

EMBARGOED UNTIL 00.01 WEDNESDAY 22 October 2008**PRESS RELEASE****NICE guidelines are set to improve the prevention and
treatment of surgical site infections (SSI)**

The National Institute for Health and Clinical Excellence (NICE) and the National Collaborating Centre for Women and Children's Health have today (22 October 2008) published a guideline on the prevention and treatment of surgical site infections.

Surgical site infections are wound infections that can occur after an invasive (surgical) procedure. Surgical site infections have been shown to be the cause of up to 20% of all healthcare-associated infections, affecting at least 5% of patients undergoing a surgical procedure. Many surgical site infections are caused by contamination of an incision with microorganisms from the patient's own body during surgery and the majority of surgical site infections are preventable.

Surgical site infections can have a significant effect on quality of life for the patient and are associated with considerable morbidity and a prolonged stay in hospital. In addition, surgical site infections result in a considerable financial burden to healthcare providers.

The key recommendations from the guideline include:

- Patients and carers should be offered clear, consistent information and advice throughout all stages of their care. This should include the risks of surgical site infections, what is being done to reduce them and how they are managed.

- Patients should be given antibiotic prophylaxis before clean surgery involving the placement of a prosthesis or implant, clean-contaminated surgery and contaminated surgery.
- Antibiotic prophylaxis should not be routinely used for clean non-prosthetic uncomplicated surgery.
- The patient's skin should be prepared at the surgical site immediately before incision using an antiseptic (aqueous or alcohol-based) preparation with povidone-iodine or chlorhexidine being the most suitable.
- Hair removal should not be routinely used to reduce the risk of surgical site infection. However if hair has to be removed, single-use head electric clippers should be used on the day of surgery. Razors should not be used for hair removal, because they increase the risk of surgical site infection.
- At the end of the operation surgical incisions anticipated to heal by primary intention should be covered with a film membrane, with or without a central absorbent pad.
- A tissue viability nurse (or another healthcare professional with wound care expertise) should also be referred to for advice on appropriate dressings for the management of surgical wounds that are healing from the base of the wound upwards (i.e. by secondary intention)

Professor Peter Littlejohns, NICE Clinical and Public Health Director, and Executive Lead for this guidance said: “Approximately 4 million people undergo a surgical procedure that falls within the scope of this guideline every year; of these at least 5% currently become infected with a surgical site infection. This guideline marks important steps to reduce infections in surgical settings across England and Wales. Many surgical site infections are not very serious, affecting only the skin, however, some can be more serious if they affect the deeper tissues under the skin. Surgical site infections can often be prevented if care is taken before, during and after surgery. This guideline will help to reassure patients that all necessary precautions are being taken to minimise the risks from surgical site infections, but also highlight ways they can help prevent them.”

Professor David Leaper, Visiting Professor at the Department of Wound Healing at Cardiff University and Guideline Development Group Chair said: “This guideline provides clear recommendations on the ways that surgical site

infections can be reduced with simple but effective measures before, during and after surgery. Recommendations such as those concerning the removal of hair and use of appropriate dressings may seem trivial but the benefits of adopting the approaches laid down in this guideline are potentially vast. The guideline has been developed following a collaborative and consultative approach, which uses the best available evidence to help ensure the NHS does everything it can to ensure service users, as well as those caring for them, are protected from surgical site infections.”

Mark Collier, Lead Nurse Consultant on Tissue Viability at United Lincolnshire Hospitals NHS Trust said: “The recommendations made in this guideline will help to ensure that all aspects of a patient’s care is co-ordinated to reduce the risks of a patient suffering from the effects of a surgical site infection. This guideline not only highlights the importance of measures taken before surgery, but also gives significant attention to the care that each patient should receive in the days and weeks after undergoing their operation and the important role of tissue viability nurses.”

Jennie Wilson, Programme Leader on the Surgical Site Infection Surveillance Service at the Health Protection Agency: “The Health Protection Agency has been a significant driver for change in the continuing efforts of the NHS’ to help reduce the rates of hospital acquired infections. We believe this guideline will help to ensure all hospitals have in place the best measures to prevent surgical site infections in all settings where surgery is performed.”

David Evans, Freelance Occupational Safety and Occupational Hygiene Consultant and Carer Representative on the Guideline Development Group: “Patients may be apprehensive about having surgical procedures and possibly concerned about getting an infection. We have worked hard to make sure patients are aware of the risks of getting a surgical site infection and of the ways they can help to prevent them; for example by washing properly before surgery. We recommend that patients and their carers are provided with information about how to look after their wounds, how to recognise infections and where to go for help. We hope this will reassure patients going for surgery that these risks, although minimal, can be minimised and not serious if identified quickly.”

Ends

For more information call the NICE press office on 0845 003 7782 and (out of hours) 07775 583 813.

Notes to Editors

1. The guidance is available at www.nice.org.uk/Guidance/CG74
2. Antibiotic Prophylaxis concerns the use of antibiotics before, during, or after a diagnostic, therapeutic, or surgical procedure to prevent infectious complications.
3. Healing by primary intention occurs when a wound has been sewn up after an operation and heals to leave a minimal, cosmetically acceptable scar.
4. Healing by secondary intention Occurs when a wound is deliberately left open at the end of an operation because of excessive bacterial contamination, particularly by anaerobes or when there is a risk of devitalised tissue, which leads to infection and delayed healing. It may be sutured within a few days (delayed primary closure), or much later when the wound is clean and granulating (secondary closure), or left to complete healing naturally without the intervention of suturing.
5. Surgical Wound Classification

Clean: an incision in which no inflammation is encountered in a surgical procedure, without a break in sterile technique, and during which the respiratory, alimentary or genitourinary tracts are not entered.

Clean-contaminated: an incision through which the respiratory, alimentary, or genitourinary tract is entered under controlled conditions but with no contamination encountered.

Contaminated: an incision undertaken during an operation in which there is a major break in sterile technique or gross spillage from the gastrointestinal tract, or an incision in which acute, non-purulent inflammation is encountered. Open traumatic wounds that are more than 12–24 hours old also fall into this category.

Dirty or infected: an incision undertaken during an operation in which the viscera are perforated or when acute inflammation with pus is encountered (for example, emergency surgery for faecal peritonitis), and for traumatic wounds where treatment is delayed, there is faecal contamination, or devitalised tissue is present.

About NICE

3. The National Institute for Health and Clinical Excellence (NICE) is the independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health.
4. NICE produces guidance in three areas of health:
 - **public health** – guidance on the promotion of good health and the prevention of ill health for those working in the NHS, local authorities and the wider public and voluntary sector
 - **health technologies** – guidance on the use of new and existing medicines, treatments and procedures within the NHS
 - **clinical practice** – guidance on the appropriate treatment and care of people with specific diseases and conditions within the NHS.