Preventing healthcare associated infection (HAI)

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 healthcare associated infections are those associated with chest infections, surgical wounds or the insertion of medical devices such as an intravenous drip, urinary catheter or wound drain.
- Some people are more susceptible to healthcare associated infections than others.

What are healthcare associated infections?

An infection is a disease caused by micro-organisms such as bacteria, viruses, fungi, or parasites. These micro-organisms are also called ‘bugs’ or ‘germs’.

Healthcare associated infections (HAIs) are infections that people catch when they are receiving care in a healthcare facility – for example, in hospital, at a GP surgery, in a nursing home, or even at home. Bacteria are the most common cause of HAIs.

HAIs occur at a cost to the patient and the community 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.

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

Many types of infection can be picked up during healthcare including wound, bloodstream, urinary tract and chest infections.

There are things you can do before and during your stay in hospital that will help reduce the chance of picking up an infection.

Susceptibility to healthcare associated infection

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, including:

- premature babies
- very sick children
- elderly people
- frail people
- people with certain medical conditions, such as diabetes
- people with low immunity – such as people with diseases that compromise their immune system or people who are being treated with chemotherapy or steroids.

Risk factors for acquiring an HAI

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

- increased length of stay – a long hospital stay can increase your risk of HAI, for example, if you are admitted to hospital for complex or multiple illnesses
- surgical procedures – the length and type of surgery can increase the risk
- hand hygiene techniques – inadequate hand hygiene practices by hospital staff and patients may increase your risk
- invasive procedures – some procedures that bypass the body’s normal protective layer, the skin, can introduce infection into the body – for example, insertion of urinary catheters, IV cannulas, respiratory equipment and drain tubes
- non-intact skin – wounds, incisions (surgical cuts), burns and ulcers are more prone to infection than intact skin.

**Types of healthcare associated infection**

The most common types of infection acquired in hospitals are:

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

- methicillin resistant Staphylococcus aureus – often called ‘golden staph’ or MRSA
- vancomycin resistant Enterococcus – also referred to as VRE
- carbapenemase-producing Enterobacteriaceae – also referred to as CPE.

**Preventing healthcare associated infections**

Healthcare workers use various well established procedures to help prevent infections, including:

- infection control procedures and policies
- correct and frequent hand hygiene measures by all staff and patients
- keeping the healthcare environment and equipment clean
- complying with standard sterile techniques when performing surgery, caring for wounds or inserting and caring for medical devices such as intravenous cannulas and urinary catheters
- using antibiotics appropriately to prevent and treat infections.

Hospitals will also participate in surveillance programs to monitor infection rates and measure the impact of infection prevention practices.

**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 your airways, which can increase your chances of getting a chest infection
- 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 hospital stay

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

- Make sure that you clean your hands often with soap and running water, or use an alcohol-based hand rub, especially after using the toilet and before eating.
- Don't be afraid to ask nursing and medical staff if they have cleaned their hands before they touch you.
- If you have an IV cannula, let your nurse know if the site around the needle is red, swollen, painful or leaking.
- Tell your nurse if any dressings are not clean, dry and attached around your wound.
- Let your nurse know if tubes or catheters feel displaced.
- Let your nurse or doctor know if you have diarrhoea.
- Cover your mouth and nose when you cough or sneeze.
- Complete any course of antibiotics that you start.
- 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 get an infection in hospital, measures (apart from antibiotic treatment) may be put in place to stop the spread of the infection to other patients.

Depending on the type of infection, these measures might include:

- being moved to a single room with your own bathroom
- being nursed by staff wearing gloves and gowns
- being put last on the surgery list.

What to do if you are unhappy with your healthcare

If you have any questions, concerns or complaints about your condition or the care you are receiving please speak directly to your treating doctor or nursing staff as this is often the quickest and easiest way to resolve issues.

If you are unable to take your complaint to the health service provider directly or the issue is not resolved to your satisfaction, there is more you can do:

- take a look at Better Health Channel's Complaints about health services page
- visit the Health Complaints Commissioner webpage.

Where to get help

- Your nursing staff
- Your doctor
- Hospital infection control department
- Health Complaints Commissioner