

Preventing Surgical Site Infections

Information for Patients and Carers

What is a surgical site infection?

Most patients who have surgery do well, but sometimes patients get infections. A surgical site infection (SSI) is an infection that occurs after surgery in the part of the body which was operated on. Most SSIs become apparent within 30 days of the operation but occasionally, an SSI only becomes apparent several months later. Surgical site infections may cause symptoms such as: redness, warmth, pain or tenderness around the affected site, discharge of pus or fever. Most SSIs can be treated with antibiotics but rarely some patients may need additional surgery to treat the infection. SSIs can often be prevented if care is taken before, during and after surgery.

What are some of the things that hospitals are doing to prevent SSIs?

To prevent SSIs, doctors, nurses, and other healthcare providers:

- May recommend you use a nasal ointment and use chlorhexidine washes for 3-5 days (doctor will provide specific details) prior to some special types of operations (e.g. coronary bypass or joint replacement). This is to treat carriage of ('Golden Staph') which is a common bacteria that lives on the skin or in the nose
- Clean their hands with an alcohol-based handrub or soap and water before and after caring for each patient
- Clean their hands and arms up to the elbows with an antiseptic agent just before surgery
- Wear special hair covers, masks, gowns, and gloves during surgery to keep the surgery area clean
- May remove some of your hair (in the area of the surgery) immediately before surgery with electric clippers. They should not shave you with a razor
- Give you antibiotics before your surgery starts (surgical antibiotic prophylaxis). Most surgical antibiotic prophylaxis is given intravenously within 60 minutes of the surgery. A repeat dose may be required during surgery if the procedure is long (>4 hours)
- Clean the skin at the site of your surgery with an antiseptic that kills germs
- Keep you warm before, during and after your surgery

What can I do to help prevent SSIs?

Here are some ways you can help to lower your risk of getting an infection:

Days or weeks before surgery:

- Ask your doctor about your risks for getting an infection
- Give up smoking
- Maintain a healthy weight
- Optimise blood sugar control if you have diabetes
- Make sure your doctor has an up-to-date list of all the medications you take
- Let the doctor know if you have:
 - » an existing or recent illnesses
 - » any allergies, especially to medication, antiseptics, tapes etc.
 - » diabetes or high blood sugar or other relevant medical history
 - » travelled overseas within the last year or been in hospital overseas
- Avoid shaving near where you will have surgery for at least five days before your surgery
 - » Shaving with a razor can irritate your skin and make it easier to develop an infection

The night before and/or day of surgery:

- Have a shower or bath using either plain or antimicrobial soap or chlorhexidine wash (as recommended by your doctor)
- If someone tries to shave you before surgery, ask why this is necessary

On the day of the surgery:

- Remain warm after the shower or bath. Wear warm clothes and ask for extra blankets if cold
- Ask if you will receive antibiotics before surgery

After the surgery:

In Hospital

- Don't be afraid to ask healthcare professionals and visitors if they have cleaned their hands, either with an alcohol-based handrub or soap and water before touching you
- Take special care to mobilise and get out of bed as soon as recommended by your doctor
- Check daily with your healthcare professional whether any tubes or drains inserted into your body are still required (e.g. drip [intravenous line], urinary catheter, drain tube)
 - » Tell your healthcare professional if the site around any of these tubes or drains is red, swollen, painful or leaking
- For most surgeries, wound dressings should stay dry and not be removed for the first 48 hours
- Tell your healthcare professional if any dressings are not clean, dry or securely attached
- Do not touch or allow visitors to touch the surgical wound/s, dressings or medical devices
- Make sure you understand how to care for your wound/s before you leave the medical facility
- If you can't understand any information you are given, tell your healthcare professional

At Home

- Always clean your hands either with an alcohol-based handrub or soap and water before and after caring for your wound/s. **Note:** if your hands are visibly dirty use soap and water
- Make sure you know who to contact if you have any questions or problems after you get home
- If you have any symptoms of an infection, such as redness, unexpected pain at the surgery site, drainage, or fever, call your doctor immediately
- If prescribed antibiotics, take the full course even if you feel better

Where can I get more information?

If you have any questions the doctor or nurse looking after you or the hospital's infection control professional can help.

Disclaimer: This health information is for general purposes only and may not include all of the measures used by hospitals to prevent SSIs. As this is an evolving area guidelines for best practice may change. Please consult your doctor or other health professional to make sure this information is right for you.

References:

- 1 World Health Organisation: Global Guidelines for the Prevention of Surgical Site Infection. 2018
- 2 National Institute for Health and Care Excellence, Surgical site infections: prevention and treatment. NICE guideline [NG125]. April 2019. Available at: <https://www.nice.org.uk/guidance/ng125>. Accessed 7th October 2019
- 3 Centers for Disease Control and Prevention: Guideline for the Prevention of Surgical Site Infection, 2017
- 4 Centers for Disease Control and Prevention. CDC 24/7: Saving Lives, Protecting People. What You Should Know Before Your Surgery. Available at: <https://www.cdc.gov/features/safesurgery/index.html>. Accessed 7th October 2019
- 5 National Health and Medical Research Council, Australian Commission on Safety and Quality in Health Care: Australian Guidelines for the Prevention and Control of Infection in Healthcare. Canberra, Commonwealth of Australia, 201