



Key Stage 2

Teacher Refresher – Hand Hygiene

Hand Hygiene

Why is hand hygiene so important?

Our hands are naturally covered by useful bacteria – *Staphylococcus* is a common example (ball shaped bacteria arranged in clusters) however, we can pick up harmful microbes from the things we touch. Hand hygiene is possibly the single most effective way of reducing and preventing the spread of these microbes and any associated infection. Schools and community groups are a relatively crowded and closed environment where microbes can spread easily and rapidly from child to child via direct contact or via surfaces. Some of these microbes can be harmful and cause illnesses. Washing our hands with soap and water at key moments removes any harmful microbes we pick up on our hands from our surroundings e.g., home, school, garden, animals, pets, food. Effective hand washing has been shown to reduce absenteeism rates in schools. Washing our hands also helps prevent the spread of antibiotic resistance which can make infections more difficult to treat. Where possible, liquid soap should be used instead of bars of soap, especially if used by multiple people.

Why is soap needed for effective hand washing?

Our skin naturally secretes oil (called ‘sebum’) which helps to keep our skin moist, stops it getting too dry and keeps our skin microbiome (micro-organisms that live on our skin) healthy. This oil, however, is a perfect place for microbes to grow and multiply, and the oil helps microbes “stick” to our skin. Washing hands in water alone will only remove visible dirt and grime invisible microbes may remain. Soap is required to break up the oils on the surface of the hands and should be applied well to all surfaces of the hand, producing a lather which helps to lift the dirt and microbes. It is important to rinse our hands to help remove the dirt and microbes.

If soap is unavailable, hand sanitisers, with at least 60% alcohol can also be effective as long as there is no visible dirt/other substance on hands (these need washing with soap and water). They should be applied to all parts of the hands and rubbed until dry (about 20 seconds - the length of the happy birthday song twice). Hand sanitisers with ingredients like alcohol work by destroying microbes as they dry, but don’t kill all types of harmful microbes and don’t remove visible dirt or other substances from our skin. Therefore, hand sanitisers should not be generally used after **using the toilet.**

When are the key moments for hand washing?

- Before, during and after preparing food
- Before eating or handling ready to eat food
- After using the toilet or changing a soiled nappy/underwear
- After exposure to animals or animal waste
- After coughing, sneezing, or blowing your nose
- If you are ill or have been around ill people
- When you get home or go into another place like work, school, or another household (especially in an outbreak situation)

SW3 Fill in the Blanks

- Microbes
- Transfer
- Infection
- Hand washing
- Antibacterial soap
- 20 seconds
- Visible
- Hand sanitiser

SW1 Healthy Hands Conclusions

1. What is the best way of getting rid of microbes from our hands?

Wash your hands with antimicrobial soap and water for at least 20 seconds, following the six steps for handwashing

2. What difference does using soap make?

Soap breaks down the oils, which microbes stick to, on our hands

3. When should we wash our hands?

Key moments:

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SW4 Hand Hygiene Quiz

How can you spread microbes to others?

- By touching them
- By sneezing

Why should we use soap to wash our hands?

- It helps remove invisible microbes, too small to be seen by the naked eye
- It breaks up the oil on our hands which traps microbes

Which is NOT one of the six steps of hand washing?

- Arms

Who might be at risk as a result of not washing your hands properly?

- All of the above

When should we wash our hands?

- After stroking a pet

- After sneezing or coughing
- After using the bathroom or changing a soiled nappy

How can you stop harmful microbes from spreading?

- Use hand sanitiser if soap and water are not available
- Wash your hands with running water and soap

After we sneeze into a tissue, we should:

- Wash our hands immediately
- Put the tissue straight into the bin

How long should we wash our hands for?

- 20 seconds (length of happy birthday song twice)