



# Disease and Prevention

Lawrence High School

The following documents contain the content knowledge and skills that students will acquire by the end of the Disease and Prevention course

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## Disease and Prevention Course Description

Disease and prevention is a full year health course designed to make students aware of present day communicable and non-communicable diseases. Emphasis is on signs, causes, and treatment of chronic and communicable diseases, as well as skills related to health promotion, disease prevention, and health maintenance. The study of Disease and Prevention conveys the important message that students have a considerable measure of control over their health. The contribution of science and technology has added greatly to disease and prevention control. Chances of contracting most illnesses can be greatly influenced by students' health-related choices and decisions. The effects of heredity will be considered, as well as the behaviors and decisions that impact our health and well-being.

The course itself is designed through a blending of the Massachusetts Comprehensive Health Curriculum Frameworks and the Common Core Literacy Standards.

**Unit 1:**  
**August - October**  
**Healthy Lifestyle Choices: Conditions Impacting Males and Females**

**Essential Questions:**

- What does it take to live a long life?
- How does our behavior and lifestyle influence our well-being?

**Standards**

- 8.14 Identify positive health behaviors that reduce the risk of disease.
- 8.15 Learn how to use effective physical self-examination procedures and at what age they become necessary.
- 8.16 Demonstrate how to discuss procedures and test results with health care providers
- 8.17 Describe the leading causes of death for different age groups, symptoms of common diseases among youth, the importance of early diagnosis, and the need for active involvement in the treatment and management of disease and chronic health problems.
- 8.18 Analyze the interaction between genetics and disease
- WHST2 Write informative /explanatory texts. (This standard is the primary writing standard for this unit).
- WHST3 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- WHST4 Draw evidence from informational texts to support analysis, reflection, and research.
- SL1 Initiate and participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

**Content Objectives**

- Students will be able to evaluate their present life styles as they relate to wellness and articulate strategies to achieve maximum health results as adults.
- Students will identify and describe diseases or conditions that can affect the health of women, including:
- Breast Cancer
  - Heart Disease
  - Teenage Pregnancy
- Students will identify and describe diseases or conditions that affect the health of men, including:
- Testicular cancer
  - Heart disease
  - Teenage pregnancy
- Students will evaluate behaviors and learned procedures that can prevent or minimize the risk of contracting diseases:
- Breast cancer, lung cancer, colon cancer
  - High blood pressure
  - Heart Disease
  - Lyme Disease

### Unit 1 Assessments

**Types of writing:** Students will complete the following exercises to demonstrate their understanding of, and their ability to apply, important information, and to fulfill the “assessment/product” requirements.

**Notebooks:**

- **Content Notes (every day or close to it):** Students will identify topics; identify the main ideas and most important details and examples associated with each topic; include summaries as well as student-generated follow-up questions and answers, reflections, visualizations, and responses to the content, using higher order thinking skills (e.g., predict, connect, infer, analyze, evaluate, categorize, synthesize).
- **Vocabulary:** Students will highlight additional, key vocabulary in their notebooks; they will build an understanding of the vocabulary using vocabulary-development exercises (e.g., word webs, Frayer Model), as well as use the vocabulary in their daily work and conversations.
- **Narrative and Explanatory Essay (in response to one or more Essential and Guiding Questions)/Investigation Reports:** Student work will include evidence of planning: graphic organizers, brainstorming lists; editing of language, vocabulary, grammar, structure; organized and developed ideas utilizing precise and domain specific language; student sharing, student and teacher feedback, and revisions based on these conversations. Argumentative essays/investigation reports will include an explicit claim, scientific evidence in support of the claim (from reports, data, observations, etc.), and an explanation of how the evidence connects to and verifies the claim.
- **Other Sample Products:** KWL Charts. Venn Diagrams, Concept Maps, H.O.T. Boxes, Others?

**End-of-Unit Assessment:** Students will engage in a teacher generated project based assessment at the conclusion of this unit.

**Unit 2**  
**November-January**  
**AIDS, HIV and Sexually Transmitted Diseases**

**Essential Questions**

- What does it take to live a long life?
- How does our behavior and lifestyle influence our well-being?

**Standards**

- 8.14 Identify positive health behaviors that reduce the risk of disease.
- 8.15 Learn how to use effective physical self-examination procedures and at what age they become necessary.
- 8.16 Demonstrate how to discuss procedures and test results with health care providers
- 8.17 Describe the leading causes of death for different age groups, symptoms of common diseases among youth, the importance of early diagnosis, and the need for active involvement in the treatment and management of disease and chronic health problems.
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- WHST4 Draw evidence from informational texts to support analysis, reflection, and research.
- SL1 Initiate and participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

Students will be able to describe the spectrum and natural history of HIV/AIDS:

- Define HIV/AIDS
- List the most common methods by which HIV is transmitted
- Identify and characterize the three levels of disease caused by the HIV virus
- Name the populations exhibiting the highest level of HIV infection
- Name, in order of effectiveness, the behaviors that protect one from HIV/AIDS
- Describe factors that can predispose, encourage, or reinforce the behaviors that protect one from HIV/AIDS
- Identify and refute common fallacies about HIV/AIDS and its transmission
- Briefly describe the public health measures and services used to control a communicable disease such as HIV/AIDS

Students will identify and describe sexually transmitted diseases or conditions that can affect the health of men and women, including chlamydia, gonorrhea, syphilis, genital herpes, pubic lice, hepatitis, and HIV/AIDS

### Unit 2 Assessments

**Types of writing:** Students will complete the following exercises to demonstrate their understanding of, and their ability to apply, important information, and to fulfill the “assessment/product” requirements.

**Notebooks:**

- **Content Notes (every day or close to it):** Students will identify topics; identify the main ideas and most important details and examples associated with each topic; include summaries as well as student-generated follow-up questions and answers, reflections, visualizations, and responses to the content, using higher order thinking skills (e.g., predict, connect, infer, analyze, evaluate, categorize, synthesize).
- **Vocabulary:** Students will highlight additional, key vocabulary in their notebooks; they will build an understanding of the vocabulary using vocabulary-development exercises (e.g., word webs, Frayer Model), as well as use the vocabulary in their daily work and conversations.
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- **Other Sample Products:** KWL Charts. Venn Diagrams, Concept Maps, H.O.T. Boxes, Others?

**Unit 2 Assessment:** Students will engage in a teacher generated project based assessment at the conclusion of this unit.

**Unit 3:**  
**February-April**  
**Healthy Lifestyle Choices: Teen Pregnancy, Cancer, and Physical Activity**

**Essential Questions**

- What does it take to live a long life?
- How does our behavior and lifestyle influence our well-being?

**Standards**

8.14 Identify positive health behaviors that reduce the risk of disease.

8.15 Learn how to use effective physical self-examination procedures and at what age they become necessary.

8.16 Demonstrate how to discuss procedures and test results with health care providers

8.17 Describe the leading causes of death for different age groups, symptoms of common diseases among youth, the importance of early diagnosis, and the need for active involvement in the treatment and management of disease and chronic health problems.

8.18 Analyze the interaction between genetics and disease  
WHST2 Write informative /explanatory texts. (This standard is the primary writing standard for this unit).

WHST3 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

WHST4 Draw evidence from informational texts to support analysis, reflection, and research.

SL1 Initiate and participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

Students will be able to explain how cancer develops, and describe the symptoms and treatment of cancer.

Students will discuss the consequences of teen pregnancy for both the parents and the child.

Students will know a variety of strategies to make healthy lifestyle choices.

Students will understand the social and personal responsibility associated with participation in physical activity.

Students will identify, evaluate and apply health information and resources to their own lives.

Students will identify factors which contribute to achieving personal wellness goals, and apply those factors to their own lives.

Students will demonstrate the ability to maintain and enhance a healthy lifestyle.

### Unit 3 Assessments

**Types of writing:** Students will complete the following exercises to demonstrate their understanding of, and their ability to apply, important information, and to fulfill the “assessment/product” requirements.

#### Notebooks:

- **Content Notes (every day or close to it):** Students will identify topics; identify the main ideas and most important details and examples associated with each topic; include summaries as well as student-generated follow-up questions and answers, reflections, visualizations, and responses to the content, using higher order thinking skills (e.g., predict, connect, infer, analyze, evaluate, categorize, synthesize).
- **Vocabulary:** Students will highlight additional, key vocabulary in their notebooks; they will build an understanding of the vocabulary using vocabulary-development exercises (e.g., word webs, Frayer Model), as well as use the vocabulary in their daily work and conversations.
- **Narrative and Explanatory Essay (in response to one or more Essential and Guiding Questions)/Investigation Reports:** Student work will include evidence of planning: graphic organizers, brainstorming lists; editing of language, vocabulary, grammar, structure; organized and developed ideas utilizing precise and domain specific language; student sharing, student and teacher feedback, and revisions based on these conversations. Argumentative essays/investigation reports will include an explicit claim, scientific evidence in support of the claim (from reports, data, observations, etc.), and an explanation of how the evidence connects to and verifies the claim.
- **Other Sample Products:** KWL Charts. Venn Diagrams, Concept Maps, H.O.T. Boxes, Others?

**End-of-Unit Assessment:** Students will engage in a teacher generated project based assessment at the conclusion of this unit.

**Unit 4**  
**May-June**  
**Bringing it**

**Essential Questions**

- What does it take to live a long life?
- How does our behavior and lifestyle influence our well-being?

**Standards**

8.14 Identify positive health behaviors that reduce the risk of disease.

8.15 Learn how to use effective physical self-examination procedures and at what age they become necessary.

8.16 Demonstrate how to discuss procedures and test results with health care providers

8.17 Describe the leading causes of death for different age groups, symptoms of common diseases among youth, the importance of early diagnosis, and the need for active involvement in the treatment and management of disease and chronic health problems.

8.18 Analyze the interaction between genetics and disease  
WHST2 Write informative /explanatory texts. (This standard is the primary writing standard for this unit).

WHST3 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

WHST4 Draw evidence from informational texts to support analysis, reflection, and research.

SL1 Initiate and participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 9-10 topics, texts, and issues, building on others' ideas and expressing their

Students will evaluate their past and present health practices and design positive changes for the future.

Students will describe symptoms, causes and prevention methods of non-communicable diseases and handicapping conditions.

Students will determine the heredity, environmental, and lifestyle factors which place them at risk for communicable diseases.

Students will determine the heredity, environmental, and lifestyle factors which place them at risk for communicable diseases, and/or enhance their health.

Students will implement ways to improve their personal health practices.

Students will explore the roles that medicine, research and government play in the prevention and control of diseases,

own clearly and persuasively.

#### Unit 4 Assessments

**Types of writing:** Students will complete the following exercises to demonstrate their understanding of, and their ability to apply, important information, and to fulfill the “assessment/product” requirements.

#### Notebooks:

- **Content Notes (every day or close to it):** Students will identify topics; identify the main ideas and most important details and examples associated with each topic; include summaries as well as student-generated follow-up questions and answers, reflections, visualizations, and responses to the content, using higher order thinking skills (e.g., predict, connect, infer, analyze, evaluate, categorize, synthesize).
- **Vocabulary:** Students will highlight additional, key vocabulary in their notebooks; they will build an understanding of the vocabulary using vocabulary-development exercises (e.g., word webs, Frayer Model), as well as use the vocabulary in their daily work and conversations.
- **Narrative and Explanatory Essay (in response to one or more Essential and Guiding Questions)/Investigation Reports:** Student work will include evidence of planning: graphic organizers, brainstorming lists; editing of language, vocabulary, grammar, structure; organized and developed ideas utilizing precise and domain specific language; student sharing, student and teacher feedback, and revisions based on these conversations. Argumentative essays/investigation reports will include an explicit claim, scientific evidence in support of the claim (from reports, data, observations, etc.), and an explanation of how the evidence connects to and verifies the claim.
- **Other Sample Products:** KWL Charts, Venn Diagrams, Concept Maps, H.O.T. Boxes, Others?

**End-of-Unit Assessment:** Students will engage in a teacher generated project based assessment at the conclusion of this unit.

# Teacher Resources

### Note-Taking Resources

#### Content Response Notes (Informational Text)

<b>Chapter/Section/Article/Document/Presentation Title/Topic</b>	
<p><b>Key Concepts, Phenomena, Processes, Events, Documents, Decisions, Laws, People, Organizations, Inc.</b></p> <p><b>Name it:</b></p> <ul style="list-style-type: none"> <li>Identify and list the key concepts, events, phenomena, etc. included in the title, major headings, subheadings, illustrations, boldfaced and italicized words, chapter summary as you preview the text.</li> <li>Identify and list additional key concepts, phenomena, events, people, etc. as you read, listen, and/or watch.</li> </ul> <p><b>Question It:</b></p> <ul style="list-style-type: none"> <li>Identify any questions you have about key concepts, events, phenomena, etc.</li> <li>You will answer these questions after you've completed your content notes.</li> </ul>	<p><b>Explain It:</b> Succinctly, in note form, using your own words (and key quotes from primary source documents). Include key dates.</p> <p><b>Helpful Hints:</b></p> <ul style="list-style-type: none"> <li>Underline or highlight the names of key concepts, people, phenomena, events, etc.</li> <li>Write in phrases or key words</li> <li>Use a symbol to identify the main idea</li> <li>Use a different symbol to identify important details and examples, directly under the main ideas.</li> </ul>
<p><b>Summarize It: 100 Word Limit</b></p> <ul style="list-style-type: none"> <li>Briefly synthesize what you have learned from the reading, video, or presentation, including the topic, main idea, most important details, and examples.</li> <li>Explain why the concepts, phenomena, people, etc. you studied are important for your and others to study, remember and understand.</li> </ul>	

### Multiple-Entry Vocabulary Journal

A strategy for learning new vocabulary by engaging students in multiple, cognitive processes.

**Purpose:**

Use *before*, *during*, and *after* reading to:

- Help students understand key Tier 2 and Tier 3 words that may limit comprehension if they are not known, as they read text or listen to a presentation.
- Provide an interactive way to learn new vocabulary.
- Provide a way for students to cognitively process new words in multiple ways, thereby resulting in greater retention.
- Help students develop a customized glossary that provides words in context, complemented by easy-to-remember definitions and other memory aids.

**Procedures:**

1. Determine the key Tier 2 and Tier 3 words that students must develop an understanding of while reading a selection.
2. Have students construct the four-column journal in their notebooks (see below), preceding or following their content notes for the same reading or presentation. Label the columns:
  - Word in context
  - Definition in Your Own Words
  - Picture/New Sentence/Other Memory Aid (Student Choice)
  - Synonym or Antonym (Student Choice)

Word in Context	Definition in Your Own Words	Picture/New Sentence/Other Memory Aid	Synonym or Antonym

3. Model the strategy with several words. As you read, stop on one of the selected words and conduct a think-aloud, interacting with the word as if you have never seen it before and do not understand its meaning. Write the word, in context, in the left column. Use context clues and your understanding of roots, suffixes and prefixes to build an understanding of the word and then define the word *in your own words*, in the second column. Use a dictionary if you remain stumped, but still write the description in everyday language. The final two columns should not be completed until after the reading is completed.

Note: Take lots of time modeling the writing of a definition in your own words. After you give it a try, ask the students if they understand your definition...and for their help if they don't. Getting students to think through this process is important work.

4. Have students practice the strategy, sharing and revising their work, as needed.
5. Have students select up to five additional words they don't know while reading and have them include the words in their grids.
6. Have students write a single paragraph of no more than three sentences, about the day's topic. The paragraph must include at least five new vocabulary words, including a mix of Tier 2 and Tier 3 words.

Option: Give some schmaltzy prize to the student who can incorporate the greatest number of words into the least number of clear, coherent, connected sentences.

**K-W-L Chart**

What I know about this topic	What I want to know more about this topic	What I learned about this topic	Connections between this topic, and another topic we've studied in science

Fruyer Model



