

Frequently asked questions

These are a selection of questions and answers that may be raised by the issuing of *Patient Safety Alert: Clean Hands Save Lives*. A more comprehensive list, which will be updated and added to, is available from www.npsa.nhs.uk/cleanyourhands

General

Q. Why is this alert being re-issued now?

A. Good hand hygiene remains a very important issue for healthcare workers in the NHS. Infection rates are still a problem in the NHS and hand hygiene is proven to be the most simple and effective method in helping to reduce these.

The alert is being reissued to incorporate the most up-to-date best practice guidelines on hand hygiene. The alert includes the WHO Five Moments for Hand Hygiene (July 2007), which is the internationally recognised procedure.

The original alert only applied to the acute sector so the scope of the advice has been broadened to apply to all providers of NHS care, whether this is directly provided (i.e. by an NHS trust) or commissioned (e.g. via an independent provider).

Q. How will the NPSA evaluate whether the alert has been implemented?

A. The Alert will be evaluated through a number of different methods including the inclusion of questions in the 2009 PEAT survey; feedback from the NHS Staff Survey undertaken by the Healthcare Commission; and direct research with trusts (for example, visual audits and obtaining copies of audits, action plans and hand hygiene policies).

The Healthcare Commission also evaluates implementation of a sample of NPSA Alerts as part of its Annual Health Check and we will be proposing that this Alert is one of those.

The role of hand hygiene by healthcare staff in preventing and controlling infection

Q. Why is the hand hygiene of healthcare staff so important for infection prevention and control?

A. Improving the hand hygiene of healthcare staff is one of the most effective ways of preventing and reducing the spread of healthcare associated infection.

Healthcare staff have the greatest potential to spread the microorganisms that cause infection as they undertake their work. Their hands can:

- transfer the patient's own microorganisms into sterile areas of the patient's body during care or treatment
- transfer microorganisms from one patient to other patients
- transfer microorganisms from the environment and equipment to a patient
- acquire microorganisms as a result of their contact with patients, which places healthcare staff at risk of infection

Q. What about patients' and visitors' hand hygiene?

A. Promoting hand hygiene amongst patients and visitors might raise the profile of hygiene generally but it is unlikely to reduce the transmission of microorganisms that cause healthcare associated infection.

While visitors and patients come into contact with the general environment, it is very rare that they have regular and prolonged contact with patients. It is important to note how extremely unlikely it is that visitors touch patients in susceptible areas of the body - and even more that they might then move to touch other patients and do the same.

While we do not wish to discourage patients or visitors from observing good personal hygiene, it is staff's hand hygiene compliance that we need to be monitoring and supporting - not visitors' and patients'.

Q. What about relatives and carers that are helping to provide care to a patient?

A. If relatives and carers are helping to nurse a patient they should be shown how and when to clean their hands at the point of care. However, again, they are unlikely to touch other patients in a similar way so are unlikely to transfer infection to other patients.

The point of care or treatment as the crucial moment for hand hygiene

Q. Why is the 'point of care' so important?

A. The 'point of care' is the patient's immediate environment (zone) in which healthcare staff-to-patient contact or treatment is taking place. It represents the time and place where there is the highest likelihood of transmission of infection via the hands of healthcare staff.

Therefore by improving the hand hygiene of healthcare staff at this time and place we have the greatest potential to stop the spread of infection. Ensuring that staff have the means to clean their hands at this point (i.e. the provision of alcohol handrub) is the first step in enabling this to happen.

Q. What does 'alcohol handrub at the point of care' mean in practice?

A. Ensuring healthcare staff have access to alcohol handrub at the point of care means locating the dispenser within the patient's immediate vicinity in any healthcare setting. For example, the alcohol handrub dispenser could be sited at the end of the patient's bed, on the bedside locker, beside a chair in a treatment area, or attached to the internal wall of an ambulance. Where it is not possible to permanently site dispensers (for example, due to any patient risk associated with its placement) staff can be issued with personal dispensers that can be carried in the pocket or clipped onto clothing.

Q. What are the WHO Five Moments?

A. The World Health Organization (WHO) developed the Five Moments to help healthcare staff better understand the times that they need to clean their hands and why. If you imagine a dotted line around the patient, then every time you cross this line and enter the patient zone (the point of care) you need to be thinking about cleaning your hands.

The Five Moments are:

1. Before patient contact
2. Before an aseptic task
3. After body fluid exposure risk
4. After patient contact
5. After contact with patient surroundings

A diagram showing the Five Moments is available from the cleanyourhands campaign website: www.npsa.nhs.uk/cleanyourhands

The current recognised standard for hand hygiene products

Q. Why are you pushing alcohol handrub? Shouldn't we all be using soap and water?

A. Alcohol handrub is currently the most effective means of decontaminating hands. It enables healthcare staff to quickly and effectively clean their hands when they are with their patient (i.e. at the point of care). It also means that patients can see their healthcare worker clean their hands, which is important for patient confidence.

There are a large number of studies which have looked at alcohol and antibacterial soap and water and compared the two. In 90% of the studies, alcohol handrubs reduced bacterial counts on the hands to a greater degree than the antimicrobial soaps.

The provision of alcohol handrub does not replace the need for soap and water. Hands should always be cleaned with soap when they are visibly soiled; there has been direct hand contact with bodily fluids; there is an outbreak of Norovirus, *Clostridium difficile* or other diarrhoeal illness; or staff are caring for a patient with vomiting and/or diarrhoea.

Q. We don't purchase our alcohol handrub through the national contract in England or Wales does this matter?

A. No, providing you have ensured the product being used meets the same standard. All products on the national contracts in England and Wales have been proven to comply with EN standard 1500. More information on the specification that products must meet is available from the NHS Supply Chain (England) and Welsh Health Supplies websites: www.supplychain.nhs.uk/handhygiene and www.whs.wales.nhs.uk

Q. We have been approached by a supplier with a new product that they say is more effective than alcohol handrub?

A. At the time of re-issuing the alert (2 September 2008) alcohol-based products are proven to be the most effective and acceptable for hand decontamination. Any products purchased for use at the point of care must adhere to the European Committee for Standardisation (CEN) standard (EN1500). All alcohol handrub products on NHS contract in England and Wales comply with the EN standard and have passed rigorous safety and in-use acceptability assessments. NHS trusts not purchasing via the national contracts must ensure the products they use are of the same standard as those used on the national contract. More information is available at www.supplychain.nhs.uk/handhygiene for England and at www.whs.wales.nhs.uk for Wales.

Q. Doesn't the alcohol handrub damage staffs' hands after a while?

A. There is a risk of work-related contact dermatitis with all hand hygiene measures. In practice so called 'wet work' (i.e. washing with soap and water) causes greater potential damage to hands than alcohol handrub.

There is a misconception that alcohol handrubs are drying to the hands. This is not the case. In fact all of the alcohol handrubs on the national contracts in England and Wales have added moisturizers and can help staff with known dry or sore hands – if used correctly.

Maintaining good hand skin condition is important for infection prevention and control as damaged skin can be prone to colonisation by microorganisms that cause infection. Any staff experiencing skin problems should be referred to occupational health.

Q. Should both alcohol handrub and soap and water be used?

A. Both alcohol handrub and soap and water should be used for optimum hand hygiene practice but there is no reason why both should be used at the same time.

Hands should always be cleaned with soap and water when they are visibly soiled; there has been direct hand contact with bodily fluids; there is an outbreak of Norovirus, *Clostridium difficile* or other diarrhoeal illness; or staff are caring for a patient with vomiting and/or diarrhoea. For added

protection to the patient and healthcare staff, you can then apply alcohol handrub following the soap and water handwash.

At other times it is perfectly acceptable and right to just use alcohol handrub. Hands do not need to be cleaned with soap and water prior to applying alcohol handrub other than in the circumstances outlined above.

The appropriate placement of hand hygiene products

Q. We have alcohol handrub at the entrance to the hospital and ward areas – does this mean that we have to remove it?

A. The placement of alcohol handrub dispensers is at the discretion of individual trusts however the NPSA is saying that it is most beneficial to patient safety, and infection prevention and control, to position alcohol handrub at the point of care.

There is no evidence to suggest that patients and visitors play a role in the transmission of healthcare associated infections – there is therefore no clinical reason for alcohol handrub to be placed at entrances to wards and buildings where they can be used by everyone as they enter and leave.

Any dispensers placed at other points, such as ward entrances, should be based on an assessment of risk, cross-infection, and risk of unintended use. There are a number of risks associated with alcohol handrub, one of which is deliberate ingestion, and only providing it at the point of care can make these risks easier to manage.

Which hand hygiene products to use when

Q. Is the NPSA saying that conventional handwashing at the sink is no longer important?

A. Not at all. There will always be a place for what some are calling 'conventional hand washing'. Hands should always be cleaned with soap and water when they are visibly soiled; there has been direct hand contact with bodily fluids; there is an outbreak of Norovirus, *Clostridium difficile* or other diarrhoeal illness; or staff are caring for a patient with vomiting and/or diarrhoea.

Evidence suggests that full compliance with hand hygiene through only soap and water is unachievable because of time, location and accessibility of sinks, skin irritation and dryness. Alcohol handrub provides a quick and effective way for staff to clean their hands when they are with their patient (i.e. at the point of care). It also means that patients can see their healthcare worker clean their hands, which is important for patient confidence.

Q. Does alcohol handrub work against *Clostridium difficile*?

A. Alcohol handrub is not effective against the spore forming bacteria that causes *Clostridium difficile* (C. diff). The only way to remove these is by cleaning hands with soap and water so that you physically wash them off your hands. Therefore, the NPSA recommends that hands should always be cleaned with soap and water when they are visibly soiled; there has been direct hand contact with bodily fluids; there is an outbreak of Norovirus, *Clostridium difficile* or other diarrhoeal illness; or staff are caring for a patient with vomiting and/or diarrhoea. Gloves should also be used when there is potential contact with bodily fluids.

Q. Is alcohol handrub always enough?

A. No. Alcohol handrub is excellent for disinfecting clean hands, but if your hands are physically dirty you need to wash with soap and water. Also, alcohol is not recommended for use against some organisms such as *Clostridium difficile* and some viruses that cause gastroenteritis. A good rule-of-thumb is to always wash with soap and water when you're caring for anyone with diarrhoea or vomiting.

Management of risks including ingestion, storage and skin irritation

Q. What are the risks associated with alcohol handrub?

A. There are a number of risks to patients and staff associated with the use of alcohol handrub however the benefits of its use far outweigh the risks. The main risks are associated with ingestion, eye exposure, skin irritation and storage. A risk assessment should be undertaken to identify the specific risks and a management plan put in place. This is particularly important for clinical areas managing patients with alcohol use disorder and patients at risk of deliberate self-harm. See the NPSA booklet on *Healthcare risk assessment made easy* for further guidance (www.npsa.nhs.uk).

Q. What are the fire risks of alcohol handrub?

A. The risk of fire with alcohol handrub is low but, due to the flammability of alcohol, fire is recognised as a hazard. These fire risks relate to the placement of dispensers, storage, application of handrub, and deliberate use of alcohol handrub as an incendiary. However, it is important to emphasise that benefits in reducing infection greatly outweigh these risks.

When considering the placement of dispensers a risk assessment should be undertaken. This may mean that in some clinical areas (for example, when caring for children or confused patients) staff need to be issued with personal dispensers of alcohol handrub. This adheres to the principle of point of care availability whilst at the same time minimising any risk to patients. Focusing the provision of alcohol handrub on the point of care will also help manage deliberate misuse of alcohol handrub as an incendiary.

After application of the alcohol handrub, it is important that hands are rubbed together until the alcohol has completely dried. This is primarily to counter any chance of static electricity shock from touching metal objects. However, the WHO recommends that clear instructions are displayed at handrub dispenser points intended for use by patients and the public to warn them not to use excessive amounts and not to smoke immediately after use.

There are also risks regarding the storage of alcohol handrub that will need to be managed. Minimum quantities should be stored at ward/department level and it is recommended that no more than five litres should be held in storage. NHS Estates Alert NHSE (2005) 07 provides more guidance in this area (www.dh.gov.uk).

Q. How can the risks of ingestion be managed?

A. All alcohol based products pose a potential risk if ingested, and therefore the products should be carefully placed to ensure that this risk is minimised. Risk of ingestion is minimised when alcohol handrub is only at the point of care.

Reports to the NPSA's National Reporting and Learning System (NRLS) shows that the majority of reported cases of ingestion of alcohol handrub have been deliberate. This makes the risk harder to manage, however placement of alcohol handrub dispensers in locations other than the point of care should be carefully considered to ensure that risks of ingestion are minimised.

If significant ingestion occurs, part of the patient care and response action may include contact with the National Poisons Information Service which provides advice via TOXBASE (www.TOXBASE.org) or via its 24 hour telephone services (0844 892 0111).

Q. How can the risks of skin irritation be managed?

A. There are risks of skin irritation when using both alcohol handrub or soap and water. These risks can be minimised by using alcohol handrub instead of soap and water – except in cases where hands are physically soiled or there are cases of diarrhoea and vomiting – as alcohol handrub is less irritating to skin than using soap and water.

Ensuring hands are fully dry after washing and use of hand moisturisers may help to minimise the risk of irritation. It is important for healthcare staff to maintain good hand skin condition as damaged skin can be prone to colonisation by microorganisms that can cause infection. More information on hand care is available from the NHS Employers Healthy Workplaces Handbook (www.nhsemployers.org)