

## Severe acute respiratory syndrome (SARS)

Reporting on 2014 data retrieved from TESSy\* on 19 November 2015

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### Key facts

- Knowledge about the epidemiology and ecology of SARS coronavirus infection remains presently incomplete and the risk of re-emergence is unpredictable.
- The rapid spread of SARS worldwide showed the need to maintain surveillance despite the disease's absence since 2003.
- The emergence in 2012 of a novel coronavirus in humans in the Middle East associated with the early detection of imported cases to Europe showed that SARS and related viruses need to be globally monitored and response capacities need to be maintained.

### Methods

[Click here for a detailed description of the methods used to produce this annual report](#)

### Epidemiology

Severe acute respiratory syndrome (SARS) is a respiratory disease in humans caused by the SARS coronavirus (SARS-CoV). In 2002–03 an epidemic originating in Foshan, Guangdong Province, China, spread globally, with over 8 000 known cases reported in eight months from 33 countries on five continents, of which 21% were healthcare workers. The case–fatality rate was about 10%. The last known community case occurred in the USA in July 2003, but another localised SARS-related crossover from animals occurred in 2004 [1].

Although surveillance has been ongoing, there were no reports of SARS virus infection in humans from 29 EU and EEA countries (no reports from Liechtenstein) in 2014; nor have there been any reports of SARS virus infection in humans worldwide since 2003.

### Discussion

SARS is believed to have been an animal virus that recently crossed the species barrier to infect humans. Bats have been identified as potential reservoir hosts of coronaviruses associated with SARS [2]. The SARS outbreak illustrated the importance of sensitive detection tools in the preparedness and response to emerging health threats. Other key preparedness activities include advance planning, communication, education and training, and stockpiling supplies of personal protective equipment [3–5].

The emergence in 2012 of human cases of an acute respiratory illness of unknown origin in several countries in the Middle East (Jordan, Qatar and Saudi Arabia with importation of several cases to Europe) revealed the importance of close monitoring, collaboration between laboratories (to promptly set up laboratory capacity for detection and characterisation of emerging pathogens), and appropriate protective biosafety measures using lessons learnt from the past SARS outbreak [6–9].

### References

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### Additional information

[ECDC Surveillance Atlas of Infectious Diseases](#)

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\* The European Surveillance System (TESSy) is a system for the collection, analysis and dissemination of data on communicable diseases. EU Member States and EEA countries contribute to the system by uploading their infectious disease surveillance data at regular intervals.