Sepsis is a medical emergency and needs to be treated immediately.

Sepsis

Information for patients and whānau

Sepsis Trust NZ

Health Quality & Safety Commission
Te Tāhū Hauora

Could it be sepsis?

What is sepsis?

It happens when your immune system responds to an infection in an extreme (dysregulated) and toxic way, injuring tissue and organs. It can be the result of any type of underlying infection for example, from bacterial, virus or fungal infections.

Sepsis occurs when your body's immune system – which normally helps us fight infection – overreacts, causing damage to tissues and organs. It can cause life-threatening changes to your body.

It can put stress on or damage your organs, for example, blood vessels, skin, lungs, heart, kidneys, and brain.

It can also cause damage to your body's internal systems. For example, your nervous system.

⚠ **SEPSIS IS NOT AN INFECTION. It is an inappropriate and dangerous response of your immune system.**

What causes sepsis?

Our body's natural defense systems and immune system fight these infections, often without any need to visit the GP or hospital. However sometimes, the body's immune system – which normally helps us fight infection – overreacts, causing damage to tissues and organs.

Sepsis is preventable.

Some people are more at risk of sepsis

Sepsis can affect anyone, but some people are more at risk than others.

» Young people under the age of 12, especially babies and children who are not fully immunised.

» People over the age of 60 years.

» Pregnant or recently pregnant women/wāhine (including after giving birth, or after an abortion or miscarriage).

» Māori or Pacific peoples, especially those who are younger.

» People who have had sepsis before.

» People recently discharged from hospital.

» People with chronic diseases or who are immunocompromised.

What does sepsis look like and what are the common signs and symptoms?

Sepsis can develop quickly. Sometimes the early signs can be hard to recognise. The earlier sepsis is identified the better the chances of minimising harm.

Common signs of sepsis include:

» feeling cold and shivery

» feeling hot and flushed

» skin is blotchy

» difficulty breathing

» aching muscles

» very tired

» not wanting to eat

» an upset stomach, perhaps vomiting or diarrhoea

» not passing urine for 12 hours or more, or passing very little

» showing signs of confusion, unusual behaviour or slurred speech.

If you are measuring body temperature it could be either very high OR very low. Both can indicate infection and sepsis.

If you think someone might have an infection and has any of these symptoms, seek help and ask: COULD IT BE SEPSIS?

What happens to the body

- Blood pressure might drop because the immune response causes your veins and arteries (blood vessels) to dilate (widen) and fluid shifts into surrounding tissue and organs.
- The heart will have to work harder and beat faster because of the dilated vessels. When the heart is working harder some people will feel short of breath or will be breathing faster.
- Skin may become cool or pale. Sometimes the skin will look blotchy, be an unusual color or there may be a rash.
- Sometimes the skin can feel hot and flushed.
- Some people might become drowsy or confused. This can be from dangerously low blood pressure not getting enough blood to the brain or the toxic effects of the sepsis.

SEPSIS IS A MEDICAL EMERGENCY

Depending on the underlying infection, there may be other symptoms, for example, a bad cough.

Sometimes symptoms are not very specific and could be described as 'feeling generally unwell'.

As sepsis progresses urgent treatment in hospital is needed.

In hospital with sepsis

What happens if you or your whānau are admitted to hospital with sepsis

All people with sepsis or septic shock need to go to hospital. Early treatment by doctors and nurses will include:

- antibiotics and intravenous fluids
- oxygen if it is needed
- taking blood cultures (to identify the type of bug or infection that has led to the sepsis)
- taking blood samples
- senior nurses and doctors will be involved in this treatment.

This treatment is often enough to stop sepsis progressing. If the person is in the emergency department and responds well, they will most likely be transferred to a ward for ongoing treatment and care.

If the person does not become stable after this treatment or there is severe organ damage, they might be taken to the High Dependency Unit (HDU) or Intensive Care Unit (ICU). Some will need to have an operation.

What happens if you or a whānau member needs to go to the ICU

When sepsis damages your tissue and organs, you need to be treated in the ICU where there is specialised support.

The ICU is where the sickest patients in the hospital are treated. The nurses and doctors use specialised equipment and medication to support and treat damaged organs, for example, your heart, lungs and kidneys.

Some examples of equipment and medication include respiratory ventilators, kidney dialysis machines, medications to keep the blood pressure up at safe level for organ function, and sedatives to induce a coma that allows treatment to be given and rest for the body to recover.

Typically, nurses look after just one or two patients at at time.

The ICU team often has other specialists working, like dieticians, physiotherapists and pharmacists.

What happens after being discharged from the ICU

The main goal of treatment in the ICU is to get you or your whānau member well enough to be safely transferred to either the HDU or hospital ward for ongoing care and rehabilitation.

Moving out of the ICU can be a big change, this can be unsettling. On the ward, the focus of treatment is ongoing medical management and rehabilitation.

Being on the ward is different too. Nurses on the wards look after more than one or two patients, and doctors see patients less frequently than in the ICU. Also, patients are generally not attached to continuous monitoring on the wards.

It is important that staff in the ICU prepare you for the move, by talking about what is happening and what you can expect in terms of care planning.

This preparation is important. Patients and whānau often still feel scared and uncertain about what to expect or scared about ‘what if things go wrong’. They might still be confused or not thinking clearly because of the sepsis and treatment in the ICU. They might also have trouble sleeping.

Moving from the ICU to either the HDU or ward can be a big change. From a medical and nursing perspective this is a sign of improvement. If you are feeling uncertain or scared talk to the staff.

Recovering from sepsis

What happens after you have had sepsis

Around half of sepsis survivors make a full recovery within a few weeks or maybe months. But some will experience Post Sepsis Syndrome (PSS).

PSS describes ongoing complications that are a result of the sepsis, the underlying infection or treatment you've had, or maybe a combination of these. PSS is broadly described as changes to your cognitive and physical function, and medical and psychological complications.

PSS symptoms can vary. You may develop new, longer-term medical conditions, or you may find that existing chronic conditions you had before sepsis become worse.

For most people the average recovery time from PSS is up to two years.

PSS does not only affect people who spent time in ICU.

It is common to become aware of PSS symptoms after you get home from hospital.

You might notice some physical and emotional changes while you are recovering from sepsis:

» general and extreme weakness

» tiredness

» breathlessness

» body aches and pains

» weight loss, lack of appetite or food not tasting the way it used to

» dry, itchy or flaky skin

» hair loss

» brittle nails and teeth

» dizziness, headaches

» change in vision

» sensitive to temperature changes or easily become cold or hot

» intolerance to environmental changes, noises or stimuli, for example, loud or busy spaces, too much happening

» repeated infections.

If any of these symptoms persist or are worsening, it could be the physical or medical features of PSS. You should talk to your doctor or nurse.

You may also experience these feelings after you get home:

- mood swings
- anxiety or depression
- feeling unmotivated
- lack of confidence or self-belief
- not caring about how you look
- wanting to be alone and isolating from loved ones
- flashbacks or bad memories, or if memories are not clear, perhaps bad feelings associated with the memory
- confusing reality (what is real and not)
- poor concentration or problems with retaining and processing information
- frustration at not being 'back to your normal self'
- guilt and stress about the worry whānau have through supporting you
- feeling that nobody understands how you are feeling.

If any of these persist or are worsening, it could be the psychological or cognitive features of PSS. It is advised to see a health care professional to discuss.

Sepsis is associated with a high rate of longer-term psychological harm, for example acute stress disorders and post-traumatic stress disorder (PTSD).

IT IS ADVISED TO SEEK HELP EARLY TO GET THE SUPPORT YOU NEED.

Recovering at home

Understanding your sepsis diagnosis is important to help understand challenges with recovery, if there are any.

Recovery from sepsis is more than recovery from an infection, surgery or a long stay in hospital. Recovery can be different for everyone going through it and can take longer than expected.

Some people might suffer from ongoing problems. Talking to your doctor or nurse about specific concerns can be helpful. They may be able to help you seek support or treatment from other community health care providers. Support might be needed from, for example, physiotherapists, occupational therapists, psychologists or counselors or other medical specialists.

Some survivors might want therapy or support from rongoā Māori practitioners, religious or cultural leaders. Sharing this information might help them plan care with you to best support your recovery.

Sometimes seeing or measuring your recovery can be hard. Especially if it is slow. Here are some activities that can help.

- Keep a journal of what is troubling you. For example, if it is poor concentration try doing an activity that can easily be repeated, maybe a word puzzle. Document once a week how you find doing this activity, for example, is it getting easier? Can you concentrate on it for longer? Over time, you will see how progress is going. Or if there is no progress, then you can let whoever is helping you know this.
- If your physical strength is poor, try doing an activity you can repeat. Perhaps a walk around the block. Over time you will see if your strength and ease of the activity is improving or not.

Sepsis and recovery can affect the whole whānau. When a loved one is home, you might feel very relieved that they are out of hospital or be anxious about the responsibility of caring for them.

It is common for those closest to a sepsis survivor, including children, to experience some emotional effects, including children. You or other members of your whānau may feel upset, tearful or anxious, depressed or just very tired.

It is important to take care of yourself. Take time out for yourself, talk about how you are feeling, eat well and get plenty of sleep. And don't be afraid to ask for help.

If you or any member of your whānau are struggling to cope or have questions, you can ask for help and support from your GP. You can also use the resources below:

Need to talk? Text 1737

Sepsis Trust NZ
www.sepsis.org.nz

Sepsis Australia
www.australiansepsisnetwork.net.au

Youthline
youthline.co.nz

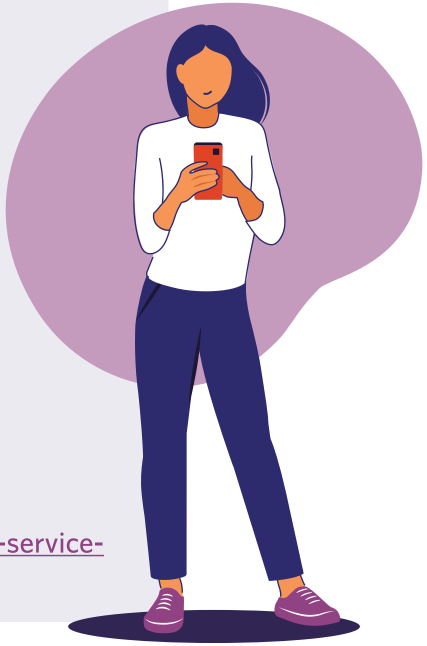
Healthline
www.healthy.org.nz

yellowbrickroad.org.nz/

www.anzics.org/information/

www.mylifeaftericu.com/

www.hqsc.govt.nz/our-work/improved-service-delivery/sepsis/



Write your GP details here

Name: ____________________

Practice/clinic: ____________________

Contact details: ____________________

Space to write your thoughts, feelings, or questions