

# Pseudomonas Infections



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## CAUSE

Pseudomonads are a group of bacteria found commonly in soil and other natural environments. Although many types of pseudomonads have been identified the one that most commonly causes infection is *Pseudomonas aeruginosa*.

## Where is it found?

*Pseudomonas aeruginosa* is sometimes called a 'water loving bug', because of its ability to grow and multiply easily in water. This is why it is found mainly in solutions containing water and soil.

## What are examples of pseudomonas infections?

*Pseudomonas aeruginosa* can cause lung infections (pneumonia), eye infections (keratitis, endophthalmitis), external ear infection, skin infections (folliculitis), blood poisoning (septicaemia), urinary tract infections and wound infections, particularly in burn wounds.

## TRANSMISSION

### How do you get pseudomonas infections?

A person can acquire a pseudomonas infection in various ways. For example, external ear infections after swimming in contaminated water, and infected wounds through contact with contaminated solutions, hands or equipment.

## Who is most likely to get pseudomonas infections?

Anyone can get a pseudomonas infection, although pseudomonads rarely attack healthy individuals in the community.

Generally, people who are at most risk of getting pseudomonas infections and becoming seriously ill are those who have a weak immune system. For example, cancer patients undergoing treatment, the very sick, the very young, the very old, and people with burns.

## SYMPTOMS

Depending on where the infection occurs, symptoms can range from localised pain, fever, swelling and discomfort, when the infection is in the skin, to severe symptoms when the infection is in the blood (bacteraemia).

## How serious are infections with pseudomonas?

These can be very serious because they tend to affect individuals who are already seriously ill from other diseases.

## DIAGNOSIS

A confirmed diagnosis is obtained through testing of infected samples (pus, blood, and tissue) for the presence of *Pseudomonas aeruginosa*.

## TREATMENT

### How are infections with pseudomonas treated?

Skin rashes caused by *Pseudomonas aeruginosa* are usually uncomplicated and resolve without treatment. However, antibiotic treatment may be considered for more serious infections.

*If you are prescribed a course of oral antibiotics, it is very important to complete the course regardless of whether you feel better soon after taking them. This will prevent the bacteria from developing possible 'resistance' to the same or similar antibiotics in the future.*

## PREVENTION

### How can infections with pseudomonads be prevented?

A number of actions can prevent infection. These include:

- drying ears thoroughly after swimming or showering
- avoiding swimming in polluted water
- washing hands before and after touching wounds
- adequate treatment of infections as recommended by your doctor
- careful attention to controlling the pH and chlorine content of hot tubs and swimming pools.

## Additional information

Lee, G & Bishop, P. Microbiology and infection control for health professionals. Sydney: Prentice Hall Australia Pty Ltd. 2002: 56-87

Mayhall, C.G., ed. Hospital Epidemiology and Infection Control. 2<sup>nd</sup> edition. Philadelphia: Lippincot, Williams & Wilkins 1999: 431-451

## For more information, contact your local public health network



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For medical advice, contact your doctor, hospital or health clinic.

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Please consult your doctor for appropriate diagnosis and treatment of Pseudomonas Infections

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