



How do I know if I or a loved one has sepsis?

If you think that you, or someone close to you, has an infection **and** is experiencing some of the following signs, you are at risk of sepsis.



S Slurred speech, confusion, weakness



I Increased heartbeat, fast breathing, insufficient urine
Heartbeat is more than 90 beats a minute. Breathing is more than 20 breaths a minute (These rates apply to adults only). Passing very little urine, or passing urine that is dark and smells bad.



R Rigors, chills
Severe shivering and/or high temperature



S Skin colour changes
Skin is cold, pale, mottled or warm and flushed

SEPSIS is

infection

+ SIRS symptoms
(Systemic inflammatory response syndrome which is the result of widespread inflammation)
Slurred speech, confusion, weakness
Increased heartrate, breathing, not enough urine
Rigors (severe shivering, fever or chills)
Skin colour changes

Should I call for help?
Yes. Call your family doctor (G.P.) or nurse immediately. If they cannot see you, go to your nearest hospital emergency department.

Remember
Suspect SEPSIS - seek urgent medical advice

If you have infection and feel very unwell, suspect sepsis.
Seek urgent medical advice.



For more information go to www.hse.ie/sepsis





What is sepsis?

Sepsis is a severe infection affecting the whole body. It can cause serious illness and even death. It is vital to get early treatment if you think you, or a loved one, might have sepsis.

Is sepsis common?

Sepsis is very common, but, as it is often labelled just 'infection', it is not well discussed.

In fact more people die of sepsis than lung cancer, breast cancer and HIV/AIDS combined. It is becoming more common due to:

- people living longer;
- increased use of antibiotics leading to germs that are resistant to antibiotics;
- more patients living with weakened immune systems.

Who is at risk?

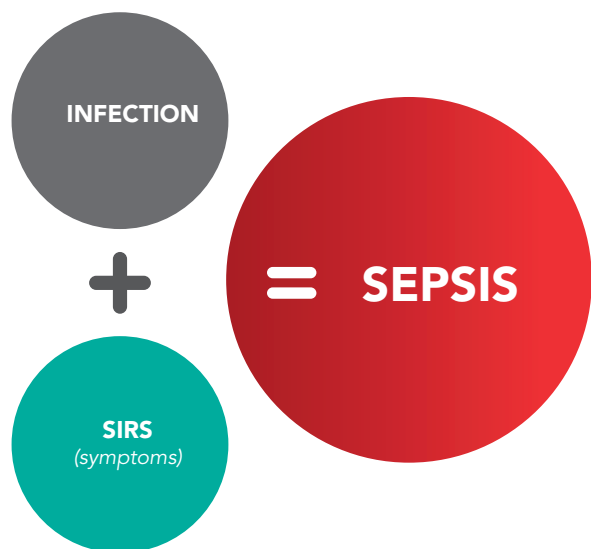
Anyone can develop sepsis but it is more likely to develop in:

- babies, especially premature babies;
- frail, older people;
- people who have recently had surgery or who have wounds or injuries from accidents;
- people receiving treatments which weaken the immune system, such as steroids or chemotherapy (cancer) treatment;
- patients who have urinary catheters (a tube in the bladder to help pass urine) or intravenous devices (such as drips going into a vein).

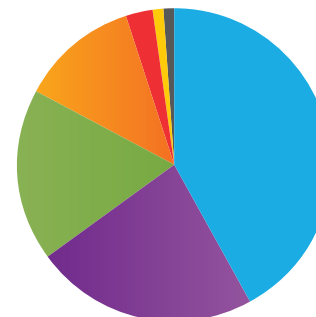
What causes sepsis?

Every year, millions of people develop local infections such as flu, gastroenteritis (vomiting and diarrhoea) or other germs. Normally, the body recognises the infection, caused by the bacteria or virus, and starts trying to remove the infection and allow the body to heal.

Sepsis happens when the local infection spreads throughout the body. The body temperature rises to try and stop the germs multiplying and the body makes more white blood cells to find and kill the germs. This is called the 'inflammatory response'.



Most common sources of infection:



- 42% Respiratory (lung)
 - 23% Urinary tract (kidney and bladder)
 - 18% Abdominal (for example, if there is an collection of pus in the stomach due to a burst appendix, hole in the intestine or as a complication after surgery)
 - 12% Other
 - 3% Catheter related blood stream infection (large drip that stays in the vein for people on long-term treatment)
 - 1% Device such as a urinary catheter or pacemaker or other foreign object in the body
 - 1% Brain and spinal cord such as meningitis
- (Sourced from IMPRESS Trial, 2014)

What are the signs of sepsis?

The early signs of sepsis are:

- high temperature greater than 38.3°C, and/or rigors (shivering fits and/or chills)
- fast heart rate, greater than 90 beats per minute (adults only)
- fast breathing rate, greater than 20 breaths per minute (adults only)
- confusion, especially in very old people
- lethargy (weakness) and poor feeding in babies and young children

However, many other illnesses and conditions can also cause these signs.

Sepsis is only diagnosed if infection is suspected or proven to be the cause of these signs.

As sepsis is often hard to diagnose in the early stages, it is really important to watch for the signs of severe sepsis which might develop if the infection is not treated early or is not responding to the initial treatment.

What is severe sepsis?

In severe sepsis there is huge damage to the body. The immune system is either not working properly or can't cope and the body's organs (such as the heart, kidneys and liver) are damaged, and begin to shut down.

What is septic shock?

Septic shock happens when sepsis has reached the point where there is a life-threatening drop in blood flow to the vital organs.

What are the signs of severe sepsis and septic shock?

- Marked confusion, slurred speech, extreme weakness, inability to feed
- Difficulty breathing
- Very fast heart rate
- Passing little or no urine, or passing very dark urine with a bad smell
- Cold, clammy, pale or mottled (blotchy) skin
- Non-blanching rash (doesn't disappear when pressed on by a clear glass)
- Adolescents may describe severe leg pain and indeed may have trouble standing
- "I feel like I might die"

