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SHORT REPORT

An outbreak of Pontiac fever due to *Legionella longbeachae* serogroup 2 found in potting mix in a horticultural nursery in New Zealand

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SUMMARY

Previous outbreaks of Pontiac fever have invariably been associated with water droplet spread of *Legionella* spp. In January 2007 three workers from a horticultural nursery were admitted to hospital with non-pneumonic legionellosis. Investigations showed that a working party of ten people had been exposed to aerosolized potting mix; nine of these workers met the case definition for Pontiac fever. The presence of genetically indistinguishable *Legionella longbeachae* serogroup 2 was demonstrated in clinical specimens from two hospitalized workers and in the potting mix to which they had been exposed. A further seven cases were diagnosed by serological tests. This is the first documented outbreak of Pontiac fever from *L. longbeachae* serogroup 2 confirmed from inhalation of potting mix. Pontiac fever is likely to be under-diagnosed. We advocate the introduction of an industry standard that ensures the use of face masks when handling potting mix and attaching masks and warning labels to potting mix bags sold to the public.

Key words: Infectious disease epidemiology, legionellosis (Pontiac fever), outbreaks.

Pontiac fever is a non-pneumonic illness caused by *Legionella* spp. leading to 'flu-like' symptoms such as headache, myalgia and fever. The first outbreak affected 144 people in a healthcare facility in Pontiac, Michigan in 1968 (retrospectively described in 1978) [1]. Although regarded as a milder illness than Legionnaires' disease, the pneumonic form of

legionellosis, Pontiac fever, has been associated with the serious complication of acute disseminated encephalomyelitis [2]. It is a self-limiting illness and is usually diagnosed in outbreak situations where cases present with similar symptoms over a very short time period following exposure to the same infective source. Several outbreaks of Pontiac fever have previously been described and all of these have been due to exposure to water droplet-borne *Legionella* spp. such as from defective air-conditioning units, cooling towers, fountains or whirlpool baths [3]. In New Zealand the first suspected outbreak of Pontiac fever occurred during March 1998 in an office building in

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