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## OUTBREAK OF COMMUNITY-ACQUIRED LEGIONNAIRES' DISEASE IN SOUTHEAST NORWAY, MAY 2005

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Norwegian health authorities are investigating an outbreak of legionnaires' disease in the neighbouring cities of Sarpsborg and Fredrikstad in southeastern Norway, close to the border with Sweden. As of 26 May, 39 cases, including five deaths, have been reported in this outbreak. All cases have been confirmed by urinary antigen testing. Cultures of clinical specimens have not yet been completed.

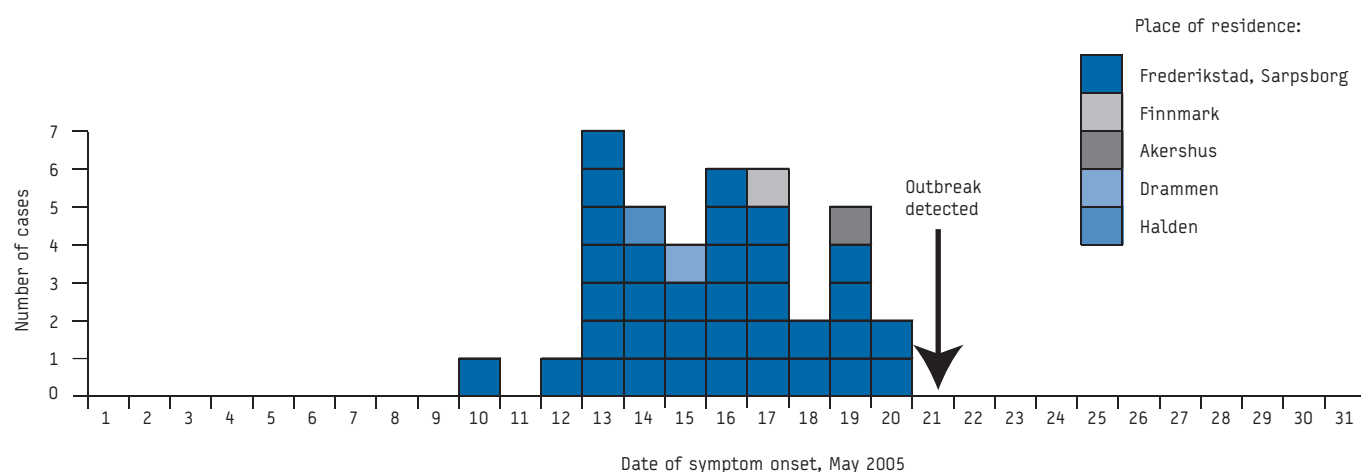
The mean age of patients is 67 years (range: 35-94). Twenty three cases (59%) are in men. All cases are in Norwegian nationals, and there is no information on any international events in the area in the period. Thirty five of the cases (90%) are in local residents, while the remaining 4 cases have been diagnosed in patients elsewhere in Norway who had visited the area during the probable exposure period.

The two cities are situated very close to each other with a total of 120 000 inhabitants. The area is heavily industrial and is not a particular tourist destination.

The source is still unknown. Because the outbreak is large with many cases including deaths, occurring over a wide geographical area within a short time period (Figure), cooling towers are the most likely source. All of the known 19 cooling towers in the area have been closed down, pending results of bacteriological testing and disinfection. Epidemiologists from Nasjonalt folkehelseinstitutt (Norwegian Institute of Public Health) are assisting local health authorities with the outbreak investigation. Other probable sources are also being investigated. Clinical and environmental samples are being genotyped to support other epidemiological data.

### FIGURE

#### Epidemic curve of the outbreak of legionnaires' disease in Fredrikstad-Sarpsborg, Norway, May 2005



The rate of case reporting has now diminished, and based on epidemiological data, it is probable that the source is now inactive. Local health authorities have not issued any specific restrictions regarding staying in or travel to the area.

The outbreak has stimulated public discussion about statutory regulations for cooling towers and similar installations. Following a similar outbreak in Stavanger in 2001 [1], all owners of cooling towers

are now required to notify local health authorities of their installation and to have an adequate system of control and maintenance. Local authorities have a statutory responsibility.

### References

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