# **Sepsis**

#### Introduction

In the UK, at least 150,000 people each year suffer from sepsis. In the UK alone severe sepsis claims 44,000 lives every year which means that more people die annually of sepsis than from lung cancer or breast and bowel cancer combined.

Worldwide it is thought that 3 in a 1000 people get sepsis each year, which means that 18 million people are affected.

Sepsis can move from a mild illness to a serious one very quickly, which is very frightening for patients and their relatives.

At Calderdale and Huddersfield Foundation Trust (CHFT) we believe that sepsis is a medical emergency and a clinical priority. However, if it is recognised early we can save lives. At CHFT we believe that we will achieve this through the promotion of earlier recognition of sepsis and delivery of immediate lifesaving treatments which includes early administration of antibiotics and fluids, by raising awareness, through innovation, research and sharing of good practice. To make this happen, we need to ensure that members the public, patients their relatives and carers and health care professionals work together to ensure that lifesaving treatment is delivered as soon as possible.



This leaflet is for patients and relatives and it explains sepsis and its causes, the treatment that is needed and what might help after having sepsis.

## What is sepsis?

Sepsis was previously known as septicaemia or blood poisoning.

Sepsis is a potentially life threatening condition that arises when the body's response to an infection injures its own tissues and organs. The organs of the body such as the kidneys, lungs or heart may then "shut down" to protect itself.

The condition is caused by the way the body responds to micro-organisms such as bacteria, viruses or fungi getting into the body. It may be limited to a particular body region or it may be widespread.



#### Common sources are

- Chest infection.
- A urine infection.
- A problem in the abdomen, such as a burst ulcer or a hole in the bowel.
- After having an operation.
- Bone or joint infection.
- Brain infection.
- Skin or soft tissue infection, wound, burn or bite.

#### Who is at risk

Most cases of sepsis are caused by common bacteria which we all come into contact with every day without them making us ill.

We do not always know why the body responds in this way and often people who get sepsis are in good health and do not have any long term illness. However, there are some groups of people who are more likely to get sepsis, these include:

- The very young or very old.
- People living with a long term condition such as diabetes.
- If you take long-term steroids or are on drugs to treat cancer (chemotherapy).
- Have had an organ transplant and are on anti-rejection drugs.
- If you are malnourished (your body hasn't had enough food).
- Suffer from serious liver disease.
- Have a serious illness which affects the immune system (the way your body protects itself from Infection), for example leukaemia.
- Have an infection or a complication following an operation.
- Pregnant and Post Natal ladies.
- If you are already in hospital due to a serious illness, and despite the best efforts of medical staff have a secondary infection.

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### Symptoms of sepsis

The symptoms of Sepsis may develop as a response to a localised infection or injury. In some cases symptoms may develop when you are already ill and in hospital for example if you have recently had surgery.

The symptoms of sepsis usually develop quickly and can include:

- Generally feeling unwell.
- High temperature or very low temperature.
- Fast heart rate.
- Fast breathing.
- Extreme shivering and /or muscle pain.
- Passing no urine (18hours).
- Low blood pressure which may result in feeling dizzy.
- An acute change in mental alertness, confusion or disorientation.
- Diarrhoea.
- Cold, clammy and /or mottled skin.
- Pale or blue lips.
- "I know something is wrong with me" or "I feel like I am going to die".

# The presence of 2 or more of these symptoms may indicate that you have severe sepsis.

Your medical and nursing team should be alert to the risks of sepsis. However, if you or your relative are concerned that something is wrong, it's important that you make your concerns known to the team. Occasionally patients don't realise that their condition is deteriorating and will rely on others to notice any changes however subtle.

## Don't be afraid to say "I think this could be sepsis"

**Remember** – If it doesn't turn out to be sepsis don't worry. However, if it is Sepsis getting the person treated even one hour earlier might make the difference between life and death.

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#### **Treatment of sepsis**

If you attend the Emergency Department and sepsis is diagnosed or suspected a full sepsis screen will be carried out as soon as possible. The treatment for Sepsis (Sepsis care bundle or Sepsis Six) should be completed within the first hour of arrival to hospital.

The Sepsis 6 includes:

- Taking BLOOD for cultures and a full set of routine blood tests.
- Measuring and recording URINE output.
- Giving FLUIDS intravenously (IV).
- Giving broad spectrum ANTIBIOTICS to work against a wide range of known infectious bacteria.
- Taking a blood sample (blood gas) to assess LACTATE level.
- Administering high flow OXYGEN.

This treatment method has proven to double the chances of survival.

# THE SEPSIS SIX

- 1. Give oxygen to maintain normal levels
- 2. Take blood cultures
- 3. Give IV antibiotics
- 4. Give a fluid challenge
- 5. Measure lactate
- 6. Measure urine output

# JUST ASK! "COULD IT BE SEPSIS?"

It's a simple question, but it could save a life.

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If sepsis is detected early enough, and no organ or tissue dysfunction has occurred, then it may be possible to treat the condition at home.

If you are given antibiotics for treatment at home, it is very important that the whole course is completed.

If you have developed complications and your vital organs are affected by sepsis you will need to be admitted to hospital for:

- Intravenous (IV) antibiotics,
- Finding and treating the source of the infection,
- IV fluids though a "drip",
- Oxygen therapy,
- Close monitoring of pulse, blood pressure, breathing rate, temperature, urine output, signs of pain and conscious level assessment will be carried out to help highlight any signs of deterioration.

If your condition does deteriorate then you may be seen by the Critical Care Outreach Team who will work alongside the ward team to monitor your progress and respond quickly if there are any further signs of deterioration. The Critical Care Outreach Team will liaise with the Critical Care doctors and discuss any further treatment you may need which could include very strong drugs that will help to maintain your blood pressure. If this occurs and your vital organs become affected by sepsis, for example your kidneys begin to fail, breathing and or blood pressure is affected then it may be necessary to be admitted to the High Dependency Unit for close monitoring or to be admitted to the Intensive Care Unit where you may need to be supported by machines to help you with your breathing or a dialysis machine to support your kidneys until your condition improves. Unfortunately, despite our best possible care, some patients may not respond to treatment and go on to develop further organ failure and sadly die.

## **Recovering from Sepsis**

Not all patients experience problems after having sepsis and make a full recovery and do not need any support after discharge from hospital. However, the length of stay in hospital and the severity of the illness can however impact on how the fast recovery can be.

If a person is generally fit and well prior to becoming ill then a full recovery is often made. However, having sepsis can have a massive impact on some patients who may experience physical as well as psychological and emotional factors that may affect recovery time. These include reduced mobility, loss of appetite, fatigue and breathlessness. Psychological issues can include anxiety, depression, insomnia, bad dreams and symptoms of post-traumatic stress.

There are a number of organisations that provide support and advice to patients and their families who have had a diagnosis of sepsis.

The UK Sepsis Trust now have a 24hour service where they can be contacted 0808 800 0029 by phone or email at www.sepsistrust.org/

# If you have any comments about this leaflet or the service you have received you can contact:

Sepsis Lead
Consultant Acute Medicine
Huddersfield Royal Infirmary
Telephone No: 01484 355744

www.cht.nhs.uk

## If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਰ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਰੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو سے معلومات کسی اور فارم کے طیزبان می در کار ہوں، تو برائے مہربازی مندرجہ بالا شعبے میں ہم سے رابطہ کری.

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم المذكور أعلاه"

