
Biology: STD/ STI Lab

Sexually transmitted infections and other communicable diseases can spread rapidly. Often, a pathogen is transmitted before the carrier even knows they are infected! The purpose of today's activity is to trace how quickly an STI can spread through our classroom population with one individual carrier and four 'casual encounters.'

PROCEDURE:

- Obtain a vial of clear solution and a solution dropper. Record your vial number in your lab notebook. This solution represents your bodily fluids for the activity.
- Begin the activity by selecting a partner to have a conversation with. Record their vial number into the transmission tree.
- While asking them what they had for dinner last night, place four drops of liquid into their vile, and accept four drops from their vial into yours. Cap your fluids.
- Repeat the procedure with three other partners. Make sure to record their vial numbers in the order you exchanged fluids.
- Report to the STI clinic to get tested. Once you have found out your results, find your previous partners and exchange infection information.
- Fill out the rest of your tree, mapping out exchanges between other people and their partners. Remember, the ORDER of exchange is as critical as who you exchanged with.
- Drain and rinse your vial - please separate infected and uninfected vials to avoid accidental transmission to other class periods!

DATA:

Fill out your transmission tree with names and vial numbers in the lab notebook.

ANALYSIS:

1. What were your results from the clinic?
2. If you tested positive, who do you think you caught the infection from and why do you think it was that person?
3. If you tested negative, did anyone you exchanged with come up positive? If so, why did you not get an infection?
4. If you or anyone you exchanged with did not test positive, how do you think you avoided infection?
5. What real life behaviors could result in the spread of this pathogen?
6. What real life behaviors would prevent the spread of this pathogen?
7. What would happen if the number of exchanges in the classroom increased? Decreased?
8. Investigate and fill out the chart for the following communicable diseases.

Communicable Disease	Type of Pathogen	Mode of Transmission	Symptoms & Treatment
HIV			
Syphilis			
Gonorrhea			
Hepatitis B			
Meningitis			