# Sepsis

Information for patients, family and whānau



## What is sepsis?

Sepsis (mate whakatāoke) is a life-threatening condition that arises when your body's response to an infection damages its own tissues and organs.

Many people have heard of "septicaemia" or "blood poisoning" (toto pirau) but **sepsis** is now the accepted term for this illness.

Sepsis is the body's toxic response to infection.

## Why does sepsis happen?

Sepsis happens when an infection you already have – in your skin, lungs, urinary tract (pee/wee/mimi), or somewhere else – triggers a chain reaction throughout your body. This reaction releases chemicals throughout your body which damage tissues and vital organs (kidneys, heart, brain, liver, and lungs).

We don't always know why the body responds in this way and it is not clear why some people get sepsis while others do not.

Although sepsis can affect anyone, certain people are more at risk of sepsis. This includes the very old, the very young, and people with weakened immune systems or chronic medical conditions like diabetes.

Women are more at risk of sepsis during pregnancy or after giving birth. Sepsis is thought to increase the chance of miscarriage, premature labour or stillbirth. Early recognition and treatment is vital to reduce the risk to both mother and baby.

In Aotearoa New Zealand, Māori and Pacific people get sepsis more often than non-Māori and non-Pacific people, often at a younger age.

## What Sepsis does to your body

Sepsis can develop quickly and is often very frightening and confusing for individuals and their family / whãnau.

At the start of the illness, it may have felt as if you were developing a flu-like illness. You may have:

- Felt very cold and shivery
- Felt very hot and looked flushed
- · Had a high temperature
- Had aching muscles
- Felt very tired
- Have had sickness and / or diarrhoea (upset stomach)
- Not felt like eating,
- Seemed confused or had slurred speech

## As your condition became worse:

- your blood pressure might have dropped because your illness caused your arteries and veins to become larger and leak fluid into the surrounding tissue.
  Your blood had a bigger space to fill and so your body struggled to keep your blood pressure at a normal level
- your heart tried to help by beating faster
- you might have felt breathless and /or were breathing very quickly
- your skin might have been cold and pale, have had an unusual colour or rash
- your skin might have been hot and flushed.

Depending on where the infection started, you would also have had other symptoms, for example, if you had pneumonia, you would probably have had a bad cough as well.

As the sepsis progressed, your blood pressure might have become very low and this would mean that:

- your organs will not have got enough blood and oxygen. This will have damaged the cells in the organs causing them to fail. the kidneys, lungs, brain and heart are particularly at risk from this
- you won't have needed to urinate (pee / mimi) as much as you normally do
- you may have found it very difficult to breathe
- · your skin may have darkened in patches and begun to blister
- you may have become very confused and you might have become unconscious
- you may have swollen up with fluid, which would have made you much bigger than your normal size and meant you looked very different. This might have been frightening for you and your family / whanau to see. This swelling happens because your blood vessels become leaky and fluid goes into the wrong places, and can leak out of your skin.

#### **Treatment**

Sepsis is treatable if it is identified and managed quickly, and in most cases leads to a full recovery with no lasting problems.

Almost all people with sepsis and septic shock require admission to hospital. Early treatment includes the 'Sepsis Six' regime.

- 1. Giving antibiotics intravenously (into the vein).
- 2. Giving fluids intravenously.
- 3. Giving oxygen if levels are low.
- 4. Taking blood cultures to identify the type of bacteria causing the infection.
- 5. Taking blood samples to assess the severity of the sepsis.
- 6. Monitor urine output to assess how well the kidneys are functioning

This treatment is often sufficient to stop the progression of the illness and patients may stay on the inpatient ward. Due to problems with vital organs, some people with sepsis are likley to be very ill and will require admission to an intensive care unit (ICU).

## What if I/my family/whānau member need to go to the Intensive Care Unit?

The chemicals that the body releases cause damage to vital organs so that they can't work properly.

The Intensive Care Unit (ICU) is where the sickest patients in a hospital are treated. The doctors and nurses there are able to give a person treatment to support their vital organs, like their heart, kidneys, and lungs.

#### In ICU:

- a person can be carefully watched and monitored; including checking their heart rate, blood pressure, breathing, and oxygen levels. These checks are all very important and they allow the nurses and doctors to quickly change treatment as needed
- the doctors, nurses, and physiotherapists are specially trained to explain what is happening
- the nurses only look after one or two patients.

## What happens after ICU?

The main goal of the doctors and nurses in the ICU is to get you or your family/ whānau member well enough to be discharged to a ward or a "step down unit", such as the High Dependency Unit. Sometimes it feels as though this happens quickly, but the nurses and doctors make sure that the patients are ready to leave before they are moved.

The ward or step down unit is where a sepsis survivor's rehabilitation journey begins. A person will be seen and assessed by many different health professionals. These health professionals will make sure that you or your family/whānau member are well enough to go home or discuss extra treatment if the infection/sepsis is not improving quickly enough.

## I have had sepsis, what happens when I go home?

Sepsis affects your whole body, so recovery involves your whole body. Many people have new physical, psychological and emotional symptoms during their recovery from sepsis. It is normal to go through this.

### Most people who survive sepsis will eventually make a full recovery.

You or your family/whānau member may have been seriously unwell, and the body and mind need time to get better. You or your family/whānau member may experience some of the following physical symptoms upon returning home:

- General to extreme weakness and fatigue
- Breathlessness
- General body aches or pains
- Difficulty moving around or sleeping
- Weight loss, lack of appetite, food not tasting the way it used to
- Dry and itchy skin that may peel
- Brittle nails and teeth
- Brittle hair and hair loss
- Dizziness and/or headaches
- Change in vision
- Dislike or intolerance for very bright, noisy, or crowded spaces
- Sensitivity to temperature (feeling very cold or sweating)
- Repeated infections

It is also not unusual to have the following feelings once home:

- Mood swings feeling "snappy", irritable, angry or upset
- A lack of confidence or self-belief
- Not caring about your appearance
- Wanting to be alone, avoiding friends and family
- · Flashbacks or bad memories
- Confusing reality (not sure what is real and what isn't)
- Feeling anxious, more worried than usual
- Poor concentration
- Depressed, angry, unmotivated
- Frustration at not being able to do everyday tasks
- Guilt for the stress and worry everyone experienced, or that you survived
- Feeling that nobody understands how you may be feeling

During your recovery you or your family/whānau member may experience some or all of the problems listed, while looking relatively well to the outside world. If it has been some time since you or your family/whānau member developed sepsis, people may expect you/them to be fully recovered. This can make people recovering from sepsis feel very alone and even start to doubt themselves, or wonder if they are imagining all these problems.

It is normal and common to experience physical, cognitive and psychological problems after any serious illness. Give it time and seek support as you need it – you are not alone in your recovery.

## What can I do to help myself or my family/whānau member recover at home?

- Set small, achievable goals for yourself each week, such as taking a bath, dressing yourself, or walking out to your letterbox.
- Rest and rebuild your strength
- Talk about how you are feeling to family and friends
- Record your thoughts, struggles, and milestones in a journal
- Learn about sepsis to understand what happened
- Ask your family to fill in any gaps you may have in your memory about what happened to you
- Fat a balanced diet
- Exercise if you feel up to it
- Make a list of questions to ask your doctors, nurses, or other healthcare professionals when you go for a follow up

## Post-sepsis syndrome (PSS)

Post-sepsis syndrome is a term used to describe the group of long-term effects that some people with sepsis experience. These symptoms are related to:

- 1. Muscle weakness and limb damage
- 2. Brain inflammation
- 3 Trauma and distress.

#### Muscle weakness

- · Disabling muscle or joint pain
- · Reduced ability to exercise
- Amputations (loss of an arm or leg)

#### Brain inflammation

- Difficulty sleeping either difficulty in getting to sleep or staying asleep
- · Hallucinations/seeing things that aren't there
- Difficulty concentrating
- Decreased cognitive (mental) functioning (memory, decision-making etc.)

#### Trauma and distress

- Panic attacks and/or flashbacks
- · Loss of self-esteem and self-belief
- Depression

It is important to remember that most people who have had sepsis make a full recovery.

### When should I be concerned?

Speak to your GP if you are still experiencing the following problems more than a month after discharge from hospital:

- Frequent anxiety or worries that interfere with your ability to face day-to-day life
- Low mood or depression, impacting on motivation, your opinion of yourself, or your thoughts about the future
- Continued poor sleep, ongoing nightmares or flashbacks
- · Change in behaviour
- Difficulty doing previously 'normal' tasks, or looking after the home and family
- Using drugs (prescription/non-prescription/recreational) or drinking a lot of alcohol

## Will I/my family/whānau member get sepsis again?

People who have had sepsis worry about it happening again. Some studies have suggested that for a period of time during recovery, people can be more prone to getting infections and therefore be at risk of sepsis again.

The most important thing is to be aware of the symptoms of sepsis and seek medical help urgently if you suspect it.

If you have an infection, symptoms of sepsis can include ANY of the following:



Slurred speech or confusion, or difficult to wake



Extreme shivering or muscle pain



Passing no urine (pee/ mimi) for a day



Severe breathlessness or breathing very fast



It feels like you are going to die



Skin mottled, bluish, or pale or feels abnormally cold to touch

## For family/whānau and primary caregivers of sepsis survivors

Sepsis can have an impact on the whole family/whānau. When your 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 not uncommon for those closest to a sepsis survivor to experience some psychological (emotional) effects, including children. You or other members of your family/whānau may feel upset, tearful, anxious, depressed, or just very tired.

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

If you or any other member of your family/whānau are struggling to cope or just have questions, you can get help and support from your/their GP or any of the resources listed below:

#### Sepsis Trust NZ

Website: www.sepsis.org.nz

#### Need to Talk? 1737

Free call or text 1737 anytime day or night to talk/text with a trained councillor.

#### Youthline

For advice and support for any young person or anyone supporting a young person call 0800 37 66 33 or free text 234 or email talk@youthline.co.nz

#### Healthline

For free health advice or information anytime call 0800 611 116

### Write your GP details here

Name:			
Practice/clinic: _			
Contact details: _			

Space to write your thoughts, feelings, or questions					

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For more information visit sepsis.org.nz

