



Recognizing Factors That Affect Health and Wellness

Learning Outcomes

Look for the skills icon  to practice health skills.

After studying this lesson, you will be able to

- 1.2-1 Identify** factors that can increase or reduce your level of health and wellness.
- 1.2-2 Describe** actions you can take to help prevent diseases linked to genes.
- 1.2-3 Examine** risk and protective factors within a person's environment.
- 1.2-4 Evaluate** how the lifestyle choices you make now can affect your health and wellness in the future.

Essential Question



What factors increase or reduce your level of health and wellness?



Reading and Notetaking Activity

While you are reading this lesson, take notes about the important facts you discover. Study your notes to make sure you understand each fact. Write down any questions you have and ask a classmate or your teacher for clarification.

Important facts I discovered are...

- Factors can increase or reduce my level of health and wellness. Some of these factors are within my control.

Questions I have are...

- What factors can affect my health and wellness that are not within my control?

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Key Terms

culture beliefs, values, customs, and arts of a group of people

environment all the conditions that surround a person in daily life

genes segments of DNA that direct the forms and jobs of a person's cells, and affect growth, development, personality, and health

risk factors aspects of people's lives that increase the chance of a disease, injury, or poor health

peers people who are similar in age to one another

protective factors aspects of people's lives that reduce risk and increase the chance of good health

National Health Education Standards

1.8.1, 1.8.2, 1.8.3, 1.8.4, 1.8.5, 1.8.6, 1.8.8, 2.8.1, 2.8.2, 2.8.3, 2.8.4, 2.8.5, 2.8.9, 5.8.1, 5.8.5, 7.8.1, 7.8.2, 7.8.3

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Introduction

How would you describe your current health status? Are you in excellent health, or are you in poor health? Do you fall somewhere in between?

A person with *optimal health* has the best health possible. This includes physical, mental and emotional, and social health. The health of most people lies on a spectrum. This means their level of health is between the extremes of poor and excellent.

For example, Samira's health is far from perfect. She needs to get more sleep and she eats too much fast food. She knows that a few diseases are common in her family. However, Samira also gets support from healthy relationships with her friends and family.

On the other hand, Colson, a classmate of Samira's, feels anxiety. He knows his family does not cope well with stress. However, Colson tries to keep a positive outlook on life. He also tries to eat well and exercise.

Essential Idea

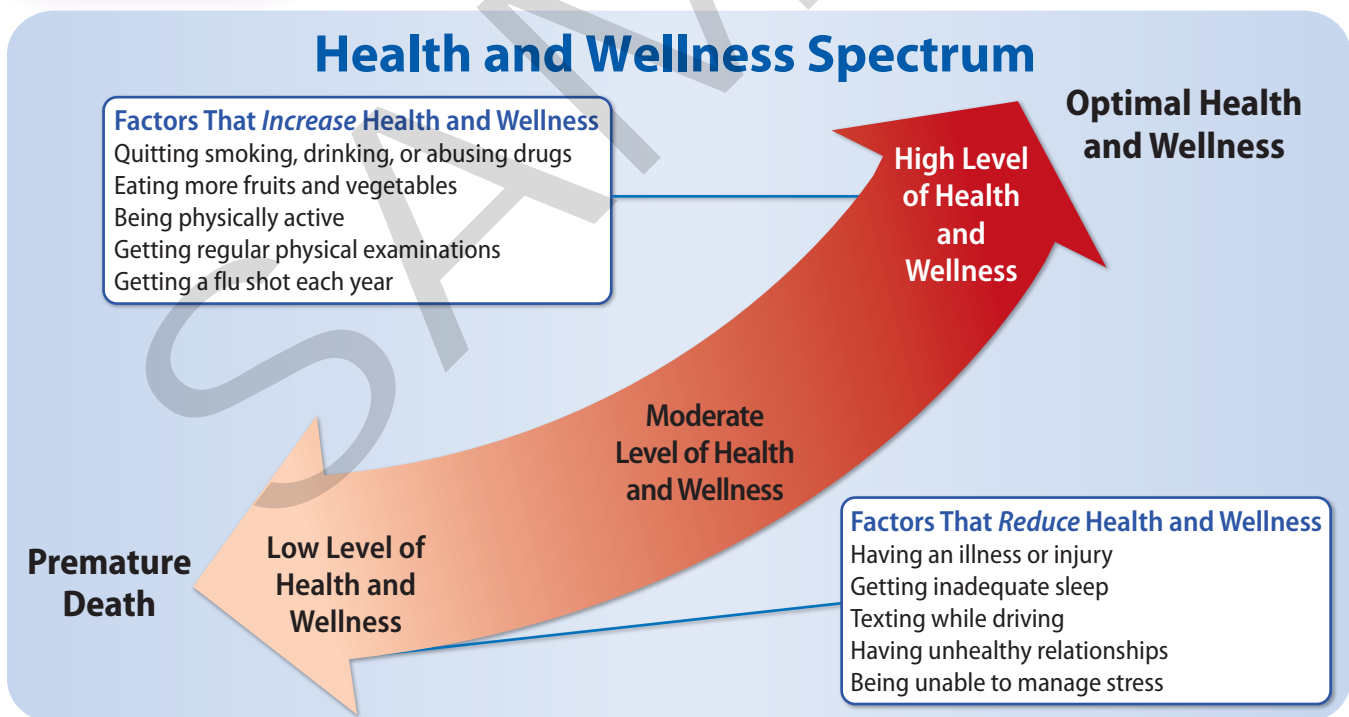


Risk factors increase the chance of disease, injury, or poor health. Protective factors reduce the impact of risk factors.

1.2-1 Factors That Affect Health

A person's health can change over time. There are aspects of your life that affect your level of health and wellness (Figure 1.2.1). These are called *risk factors* and *protective factors*.

Risk factors increase the chance of having a disease, injury, or poor health. **Protective factors** increase the chance of having good health and can reduce the impact of risk factors.



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Figure 1.2.1 Your level of health and wellness lies on a spectrum.

Does being unable to manage stress increase or reduce health and wellness?

Answer reduce

Some factors that affect health, such as genetic factors, are not within your control. Many factors, however, are within your control. For example, a person who smokes can improve their health by quitting smoking. The choices you make affect your health, both today and in the future. By taking responsibility for the factors you do control, you can improve all parts of your health.



1.2-1 Reading Checkpoint

1. Describe the difference between risk and protective factors. Provide an example of each.
2. How are protective factors important for the health of young people?

1.2-2 Genetic Factors

Genetic factors relate to your genes. Your **genes** are present in every cell in your body. They direct what jobs all of your cells perform and the forms all of your cells take. Genes direct how your body grows and develops. They also affect your personality, likes, and dislikes. Some genes affect your risk for getting certain diseases.

Humans have 20,000 to 25,000 genes. These genes are made from a chemical known as DNA. Genes are located on *chromosomes* inside the cell's nucleus (**Figure 1.2.2**). Humans inherit half of their chromosomes from each biological parent.

Essential Idea



Genetic factors impact your risk of certain diseases.

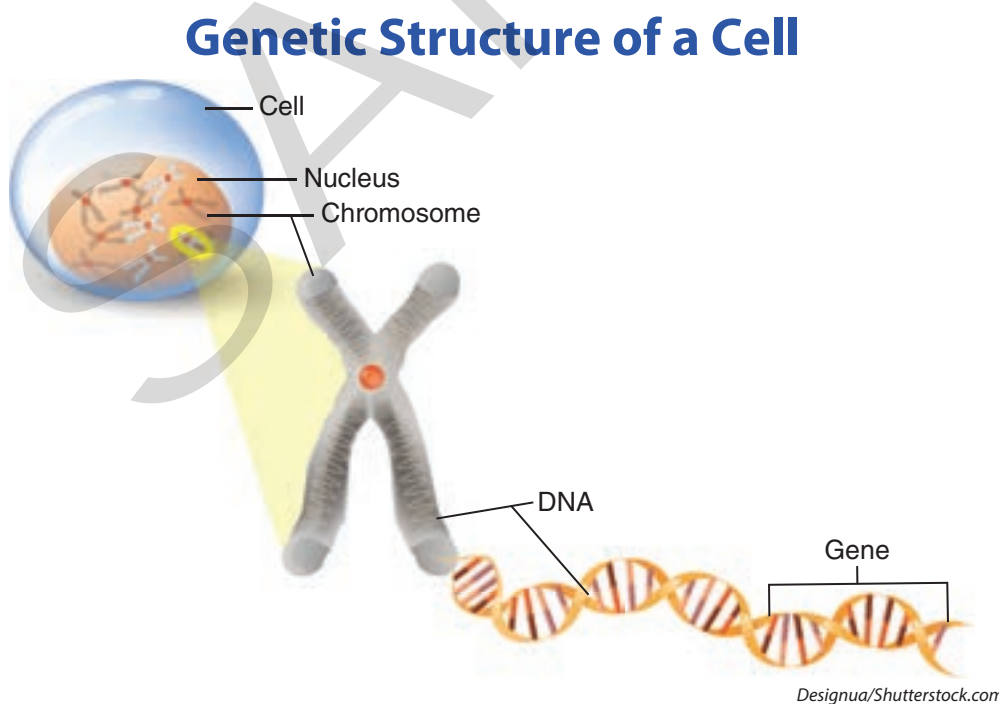


Figure 1.2.2 Each cell in your body contains chromosomes. Most people have 46 chromosomes total (23 pairs). The chromosomes hold about 20,000 to 25,000 genes. One set of chromosomes is inherited from each biological parent.

The unique set of genes from your parents determine many of your characteristics. You inherit some traits from each parent. For example, you might have curly hair and dimples like one of your parents. You might be left-handed like your other parent.

Your genes can increase your risk of developing certain diseases, such as heart disease. A person's *family history* is the record of disease within their family. A family history of a disease means you might have genetic risk for that disease.

You cannot change the genes you receive. The good news is your choices can reduce the impact of your genetic risk factors. For example, suppose your grandparent has heart disease. This means you have a family history of heart disease. You can reduce this genetic risk by eating well, exercising, and never smoking.

CASE STUDY

The Genetic Impact for Oliver, Kylie, and Alejandro

Oliver has a family history of alcoholism. While he knows he is at a higher risk of alcoholism compared to his peers, Oliver believes he is young and strong enough to resist alcohol later in life. Oliver has stolen several of his parents' beers and encourages his friends to drink with him.

Kylie has a similar body type to her mother. Kylie's pear-shaped figure has caused her to feel insecure among her friends, who all have lean, athletic builds. While Kylie eats healthy and exercises, it does not seem to impact her body shape. Lately, Kylie has not been eating as much at lunch and seems withdrawn.

Alejandro is in seventh grade and has not begun to go through puberty. His friends and classmates



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tower over him and have begun to grow body hair and have voice changes. While Alejandro's parents were late to go through puberty too, this does not change how he feels. Alejandro feels like an outcast. Lately, he has started to avoid social situations for fear of being noticed or picked on.



Practice Your Skills

Communicate with Others

Consider how you would talk to each person to encourage a healthy decision. With a partner, outline what you could say to show that you understand the person's perspective and needs, give support, and

encourage making healthy decisions. Explain how this person's genes are impacting their physical, mental and emotional, or social health. Write a script or perform a role play for the class.

Differentiation **Level 2.** To use for **level 1**, model an example of the conversation or provide sentence-starters to guide students. To use for **level 3**, allow students to work with a partner to create a new scenario involving the impact of genetics on health.



1.2-2 Reading Checkpoint

1. How does genetics impact health and well-being?
2. How can knowing family history guide a person's decisions today and in the future?

1.2-3 Environmental Factors

Your **environment** is your surroundings. It includes all the conditions that surround you. Your environment has risk factors and protective factors (Figure 1.2.3).

Physical Environment

Your *physical environment* includes the places where you spend your time. These places include your school, home, or neighborhood. Physical environment also refers to the region where you live. Important factors include the air you breathe and the water you drink.

Risk factors within the physical environment differ for each person. Hazards are examples of risk factors. Hazards are dangers in your surroundings.

Essential Idea



Factors in your physical, social, and economic environment play a role in your health.

Environmental Protective and Risk Factors

Protective Factors

Low levels of stress and conflict
Tobacco-, alcohol-, and drug-free environment
Positive adult role models
Stable, safe housing
Strong social supports
Healthy family and peer relationships
Supportive school environment
Steady employment
Access to community services

Risk Factors

High levels of stress and conflict
Tobacco, alcohol, or drug abuse
Homelessness
Racism and discrimination
Unhealthy family and peer relationships
Exposure to violence
Poverty
Unemployment
Lack of community services

Increase these factors

Decrease these factors

Figure 1.2.3 Risk and protective factors exist in your environment.

Is access to community services a risk or protective factor?

Answer protective

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These could harm your health and safety. Possible hazards within a physical environment include the following:

- weather conditions
- pollution
- violence
- unsafe drinking water

Social Environment

The people around you make up your *social environment*. The people in your social environment can all influence your health in positive or negative ways. These people may include the following:

- family members
- friends
- neighbors
- **peers** (people similar in age to you)
- teachers and coaches
- people you interact with on social media
- your culture and community

Your **culture** is your social group's beliefs, values, customs, arts, and practices. Your social group's cultural practices affect your health and wellness (**Figure 1.2.4**).

Risk factors within your social environment may include the following:

- behaviors and influences of the people around you
- negative peer pressure
- unhealthy relationships
- discrimination and harassment
- cultural practices of your social group

You can reduce the risk factors within your social environment in a few ways. Maintain healthy relationships. Choose to practice healthy behaviors. Practice refusal skills to resist negative peer pressure. Practice skills for staying safe in public places and online.

Figure 1.2.4 The way your family and the wider culture you are part of eats, celebrates, gets physical activity, and treats illnesses affect your overall health and wellness.



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The Power of Social Media to Inspire

How often do you spend time on social media? What kinds of messages do you receive online? Do the people in your social media network promote healthy behaviors or risky behaviors?

Social media can inspire healthy behaviors. It can also influence you to engage in risky behaviors. Just as peer pressure from your friends and classmates can impact the decisions you make regarding your health, so can the content you view on social media.

If you have a social media account, reflect on how these posts impact the way you think about risky behaviors. Carefully choose who you follow on social media based on how their messages could



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impact the way you view your own health. Surround yourself with a social network that cultivates a respectful, safe, and overall healthy lifestyle. In addition, inspire others to live this kind of lifestyle too, through the content you post on social media. If you currently do not use social media, consider how you will decide when or if to start using it.



Practice Your Skills

Advocate for Health

In this activity, you will create a digital or print visual of a positive social media post. Your goal is to inspire a healthy behavior. The materials you need depend on how you want to create your visual. You may choose to use a social media template. You could also make your visual using poster board or construction paper. To create your visual, complete the following steps:

1. Identify a healthy behavior that is meaningful to you, your classmates, or your friends. Topic examples may include green living, accepting others, drug-free living, or physical activity. The healthy behavior you choose should positively impact a person's physical, mental and emotional, or social health.
2. Create your social media post to raise awareness of this healthy behavior. Your visual may include infographics or pictures with captions. You could use famous quotes and add a hashtag or other link to a larger health community. Add other details to make your visual positive, informative, creative, and appealing.
3. With permission, display these healthy social media posts online or around the classroom to inspire your peers. This way you can get feedback from your social community.

Economic Environment

Your *economic environment* includes your family's and community's

- level of education
- income level
- access to resources and healthcare that promote health

Economic factors affect health. For example, education improves knowledge about the value of nutrition and physical activity. People who know more about nutrition and physical activity are more likely to make healthy eating and activity choices.

The connection between education and health also relates to income. People with more education tend to earn more income from full-time jobs. More income enables people to pay for healthcare. They are also better able to pay for other resources that promote health.

Differentiation

Level 2. To use for **level 1**, provide examples of work to help students get started. To use for **level 3**, have students share their posts with a partner and provide feedback on how to enhance. Students will then modify their posts before turning them in.



1.2–3 Reading Checkpoint

1. Explain how a person's physical environment can have a positive or negative impact on their health.
2. Explain how a person's social environment can have a positive or negative impact on their health.
3. Explain how a person's economic environment can have a positive or negative impact on their health.

1.2-4 Lifestyle Factors

Essential Idea



Your lifestyle choices can positively or negatively impact your health.

The way you choose to live your life can greatly affect your health. Lifestyle choices that affect your health include the following:

- food and drink choices
- the physical activity you get each day
- the sleep you get each night
- smoking, drinking alcohol, doing drugs
- riding in the car with someone who texts and drives

Some choices affect your health right away. If you did not get enough sleep last night, you may lack energy and have trouble focusing. Other choices have both short-term and long-term effects. Suppose a person does not use sunscreen when spending time in the sun. In the short-term, sun exposure leads to sunburn. In the long-term, sun exposure can lead to skin cancer.

You begin your lifestyle choices and behaviors as a child and preteen. These behaviors often continue into adulthood. These choices can affect your health for years to come.

Parents and culture often influence lifestyle choices and behaviors that begin in childhood and adolescence. If your parents exercise on a regular basis, you are more likely to exercise as well. If your culture does not believe in taking medication, you will likely feel the same way. Your parents and culture may be a strong influence on you when you are young.

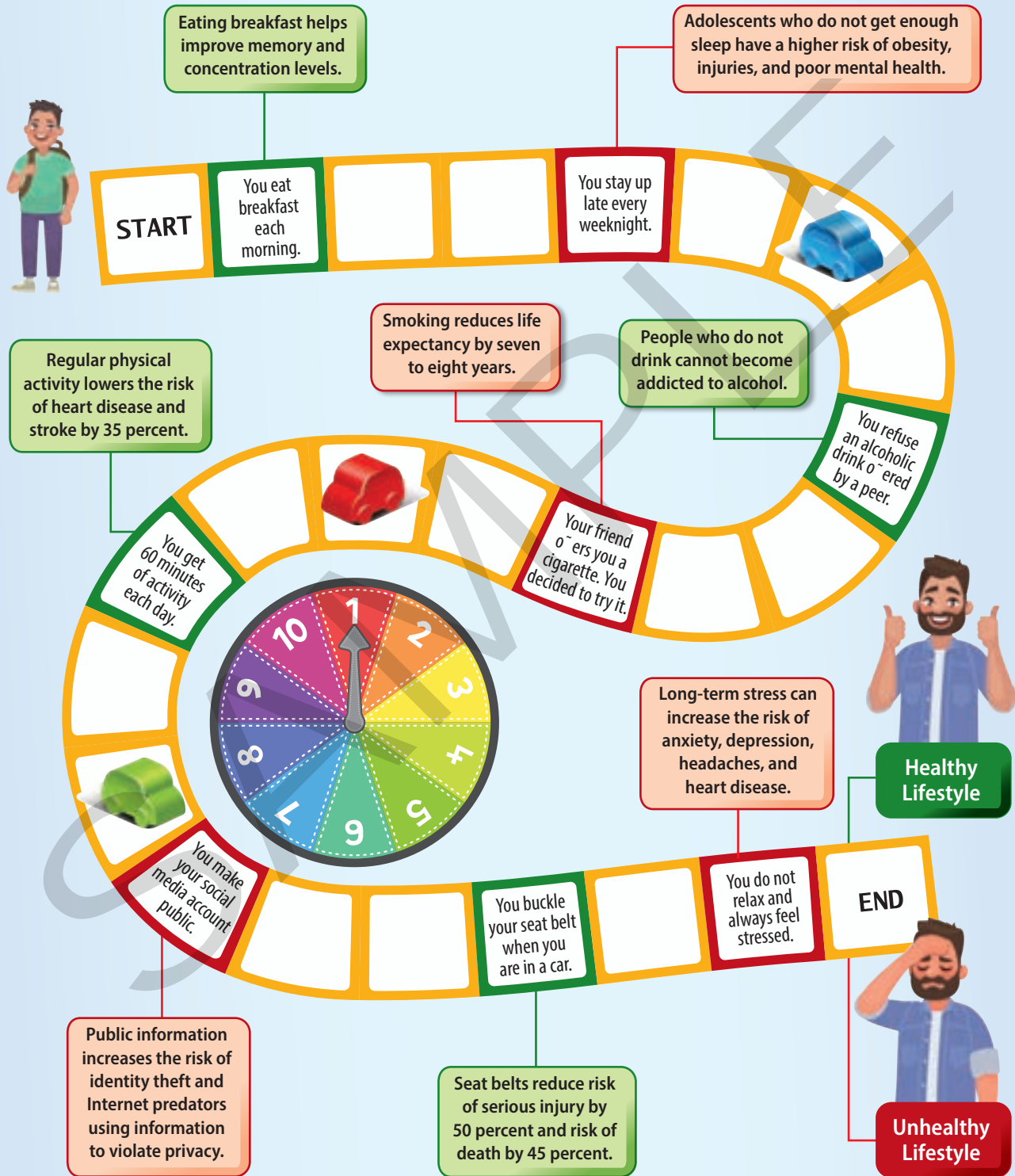
If your current lifestyle choices need improvement, remember you can still change your behavior. You can always take charge of your health and wellness.



1.2–4 Reading Checkpoint

1. Think about your lifestyle choices. What is a lifestyle choice you are making that is having a positive impact on your health?
2. What connections can you make between the information presented and the real world?

The Game of Life



Game spinner: wongstock/Shutterstock.com; Game path: EkaterinaP/Shutterstock.com; Game pieces: Reinekke/Shutterstock.com; Young person, sad and happy adults: tynyuk/Shutterstock.com

Reading Summary

- 1.2-1** Risk factors increase the chance of a disease, injury, or poor health. Protective factors reduce risk and increase the chance of good health.
- 1.2-2** Genetic factors are not within your control. Some genes affect your risk for getting certain diseases. Family history is the record of disease in a person's family.
- 1.2-3** Your environment includes all the conditions that surround you in daily life. Your physical environment consists of the places where you spend your time. It includes the air you breathe and the water you drink.
- 1.2-3** Your social environment includes the people in your life and your culture. Your economic environment includes your level of education and income level.
- 1.2-4** Healthy lifestyle choices and healthy behaviors promote your health today and in the future.

Critical Thinking

- Infer.** Provide reasons why preteens may be tempted by risky behaviors. Explain why this group in particular is vulnerable.
- Evaluate.** Give an example of a cultural practice that influences a family's health. Do you believe this cultural practice is having a positive or negative impact their health? Explain.



Develop Your Skills

- Practice Health-Enhancing Behaviors.** Your lifestyle behaviors can greatly affect your health. In class, create a one-week chart and record a new behavior that you can do each day to have a positive impact on your physical, mental and emotional, or social health. Include the following on your chart for each day: a new behavior, the area(s) of health that will be affected, and the impact you think will occur by doing this behavior. Implement your one-week plan and reflect on the impact of these behaviors.
- Communicate with Others.** Think about your interactions with family members, trusted adults, and friends. Do your words and actions have a positive or negative impact on their health? To experience the positive impact you can make, write a letter to a family member, trusted adult, or friend. Express thanks, highlight the qualities that you appreciate in them, and share your feelings regarding their positive impact on your life. Give your letter to the individual.
- Analyze Influences.** Analyze a social media post, short video, online article, or website that could potentially have a negative influence on a young person. Write a short paragraph about how this message could negatively affect a young person's behavior or health. Share your reflection with a partner or the class. Include the message for the class to view during your presentation.

Differentiation

- Level 2.** To use for **level 1**, provide a chart for students to fill out. As a class, brainstorm behaviors and potential impacts. To use for **level 3**, have students also identify what supported or hindered their achievement of the behavior each day.
- Level 2.** To use for **level 1**, read an example letter to the class. To use for **level 3**, reflect as a class on the impact the letter made on self and others.
- Level 1.** To use for **level 2**, have students also find an example of a message that has a positive influence. To use for **level 3**, have students compare and contrast the negative and positive messages and their impacts on health.