

LEGIONELLOSIS - USA (06): (FLORIDA) FATAL

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

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<[http://www.myfoxtampabay.com/dpp/news/local/nature\\_coast/legionnaires-cases-diagnosed-110211](http://www.myfoxtampabay.com/dpp/news/local/nature_coast/legionnaires-cases-diagnosed-110211)>

Pasco County public health authorities are trying to determine what may have caused 3 cases of Legionnaires' disease. 2 cases were diagnosed on the same street in Port Richey.

"We just heard of a 3rd case that's in a different location 4 miles [6.5 km] away," said Dr David Johnson, director of the Pasco County Health Department.

The 3 cases follow last week's [week of 24 Oct 2011] outbreak of Legionnaire's disease in Plant City [Hillsborough County, Florida]. 3 people were diagnosed to the bacterial infection in the Meadows Countrywood neighborhood last week. One of the patients died. Initially the Hillsborough County Health Department suspected a community hot tub may have been the source of the illness. That has since been ruled out. No known cause has been identified.

"Sometimes the cause jumps right out at you," Pasco's Dr Johnson said. "But often the cause is never found," he added.

There is no common connection between Pasco County's 3 cases, except from location. 2 of the patients live on the same street. The 3rd lives nearby.

The cause could be as simple as a dirty showerhead. People who live near one of the Port Richey patients say he was rushed to a hospital in an ambulance. Johnson suggests not waiting that long for anyone who feels ill. "If you have symptoms, if you're developing a fever and cough you need to get in and see your doctor," he said.

Legionnaires' disease comes from bacteria usually found in water. The bacterium that causes it thrives in warm and wet environments, and people contract the disease by breathing in contaminated water vapor.

"It is not contracted person to person," explained FOX 13's Dr Joette Giovinco. "However, if several people were exposed to the same source, then many of those people may get sick, depending on their health."

[Byline: Peter Linton-Smith]

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Communicated by: ProMED-mail from HealthMap alerts <[promed@promedmail.org](mailto:promed@promedmail.org)>

[The state of Florida can be located on the HealthMap/ProMED-mail interactive map at <<http://healthmap.org/r/1p4i>>. Pasco and Hillsborough counties can be seen on the map at <<http://www.digital-topo-maps.com/county-map/florida.shtml>>.

Port Richey is a small town in Pasco County on the west coast of Florida in the United States, north of the Tampa-St. Petersburg-Clearwater metropolitan area, with a population was 3294 in 2004 (<[http://en.wikipedia.org/wiki/Port\\_Richey,\\_Florida](http://en.wikipedia.org/wiki/Port_Richey,_Florida)>). Plant City is in Hillsborough County, Florida, east

of Tampa along Interstate 4, with a population of 34 721 in 2010; Plant City is known as the winter strawberry capital of the world (<[http://en.wikipedia.org/wiki/Plant\\_City,\\_Florida](http://en.wikipedia.org/wiki/Plant_City,_Florida)>).

Legionellosis is an infectious disease caused by a gram negative bacillus of the genus *Legionella*, most commonly *Legionella pneumophila*. Legionnaires' disease is the acute pneumonic form of the disease; more than 70 percent of cases are due to *L. pneumophila* serogroup 1, except in Australia and New Zealand, where *L. pneumophila* serogroup 1 has accounted for only 45.7 percent of cases of community-acquired legionellosis, and *Legionella longbeachae* has accounted for 30.4 percent of cases (Yu VL, et al: Distribution of *Legionella* species and serogroups isolated by culture in patients with sporadic community-acquired legionellosis: An international collaborative survey. *J Infect Dis.* 2002; 186(1): 127-8; <[http://www.legionella.org/lp\\_distribution.pdf](http://www.legionella.org/lp_distribution.pdf)>). Risk factors for Legionnaires' disease include age over 50 years, cigarette smoking, diabetes, chronic heart or lung disease, and immunosuppression.

Pontiac fever is a non-pneumonic form of legionellosis that is less severe than Legionnaires' disease. Pontiac fever takes its name from an outbreak in 1968 in Pontiac, Michigan, USA.

Legionnaires' disease, and presumably Pontiac fever, is acquired by inhalation of an infectious dose of aerosolized *Legionella*. 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. Water temperatures of 25-40 deg C (77-104 deg F) support the highest concentrations of the organism in water storage tanks of plumbing systems. Aerosolization of the contaminated warm water can occur in showers, spa pools, sprays in groceries, fountains, car washing establishments, and cooling towers. Also, other sources include aerosolized windscreen wiper fluid not containing alcohol that may enter a car (<<http://www.higieneambiental.com/sites/default/files/images/pdf/legionelosis-journal-epidemiol.pdf>>) and contaminated aerosols that may enter a car when a car is driven through puddles from rain puddles on asphalt roads (see ProMED-mail post Legionellosis - Spain: (AN) 20100612.1973).

In contrast, in Australia and New Zealand, Legionnaires' disease has been associated with gardening and exposure to potting mix, compost, and soil; in these countries *L. longbeachae* has been commonly found in potting mix, compost, and soil and cultured from the respiratory specimens of patients with sporadic community-acquired pneumonia. Cases of community-acquired pneumonia due to *L. longbeachae* also have been reported sporadically in Europe (<<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19497>>).

Genotyping of patient and environmental isolates has become a helpful tool to establish transmission pathways. The predominance of one genotype of *Legionella* isolated from patient specimens suggests transmission from a common source. Because *Legionella* may be found in environmental samples without linkage to any cases of legionellosis, the actual causative infectious reservoir can be confirmed by matching the genotype of clinical and environmental isolates (see <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC86783/>> and <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2730281/>>). However, the clinical diagnosis of Legionnaires' disease is commonly made on the basis of serology or the *Legionella* urinary antigen test, and not culture of patient specimens. - Mod.ML]

[see also:

Legionellosis - USA (05): (MD) fatal, hotel 20111014.3073 Legionellosis - USA (04): (NY) shredder 20110826.2604 Legionellosis - USA (03): (NV) hotel 20110716.2159 Legionellosis, nosocomial - USA (03): (OH) 20110315.0831 Legionellosis, nosocomial - USA (02): (OH) 20110310.0775 Legionellosis - USA (02): (CA) conference, susp. 20110304.0713 Legionellosis, nosocomial - USA: (OH) 20110303.0692 Legionellosis - USA: (CA) conference, susp. 20110214.0494

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Legionellosis - USA (02): (MI) 20100728.2536 Legionellosis, nosocomial - USA: (WI) 20100315.0834]  
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