



Sepsis – what you need to know



**Adult
information
leaflet**

Sepsis is a life-threatening condition. It can happen when the body develops an infection which then affects the organs.

If it is not treated quickly, sepsis can lead to death.

There are around 15,000 cases of sepsis in Ireland each year. Around 1 in 5 people with sepsis will die.

Who is at risk of sepsis?

Anyone who has an infection could be at risk of developing sepsis but some people are at increased risk:

- older people
- people with chronic health problems
- people on medications and treatments which affect the way the immune system works
- people with materials that are not a normal part of the body such as medical tubes and catheters
- people who have had an organ transplant and are taking medication to prevent the body rejecting the organ



Conditions associated with increased risk of sepsis

Neutropenia or low white blood cell count. This may occur due to bone marrow failure, autoimmune disorder or treatment such as chemotherapy and radiotherapy.

Living with a cancer diagnosis.

Taking immunosuppressant medications to control a chronic health problem (organ transplant, rheumatoid arthritis).

If you are taking medications such as steroids, methotrexate or anti-rejection agents (following transplant), read the information leaflet for the medication and ask your pharmacist if it can affect your immune system.

Frailty – general poor health.

Diabetes.

Chronic obstructive pulmonary disease (COPD).

Chronic liver disease.

Chronic kidney disease.

HIV/AIDS.

Recent surgery or a physical trauma within the last 6 weeks.

Older age, particularly over 75 years.

Signs and symptoms of infection

You may suspect an infection if you develop a temperature or feel unwell.

General symptoms

- Temperature over 38°C or under 36°C

If you take paracetamol this may lower the temperature but will not treat the underlying infection.

- Severe uncontrollable shivering
- Fatigue
- Loss of appetite
- Muscle and joint pain
- Vomiting
- Diarrhoea

Local signs and symptoms

As well as general symptoms, infection causes local signs and symptoms, where the infection is in the body.

Respiratory tract / lung infection	<ul style="list-style-type: none">• A cough with or without green sputum (phlegm).• Breathlessness.
Abdominal infection	<ul style="list-style-type: none">• Unexplained abdominal (tummy) pain with or without a swollen tummy.• Pain may be worse when your tummy is pressed.
Urinary tract infection (UTI)	<ul style="list-style-type: none">• Burning sensation on passing urine, with intense urge to go.• Pain may be in your side or spread round to your back.
Genital tract infection	<ul style="list-style-type: none">• Lower tummy discomfort or pain with or without smelly discharge.

Local signs and symptoms

Skin or wound infection	<ul style="list-style-type: none">• Pain, swelling, redness and hot to touch.• There may be pus or fluid oozing.
Bone or joint infection	<ul style="list-style-type: none">• Pain, swelling, redness and hot to touch.• There may be pus or fluid oozing.• Stiffness.
Brain infections and meningitis	<ul style="list-style-type: none">• Severe headache.• Neck stiffness.• Not able to tolerate bright lights.• May have a rash on the skin or body.• May be agitated or confused.
Device-related infection	<p>This is where an infection is caused by an item or material which is not a normal part of the body. For example, a medical tube used for giving fluids, or metal work, such as a plate for broken bones.</p> <p>Symptoms of a device-related infection include:</p> <ul style="list-style-type: none">• pain, swelling, redness and hot to touch in the area of the device• pus or fluid oozing.
Blood stream infection or blood poisoning	<ul style="list-style-type: none">• Temperature over 38°C or under 36°C.• Severe uncontrollable shivering.• Fatigue.• Loss of appetite.• Muscle and joint pain.• Vomiting and diarrhoea.

Sepsis checklist

If you or someone else has an infection, use the following checklist to see if they may be at risk of sepsis. If you tick any of the boxes, it could be a sign of sepsis and organ malfunction (organs are not working properly), and you should get urgent medical help.

Tick if applies	Part of the body affected	 Consider
<input type="checkbox"/>	Brain	<ul style="list-style-type: none"> • Is the person behaving as they normally do? • Changes can range from mild agitation or confusion all the way to a coma. • Are they too sick to communicate?
<input type="checkbox"/>	Breathing	<ul style="list-style-type: none"> • Is their breathing pattern very fast and they are finding it very hard to breath? • Can they finish a sentence without having to stop? • Are their lips tinged with blue?
<input type="checkbox"/>	Circulation	<ul style="list-style-type: none"> • Is their heart racing very fast? • Are their hands and feet cold, clammy and pale? • Are they dizzy all the time when sitting, standing or trying to walk?
<input type="checkbox"/>	Kidneys	<ul style="list-style-type: none"> • Is it more than 12 hours since they passed urine and do they not feel a need to pass urine?
<input type="checkbox"/>	Clotting	<ul style="list-style-type: none"> • Do they have a new rash that is still visible when pressed on by your finger or when a glass is rolled over it (glass test)?
<input type="checkbox"/>	Functional status	<ul style="list-style-type: none"> • Is there a change in their behaviour or their ability to carry out their normal activities? • Sometimes it can be difficult to recognise these changes in people with intellectual and/or physical disabilities, especially if you don't know them well. • Young people may have severe leg pain and difficulty standing.

Preventing infection and sepsis

Our bodies have multiple layers of defence against infection. To work well all of these must be in good working order.

Not all bugs cause infection and bugs in the right place are essential for our bodies to be healthy. We have bugs on our skin and in our digestive system that not only help keep us well but also ensure that our immune system is working well. Here are some things you can do to protect against infection.

Good hygiene

- Keep yourself clean and wash your hands regularly and thoroughly.
- Keep your environment clean.
- Use soap and hot water to keep the number of bugs down.
- Get rid of food and stains on clothes and other surfaces.

Good sanitation

- Make sure you have clean water to drink.
- Make sure your toilet facilities are clean.

Vaccination or immunisation

- Vaccination is a method of stimulating the immune system to recognise and destroy dangerous bugs. Immunisation is a simple, safe and effective way of protecting people against harmful diseases before they come into contact with them in the community.
- Immunisation not only protects individuals, but also others in the community, by reducing the spread of disease. For example, the flu vaccine helps your immune system to produce antibodies to the influenza virus which reduces the risks of you getting the flu.

Breastfeeding

- When a baby is born his or her immune system is not fully developed. Because of this, babies are at increased risk of infection.
- As he or she is delivered and cuddled at birth, the baby is exposed to bugs carried by his/her mother. This is helpful so that the baby can be exposed to a nice healthy varied group of bugs for his or her skin and digestive tract.
- Breast milk contains cells and proteins from the mothers' immune system that can be used by baby to fight infections. Immune cells and proteins are also transferred across the placenta before birth and these give some protection too.

Exposure to infection

Have you or someone you are caring for:

- been in close contact with anyone who has had similar symptoms?
- had a recent operation or infection?
- known to carry a multi-drug resistant bacteria i.e. MRSA?
- recently travelled to tropical areas or to an area with an infection outbreak?

Could this be sepsis?

If you or someone you are caring for has an infection which is getting worse, look for the signs of sepsis using the checklist.

Infection



= Sepsis

**Organ
Malfunction**

What to do

If you have an infection which is getting worse and you think any of the signs of sepsis are present, you should:

1. Get urgent medical help from your GP, out of hours service or local emergency department
2. Tell them the part of the body that is abnormal (see the checklist)
3. Ask 'could this be sepsis'?

If you suspect sepsis – seek urgent medical help.

For more information visit:
www.hse.ie/sepsis

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