

LEGIONELLOSIS, FATAL - NORWAY (SOUTHEASTERN)

A ProMED-mail post <<http://www.promedmail.org>>

ProMED-mail is a program of the International Society for Infectious Diseases

<<http://www.isid.org>>

[1]

Date: Sun 22 May 2005

From: Egil Bovim <Egil.Bovim@kokom.no>

According to the media, there is an outbreak of legionellosis in the Norwegian towns of Fredrikstad and Sarpsborg. The Norwegian newspaper Aftenposten reports that 11 cases have so far been confirmed, including 2 deaths (females, 70-80 years of age).

Investigations are ongoing, cooling towers being the main suspects and some having already been closed down pending results of test samples.

Egil Bovim Director, National Centre on Emergency Communication in Health Bergen, Norway <Egil.Bovim@kokom.no>

[2]

Date: Mon 23 May 2005

From: ProMED-mail <promed@promedmail.org>

Source: Norway Post [edited]

<http://www.norwaypost.no/content.asp?cluster_id=27780&folder_id=1>

Growing epidemic of Legionnaires' disease in Fredrikstad

Altogether, 5 persons have died, and one is critically ill in the hospital, following an outbreak of Legionnaires' disease in the Fredrikstad and Sarpsborg region. Another 20 have contracted legionellosis and have been hospitalized, and the condition is serious for 3 of these persons.

Most of the dead and infected are elderly, or weakened by other diseases.

The disease is not spread by personal contact but through the air, often from water vapor from large air conditioning systems. The source of the infection has not been found, but large air conditioning systems in the 2 cities have been closed down.

In 2001, 7 persons died from Legionnaires' disease in the city of Stavanger [see ref. below. - Mod.JW].

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[3]

Date: Mon 23 May 2005

From: ProMED-mail <promed@promedmail.org>

Source: Newsday (NY) [edited]

<<http://www.newsday.com/news/nationworld/world/wire/sns-ap-norway-legionnaires-disease,0,6816195.story?coll=sns-ap-world-headlines>>

Legionnaires' outbreak kills 3 in Norway

An outbreak of Legionnaires' disease has killed 3 people and left at least 23 others infected in southeastern Norway, public health officials said on Mon 23 May 2005. The 1st cases were reported on Sat 21 May 2005 in the town of Fredrikstad, some 80 km (50 miles) south of Oslo.

The National Institute of Public Health said all those infected live in or had recently visited the Fredrikstad area. Generally, they were older, with an average age of 69, the institute said. The source of the infection had not been determined, but the potentially deadly respiratory illness is caused by *Legionella* bacteria, which grow in water and can be spread through air conditioning ducts and water cooling towers.

"The municipal health services ... have taken steps to shut down cooling towers in the towns, so there is a great probability that the source of the outbreak has been stopped," the institute said in a statement.

[The 2 municipalities are geographically close to one another, so it is indeed possible that this somewhat explosive cluster (26 cases over 3 days) may have been exposed in the same location. ProMED thanks Egil Bovim, Director, National Centre on Emergency Communication in Health Bergen, Norway, for calling attention to this cluster. - Mod.LL]

LEGIONELLOSIS - EUROPE (NORWAY, FRANCE)

A ProMED-mail post <<http://www.promedmail.org>>

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[1] Norway

Date: Thu, 26 May 2005

From: ProMED-mail <promed@promedmail.org>

Source: Eurosurveillance Weekly [edited]

<<http://www.eurosurveillance.org/ew/2005/050526.asp>>

Community-acquired Legionnaires' disease in southeast Norway, May 2005

Norwegian health authorities are investigating an outbreak of Legionnaires' disease in the neighboring cities of Sarpsborg and Fredrikstad in southeastern Norway, close to the border with Sweden.

As of 26 May 2005, 39 cases, including 5 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). 23 cases (59 percent) are in men. All cases are in Norwegian nationals, and there is no information on any international events in the area in the period.

35 of the cases (90 percent) 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 2 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) 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.

[See Figure. Epidemic curve of the outbreak of legionnaires' disease in Fredrikstad-Sarpsborg, Norway, May 2005 at URL link provided above]

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.

1. Blystad H, Bjorlow E, Aavitsland P, Holm J. Outbreak of legionellosis in Stavanger, Norway - final report. Eurosurveillance Weekly 2001; 5(47): 22/11/2001. (<<http://www.eurosurveillance.org/ew/2001/011122.asp#2>>)

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[2]France

Date: Thu, 26 May 2005

From: ProMED-mail <promed@promedmail.org>

Source: Eurosurveillance Weekly [edited]

<<http://www.eurosurveillance.org/ew/2005/050526.asp>>

Legionnaires' disease in Lyon, France, Apr-May 2005: preliminary results

In May 2005, an outbreak of 34 cases of Legionnaires' disease was detected in a suburb of Lyon, in eastern France. All patients presented with symptoms of acute lower respiratory disease, and all tested positive for urinary antigen, indicating a *Legionella pneumophila* Lp1 infection. Patient ages ranged from 39 to 86 years (median age 65 years) and 70 percent were men.

27 patients were admitted to hospital. No deaths have been reported. The dates of symptom onset ranged from 28 Apr to 9 May 2005 (Figure). Clinical isolates were obtained from 2 patients and are currently being tested by the National Reference Laboratory for Legionella.

[See Figure. Epidemic curve of the legionnaire's disease outbreak, northeast suburbs of Lyon, France, April-May 2005, at URL link provided above]

The epidemiological investigation carried out by the local and national health institutions was based on a standardised questionnaire. Patients were asked about their living and working conditions as well as where they had been during the 10 days preceding the onset of symptoms (incubation period for Legionnaires' disease is 2-10 days). The environmental investigations were carried out in the same area by the local environmental authorities. All devices that can spread aerosols were tested, including cooling towers, car wash stations and agricultural watering systems. Control measures implemented included the disinfection and shutdown of these systems until further verification.

Preliminary findings showed that 32 patients (94 percent) lived in, or passed through, the 2 adjacent communes of Caluire-et-Cuire and Rilleux-la-Pape, a residential area located in a northeastern suburb of Lyon. This suggests a common source of infection such as a cooling tower. No additional case was detected during the 10 days after the onset of the last cases on 9 May 2005, suggesting that the source may have been interrupted.

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LEGIONELLOSIS, FATAL - NORWAY (SOUTHEASTERN)(02)

A ProMED-mail post <<http://www.promedmail.org>>

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Date: Thu, 2 Jun 2005 14:33:23 +0100

From: Mary Marshall <tropical.forestry@btinternet.com> and A-Lan Banks <alan.banks@thomson.com>

Source: Reuters [edited] <<http://www.alertnet.org/thenews/newsdesk/L02605783.htm>>

8 Norwegians dead from Legionnaires' disease

8 Norwegians have died from an outbreak of Legionnaires' disease, making it the most serious outbreak ever in Norway, a hospital in southern Norway said on Thu, 1 Jun 2005.

The source of the bug has not yet been identified. Another 45 people have been infected with the bacteria since mid-May 2005.

"One of the patients is now on a respirator," a spokeswoman at Oestfold Hospital told Reuters.

The latest victims died on 26 and 27 May 2005, but it was not proven until now that the 2 elderly men had died of Legionnaires' disease.

Norwegian health authorities have said they believe the outbreak is over, but the hospital said there could be more people infected as the incubation period could be up to 20 days.

"Oestfold Hospital is prepared for zero to 1 new positively (infected) each day until 10 Jun 2005 although the source of infection is inactive," the hospital said in a statement.

The outbreak in 2 southeast Norwegian towns is the most deadly occurrence of Legionnaires' in Norway, surpassing a 2001 infection that killed 7 people.

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LEGIONELLOSIS, FATAL - NORWAY (SOUTHEASTERN)(03):SOURCE

A ProMED-mail post <<http://www.promedmail.org>>

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Date: Wed, 8 Jun 2005

From: ProMED-mail <promed@promedmail.org>

Source: Aftenposten.no [edited]

<<http://www.aftenposten.no/english/local/article1055402.ece>>

Legionnaires' Disease source pinpointed

Authorities at Ostfold Hospital Fredrikstad announced Wed, 8 Jun 2005, that the source of the Legionnaires' disease outbreak that killed 10 and infected 52 so far has been found.

"The hunt for the source of infection is over. We have, to a high degree of likelihood, found the source," Svein Ronsen said at the press conference. The Borregard [company] in Sarpsborg has been named as the probable source of the *Legionella* bacteria. A purifying installation known as a scrubber, which cleans air using water, is considered the specific source.

"Such facilities spread large amounts of water vapor through the air," communicable disease authorities said at the press conference. The result came as a surprise to investigating authorities, as such facilities have never caused a Legionnaires' outbreak before, either in Norway or abroad.

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[In order to prove the link, the organisms found in the suggested source and those from patients need to be shown to be identical. This requires a diagnosis of legionellosis by culture, not just urinary antigen or serology. Any device that produces an aqueous aerosol can spread legionellosis. - Mod.LL]