This leaflet has been designed to give you important information about your condition / procedure, and to answer some common queries that you may have.
Introduction
This leaflet is about the care and treatment of people who are having an operation in hospital, in the NHS in England and Wales, to reduce their risk of getting cold before, during or after their operation. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence). It is written for people who are having an operation but it may also be useful for families or carers or for anyone with an interest in the topic.

The advice in the NICE guideline covers:
- All adults having a planned or emergency operation in hospital under anaesthetic (except where there is a local anaesthetic)

It does not apply to:
- Children or young people under 18 years old
- Pregnant women
- People who are deliberately kept cold during their operation for medical reasons
- People with severe head injuries

What is perioperative hypothermia?
The perioperative period is the time surrounding a patient’s surgical procedure; this includes the period before surgery on the ward (or in A&E, Scunthorpe), as well as during the operation and afterwards.

Hypothermia means an abnormally low body temperature; that is a ‘core’ temperature below 36°C. Your core temperature is the temperature of your organs, such as your heart and liver, and it is normally slightly higher than at the places where your temperature is usually taken such as your mouth or ear. For some operations, a person’s temperature may be deliberately lowered for medical reasons (known as therapeutic hypothermia). However, if perioperative hypothermia occurs unintentionally, it may cause:
- Increased blood loss and a greater risk that you will need a blood transfusion
- A higher chance of wound infection
- A greater chance of heart problems
- An increased risk of bed sores
- A longer recovery period after the operation, which may require a longer stay in hospital

How can you avoid getting perioperative hypothermia, and what will happen if you get cold?
The advice from NICE about how to prevent perioperative hypothermia covers the care and treatment you should receive before, during and after your operation. In general, your healthcare team will try to ensure that you stay comfortably warm all the time. They will do several things to keep you warm, starting before your operation and continuing until you are comfortably warm back on the ward. They will monitor your temperature, and may use a special blanket that is usually placed over you and into which warm air is blown to help stop you getting too cold. This is called “forced air warming”.

For more information about our Trust and the services we provide please visit our website. www.nlg.nhs.uk
Before your operation

Staff should encourage you to bring extra clothes (such as slippers, a dressing gown, a vest and other warm clothing) to help you keep comfortably warm in hospital. To help you keep warm while waiting for your operation, staff on the ward, should make sure that you have at least a sheet and two blankets (in A&E/ECC this will be blankets only). You should tell staff if you feel cold at any time during your stay in hospital. Before your operation, a healthcare professional should assess your risk of getting cold during the operation and of associated problems. If you are at higher risk the box below), you should be kept warm using a warm-air blanket throughout your operation.

Assessing your Risk

If any two of the following apply to you, you are at a higher risk of getting cold during your operation or of developing one of the health problems associated with perioperative hypothermia:

- You have a condition that affects your general health, such as high blood pressure, asthma, diabetes or angina
- Your body temperature is below 36°C before your operation
- You are having a regional anaesthetic (such as an epidural) as well as a general anaesthetic
- Your operation is not a minor operation
- The assessment shows that you are at risk of heart problems during or after your operation

Your temperature should be measured and recorded in the hour before you leave the ward or A&E.

If your temperature is below 36°C you should be kept warm using a warm-air blanket (forced air warming). However there might not be time to use the warm-air blanket if the operation is urgent. If your temperature is 36°C or above, you can be taken to the operating theatre. Staff should make sure that you are comfortably warm on the way, and should encourage you to walk there if you can because this helps to keep warm.

During Your Operation

When you get to the operating theatre, your temperature should be measured and recorded before you are given the anaesthetic. If your temperature is below 36°C you should not be given the anaesthetic straight away, but a warm-air blanket should be used so that your temperature reaches 36°C. Your temperature should also be measured every 30 minutes during your operation. If your operation lasts longer than 30 minutes, or if your operation is shorter than this but you are at higher risk of getting cold as described in the “Assessing your risk” you should be kept warm throughout the operation using a warm-air blanket. You should be kept covered as much as possible during your operation, and the theatre temperature should be at least 21°C at times when you aren’t covered by a warm air blanket. Any fluids used during the operation should be warmed to normal body temperature.

After your operation

Your temperature should be measured and recorded when you arrive in the recovery room after your operation, and then every 15 minutes until it is at least 36°C. If your temperature is below 36°C, you should be
kept warm with a warm-air blanket. Transfer back to the ward should not be arranged until your temperature is at least 36°C. Back on the ward, staff should measure and record your temperature when you arrive, and then every 4 hours. Like before your operation, you should be given enough bed clothes so that you are comfortably warm, and you should tell staff if you feel cold at any time. If staff find that your temperature has dropped below 36°C on the ward, you should be kept warm using a warm air blanket. Your temperature should be measured and recorded at least every 30 minutes until you are comfortably warm.

**Alternatives**

There are no alternatives.

**Questions you might like to ask your health care team.**

- What can I do to help prevent myself from getting cold when in hospital?
- What will you do to help me keep warm?
- Who should I tell if I feel cold at any time when I am in hospital?
- When and how often will my temperature be measured?
- Am I at higher risk of getting cold during my operation?
- If I need to be kept warm, how will this be done?
- Why is it better for me to walk to the operating theatre rather than be taken on a trolley?

**Reference section**

NICE (National Institute for Health and Clinical Excellence) clinical guideline 65 (April 2008).

**Concerns and Queries**

If you have any concerns / queries about any of the services offered by the Trust, in the first instance, please speak to the person providing your care.

**For Diana, Princess of Wales Hospital**

Alternatively you can contact the Patient Advice and Liaison Service (PALS) on (01472) 875403 or at the PALS office which is situated near the main entrance.

**For Scunthorpe General Hospital**

Alternatively you can contact the Patient Advice and Liaison Service (PALS) on (01724) 290132 or at the PALS office which is situated on C Floor.

Alternatively you can email: nlg-tr.PALS@nhs.net
Information for Patients & Visitors

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