

HOSA Nursing Assistant Handwashing Procedure

ASSESSMENT

HOSA Event Guidelines
Laboratory Investigation Rubric

ACCOMMODATIONS

For reinforcement, the student will practice the technique and critique each other.

For enrichment, the student will go to middle schools and elementary schools to teach proper handwashing.

REFLECTIONS

Comparison of Handwashing Techniques

Purpose:

In this laboratory investigation, the student will analyze the effectiveness of handwashing.

Background Information:

Materials:

3 Blood agar plates
Permanent marker
handwashing soap
non-water hand cleanser
Incubator 37 C
sink with running water
Laboratory coat or apron
Goggles
Biohazard containers
Surface disinfectant
Paper towels

Procedure:

1. Label three agar plates #1, #2, and #3.
2. Before washing hands, touch the thumb of either hand to one of the agar plates and then label the plate #1.
3. After washing hands, touch the same thumb to plate #2.
4. Separate into assigned groups.
5. **Group #1** will touch the top of their desk with the thumb used to touch the agar plate.
6. Half the group will wash hands and touch the thumb to plate #3.
7. The other half of the group will touch the thumb to plate #3 **before** washing hands.
8. **Group #2** will shake hands with someone else in their group.
9. Half the group will wash hands and touch the thumb to plate #3.
10. The other half of the group will touch the thumb to plate #3 **before** washing hands.
11. **Group #3** will touch doorknob with the thumb used to touch the agar plate.
12. Half the group will wash hands and touch the thumb to plate #3.
13. The other half of the group will touch the thumb to plate #3 **before** washing hands.
14. Each student should place all plates upside down (lid on bottom, agar side on top) in an incubator and allow to incubate at 37C for 24 hours.

15. Students should observe their plates after 24 hours.
16. Students should document the number of colonies of microbial growth on each plate.
17. Students should dispose of agar plates in a biohazard container.
18. Students should meet in like groups again and compile data.

Data:

Design a bar graph from the data presented by each of the three groups and make a conclusion.

Number of Colonies

		Plate #1	Plate #2	Plate #3
Group #1 Desk	Hands Washed			
Group #1 Desk	Hands Not Washed			
Group #2 Handshake	Hands Washed			
Group #2 Handshake	Hands Not Washed			
Group #3 Doorknob	Hands Washed			
Group #3 Doorknob	Hands Not Washed			

Conclusion

1. What is a nosocomial infection?
2. Describe the effect of handwashing on nosocomial infections.
3. What is a fomite?
4. Do you think infections can be passed via a fomite? Why?
5. How do you feel handwashing can affect your overall health? Explain