

LEGIONELLOSIS - SPAIN: (ALICANTE)

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

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<<http://www.euroweeklynews.com/2010061180420/news/costa-blanca/legionnaires-outbreak-in-alcoy.html>>

There is a new outbreak of Legionnaires Disease in Alcoy, where 4 cases have already been confirmed. 2 of the victims are currently in the Virgen de los Lirios Hospital improving favorably. Meanwhile the regional health authority has said that the 4 cases were all localized and appear linked.

This raises the outbreaks seen in the town since 1999 to 16, during which time 300 people have been affected and 11 have died.

The regional health authority wants to avoid the use of the word 'outbreak' which technically can only be used if there are 3 more cases and that a connection can be found between them. However the opposition (the Socialist Party and Esquerra Unida) is insisting on the necessity of an in-depth investigation to find the reasons behind the recurring outbreak of this illness in the municipality during the last decade.

The last 2 outbreaks in the town were linked to asphaltting machinery.

Communicated by: ProMED-mail <promed@promedmail.org>

[Legionnaires' disease is the acute pneumonic form of disease caused by Legionella bacteria, usually Legionella pneumophila. About 80-90 percent of cases are caused by L. pneumophila serogroup 1. Legionnaires' disease is usually acquired by inhalation by a susceptible person of an infectious dose of aerosolized Legionella. Risk factors in adults include age over 50 years, cigarette smoking, diabetes, chronic heart or lung disease, and immunosuppression.

Usually a building's contaminated water system is incriminated as the source. Legionella are found primarily in the hot water portion of plumbing systems and in cooling towers. Warm water temperatures of 25-40 deg C (77-104 deg F) support the highest concentrations of the organism in plumbing systems.

Although I am not aware that legionellosis has been linked to use of asphaltting machinery, as mentioned in the news release above, L. pneumophila has been isolated from in puddles of rainwater on asphalt roads, especially in warm weather, and aerosolization of the organism from puddles by vehicular traffic has been hypothesized as a possible source for sporadic cases of legionellosis (<<http://www.cdc.gov/eid/content/15/8/1295.htm>>).

However, a machine known as a roller follows the asphalt paver to compact newly laid asphalt. The weight of roller drums is used to compact the asphalt surface being laid down. Water may be used to lubricate the drum surface to prevent hot asphalt from sticking to the drum (see <http://en.wikipedia.org/wiki/Road_roller>). Also, on some machines, the drums may be filled with

water on site to achieve the desired weight. When empty, the lighter roller drum is easier and cheaper to transport between work sites. Perhaps aerosolization of water contaminated with *L. pneumophila* used for lubrication of the roller drums or to add weight to these drums was linked to past cases of legionellosis in Alcoy.

Alcoy is an inland industrial city, with a population of about 61 000, located in the province of Alicante, along the eastern coast (Costa Blanca) of Spain (<[http://en.wikipedia.org/wiki/Alcoy_\(Spain\)](http://en.wikipedia.org/wiki/Alcoy_(Spain))>). The HealthMap/ProMED-mail interactive map of Spain can be accessed at <<http://healthmap.org/promed/en?name=Kingdom%20of%20Spain,%20Spain&g=2510769&v=40,-4,5>>. - Mod.ML]

[Regarding earlier reports of Legionellosis in Alcoy & Alicante, although the ProMED English archives only contain reports in 2001 (Murcia), 2002 & 2003 (Valencia) below, there is a report from 2004 in Spanish in the ProMED/ESP archives: Legionella, brote comunitario - España (Alicante) 20041101.2955, but nothing since. - Mod.JW]

[see also:

Legionellosis, nosocomial - USA: (WI) 20100315.0834 Legionellosis, fatal - Germany: (BY, BW) 20100129.0314 Legionellosis - France: (AM) 20100115.0185

2006

Legionellosis - Spain (Pamplona) (03) 20060609.1611 Legionellosis - Spain (Pamplona) (02) 20060605.1565 Legionellosis - Spain (Pamplona) 20060604.1558

2005

Legionellosis - Spain (Barcelona) 20051103.3210 Legionellosis, nosocomial - Spain (Barcelona) 20050302.0646

2004

Legionellosis - Spain (Barcelona) (02) 20040820.2305 Legionellosis - Spain (Barcelona) 20040816.2271 Legionellosis, hospital - Spain (Zaragoza) (02) 20040630.1743 Legionellosis, hospital - Spain (Zaragoza) 20040621.1651

2003

Legionellosis - Spain (Valencia) 20030611.1439 Legionellosis, spa outbreak - Spain (Canary Islands) (02) 20030603.1352 Legionellosis, spa outbreak - Spain (Canary Islands) 20030530.1320

2002

Legionellosis update: 2002 (03) 20020828.5173 Legionellosis - Spain (Barcelona, Valencia) 20020812.5029

2001

Legionellosis - Spain (Murcia) (08) 20011017.2555 Legionellosis - Spain (Pamplona) (02) 20010822.1979 Legionellosis - Spain (Pamplona) 20010815.1929 Legionellosis - Spain (Murcia) 20010710.1331

2000

Legionellosis - Spain: 2000 20001209.2163 Legionellosis - Spain (Vigo, Arbizu) (02) 20001026.1860

1998

Legionellosis - Spain (Zaragoza) 19981130.2302]sb/ml/ejp/jw