



# Proposed 2020 Health Education Standards of Learning Curriculum Framework

For First Review: January 27, 2022

## Introduction

Health Education increases health literacy, helps students understand how to achieve and maintain a healthy lifestyle, and fosters motivation, skills, and self-efficacy necessary to make informed and healthy choices, avoid high-risk behaviors, and build healthy families, relationships, schools, and communities. Effective health education programs help every child in Virginia become health literate, creative problem solvers, self-directed learners, effective communicators, and ultimately responsible and productive citizens who live healthy productive lives. The knowledge and skills described in the *2020 Health Education Standards of Learning Curriculum Framework* are the culmination of work led by dedicated writing committees composed of Virginia educators, subject matter experts, and other stakeholders who shared the overarching goal of building a supportive foundation for teaching and learning relevant content, rigorous instruction, and academic excellence.

The *2020 Health Education Standards of Learning Curriculum Framework* aligns with Priorities 1 and 3 of the Virginia Board of Education’s (Board) Comprehensive Plan: 2018-2023, and supports the Profile of a Virginia Graduate through the development and use of communication, collaboration, critical thinking, and civic responsibility skills necessary to adopt and maintain health-enhancing behaviors, manage feelings, build healthy relationships, successfully navigate social environments, make safe life choices, advocate for personal health and the health of others. It includes actionable indicators, and provides meaningful enriching classroom experiences for students to apply health education skills to real-life, challenging situations throughout their lives.

The *2020 Health Education Standards of Learning Curriculum Framework* is organized into strands to provide clarity for learning expectations and guide learning progressions.

1. *Demonstrate the knowledge and skills to make healthy decisions that reduce health risks and enhance the health of oneself and others. (Essential Health Concepts)*

The intent of this goal is for students to become health-literate, self-directed learners who recognize the relationship between personal behavior and personal health and can skillfully apply health-promotion and disease-prevention strategies as a foundation for leading healthy and productive lives. This includes the development of the capacity to acquire, interpret, and understand health concepts and the development and application of a range of health skills. Instruction will focus on the topics of hygiene, communicable and non-communicable disease prevention, dental health, nutrition, sleep, mental wellness and social and emotional skills, drug use, physical activity, body systems, safety, intentional and unintentional injury and violence prevention, Internet safety, gangs, bullying, and preventive health care. As a result, students will have a comprehensive understanding of essential health concepts related to health promotion and risk/disease prevention, self-awareness and social awareness, and an enhanced ability to engage in lifelong health behaviors.

2. *Demonstrate the ability to access, evaluate, and use health information, products, and services that influence health and wellness in a positive manner. (Healthy Decisions)*

The intent of this goal is for students to demonstrate the ability to identify valid and accurate health information, products, and services. This ability is critical for the prevention, early detection, and treatment of most health problems. Valid health information raises awareness of the long-term consequences of unhealthy decisions and enables students to make decisions that support lifelong health. Students will experience many opportunities across their school years to use information-analysis and responsible decision-making skills as they compare, contrast, analyze, synthesize, and evaluate materials, products, and services related to a variety of health issues. As they become informed consumers, students will become aware of and able to analyze the influence of culture, media, technology, and other factors on health. Upon the completion of the health education program, students will be able to make constructive choices about personal behavior and social interactions based on ethical standards, safety concerns, and social norms, and accept responsibility for personal health practices and engage in healthy decision making.

3. *Demonstrate the use of appropriate health practices and behaviors to promote a safe and healthy community when alone, with family, at school, and in other group settings. (Advocacy and Health Promotion)*

The intent of this goal is for students to become responsible, health-literate citizens who demonstrate an understanding of how to create and maintain an environment that serves to protect and promote the health and wellness of individuals, families, and communities. Students will develop awareness of social and media influences that affect their decision making and develop skills to effectively navigate and resist negative influences while building positive, healthy rewarding relationships with diverse individuals and groups. Students will develop healthy habits for managing emotions including stress, anger, and impulse control, and learn how to effectively advocate for themselves and their communities, which also supports equity. Specifically, upon completing their health education program, students will demonstrate a variety of healthy practices and behaviors and advocate for ways in which peers, families, and community groups can work together to promote safe and healthy communities.

The three strands identify a core set of concepts and skills that facilitate the formation and promotion of healthy behaviors and practices. Indicators that align with the three content strands and address four dimensions of health (i.e., physical, emotional, social, environmental), as well as health careers, are embedded at each grade level. The indicators are sequenced to progress in complexity from grade level to grade level, across several topic areas (i.e., Body Systems, Nutrition, Physical Health, Disease Prevention/Health Promotion, Substance Abuse Prevention, Safety/Injury Prevention, Mental Wellness/Social and Emotional Skills, Violence Prevention, Community/Environmental Health).

The *2020 Health Education Standards of Learning Curriculum Framework*, a companion document to the proposed *2020 Health Education Standards of Learning*, amplifies and supports the *Health Education Standards of Learning* and delineates in greater

specificity the minimum content that all teachers should teach and all students should learn. The standards and curriculum framework are not intended to encompass the entire curriculum for a given grade level or course. School divisions are encouraged to incorporate the standards and curriculum framework into a broader, locally designed or selected curriculum.

The format of the *2020 Health Education Standards of Learning Curriculum Framework* aligns with each topic in the *2020 Health Education Standards of Learning* and facilitates teacher planning by identifying the key concepts, knowledge, and skills for each standard. It is divided into two columns: *Understanding the Standard* and *Essential Knowledge and Skills*. The purpose of each column is explained below.

#### *Essential Understandings*

This section includes content and key concepts that assist teachers in planning instruction. The statements may provide definitions, explanations, examples, and information regarding connections within and between grade level(s)/course(s).

#### *Essential Knowledge and Skills*

This section provides an expansion of the knowledge and skills that each student should know and be able to demonstrate. This is not meant to be an exhaustive list of student expectations.

The standards for each grade level are grouped into three content strands—Essential Health Concepts, Healthy Decisions, and Advocacy and Health Promotion—that align with the overarching learning goals of the *2020 Health Education Standards of Learning*.

**Topic: Body Systems**

**Standards:**

- 9.1.a Identify and describe the major structures and functions of the endocrine system.
- 9.2.a Identify health risks and other factors that affect the function of the endocrine system.
- 9.3.a Promote behaviors that protect endocrine system health.

Essential Understandings	Essential Knowledge and Skills
<p>The endocrine system regulates many processes in the body, including mood, growth and development, tissue function, metabolism, sexual function, and reproduction.</p> <ul style="list-style-type: none"> <li>• The endocrine system is composed of glands that secrete hormones to regulate many processes in the body.</li> <li>• Major glands and their functions (1.a):                             <ul style="list-style-type: none"> <li>○ Hypothalamus: Located in the lower central part of the brain; link between endocrine and nervous systems; produces chemicals to stimulate or suppress hormone secretion from the pituitary gland.</li> <li>○ Pituitary gland: Located at the base of the brain. The anterior lobe regulates the thyroid, adrenal, and reproductive glands. The posterior lobe helps control water balance in the body and produces oxytocin, which is important in childbirth, and it secretes endorphins to reduce the perception of pain.</li> <li>○ Pineal body: Located in the middle of the brain, it secretes melatonin that helps regulate when to sleep and wake.</li> <li>○ Thyroid gland: Located in the front part of the lower neck. It secretes hormones that control the rate at which cells burn fuel from food to produce energy, and these hormones aid in bone growth and development and brain and nervous system development.</li> </ul> </li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>• describe the major structures and functions of the endocrine system (1.a);</li> <li>• research health risks that affect the endocrine system (2.a);</li> <li>• promote healthy behaviors to support endocrine system health (3.a).</li> </ul> <p>Additional resources:  <a href="http://www.healthsmartva.org">www.healthsmartva.org</a>  <a href="https://everfi.com/">https://everfi.com/</a></p>

<ul style="list-style-type: none"><li>o Parathyroid glands: Attached to the thyroid. These glands secrete a hormone to regulate level of calcium in the blood.</li><li>o Adrenal glands: Sit on top of each kidney. The outer part, called the adrenal cortex, produces hormones to regulate salt and water balance, the body's response to stress, metabolism, immune system, and sexual development and function. The inner part, called the adrenal medulla, produces catecholamines such as epinephrine.</li><li>o Reproductive glands (ovaries and testes): Secrete androgens including testosterone in males and estrogen and progesterone in females; hormones control growth and changes that occur during puberty; estrogen and progesterone are involved in the regulation of the menstrual cycle and play a role in pregnancy.</li><li>o Pancreas: Located deep in the abdomen. It is also associated with the digestive system. The pancreas secretes insulin and glucagon that work together to maintain steady level of glucose in the blood and keep body supplied with fuel.</li><li>• Too little or too much of a hormone can be harmful to the body. Many problems affecting the endocrine system are treatable. Doctors can often treat imbalanced hormones with medications to replace hormones or by controlling the production of hormones. (2.a)</li><li>• Endocrine problems that may affect teens (2.a):<ul style="list-style-type: none"><li>o Adrenal insufficiency</li><li>o Diabetes (type 1 or type 2)</li><li>o Growth hormone problems</li><li>o Hyperthyroidism</li><li>o Hypothyroidism</li><li>o Precocious puberty (early puberty, when signs of puberty start before age 7 or 8 in girls and age 9 for boys)</li></ul></li><li>• To keep endocrine system healthy (3.a):</li></ul>	
---	--

<ul style="list-style-type: none"><li>o Get plenty of exercise.</li><li>o Eat a nutritious diet.</li><li>o Go for regular medical checkups.</li><li>o Talk to the doctor before taking any supplements or herbal treatments.</li><li>o Let the doctor know about any family history of endocrine problems, such as diabetes or thyroid problems.</li></ul>	
--	--

**Topic: Nutrition**

**Standards:**

- 9.1.b Explain the differences between fat-soluble and water-soluble vitamins, food and non-food sources of vitamins, the role of vitamin and mineral supplements, and associated dietary reference intakes (DRIs) to maintain health.
- 9.1.c Explain organic, fresh, farm-raised, “lite,” low-fat, and fat-free foods.
  
- 9.2.b Analyze personal daily intake to determine if one is meeting daily values for vitamins and minerals.
- 9.2.c Explore community resources for purchasing locally grown/sourced foods, including the concept of farm-to-table/restaurant.
  
- 9.3.b Create one or more SMART goals for personal consumption of vitamins and minerals and develop a plan to meet them.
- 9.3.c Explore careers associated with healthy food choices (e.g., dietetics, nutrition, farming, environmental science, food production, food safety, restaurant ownership).

Essential Understandings	Essential Knowledge and Skills
<p>Most individuals can get all of the necessary vitamins and minerals through a healthy eating pattern of nutrient-dense foods.</p> <ul style="list-style-type: none"> <li>• Vitamins and minerals (known as micronutrients) are essential substances that the body needs to develop and function normally. Vitamins include A, C, D, E, and K, and the B vitamins thiamin (B1), riboflavin (B2), niacin (B3), pantothenic acid (B5), pyridoxal (B6), cobalamin (B12), biotin, and folate/folic acid. (<a href="#">Vitamins and Minerals</a>) (1.b)</li> <li>• Fat-soluble vitamins (A, D, E, and K) can dissolve in oil and fat and can be stored in the body. (1.b)</li> <li>• Water-soluble vitamins (C and some B) can dissolve in water and are not stored in the body. Excess water-soluble vitamins are excreted and need to be replenished through food. (1.b)</li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>• explain the function of vitamins and minerals for body function (1.b);</li> <li>• explore food and non-food items that provide vitamins and minerals (1.b);</li> <li>• access current ability to meet vitamin and mineral requirements to maintain health (2.b);</li> <li>• develop one or more SMART goals and action steps/plan to maintain or improve consumption of vitamins and minerals (3.b);</li> </ul>

<ul style="list-style-type: none"><li>• A number of minerals are essential for health: calcium, phosphorus, potassium, sodium, chloride, magnesium, iron, zinc, iodine, sulfur, cobalt, copper, fluoride, manganese, and selenium. Minerals are important for keeping bones, muscles, heart, and brain working properly. The Dietary Guidelines for Americans 2020-2025 recommends that people should aim to meet their nutrient requirements through a healthy eating pattern that includes nutrient-dense forms of foods. (<a href="#">Vitamins and Minerals</a>) (1.b)</li><li>• Multivitamins/multi-minerals are the most frequently used dietary supplements, with close to half of American adults taking them. Multivitamins/multi-minerals cannot take the place of eating a variety of foods that are important to a healthy diet. Foods provide more than vitamins and minerals. Many foods also have fiber and other substances that can provide health benefits. However, some people who do not get enough vitamins and minerals from food alone, or who have certain medical conditions, might benefit from taking one or more of these nutrients found in single-nutrient supplements or in multivitamins/multi-minerals. However, evidence to support their use for overall health or disease prevention in the general population remains limited. (<a href="#">Vitamins and Minerals</a>) (1.b)</li><li>• Taking multivitamins/multi-minerals increases overall nutrient intake and helps some people get the recommended amounts of vitamins and minerals when they cannot or do not get them from food alone. Taking multivitamins/multi-minerals can also raise the chances of getting too much of some nutrients, like iron, vitamin A, zinc, niacin, and folate/folic acid, especially when a person takes more than a basic, once-daily product that provides 100% of the daily value (DV) of nutrients. (<a href="#">Vitamins and Minerals</a>) (1.b)</li><li>• Each vitamin has a specific job. A person with low levels of certain vitamins may develop health problems. For example, if a person does not get enough vitamin C, they could become anemic. Some vitamins may help</li></ul>	<ul style="list-style-type: none"><li>• explain the variety of food labeling, including organic, natural, fresh, farm-raised, “lite,” low-fat, and fat-free foods (1.c);</li><li>• research community resources for locally grown foods and farm-to-table restaurants (2.c);</li><li>• for a selected career related to healthy food choices, identify the type or work, academics/course work that support that profession, work settings (office, outdoors, laboratories), and earning potential (3.c).</li></ul> <p>Additional resources: <a href="http://www.healthsmartva.org">www.healthsmartva.org</a> <a href="https://everfi.com/">https://everfi.com/</a></p>
--	---

prevent medical problems. Vitamin A prevents night blindness. Additional information on vitamins is available at [NIH Office of Dietary Supplements](#).

(1.b)

- The best way to get enough vitamins is to eat a balanced diet with a variety of foods. In some cases, people may need to take vitamin supplements. It's a good idea to ask a health care provider first. High doses of some vitamins can cause problems. (1.b)
- Dietary reference intakes (DRIs): Represent the most current scientific knowledge on the nutrient needs of healthy populations. Individual requirements may be higher or lower than the DRIs. DRI charts can be found on NIH site [Office of Dietary Supplements](#). (2.b)
- SMART goals are specific, measurable, attainable, relevant and timely. (3.b)

Food labeling should be carefully read prior to making healthy food choice decisions.

- Organic: Organic products are managed according to defined processes for planting, growing, raising, and handling. For example, the USDA organic label on dairy or meat products means that the animals from which it originated were raised in living conditions that accommodated their natural behaviors, without being administered hormones or antibiotics, and while grazing on pasture grown on healthy soil. Then during processing, the meat or dairy product was handled in a facility that was inspected by an organic certifier and processed without any artificial colors, preservatives, or flavors before being packaged to avoid contact with any prohibited, nonorganic substances. ([USDA Organic 101](#)) (1.c)
- Fresh: Suggests or implies that the food is unprocessed, means that the food is in its raw state and has not been frozen or subjected to any form of thermal processing or any other form of preservation. (1.c)

<ul style="list-style-type: none"><li>• Natural: According to the USDA definition, food labeled “natural” does not contain artificial ingredients or preservatives and the ingredients are only minimally processed. However, they may contain antibiotics, growth hormones, and other similar chemicals. Regulations are fairly lenient for foods labeled “natural.” (1.c)</li><li>• Farm-raised: Fish are commercially raised in controlled pens that exist within lakes, oceans, or rivers, and in large tanks. (1.c)</li><li>• Lite or light: Can mean lower in calories, fat, or sodium. If less than 50% of the calories in the food are from fat, it can mean that a food has been changed so it contains one-third fewer calories or no more than half the fat of the regular version of this food. (1.c)</li><li>• Low-fat: For every 100 calories, if the product has 3 grams of fat or less, it’s a low-fat product. This means 30% or less of the calories come from fat. (Low-Fat Foods) (1.c)</li><li>• Fat-free foods: “Free” means that a product does not have any of that nutrient, or so little that it’s unlikely to make any difference to your body.<ul style="list-style-type: none"><li>◦ For example, “calorie-free” means less than 5 calories per serving.</li><li>◦ “Sugar-free” and “fat-free” both mean less than 0.5 g (grams) per serving. (1.c)</li></ul></li><li>• Community resources for purchasing locally grown/sourced foods include farmers markets and farm-to-table restaurants. (2.c)</li><li>• Careers associated with healthy food choices include dietetics, nutritionists, food production, food safety, culinary arts, and restaurant ownership. Agriculture careers include farmers, farm workers, equipment operators, food packers and packagers, business (bookkeeping, accounting, auditing), food scientists, and environmental scientists. (3.c)</li></ul>	
---	--

**Topic: Physical Health****Standards:**

- 9.1.d Describe the prevalence, causes, and long-term consequences of unhealthy eating, sleep deprivation, extended screen time, and a sedentary lifestyle.
- 9.2.d Explain the physical, mental, and academic benefits of proper nutrition, sleep and rest, physical activity, maintaining a healthy body weight, and other personal wellness behaviors.
- 9.3.d Design a wellness plan for physical activity, sleep, rest, and nutrition to meet current health goals.

Essential Understandings	Essential Knowledge and Skills
<p>Unhealthy eating, sleep deprivation, and a sedentary lifestyle can contribute to the development of chronic disease, feeling tired or lethargic, obesity and obesity-related disease, cancers, depression, and osteoporosis.</p> <ul style="list-style-type: none"> <li>Unhealthy eating: Fewer than 1 in 10 adults and adolescents eat enough fruits and vegetables, and 9 in 10 Americans aged 2 years or older consume more than the recommended amount of sodium. Six in 10 young people and 5 in 10 adults consume at least one sugary drink on a given day. In the United States, 19% of young people aged 2 to 19 and 40% of adults have obesity, which can put them at risk for heart disease, type 2 diabetes, and some cancers. Consuming too much sodium can increase blood pressure and the risk for heart disease and stroke. Overweight and obesity are associated with at least 13 types of cancer. (<a href="#">CDC Poor Nutrition</a>) (1.d)</li> <li>Sleep deprivation is not getting enough sleep (less than 8-10 hours per night). An NHLBI (<a href="#">National Heart Lung and Blood Institute</a>) funded study found that more than 70 percent of high school students in the United States get less than eight hours of sleep per night, falling short of the eight to 10 hours they required for optimal health. When someone is in a chronic sleep-restricted state, they will notice excessive daytime sleepiness, fatigue, clumsiness, and weight gain or weight loss. In addition, being sleep-deprived affects the brain and cognitive function. Effects may include</li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>explain concerns for unhealthy eating, sleep deprivation, extended screen time, and sedentary lifestyle (1.d);</li> <li>promote the benefits of proper nutrition, sleep and rest, physical activity, maintaining a healthy body weight, and other personal wellness behaviors (2.d);</li> <li>assess current wellness related to proper nutrition, sleep and rest, physical activity, maintaining a healthy body weight, and other personal wellness behaviors, and develop a wellness plan with SMART goals, action steps, monitoring, and reflection to maintain or improve (3.d).</li> </ul>

<p>accidents from a lack of attention, moodiness, and hunger. (<a href="#">American Sleep Association Sleep Deprivation</a>). (1.d)</p> <ul style="list-style-type: none"><li>• Extended screen time can negatively affect sleep, mental, emotional, and social health, physical health (posture, lack of physical activity, affect vision, lead to weight gain, increased risk of diabetes and heart disease); much is unknown about long-term effects of screen time on health. (1.d)</li><li>• Sedentary lifestyle: Children and adolescents spend an average of six to eight hours per day, respectively, in sedentary behaviors, during and outside school. Older children and teens are more likely to spend more time in sedentary behaviors and to exceed recommended limits on sedentary time than younger children. (<a href="#">Sedentary Behaviors and Youth</a>) According to data, there seems to be a sharper-than-expected decline of physical activity during childhood—starting in elementary school and continuing through middle school and high school. By age 19, the average American is as sedentary as a 60-year-old. (<a href="#">Re-evaluating the effect of age on physical activity over the lifespan</a>) (1.d)</li><li>• Proper nutrition: Proper nutrition provides vitamins and minerals to support the immune system, support normal growth and development, and help cells and organs to function. It helps with reaching and maintaining a healthy weight (as does physical activity), reduces the risk of chronic diseases (like heart disease and cancer), and promotes overall health. Risk factors for adult chronic diseases, like high blood pressure and type 2 diabetes, are increasingly seen in younger ages, often a result of unhealthy eating habits and increased weight gain. Dietary habits established in childhood often carry into adulthood. (2.d)</li><li>• Physical activity improves brain health (improves thinking, cognition, learning), weight management, reduces disease (heart disease, type 2 diabetes, and some cancers), strengthens bones and muscles, and improves the ability to do everyday activities. Better sleep and physical activity can</li></ul>	<p>Additional resources: <a href="http://www.healthsmartva.org">www.healthsmartva.org</a> <a href="https://everfi.com/">https://everfi.com/</a></p>
---	---

<p>reduce the risk of depression and anxiety and reduce stress. Improvements are seen in components of executive function, including the ability to plan and organize; monitor, inhibit, or facilitate behaviors; initiate tasks; and control emotions. Physical activity increases self-esteem and self-confidence. (<a href="#">CDC Physical Activity Why It Matters</a>) (2.d)</p> <ul style="list-style-type: none"><li>• Sleep is required for survival, is important for normal motor and cognitive function, gives the body rest, helps thinking, feeling good (mood), helps with energy, and helps children do better in school. (2.d)</li><li>• Healthy body weight: Body weight is the weight of all body tissues combined. Body composition is the proportion of fat and lean tissue mass in the body and is measured using BMI or body fat percentage. Body composition in the healthy range is correlated to a lower risk of diabetes, high blood pressure, and some cancers. When body composition is too low, it can affect the delivery of vitamins to the organs, reproductive function, and general well-being. (2.d)</li><li>• Planning for physical activity and wellness can help improve and maintain health. (3.d)<ul style="list-style-type: none"><li>◦ Guidelines for sleep are 9-10 hours per night for teens.</li><li>◦ Limit foods high in solid fats, added sugars, and salt. Most food intake should be from vegetables, fruits, whole grains, low-fat dairy products, and lean proteins.</li><li>◦ Children and teens need 60 minutes of physical activity per day. Physical activity for children and teens should include aerobic, muscle strengthening, and bone strengthening activities.</li></ul></li></ul>	
---	--

**Topic: Disease Prevention/Health Promotion**

**Standards:**

- 9.1.e Identify common types of chronic disease including diabetes, heart disease, cancer, obesity, and stroke.
- 9.1.f Define herd immunity and explain how immunizations can prevent the spread of diseases.
- 9.1.g Describe the importance of health habits that promote vision, hearing, and dental health.
  
- 9.2.e Identify behaviors that contribute to heart disease, stroke, diabetes, cancer, obesity, and other chronic diseases and conditions.
- 9.2.f Understand the difference between an epidemic and a pandemic and how they affect populations.
- 9.2.g Determine strategies to protect vision, hearing, and dental health.
  
- 9.3.e Assess personal risk factors for diabetes, heart disease, cancer, obesity, and stroke, and develop personal prevention strategies.
- 9.3.f Analyze data on the spread of diseases and develop personal prevention strategies based on information analyzed.
- 9.3.g Promote vision, hearing, and dental health.

Essential Understandings	Essential Knowledge and Skills
<p>Noncommunicable diseases/chronic diseases are not contagious, and many develop from unhealthy lifestyle choices over time or may be inherited. Healthy choices begin early in life. Many risk factors for chronic disease cannot be controlled or changed. Individual behaviors may increase or decrease the risk of developing a chronic disease.</p> <ul style="list-style-type: none"> <li>• Diabetes: <b>Diabetes</b> is a disease that affects how the body uses glucose, a sugar that is the body’s main source of fuel. Glucose from food enters the bloodstream. The pancreas makes insulin. Insulin helps the glucose get into the body’s cells for the body to have energy. Individuals with type 1 diabetes, have a chronic condition in which the pancreas produces little to no insulin. Meanwhile, type 2 diabetes is a condition in which the cells do not use</li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>• describe chronic diseases, including diabetes, heart disease, cancer, obesity, and stroke, including risk factors and behaviors that contribute to these diseases, and prevention strategies (1.e, 2.e);</li> <li>• develop a personal plan to reduce or prevent chronic disease (this could be</li> </ul>

<p>insulin properly, and this called insulin resistance. When glucose does not get into the body’s cells, blood sugar levels get too high, making people sick without treatment. Someone with type 1 diabetes has to take insulin. Someone with type 2 diabetes has to be careful to eat a healthy diet, get regular physical activity, maintain a healthy weight, monitor their blood sugar on a regular basis, and have regular checkups with a health care provider. They may also have to take insulin. (1.e, 2.e)</p> <ul style="list-style-type: none"> <li>o Maintaining a healthy weight, eating well, and getting regular physical activity can help you manage type 2 diabetes.</li> <li>o Risk factors for type 2 diabetes include age, family history of diabetes, obesity, history of gestational diabetes, inactivity, and race/ethnicity. African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Pacific Islanders are at higher risk.</li> <li>o Risk factors for type 1 diabetes include autoimmune, genetic, and environmental factors.</li> </ul> <ul style="list-style-type: none"> <li>• <b>Heart Disease:</b> Includes hardening of the arteries, chest pain, and heart attacks. (1.e, 2.e) <ul style="list-style-type: none"> <li>o Causes: Heart disease isn’t contagious (communicable). Risk factors such as smoking, high blood pressure, and physical inactivity increase a person’s chances of getting cardiovascular disease.</li> <li>o Prevention: Risk factors that cannot be controlled are age and family history (genetics). Risk factors that can be controlled include smoking, having high blood pressure, being overweight, and not exercising.</li> </ul> </li> <li>• <b>Cancer:</b> There are more than 100 types of diseases known collectively as cancer. Cancer results from an overgrowth of cells, tiny units that make up all living things. Cancer (malignancy) occurs when cells begin to grow and multiply in an uncontrolled way. These cells gather to form tumors. Tumors are growths that can interfere with the body’s normal processes. Scientists and researchers are working to discover why some people get cancer and others do not. Currently, the main reasons</li> </ul>	<p>included with the personal wellness plan in physical health topic) (3.e);</p> <ul style="list-style-type: none"> <li>• explain epidemic and pandemic (2.f);</li> <li>• analyze data on the spread of diseases, including the effect of immunizations (as available) and herd/community immunity (1.f, 2.f);</li> <li>• apply knowledge of importance of health habits and protective strategies to promote vision, hearing, and dental health (1.g, 2.g, 3.g).</li> </ul> <p>Additional resources:  <a href="http://www.healthsmartva.org">www.healthsmartva.org</a>  <a href="https://everfi.com/">https://everfi.com/</a></p>
--	--

are genetics/inherited and certain environmental or behavioral triggers. Some behavioral and environmental triggers include cigarettes (increase the risk of lung cancer) and too much exposure to the sun (increase the risk of skin cancer). These types of triggers act on the body slowly over time, so the cancers that may result from them will not show up until a person is an adult. Cancer screening can result in earlier detection, which increases the likelihood of effective treatment and cure.

- o Common cancers include non-melanoma, bladder, breast, colon and rectal, endometrial, kidney, leukemia, lung, melanoma, non-Hodgkin lymphoma, pancreatic, prostate, and thyroid.
- o Common risk factors for different cancers include smoking, obesity, unhealthy diet, genetic factors, and age. Specific types of cancer may have additional or different risk factors. Healthy choices begin early in life. Common prevention strategies include a healthy diet, regular physical activity, taking medications to treat precancerous conditions, and avoiding known carcinogens. (1.e, 2.e)
- **Obesity:** Well above the normal or healthy weight for a person’s age and height. Causes of excess weight gain in young people are similar to those in adults, including factors such as a person’s behavior and genetics. Behaviors that influence excess weight gain include eating high-calorie, low-nutrient foods and beverages, not getting enough physical activity, sedentary activities such as watching television or other screen time on devices, medication use, and sleep routines. Consuming a healthy diet and being physically active can help children grow as well as maintain a healthy weight throughout childhood. Balancing energy or calories consumed from foods and beverages with the calories burned through activity plays a role in preventing excess weight gain. In addition, eating healthy and being physically active helps to prevent chronic diseases such as type 2 diabetes, cancer, and heart disease. (1.e, 2.e)
- **Stroke:** Occurs when something blocks the blood supply to part of the brain or when a blood vessel in the brain bursts (aneurysm). If something happens

to block the flow of blood, brain cells start to die within minutes because they can't get oxygen. A stroke can cause lasting brain damage, long-term disability, or even death. Anyone can have a stroke at any age. (1.e, 2.e)

- o Risks for stroke: unhealthy diet, physical inactivity, obesity, too much alcohol, tobacco use, genetics and family history, age, sex (gender—men are more likely than women to have a stroke), race or ethnicity, previous stroke, high blood pressure, high cholesterol, heart disease, diabetes, and sickle cell disease.

It is always better to prevent a disease than to treat it after it occurs. Diseases that used to be common in this country and around the world, including polio, measles, diphtheria, pertussis (whooping cough), rubella (German measles), mumps, tetanus, rotavirus, smallpox, and Haemophilus influenzae type b (Hib) can now be prevented by vaccination.

- **Herd immunity/community immunity:** A sufficient proportion of a population is immune to an infectious disease (through vaccination and/or prior illness) to make its spread from person to person unlikely. Even individuals not vaccinated (such as newborns and those with chronic illnesses) are offered some protection because the disease has little opportunity to spread within the community. (1.f)
- Germs can travel quickly through a community and make people sick. If enough people get sick, it can lead to an outbreak. However, when enough people are vaccinated against a certain disease, the germs cannot travel as easily from person to person and the entire community is less likely to get the disease. That means even people who are not vaccinated will have some protection from getting sick. If a person does get sick, there is less chance of an outbreak because it is harder for the disease to spread. Eventually, the disease becomes rare and sometimes it is wiped out altogether. (**Vaccines Protect Your Community**) (1.f)

- Epidemic refers to an increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area. Outbreak carries the same definition as epidemic, but it is used for a more limited geographic area. Pandemic refers to an epidemic that has spread over several countries or continents, usually affecting a large number of people. ([Introduction to Epidemiology](#)) (2.f)
- [Data for the spread of diseases can be found on CDC website](#). Teachers may also wish to have students analyze data related to chronic diseases. (3.f)

Vision and hearing are used to navigate the world by helping to process sights and sounds. Good dental health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions.

- Vision: Eyes take in visual information about the world around us and sends the information to the brain to process. ([Protect Your Eyes](#))
  - o Wear sunglasses. Protect your eyes from the sun by wearing sunglasses, even on cloudy days! Be sure to look for sunglasses that block 99% to 100% of UVA and UVB radiation. Damage to the eyes by lights includes light emitted by electronic devices.
  - o Wear protective eyewear. Safety glasses and goggles are designed to protect your eyes during certain activities, like playing sports, doing construction work, or doing home repairs.
  - o Give your eyes a rest. Looking at a computer for a long time can tire out your eyes. Rest your eyes by taking a break every 20 minutes to look at something about 20 feet away for 20 seconds. (1.g, 2.g)
- Hearing: Ears take in sounds and balance information and send the information to the brain to process. ([October Is National Protect Your Hearing Month](#) and [Your Ears](#))

<ul style="list-style-type: none"><li>o Move away from the noise. If you can't lower the volume, put some distance between you and the source.</li><li>o Lower the volume. Know which noises can damage your hearing, such as listening to music at a high volume. While sound at or below 70 A-weighted decibels (dBA) is generally considered safe, sounds at or above 85 dBA can damage your hearing over time. Turn down the volume on video games, TV, and phones (especially music apps).</li><li>o Wear hearing protectors, such as earplugs or earmuffs, when involved in a loud activity (at a concert, using lawn mowers or other loud equipment). Activity-specific earplugs and earmuffs are available at hardware and sporting goods stores.</li><li>o Do not stick things like cotton swabs and fingernails into your ears. Doing so can scratch the ear canal, push earwax deeper into the ear, and even rupture the eardrum. If earwax bothers you, talk to a parent, who can let your doctor know. (1.g, 2.g)</li><li>• Dental health: Oral health care minimizes bacteria in the mouth and gum disease, which can lead to heart problems. Oral infections include tooth decay and gum disease. Oral diseases include cavities and oral cancer. Poor oral health is affected by behaviors including tobacco use, excessive alcohol use, and poor nutrition. Poor oral health is also affected by conditions including diabetes.</li><li>o <b>Oral Health Tips:</b> Drink fluoridated water and brush with fluoride toothpaste. Practice good oral hygiene. Brush teeth thoroughly twice a day and floss daily between the teeth to remove dental plaque. Visit your dentist at least once a year, even if you have no natural teeth or have dentures. Do not use any tobacco products. If you smoke, quit. Eat a healthy diet and limit food and beverages with added sugar. Protect teeth and gums by using a mouth guard when playing contact and collision sports. (1.g, 2.g)</li></ul>	
---	--

**Topic: Substance Use/Misuse Prevention**

**Standards:**

- 9.1.h Explain how alcohol and other drugs increase the risk of injury.
- 9.1.i Analyze the consequences of binge drinking.
- 9.1.j Explain facts about opioids and why teens are more vulnerable to heroin and prescription opioids.
  
- 9.2.h Evaluate the effects of alcohol and other drugs on human body systems, brain function, and behavior, and describe health benefits associated with abstaining from alcohol, tobacco, or other drugs.
- 9.2.i Develop a set of personal standards to resist the use of alcohol, tobacco, and other harmful substances and behaviors.
- 9.2.j Analyze and draw inferences about behaviors connected to addiction and mental health.
  
- 9.3.h Promote ways to encourage reporting peer substance use to trusted adults (e.g., parents, teachers, coaches, doctors).
- 9.3.i Develop a personal plan to prevent substance use.
- 9.3.j Research consequences of drug abuse, including stealing to support a drug habit, arrest, prosecution, and jail.

Essential Understandings	Essential Knowledge and Skills
<p>Using drugs or alcohol may result in individuals taking greater risks that negatively affect the individual. <a href="#">Information on drug effects obtained from NIH National Institute on Drug Abuse.</a></p> <ul style="list-style-type: none"> <li>• Risk of injury: The use of alcohol and other drugs impairs brain function and may increase risk-taking behaviors leading to increased injury. Alcohol and drug use may result in injury due to impaired coordination, impaired neurocognitive performance, and impaired ability to recognize and respond to hazards. Additionally, people who are impaired due to alcohol or other drugs are more likely to be hurt more seriously than if they hadn't been using these substances. (1.h)</li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>• research the effects of alcohol and other drugs on body systems, brain function, and behavior, and how these effects can increase the risk of injury (2.h, 1.h);</li> <li>• research national and state data on the frequency and number of injuries that occur when individuals are impaired by alcohol or drugs (1.h);</li> </ul>

<ul style="list-style-type: none"><li>• Alcohol is a depressant and slows the functioning of the central nervous system. Alcohol can block messages in the brain. Alcohol intoxication may result in someone being talkative and outgoing or angry and aggressive. (2.h)</li><li>• Many factors influence how drugs affect the body, brain, and behavior, including the kind of drug taken, how much of the drug is taken, how often the drug is used, what other food, drugs, or substances are used at the same time, and individual body size and chemistry. (2.h)</li><li>• Drugs may intensify or dull the senses, alter the sense of alertness, and may decrease physical pain. Drugs may also affect the ability to learn, solve complex problems, plan ahead, and affect motor coordination. Drug use may lead to aggressive behavior, extreme mood swings, paranoia, delusional behavior, and a feeling of invincibility. (2.h)</li><li>• Drugs may alter the brain by affecting cognition (learning and memory), emotion, and perception of pain. Drugs interfere with the way neurons send, receive, and process signals via neurotransmitters. This can lead to abnormal messages being sent, can amplify or disrupt the normal communication between neurons, and reinforces the desire to use drugs. Over time, drug use can lead to addiction, a devastating brain disease—when people can’t stop using drugs even when they really want to. (2.h)</li><li>• Specific information on the effects of alcohol and other drugs on body systems, brain, and behavior may be found at NIDA (<a href="#">National Institute on Drug Abuse</a>). (2.h)</li><li>• Outside of medications from a pharmacy or hospital, drugs obtained in other ways may include additional or more potent ingredients that make the drug more harmful. (2.h)</li><li>• Getting help: Drug addiction is a complex disease, and quitting usually takes more than good intentions or a strong will. Drugs change the brain in ways that make quitting hard, even for those who want to. Fortunately, researchers know more than ever about how drugs affect the brain and have found treatments that can help people recover from drug addiction and lead productive lives. (3.h)</li></ul>	<ul style="list-style-type: none"><li>• promote the health benefits of abstaining from alcohol, tobacco, and other drugs, and promote seeking help for self and others (2.h, 3.h);</li><li>• identify resources available for teens and youth for help with addiction (3.h);</li><li>• describe binge drinking and the increased health and safety risks (1.i);</li><li>• develop personal strategies and a plan to prevent substance use and to resist substance use; apply personal strategies to a variety of role-play situations (2.i, 3.i);</li><li>• explain the connection between prescription opioids and heroin and why teens are more vulnerable (1.j);</li><li>• explain the connection between substance use disorder and mental health (2.j);</li><li>• explain the potential legal and school consequences of substance use and the possible effects on a student’s future (3.j).</li></ul> <p>Additional resources: <a href="http://www.healthsmartva.org">www.healthsmartva.org</a> <a href="https://everfi.com/">https://everfi.com/</a></p>
--	---

Youths who binge drink are at higher risk for the health, injury, school, social, and legal consequences associated with underage drinking.

- **Binge drinking** is defined as four or more drinks for women and five or more drinks for men during a single occasion (in about two hours).
- **Binge drinking** is associated with many health problems (1.i):
  - Unintentional injuries, such as car crashes, falls, burns, and alcohol poisoning.
  - Violence, including homicide, suicide, intimate partner violence, and sexual assault.
  - Sexually transmitted infections/diseases.
  - Unintended pregnancy and poor pregnancy outcomes, including miscarriage and stillbirth.
  - Fetal alcohol spectrum disorders.
  - Sudden infant death syndrome.
  - Chronic diseases, such as high blood pressure, stroke, heart disease, and liver disease.
  - Cancer of the breast, mouth, throat, esophagus, liver, and colon.
  - Memory and learning problems.
  - Alcohol use disorders.
- Resistance skills: Verbal (2.i)
  - Say “no.” There is no substitute for the word “no.” It makes any refusal stronger.
  - Repeat the refusal.
  - Suggest an alternative (suggest something to do instead).
  - Build the friendship (say something to let the person know you are his/her friend and want to spend time with them.) This is especially important because a major reason for ineffective refusals is not wanting to hurt the other person’s feelings or make them.
  - Use a firm tone of voice. Be strong and business-like.
- Resistance skills: Nonverbal (2.i)

- o Direct eye contact (look the person in the face).
- o Serious expression (use your best “I mean it” face).
- o Hands-off hands (put your hands up in front of you when you refuse). This is especially useful in situations involving physical pressure.
- o Leave (get out of the situation).
- o Avoid situations where there may be pressure.

Opioids are among the most addictive drugs. Opioid misuse has become a nationwide public health crisis. [Information on drug effects obtained from NIH National Institute on Drug Abuse.](#)

- Opioids are a class of drugs that include the illegal drug heroin (not a medication), synthetic opioids such as fentanyl, and pain relievers available legally by prescription, such as oxycodone (OxyContin), hydrocodone (Vicodin), codeine, morphine, and many others. (1.j)
- All opioids are chemically related and interact with opioid receptors on nerve cells in the body and brain. Opioids block pain messages sent from the body to the brain, which is why they are prescribed for serious injuries or illnesses. Regular use—even as prescribed by a doctor—can lead to dependence and, when misused, opioid pain relievers can lead to addiction, overdose incidents, and deaths. In the short term, the release of dopamine into the body can make some people feel really relaxed and happy. But it can also cause more harmful effects, like extreme sleepiness, confusion, nausea, vomiting, and constipation. Over time, opioids can lead to insomnia, muscle pain, heart infections, pneumonia, and addiction. Note: Parents and children can talk with physicians about non-opioid pain options for surgical procedures or other medical needs.
- Outside of medications from a pharmacy or hospital, drugs obtained in other ways may include additional ingredients that make the drug more harmful. (1.j)
- Using drugs, especially early in life, increases mortality and the likelihood of addiction, can lead to poor grades, a decreased level of performance in sports,

and affect relationships with friends and family. Opioids alter judgment, which can cause risky behaviors. (1.j)

- Heroin is a dangerous drug that can be injected, sniffed, snorted, or smoked, but is most often used by injecting it directly into a vein with a needle. The chemical makeup of heroin is the same as that of pain relievers, and both can be addictive and cause deadly opioid overdoses. (1.j)
- A [2019 University of Southern California study](#) shows that teens who use prescription opioids to get high are more likely to start using heroin by high school graduation. (1.j)
- [Research](#) now suggests that the human brain is still maturing during the adolescent years. The developing brain may help explain why adolescents sometimes make decisions that are risky and can lead to safety or health concerns, including unique vulnerabilities to drug abuse and that drug use during adolescence may significantly increase a young person’s risk for developing a substance use disorder later in life. (1.j)
- Many individuals who develop substance use disorders are also diagnosed with mental health disorders, and vice versa. Multiple national population surveys have found that about half of those who experience a mental illness during their lives will also experience a substance use disorder and vice versa. Research suggests that adolescents with substance use disorders also have high rates of co-occurring mental illness; over 60% of adolescents in community-based substance use disorder treatment programs also meet diagnostic criteria for another mental illness. (2.j)
- Help and resources are available for mental health and substance use disorders. Talk with a parent, a trusted adult at school, home, or in the community if you have concerns for yourself, friend, or loved one.
  - Parents can help access the health care and resources needed.
  - School counselors, psychologists, and social workers can also help with accessing community services.

<ul style="list-style-type: none"><li>○ In Virginia, the Community Services Boards in many areas of the state can be accessed for information and treatment.</li><li>• In addition to the health effects, substance use and misuse can lead to risky behaviors (e.g., stealing for money to buy drugs) and involvement with law enforcement and the judicial system. Types of drug crimes include possession, sale or distribution, and manufacturing. The type of controlled substance and the type of drug crime determine legal penalties, to include fines and imprisonment. Legal penalties may affect a person’s future. Note: Teachers should also review their school division’s Students Rights and Responsibilities. (3.j)</li><li>• Under <a href="#">Code of Virginia §18.2-251.03</a>, someone who seeks or obtains emergency medical attention for himself or for another individual because of a drug- or alcohol-related overdose in progress may be protected from being convicted for certain possession or intoxication crimes if the person reports an overdose to a firefighter, EMS personnel, or a law enforcement officer (most commonly by calling 911 for emergency medical response). To be eligible for this “affirmative defense,” the person reporting the overdose must identify themselves as being the one who reported the overdose. (3.j)</li><li>• Note: Naloxone is a prescription medication designed to rapidly reverse opioid overdose. It is an opioid antagonist—meaning that it binds to opioid receptors and can reverse and block the effects of other opioids. It can quickly restore normal respiration to a person whose breathing has slowed or stopped as a result of overdosing with heroin or prescription opioid pain medications. Naloxone is used by paramedics, emergency room doctors, and other specially trained first responders. Revive! is a free one-hour training offered in Virginia for members of the community to administer <a href="#">Naloxone</a>; <a href="#">information available at VDH</a> and local health departments. Naloxone can be purchased in many pharmacies in Virginia without bringing in a prescription from a physician. A common brand of naloxone is Narcan.</li></ul>	
---	--

**Topic: Safety/Injury Prevention****Standards:**

- 9.1.k Identify behaviors that contribute to injuries and that may result in irreversible consequences.
- 9.1.1 Define traumatic and non-traumatic brain injury and identify examples of each, including concussion.
- 9.1.m Describe actions, behaviors, and signs that may indicate potential threats to individuals or the school.
- 9.2.k Evaluate the long-term consequences of injury and describe controllable and uncontrollable risk factors.
- 9.2.1 Identify common signs/symptoms (e.g., cognitive, emotional, physical, sleep) of a concussion.
- 9.2.m Identify strategies to respond to and report potential threats to individuals or the school.
- 9.3.k Demonstrate adult and child cardiopulmonary resuscitation (CPR), the use of an automated external defibrillator (AED), and first aid skills for choking, bleeding, contusions, fractures, and anaphylactic shock.
- 9.3.1 Advocate for reporting signs and symptoms and for safety practices to prevent brain injury.
- 9.3.m Develop action steps to promote a safe and inclusive school environment.

<b>Essential Understandings</b>	<b>Essential Knowledge and Skills</b>
<p>Taking precautions to reduce risk can help protect self and others from unintentional injury. Making healthy decisions before engaging in behaviors and activities with risk can save lives.</p> <ul style="list-style-type: none"> <li>Injuries can occur in the home, during recreational activities, sports, and in motor vehicles for the person involved in the activity and can cause injury to others. For example, impaired or distracted driving may result in a crash that could injure the driver, passengers, occupants of another vehicle, or pedestrians. (1.k)</li> <li>Injuries can be intentional or unintentional and result in temporary, long-term, and permanent disability. Intentional injuries are injuries which were intended to hurt or harm a person. Unintentional injuries are injuries which were not planned or intended to happen. (2.k)</li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>research CDC the injury prevention and control section (or other source) for information/data on types of injuries, causes, potential consequences, and the effects of controllable and uncontrollable risk factors (1.k, 2.k);</li> <li>demonstration of knowledge and skills for CPR, the use of</li> </ul>

<ul style="list-style-type: none"> <li>• Risk factors may be controllable or uncontrollable. Uncontrollable risk factors include age, family history, race, and gender. For example, older people are at higher risk for falling. Controllable risk factors include diet, activity level, obesity, and alcohol, tobacco, or other drug use. Individuals can use decision-making strategies to limit risk of injury. (2.k)</li> <li>• Adult and child cardiopulmonary resuscitation (CPR), the use of an automated external defibrillator (AED), and first aid skills for choking, bleeding, contusions, fractures, and anaphylactic shock. CPR should follow current guidelines as set by the <a href="#">International Liaison Committee on Resuscitation/American Heart Association</a> (guidelines are reviewed and revised every five years). (3.k)</li> </ul> <p>Traumatic brain injury (TBI) is a serious public health problem in the United States. Each year, traumatic brain injuries contribute to a substantial number of deaths and cases of permanent disability. (<a href="#">Get the Facts About TBI</a>). Traumatic brain injuries have many causes, including falls, sports, violence, and motor-vehicle crashes.</p> <ul style="list-style-type: none"> <li>• A TBI is caused by a bump, blow, or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. Not all blows or jolts to the head result in a TBI. The severity of a TBI may range from mild (a brief change in mental status or consciousness) to severe (an extended period of unconsciousness or amnesia after the injury).       <ul style="list-style-type: none"> <li>◦ A concussion is a type of TBI caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move rapidly back and forth. This sudden movement can cause the brain to bounce around or twist in the skull, creating chemical changes in the brain and sometimes stretching and damaging brain cells. Effects of concussions are serious, include affecting memory, judgment, reflexes, speech, balance, and coordination. (1.1)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• an AED, and first aid skills (3.k);</li> <li>• explain the difference between traumatic and non-traumatic brain injuries (1.1);</li> <li>• promote awareness of signs and symptoms of a concussion, importance of reporting, and prevention strategies (2.1, 3.1);</li> <li>• identify actions, behaviors, and signs that indicate potential threats to individuals and schools (1.m);</li> <li>• promote the importance of reporting potential threats and ways to report (2.m);</li> <li>• evaluate the current school climate and make recommendations for ways students and staff can promote a safe and inclusive school environment (3.m).</li> </ul> <p>Additional resources:  <a href="http://www.healthsmartva.org">www.healthsmartva.org</a>  <a href="https://everfi.com/">https://everfi.com/</a></p>
---	--

<ul style="list-style-type: none"><li>• Non-traumatic brain injury may also be called an acquired brain injury (ABI). ABI is a result of an illness or condition within the body, and it is not a result of a blow to the head (TBI). Most common causes of a non-traumatic brain injury include stroke (leading cause), a lack of oxygen (hypoxia), tumors, other illnesses such as cancer, brain infections or inflammation, and other infections. (1.1)</li><li>• Signs and symptoms of a concussion generally show up soon after the injury. However, a person may not know how serious the injury is at first and some symptoms may not show up for hours or days. Signs/symptoms of a concussion (2.1):<ul style="list-style-type: none"><li>◦ Cannot recall events prior to or after a hit or fall.</li><li>◦ Appears dazed or stunned.</li><li>◦ During physical activity, forgets an instruction, is confused about an assignment or position, or is unsure of the game, score, or opponent.</li><li>◦ Moves clumsily.</li><li>◦ Answers questions slowly.</li><li>◦ Loses consciousness (even briefly).</li><li>◦ Shows mood, behavior, or personality changes.</li><li>◦ Headache or “pressure” in head.</li><li>◦ Nausea or vomiting.</li><li>◦ Balance problems, dizziness, or double or blurry vision.</li><li>◦ Bothered by light or noise.</li><li>◦ Feeling sluggish, hazy, foggy, or groggy.</li><li>◦ Confusion, concentration or memory problems.</li><li>◦ Just not “feeling right” or “feeling down.”</li><li>◦ Changes in sleep or feeling sleepy.</li></ul></li><li>• Anyone with signs or symptoms of a concussion should be seen by a health care provider. (3.1)</li></ul>	
---	--

<ul style="list-style-type: none"><li>• To reduce or prevent TBI, wear seat belts for every ride/drive in a motor vehicle, never drive under the influence, and wear a helmet or appropriate head/protective gear for sports and recreational activities. (3.1)</li></ul> <p>Speaking up about violence, weapons, or threats not only protects you but your friends and classmates too.</p> <ul style="list-style-type: none"><li>• A threat is an expression of intent to physically or sexually harm someone. This expression may be spoken, written, or gestured. Threats can be expressed directly or indirectly to the victim or to others and may be explicit or implied. Threats sometimes, but rarely, actually involve guns or explosive devices. Most students who pose a threat indicate their intentions in some way. Examples include statements to friends, ideas in written work, drawings, and postings on social media that threaten harm. (<a href="#">Threat Assessment at School [National Association of School Psychologists]</a>) (1.m)</li><li>• Someone on the verge of violence may display warning signs. (<a href="#">School Violence: What Students Can Do</a>) (1.m)<ul style="list-style-type: none"><li>◦ Playing with weapons of any kind.</li><li>◦ Bragging about acts of violence one would like to commit.</li><li>◦ Showing an obsession with violent movies or playing violent games.</li><li>◦ Bullying or threatening other people.</li><li>◦ Cruelty to pets or other animals.</li></ul></li><li>• These signs do not necessarily mean that a person will become violent or bring a weapon to school. Still, all threats should be taken seriously and be reported to a trusted adult. That person could be a teacher, parent, school counselor, or religious leader. (2.m) Note: Teachers should review school-specific reporting procedures.</li><li>• Students who are connected to their peers, educators, and communities in meaningful ways can improve the school climate and prevent violence. Research suggests that a positive school climate can lead to a significant</li></ul>	
---	--

<p>decrease in the likelihood of crime, aggression, and violent behavior.  <b>(School Climate)</b> (3.m)</p> <ul style="list-style-type: none"> <li>Students can contribute to a positive school climate by being involved on a school climate team, looking at data for their school, and working with teachers, administrators, and parents to implement activities and programs to promote student engagement, safety, and environmental changes and design and implement programs to prevent violence, bullying, and harassment. (3.m)</li> </ul>	
---	--

**Topic: Mental Wellness/Social and Emotional Skills****Standards:**

- 9.1.n Identify effective time-management and organizational skills.
- 9.1.o Describe the positive and negative effects of social media and of sharing personal information online.
- 9.1.p Identify signs and symptoms of mental illnesses or challenges (e.g., anxiety, depression, suicide, eating disorders, self-harm behaviors).
- 9.1.q Identify causes of conflict with friends and family and feelings/emotions both sides might experience.
- 9.2.n Analyze how time management might contribute to stress reduction.
- 9.2.o Explain limitations to effective communication online.
- 9.2.p Identify school and community mental health resources to help with mental illnesses or challenges.
- 9.2.q Identify strategies for peaceful resolution of conflict.
- 9.3.n Create strategies to manage deadlines for a school-related activity (e.g., studying for a test, completing a project).
- 9.3.o Create strategies to manage personal information and communicate effectively online, and balance technology use with offline activities.
- 9.3.p Promote access to mental health resources to help oneself and others.
- 9.3.q Apply appropriate conflict-resolution skills to prevent, manage, de-escalate, defuse, and/or resolve conflict in a variety of situations.

<b>Essential Understandings</b>	<b>Essential Knowledge and Skills</b>
<p>Good time management allows a person to accomplish more in a shorter period of time, which leads to more free time, which lowers stress and helps with focus.</p> <ul style="list-style-type: none"> <li>• Time-management skills (adapted from <a href="#">Purdue University Global</a>) (1.n, 2.n):               <ul style="list-style-type: none"> <li>o Identify time wasters and set goals: Make a list of things to do. Identify time wasters. Set goals for completing tasks.</li> </ul> </li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>• apply time management and organization skills by creating a plan for a school-related activity (projects, assignments, or assessments) (1.n, 2.n, 3.n);</li> </ul>

<ul style="list-style-type: none"> <li>o Plan ahead by creating a to-do list: Divide your list into things to do now and things to do later, and prioritize the list. Set due dates.</li> <li>o Tackle small tasks to start: Prioritize your list by what can be done in a few minutes and what will take longer to complete. Start with shorter, simpler to-do items and then move on to larger projects or assignments.</li> <li>o Only do one thing at a time: Don't multitask. Remove distractions.</li> <li>o Establish routines: A set routine can also help you accomplish the things you need to do.</li> <li>o Use breaks wisely: Work in short intervals and take short, regular, timed breaks. For example, work for 25 minutes then take a five-minute break.</li> <li>o Take time off: It's important to take time for yourself. Long study sessions or chunks of time working on assignments should be broken up with time away from screens or textbooks. You need to give your mind a rest. Mindfulness practices can help reduce stress.</li> </ul> <p>Electronic media, including social networking, can be used in positive and beneficial ways, but users need to be aware of risks and protect themselves online. (1.o)</p> <ul style="list-style-type: none"> <li>• Social media has benefits, such as communication, education, and entertainment. Social media can negatively affect lives, including how we interact with others in day-to-day life, self-expression, bullying, friendships, and mental health. (1.o) <ul style="list-style-type: none"> <li>o Benefits of social media: <ul style="list-style-type: none"> <li>▪ Connect with peers, friends, and family; cost savings to connect with others.</li> <li>▪ Overcome geographical barriers to connect and for learning.</li> <li>▪ Opportunities to connect with others of shared interests.</li> <li>▪ Promotes and enables collaboration.</li> <li>▪ Can be used to help others, start a business.</li> <li>▪ Access information for health, education, and real-time news.</li> <li>▪ Fun and enjoyment.</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• compare and contrast the positive and negative effects of social media, sharing personal information, and communicating online (1.o, 2.o);</li> <li>• develop personal strategies to mitigate the negative effects of social media and sharing personal information online (3.o);</li> <li>• explore/research one or more mental illnesses or challenges and the resources available for help (1.p, 2.p);</li> <li>• promote help seeking and available resources for mental illness or challenges (3.p);</li> <li>• apply knowledge of conflict resolution skills and strategies to situations that demonstrates understanding of the emotions of all parties involved and when it is appropriate to prevent, manage, de-escalate, defuse, and/or resolve conflict (1.q, 2.q, 3.q).</li> </ul> <p>Additional resources:  <a href="http://www.healthsmartva.org">www.healthsmartva.org</a>  <a href="https://everfi.com/">https://everfi.com/</a></p>
--	--

<ul style="list-style-type: none"><li>o Risks of social media:<ul style="list-style-type: none"><li>▪ Overuse/dependence can lead to sleep deprivation, less face-to-face interactions; take time away from physical activity and time with family/friends; being overwhelmed with it all.</li><li>▪ Social pressure: Comparisons with “ideal” lives and pictures of others may affect self-esteem and self-image and may cause feelings of depression.</li><li>▪ Misunderstandings from communications; conflict; cyberbullying; damage to your reputation.</li><li>▪ Meeting people who may not be who they say they are can be dangerous.</li><li>▪ Leaving a digital footprint puts personal information at risk.</li><li>▪ Exposure to frauds and scams.</li><li>▪ May lead to dangerous activities, such as trying stunts or challenges posed online that can cause injury or death.</li></ul></li><li>o Inappropriate online behavior includes cheating, accessing and/or sending inappropriate images, hacking, downloading illegally recorded movies or music, cyberbullying.</li><li>o Inappropriate online behavior may result in legal consequences, identity theft, the loss of college admission or job, and financial loss.</li><li>o Accepting location services—the features of an app that track and use your geographical location (or geolocation)—can be helpful and harmful. Location services features—information about where your device (and you) are in the world—is collected and, in many cases, the information is shared.</li><li>• Online Communication: Getting to know someone online and communicating online with someone a person knows, without nonverbal cues or being able to see them, can be risky—from simple misunderstandings to manipulation. People do not always represent their true selves online, which may increase risk. (2.o)</li></ul>	
---	--

Teens experience many changes and situations that may lead to stress, anxiety, and self-destructive behaviors. Resources are available to help teens manage stress, anxiety, self-destructive behaviors, eating disorders, and other mental illnesses or challenges. (1.p)

- **Anxiety**
  - Common signs and symptoms of anxiety include:
    - Feeling restless or nervous
    - Being easily fatigued
    - Having difficulty concentrating; mind going blank
    - Being irritable
    - Having muscle tension or an upset stomach
    - Difficulty controlling feelings of worry
    - Having sleep problems, such as difficulty falling or staying asleep, restlessness, or unsatisfying sleep
- **Depression:** Signs and symptoms of depression may include persistent feelings of sadness, anxiousness, or emptiness; feeling hopeless, guilty, and helpless; loss of interest in activities or hobbies; fatigue; difficulty concentrating and making decisions; headaches, digestive problems that do not get better with treatment; overeating or loss of appetite; thoughts of suicide or suicide attempt.
- **Suicide:** Warning signs of suicide include talking about suicide, having a plan, preoccupation with death, self-destructive behavior, loss of interest in activities or hobbies, giving away possessions, visiting or calling family and friends.
- **Eating disorders:** Some signs of eating disorders include becoming very thin; obsession with food, weight control, counting calories; unhappy with body size; excessive exercise; vomiting after meals or making excuses to go to the bathroom after eating; withdrawing from social activities.

<ul style="list-style-type: none"><li>• <b>Self-harm</b> or self-injury signs may include someone with frequent bruises or bandages. If someone is wearing long sleeves and pants even in hot weather, they may be trying to hide injuries or scarring. This behavior might be part of a larger condition. There also may be additional signs of emotional distress. They might make statements that sound hopeless or worthless, have poor impulse control, or have difficulty getting along with others.</li><li>• Other instructional topics may include challenges such as stress:<ul style="list-style-type: none"><li>◦ Signs and symptoms of stress include headache, muscle tension, fatigue, sleep problems, anxiety, lack of motivation or focus, irritability, depression, drug or alcohol abuse, social withdrawal, and overeating or undereating</li></ul></li><li>• Mental health professionals help children, adolescents, and adults deal with life stresses and problems, including addiction/substance abuse; problems with self-esteem; age-related mental health issues; family, parenting or marital problems; grief, anger or depression; and other emotional or behavioral issues. (2.p)<ul style="list-style-type: none"><li>◦ Mental health professionals in schools<ul style="list-style-type: none"><li>▪ School counselor: Supports student success by providing academic, college and career, and personal and social counseling.</li><li>▪ School psychologist: Helps students foster social skills, address mental health concerns, and enhance self-regulation skills.</li><li>▪ School social worker: Provides individual and group counseling to students to develop social-emotional competencies, foster resiliency, and cope with crisis situations and conflicts. Help students and families access resources.</li></ul></li><li>◦ Community resources include local Community Services Boards and a variety of mental health professionals.<ul style="list-style-type: none"><li>▪ Social worker: Helps individuals develop skills to solve and cope with problems in their everyday lives and can diagnose and treat mental, behavioral, and emotional issues.</li></ul></li></ul></li></ul>	
--	--

- Psychologist: Collaborates with physicians, social workers, and others to treat illness and promote overall wellness.
- Psychiatrist: Physician who evaluates, diagnoses, and treats patients affected by a temporary or chronic mental health problem.
- Counselor: Provides mental health and substance abuse care.
- Psychiatric nurse: Treats patients diagnosed with mental illnesses.

Conflicts with friends and family will occur but can be effectively managed.

- Conflicts with friends and family may result from many situations including different values, different interests, changes in personal interests during adolescence, developing a sense of self that may be different from a parent’s or family’s, a change in the family makeup (e.g., birth, divorce, remarriage, extended family), family or personal finances. (1.q)
- Conflict is better managed when you have self-control, empathy, and emotional maturity. Knowing when emotions are too high (anger or upset) to engage in resolving a conflict is important. If either or both people involved are too angry or upset, it can lead to saying or doing things that will not resolve the situation. When emotions run high, rational thinking is usually low. (1.q)
- Guidelines for resolving conflict include making the relationship the priority, focusing on the present—not what happened in the past, considering whether the issue is worth the time and energy to resolve or whether you can let it go, being willing to forgive and not punish, and knowing when it is OK to disagree. (2.q, 3.q)
  - o De-escalate or de-escalation in a conflict means to reduce the intensity or potential violence of a situation. This can be done by active listening, empathy (identify and understand the other person’s situation, feelings, and motive), establishing rapport, providing information and support, and following up if appropriate.

- o Defuse means to make a situation less harmful, potent, or tense. This can be done by addressing the conflict early so that it does not escalate, but only if it is safe to do so. Avoiding conflict will not necessarily make it go away. Identify the problem, gather information, stay calm (tone of voice, demeanor, and being sincere in what is said), and come to a conclusion (negotiation) if possible.
- o Skills to address conflict:
  - Reducing stress quickly (calming oneself before addressing the conflict).
  - Being emotionally aware of yourself and the other person (How are you feeling? How is the other person feeling?)
  - Stating what the conflict is about.
  - Having effective communication skills include;
    - Listening carefully to others.
    - Speaking directly to each other.
    - Speaking honestly and kindly.
    - Focusing on your body language (nonverbal communication).
  - Proposing solutions or compromises:
  - Agree on solution or compromise to try.
  - Asking an adult for help if the conflict is not addressed.

Teacher note: Reminder that all school personnel are mandated reporters. Child abuse and recognition training is required for initial licensure and renewals; training and resources are available at the [Virginia Department of Education](https://www.doe.virginia.gov).

**Topic: Violence Prevention**

**Standards:**

- 9.1.r Identify types of gangs, gang-related behaviors, and associated consequences.
- 9.1.s Identify risky behaviors adolescents engage in, including weapon use and gang involvement.
  
- 9.2.r Analyze level of risk associated with a variety of behaviors, including weapon use and gang involvement.
- 9.2.s Examine how the consequences associated with gang involvement could affect oneself, the family, and the community in the present and the future.
  
- 9.3.r Create a message about the importance of avoiding gang involvement.
- 9.3.s Demonstrate healthy decision-making strategies related to risky behaviors.

Essential Understandings	Essential Knowledge and Skills
<p>Involvement in gangs and weapon use can have negative consequences for the individual, their family, and their community.</p> <ul style="list-style-type: none"> <li>• According to the <a href="#">FBI</a>, in 2015 about 33,000 violent street gangs (national, local, female), motorcycle gangs, and prison gangs were criminally active in the United States. Local street gangs are in rural, suburban, and urban areas. (1.r)</li> <li>• A gang is a group of two or more persons, whether formal or informal, and which individually or collectively engage in activities that are illegal, destructive, disruptive, or intimidating (<a href="#">Fairfax County Public Schools Gang Prevention and Education</a>). Crimes among gangs can include intimidation, vandalism, graffiti, drug dealing, theft, assault, rape, trafficking, and gang-related homicides. Teens involved in gangs are more likely than other teens to commit serious and violent crimes. (1.r. 1.s)</li> <li>• Gang members may threaten family or friends to manipulate and coerce an individual to participate in gang activities. Joining a gang creates automatic enemies from rival gangs. (1.r, 2.s)</li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>• create a message about the importance of avoiding gang involvement that includes knowledge of gang-related behaviors and consequences (1.r. 1.s);</li> <li>• explain the laws related to gangs and gang recruitment (1.r);</li> <li>• explain the consequences associated with gang involvement and weapon use and how the consequences could affect oneself, family, and the community in the</li> </ul>

<ul style="list-style-type: none"> <li>• Gang involvement can have <b>long-term effects</b>, including increased participation in crime, school problems, decreased employment prospects, exposure/involvement with drug and alcohol use/abuse and sales, and increased risk of victimization. Long-term gang membership is associated with an escalating succession of effects, such as dropping out of school, increased risk of teen parenthood, lack of employment success, arrests, being stopped by police, living under the threat of victimization, involvement with the criminal justice system, negative contacts with law enforcement, and victimization by other gang members (including physical violence and weapon use leading to injury and death). (1.r, 2.s)</li> <li>• A weapon is something (such as a club, knife, or gun) used to injure, defeat, or destroy. Weapon use and physical violence can lead to injury of self and others, death, result in school suspension/expulsion, arrest, and legal actions. (2.r, 1.s)</li> <li>• Gang membership can lead to recruitment of family members (siblings) and violence against family members. Gangs affect communities by instilling fear through intimidation, vandalism, graffiti, drug sales, intimidation of witnesses to gang activity/violence, getting caught in gang crossfire, trafficking, and gang-related homicides. Fear is higher where gangs are more prevalent and dangerous. (2.s)</li> <li>• <a href="#">Code of Virginia §18.2-308.1</a>: Possession of firearm, stun weapon, or other weapon on school property prohibited. It is illegal to carry a weapon on public, private, or religious school grounds “or (c) any school bus owned or operated by any such school, is guilty of a Class 1 misdemeanor.” Exceptions include law-enforcement officers and an armed security officer hired by school (2.s)</li> <li>• <a href="#">Code of Virginia §18.2-46.3</a>: Recruitment of persons for criminal street gang; penalty. (2.s) <ul style="list-style-type: none"> <li>o “Any person who solicits, invites, recruits, encourages, or otherwise causes or attempts to cause another to actively participate in or become a</li> </ul> </li> </ul>	<p>present and the future (1.r, 2.s);</p> <ul style="list-style-type: none"> <li>• apply decision-making skills to a healthy decision related to weapon use and/or gang involvement (3.s).</li> </ul> <p>Additional resources:  <a href="http://www.healthsmartva.org">www.healthsmartva.org</a>  <a href="https://everfi.com/">https://everfi.com/</a></p>
---	---

<p>member of what he knows to be a criminal street gang is guilty of a Class 1 misdemeanor. Any person age 18 years or older who solicits, invites, recruits, encourages or otherwise causes or attempts to cause a juvenile to actively participate in or become a member of what he knows to be a criminal street gang is guilty of a Class 6 felony.”</p> <ul style="list-style-type: none"><li>o “Any person who, in order to encourage an individual (a) to join a criminal street gang, (b) to remain as a participant in or a member of a criminal street gang, or (c) to submit to a demand made by a criminal street gang to commit a felony violation of this title, (i) uses force against the individual or a member of his family or household or (ii) threatens force against the individual or a member of his family or household, which threat would place any person in reasonable apprehension of death or bodily injury, is guilty of a Class 6 felony. The definition of ‘family or household member’ set forth in § 16.1-228 applies to this section.”</li><li>• Additional risky behaviors may be included, such as:<ul style="list-style-type: none"><li>o Hazing: Any activity expected of someone joining or participating in a group that humiliates, degrades, abuses, or endangers them, regardless of a person’s willingness to participate. Hazing incidents occur in many types of clubs, organizations, and teams and in diverse settings including middle and high schools, colleges and universities, the military, and workplaces. The intimidating, harassing, and sometimes even violent nature of hazing can threaten the health and safety of its victims. It can even be deadly. (<a href="#">Hazing: The Issue</a>)</li><li>o Hate crimes: Defined by the <a href="#">FBI</a> as a “criminal offense against a person or property motivated in whole or in part by an offender’s bias against a race, religion, disability, sexual orientation, ethnicity, gender, or gender identity.” Hate crimes can be prosecuted at the state or federal level.</li></ul></li><li>• Decision-making process includes (3.s):</li></ul>	
--	--

<ul style="list-style-type: none"> <li>o Identify the decision to be made.</li> <li>o List all of the possible options.</li> <li>o Evaluate the pros and cons of each option (research consequences), using criteria such as:             <ul style="list-style-type: none"> <li>▪ Is this option healthful and does it reflect my beliefs and values?</li> <li>▪ Is this option legal?</li> <li>▪ Is this option safe?</li> <li>▪ Is this option respectful to my family and myself?</li> <li>▪ Is this option responsible?</li> </ul> </li> <li>o Make your decision based on the evaluation of each option (act on the decision selected).</li> <li>o Reflect on the decision that was made.</li> </ul>	
--	--

**Topic: Community/Environmental Health**

**Standards:**

- 9.1.t Identify health-related social issues, such as homelessness, underage drinking, and substance abuse.
- 9.1.u Identify global environmental health issues.
  
- 9.2.t Evaluate strategies for improving health-related social issues.
- 9.2.u Examine the effects of global environmental health issues on local communities.
  
- 9.3.t Develop a long-term plan for oneself and/or the family to positively influence a health-related social issue.
- 9.3.u Promote global environmental health and/or disease prevention projects.

Essential Understandings	Essential Knowledge and Skills
<p>Healthy physical, social, and economic environments strengthen the potential to achieve health and well-being. The neighborhoods people live in have a major influence on their health and well-being. (<a href="#">Healthy People 2030 Framework Foundational Principle</a>)</p> <ul style="list-style-type: none"> <li>• Social determinants of health are conditions in the environments in which people live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Health is determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. (<a href="#">HealthyPeople.gov</a>)</li> <li>• Examples of health-related social issues include homelessness, underage drinking, and substance use/misuse. (1.t)             <ul style="list-style-type: none"> <li>o Homelessness: On any given night, hundreds of thousands of people are homeless in the United States. These people might be chronically homeless, have temporarily lost their shelter, be fleeing domestic</li> </ul> </li> </ul>	<p>In order to meet these standards, it is expected that students will</p> <ul style="list-style-type: none"> <li>• list health-related social issues (1.t);</li> <li>• research social determinants of health and strategies for improving at least one health-related social issue (2.t);</li> <li>• develop a plan to positively influence a health-related social issue (3.t);</li> <li>• list global environmental health issues (1.u);</li> <li>• research global environmental health issues and effects on local communities (2.u);</li> <li>• promote global environmental health and/or disease prevention strategies or projects (3.u).</li> </ul> <p>Additional resources:</p>

violence, or facing any number of other issues. Homelessness is closely connected to declines in physical and mental health. Homeless people experience high rates of health problems, such as HIV infection, alcohol and drug abuse, mental illness, tuberculosis, and other conditions.

(CDC)

- o Underage drinking: Alcohol is the most commonly used substance among young people in the United States. Underage drinking is a significant public health problem. Excessive drinking is responsible for more than 3,500 deaths and 210,000 years of potential life lost among people under age 21 each year. (CDC)
- o Substance use/misuse: Alcohol and drug misuse and related disorders are major public health challenges that are taking an enormous toll on individuals, families, and society. Neighborhoods and communities as a whole are also suffering as a result of alcohol- and drug-related crime and violence, abuse and neglect of children, and the increased costs of health care associated with substance misuse. The health care system has not given the same level of attention to substance use disorders as it has to other health concerns that affect similar numbers of people. Substance-use disorder treatment in the United States remains largely segregated from the rest of health care and serves only a fraction of those in need of treatment. Only about 10% of people with a substance use disorder receive any type of specialty treatment. Further, over 40% of people with a substance use disorder also have a mental health condition, yet fewer than half (48%) receive treatment for either disorder. (Surgeon General’s Report on Alcohol, Drugs, and Health [2015])

According to the [World Health Organization](#) (WHO), “Clean air, stable climate, adequate water, sanitation and hygiene, safe use of chemicals, protection from

[www.healthsmartva.org](http://www.healthsmartva.org)

<https://everfi.com/>

radiation, healthy and safe workplaces, sound agricultural practices, health supportive cities and built environments, and a preserved nature are all prerequisites for good health.”

- An estimated 12.6 million deaths each year—nearly one in four of total global deaths—are attributable to unhealthy environments. Environmental risk factors, such as air, water and soil pollution, chemical exposures, climate change and ultraviolet radiation, contribute to more than 100 diseases and injuries. (WHO) (1.u)
- As globalization continues, the international spread of disease can affect travel and trade worldwide, as seen with COVID-19. International health regulations encourage countries to work together and share information about disease and other health-related issues with potential international effects. (2.u)