



OVERVIEW

BIG IDEA

We can improve our health by doing things to reduce our chances of getting sick, by recognizing more quickly when we are sick, and by getting treatment when we are sick.

OBJECTIVE

5.6: Distinguish between primary, secondary, and tertiary prevention.

AGENDA

1. Ounce of Prevention
2. Which type of prevention?
3. Prevention Methods
4. Skin Cancer Prevention
5. Lyme Disease Prevention
6. Research & Presentations

HOMEWORK

Find an example of prevention in your community & analyze it.

LESSON 5.6

Prevention

SUMMARY:

Students will explore prevention on all levels in a variety of contexts--from lung cancer, skin cancer, and lyme disease to a disease of their own interest. In this lesson, students will reflect upon a quote, defend which treatments work best, read about different types of treatment, and ultimately present a new disease and explain its prevention methods.

STANDARDS:

NHES 1.12.5: Propose ways to reduce or prevent injuries and health problems.



Prevention

Obj. 5.6: Distinguish between primary, secondary, and tertiary prevention.



An Ounce of Prevention

Benjamin Franklin once said, "An ounce of prevention is worth a pound of care."

1. Do you think the average American follows Mr. Franklin's advice? Why or why not?
2. Do you think most health care providers follow Mr. Franklin's advice? Why or why not?



Which Type of Prevention?

With a partner, determine which of the following would be the BEST way to fight a community's problem with lung cancer? Circle your choice, then justify your answer.

1. Run a campaign in schools to encourage youth not to smoke
2. Hold classes to educate smokers how to stop smoking
3. Increase funding to lung cancer treatment centers

Why did you choose this answer?



Prevention Methods

After we identify risk factors, we can devise solutions to target them. These solutions are considered prevention methods. Read about the three types of prevention in the table below:

Primary Prevention	Secondary Prevention	Tertiary Prevention
<p>Goal: stop disease from occurring before it happens</p> <p>Focus: education, knowledge, changing norms, providing preventive care, establishing access to resources to maintain healthy lifestyle</p> <p>Examples: vaccination, health ed, access to fruit/vegetable, annual physicals</p>	<p>Goal: treat disease early (after disease has occurred but before the person may know anything is wrong)</p> <p>Focus: routine screenings for disease, early detection tests, self-exams, access to regular care</p> <p>Examples: breast self-exams, colonoscopies, STI testing among young adults, access to Plan B emergency contraceptive</p>	<p>Goal: seeks to lessen the impact of disease on patient function, longevity, and quality of life</p> <p>Focus: medical services, medication, treatment plans, holistic care and support through illness</p> <p>Examples: emergency response time, chemotherapy, pain relieving drugs, support groups for drug addicts</p>

DO NOW: Ask students to name examples of how they see healthcare professionals in their community engaging in prevention vs. care/treatment

DISCUSS: Encourage debate as students respond to this question!

NEW INFO: Ask students WHY these types of prevention are named the way they are—primary, secondary, and tertiary? Ask students which type of prevention they use or receive most in their own lives?



Skin Cancer Prevention

Read about Emily and apply what you have learned about types of risk factors and prevention methods.

Emily is a naturally fair-skinned Caucasian teenager (age 16) who loves to spend time at the beach. She often goes with her friends in the summertime 3-4 times per week. Emily burns quite a bit at the beginning of the summer, but develops what she considers a “pretty nice tan” by the end of the summer. Her friends never use sunscreen, so she has never considered using it herself, even though her mother reminds her to take it every time she leaves the house. Next year, Emily is hoping to save up some money to visit a local tanning place in the Spring so that she can have a good “base tan” for the summer months and won’t have to burn as much at the beginning of the summer.

1) List Emily’s risk factors for skin cancer in the table below:

Risk Factor Type	Example Risk Factors from Emily’s Story
Modifiable	
Unmodifiable	
Predisposing	
Reinforcing	
Enabling	

2) List examples of the types of prevention Emily could use to prevent skin cancer in the table below:

Prevention Type	Prevention Strategies Emily Could Choose
Primary	
Secondary	
Tertiary	



Barriers to Prevention

1. Which type of risk factor seems most influential on Emily’s risk for skin cancer?
2. Which type of prevention will be most useful for Emily? Why?
3. What factors may prevent Emily from using the prevention strategies you suggested?

THINK: Answers:

Modifiable—spends a lot of time in sun, not using sunscreen, parental support to use sunscreen, tanning

Unmodifiable—fair-skinned, Caucasian, teenager

Predisposing—(lack of knowledge of harmful effects of sun exposure/burns and skin cancer can be inferred, but not explicitly mentioned)

Reinforcing—friends do not use sunscreen, mother encourages sunscreen use

Enabling—access to tanning beds as a teen

Primary Prevention—use sunscreen/shade/hat, avoid high peak sun times, avoid tanning beds, learn about skin cancer & risks

Secondary Prevention—check for the signs of skin cancer (ABCDs), regularly visit dermatologist for skin cancer checks

Tertiary Prevention—obtain treatment for skin cancer if detected

DISCUSS:

Ask students why Emily may not be worried about her sun exposure & burns. Pose a hypothetical, maybe she IS worried, but she still chooses the same behavior. What could account for this?



Lyme Disease Prevention

Lyme disease is a chronic disease caused by bites from deer ticks. Luckily, there are many ways one can prevent lyme disease, get it treated quickly, or reduce its impact. Document the variety of prevention measures in the table below. To find information, go to the CDC Lyme Disease website, at: www.cdc.gov/lyme

Prevention Type	Prevention Strategies for Lyme Disease
Primary	
Secondary	
Tertiary	

READ: Possible Answers:

Primary—avoid deep woods areas where ticks may be common, wear tall socks, inspect socks, feet, legs & body for ticks after hikes

Secondary--remove ticks with tweezers carefully if bitten, seek medical attention quickly, depending on factors, follow doctor's plan, often including taking antibiotics

Tertiary—Continue medications and treatment plan if diagnosed w/ Lyme disease



Team up for Disease Prevention

Now that you have studied primary, secondary, and tertiary prevention for skin cancer and lyme disease, let's look at one more example. This time, with a small group, YOU will choose the disease. Once you choose your disease, fill in the table below. For your research, you may use any credible website. The CDC website is a great place to start.

Disease: _____	
Description	
Risk Factors	
Signs & Symptoms	
Primary Prevention	
Secondary Prevention	
Tertiary Prevention	

THINK: Encourage students to select diseases with more preventable causes. For example, brain cancer might not be a good option for this exercise because it is primarily genetic and studies demonstrating other risk factors (i.e, cell phone use) have not documented any consistent findings showing other risk factors.



Presentations

Present your disease information to the class, focusing on your descriptions of the three types of prevention and why each example is classified as primary, secondary, or tertiary prevention. Take notes on other groups' presentations below:

Disease	One example of Primary Prevention	One example of Secondary Prevention	One example of Tertiary Prevention



- Miguel is worried about getting Athlete's Foot. He always wears sandals in the shower because he's scared. This is an example of:
 - Primary Prevention
 - Secondary Prevention
 - Tertiary Prevention
- Jane has a two-year old daughter in daycare. Her daughter woke up sick and began vomiting and having diarrhea immediately. Jane decided to keep her home from daycare and give her oral rehydration fluids to prevent dehydration. He always wears sandals in the shower because he's scared. This is an example of:
 - Primary Prevention
 - Secondary Prevention
 - Tertiary Prevention



Prevention Analysis

Find an example of prevention in your community. Then answer the questions below on a separate sheet of paper:

- Describe the example of prevention.
- What type of prevention is it--primary, secondary, or tertiary--and why?
- What characteristics seem to make it effective or ineffective?
- How might you improve it to make it even more effective?

DISCUSS: Recommend that students in the audience write down the one example that they think is most essential or effective for each type of prevention.

ASSESS:

- Answers:
- Primary;
 2. Tertiary

HOMEWORK: The purpose of this homework assignment is for students to investigate prevention efforts that exist in their own community and practice identifying them by type. If desired, the instructor could also allow students to focus on prevention efforts on the statewide, national, or international health setting.