

What is sepsis

Sepsis is a life-threatening uncontrolled immune response to an infection, causing the body to damage its own tissues and organs. Sepsis can be triggered by any type of infection, whether bacterial, viral, fungal, or caused by other germs (pathogens). Sepsis needs urgent and quick treatment with antibiotics, intravenous fluids and other supportive measures.

Who is at risk of sepsis

Anyone is at risk of developing sepsis from any infection at any time.

What causes sepsis

Sepsis always starts with an infection, this could be a bacterial, viral or fungal infection. It's not known why the immune response of some people develop sepsis in response to infections whereas others don't.

Signs and symptoms of sepsis

Recognising sepsis can be challenging, as there is no single sign or symptom that is completely unique to the condition. Symptoms may present like typical flu or infections.

Some people may only have one sign or symptom of sepsis. Red flags indicating that it could be sepsis include:

- Small changes in multiple signs and symptoms such as temperature, drowsiness, rapid breathing, little to no urine
- A person feeling or appearing extremely unwell – worse than normal
- When the cause of illness is unclear
- Parental concern that the child's illness is unusual or worse than normal

Any combination of these subtle early signs and symptoms should be regarded seriously and urgent medical advice or assistance should be obtained as soon as possible.

Sepsis signs for adults

There is no single sign and no single diagnostic test for sepsis. Seek medical help urgently if you (or another adult) develop any of these signs.



Rapid breathing and/or heart rate



Confusion, slurred speech and/or disorientation

Fever and/or shivering



Weakness and/or muscle pain



Not passing urine



New rash and/or discoloured skin

Feeling like you're going to die



Sepsis signs for children



Convulsions or fits



Rapid breathing

A rash that doesn't fade when you press it



Fever or very low temperature



Discoloured or mottled skin, very pale or bluish



Not passing urine for several hours



Hard to wake, lethargic or floppy



Feels abnormally cold to touch



Acknowledging and responding to parental concern is paramount in the early treatment of sepsis in children.

If you spot any of the signs or are concerned call 000 or go to Emergency and just ask "Could it be sepsis?"



Diagnosing sepsis

Recognising sepsis can be challenging, as there is no single sign, symptom, or diagnostic test for it.

When there are small changes in various signs and symptoms, combined with a person feeling or appearing extremely unwell, especially when the cause is unclear, a person should seek urgent medical attention and a clinician should diagnose and treat with urgency.

Symptoms of sepsis can differ between adults and children, making early recognition crucial.

Clinicians must prioritise parental concerns as a vital component of assessment and treatment, recognising that parents have unique insight into their child's health. Their intuition and observations often serve as early indicators of deterioration, reinforcing the importance of listening to parental voices in the diagnostic process.

Parents know their children best and should feel confident in voicing their concerns. By speaking up and sharing what they've observed, they play a vital role in ensuring timely and accurate diagnosis.

By acknowledging and acting on parental concerns, healthcare providers can improve early intervention, ultimately enhancing outcomes for children at risk of sepsis.

Suspecting sepsis in anyone who is severely ill and could potentially have an infection, even if not confirmed, can save lives. Those with sepsis require immediate and aggressive treatment, including escalation to a senior clinician. They are also likely candidates for hospital admission, often to an Intensive Care Unit.

In cases of suspected infection and unclear diagnosis, the early administration of antibiotics is crucial to controlling the infection - each hour of delay increases the risk of death or lifelong disability by 8-10%.

In addition to listening to the patient and patient's families, clinicians will screen for sepsis through a series of tests that determine infection, type of infection, organ function, level of inflammation in the body's blood.

How to prevent sepsis

Reduce Risk: Certain infections that can lead to sepsis are preventable through vaccination, good hygiene, proper nutrition, and overall health maintenance.

Urgent Action: The progression of infection into sepsis can be prevented through early detection of symptoms, prompt medical care, and timely antimicrobial treatment.

Keep Seeking Medical Support: If an individual has been treated by a GP or Emergency Department and sent home but does not feel like they are improving or has concerns about their condition, they should return immediately and not delay seeking further medical attention.

Awareness and Timely Treatment: Deaths and disabilities caused by sepsis can be reduced through increased awareness, understanding, timely treatment, and standardised recognition protocols and training.





Sepsis, septicaemia, and blood poisoning are not the same

The term 'sepsis' is frequently misused interchangeably with the terms 'septicaemia', 'blood poisoning' and 'blood infection'. This can lead to miscommunication, life-threatening diagnostic errors and inappropriate treatment.

Sepsis is the broader term that refers to body's immune response to ANY infection, injuring its own tissues and organs. It can lead to organ failure, septic shock, and death if not treated promptly.

Septicaemia specifically refers to the presence of bacteria in the bloodstream, which may be termed as 'blood poisoning'.

Bacteria spread throughout the body through the bloodstream can cause serious infections in organs and tissues. Septicaemia can lead to sepsis if the infection triggers a systemic inflammatory response.

Consistent and correct use of the term 'sepsis' reinforces its identity as a severe, life-threatening condition that can arise from ANY infection. This practice helps to educate about the critical nature of sepsis and underscores the urgent need for immediate medical intervention to access life-saving treatment.

Sepsis Is A Silent Health Crisis

Sepsis is a medical emergency that affects over

84,000

Australians each year, yet public awareness and funding for early diagnosis, treatment, and post-care remain critically inadequate.



Despite its staggering impact - causing more than

12,000

preventable deaths annually, sepsis lacks the visibility and prioritisation given to other major health crises.





Factors that contribute to this gap in awareness:

There are a number of challenges to increasing awareness of sepsis. These include:



Complex Symptoms

Sepsis symptoms can be quite vague and overlap with other common illnesses like flu or urinary tract infections. This makes it difficult for both the public and healthcare professionals to recognise it early.



Misconceptions

There are misconceptions about sepsis, such as confusing it with blood poisoning or septicaemia. This can lead to misunderstandings about its seriousness and the need for urgent treatment.



Lack of Public Education

Unlike conditions such as heart disease or diabetes, sepsis doesn't receive as much attention in public health campaigns. Many people have never heard of sepsis, despite it being a leading cause of death.



Delayed Diagnosis

Since sepsis progresses rapidly, there's often a narrow window for diagnosis and treatment. Delays in recognising and treating sepsis can lead to severe complications or death.



Inconsistent Documentation

Inconsistent documentation of sepsis which has caused extreme illness, death and morbidity can significantly impact awareness. This creates gaps in data, making it difficult to understand the true prevalence and impact of the and therefore hinder public health campaigns and education. It also impedes the urgency or treatment, research and the development of effective treatment protocols.

For more information about Sepsis – Contact Sepsis Australia at sepsis@georgeinstitute.org or visit us at www.australiansepsisnetwork.net.au