

# Weekly Epidemiological Monitor

Volume 16; Issue no 13; 26 March 2023

## REGIONAL OFFICE FOR THE Eastern Mediterranean

### Current major event

#### Travel Associated Legionnaires Disease

Two cases of Legionnaires disease have been reported to the European Legionnaires Disease Surveillance Network (ELDSNet) in February with travel history to one of the countries in EMR. The investigation is still ongoing to confirm the source of infection.

#### **Editorial note**

The first case was reported in the Netherlands while the most recently confirmed case, a 53-year-old male was reported in Italy. They both stayed in the same building in a country in the Region. More data about the first case might be available in the future.

Legionnaires' disease is caused by exposure to a bacterium that is found in water and soil. It can be as mild as an influenza-like sickness or as serious and occasionally fatal as pneumonia. Up to 30% of community-acquired illnesses requiring admission to intensive care can be attributed to legionnaires' disease. Worldwide, the prevalence of legionnaires' disease is unknown since many countries lack trustworthy surveillance systems for diagnosis and detection.

Although outbreaks can happen at any time of the year, they often happen in the summer and early autumn. The European Working Group for Legionella Infections received reports of almost 32,000 cases of Legionnaires' illness and more than 600 outbreaks between 1995 and 2005. Its evident that there are many Legionella -related are illnesses or deaths that underdiagnosed worldwide.

The majority of those with noticeable symptoms are over 50, and the most at risk groups are those with compromised immune systems. chronic illnesses, smoking habits, and histories of heavy drinking. In most cases, outbreaks are associated with poorly maintained water and air conditioning such systems, as humidifiers and saunas.



The map illustrates the travel-associated Legionnaires' disease in Europe, 2010. European communicable disease bulletin 2013 B. de Jong, L. Payne Hallström, E. Robesyn, D. Ursut, P. Zucs deline, 13 January 2023, page 12.

#### Links to Legionellosis Toolbox

Legionellosis Outbreak Toolbox https://cdn.who.int/media/docs/default-source/outbreaktoolkit/legioneliosis-outbreak-data-collectiontoolbox 20220922.pdf?sfvrsn=9f306535 1

There are four varieties of legionnaires' disease, according to the World Health Organization (WHO) classification:

- 1. Hospital-acquired (nosocomial)
- 2. Community-acquired
- 3. Travel-associated
- 4. Domestically-acquired

Nosocomial outbreaks in hospitals have been spread from cooling towers, hot and cold-water systems, respiratory therapy equipment, and other medical treatment. The clinical symptoms of infection with Legionella are indistinguishable from the symptoms of other causes of pneumonia. Urinary antigen is the most common method of detection. The antigen detection test is substantially more sensitive for community acquired and travelassociated Legionnaires' disease than for nosocomial (hospital-acquired)

Death occurs through progressive pneumonia with respiratory failure and/or shock and multi-organ failure. The death rate may be as high as 40-80% in untreated immuno-suppressed patients and can be reduced to 5-30%through case management. Overall, the death rate is usually within the range of 5-10%. The public health threat can be reduced by regular maintenance, cleaning and disinfection of water and air conditioning systems to minimize the growth of legionella bacterium.

#### Update on outbreaks

in the Eastern Mediterranean Region

#### COVID-19 in 22 EMR countries

Current public health events of concern [cumulative N° of cases (deaths), CFR %]	
Coronavirus disease 2019 (COVID-19): 2019-2023	
Afghanistan	[210 127 (7882), 3.8%]
Bahrain	[696 614 (1536), 0.2%]
Djibouti	[15 690 (189), 1.2%]
Egypt	[515 882 (24 821), 4.8%]
Iran (Islamic Republic of)	[7 584 531 (145 196) 1.9%]
Iraq	[2 465 545 (25 375), 1%]
Jordan	[1 746 997 (14 122), 0.8%]
Kuwait	[665 122 (2570), 0.4%]
Lebanon	[1 234 295 (10 862), 0.9%]
Libya	[507 206 (6437), 1.3%]
Morocco	[1 272 622 (16 296), 1.3%]
occupied Palestinian territory (oPt)	[703 228 (5708), 0.8%]
Oman	[399 449 (4628), 1.2%]
Pakistan	[1 579 112 (30 649), 1.9%]
Qatar	[497 912 (688), 0.1%]
Saudi Arabia	[832 429 (9627) 1.2%]
Somalia	[27 334 (1361), 5%]
Sudan	[63 922 (5034), 7.9%]
Syrian Arab Republic	[57 423 (3163), 5.5%]
Tunisia	[1 151 832 (29 362), 2.5%]
United Arab Emirates	[1 056 485 (2349), 0.2%]
Yemen	[11 945 (2159), 18.1%]

Published by World Health Organization, Regional