

LEGIONELLOSIS, FATAL, POTTING SOIL - AUSTRALIA (VICTORIA): 2004

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<<http://www.smh.com.au/news/National/Gardeners-warned-of-deadly-potting-mix/2005/01/23/1106415453516.html?oneclick=true>>

Gardeners warned of deadly potting mix

Gardeners are being warned to handle potting mix with great care, after 3 deaths in Victoria were linked to a bacteria found in the mix. Victorian Health Minister Bronwyn Pike said 3 Victorians died in 2004 from *Legionella longbeachae*, a bacterium commonly found in potting mix.

In at least 2 of the cases, the victims had been exposed to potting mix before their deaths, and 24 other cases of related illness were reported, she said. In a 3rd fatal case, potting mix was the likely cause of death, but this is yet to be fully confirmed, a spokesman for Ms. Pike said.

Acting chief health officer John Carnie said different types of legionella bacteria all caused a rare form of pneumonia, and early symptoms included fever, chills, headaches, shortness of breath, dry cough and muscle aches and pain.

Ms. Pike said gardeners using potting mix should wear a mask to avoid breathing in dust, wear eye protection and wash hands and work clothes afterwards.

Gardeners should not shake a potting mix bag, and should moisten the contents of a bag before opening it at arm's length. Potting mix should be stored in a cool location and cleaned up while the product is damp.

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L. longbeachae, originally described in 1981 (1), has been associated with lower respiratory infection in normal and immunocompromised individuals. The organism, especially in Australia, appears to be unique in being associated with pneumonia after

exposure to soil. The organism has been found in soil and potting mixes from Australia but not from potting mix made in Europe.

Importantly, the legionellae from the soil and patients appear to be closely related (2,3). However, cases of *L. longbeachae* (see ProMED-mail posting: Legionellosis, potting soil - USA: May-Jun 2000 (20000904.1503)) associated with potting soil have been described in the USA and Japan (4,5) as well.

1. McKinney RM, Porschen RK, Edelstein PH, et al: *Legionella longbeachae* species nova, another etiologic agent of human pneumonia. *Ann Intern Med* 1981; 94: 739-43.
2. Steele TW, Moore CY, Sangster N: Distribution of *Legionella longbeachae* serogroup 1 and other legionellae in potting soil in Australia. *Appl Environ Microbiol* 1990; 56:49-53.
3. Lanser JA, Adams M, Doyle R, et al: Genetic relatedness of *Legionella longbeachae* isolates from human and environmental sources in Australia. *Appl Environ Microbiol* 1990; 56:2784-90.
4. Centers for Disease Control and Prevention: Legionnaires' disease associated with potting soil -- California, Oregon and Washington, May-June 2000. *MMWR Morb Mortal Wkly Rep* 2000; 49: 777-78.
5. Koide M, Saito A, Okazaki M, et al: Isolation of *Legionella longbeachae* serogroup 1 from potting soils in Japan. *Clin Infect Dis* 1999; 29:943-44. - Mod.LL]