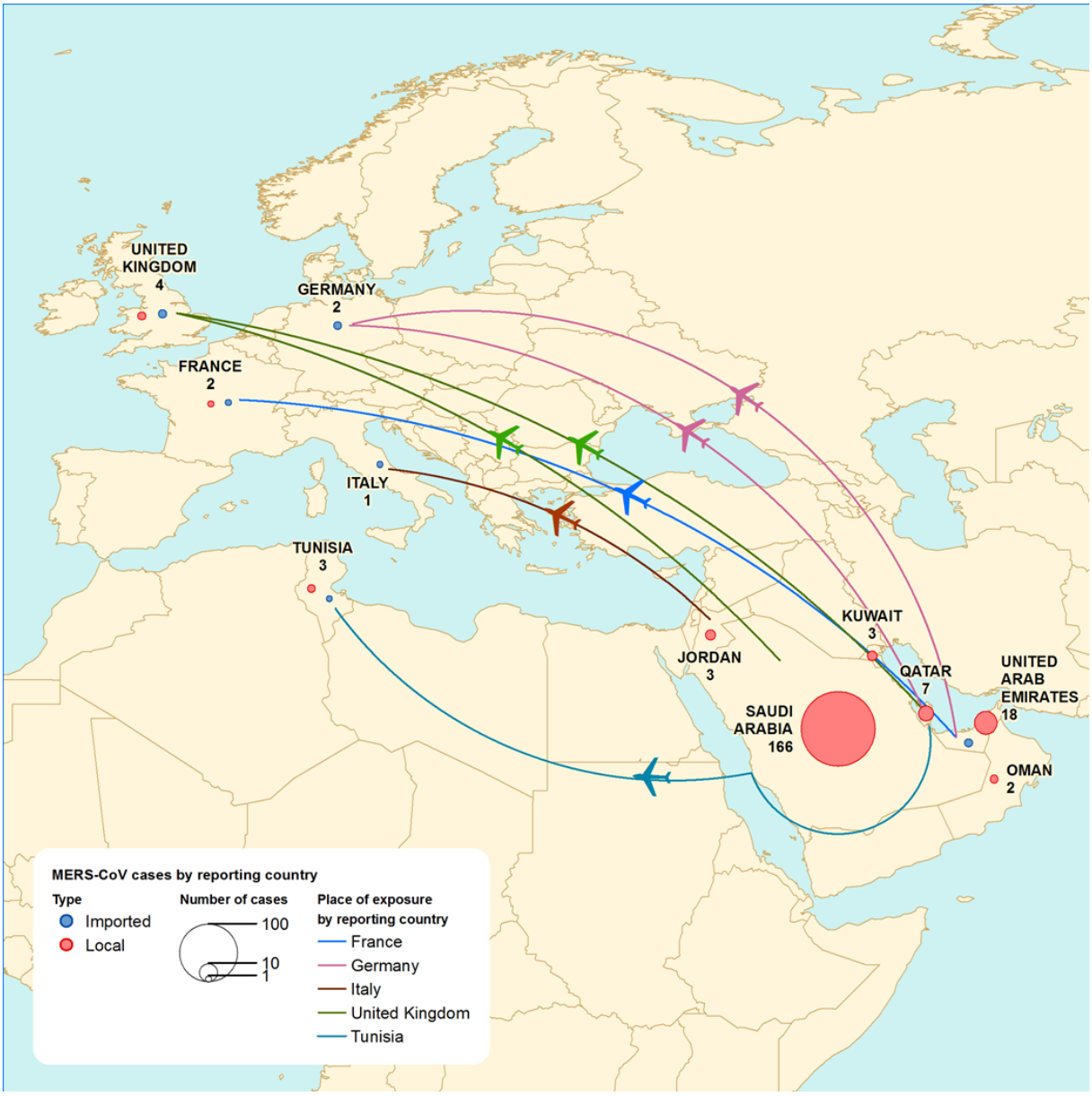
Distribution of confirmed MERS-CoV cases by place of reporting, March 2012 - 3 April 2014 (n=211)

ECDC SRS



Zika virus infection outbreak - The Pacific - 2013-2014

Opening date: 9 January 2014 Latest update: 4 April 2014

Epidemiological summary

The Zika outbreak started in October 2013 in French Polynesia and it is estimated that more than 30 000 cases have sought medical care with Zika-like symptoms there. The outbreak has since spread to other areas including a territory belonging to Chile. Public health control measures, such as increased surveillance and the promotion of measures to avoid mosquito bites, have been implemented in the affected territories.

Health authorities in French Polynesia have reported a concurrent significant increase in neurological syndromes and autoimmune illnesses. There is a simultaneous dengue outbreak in the region. The cause of the complications and their possible links with ZIKAV or dengue virus infections are being investigated. No neurological complications have been reported to date in the other affected areas.

Web sources: ECDC fact sheet | Bureau de Veille Sanitaire| NaTHNac | DASS New Caledonia

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ECDC assessment

ZIKAV infection continues to spread to new areas in the Pacific. There is a risk for the disease spreading further both in the Pacific and to the countries of the Americas where the *Aedes* mosquito is present, and for sporadic imported cases in Europe from endemic areas. Vigilance must be enhanced towards imported cases of ZIKAV infection in EU Member States and EU overseas countries and territories and outermost regions, in particular where effective vectors are present. Early detection of cases is essential to reduce the risk of autochthonous transmission. Clinicians and medical travel clinics should be aware of the situation in the Pacific islands and include ZIKAV infection in their differential diagnosis.

There is no available vaccine against ZIKAV infection. Travellers can protect themselves by preventing mosquito bites.

ZIKAV infection is a mild illness and has not been known to have neurological complications. The reported complications in French Polynesia are not confirmed to be caused by ZIKAV infections. However, there is a temporal association with the simultaneous outbreaks of ZIKAV and dengue. It is important to determine the cause of this increase and a possible association with the ongoing transmission of DENV-1, DENV-3 and ZIKAV.

Actions

ECDC published a risk assessment on 14 February 2014.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 3 April 2014

Epidemiological summary

During week 14, four new cases of WPV1 were notified to WHO (with onset of disease from 2014). Three cases were from Pakistan and one from Syria.

Worldwide, 51 cases have been reported to WHO in 2014, compared with 16 for the same time period in 2013. The most affected country is Pakistan (39 cases this year).

WPV1 positive samples have been detected by environmental surveillance in Israel since 3 February 2013 and continue to be detected in 2014 (17 positive samples have been collected this year, the most recent of which was collected on 16 February 2014).

The Strategic Advisory Group of Experts on Immunization (SAGE) met in Geneva on 1-3 April to discuss vaccination requirements for travellers from polio-infected countries, progress in eliminating wild and vaccine derived poliovirus and the status of the preparation for global OPV2 withdrawal.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet

ECDC assessment

Europe is polio free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. This was an imported outbreak and it was demonstrated that the WPV originated from India. An outbreak in the Netherlands, in a religious community opposed to vaccinations, caused two deaths and 71 cases of paralysis in 1992.

The last indigenous WPV case in the WHO European Region was in Turkey in 1998. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

The recent detection of WPV in environmental samples in Israel, and the confirmed and ongoing outbreaks in Syria and Somalia, highlight the risk of re-importation into Europe. Recommendations are provided in the recent ECDC risk assessments:
Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA
Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA?

Actions

ECDC follows reports of polio cases worldwide through epidemic intelligence, in order to highlight polio eradication efforts and

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identify events that increase the risk of re-introduction of wild poliovirus into the EU.

Due to the current situation of polio, the threat is being followed weekly.

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 28 March 2014

Epidemiological summary

Cases reported as of 28 March 2014:

- Virgin Islands (UK), 7 confirmed cases;
- Saint Martin (FR), 2 840 suspected and 790 confirmed or probable cases, 3 deaths;
- Sint Maarten (NL), 224 confirmed autochthonous cases;
- Martinique, 11 400 suspected and 1 284 confirmed or probable cases, 2 deaths;
- Saint Barthélemy, 432 suspected and 135 confirmed or probable cases;
- Guadeloupe, 2 737 suspected and 802 confirmed or probable cases, one death;
- Dominica, 487 suspected cases and 72 confirmed cases;
- French Guiana, 25 confirmed autochthonous cases and 11 imported cases;
- Anguilla, 14 confirmed cases on the island with one case probably originating from Saint Martin;
- Aruba, one imported case originating from Sint Maarten;
- St. Kitts and Nevis, one confirmed case.

ECDC assessment

Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is expanding. An increasing number of cases have been observed from most of the affected areas. The vector is endemic in the region, where it also transmits dengue virus. Vigilance is recommended for the occurrence of imported cases of chikungunya in tourists returning to the EU from the Caribbean, including awareness among clinicians, travel clinics and blood safety authorities. The autochthonous cases in French Guyana are the first autochthonous chikungunya cases in mainland South America.

Actions

ECDC published a rapid risk assessment on 12 December 2013 and an epidemiological update on 10 January and on 7 February 2014.

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The Caribbean islands

Wikipedia

Influenza A(H7N9) - China - Monitoring human cases

Opening date: 31 March 2013 Latest update: 3 April 2014

Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, human cases have continued to be reported, and as of 27 March 2014, there have been 406 laboratory-confirmed cases: Zhejiang (138), Guangdong (97), Jiangsu (45), Shanghai (42), Fujian (22), Hunan (20), Anhui (11), Jiangxi (5), Henan (4), Beijing (4), Guangxi (4), Shandong (2), Hebei (1), Guizhou (1), Jilin (1), Hong Kong (6), Taiwan (2) and one case reported in Malaysia imported from China.

Most cases have developed severe respiratory disease. One hundred and twenty-one patients have died (case-fatality ratio=30%).

Since October 2013, 271 cases were reported from Guangdong (96), Zhejiang (92), Jiangsu (18), Fujian (17), Hunan (17), Shanghai (8), Anhui (7), Guangxi (4), Beijing (2), Guizhou (1), Jilin (1), Taiwan (1) and Hong Kong (6). One exported case from China was diagnosed in Malaysia.

Web sources: Chinese CDC | WHO | WHO FAQ page | ECDC |

ECDC assessment

The continued transmission in one of the most densely populated areas in the world of a novel reassortant avian influenza virus capable of causing severe disease in humans, is a cause for concern due to the pandemic potential of the virus. Currently, the most likely scenario is that this remains a local although geographically widespread zoonotic outbreak, in which the virus is transmitted sporadically to humans in close contact with the animal reservoir, similar to the influenza A(H5N1) situation.

The fatal case of influenza A(H5N1) imported from China to Canada and the recent imported case of influenza A(H7N9) in Malaysia support the scenario that imported cases of influenza A(H7N9) may be detected in Europe. However, the risk of the disease spreading among humans following an importation to Europe is considered to be very low. People in the EU presenting with severe respiratory infection and a history of potential exposure in the outbreak area will require careful investigation in Europe.

The risk of increased transmission of H7N9 viruses between humans is not negligible. European countries should continue to prepare for the eventuality of future pandemics, including one caused by A(H7N9). Preparedness activities should include the

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precautionary development of early human vaccine candidates and increased monitoring of animal influenzas at the animal–human interface.

Actions

The Chinese health authorities continue to respond to this public health event with enhanced surveillance, epidemiological and laboratory investigation, including scientific research. ECDC is closely monitoring developments.

ECDC published an updated Rapid Risk Assessment on 26 February 2014.

ECDC published an epidemiological update on 7 February 2014.

ECDC published a guidance document for Supporting diagnostic preparedness for detection of avian influenza A(H7N9) viruses in Europe for laboratories on 24 April 2013.

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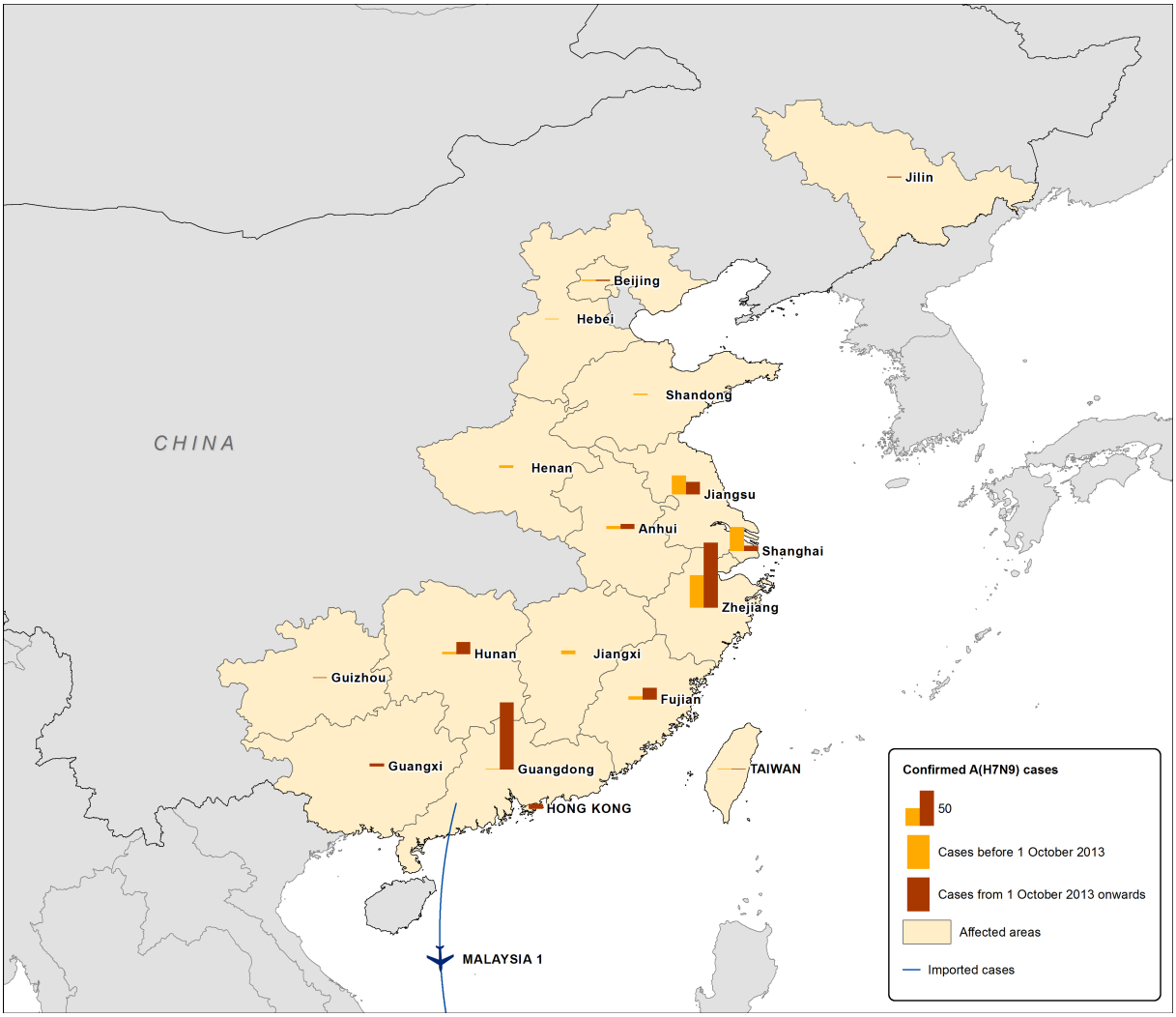
Distribution of confirmed A(H7N9) cases by place of reporting, week 14/2013 to 14/2014 (n=406)

Source: ECDC SRS



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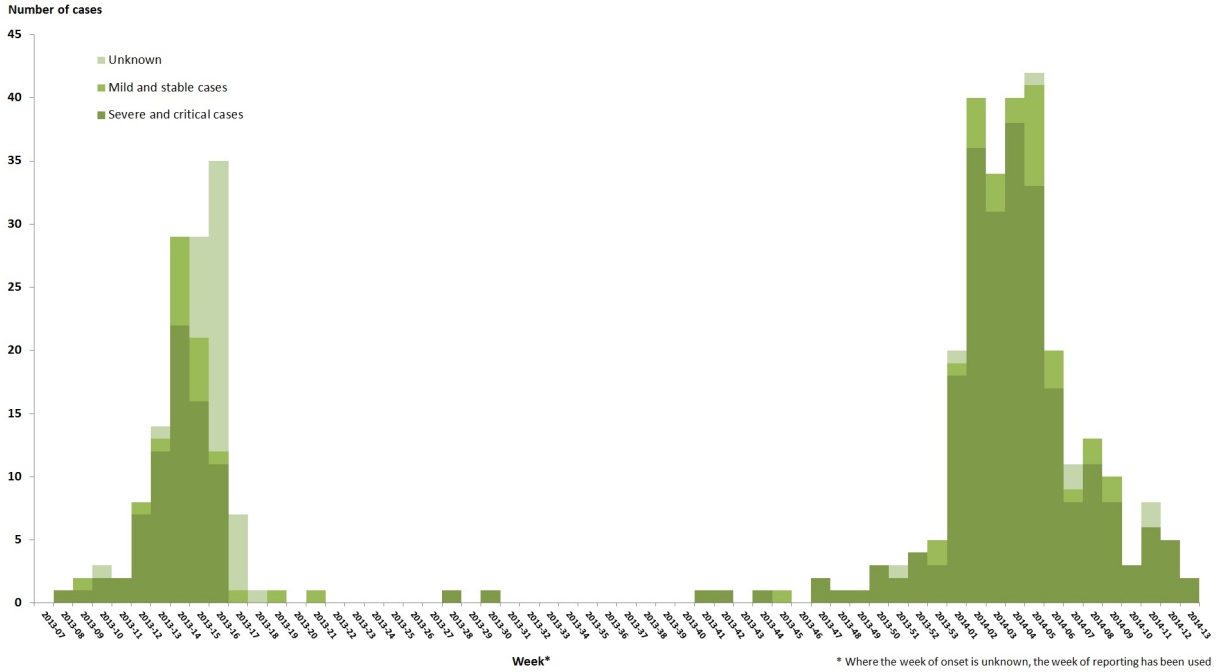
Distribution of confirmed A(H7N9) cases by week of onset and severity, week 14/2013 to week 14/2014, China (n=406)

Source: ECDC SRS



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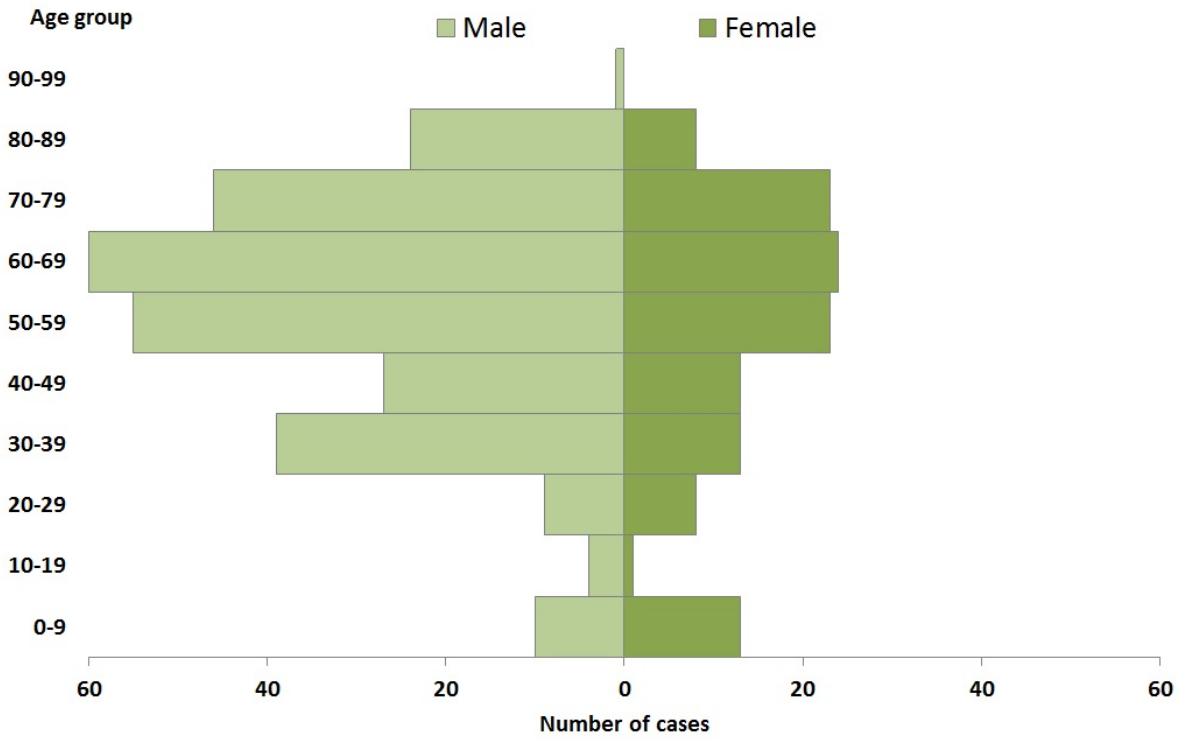
Distribution of confirmed A(H7N9) cases by age and gender, week 14/2013 to week 14/2014, China (n=401*)

Source: ECDC SRS



*5 cases where age or gender is missing have been excluded

Dengue - Multistate (world) - Monitoring seasonal epidemics

Opening date: 20 April 2006 Latest update: 3 April 2014

Epidemiological summary

Europe: No autochthonous cases have been reported so far in 2014.

Asia: As of 25 March 2014, Malaysia and Singapore have been experiencing a higher number of reported cases in 2014 compared to the same time period in 2013. The recent trend continued to decrease in Cambodia, Lao PDR, Philippines and Vietnam. Dengue activity in Malaysia is more than four times higher in 2014 than for the same time period in 2013. As of 31 March, 1 266 cases and five deaths have been reported in Metro Manila in the Philippines. The most affected municipality is Manila city with 363 cases, according to media quoting the Ministry of Health. On 23 March, a media report quoting local health authorities suggested that the occurrence of seasonal dengue cases in Karachi (Sindh province) in Pakistan is much earlier than usual this year. Normally, the dengue outbreaks start after the summer monsoons in August. To date, 136 dengue cases have been reported in Karachi.

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Oceania: A high level of dengue activity continues to be reported in Fiji, New Caledonia and French Polynesia. In Fiji, nearly 19 000 suspected dengue cases and 12 confirmed dengue deaths with 3 500 cases were reported in the past week alone, according to the media. The majority of cases are from the Central division. However, there is an increasing number of cases being observed in the Western and Northern divisions. DENV-3 has been isolated and the number of cases is expected to continue to increase. In New Caledonia, 122 cases have been reported since September 2013: 24 cases in 2013, 16 cases in January, 58 cases in February 2014 and 24 cases in March 2014. DENV-3 has been isolated in addition to DENV-1 (isolated in an imported case) from cases occurring in New Caledonia. In French Polynesia, the dengue cases reported each week are declining after seeing an increasing level of dengue since mid-July 2013. As of 28 March 2014, 1 840 cases have been reported since February 2013 with 102 cases recorded so far in March, according to the Bureau de Veille Sanitaire. Both DENV-1 and DENV-3 have been isolated.

Australia reports three ongoing dengue outbreaks in Queensland (Port Douglas, Cairns and Townsville).

Americas: In Central America, more than 2 000 cases have been reported nationally in El Salvador during the first quarter of the year, which is more than double than for the same time period in 2013, according to the media quoting the Ministry of Health.

Africa: Despite the recent locally-acquired case of dengue in the south of Réunion, no active virus circulation has been demonstrated on the island. However, many territories close to the Indian Ocean are affected by active virus circulation (Comoros, Mayotte, Mauritius), with two dengue serotypes identified. According to InVS, the risk of importing the virus is particularly high and the current climate is favourable for vector growth. As of 27 March, Tanzania has reported 140 dengue cases and one death. The most affected district is March Kinondoni, according to media quoting the Ministry of Health. The first reported dengue cases in Tanzania were in Dar es Salaam in June 2010 with 40 cases and between May and July in 2013 when 170 cases were notified. A media report quoting the Ministry of Health in Nigeria reports that the suspected fatal case of Ebola in Irrua was due to dengue haemorrhagic fever.

Websources: ECDC Dengue | Healthmap Dengue | MedISys | ProMED Americas, Asia, Pacific, Africa |

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. Before the 2012 outbreak in the Autonomous Region of Madeira, local transmission of dengue was reported for the first time in France and Croatia in 2010. Imported cases are being detected in European countries, highlighting the risk of locally acquired cases occurring in countries where the competent vectors are present.

Actions

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

From week 28 2013 onwards, ECDC has been monitoring dengue on a bi-weekly basis.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 3 April 2014

Epidemiological summary

In Guinea, cases have been reported from Conakry, Guéckédou, Macenta, Kissidougou, and from Dabola and Djingaraye prefectures. Thirty-five cases have tested positive for Ebola virus by PCR. Eleven of the confirmed cases were from Conakry. At least 14 cases in Guinea have been in healthcare workers indicating the need to further strengthen health facility-based infection prevention and control. As of 2 April, 375 contacts are under follow-up.

In Liberia, as of 1 April, 14 confirmed or suspected cases have been identified in Lofa, Nimba, Montserrado and Margibi counties including six fatalities. The number of confirmed cases still stands at two, including one patient who died last week in Lofa County and one patient who is in isolation at a hospital in Margibi County.

Sierra Leone has identified the deaths of two probable cases of EVD from Kailahun district (both cases died in Guinea). Active

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surveillance activities have identified no new cases and contacts are under medical follow-up.

The national authorities of Guinea, Sierra Leone and Liberia have activated their national emergency committees, prepared response plans and carried out needs assessments.

Control activities supported by WHO, UNICEF, Médecins Sans Frontières and other stakeholders are being implemented, including contact tracing, enhanced surveillance and strengthening of infection control practices, free-of-charge access to healthcare for suspected cases, case isolation and management, and social mobilisation. Information and education materials have been developed and distributed, intensive multimedia communications are underway and psychosocial support is being provided to patients, their families and the affected communities. There is ongoing training for carers in safe practices and the community in safe burials. A team of EU scientists have set up a field laboratory to test suspect cases, working alongside Médecins Sans Frontières at an isolation centre near the borders with Sierra Leone and Liberia.

Web sources: WHO/AFRO outbreak news |Interim Infection Control Recommendations for Care of Patients with Suspected or Confirmed Filovirus (Ebola, Marburg) Haemorrhagic Fever WHO |ECDC Ebola health topic page |ECDC Ebola and Marburg fact sheet |Risk assessment guidelines for diseases transmitted on aircraft

ECDC assessment

This is the first time an Ebola outbreak has been reported in this part of Africa. The origin of this outbreak is currently unknown. However, exposure to bush meat has been suspected for primary cases, as well as transmission through close contact with blood, secretions, organs or other biological fluids of infected animals. Most of secondary cases who developed the disease participated in funeral ceremonies and most had been in direct contact with infected or deceased patients or had handled their bodies. It seems to be a rapidly developing outbreak and the number of cases is expected to increase in the coming weeks in Guinea and potentially in bordering countries in the region. However, control measures, such as isolation of cases and active monitoring of contacts, currently implemented with the support of international partners should be able to control this outbreak and prevent further spread of the disease.

The risk of infection for travellers is considered very low since most human infections result from direct contact with the body fluids or secretions of infected patients, particularly in hospitals (nosocomial transmission) and as a result of unsafe procedures, use of contaminated medical devices (including needles and syringes) and unprotected exposure to contaminated body fluids.

Returning visitors from the affected areas who develop infectious disease symptoms such as fever, headache, diarrhoea or general malaise within three weeks after return should always seek rapid medical attention and mention their recent travel to the attending physician. It is unlikely, but not impossible, that travellers infected in affected areas could arrive in the EU while incubating the disease and develop symptoms compatible with EVD while in the EU. These cases should immediately seek and receive medical attention and be isolated to prevent further transmission. Clinicians managing returning travellers from visiting these areas with compatible symptoms are advised to take into consideration the possibility of EVD.
EU citizens travelling or living in the affected countries can eliminate the risk of getting infected if they avoid:

- direct contact with blood or bodily fluids of a person or corpse infected with the Ebola virus
- close contact with or handling of wild animals, alive or dead, such as monkeys, forest antelope, duikers, porcupines, and bats, or their meat.
- having unprotected sexual intercourse with an infected person or a person recovering from EVD
- having contact with any object, such as needles, that have been contaminated with blood or bodily fluids.

Those who are providing medical care in the outbreak area are advised to wear protective clothing, including masks, gloves, gowns, eye protection and practice proper infection prevention and control measures. The risk related to seeking medical care in affected countries depends on the implementation of precautionary measures in those settings.

WHO advises against the application of travel or trade restrictions on Guinea and neighbouring countries based on the current

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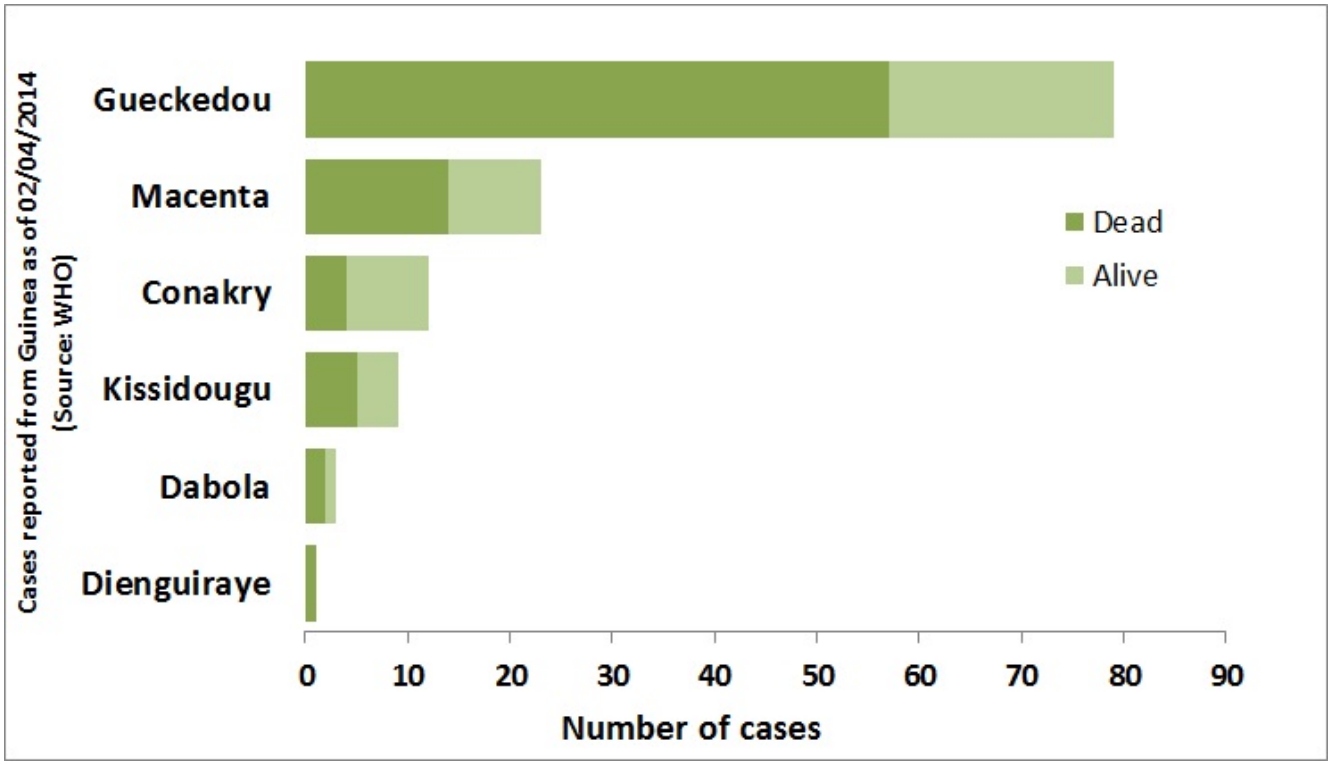
information available on this Ebola outbreak.

Actions

ECDC has prepared a rapid risk assessment (which is currently being updated), an epidemiological update and is closely monitoring this event.

Cases of Ebola Viral Disease reported from Guinea as of 02 April 2014

Source: WHO



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

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