### **Educator Resource**

## Interactive Experiment:

# The Importance of Handwashing

Students come into contact with germs every day. They may not understand just how quickly germs can be transmitted by hands – and as a result, they may not wash and sanitize as often as they should. Try these interactive experiments to reinforce hand hygiene and encourage a lifetime of healthy habits.



#### **Materials**

- White paper
- Washable finger paint (darker colors are recommended)
- Blindfold
- Soap
- Running water
- Paper towels

### **Getting Ready**

- Before performing the experiment, complete Worksheet 1 to discuss the concept of germs (good vs. bad, microscopic and can't see).
- If performing the experiment in a classroom setting, split students into 2 groups. Review Worksheet 2 with student group A to review how to properly wash hands. Do not review Worksheet 2 with student group B.

#### **Procedure**

- 1. Explain that paint will represent germs typically found on our hands.
  - Note We're unable to see germs because they are so small (microscopic).
- 2. Dispense a dime-sized amount of paint on student's hands.
- 3. Have student rub paint on palm of hands only from wrist to fingertips.
- 4. Blindfold student and ask them to wash hands with soap and water.
  - **Note** For classroom experiment, group A should be instructed to wash per the WHO Handwashing Procedure. Allow group B to wash as they normally would.
- 5. Lightly pat palms of hands with paper towel one time.
- **6.** Stamp hands onto white paper. Any area on the paper that has paint represents where germs were missed during hand wash. Areas without paint represent that germs have been removed.

#### **Discussion Questions**

- **1.** Which area(s) on your hands did you wash poorly and they had a lot of visible paint? Which area(s) on your hands did you wash well and they had no visible paint?
- 2. For classroom experiment did group A or group B wash their hands better and remove more germs?
- 3. Look around what objects do you think have the most germs on them? Why?
- 4. What area of your hand do you think would have the most germs? Why?
- **5.** What is a good way to clean your hands?
- **6.** Why is it important to clean your hands?

