



Issue date

04 January 2024

Distributed to:

Chief Executives
Directors of Clinical Governance
Director, Regulation and Compliance Unit

Action required by:

Chief Executives
Directors of Clinical Governance

We recommend you also inform:

Directors, Managers and Staff of:

- Emergency Departments
- Infectious Diseases
- Paediatric Emergency department
- General paediatric
- PHU
- Nursing

Deadline for completion of action

07/01/2024

Expert Reference Group

Content reviewed by:

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Review date
January 2025

Clinician Alert: Pneumonia – Legionella and Mycoplasma

Situation

NSW Health surveillance has detected public health signals for two causes of atypical bacterial pneumonia: *Legionella pneumophila* and *Mycoplasma pneumoniae*.

Legionella pneumophila

As of 3 January 2024, seven confirmed cases of *Legionella pneumophila* have been notified in NSW over the past 10 days. These cases developed symptoms in late December 2023. All cases spent time in the Sydney CBD area in mid to late December 2023. Investigations to identify a possible common environmental source are ongoing.

Mycoplasma pneumoniae

Pneumonia presentations to public hospital emergency departments, as well as subsequent admissions, have started to increase, particularly in people aged 5 to 16 years.

While the majority of childhood pneumonias are caused by a variety of viruses and bacterial infections, the proportion of presentations and admissions due to mycoplasma pneumonia and atypical pneumonia is starting to increase.

Background

Legionella pneumophila

Legionella pneumophila can contaminate air conditioning cooling towers, whirlpool spas, shower heads and other bodies of water. People outside may be exposed if they inhale aerosolized contaminated water.

The incubation period is 2 to 10 days, but more commonly 5 to 6 days. Symptoms usually include fever, chills, cough, and shortness of breath. Cases may also have muscle aches, headache, fatigue, loss of appetite and diarrhoea.

Mycoplasma pneumoniae

Globally, there has been an increase in cases of *Mycoplasma pneumoniae* circulation. Such increases usually occur every 3 to 7 years as population immunity wanes.

Symptoms may develop over 1 to 3 weeks and include fever, dry cough, headache, sore throat, and malaise. *Mycoplasma pneumoniae* commonly causes mild respiratory infections and generally resolves without serious complications. Cough and lethargy may persist for more than 1 month. Infection is most common in age groups 5 to 20 years but can occur at any age.

FOR NSW HEALTH STAFF ONLY

This Safety Alert is current at the issue date. Printed copies are uncontrolled.

Made obsolete February 2024

Superseded by SA:003/24

Page 1 of 2



Assessment

It can be difficult to distinguish *Legionella* pneumonia from other types of pneumonia by symptoms alone.

In adults, consider *Legionella* as a possible cause of pneumonia.

People with *Mycoplasma* pneumonia may appear well, often referred to as “walking pneumonia”.

In children, consider a diagnosis of *Mycoplasma pneumoniae*.

Atypical pneumonia can present with a characteristic bilateral lower lobe reticulonodular pattern or patchy infiltrates on chest x-ray.

Clinical Recommendations

In adults presenting with pneumonia consider *Legionella pneumophila* among other causes.

In children, the commonest cause of pneumonia is viral, followed by streptococcal pneumonia, but consider *Mycoplasma pneumoniae* infection among other causes in those with clinically compatible symptoms.

In patients presenting with an illness that is clinically compatible with *Legionella* or *Mycoplasma* infection, consider the following investigations:

- chest x-ray
- atypical respiratory PCR (to detect *Mycoplasma pneumoniae* and *Legionella*)
- urinary antigen testing (to detect *Legionella*)
- sputum culture and/or PCR testing
- atypical pneumonia serology (acute and convalescent sera)

Manage as per treatment guidelines (penicillins e.g., amoxicillin) for typical pneumonia.

For patients with clinically consistent disease and/or epidemiological suspicion of pneumonia caused by an atypical pathogen, consider including treatment with appropriate antimicrobial cover e.g., doxycycline (children 8 years and over), azithromycin or clarithromycin.

Refer to clinical guidelines or the relevant local specialty team for further advice on antimicrobial selection.

Required actions for the Local Health Districts/Networks

1. Distribute this Safety Alert to all relevant clinicians and clinical departments.
2. Include this Safety Alert in relevant handovers and safety huddles.
3. Confirm receipt and distribution of this Safety Alert within 72 hours to cec-recalls@health.nsw.gov.au