Regional Public Health
Better Health For The Greater Wellington Region

To:	General Practices, Pharmacists, Hospital Physicians, After-Hours Centres and Emergency Departments in the greater Wellington, Hutt Valley and Wairarapa regions
From:	Dr Annette Nesdale, Medical Officer of Health
Date:	**22 January 2016**
Title:	**Increase in Legionellosis**

The clinical and laboratory advice has been provided by ID and Respiratory Physicians at CCDHB

Please distribute the following information to relevant staff in your organisation. All public health alerts are available at www.rph.org.nz (health professionals – public health alerts)

Increase in Legionellosis

Current situation

Since the beginning of January there have been 8 confirmed cases of Legionellosis in the greater Wellington region (3 Hutt, 2 Kapiti, 3 Wellington). The age range of the ill people is from 43 to 74 years. All were hospitalised with pneumonia. Across NZ a high proportion of legionellosis is currently caused by *L. longbeachae*, which is associated with compost and potting mix exposure. The increase is largely due to better case detection from the introduction of molecular tests on sputum as part of a national (LEGINZ) study.

Clinical presentation

Whilst legionellosis can cause multisystem disease, all of the cases seen in the greater Wellington region have had pneumonia. Some patients have been admitted to ICU. The incubation period for Legionnaires' disease is usually 2-10 days, up to 14 days.

Diagnosis and management:

Ask people with suspected pneumonia about potting mix/ compost exposure in the preceding 14 days.

Inpatient management

For patients with symptoms suggestive of pneumonia requiring **inpatient management** we advise:

- Obtain a chest X-ray, and if pneumonia is confirmed send sputum for culture and legionella PCR.
- An induced sputum may be tested by PCR for hospitalised patients who cannot produce sputum. This can be performed in an isolation room on the wards or ED.
- During the gardening weather we recommend azithromycin to be included in the management of all suspected and confirmed pneumonia.

Community management

For suspected pneumonia general practitioners are able to prescribe up to 5 days of treatment, azithromycin 500mg PO daily, for 5 days which is the full treatment course. Azithromycin monotherapy is recommended currently for possible cases not requiring admission.

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Laboratory investigation

There is little point in trying to obtain sputum from mild cases not needing admission. Paired serology testing may be helpful for making a retrospective diagnosis, and to detect outbreaks, but is not routinely recommended. Legionella urinary antigen is less helpful because it only detects *L. pneumophila* SG1, which is a rarer cause of pneumonia in comparison *to L. longbeachae*

Medication Alert

All macrolides are prone to interactions, although azithromycin is a less potent inhibitor of CYP3A4 compared to the others. Close monitoring is required if your patients are on warfarin, digoxin or cyclosporin as the serum levels of these medications can increase. If you are unsure if an interaction may exist check with your clinical pharmacist. There is evidence that legionella-related mortality is related to the time taken to start macrolide antibiotics.

Further information is available at:

- www.rph.org.nz