
Meningitis

Summary

- Meningitis is infection of the membranes that surround the brain and spinal cord.
 - It can be caused by bacteria or viruses.
 - Meningitis is very serious and needs immediate medical attention.
 - Vaccination can protect against some forms of meningitis.
-

Meningitis is when the membranes that surround the brain and spinal cord (meninges) become infected. It can be caused by bacteria or viruses.

Meningitis is very serious, and can cause death. If you have symptoms of meningitis, get treatment immediately.

Immunisation can protect against some forms of meningitis.

Symptoms of meningitis – babies and young children

The symptoms and signs of meningitis in babies and young children include:

- fever
- refusing feeds
- fretfulness
- being difficult to wake
- purple–red skin rash or bruising
- high moaning cry
- pale or blotchy skin.

Symptoms of meningitis – older children and adults

The symptoms and signs of meningitis in adults and older children include:

- headache
- fever
- vomiting
- neck stiffness and joint pains
- drowsiness and confusion
- purple–red skin rash or bruising
- discomfort looking at bright lights (photophobia).

Diagnosis of meningitis

A doctor is the only person who can make a diagnosis to determine if meningitis is viral or bacterial. Meningitis is sometimes difficult to diagnose. Your doctor may order several tests or seek specialist advice.

Diagnosis may include:

- taking a detailed history of signs and symptoms
 - clinical examination
 - blood tests
 - a lumbar puncture, which may be done in hospital (spinal fluid is removed using a needle and examined for
-

bacteria).

Bacterial meningitis

Meningitis caused by bacteria is called 'bacterial meningitis'. The organisms (germs) that cause bacterial meningitis may live in the nose and throat. People of any age can carry them without becoming ill, but they can infect others through coughing or sneezing. Meningitis caused by these bacteria is serious and requires very prompt medical attention.

Some common examples of bacterial meningitis are:

- **haemophilus (Hib) meningitis** – caused by Haemophilus influenzae type b
- **meningococcal meningitis** – caused by Neisseria meningitidis
- **pneumococcal meningitis** – caused by Streptococcus pneumoniae.

Meningitis caused by bacteria is serious. Antibiotics are used to treat the infection, but death does occur in a small number of those affected – five per cent of people with Hib meningitis, seven per cent of people with meningococcal meningitis and 20 per cent of people with pneumococcal meningitis.

One in five children who have had bacterial meningitis are left with permanent disabilities, such as cerebral palsy and deafness.

Prevention of bacterial meningitis

Some forms of meningitis can be prevented by immunisation:

- **Haemophilus influenzae type b** can be prevented with **Hib immunisation**, which is available for free (as part of a combination vaccine) through the **National Immunisation Program Schedule**. It is routinely offered for babies but needs to be purchased on prescription for some groups at high risk of bacterial disease.
- The National Immunisation Program schedule provides a free **meningococcal ACWY** vaccine for:
 - children at 12 months of age
 - people under 20 years of age who did not have their meningococcal C vaccine at 12 months of age
 - secondary school students in Year 10, or age equivalent, through a school-based immunisation program. Young people aged 15 to 19 years who have not already received the vaccine in school will be able to be vaccinated by their immunisation provider.
- **Meningococcal B** vaccine is not funded on the National Immunisation Program but can be purchased by prescription.
- **Pneumococcal** can be prevented with two types of pneumococcal vaccine. They are available free on the National Immunisation Schedule to:
 - all babies
 - Aboriginal and Torres Strait Islander people who are 50 years of age or over
 - non-Aboriginal and Torres Strait Islander people who are 65 years of age and over.

Pneumococcal vaccines need to be purchased on prescription for some groups at high risk of bacterial disease.

Meningococcal vaccines are recommended for:

- infants
- children
- adolescents
- young adults
- people at increased risk of meningococcal disease due to certain medical conditions or immunosuppressive medications
- anyone wishing to protect themselves from meningococcal disease.

Treatment for bacterial meningitis

Early and rapid diagnosis is very important in the treatment of bacterial meningitis. Treatment may include:

- antibiotics (often given intravenously)
- hospital care
- anticonvulsant, cortisone and sedative medications, which may be used to treat complications.

Viral meningitis

Meningitis caused by a virus is called 'viral meningitis'. This type of meningitis is relatively common and can occasionally be serious. It can be caused by a variety of different viruses. It is often a complication of another viral illness.

Some of the viruses that can cause meningitis include:

- enteroviruses
- coxsackieviruses
- mumps virus
- adenovirus.

Prevention of viral meningitis

You can prevent the spread of viral meningitis by:

- washing your hands thoroughly after using the toilet, changing a nappy or blowing your nose, and before touching food
- covering your coughs and sneezes with a tissue, or coughing or sneezing into your sleeve
- avoiding close contact with other people, such as kissing
- stay home from work, childcare, kinder or school if you are unwell.

Treatment for viral meningitis

Treatment for viral meningitis depends on the severity of the symptoms. Treatment is the same as for any viral infection and may include supportive care such as:

- resting
- keeping warm and comfortable
- drinking plenty of fluids.

Viral meningitis cannot be treated with antibiotics.

Get further medical help if you are still worried

You are the expert in your family's health. If you think a person has symptoms that suggest meningitis, contact your doctor immediately, call triple zero (000) for an ambulance or go to the nearest hospital emergency department. Early diagnosis and treatment are vital.

Where to get help

- In an emergency, call triple zero (000)
- Go to the emergency department of your nearest public hospital
- Your **GP (doctor)**
- **NURSE-ON-CALL** Tel. **1300 606 024** – for expert health information and advice (24 hours, 7 days)
- Local government immunisation service
- **Immunisation Section**, Department of Health and Human Services, Victorian Government Tel. **1300 882 008**
- **National Immunisation Hotline** Tel. **1800 671 811**

This page has been produced in consultation with and approved by:

Department of Health and Human Services - RHP&R - Health Protection - Communicable Disease Prevention and Control Unit

Content on this website is provided for information purposes only. Information about a therapy, service, product or treatment does not in any way endorse or support such therapy, service, product or treatment and is not intended to replace advice from your doctor or other registered health professional. The information and materials contained on this website are not intended to constitute a comprehensive guide concerning all aspects of the therapy, product or treatment described on the website. All users are urged to always seek advice from a registered health care professional for diagnosis and answers to their medical questions and to ascertain whether the particular therapy, service, product or treatment described on the website is suitable in their circumstances. The State of Victoria and the Department of Health & Human Services shall not bear any liability for reliance by any user on the materials contained on this website.

For the latest updates and more information, visit www.betterhealth.vic.gov.au

Copyright © 1999/2019 State of Victoria. Reproduced from the Better Health Channel (www.betterhealth.vic.gov.au) at no cost with permission of the Victorian Minister for Health. Unauthorised reproduction and other uses comprised in the copyright are prohibited without permission.