

Hand Hygiene Training in Adult Care Homes

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1. Introduction and contact details

This hand hygiene training guide provides training and resources in hand hygiene and also enables care provider staff to train other staff in their organisation. This training is suitable for all health care staff working directly with residents/service users in a care settings. There is an optional handshake experiment at the end and will require the use of a Glitterbug hand lotion and UV torch.

The items can be purchased here: <https://www.foodsafetydirect.co.uk/hygiene-training-starter-kit-large-glitterbug-potion.html>

On completion of the hand hygiene training there is a hand hygiene training certificate on page 9 and page 11 contains a competency checklist for guidance when training other members of staff.

Hand hygiene is one of the most important procedures for preventing the spread of infectious agents.

Good hand hygiene amongst all staff, protects both you and residents from acquiring a healthcare associated infection.

The transmission of microorganisms, such as bacteria and viruses, from one resident to another or to yourself via staff hands, or from hands that have become contaminated from the environment, can result in adverse outcomes.

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2. Microbiology of hands

The skin on our hands harbour 2 types of microorganisms:

Transient microorganisms include bacteria and viruses and are found on the superficial layers of the skin. They are termed 'transient' as they do not stay long, 'hitching a ride' on the surface of hands where they are easily transferred to other people, for example, contact with a resident's wound, urinary catheter drainage system, equipment, and the environment. However, unlike resident bacteria, they are easily removed by routine handwashing with liquid soap and warm running water or the use of an alcohol hand rub.

Resident microorganisms, e.g. Staphylococcus, reside on the skin and also under the superficial layers of skin, in crevices, hair follicles, sweat glands and under finger nails. Their primary function is defensive in that they protect the skin from invasion by more harmful microorganisms. They do not readily cause infection, but can cause infection for example, if they enter the body through damaged skin. They are not easily removed with routine handwashing alone. Either an antimicrobial solution should be used or routine handwash followed by an application of alcohol handrub.

3. Preparing for hand hygiene

To facilitate effective hand hygiene when delivering direct care, staff must ensure that they:

- Cover cuts and abrasions with waterproof dressings
- Are 'bare below the elbows', which entails: Exposing forearms by wearing short sleeved clothing or rolling sleeves up to the elbows. If disposable over-sleeves are worn for religious reasons, these must be removed and disposed of before performing hand hygiene, then replaced with a new pair.
- Removing wrist and hand jewellery. Rings with jewels, stones, ridges or grooves should not be worn as these may harbour bacteria and also prevent good hand hygiene. A plain band ring may be worn, but ensure the area under the ring is included when hands are washed or
- A religious bangle can be worn but should be moved up the forearm during hand hygiene and secured during resident care activities.
- Not having dermal piercings on the arms or wrists.
- Keeping nails clean and short (fingertip length), as long fingernails will allow a build-up of dirt and bacteria under the nails and impede effective handwashing.
- Keeping nails free from nail polish/gel as flakes of polish/gel may contaminate a wound and broken edges can harbour microorganisms.
- Keeping nails free from acrylic/artificial nails, nail art/accessories, as these can harbour microorganisms, become chipped or detached.

4. When to clean your hands?

Before resident contact

When? Clean your hands before touching a resident when approaching him/her.

Why? To protect the resident against harmful germs carried on your hands.

Before a clean/aseptic procedure

When? Clean your hands immediately before any clean/aseptic procedure.

Why? To protect the resident against harmful germs, including the resident's own, from entering his/her body.

After body fluid exposure risk

When? Clean your hands immediately after an exposure risk to body fluids (and after glove removal).

Why? To protect yourself and the health and social care environment from harmful resident germs.

After resident contact

When? Clean your hands after touching a resident and her/his immediate surroundings, when leaving the resident's side.

Why? To protect yourself and the health and social care environment from harmful resident germs.

After contact with residents' surroundings

When? Clean your hands after touching any object or furniture in the resident's immediate surroundings when leaving—even if the resident has not been touched.

Why? To protect yourself and the health and social care environment from harmful resident germs.



Other examples of when hand hygiene should be performed:

- When hands are visibly dirty or soiled
- Before preparing food and after handling food.
- Before eating or drinking
- Before the start of your shift, between each task and before you go home
- Before putting on and after removal of personal protective equipment (PPE) or domestic gloves. Wearing gloves should not be a substitute for handwashing
- Before and after having a break and using the toilet
- After handling used laundry, e.g. stripping beds, dirty clothing
- After emptying commodes, urine bottles, catheter bags
- After coughing, sneezing or blowing your nose

Always wash hands with liquid soap and warm running water if:

- Hands are visibly soiled or dirty
- Caring for residents with vomiting or diarrhoeal illnesses
- Caring for a resident with confirmed or suspected viral gastroenteritis, e.g. Norovirus, or *C.diff*

In all other circumstances, an alcohol handrub can be used for routine hand hygiene on visibly clean hands during care. Alcohol handrubs are not effective against viral gastroenteritis or spore forming organisms, such as *C. diff*. Skin wipes can be used for residents unable to access handwashing facilities.

- Soap and warm running water or non-alcohol skin wipes should be used if the resident's hands are visibly soiled or dirty, or they have confirmed or suspected viral gastroenteritis or *C.diff*.
- Bar soap should not be used as it can harbour microorganisms
- Communal fabric hand towels must not be used
- Nail brushes should not be used routinely as they can cause skin damage & harbour bacteria. If nail brushes are used they should be single use and disposed of.
- To minimise the risk of skin damage use hand cream 3 times a day and do not use communal pots (fingers inside pot) as the contents can become contaminated.

5. Hand cleaning methods

Handwashing removes dirt, organic matter, and most transient microorganisms, acquired through direct contact with a person or from the environment. Liquid soap and warm running water are adequate for this procedure.

The overall handwashing process should take 15-30 seconds.

- Ensure you are 'Bare below the elbow.
- Before applying liquid soap, wet hands under warm running water to minimise the risk of skin damage.
- Apply liquid soap.
- Rub all parts of the hands, as seen in the hand hygiene technique poster for staff (see appendix 1), for at least 15 seconds, ensuring that all surfaces of the hands and wrists are covered with soap.
- When caring for residents with confirmed or suspected COVID-19 or any other new emerging infections, rub all parts of the hands and in addition, rub exposed forearms as these may have been exposed to respiratory droplets.
- Rinse hands thoroughly under warm running water to remove residual soap.
- Dry hands thoroughly using paper towels. Wet hands are more likely to transfer microorganisms than dry hands as the friction of paper towels also helps to further remove microorganisms on the hands. Also drying hands thoroughly prevents chapping.

Skin wipes can be used if handwashing facilities are unavailable, or a resident is unable to access hand washing facilities, skin wipes can be used.

- Resident's hands should be rubbed with the wipe, as seen in the hand hygiene technique poster for staff (see appendix 1) ensuring that all surfaces of the hands are covered.
- Staff using skin wipes for cleaning their hands should:
 - Then apply alcohol handrub, if available, using the hand hygiene technique ensuring that all surfaces of the hands and wrists are covered with the product until the solution has dried
- Wash their hands at the earliest opportunity

Alcohol based handrubs (with a minimum 60% alcohol content) offer a practical and acceptable alternative to handwashing in most situations. It should be applied to all areas of the hands using the hand hygiene technique (appendix 1), ensuring that all surfaces of the hands and wrists are covered, until the solution dries.

Alcohol based handrubs are not effective:

- In removing physical dirt or soiling and, therefore, must only be used on visibly clean skin

- When caring for residents with viral gastroenteritis, e.g. Norovirus, or a spore forming bacteria, such as *Clostridium difficile*. Hands must be washed with liquid soap and warm running water when caring for or in contact with the environment of residents with these infections.
- Alcohol handrub may be less effective if used immediately after the application of a hand cream/lotion
- Alcohol handrub must not be applied to gloved hands as this may affect the integrity of the glove material.

Technique for using alcohol handrub

- Ensure you are 'Bare below the elbows'
- Dispense manufacturer's recommended amount of alcohol product on to hands, ensuring it covers all surfaces of the hands and wrists.
- Rub hands, using the hand hygiene technique (see appendix 1), ensuring that all surfaces of the hands and wrists are covered with the product until the solution has dried (about 20 seconds). Do not dry with paper towels.

6. Optional Handshake experiment

Next, we are going to carry out a handshake and handwash experiment to show the transfer of microorganisms (microbes), such as bacteria or a virus from person to person. During the second part of the experiment, we will look at hand washing technique.

We are going to use a lotion and UV torch for this experiment. The lotion is used like a pretend microbe - It does not make germs glow, instead it's pretending to be a microbe.

Activity instructions:

1. Stand staff in rows of 5, all facing the front.
2. Apply lotion to the hands of the first person only, then ask them to shake hands with the person on their left and so on until all have shaken hands in the row.
3. Close the curtains to eliminate as much natural light as possible, ensuring the best effect of the UV torch. Shine the torch on the hands to see how far along the row 'microbes' have travelled. The hands will 'glow' if there are any 'microbes' on them.
4. Now ask staff to wash hands with good hand washing technique.
5. Use the UV torch again, to show if there are any parts of the hands that have been missed by handwashing. These parts of the hand will 'glow'

The lotion will still be present on any areas that are missed by washing, and this will show up under UV light. The areas that glow are the areas where hands have not been washed properly. These are the areas that any microbes on the hands could survive hand washing. It is therefore the glowing parts of the hands that need extra attention when hand washing in future.



The most commonly missed areas during handwashing are back of the hand, fingernails, thumb area and crevices between fingers. It is important to pay particular attention to these areas.

Hand Hygiene Train the Trainer CPD Certificate

This is to certify completion of the hand hygiene
train the trainer training

Awarded to:

Name: _____

Job Title: _____

Employer: _____

Date: _____

Signed: _____

Training aim:

Provide training and resources in hand washing to enable care provider staff to train other staff in their organisation.

Training objectives:

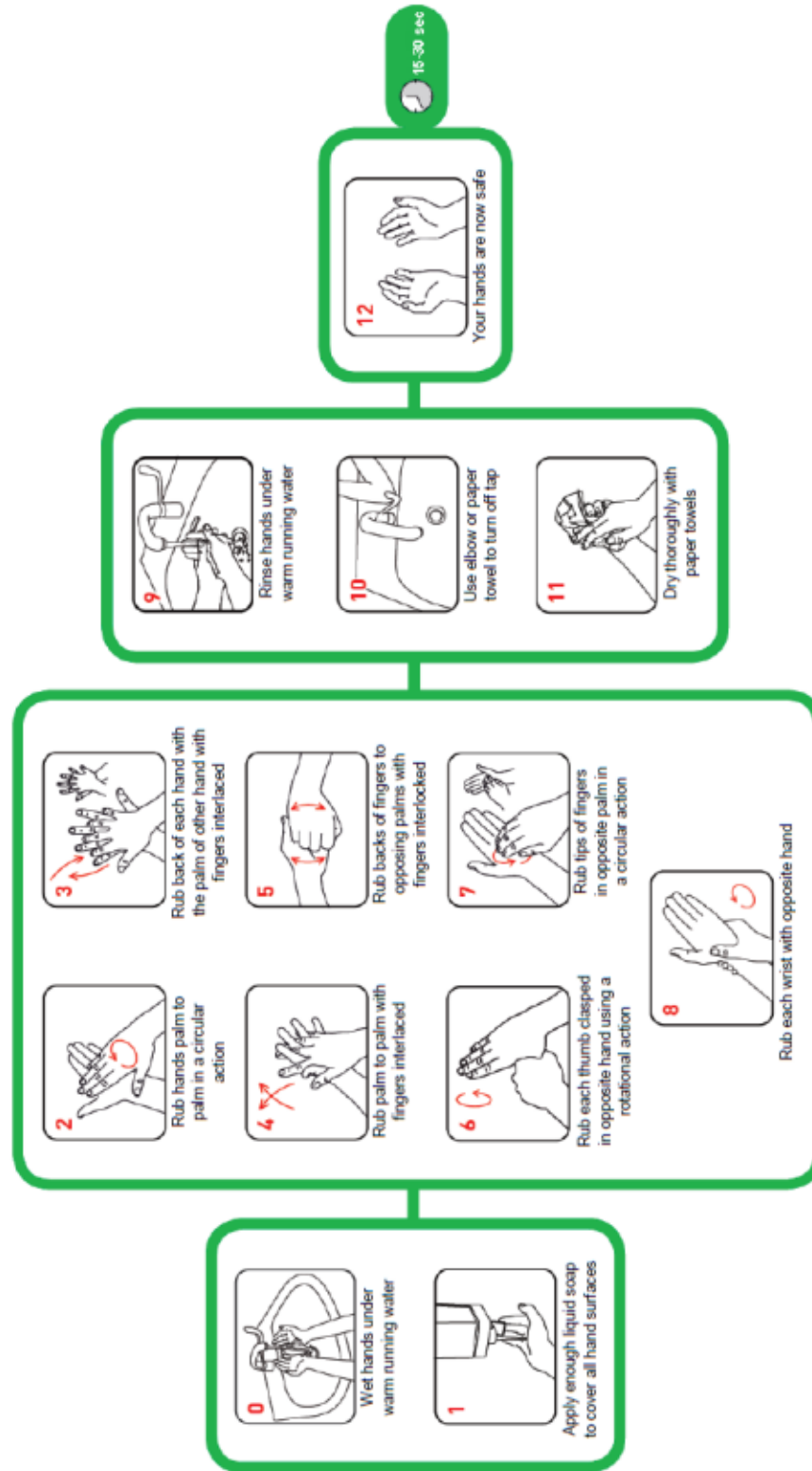
- Provide practical training in hand washing
- Provide guidance for hand washing in care settings
- Provide a checklist and guidance for hand washing

8. Appendix



HAND HYGIENE TECHNIQUE FOR STAFF

- If using liquid soap and warm water, use all steps.
- If using alcohol handrub, use steps 2-8.



Adapted from World Health Organization Guidelines on Hand Hygiene in Health Care and National Patient Safety Agency

Community Infection Prevention and Control
 Harrogate and District NHS Foundation Trust — www.infectionpreventioncontrol.co.uk
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Hand Hygiene Trainer Training Competency Checklist

Employee Name:

Hand Hygiene competency	YES	NO
1. Advise handwashing physically removes the virus	<input type="checkbox"/>	<input type="checkbox"/>
2. Advise gelling physically kills the virus	<input type="checkbox"/>	<input type="checkbox"/>
3. Advise hand gel should not be used on dirty hands	<input type="checkbox"/>	<input type="checkbox"/>
4. Advise commonly missed areas – fingernails, wrists etc	<input type="checkbox"/>	<input type="checkbox"/>
5. Advise not possible to wash hands properly if wearing watches, rings with stones or jewellery – strongly advise to remove	<input type="checkbox"/>	<input type="checkbox"/>
6. Advise to either do handwashing or gelling – no need to do both	<input type="checkbox"/>	<input type="checkbox"/>
Other competency	YES	NO
1. Recognises own scope	<input type="checkbox"/>	<input type="checkbox"/>
2. Aware not to amend or add to the training	<input type="checkbox"/>	<input type="checkbox"/>

Comments or follow up options		

Employee Signature

Date

10. References

For a downloadable copy of the Hand hygiene Policy for Care home settings (April 2023), please visit <https://www.infectionpreventioncontrol.co.uk/resources/hand-hygiene-policy-for-care-home-settings/>

For further information, please refer to the full Policy which can be found at <https://www.infectionpreventioncontrol.co.uk/care-homes/policies/>