## E X E RC I S E

## Handwashing

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Handwashing is a simple and effective way to help prevent diseases, such as colds, flu, and food poisoning.

**When to wash your hands**

**Washing hands:**

* Before and after preparing food, eating, or feeding someone else
* After using the washroom or helping someone use the washroom
* Before and after changing diapers
* After sneezing, coughing, or using a tissue
* Before and after caring for someone who is sick
* After handling pets or other animals
* After handling animal waste
* After handling shared objects

**Proper handwashing**

### **Steps when using soap**

* Wet your hands with warm water.
* Apply plain soap to your hands and rub together for 20 seconds
* Wash the front and back of your hands, as well as between your fingers and under your nails.
* Rinse your hands well for 10 seconds under warm running water, using a rubbing motion.
* Wipe and dry your hands gently with a paper towel or a clean towel. Drying them vigorously can damage the skin.
* Turn off the tap using the paper towel so that you do not re-contaminate your hands.



### **Steps when using alcohol-based hand rubs**

* These products need to be at least 60% alcohol to be effective, so check the label.
* Alcohol-based hand rubs do not cause antibiotic resistance.
* Alcohol-based hand rubs do not work if your hands are greasy or visibly dirty. These products do not clean your hands and are not a substitute for handwashing. If your hands are visibly soiled, it is best to use soap and water.
* Rub your hands together until the product has evaporated.
* If dry skin is a problem, use a moisturizing lotion.
* Alcohol-based hand rubs are safe for children if used with supervision. Alcohol-based hand rubs are poisonous if ingested. Children should not put their hands in their mouths until the alcohol evaporates (about 15 seconds).

**Hand washing laboratory**

**Aim**

To demonstrate different organisms on our hands to increase awareness of hand washing importance in preventing health care-associated infections.

**Objectives:**

Screening hands for presence of organisms using nutrient agar plates.

Hands will be screened before and after washing.

**Materials:**

Nutrient agar plates.

Soap, alcohol gel and tissue paper.

37°C incubators.

**Method:**

Students will be divided into two groups, A and B.

**For both groups:**

Streak your fingers (as demonstrated) on the agar plate before washing your hands and label the plate appropriately.

**Group A:**

Wash your hands using soap and water, dry your hands then streak the fingers on a labeled plate as appropriate.

**Group B:**

Wash your hands using the provided alcohol gel until dry then streak your fingers on a labeled plate as appropriate.

**For both groups:**

Incubate all the plates at 37°C overnight.

Record your result the next day.