Lab 10: How Germs Spread

Learning objectives:

- To learn how germs spread
- To better understand the spread of germs, by healthcare professionals, from patient to patient
- To better understand the importance of good handwashing.

Germs spread in many different ways. Direct contact, indirect contact, aerosol transmission, sexually transmitted or through a vector. In this lab, we will observe how germs spread.

Materials:

Glow in the dark gel, Black light

Method:

- 1. Wear personal protective equipment including lab coat, safety glasses and gloves.
- 2. Instructor will provide glow in the dark gel to students. Gel is used to simulate how germs will spread.
- 3. Take some gel in your hands (after wearing gloves), rub hands thoroughly and then proceed to carry out any work assigned by instructor.
- 4. Move around, touch surfaces and objects as you would normally do on any other day.
- 5. After 30-60 minutes, turn off lights in the class room and observe.
- 6. Glowing spots show where germs have spread.
- 7. With gloves on, perform good handwashing technique using the available soap.
- 8. Turn off the lights and observe your hands (ie gloves) for glowing bacteria.
- 9. Wash different bench tops with soap and water, alcohol, and disinfectants.
- 10. Turn off the lights and observe for glowing bacteria. Use black light if necessary.
- 11. Write down observations in the lab report.

Note: After the observation, use the surface cleaner provided in the lab to thoroughly clean the surfaces.