

# THE EPIDEMIC

## *Did you know...*

In 1918, a pandemic outbreak of influenza killed between 20 and 40 million people.

The Armistice Day celebration of the end of the war on November 11, 1918 with public parades and parties restarted the epidemic in the U.S. Over one-quarter of the U.S. population became infected and over 500,000 individuals died.

## INTRODUCTION

We will simulate an **epidemic** or widespread outbreak in our population (classroom). Everyone in the classroom will be given mineral oil, however, one person will have mineral oil that is contaminated with **GLOGERM**. GloGerm is nontoxic, and it is NOT a microorganism (bacteria or virus). It fluoresces or glows under ultraviolet (UV) light.

**Epidemiology** is the study of the occurrence, distribution, and control of disease in a population. We will trace the epidemiology of the epidemic by using GloGerm as our tagged "microorganism" and trace the transmission of an infectious agent. You can easily see if you have been "infected" by viewing your hand under UV light (You must wear eye protection, though, to shield your eyes from harmful UV rays).

The objectives for this laboratory are to investigate the following topics:

- epidemics
- epidemiology

# INSTRUCTIONS

1. Put a glove on your non-writing hand.
2. Collect one petri dish containing mineral oil on gauze, per person.
3. Pick up the gauze from your dish with your gloved nonwriting hand.
4. Work the oil around in your palm—**without using your other hand.**
5. Put the gauze back into the dish.
6. Go through a round of handshakes, **as directed by the instructor.**  
Make sure that your hand **REALLY** contacts the other person's hand.  
Use your gloved hand only. Please do not inoculate the back of your partner's hand.
7. Record the number and name of who you shake hands with in the chart below.
8. Continue with the handshake rotations, **as directed by the instructor.**
9. After all handshakes, do not touch anything or anyone else.
10. Wait for the instructor to view your hand under the UV light.
11. Record the numbers of those people infected with the GloGerm.
12. Solve for the person who started the epidemic using the provided data table.

## Handshake Rotations

Rotation no.	Handshaker's no.	Handshaker's name
1		
2		
3		
4		
5		