

Epidemiology: Classroom Lesson Plan

Lesson Topic:

What Is An Epidemiologist?

Lesson Objective:

Students will be able to describe the job tasks of an epidemiologist and give other basic career facts.

Materials:

- Writing utensils
- Learning About Epidemiology and Career Bio: Epidemiology worksheets, one of each per student
- Internet-connected devices, enough for students to work in small groups or individually
- Projector or other method to watch the movie

Advanced Preparation:

- Preview the <u>video</u> before sharing it with your students [3:03].
- Make copies of Learning About Epidemiology and Career Bio: Epidemiology, one of each worksheet per student.

Warm-up Activity:

1. Ask, "Who has ever had a cold, the flu, or gotten sick from bad food?"



- 2. Allow students to briefly share their experiences.
- 3. Tell students that there is a career that works to track sicknesses like the flu and help prevent and contain illnesses caused by bad food.
- 4. Introduce the term epidemiologist and provide a general job description.

View the Video: "Epidemiology"

- 1. Tell students they will be watching the video titled, "Epidemiology".
- 2. Explain that the video presents role models describing epidemiology careers and the excitement and sense of discovery this career can offer.
- 3. View the video together. Ask students to complete the **Learning About Epidemiology** worksheet while listening to the role models.
- 4. View the video a second time to allow students to check their answers and prepare to discuss the video content with the class.

Video Follow-up:

- 1. Ask students to offer their questions, comments, reactions, and responses to the video.
- 2. Discuss students' answers to the **Learning About Epidemiology** worksheet. Ensure a general understanding of an epidemiologist's job.
- 3. Distribute internet-connected devices and Career Bio: Epidemiologist worksheet. Depending on the number of internet-connected devices available, students can work individually or in small groups. Each student should complete their own copy of Career Bio: Epidemiologist.



- 4. Direct students to use the information from the video and additional information from their internet research to complete Career Bio: Epidemiologist. The Career Girls Epidemiologist career page is a good place to start.
- 5. Allow students time to complete their worksheets. Circulate to assist as necessary.
- 6. Bring the class back together to share the career information and facts that they gathered.
- 7. Ask students to share one interesting or surprising fact they learned about epidemiologists from their research.
- 8. End by telling students that anyone can become an epidemiologist and encouraging them to share the career information they gathered about epidemiologists with friends and family at home.



Extension Activities:

- 1. Have students explore the lives of famous epidemiologists. Direct them to create a report, timeline, or mural of their chosen epidemiologist's life.
- 2. Direct students to use the Career Bio sheet to research and learn about other careers.
- 3. Use the "Related Questions to Explore" as discussion springboards or writing prompts to help students further explore careers in epidemiology.

Related Questions to Explore:

- What skills or characteristics do you think it takes to be a successful epidemiologist? Why do you think that?
- What do you think epidemiologists do all day? Is every day the same?
- What would be the most exciting part about being an epidemiologist? What would be the least exciting? Why?
- What might inspire someone to pursue a career in epidemiology?
- If you had to explain an epidemiologist's job to a student in kindergarten, what would you say?



Learning About Epidemiology

As you watch the video "Epidemiology", listen to the role models to answer the questions below. Be prepared to discuss your answers with the class after the video.

1. What is an epidemiologist?		
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1. What does an epidemiologist do?		
2. What do the role models think is rewarding about being an		
epidemiologist?		
3. Would you like to be an epidemiologist? Why or why not?		



Career Bio: Epidemiologist

Complete the items below. Use the oval to draw an image of yourself as an epidemiologist.

	Common job tasks:	
Educational requirements:		
Important skills or qualities:		
Average pay:		
Job outlook:		
Other information:		



Ideas for Future Lessons/Activities Related to Epidemiology:

- 1. Solving Cases! A Focus on Epidemiology Case Studies
- 2. Math Connection: Charting Disease Outbreaks
- 3. How Do I Become an Epidemiologist? Educational Requirements and Possible Career Paths
- 4. What Causes Foodborne Illness and How Can I Avoid It? Salmonella, Listeria, and E-Coli
- 5. Literature-Based Learning: Autobiographies and Memoirs of Famous Female Epidemiologists
- 6. Epidemiological Breakthroughs: Handwashing, Vaccines, and More!
- 7. The Epidemiologic Triangle: Host, Agent, and Environmental Factors
- 8. What's Happening in the World? Epidemiology in the News