Sepsis Prevention Strategies

How can prevention strategies influence sepsis?

Abstract
After learning about the basics of sepsis, students will review prevention strategies. Throughout the lesson, students will complete summative tasks that demonstrate their understanding. To culminate the lesson, students will develop an informational brochure or poster.

Grade Level
6-8

Subject Area
Health

Time
40 minutes
Suggestion: Complete this lesson after “Sepsis: A Public Health Emergency.”

Setting
Classroom

Skills
Evaluate, choose and defend a position; analyze issues; influence; persuade.

Standards Addressed
New York State Health Education Standards
- DM.I.5 – Applies a decision making model to real-life health-related situations.
- PG.I.8 – Assesses, reflects on and adjusts the plan to maintain and enhance personal health and safety, as needed.
- AD.I.3 – Researches the health or safety issue.
- AD.I.9 – Works collaboratively with individuals, agencies or organizations to advocate for the health of self, families and communities.
- ORH.I.3 – Know first aid procedures appropriate to common injuries in the home, school and community.

National Health Education Standards
- 1.8.1 – Comprehend concepts related to health promotion and disease prevention to enhance health.
- 1.8.5 – Describe ways to reduce or prevent injuries and other adolescent health problems.
- 1.8.6 – Explain how appropriate healthcare can promote personal health.
- 4.8.4 – Demonstrate how to ask for assistance to enhance the health of self and others.
- 7.8.2 – Demonstrate healthy practices and behaviors that will maintain or improve the health of self and others.
- 7.8.3 – Demonstrate behaviors to avoid or reduce health risks to self and others.

National Consortium for Health Science Education

Common Core State Standards
- W.7.1 – Write arguments to support claims with clear reasons and relevant evidence.
- W.7.2 – Write informative/explanatory texts to examine a topic and convey ideas, concepts and information through the selection, organization and analysis of relevant content.
- W.7.6 – Use technology, including the internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.
Materials
Have individual devices with internet access for each student, such as computers or iPads; stickers; bandages, gauze and other basic first aid materials; cameras; art supplies such as colored pencils or markers.

*Instructors should use discretion on whether students will be allowed to use camera phones.*

Directions
1. Students will review sepsis prevention strategies.
2. To review each type of prevention, students will examine local vaccination requirements and create a map to identify locations where vaccinations are given. Students will also photograph other classmates practicing basic first aid and create artistic representations of the signs of sepsis so that they learn how to identify the symptoms in themselves and in others.
3. To close both lessons, students will develop a brochure or poster reviewing all they have learned and incorporating all the summative tasks they have developed.

How can you prevent sepsis?
Review Session 1: Sepsis occurs when a person (1) has a bacterial infection, (2) the infection moves into the bloodstream, spreading throughout the whole body and (3) this change in the blood makes it difficult to deliver oxygen to the whole body, damaging tissues and organs. Let’s talk about preventing each step from occurring.
1. To prevent infection that can lead to sepsis, practice good hygiene, including regular hand washing with soap and warm water. And stay up to date on vaccinations against the flu, pneumonia and other common infections.
2. To prevent infections from escalating to sepsis, practice excellent wound care.
3. To prevent sepsis from rapidly taking over, remember the six signs of sepsis: rapid breathing and fast heartbeat, mottled skin, confusion and sleepiness, fever and chills, extreme illness and extreme pain. If you notice any of these symptoms, it is important to tell a trusted adult right away.

Infection prevention
1. Instructors will encourage students to investigate the vaccinations that are required for school—and the nearest location where adults in their life can be vaccinated.
2. Summative task: Students will create a map highlighting a convenient location where their entire family can be vaccinated. *Note: State requirements and a map by ZIP code are available at [https://www.vaccines.gov/getting/where/index.html](https://www.vaccines.gov/getting/where/index.html).*

Excellent wound care
1. Instructor will review the elements of excellent wound care: To deter infection, wound care is important. These guidelines can help you care for wounds:
   - Wash your hands!
   - Stop the bleeding. Minor cuts and scrapes usually stop bleeding on their own. Get stitches for deep wounds.
   - Wash the wound.
   - Bandage the wound. Change the dressing regularly.
   - Watch for signs of infection.
2. Arrange students into small groups of three or four. Equip each group with a few stickers to represent a wound (cut, scrape, gash) somewhere on their body; basic first aid materials, such as bandages and gauze; and a camera.
3. Summative task: Students will photograph their classmates to highlight the key steps of excellent wound care.

Health advocacy
1. An important part of sepsis control is knowing how to identify the symptoms. As discussed, six signs of sepsis suggest that you should ask for help immediately: rapid breathing and fast heartbeat, mottled skin, confusion and sleepiness, fever and chills, extreme illness and extreme pain.
2. Summative task: Students will create artistic representations of each symptom, such as illustrated in the Centers for Disease Control and Prevention VitalSigns image.
Closing
Students will develop a brochure on sepsis that includes all the summative tasks from "Sepsis—A Public Health Emergency" and "Sepsis Prevention Strategies." Students may need to adapt elements to develop a cohesive set of messages.

- Informational paragraph explaining sepsis;
- Persuasive paragraph explaining why sepsis is a public health emergency;
- Map highlighting convenient locations for family vaccination;
- Photographs showing key elements of excellent wound care; and
- Artistic representations of signs of sepsis.

Differentiation option: Assign students to small groups of five people to collaboratively develop a poster. Each group should use one summative task from each group member. Display the posters throughout the classroom or school building.