Sepsis in children

Sepsis is a rare but life-threatening illness caused by an abnormal response of the body to an infection. It can lead to tissue damage, multiple organ failure and death.

Sepsis can be caused by any infection (viral, fungal, bacterial), but most commonly occurs with bacterial infections of the lungs, urinary tract (bladder, urethra, kidneys), abdomen, skin and soft tissues.

Anyone can develop sepsis, however children, infants, people of Aboriginal and Torres Strait Islander descent, and those with a weak immune system are most at risk.

Signs and Symptoms:

The signs and symptoms of sepsis can sometimes be difficult to diagnose in the early stages of the illness because they are like those of common ailments, such as gastroenteritis or the common cold or flu.

The signs of sepsis include:

- blotchy, pale or bluish skin
- sleepy, confused or irritable
- shivering fever or cold hands and feet
- very fast breathing, struggling to breathe
- grunting noises when breathing
- rapid heart rate
- pain or discomfort that doesn't settle with ordinary pain relief like paracetamol
- rash that doesn’t fade when pressed
- fit or convulsion
- reduced urine output or only one wet nappy in 12 hours.

How is sepsis diagnosed?

Health professionals diagnose sepsis by monitoring observations such as temperature, heart rate, breathing rate and blood pressure, as well as regular examinations and medical imaging as needed (X-Ray, ultrasound, CT scan).

The healthcare team will look for and attempt to culture organisms that may be causing the sepsis. They do this with blood tests (blood cultures) as well as looking at other sites in the body and body fluids, such as urine or stool samples, wound swabs and sputum tests.

What is the treatment?

Sepsis is curable if it is identified and treated quickly and, in most cases, will lead to a full recovery. Children with sepsis will require an initial stay in hospital. Treatment includes antibiotics to treat the infection and support of any organs that are not functioning well. This may include the need for some intravenous fluids and, in more severe cases, medications to support blood pressure and ventilation to support the lungs in the intensive care unit.

How to protect your child from sepsis?

- talk to your healthcare professional about action you can take to prevent infections
- know the signs and symptoms of sepsis
- if you suspect sepsis, get medical treatment fast - the germs that cause sepsis can multiply rapidly
- ask your health care professional ‘could this be sepsis’
- early diagnosis and treatment of sepsis saves lives.

Key points to remember

- sepsis is a potentially life-threatening complication of an infection
- sepsis can be caused by viral or fungal infections, although bacterial infections are the most common cause
- without quick treatment, sepsis can lead to severe illness, multiple organ failure and death
- if your child is unwell with an infection and is rapidly getting worse, or their illness seems different, seek urgent medical attention
- don’t be afraid to ask your health professional if your child may have sepsis
- sepsis is treatable if identified and treated quickly and, in most cases, leads to a full recovery.