

Preventing infections in people having treatment or care at home or in the community

Information for the public

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About this information

NICE clinical guidelines advise the NHS on caring for people with specific conditions or diseases and the treatments they should receive. The information applies to people using the NHS in England and Wales.

This information explains the advice about preventing infections in people having treatment or care at home or in the community that is set out in NICE clinical guideline 139.

This is an update of advice on the prevention of healthcare-associated infections in primary and community care that NICE produced in 2003.

Does this information apply to me?

Yes, if you are:

- an adult or child receiving healthcare in primary care or community care
- a healthcare worker, family member and other carer who provides healthcare in primary care or community care.

It does not specifically look at people receiving healthcare in hospital.

This information is to help you understand what you, your carers and healthcare workers should do

to reduce the risk of infection when you are having treatment or care. It does not describe the types of healthcare in detail. Your healthcare worker should discuss these with you.

Your care

If you think that your care does not match what is described in this information, please talk to a member of your healthcare team in the first instance.

In the NHS, patients and healthcare professionals have rights and responsibilities as set out in the NHS Constitution (www.dh.gov.uk/en/DH_132961). All NICE guidance is written to reflect these. You have the right to be involved in discussions and make informed decisions about your treatment and care with your healthcare team. Your choices are important and healthcare professionals should support these wherever possible. You should be treated with dignity and respect.

Healthcare professionals should explain how to reduce the risk of infection when you are having treatment or care. You should be given relevant information that is suitable for you and reflects any religious, ethnic, or cultural needs you have. It should also take into account whether you have any physical or learning disability, sight or hearing problem or language difficulties. You should have access to an interpreter or advocate (someone who helps you put your views across) if needed.

Your family and carers should be given their own information and support. If you agree, they should also have the chance to be involved in decisions about your care.

You should be able to discuss or review your care as your treatment progresses, or your circumstances change. This may include changing your mind about your treatment or care. If you have made an 'advance decision' (known as a 'living will' in the past) in which you have already given instructions about any treatments that you do not wish to have, your healthcare professionals have a legal obligation to take this into account.

All treatment and care should be given with your informed consent. If, during the course of an illness, you are not able to make decisions about your care, your healthcare professionals have a duty to talk to your family or carers unless you have specifically asked them not to. Healthcare professionals should follow the Department of Health's advice on consent (www.dh.gov.uk/en/DH_103643) and the code of practice for the Mental Capacity Act. Information about the Act and consent issues is available from www.nhs.uk/CarersDirect/moneyandlegal/legal. In Wales healthcare professionals should follow advice on consent from the Welsh Government (www.wales.nhs.uk/consent).

If you are under 16, your parents or carers will need to agree to your treatment, unless it is clear that you fully understand the treatment and can give your own consent.

Preventing infections

People often have medical treatment or other healthcare outside of hospital. This might be in their own home, in a residential or nursing home, or in places such as GP surgeries or health centres. Sometimes a patient will be mainly responsible for their own care, perhaps with the help of a family member or other carer. Healthcare workers may also be involved in a patient's care.

Many healthcare activities are associated with a risk of infection. It is essential that everyone involved makes sure that they keep this risk of infection as low as possible. This information explains the advice given to healthcare workers in the NHS about how to prevent and control the spread of infections. This information is also relevant for anyone else involved in giving healthcare, such as family members, other carers and patients themselves. Specific information is included about caring for people who have a higher risk of infection because they have a urinary catheter or a vascular access device, or require enteral feeding.

Principles of preventing infections

If you have any concerns about the precautions taken by your healthcare worker, you should discuss this with them.

Everyone involved in providing care should be educated about preventing infection, and should receive training in keeping hands clean, using protective equipment (such as gloves and aprons) and the safe use of sharps. Healthcare workers will make sure they have the equipment they need to help prevent infections.

Keeping hands clean

It is essential that hands are cleaned in the correct way when any type of healthcare is carried out, in order to minimise the risk of passing on infections. This is sometimes called 'hand hygiene' or 'hand decontamination'. This applies to anyone who is caring for you, and to you if you are looking after yourself. You should remind your healthcare workers and any other carers about this if you feel that they are not following the correct procedures.

Healthcare workers should make sure that their hands can be cleaned effectively throughout the time they are providing care, by:

- removing wrist and hand jewellery (including watches)
- having short, clean fingernails without nail polish
- covering any cuts or grazes with waterproof plasters
- wearing clothes that are short-sleeved or have sleeves that can be easily pushed up.

Hands must be cleaned at all of the following times:

- immediately before and immediately after any healthcare activity or procedure
- immediately after any exposure to body fluids
- immediately after any other activity or contact with a patient's surroundings that could cause hands to become contaminated
- immediately after removing gloves.

Hands that aren't visibly dirty should be cleaned using a handrub that conforms to British Standards. However, liquid soap and water must be used if hands look dirty or could have come into contact with body fluids, or if there is a risk of spreading infections that cause diarrhoea, such as *Clostridium difficile* ('C. diff').

Your healthcare worker can give you more information about keeping your hands clean, including which handrubs conform to British Standards and the correct way to clean your hands.

Cleaning your hands using liquid soap and water

- Wet your hands under lukewarm running water.
- Apply liquid soap, making sure that it covers all the surfaces (including the back) of your hands.
- Rub your hands together vigorously for at least 10 to 15 seconds, remembering your fingertips, thumbs and the areas between your fingers.
- Rinse your hands thoroughly and dry them (for example with a clean hand towel, paper towels or kitchen roll).

Cleaning your hands using handrub

- Hands should not be visibly dirty.
- Make sure that the handrub covers all surfaces (including the back) of your hands.
- Rub your hands together vigorously, remembering your fingertips, thumbs and the areas between your fingers.
- Rub your hands together until they are dry.

Protective equipment

The types of protective clothes and other equipment that healthcare workers may use will depend on the risk of infection (to you and them).

Gloves

Healthcare workers must wear gloves if they have any contact with the inside of a patient's body (including their mouth) or with a wound. Gloves must also be worn if they are carrying out an activity that might lead to contact with blood or body fluids, or with sharps or contaminated instruments.

Healthcare workers must use gloves only once. They must put them on immediately before the activity, remove them as soon as it is completed and dispose of them according to the special rules for this. They must change gloves between different activities for the same patient, as well as between caring for different patients.

If a patient, carer or healthcare worker is sensitive to latex, then gloves of another suitable material must be made available.

Other protective equipment

Healthcare workers should wear a disposable plastic apron if blood or body fluids might splash onto their clothes, or a waterproof long-sleeved gown if there could be a lot of splashing onto skin or clothes. These items should be used once and disposed of correctly.

If there is a chance that blood or body fluids could splash into their face and eyes, the healthcare

worker must also wear a face mask and eye protection.

Sharps

Anyone who uses sharps and related safety devices, including you and your carers, should be trained in both how to use them and how to dispose of them correctly into a sharps container.

Sharps should be handled as little as possible and should not be handed from one person to another. After being used they must be put straight into a special sharps container, and must not be bent, broken or have the cap put back on.

Sharps containers must be located in a safe place that is out of the reach of children. They must not be overfilled. Healthcare workers will advise you about the special rules for the storage and disposal of sharps containers.

Healthcare waste

Healthcare waste is any waste produced as a result of healthcare activities. Examples include dressings, sharps and catheters. Your healthcare worker will give you advice and information about the correct handling, storage and disposal of healthcare waste, because there are special rules about this.

Questions you and your carers might like to ask healthcare workers about preventing infection

- What can I do to help minimise the risk of infection?
- When should I clean my hands?
- Please could you show me the correct method of cleaning hands?
- When should soap and water be used rather than handrub?
- What procedures are you following to prevent infection?
- How should sharps be disposed of?
- How can I tell whether I might have an infection?

- When should I contact a healthcare professional if I think I have an infection?
- Where can I get more information about infections?

Long-term use of urinary catheters

Urinary catheters may be used by people who have problems passing urine. Long-term use is when a person uses a urinary catheter for at least 4 weeks.

People who use a urinary catheter are at increased risk of getting an infection. If you need to use a catheter at home, you and your family and carers should be given information and training to help you with this, including how to minimise the risk of infection. You should also get ongoing support and training for using a catheter at home.

Healthcare workers should make sure that a record is kept of your care, including catheter insertions and changes. They should check regularly whether you still need the catheter, and remove it as soon as possible if you no longer need it.

Types of urinary catheter

There are two types of urinary catheter – intermittent and indwelling catheters – and you should be offered the one that is best for you.

Intermittent catheter

An intermittent catheter is inserted at regular intervals or when you need to urinate. You should be offered an intermittent catheter if it is suitable for you and you are able to manage it, because the risk of infection is lower with this type of catheter. You should have a choice of two types of intermittent catheter for single use: these are called hydrophilic catheters and gel reservoir catheters.

Indwelling catheter

An indwelling catheter is in place all the time. You should only be offered an indwelling catheter once all other options have been considered. The indwelling catheter you are offered will depend on your particular characteristics and requirements, with your comfort and preferences being

important factors. Your healthcare worker should talk with you about the options.

Inserting and looking after the catheter

If you are managing your catheter yourself, it is very important to clean your hands (as described in '[Keeping hands clean](#)') both before and after handling the catheter. The same is true of any carer who is helping you. Healthcare workers should also wear a new pair of clean gloves whenever they handle the catheter.

When inserting the catheter, a lubricant should be used (sometimes the catheter is lubricated already). This makes it easier to put the catheter in place and helps avoid infection. If you are using a sachet of lubricant, this should be used once and then thrown away. Containers or tubes of lubricant can be used more than once, but should only be used by one person.

The place where the catheter enters your body (sometimes called the 'meatus') should be cleaned before the catheter is inserted. If you have an indwelling catheter, the meatus should be washed every day with soap and water.

Healthcare workers should make sure that the risk of an indwelling catheter becoming blocked is as low as possible. For example, they might advise you to drink more fluids.

Indwelling catheters should only be changed when necessary or according to the manufacturer's instructions. You may be offered antibiotics when a catheter is changed, but this should only be the case if you are prone to getting infections after catheter changes or if there are difficulties at the time of the catheter change.

Managing the catheter drainage system

There are two drainage system options for indwelling catheters. In the first option, the catheter is connected to a large drainage bag that is emptied at intervals so that it doesn't get too full. The bag should be positioned below the level of the bladder, but it should not touch the floor.

Alternatively, the catheter is controlled by a valve that is opened to allow the bladder to empty into a small drainage bag (leg bag) at intervals or when the person feels uncomfortable. When the bag is full, the urine is drained via the bag so that the system is kept intact, reducing the risk of infection. An extra bag can be added to the small bag to increase capacity overnight.

Your healthcare worker should advise you about how and when to change your drainage bag.

Enteral feeding

Avoiding infections such as gastroenteritis is very important for people who have enteral feeding.

Before you leave hospital, you and your carer(s) should have thorough training until you feel confident about managing enteral feeding at home. You will get support and help from healthcare workers once you get home and for as long as you need it.

Preparing and giving feeds

Whenever possible, you should be provided with cartons containing feeds that are ready to use and do not need mixing or diluting. These feeds may be given in a feeding session of up to 24 hours.

If ready-to-use feeds are not available, the person preparing a feed should clean their hands thoroughly (see 'Keeping hands clean') and use a clean working area and equipment that is for enteral feeding only. Cooled boiled water or fresh sterile water should be used to mix the feed, which can be prepared up to 24 hours in advance and kept in the fridge. Home-prepared feeds should be given in a session of no more than 4 hours.

All feeds should be stored according to the manufacturer's instructions.

Equipment

The equipment used for giving feeds should be handled as little as possible, and an aseptic technique should be used. The feed-giving set (that is, the equipment used to administer feeds) and feed containers must be discarded after each feeding session.

The place where the feeding tube enters your body (sometimes known as the 'PEG') should be washed daily with water and dried thoroughly.

To prevent blockages, the feeding tube should be flushed with freshly drawn tap water before and after feeding or giving medications, using syringes provided by your healthcare worker. For patients whose immune systems aren't working properly (who are 'immunosuppressed'), either cooled freshly boiled water or sterile water from a freshly opened container should be used to flush the tube.

Vascular access devices

Patients with a [vascular access device](#), their carers and healthcare workers need to follow strict guidelines to prevent infection.

Before you leave hospital, you and your carers should be taught techniques to help prevent infection and manage your vascular access device safely. You should receive further training and support for as long as you need it.

Hands must be cleaned thoroughly (see '[Keeping hands clean](#)') before touching a vascular access device, and procedures must be carried out using an [aseptic technique](#).

The site where the vascular access device enters the body needs careful attention to avoid infection. Your healthcare worker should use special antiseptic solution, swabs and/or wipes for cleaning your skin before inserting a peripheral vascular access device. Skin should also be cleaned whenever dressings are changed for all vascular access devices.

You should use dressings provided by your healthcare worker. The type used will depend on whether or not the site where the vascular access device enters your body is bleeding or oozing, or you are sweating a lot. Your healthcare worker will talk with you about how often the dressing should be changed. If you have a type of vascular access device called a peripheral cannula, the dressing won't usually be changed at all unless it is damaged.

Healthcare workers should provide liquids for flushing out and cleaning vascular access devices. Your healthcare worker will also advise you about how often the administration set for your vascular access device should be changed.

If you are receiving drugs through your vascular access device, the vial containing the drug should be thrown away after a single dose has been taken from it. Your healthcare worker will advise you about the special rules for this.

Explanation of terms

Aseptic technique

A procedure to reduce the number of infectious organisms and prevent their spread by following key principles such as cleaning hands thoroughly, using protective equipment and touching as little as possible.

Enteral feeding

A type of feeding used for people who cannot eat normally. Liquid food is given through a tube directly into the gut.

Handrub

A liquid for rubbing onto hands that kills germs that can cause infection. Handrubs used for preventing infections in people having treatment or care should conform to British Standards.

Sharps

Anything that can cut, graze or prick you, such as needles, scalpels or other sharp instruments.

Urinary catheter

A thin flexible tube used to drain urine from the bladder.

Vascular access device

A tube that is inserted into a vein. There are various types. A central vascular access device is placed into a major vein, usually in the chest or neck (note that this is done in hospital rather than in a person's home or in the community). A peripheral vascular access device is placed into a smaller vein, usually in the arm or hand.

More information

The organisations below can provide more information about preventing infections. NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

- MRSA Action UK, 07762 741 114 www.mrsaactionuk.net
- The Patients Association, 0845 608 4455 www.patients-association.org.uk

You can also go to NHS Choices (www.nhs.uk) for more information.

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Accreditation

