Infections in hospital - reduce the risk

Summary

- There are things you can do before and during your stay in hospital that will help reduce the chance of you getting an infection.
- Common types of hospital-acquired infections are chest infections, wound infections, urinary infections and bloodstream infections.
- Some people are more susceptible to hospital infections than others.

All hospitals have infection control procedures and policies, and staff take every precaution to avoid infections. However, the risk of infection can never be completely eliminated and some people have a higher risk of acquiring an infection than others.

Lung, wound, urinary tract and bloodstream infections can be picked up during a stay in hospital. These are called healthcare-associated infections or HAI. They are also known as nosocomial infections. There are things you can do before and during your stay in hospital that will help reduce the chance of picking up extra infections.

Infections in hospital

An infection is a disease caused by micro-organisms such as viruses, fungi, bacteria or parasites. These micro-organisms are often called ‘bugs’ or ‘germs’. Bacteria are the most common cause of HAI.

HAI usually occurs two to three days after admission to hospital. These infections occur at a cost to the community and the patient because they cause:

- illness to the patient
- a longer stay in hospital
- a longer recovery time
- costs associated with a longer stay in hospital and longer recovery time.

Susceptibility to infections in hospital

All people admitted to hospital are at some risk of contracting an HAI. If you are very sick or have had surgery, you have an increased risk. Some people are more vulnerable than others. These include:

- **very young people** – premature babies and very sick children
- **very old people** – the frail and the elderly
- **those with medical conditions** – such as diabetes
- **people with defective immunity** – people with diseases that compromise their immune system or people who are being treated with chemotherapy or steroids.

Risk factors for infections in hospital

There are other risk factors that may increase your likelihood of acquiring HAI. These include:

- **length of stay** – a long hospital stay can increase the risk, for example, admission for complex or multiple illnesses
- **operations and surgical procedures** – the length and type of surgery can also have an impact
• **hand hygiene techniques** – inadequate hand hygiene practices by hospital staff and patients may increase your risk
• **antibiotics** – overuse of antibiotics can lead to resistant bacteria, which means that antibiotics become less effective
• **equipment** – invasive procedures can introduce infection into the body, for example, procedures that require the use of equipment such as urinary catheters, IV drips and infusions, respiratory equipment and drain tubes
• **wounds** – wounds, incisions (surgical cuts), burns and ulcers are all prone to infection
• **high-risk areas** – some areas of the hospital are more likely to have infection, such as intensive care units (ICU) and high dependency units (HDU).

**Types of infections acquired in hospital**

The most common types of infection acquired in hospitals are:

- urinary tract infection (UTI)
- wound infection
- pneumonia (lung infection)
- bloodstream infection.

Infections are treated with antibiotics and usually respond well. Occasionally, infections can be serious and life threatening. Some bacteria are hard to treat because they are resistant to standard antibiotics. These bacteria are sometimes called ‘superbugs’.

Some examples of superbugs are:

- **Staphylococcus aureus** – often called ‘golden staph’ or methicillin-resistant *Staphylococcus aureus* (MRSA)
- resistant **Enterococcus** – also referred to as vancomycin-resistant *Enterococcus* (VRE)
- carbapenem-resistant **Enterobacteriaceae** (CRE).

**Controlling infection in hospital**

Spread of infection can be controlled and reduced by:

- strict hospital infection control procedures and policies
- correct and frequent hand hygiene measures by all hospital staff and patients
- cautious use of antibiotic medication.

**Before admission to hospital**

If you are going to hospital, there are things you can do before admission and in hospital that will help reduce the chance of you getting an infection. Steps to follow before you go to hospital include:

- **stop smoking** – smoking can interfere with healing processes. It also damages the airways, which can make lung infections more likely
- **maintain a healthy weight** – people who are overweight are more prone to infection
- **inform your doctor of all existing or recent illness** – a cold or the flu can lead to a chest infection, so let your doctor or the hospital staff know if you are not well
- **manage diabetes** – if you are a diabetic, make sure that your blood sugar levels are under control.

**During your stay**

Some things that can help reduce the chance of infection while you are in hospital include:

- Make sure that you wash your hands properly, especially after using the toilet.
- If you have an IV drip, let your nurse know if the site around the needle is not clean and dry.
- Tell your nurse if the dressings are not clean, dry and attached around any wounds you may have.

Let your nurse know if tubes or catheters feel displaced.

Do your deep breathing exercises – the staff will instruct you. This is very important because they can help prevent a chest infection.

Ask relatives or friends who have colds or are unwell not to visit.

**What to expect if you get an infection in hospital**

If you do acquire an infection in hospital, other procedures and practices (apart from antibiotic treatment) may be put in place to stop the spread of infection to other patients.

Depending on the type of infection, these might include:

- isolation in a single room
- being put last on the operation surgery list
- being nursed by staff wearing gloves and gowns.

**Where to get help**

- Hospital infection control department
- Your nursing staff
- Your doctor

**Things to remember**

- There are things you can do before and during your stay in hospital that will help reduce the chance of you getting an infection.
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- Some people are more susceptible to hospital infections than others.

**This page has been produced in consultation with and approved by:**

VICNISS Hospital Acquired Infection Surveillance Centre

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