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Unit 4

Health

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## 4.1.1 Study: Communicable Diseases

Study Sheet

Health

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# words

Record key terms and their definitions in the table.

Word	Definition
bacterium	
communicable disease	
disease	
epidemic	
infection	
pandemic	
pathogen	
resistant	
risk factor	
vaccine	
virus	

# review

Use this study sheet to keep track of the important concepts covered in this study. If you need help answering any of the questions, check with your instructor. Save these study sheets for review when preparing for quizzes and tests.

## Communicable Diseases

Describe two characteristics of a communicable disease.

Complete the following table by giving a description and an example of each pathogen.

Pathogen	Description	Example
Bacteria		
Viruses		
Fungi		
Protist		
Worm		

List negative consequences of common communicable diseases.

List negative consequences of diseases of global concern.

## Modes of Transmission

Complete the table by describing how each disease is transmitted.

Transmission type	Direct contact		Animal vectors
Description			
Example		Drinking contaminated water	

## Preventing Communicable Diseases

Describe ways to prevent transmission of communicable diseases.

List methods used by public health agencies to prevent disease.

## Risk Factors

What are some factors that decrease access to health care?

Complete the table with examples of risk factors.

Controllable risk factors	Uncontrollable risk factors



## 4.1.3 Study: Noncommunicable and Chronic Diseases

Study Sheet

Health

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# words

Record key terms and their definitions in the table.

Word	Definition
anaphylaxis	
cancer	
chronic disease	
detection	
environmental factors	
health care	
health insurance	
health screening	
oral health	
predisposition	
prevention	
sleep deficiency	

treatment	

# review

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Approximately what percentage of deaths in the United States are caused by noncommunicable and chronic diseases?

Complete the table. Give descriptions of different noncommunicable and chronic diseases.

Disease	Description
Cardiovascular disease	
Cancer	
Lung diseases	
Asthma	
Diabetes	
Allergies	

What are some causes of obesity?

List three lifestyle factors that affect a person's risk of chronic disease.

What does knowing your family history for a noncommunicable or chronic disease allow you to do? List two actions.

What are three factors that affect air quality?

List three ways toxic chemicals might get into your body.

What three methods can you use to protect yourself from the sun?


Complete the table with an example of a problem that might be detected by each type of screening.

Screening	Risk factor or disease
Blood glucose	
Blood pressure	
Blood cholesterol	
Body weight	
Behavioral test	

Why is access to health care an important factor for handling chronic diseases? List two reasons.

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What are some inexpensive ways to keep yourself healthy?



## 4.1.5 Practice: Personal Health Plan

Practice Assignment

Health

Name: \_\_\_\_\_

Points possible: 40

Date: \_\_\_\_\_

### Question 1

You will be using what you've learned in this lesson to develop a personal wellness plan to help protect yourself from both communicable and noncommunicable diseases. Start by identifying controllable and uncontrollable risk factors for disease.

Communicable	
Controllable	Uncontrollable

Noncommunicable	
Controllable	Uncontrollable

### Question 2

Use the chart to differentiate between some of the lifelong effects of positive and negative health behaviors.

Behavior	Possible outcomes
----------	-------------------

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Regular visits to family doctor	
Nutritious diet	
Regular handwashing	
150 minutes of weekly medium-intensity workouts	
Complete set of childhood vaccinations	
Diet high in dairy, fatty meats, and processed foods	
Drinking alcohol in excess	
Smoking cigarettes	
Drinking four sodas a day	

### Question 3

Analyze the cost and accessibility of local health care services, including dental care.

- Complete the chart with information about the cost and accessibility of local health care services.
- How do you think having health insurance will impact a person's health?
- Research cost-effective health insurance plans. Describe two plans.
- In your situation, should purchasing health insurance be an individual decision or a collaborative decision with your family? Explain your response.

a.

Location of and travel time to the nearest emergency room	
-----------------------------------------------------------	--

Location of and travel time to the nearest after-hours clinic	
Location of and travel time to the nearest general practitioner's office	
Location of and travel time to the nearest dentist's office	
Physician's cost for a routine checkup including blood tests (without insurance)	
Physician's cost for a visit with flu-like symptoms (without insurance)	
Emergency room charge for asthma attack treatment (or similar, without insurance)	
Dentist's charge for a teeth cleaning (without insurance)	
Dentist's charge for a routine checkup (without insurance)	
Dentist's charge for filling a cavity (or similar, without insurance)	

b.

c.

	Plan 1 (Name)	Plan 2 (Name)
Monthly premium		
Yearly deductible		
Number of doctor visits		

Copay for doctor visit		
------------------------	--	--

d.

### Question 4

Describe the types of regular medical and dental checkups, screenings, and tests that would help you avoid disease.

### Question 5

Describe a plan for personal wellness. Include in your plan how you can help prevent disease and access health care and medical services at different stages of life. Make sure your plan is adaptable to changing health needs based on genetics, family history, and personal health behaviors.

Age	Health insurance	Prevention	Screening
0 – 12			
12 – 19			
19 – 40			

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40 – 65			
65 and over			

### Question 6

Your environment can affect your health. Now that you have made a personal wellness plan, consider how you can make your environment "well."

- a. How do you think ideas about what is normal or good in your community influence how people treat the environment around them?
- b. Research at least one way that your environment influences your health and different ways that you can lessen your negative impact on and improve your environment. Describe your findings and cite your sources here.
- c. Do you think it is important to involve health, wellness, education, safety, and business professionals in plans for improving the health of the environment? Explain your answer.
- d. Develop a long-term plan describing how you can positively impact your environment. Describe your plan here.



## 4.2.1 Study: Public Health Policies

Study Sheet

Health

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# words

Record key terms and their definitions in the table.

Word	Definition
automated external defibrillator (AED)	
food inspection	
immunization	
organ donation	
vaccination	
public health policy	
chronic disease	
communicable disease	

# review

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## Public Health Policies

At what four levels are public health activities carried out?

What is the reason public health programs are often designed locally?

Complete the following table. Describe two activities used in each public health program.

Public health program	Activities
Malaria	
Vaccination	
Obesity	

## How Public Health Works

List three approaches that have been used to reduce smoking rates.

Why is it required to report certain diseases to local health authorities?

List the types of laws that have been passed regarding AEDs.



How are you participating in public health policy by taking this course?

Why do some people refuse to vaccinate their children? What is the cost?

List three public health steps that have made our food safer.

What type of organ donation system does the United States have? Why is organ donation important for people waiting for a transplant?



## 4.2.3 Study: Good Hygiene

Study Sheet

Health

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# words

Record key terms and their definitions in the table.

Word	Definition
hygiene	
infectious agent	
transmit	

# review

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Name three places where good hygiene practices are important.

Complete the table by describing good hygiene practices for each category.

(pg. 2)

Context	Activities
Personal	

Outdoor environment	
Animals	

Give three examples of global issues that contribute to poor hygiene.

List a good hygiene practice that can help prevent each of these diseases from being transmitted.

Disease	Practice
Common cold	
Flu	
<i>Salmonella</i>	
Athlete's foot	

List a good hygiene practice that can help prevent each of these common diseases from being transmitted.

Disease	Practice
Mononucleosis	
Conjunctivitis	
Staph infection	
Cold sore	

List the four steps in maintaining oral health.

List two hygiene practices that are supported by scientific evidence and two that are not.

(pg. 6)

Supported	Not Supported

What strategy would you use to make a choice between different hygiene products?



## 4.2.5 Checkup: Practicing Good Hygiene

Checkup

Health

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Question 1

Choose a disease and locate two independent and reliable sources on the Internet that describe hygiene practices that prevent the disease. Answer the following questions.

- Identify the disease. Provide the name and URL for each source of information about the disease.
- Explain why you think each source is reliable and independent.
- List the specific hygiene recommendations that each site makes.
- Identify any significant differences between the two sets of information provided.

a.

b.

c.

d.

### Question 2

Keeping in mind what you have learned about hygiene, create a personal hygiene plan for yourself. Include the specific things you will do, and when, and products you might use to prevent getting infectious diseases and to maintain good oral health.

### Question 3

Many diseases require contact with a mucous membrane in order to be transferred between people. Identify the locations of mucous membranes on the human body that are sites for infection. List hygiene strategies that can be used to prevent infection in these locations.

### Question 4

Choose a type of hygiene product, and list the steps you will take to decide which specific product is best for you. Provide links to at least three sources of reliable information you would use in making your decision.



### 4.3.1 Journal: Your Susceptibility to Disease

Journal

Health

Name: \_\_\_\_\_

Points possible: 10

Date: \_\_\_\_\_

1. Consider your environment, genetics, family history, and current health behaviors.
  - a. How do they make you susceptible to communicable diseases? (3 points)
  - b. How do they make you susceptible to noncommunicable diseases, including diabetes, heart disease, and stroke? (3 points)
  - c. What is the potential severity of the illnesses you are most susceptible to? (2 points)
  - d. How could you avoid or minimize the risk of getting these illnesses? (2 points)

a.

b.

c.

d.



## 4.3.2 Study: Impact of Technology on Health

Study Sheet

Health

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# words

Record key terms and their definitions in the table.

Word	Definition
prediabetes	
humulin	
endoscopy	
telemedicine	
ultrasound	
magnetic resonance imaging (MRI)	
computerized tomography (CT)	
insulin pump	
glucose meter	
heart pacemaker	
implantable cardioverter defibrillator (ICD)	
anaphylactic allergic	



reaction	
arrhythmia	
neurostimulator	
CDC	
type 2 diabetes	
technology	
claustrophobia	
pandemic	
vaccine	

# review

Use this study sheet to keep track of the important concepts covered in this study. If you need help answering any of the questions, check with your instructor. Save these study sheets for review when preparing for quizzes and tests.

## Technology

Complete the table for each of the listed technologies

Technology	Brief description	Advantages	Disadvantages
Magnetic resonance imaging (MRI)			
Digital X-rays			

Ultrasound			
Computerized tomography (CT)			

Give examples of areas in which the Internet can have an impact on our health.

List examples of medical devices.

Type	Example
Implantable	
External	

What type of data can fitness monitors collect for us?

List technologies used to make flu vaccines.

List two methods that have been used to predict flu outbreaks.

What technologies can be used to diagnose the flu?

Identify three ways in which technology can improve access to health care.

Complete the table for each of the listed diseases. Describe the medical tests or technologies that can aid in detection.

Disease	Detection	Treatment technologies
Cancer		

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Diabetes		
Bipolar disorder		
Schizophrenia		



## 4.3.4 Project: Improving Your Community's Health

Project

Health

Name: \_\_\_\_\_

Points possible: 75

Date: \_\_\_\_\_

### Your Assignment, Part I

You are going to research the technological supports for health care in your community. Consider any technology that assists in assessing, monitoring, improving, and maintaining health for your community. Examples should include Internet resources and tools such as online scheduling services for community health providers and support groups and telephone services such as health hotlines and 911 service. Include medical technology such as ultrasounds, mammograms, X-rays, AEDs, and MRIs. Include other technologies that you find in your research.

Use resources such as the Internet, the library, or phone interviews to conduct your research.

Your research should examine the purpose, cost, benefits, and accessibility of the technologies.

Compile your research in a table that lists each technology, its purpose, its cost to use, whether it is covered by insurance, and details on accessibility (numbers and locations if individual services). Finally, write a brief assessment of accessibility issues you uncovered.

Technology	Purpose	Cost	Covered by insurance?	Accessibility


## Your Assignment, Part II

What are the obvious gaps in accessibility for any of the resources you researched? Choose an area where you would like to advocate for improved access to the resource. Identify the area of interest, and then choose a group you would like to advocate for. The group could be family members, classmates, a community service organization, or a certain patient population.

Work with your group to decide the best way to conduct your advocacy. You may choose to write a letter to a particular party, circulate a petition, hold a discussion, hold a debate, give a speech at an event, or provide public input at a city council meeting. Think of the best way to get your message to the people who will make a difference in access to the resource.

Having made these decisions, create the materials to carry out the advocacy. Identify what materials are needed, and then develop them. Your materials should justify the need for better access and should explain how better access will improve disease prevention or treatment in your community.

## Your Assignment, Part III

For the final part of this project, carry out the plans for your advocacy and report on the results. Describe what you did and the outcomes in your report. Also describe the future directions and plans for the advocacy.

### Tips for Success

*Here are some tips to keep in mind as you complete your assignment.*

- Read over the material in the unit 4 studies before answering the questions.
- Once you select a technology, do more detailed research on that technology to identify issues of access and how they might have been addressed in other locations.
- Do a final edit of the documents you have created, including checking spelling and grammar, before turning in your assessment. Have someone unfamiliar with the writing read and comment on your written materials.
- Make sure you have answered all questions sufficiently.

### Self-Assessment Checklist

*Read each question and evaluate your work. If the answer to the question is yes, check the box to the left. If the answer is no, go back and revise your work. Your teacher will use these same guiding questions to score your assignment.*

#### Quality of Ideas (25 points)

<input type="checkbox"/>	Did I demonstrate an understanding of the assignment by:
<input type="checkbox"/>	Finding entries or values for each of the locations in the research table (10 points)
<input type="checkbox"/>	Writing a complete accessibility assessment (5 points)
<input type="checkbox"/>	Including information on technology that was specifically available in my area (5 points)
<input type="checkbox"/>	Producing results that are clear to read and include no spelling errors (5 points)

#### Quality of Ideas (25 points)

<input type="checkbox"/>	Did I demonstrate an understanding of the assignment by:
<input type="checkbox"/>	Identifying effective advocacy strategies (5 points)
<input type="checkbox"/>	Having a specific stated advocacy goal (5 points)

	Providing background facts and statistics and sound logic in the advocacy materials (10 points)
	Producing advocacy materials that are grammatically correct and without spelling errors (5 points)

Performance (25 points)

	Do it!
	Carry out the stated advocacy plan (10 points)
	Follow up with responses to the advocacy materials (5 points)
	Provide a clear plan for going forward (5 points)
	Create a report that is grammatically correct without spelling errors (5 points)





## 4.4.1 Review: Disease

Study Sheet

Health

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# words

Record key terms and their definitions in the table.

Word	Definition
prediabetes	
humulin	
endoscopy	
telemedicine	
ultrasound	
magnetic resonance imaging (MRI)	
computerized tomography (CT)	
insulin pump	
glucose meter	
heart pacemaker	
implantable cardioverter defibrillator (ICD)	
anaphylactic allergic	

reaction	
arrhythmia	
neurostimulator	
CDC	
type 2 diabetes	
technology	
claustrophobia	
pandemic	
vaccine	

# review

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## Technology

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External	

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Diabetes		
Bipolar disorder		
Schizophrenia		