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
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:
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