



## COMMUNICABLE DISEASE THREATS REPORT

# CDTR

## Week 12, 19-25 March 2017

**All users**

This weekly bulletin provides updates on threats monitored by ECDC.

### World Tuberculosis Day 2017

New data released on 20 March 2017 by the European Centre for Disease Prevention and Control (ECDC) and the WHO Regional Office for Europe show that new tuberculosis (TB) cases and deaths in the 53 countries of the WHO European Region declined each year by 4.3% and 8.5% respectively between 2011 and 2015.

However, vulnerable groups for TB infection, such as people living with HIV, prisoners and migrants, do not benefit from this overall trend. In particular, new TB/HIV co-infections increased by 40% over the same time period. Providing testing to all TB patients for HIV and vice versa, together with counselling and rapid treatment, could reverse the negative trend for these vulnerable populations.

To mark World Tuberculosis Day 2017, on 24 March, ECDC has released a series of materials. They range from the latest surveillance data for the EU/EEA region in the annual joint report with WHO/Europe and slideshare, peer-reviewed publications, to a list of online resources on TB. This week, [Eurosveillance](#) is also presenting articles on the different challenges to TB elimination faced by Europe.

## I. Executive summary

### EU Threats

#### Influenza – Multistate (Europe) – Monitoring 2016/2017 season

Opening date: 13 October 2016

Latest update: 24 March 2017

Influenza transmission in Europe shows a seasonal pattern, with peak activity during winter months. ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#).

→ Update of the week

During week 11-2017, influenza activity across the region continued to decrease with the majority of countries reporting low intensity.

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

Opening date: 9 February 2011

Latest update: 24 March 2017

A measles outbreak in Romania has been ongoing since February 2016 and cases continue to be reported despite ongoing response measures that have been implemented at national level through reinforced vaccination activities. From September 2016 to 17 March 2017, Romania has reported 3 799 cases.

In 2016, a number of EU/EEA countries reported measles outbreaks and an increase in the number of cases continues to be observed in 2017. Previous and ongoing measles outbreaks in other EU countries have been epidemiologically linked to the current outbreak in Romania. However, additional knowledge on genotypic characterisation of the virus is needed to allow further insight into the epidemiological investigations.

### →Update of the week

In the EU/EEA Member States, measles cases have been reported in Austria, Belgium, Bulgaria, Denmark, France, Germany, Hungary, Italy, Spain and Sweden as well as in Romania where 3 799 cases have been reported as of 17 March 2017. Outside of the EU, outbreaks have been detected in Australia, Canada, Democratic Republic of Congo, Guinea, Mali, Republic of South Sudan, Syria and South Africa.

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

Opening date: 7 March 2012

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. No new outbreaks have been detected in the EU since June 2015.

### →Update of the week

No new outbreaks have been detected since June 2015.

## Legionnaires' disease – Lithuania- 2017

Opening date: 14 March 2017

Latest update: 24 March 2017

Since the beginning of 2017 and as of 23 March, Lithuania has reported three fatal cases of Legionnaires' disease among residents in Vilnius. Legionella has been detected in the hot water supply in two apartment blocks in Vilnius.

### →Update of the week

On 20 March 2017, Lithuania reported one case of Pontiac fever. However, Lithuania did not report any new Legionnaires' disease cases in the past week.

## Non EU Threats

## Influenza A(H7N9) – China – Monitoring human cases

Opening date: 31 March 2013

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, and up to 23 March 2017, 1 307 cases have been reported to WHO, including at least 418 deaths. No autochthonous cases have been reported outside China. Most cases are isolated, and sporadic zoonotic transmission from poultry to humans is the most likely explanation for the outbreak. Five hundred and nine cases were reported since week 40/2016, representing a significant increase compared to previous seasons.

### →Update of the week

Since the last update, no additional cases have been reported by WHO.

## Yellow fever – South America – 2016/2017

Opening date: 16 January 2017

Latest update: 24 March 2017

Yellow fever is a mosquito-borne viral infection present in some tropical areas of Africa and South America.

In South America, there are two transmission cycles of yellow fever:

- A sylvatic cycle, involving transmission of the virus between *Haemagogus* or *Sabethes* mosquitoes and primates. The virus is transmitted by mosquitoes from primates to humans when humans are visiting or working in the forest.
- An urban cycle, involving transmission of the virus between *Aedes aegypti* mosquitoes and humans. The virus is usually introduced in an urban area by a viraemic human who was infected in the forest.

Brazil has been experiencing an outbreak of yellow fever since December 2016. The outbreak was notified on 6 January 2017. From the beginning of the year to 23 March 2017, WHO PAHO has reported cases in Brazil, Colombia, Ecuador, Peru, Bolivia and Suriname.

### →Update of the week

Since 16 March 2017, national public health authorities in Brazil have not reported any new confirmed case of yellow fever.

WHO has extended its vaccination recommendations to the state of Rio de Janeiro, with the exception of the urban areas of Rio de Janeiro City and Niterói, and to the State of São Paulo, with the exception of the urban areas of São Paulo City and Campinas.

This week, according to WHO PAHO update, Peru reported one additional case.

## Increase in travel-associated Legionnaires' disease – Dubai, UAE – 2016/2017

Opening date: 10 November 2016

The ECDC ELDSNet surveillance scheme on travel-associated Legionnaires' disease (TALD) has observed an increase in the number of legionellosis cases associated with travel to Dubai, United Arab Emirates (UAE) in the past few months. Since October 2016, ten EU Member States as well as Switzerland have reported 48 confirmed cases among travellers coming back from Dubai.

### →Update of the week

On 21 March 2017, Denmark reported a case of TALD in a traveller to Thailand who stayed one night in Dubai on his way to Thailand. The case is a 74 year old resident of Denmark who fell ill on 7 March 2017. The case stayed one night in Dubai on 26 February and stayed in Thailand until 7 March.

This case is being investigated before considering a possible exposure in Dubai, as part of the current outbreak affecting Dubai.

## II. Detailed reports

### Influenza – Multistate (Europe) – Monitoring 2016/2017 season

Opening date: 13 October 2016

Latest update: 24 March 2017

#### Epidemiological summary

##### Week 11/2017 (13–19 March 2017)

Influenza activity across the region continued to decrease, with the majority of countries reporting low intensity.

The proportion of influenza virus detections among sentinel surveillance specimens continued to decrease from 22% to 17% in the past week.

This week, for the first time during the season, the proportion of type B viruses exceeded the proportion of type A viruses in sentinel detections, however the overall number remained low. This is commonly seen in the second half of an influenza season.

##### Season overview

Influenza activity started early this season in week 46-2016, which is the earliest week that the overall influenza-positivity rate in sentinel specimens reached 10% since the emergence of A(H1N1)pdm09 viruses in 2009/10.

Since week 40-2016, influenza A viruses have predominated, accounting for 94% of all sentinel detections; the great majority (99%) of subtyped influenza A viruses from sentinel sites being A(H3N2).

Confirmed cases of influenza virus type A infection reported from hospitals have predominantly been in adults aged over 65 years.

Excess all-cause mortality has been observed substantially in people aged 15–64 years and markedly in people aged 65 years or older in the majority of the 19 reporting countries. This is commonly seen when the predominant viruses circulating are A(H3N2). Two-thirds of the A(H3N2) viruses genetically characterized belong to a recently emerged genetic subclade (3C.2a1). However, those that have been antigenically characterized are largely similar to the clade 3C.2a vaccine virus.

Recent vaccine effectiveness estimates for all age groups against A(H3N2) illness from [Canada](#) (42%), the [US](#) (43%) and [Europe](#) (38%) are consistent with estimates from [Stockholm](#) county (28%) and [Finland](#) (32%) earlier in the season.

Given typically suboptimal vaccination coverage and the partial effectiveness of influenza vaccines, rapid use of neuraminidase inhibitors (NAIs) for laboratory-confirmed or probable cases of influenza infection should be considered for vaccinated and non-vaccinated patients at risk of developing complications.

Of the viruses tested so far, only one A(H3N2) virus (<1%) has shown reduced susceptibility to oseltamivir this season.

#### ECDC assessment

Influenza activity started early this season in week 46/2016, which is the earliest week that the overall influenza-positivity rate in sentinel specimens reached 10% since the emergence of A(H1N1)pdm09 viruses in 2009/10. The progression of the season confirms the conclusions of ECDC's latest [risk assessment](#) published on 25 January 2017.

#### Actions

ECDC monitors influenza activity in Europe during the winter season and publishes its weekly report on the [Flu News Europe website](#). Risk assessments for the season are available on [ECDC](#) website and on [WHO Regional Office for Europe](#) website.

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

Opening date: 9 February 2011

Latest update: 24 March 2017

#### Epidemiological summary

##### EU/EEA Member States

###### [Austria](#)

Since the beginning of 2017 and as of 20 March, Austria has reported 67 cases of measles which exceeds the number of cases reported throughout 2016.

###### [Belgium](#)

Since 20 December 2016, the region of Wallonia in Belgium has been affected by an outbreak of measles. Since mid-February 2017, the number of weekly notifications has been increasing, with an average of 36 new measles cases per week since week 8-2017. As of 12 March 2017, authorities reported 177 measles cases including 96 confirmed cases. The outbreak affects the

provinces of: Hainaut, Liège, Namur and Walloon Brabant. All age groups are affected and 50% of cases are 15-45 years. Eighteen cases are healthcare workers. Most of the cases were not vaccinated or did not know their vaccination status. Seventy-six cases (43%) have been hospitalised. No deaths have been reported. The same genotype B3, similar to the strain found in Romania, Italy and Austria at the end of 2016, has been identified. The index case of the epidemic travelled to Romania during incubation period. In Flanders, one isolated imported case was reported in January and another case in March with possible links to a cluster in Wallonia.

### ***Bulgaria***

Since mid March 2017 and as of 23 March, Bulgaria reported eight cases of measles in Plovdiv. Of the three confirmed cases, two are women in their early twenties and one is a child.

### ***Denmark***

On 15 March 2017, Denmark reported an imported case of measles in an unvaccinated adult who got infected during holidays in Asia.

### ***France***

Since the beginning of 2017, measles cases have been detected in several departments in France. From January to 28 February 2017, 79 cases were reported in [France](#), mainly related to an outbreak in Lorraine, where more than 50 cases were reported until end of February. Two cases of encephalitis and seven with severe pneumonia have been reported since the beginning of the year. The circulation of the virus remains active in several departments. Moselle and Meurthe-et-Moselle are currently the most affected areas with 61 cases as of 13 March 2017.

### ***Germany***

Since the beginning of 2017 and by mid-March, 203 cases have been reported in [Germany](#) compared to 326 throughout 2016. Of the 203 cases, 66 are from Hesse, 54 from Leipzig and 77 from Duisburg. According to [media](#), 60 of the 66 cases in Hesse occurred in Wiesbaden city. Of the 77 cases in Duisburg, 61 are children and 22 of them are younger than one year. Since January 2017 and as of 15 March, [Berlin](#) reported 31 cases. As of 3 March 2017, [Baden-Württemberg](#) reported 21 cases.

### ***Hungary***

Between 21 February and 8 March 2017, 13 cases of measles have been reported among [healthcare workers](#). According to [media](#), up to 13 March, there were 41 cases compatible with measles.

### ***Italy***

From the beginning of the year to mid-March 2017, [media](#), quoting authorities, has reported 700 cases of measles. This represents a 2.3-fold increase compared to the same time period in 2016. The majority of cases were reported in Piedmont, Lazio, Lombardy and Tuscany. Most of the cases are aged between 15 and 39 years. Additionally, since February 2017 in [Pescara](#), authorities report 75 cases in mainly unvaccinated young adults. Of the 75 cases, 25 are hospitalised. Since the beginning of 2017 and as of 22 March, [Umbria](#) has reported 12 cases. In January 2017, twelve cases of measles were reported in a kindergarten in [Milan](#).

### ***Romania***

Between 1 January 2016 and 17 March 2017, Romania reported 3 799 cases of measles, including 17 deaths. Cases are either laboratory-confirmed or have an epidemiological link to a laboratory-confirmed case. Infants and young children are the most affected population. Thirty-seven of the 42 districts report cases, Caras Severin (western part of the country, at the border with Serbia) being the most affected district with 853 cases. Vaccination activities are ongoing in order to cover communities with suboptimal vaccination coverage.

### ***Spain***

An outbreak started in the first week of January due to an imported measles case from China. As of 10 March, Barcelona and its metropolitan area reported 35 confirmed cases of measles. The cases are mostly adults who are either incompletely or not vaccinated. Two of the cases are children and six are hospitalised. A case of measles has been identified on the Canary Islands, the first case after three years of eradication.

### ***Sweden***

Since the beginning of 2017 and as of 21 March, Sweden reported 15 cases of measles, including three imported cases.

## **Outside the EU**

### ***Australia ex Bali***

Since the beginning of 2017, and as of 16 March, [Western Australia](#) reported six cases, and as of 14 March, Gold Coast, South East of [Queensland](#), reported four cases of measles, all imported from Bali, Indonesia.

**Canada**

Since the beginning of the year and as of 11 March, nine cases of measles have been reported in Canada from three different provinces, Nova Scotia (7), Alberta (1), and British Columbia (1). These events are not linked, as they resulted from separate importation events (from USA, Indonesia, and Mexico/France respectively). In [Halifax](#), Nova Scotia, the seven cases are in young adults. On 20 March, an imported measles case from West Caledonia, Nova Scotia, was detected in [Halifax](#). This case is not linked to the outbreak mentioned above.

**Democratic Republic of the Congo**

An outbreak of measles with 30 cases was reported at the end of February in [Shabunda](#). Between 20 and 26 February 2017, 288 cases were reported in the [Tanganyika](#) province. A vaccination campaign is being planned for the province.

**Guinea**

Since the beginning of the year and as of 10 March 2017, [Guinea](#) reported more than 2 100 children infected with measles. The epidemic now affects 17 districts in Guinea. N'Zerekore, in the south eastern forest region, is the most affected districts with 675 cases reported between 1 January and 8 March 2017. The Ministry of Health declared a measles epidemic on 8 February.

**Mali**

As of 11 March 2017, the rural commune of [Keme-Kafo](#), 150 km southeast of Bamako, the capital of Mali, reported 30 suspected cases of measles.

**South Sudan**

Between 20 and 26 February 2017, 22 suspected cases of measles were reported in [South Sudan](#) in Gogrial East (14), Wau (4) and Juba (4). Since the beginning of 2017, 359 suspected cases were recorded in South Sudan.

**Syria**

Since end of January 2017 and as of 14 March 2017, Syria reported 121 cases of measles in [Ghouta](#), compared to 50 cases in the past two years.

**South Africa**

Since the beginning of 2017 and as of 15 March, South Africa has reported six confirmed cases of measles in [Johannesburg](#). The cases were mostly unvaccinated primary school children. Additionally, they reported one new confirmed case of measles in Rustenburg, North West Province. This case follows a confirmed outbreak of measles in the Western Cape in the first few months of this year, currently totalling 29 cases.

**ECDC assessment**

Measles outbreaks continue to occur in EU/EEA countries and there is the risk of spread and sustained transmission in areas with susceptible populations. The national vaccination coverage remains less than 95% for the second dose of MMR in the majority of EU/EEA countries.

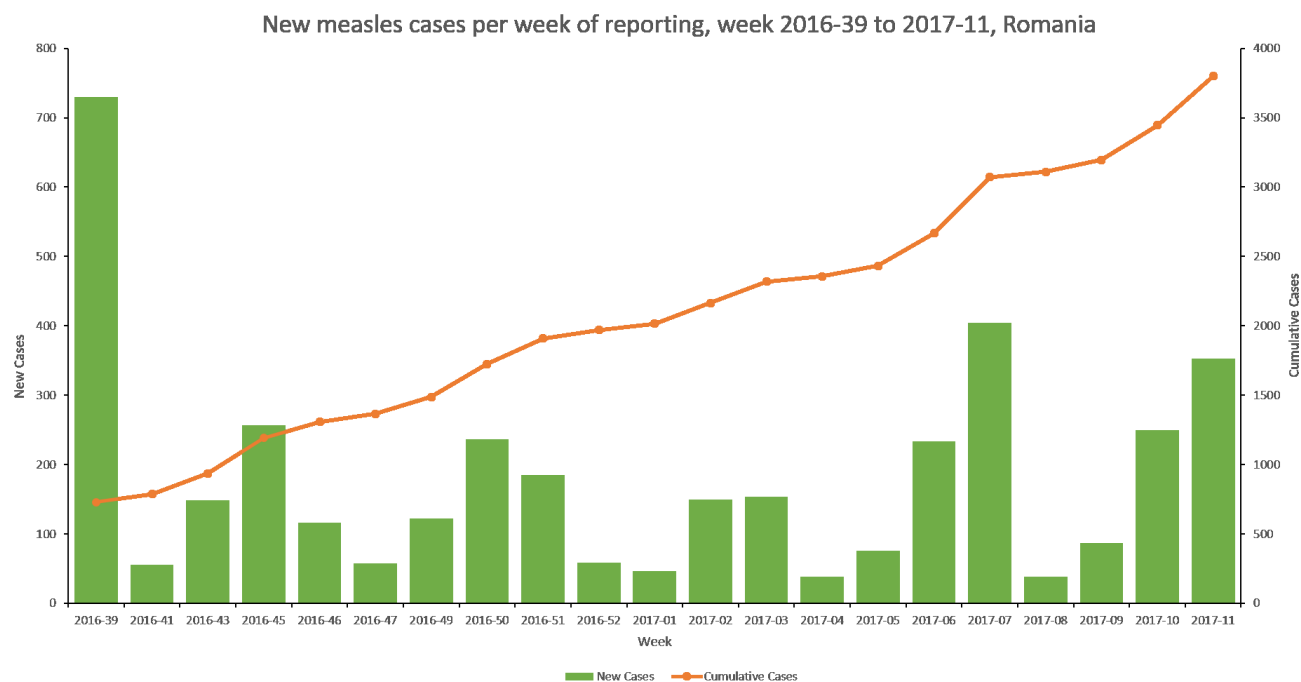
The progress towards elimination of measles in the European Region of WHO is assessed by The European Regional Verification Commission for Measles and Rubella Elimination (RVC). Member States of the WHO European Region are making steady progress towards the elimination of measles. At the fifth meeting of the RVC for Measles and Rubella in October 2016, of 53 countries in the WHO European Region, 24 (15 of which are in EU/EEA) were declared to have reached the elimination goal for measles, and an additional 13 countries (nine in EU/EEA) were concluded to have interrupted endemic transmission for less than 36 months, meaning they are on their way to achieving the elimination goal. However, six EU/EEA countries were judged to still have endemic transmission of measles: Belgium, France, Germany, Italy, Poland and Romania.

[Source: WHO - Europe](#)

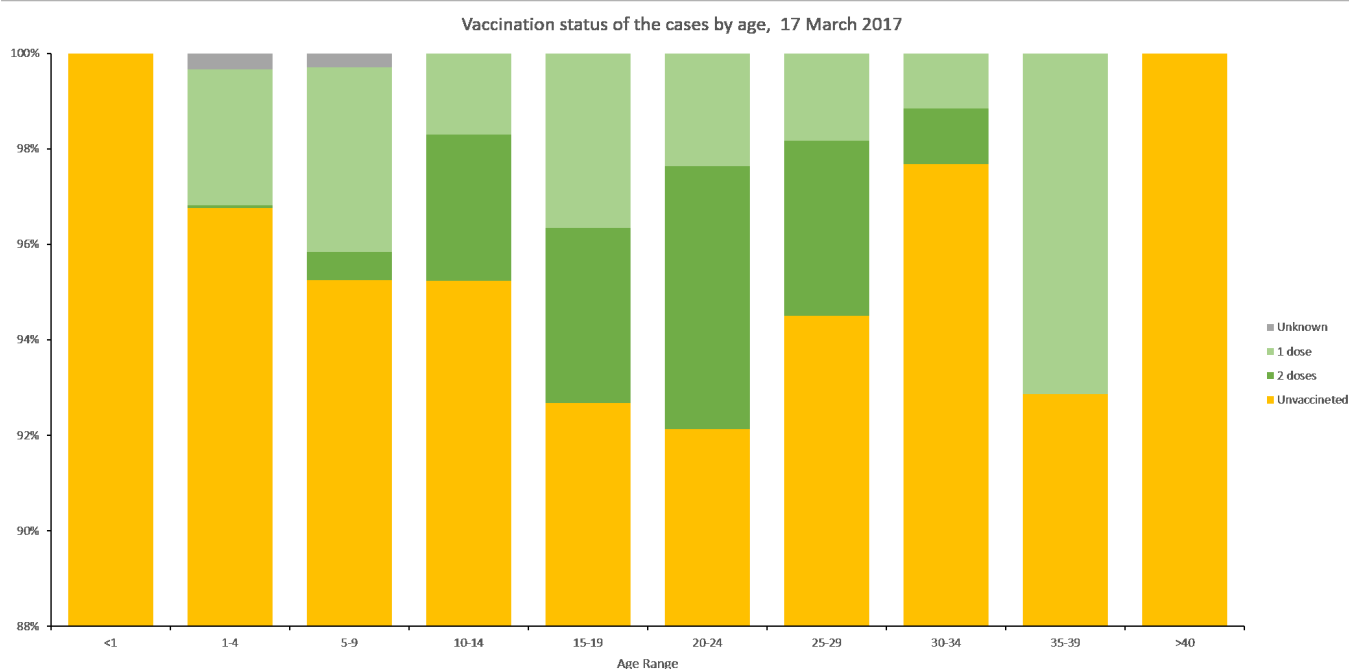
**Actions**

ECDC has prepared a [Rapid Risk Assessment](#) published on 6 March 2017. ECDC monitors measles transmission and outbreaks in the EU/EEA on weekly basis through enhanced surveillance and epidemic intelligence activities.

## New measles cases per week of reporting, week 2016-39 to 2017-11, Romania



## Vaccination status of cases of measles by age, 17/03/2017



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

Opening date: 7 March 2012

### Epidemiological summary

No new outbreaks have been detected in the EU since June 2015.



**Web sources:** [ECDC measles and rubella monitoring](#) | [ECDC rubella factsheet](#) | [WHO epidemiological brief summary tables](#) | [WHO epidemiological briefs](#) | [Progress report on measles and rubella elimination](#) | [European Regional Verification Commission for Measles and Rubella Elimination \(RVC\) \(2016\)](#)

## ECDC assessment

The World Health Organization (WHO) has targeted the elimination of measles and rubella in the 53 Member States of the WHO European Region. Elimination is defined as the absence of endemic cases in a defined geographical area for a period of at least 12 months, in the presence of a well-performing surveillance system. Regional elimination can be declared after 36 or more months of the absence of endemic measles or rubella in all Member States of the WHO European Region. Although progress has been made towards elimination, this goal has not yet been achieved. The fifth Regional Verification Commission meeting was held 24-26 October 2016. According to the results, 24 countries in the WHO EURO region have been judged to have eliminated rubella.

**Web source:** [WHO-EU](#)

## Actions

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

## Legionnaires' disease – Lithuania- 2017

Opening date: 14 March 2017

Latest update: 24 March 2017

### Epidemiological summary

Since the beginning of 2017 and as of 23 March, Lithuania has reported three fatal case of Legionnaires' disease among residents in Vilnius. Samples have been collected from the hot water supply of each flat where the cases lived. Two buildings tested positive for Legionella and results are pending for the third. Authorities are performing thermal shock of the buildings' water systems.

#### *Background*

According to the Centre for Communicable Diseases and AIDS, Lithuania reported 11 cases of Legionnaires' disease in 2016.

Sources: [National Public Health Service \(NVSC\)](#) | [Centre for Communicable Diseases and AIDS](#) |

### ECDC assessment

Legionnaires' disease cannot be transmitted from human to human. The risk associated with any specific source is therefore likely to be limited to a population confined in time and space to an area with a device capable of producing an aerosol from contaminated water.

## Actions

ECDC monitors this event through epidemic intelligence and is in contact with Lithuania through ELDSNet.

## Influenza A(H7N9) – China – Monitoring human cases

Opening date: 31 March 2013

### Epidemiological summary

In March 2013, a novel avian influenza A(H7N9) virus was detected in patients in China. Since then, and up to 23 March 2017, 1 307 cases have been reported to WHO, including at least 418 deaths. The A(H7N9) outbreak shows a seasonal pattern. Cases reported between weeks 41, and 40 in the subsequent year, are considered to belong to one epidemic wave. The first wave in

8/14



spring 2013 (weeks 7/2013–40/2013) included 135 cases; 320 cases were reported during the second wave (weeks 41/2013–40/2014), 224 cases were reported during the third wave (weeks 41/2014–40/2015), and 119 were reported in wave four (weeks 41/2015–40/2016). A fifth wave started in October 2016 (week 41/2016), with 509 cases as of 23 March 2017.

The 1 307 cases have been reported from Zhejiang (299), Guangdong (253), Jiangsu (238), Fujian (100), Anhui (92), Hunan (66), Shanghai (56), Jiangxi (47), Hubei (26), Hong Kong (21), Henan (15), Guangxi (14), Shandong (14), Beijing (11), Sichuan (11), Guizhou (10), Xinjiang (10), Taiwan (5), Hebei (4), Liaoning (3), Jilin (2), Macau (2), Tianjin (2), Yunnan (2), Chongqing (1). Three imported cases have been reported: one in Malaysia and two in Canada.

**Web sources:** [Chinese CDC](#) | [WHO](#) | [WHO FAQ page](#) | [ECDC](#) | [Hong Kong CHP](#)

## ECDC assessment

This is the fifth winter season in the northern hemisphere with human cases caused by A(H7N9) infections. During this wave, the number of human cases has been higher than in previous waves. This is most likely due to greater environmental contamination in live bird markets and increased circulation of the virus among poultry.

In February 2017, a new A(H7N9) virus with mutations in the haemagglutinin gene - indicating high pathogenicity in poultry - was detected in three cases related to Guangdong, as well as in environmental and poultry samples. It is unclear at the moment if the newly-emerged, highly-pathogenic avian influenza (HPAI) virus A(H7N9) will replace the low pathogenic virus or if both will co-circulate in the bird population. Although the genetic changes in A(H7N9) may have implications for poultry in terms of pathogenicity, surveillance and control strategies, to date, there is no evidence of increased transmissibility to humans or sustainable human-to-human transmission.

The continued transmission of A(H7N9) to humans in China poses the risk that sporadic imported cases may be detected in Europe. The following options for prevention and control of the infection should be considered:

- people travelling to China should avoid direct exposure to poultry and refrain from visiting live poultry markets or backyard farms;

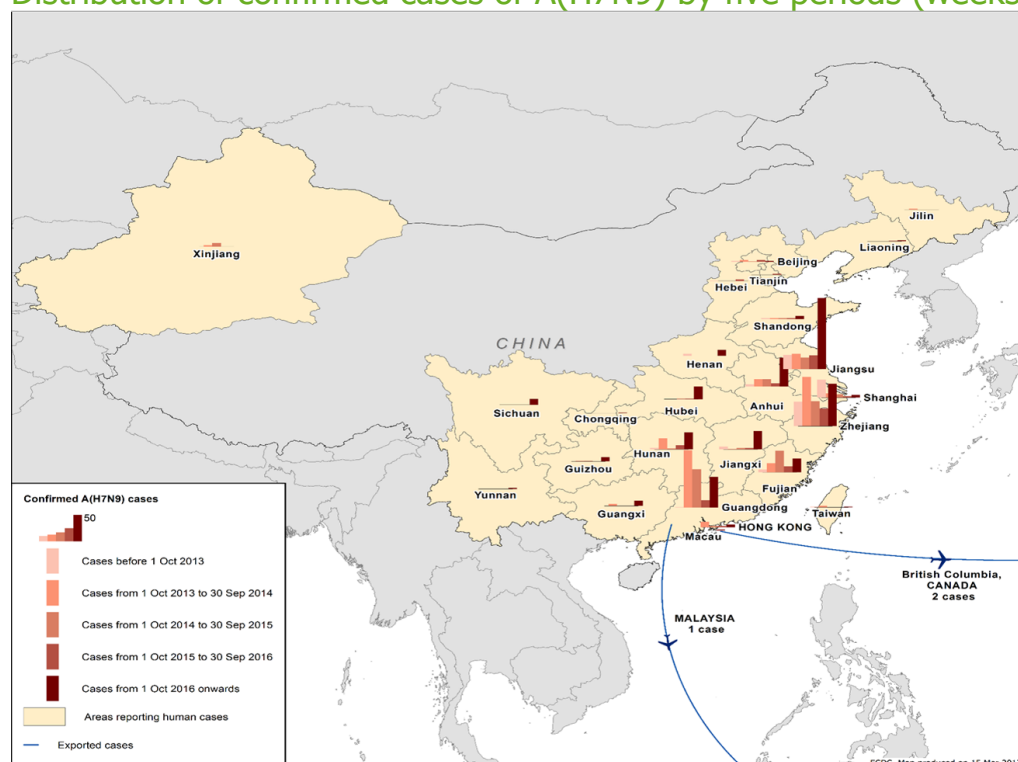
- travellers who have visited affected areas and develop respiratory symptoms and fever upon their return should consult a physician and mention their recent travel history to enable early diagnosis and treatment.

In addition, travellers who have visited affected areas should avoid entering farms for the entire duration of the 10-day incubation period (and during the symptomatic period in the event that they develop symptoms) in order to prevent a possible virus introduction to poultry in the EU. The possibility of humans infected with A(H7N9) returning to the EU/EEA cannot be excluded. However, the risk of the disease spreading within Europe via humans is still considered low, as there is no evidence of a sustained human-to-human transmission.

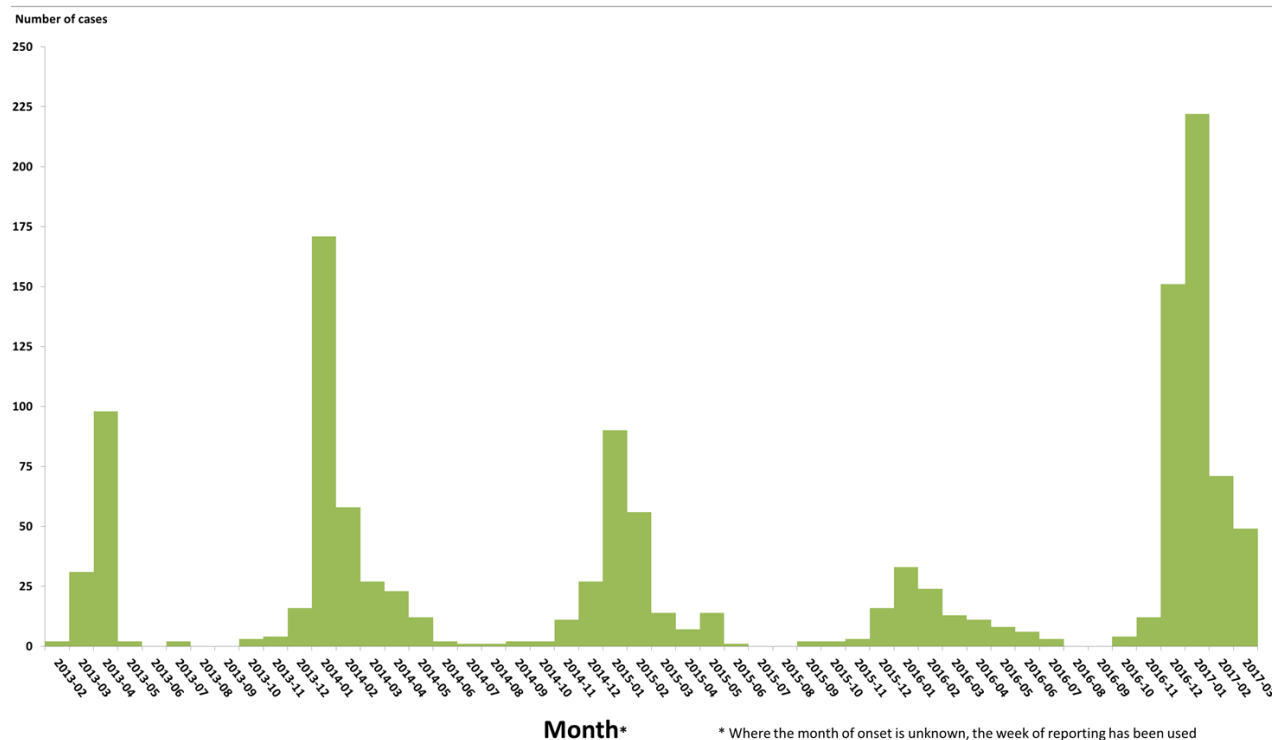
## Actions

ECDC published a sixth update of the [Rapid Risk Assessment](#) on 9 March 2017, addressing the genetic evolution of influenza A (H7N9) virus in China and the implications for public health.

## Distribution of confirmed cases of A(H7N9) by five periods (weeks 7-2013 to 11-2017)



## Distribution of confirmed cases of A(H7N9) by first available month, February 2013 to 16 March 2017



## Yellow fever – South America – 2016/2017

Opening date: 16 January 2017

Latest update: 24 March 2017

## Epidemiological summary

**Brazil:**

Between 6 January and 16 March 2017, Brazil has reported 1 357 cases (933 suspected and 424 confirmed), including 249 deaths (112 suspected and 137 confirmed). The case-fatality rate is 18.3% among all cases and 32.3% among confirmed cases.

States reporting suspected and confirmed autochthonous cases:

- Minas Gerais has reported 1 074 cases (749 suspected and 325 confirmed), including 189 deaths (78 suspected and 111 confirmed).
- Espírito Santo has reported 243 cases (150 suspected and 93 confirmed), including 48 deaths (26 suspected and 22 confirmed).
- São Paulo has reported 15 cases (11 suspected and four confirmed), including four deaths (one suspected and three confirmed).
- Rio de Janeiro has reported three cases (one suspected and two confirmed), including one confirmed death.

States reporting suspected autochthonous cases:

- Bahia has reported eight suspected cases, including one fatal.
- Tocantins has reported six suspected cases, including one fatal.
- Rio Grande do Norte has reported one suspected case, fatal.
- Goiás has reported three suspected cases, not fatal.

In addition, investigations are ongoing to determine the probable infection site of four further suspected cases.

**Other countries in South America:**

From week 1 to 11 of 2017, five other countries reported suspected and/or confirmed cases of yellow fever: Bolivia (1), Colombia (1), Ecuador (1), Peru (8) and Suriname (1).

This week, WHO PAHO reported one additional case in Peru. From the beginning of the year to 23 March 2017, Peru has notified three confirmed cases and five probable cases. Among these eight cases, two have died.

**Sources:** [Brazil MoH](#) | [Rio de Janeiro MoH](#) | [RIVM](#) | [PAHO](#)

**ECDC assessment**

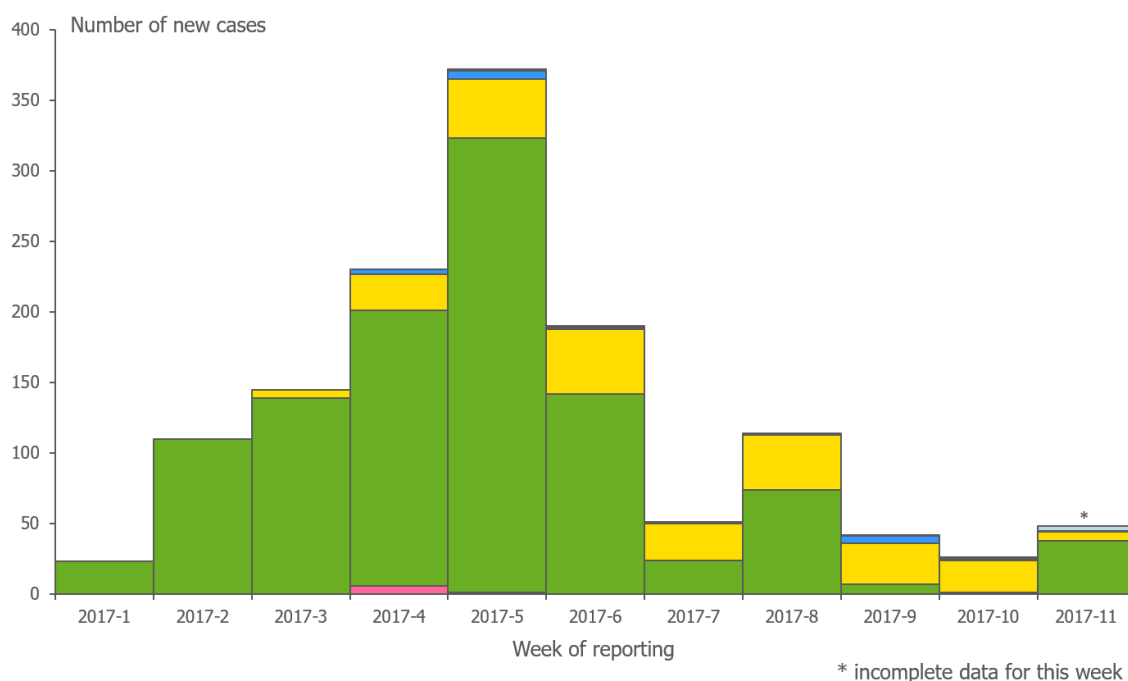
The ongoing outbreak should be carefully monitored, as the establishment of an urban cycle of yellow fever would have the potential to quickly affect a large number of people. EU/EEA citizens who travel to, or live in, areas where there is evidence of yellow fever virus transmission should check their vaccination status and obtain medical advice about being vaccinated against yellow fever.

In Europe, *Aedes aegypti*, the primary vector of yellow fever in urban settings, is present in Madeira. Recent studies have shown that *Aedes albopictus* can potentially transmit the yellow fever virus. However, the risk of the virus being introduced into local competent vector populations in the EU through viraemic travellers from Brazil is considered to be very low, as the current weather conditions in Europe are not favourable for vector activity.

**Actions**

ECDC closely monitors this event in collaboration with the World Health Organization. ECDC published a [rapid risk assessment on the outbreak of yellow fever in Brazil](#) on 26 January 2017 and a [rapid risk assessment on yellow fever among travellers returning from South America](#) on 15 March 2017. ECDC is also producing a [map for travel advice](#).

## Distribution of suspected and confirmed human cases of yellow fever in Brazil by week of reporting from 1 January to 16 March 2017



■ Bahia ■ Minas Gerais ■ Espírito Santo ■ Goiás ■ São Paulo ■ Tocantins ■ Rio Grande do Norte ■ Rio de Janeiro

## Distribution of suspected and confirmed human cases of yellow fever in Brazil by state between 1 January and 16 March 2017

	All cases	Suspected cases	Confirmed cases
Minas Gerais	1 074	749	325
Espírito Santo	243	150	93
São Paulo	15	11	4
Rio de Janeiro	3	1	2
Bahia	8	8	0
Tocantins	6	6	0
Rio Grande do Norte	1	1	0
Goiás	3	3	0
Under investigation	4	4	0
<b>Total</b>	<b>1 357</b>	<b>933</b>	<b>424</b>

## Increase in travel-associated Legionnaires' disease – Dubai, UAE – 2016/2017

Opening date: 10 November 2016

## Epidemiological summary

As of 24 March 2017, eleven countries have reported 48 TALD cases with illness onset between October 2016 and February 2017: the UK (22), Sweden (6), the Netherlands (5), Denmark (4), France (3), Germany (3), Austria (1), Belgium (1), Hungary (1), Spain (1) and Switzerland (1). One of the 48 cases died. The most recent illness onset was on 7 March. Three cases with complete laboratory investigation are characterised as *Legionella pneumophila* serogroup 1 sequence type 616, which is not common in Europe, but has been identified among returning travellers from Dubai before.

## ECDC assessment

Cases continue to be reported with onset of symptoms in recent weeks, indicating that there is a persistent source of *Legionella* exposure common to travellers returning from Dubai. However, it cannot be ruled out that some of these travellers may have acquired their infection elsewhere, if their travel stay in Dubai was shorter than the range of the incubation period. The increase in cases observed between October 2016 and February 2017 cannot only be explained by the increase in the number of travellers from the EU to Dubai.

## Actions

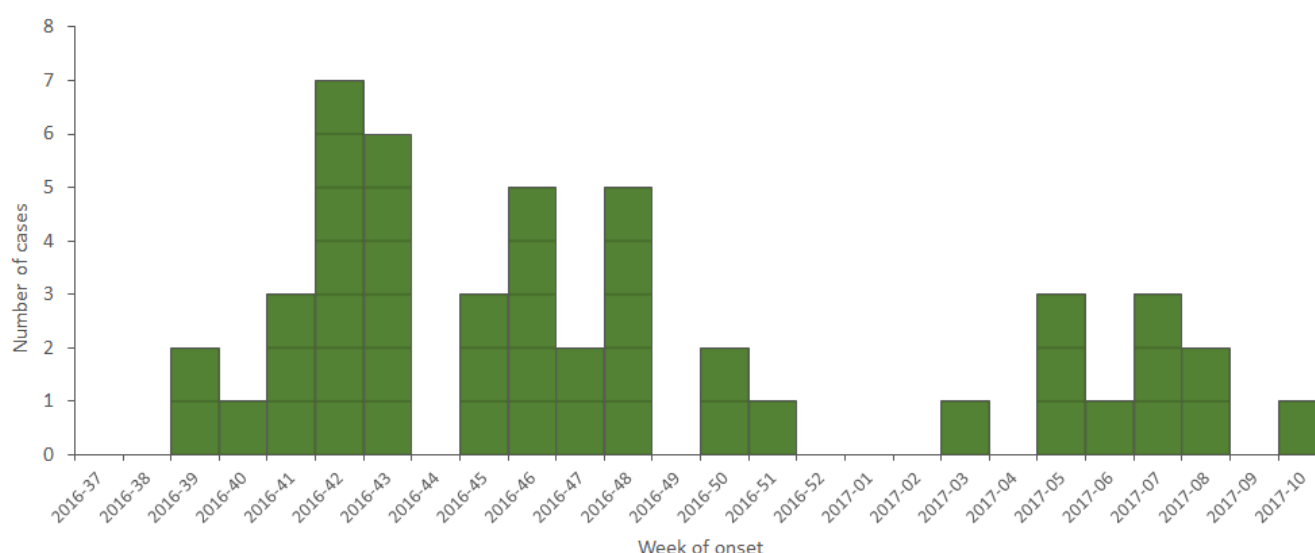
ECDC monitors this event through ELDSNet. ECDC is analysing the investigation questionnaires and is in contact with EU Member States, the ELDSNet network, WHO and UAE for information sharing and assessment. ECDC posted an [epi-update](#) on 9 March 2017.

ECDC published a [rapid risk assessment](#) on 23 December 2016 and shared an updated rapid risk assessment with the European Commission and EU Member States on 13 January 2017. The conclusions of the RRA remain valid.

## Distribution of travel-associated Legionnaires' disease cases with history of stay in Dubai, United Arab Emirates, by week of onset from 37-2016 and 10-2017, as reported to ELDSNet by 23 March 2017 (n=48 cases)

ECDC

Distribution of travel-associated Legionnaires' disease cases with history of stay in Dubai, United Arab Emirates, by week of onset from 37-2016 and 10-2017, as reported to ELDSNet by 23 March 2017 (n=48 cases)



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