

## **Remember - to stop amoebic meningitis infection**

- Don't allow water to go up your nose.
- Do not play with garden hoses and sprinklers.



- Let bath and shower taps run for a few minutes.



- Keep wading pools clean and only use the water once.



- Keep your swimming pool or spa clean.



- Test your swimming pool or spa at least every day.



- Stay out of hazardous water - dirty pools, spas, waterholes, dams etc.



- If you do come in contact with unsafe water, walk or lower yourself in.

**Don't allow water to be  
forced up your nose.**



## **Other leaflets available:**

Keeping your Swimming Pool and Spa Healthy  
Emergency Treatment of Drinking Water  
Monitoring Drinking Water in Western Australia  
Using Bore Water Safely

## **Further Information:**

For further information contact your local  
government Environmental Health officer

or

Office of Water Quality, Environmental Health  
Directorate

Telephone: (09) 9388 4999

Facsimile: (09) 9388 4955



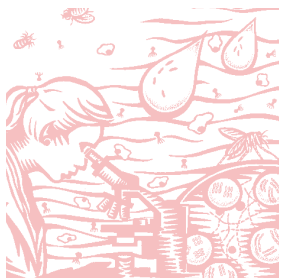
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# **Amoebic Meningitis**





## What is Amoebic Meningitis?

*Amoebic meningitis is a disease that causes inflammation and eventual destruction of the brain and brain linings. It is caused*

*by a single-celled amoeba that lives in fresh water.*

*The amoeba, Naegleria fowleri, can survive in soil for a long time and still reactivate when put in fresh water.*

This rare and fatal water-borne disease was discovered at the Adelaide Children's Hospital in the 1960s. Since then 15 countries in Asia, Europe, North and South America have detected *Naegleria fowleri*.

Most victims have been children who didn't know the dangers of swimming in or playing with unclean water. Taking the simple precautions listed below will help you protect them.

## Symptoms of Amoebic Meningitis

The following symptoms are usually recorded within three to seven days of infection and result in death.

- *severe and persistent headache*
- *sore throat*
- *nausea*
- *vomiting*
- *high fever*
- *sleepiness*



## How do you get it?

Amoebic meningitis occurs only if water containing the amoebae goes up the nose. The amoebae can then make their way up the nerves to the brain.

## When do you get it?

When a number of conditions occur at the same time:

- if the amoebae are present in the water
- if they get a chance to multiply
- if water gets up your nose



## Where do you get it?

*Naegleria fowleri* thrive in water temperatures between 28° and 40°C. You can get amoebic meningitis from:

- ✗ unchlorinated or incorrectly chlorinated fresh water (drinking water, bore water),
- ✗ warm inland waters (dams, lakes, geothermal water, or waterholes),
- ✗ poorly maintained swimming pools and spas,
- ✗ water piped above ground for long distances without proper treatment.
- ✗ garden hoses and sprinklers containing stagnant water.

*Naegleria fowleri* will not grow in any water body with more than two percent salt such as sea water and river estuaries.

## To prevent infection

- ✓ Don't allow water to go up your nose or sniff water into your nose when bathing, showering or washing your face.
- ✓ Don't allow children to play unsupervised with hoses or sprinklers as they may accidentally squirt water up their nose.
- ✓ Let bath and shower taps run for a few minutes to flush out the pipes.
- ✓ Don't jump into or duck dive into bathing water – walk or lower yourself in.
- ✓ Swim in and play with safe water only. Stay out of dirty pools, waterholes, dams, swimming pools, spas, etc.
- ✓ Disinfect your swimming pool and spa water. Chlorine is the most effective way to continually disinfect water as it kills all stages of *Naegleria fowleri*.
- ✓ Keep wading pools clean by emptying, scrubbing and allowing them to dry in the sun after each use.
- ✓ Swim in sea water as you cannot get amoebic meningitis from water containing more than two per cent salt.



**Water should be clean,  
cool and chlorinated.**