

# Lesson One:

## Introduction to Health

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### Objectives

1. To learn comprehensive definitions of health, health equity, and health disparities.
2. To understand how individual health behaviors and health or disease outcomes are embedded within a broad context.

### Outcomes

Students will recognize that health extends beyond the absence of disease to encompass the physical and mental well-being of individuals, which can be influenced by one's community.

1. Students will understand how social, cultural, economic, and political factors (i.e., upstream causes) can influence health behaviors and health or disease outcomes.
2. Students will understand how the unequal distribution of resources (goods/services/people) and policies can contribute to health disparities.

### Activities

Students will participate in the following three activities:

1. *Health Case Scenarios*
2. *Upstream Causes Story and Flow Chart*
3. *Unnatural Causes* documentary



# Activity 1: Health Case Scenarios

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## Purpose

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The purpose of the *Health Case Scenarios* activity is to gain an understanding of health by examining case scenarios that describe individuals whose physical and mental health differ. Because health is influenced by many individual and community factors, the case scenarios illustrate the difficulty of categorizing a person as entirely healthy or unhealthy.

## Required Materials

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The *Health Case Scenarios* activity requires the following materials:

1. Health case scenario cards (provided at the end of *Lesson One*).

Cards describe the following scenarios:

**CARD 1.** A young man, who is a high school junior and athlete, has treatable asthma that requires the use of an inhaler. His asthma sometimes results in emergency room visits and missed days of school. He has no mental health problems and lives with a supportive family in a community with excellent health care services.

**CARD 2.** A young woman, who is a high school sophomore, has no physical or mental health problems. She is engaged in social activities at school. However, she has no health insurance and lives in a crowded apartment with her extended family in a neighborhood that has high crime rates.

**CARD 3.** A young woman, who is a high school senior, struggles with suicidal thoughts after breaking up with her long-term boyfriend. She has no physical health problems, has supportive friends, and lives in a community with many resources.

**CARD 4.** A young man, who is a high school graduate, enlisted in the army when he was 19. He was severely wounded and is now a paralyzed and uses a wheelchair. He suffers from post-traumatic stress disorder (PTSD), has completed one year of rehabilitation at the Veterans Affairs Hospital, and plans to enter job training. He is single and lives in a community with many social organizations and policies that support people with disabilities.

## Instructions

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Follow the instructions below to implement the *Health Case Scenarios* activity.

**NOTE:** For all activities, students should rotate responsibilities, so that different students read or record activities.

## During Class

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Handout  
1

1. **Divide** the class into four groups.
2. **Distribute** one *Health Case Scenario Card* to each group.
  - a. One student from each group will read the assigned *Health Case Scenario Card* aloud to his/her group.
  - b. Individually, students will decide if they feel the person described in the health case scenario is healthy or unhealthy, and will justify their reasons.
  - c. Small groups will come to a consensus, and will create a comprehensive list of reasons why they feel the individual in their health case scenario is healthy or unhealthy.
3. **Reconvene** the class.
4. **Instruct** each group to read their *Health Case Scenario Card* and state their decision (healthy or unhealthy) aloud to the class.
  - a. For each health case scenario, the class will vote whether they agree with the group's decision and will discuss differences of opinion.

Q&A

5. **Pose** the questions below to facilitate a discussion.
  - a. How do you define health?

The Centers for Disease Control and Prevention, World Health Organization, and Healthy People initiative support the following definition of health:

“...a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”
  - b. What makes an individual healthy?

Examples of individual behaviors that promote health include:

    - having and maintaining a healthy diet,
    - exercising regularly,
    - not smoking,
    - obtaining preventative health services (e.g., screenings and immunizations),
    - seeking treatment when ill,
    - abstaining from violent behavior (physical and verbal), and
    - participating in meaningful activities (e.g. volunteering).

c. What makes a community healthy?

Examples of resources (goods/services/people) and policies that promote health include:

- availability of and access to healthy and affordable food,
- access to safe, affordable places to exercise (e.g., parks, sports fields, fitness centers),
- implementation of smoke-free policies in schools, restaurants, and workplaces,
- access and proximity to health and medical clinics and services,
- construction and maintenance of homes, schools, and workplaces that are structurally sound, toxin-free, and promote social interaction,
- enactment of policies that protect and enhance health (e.g., bicycle helmet, seat belt, and dog leash laws),
- fostering of cohesive, safe neighborhoods (e.g., neighbors who know and care about each other), and
- presence of social and/or religious organizations.

Handout  
2

6. **Distribute** *Characteristics of Healthy and Unhealthy Communities* list (provided at the end of *Lesson One*) for additional examples of community influences on health.

7. **Instruct** groups of students to re-examine their list of reasons for determining if the young person in their health case scenario is healthy or unhealthy. Distinguish between individual and community factors by circling individual factors and marking a square around community factors, or highlighting individual versus community factors in different colors.

Q&A

8. **Facilitate** the following discussion to teach students about health equity and health disparities.

- a. How does the unequal distribution of resources (goods/services/people) and policies—like the community-based factors described in students' lists from the health case scenarios—affect the health of individuals in different ways?

Examples include:

- tobacco advertisements may influence its residents to smoke,
- fast food restaurants that sell high-fat, high-sugar food in a community may encourage residents to purchase unhealthy meals and forego a balanced diet,
- facilities for extracurricular activities (e.g., parks, sports fields, fitness centers) may encourage residents to be physically active,

- fluoridated water may improve the oral health of residents, and
- pedestrian-friendly sidewalks and bike lanes may increase walking and bicycling.

b. What do you think the terms “health equity” and “health disparities” mean?

The Centers for Disease Control and Prevention, World Health Organization, and Healthy People initiative support the following definitions:

*Health Equity:* “When all people have the opportunity to ‘attain their full health potential’ and no one is ‘disadvantaged from achieving this potential’ because of their social position or other socially determined circumstance.”

*Health Disparities:* “A type of difference in health that is closely linked with social or economic disadvantage. Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health. These obstacles stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socioeconomic status, gender, mental health status, sexual orientation, or geographic location. Other characteristics include cognitive, sensory, or physical disability differences in health along social, economic, and racial or ethnic lines.”<sup>1</sup>

c. In this *Curriculum* you will learn what factors affect health and develop projects where you advocate for healthy communities. In what ways might you address health equity and health disparities in your communities?

Examples include:

- attending a city council meeting and testifying for the allocation of funding to revitalize and maintain sports fields or parks, which in turn allows residents to exercise safely and more frequently,
- lobbying school administration to staff school recreational facilities that are otherwise closed after hours because of a lack of adult supervision, and
- collecting signatures from classmates, families, and neighbors in support of initiatives for health-related ordinances (e.g., no soda in school, a tax increase on cigarettes or high-sugar beverages, creation of farmers’ markets, development of a violence prevention task force).

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1 U.S. Department of Health and Human Services, Healthy People 2020 Draft. (2009). U.S. Government Printing Office

## Activity 2: Upstream Causes Story and Flow Chart

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### Purpose

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The purpose of the *Upstream Causes Story and Flow Chart* activity is to illustrate the concept of upstream causes of health.

### Required Materials

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The *Upstream Causes Story and Flow Chart* activity requires the following materials:

1. *Upstream Causes Story Card* and *Upstream Causes Story Flow Chart* for each student in class (provided at the end of *Lesson One*).
2. Chart paper.
3. Markers.

## Instructions

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Follow the instructions below to implement the *Upstream Causes Story and Flow Chart* activity.

**NOTE:** It is helpful to understand and identify upstream causes by first examining an outcome related to a disease or state of health and then working backwards to determine what ultimately may have caused or prevented the disease. For example: What is the health or disease outcome? What risk factors led to or protected someone from having the disease? What individual behavior choices caused or prevented the risk factors from happening? What community influences contributed to individual behavior choices? What goods, services, resources, and policies—or lack of—created those community influences? Refer to the *Upstream Causes Flow Chart—Additional Examples* for further illustration of this concept.

Handout  
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1. **Distribute** *Upstream Causes Story Card* to each student.
2. Instruct the students to read it individually.
3. **Read** the following definition to students:

Read

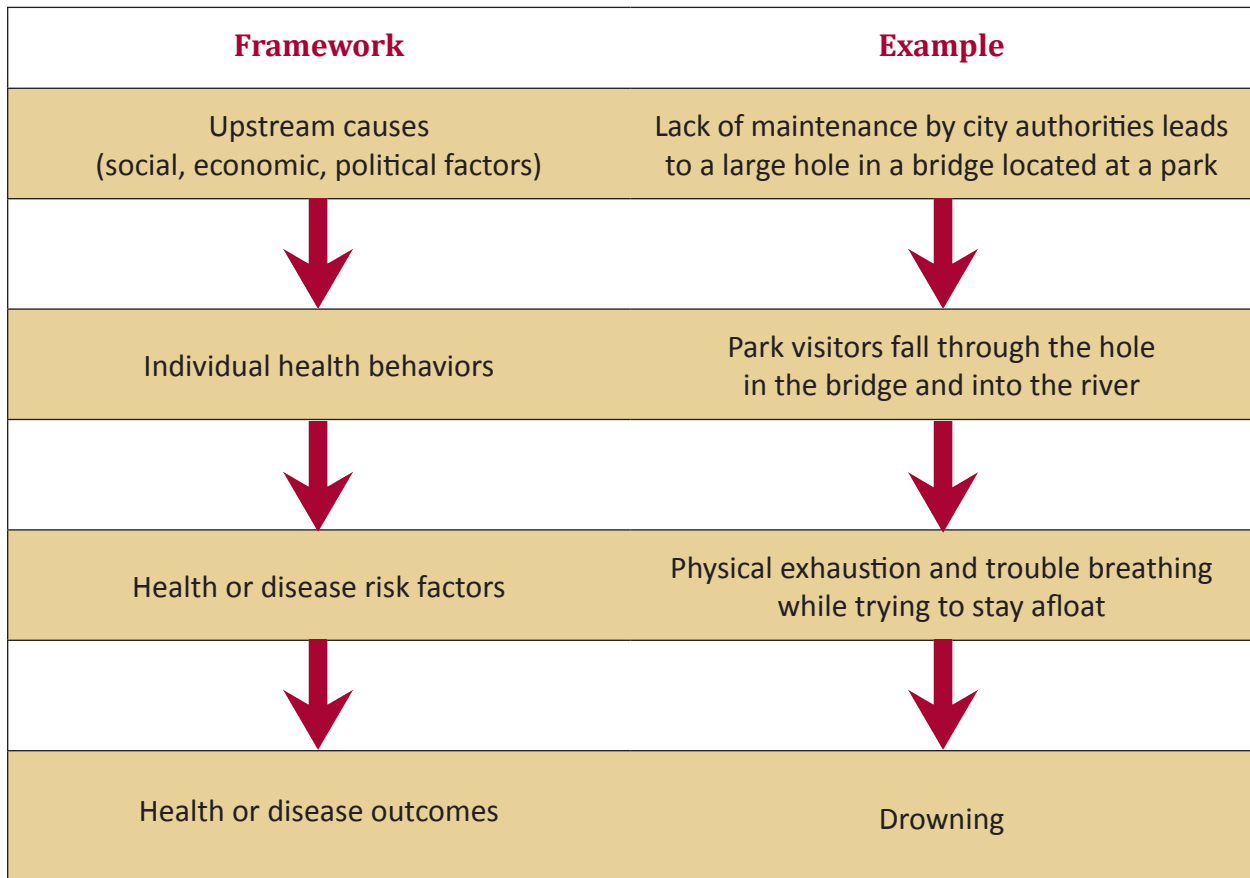
Upstream causes are the root causes of health and disease outcomes—the social, economic, or political factors that affect health as much as or more than genetics or individual behavior/lifestyle choices. Understanding and addressing upstream causes is the hallmark of public health.

4. **Use** the *Upstream Causes Flow Chart—Upstream Causes Story* and *Upstream Causes Flow Chart—Additional Examples* to describe how the pathway of upstream causes (i.e., social, economic, and political factors affecting behavior choices affecting risk factors affecting health outcomes) applies to this story as well as to other health issues. Optionally, you may **distribute** blank flow charts (provided at the end of *Lesson One*) to each student for them to fill in during your explanation.

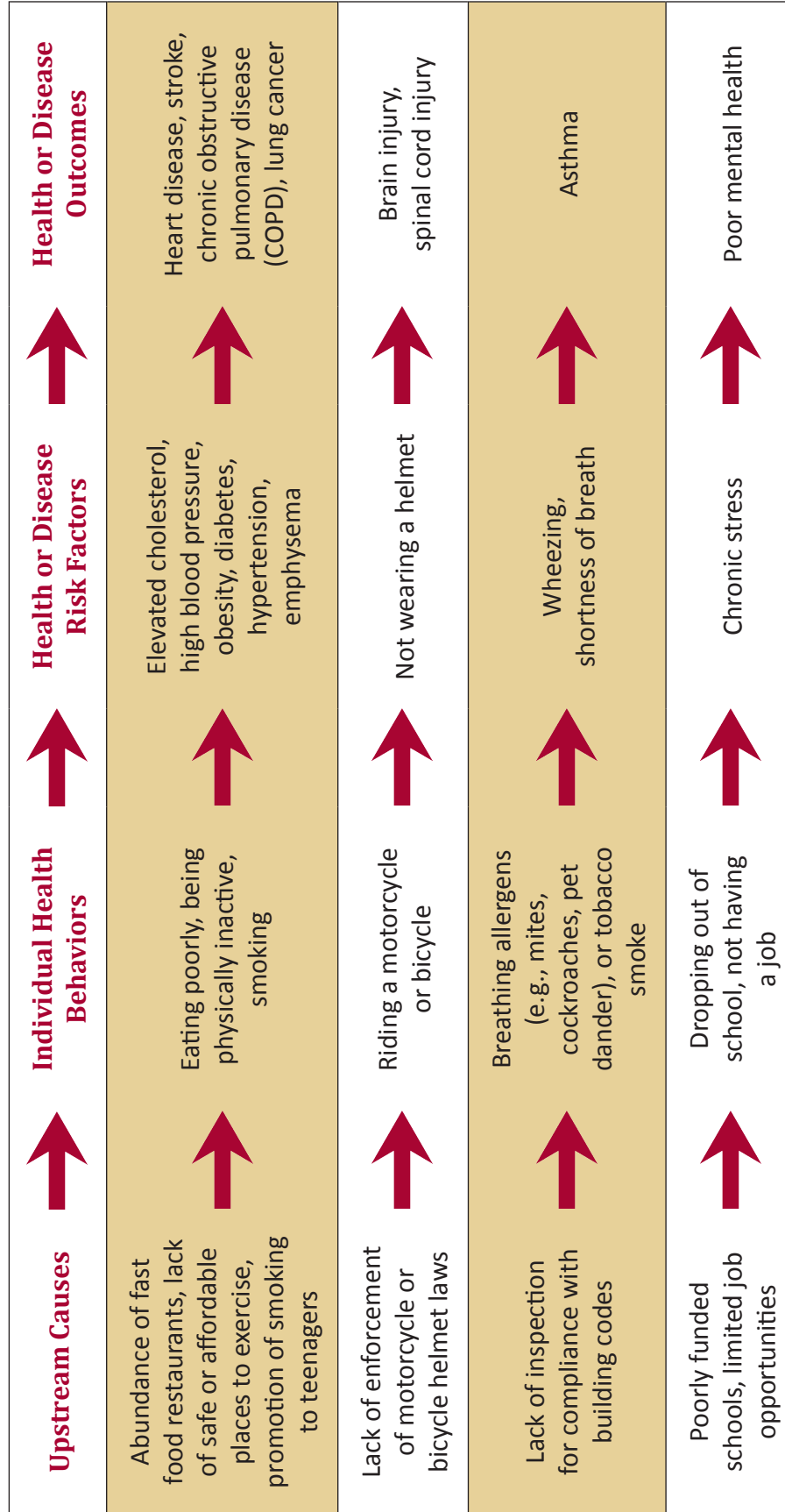
Handout  
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## Upstream Causes Flow Chart: Upstream Causes Story



## Upstream Causes Flow Chart: Additional Examples



## Activity 3: *Unnatural Causes* Documentary

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### Purpose

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The purpose of the *Unnatural Causes Documentary* activity is to further educate students about how upstream causes impact the health of individuals and communities.

### Required Materials

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The *Unnatural Causes Documentary* activity requires the following materials, which can be purchased from the *Unnatural Causes* website or borrowed from your local library. Given that you must obtain the documentary, this activity is optional but encouraged.

1. *Unnatural Causes* documentary, *Episode One—In Sickness and Wealth*<sup>2</sup>  
(56 minutes)

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2 California Newsreel (Producer) (2008). *Unnatural causes. Discussion guide. Episode 1: In sickness and in wealth.* [PDF] Retrieved from [http://unnaturalcauses.org/assets/uploads/file/UC\\_DiscussionGuide\\_1.pdf](http://unnaturalcauses.org/assets/uploads/file/UC_DiscussionGuide_1.pdf)

## Instructions

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Follow the instructions below to implement the *Unnatural Causes Documentary* activity.

## Prior to class

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1. **Obtain** a copy of the *Unnatural Causes* documentary by purchasing it from the Unnatural Causes website ([www.unnaturalcauses.org](http://www.unnaturalcauses.org)) or borrowing it from your local library.
2. **Arrange** technology resources needed to view *Unnatural Causes* documentary.
3. **Refer** to the *Unnatural Causes* website ([www.unnaturalcauses.org](http://www.unnaturalcauses.org)) for background information and supporting materials.

## During class

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1. **Show** the *Unnatural Causes* documentary to class.
2. **Facilitate** a discussion using the questions below (adapted from the *Unnatural Causes* website):
  - a. What employment, education, housing, transportation, or other policies promote or hinder healthy choices and health equity? What obstacles and opportunities exist in enacting such policies?
  - b. Why is it important to link individual responsibility and social determinants of health within the same context? How does that link affect possibilities for change? What will happen if a community focuses exclusively on the individual instead of the society as a whole?
  - c. In the documentary, destiny is defined as the “ability to influence the events that impinge on your life.” What does this mean? How is the ability to influence events in your life related to your health?
  - d. Why is it helpful to promote prevention measures before people get sick rather than only providing treatment after people get sick?

## Health Case Scenario: Card 1

Since childhood, Jose has suffered from asthma. He experiences difficulty breathing as well as nighttime coughing spasms. Using an inhaler is second nature, as he never leaves home without it. Despite his chronic illness, Jose is determined to live an active lifestyle like his friends. He is a star basketball player for the high school team and plays for club teams during the off-season. He has been part of the starting line-up since freshman year. As a junior, he held the school record for the most three-point shots during a game. He has been MVP twice and is expecting to be elected captain his senior year. Such achievements are deserved as Jose is always practicing—either running sprints or shooting hoops—even outside of scheduled gym time. However, Jose often misses school for doctors' appointments and for visits to the emergency room.

Jose's mother also has asthma and worries about her son. Fortunately, the hospital is a short drive from their home and her work schedule allows her to take him there whenever needed. The family has established a relationship with the doctors and nurses on staff. They are always prepared to see Jose and treat his condition. Jose's family's insurance, provided by his father's employer, covers the latest inhalers and medication. His asthma, though problematic, is treatable and his health care expenses are affordable. He remains, however, at risk for severe asthma attacks that can require either extra medication or other interventions to help him breathe normally. While these severe asthma attacks are rare for Jose, they are potentially life threatening.



## Health Case Scenario: Card 2

Allison, a sophomore, has a packed schedule with school and work, but also finds time for extracurricular activities. She works at a community food pantry every weekend where she helps package food baskets for those in need. Allison is interested in becoming an ultrasound technician and shadows staff at the local hospital for three hours each week. She loves her volunteer position and knows that she needs to focus on academics to pursue a career in the health care field; as a result, she tries to attend all classes and complete her homework. Allison spends her spare time socializing with friends.

Allison's home life is chaotic. Her aunt and two cousins experienced financial hardship. Six months ago, they moved into Allison's family's apartment. Because of this, Allison and her sister share a bedroom with their younger cousins. Without a quiet space to do homework, studying has become challenging and Allison's grades are beginning to slip. The school library is open only during school hours and the city library closes in the evenings. Allison's schedule only allows access to a computer during her lunch period. Although she is an appropriate weight for her height, Allison has always been concerned about her figure and is constantly dieting. For this reason, she doesn't mind skipping meals and tries to finish her homework during her lunch period. Allison's mother cooks meals for the entire family every evening. To stretch the family's food budget, ingredients for dinner are limited and tend to be high in fat, sodium, and sugar, and low in protein, fruits, and vegetables. Between school and extracurricular activities, Allison typically doesn't arrive home in time to eat with her family. There is an abundance of fast food restaurants near school and in her neighborhood, though, so grabbing dinner on the go is easy. If she is still hungry before bed, her mother always saves a plate of food for her.

Allison's mom wishes she were home more often. Not only does she miss her during family dinners, but she worries about Allison coming home so late. Cutbacks in the city budget have led to fewer operating buses, especially at night. Allison waits at the bus stop across town for undetermined amounts of time. She then walks six blocks home, mostly in the dark, as there are few functioning streetlights in her neighborhood. There have been purse snatchings and a spike in gang activity, so when Alison walks home alone, it makes her mom nervous. City budget cutbacks have also led to a reduction in the police force and neighborhood patrols if Allison encounters problems.





## Health Case Scenario: Card 3

Tasha met David when he moved to town in the eighth grade. They were homeroom friends and she was assigned as his tour guide at their middle school. She helped him find his classes and introduced him to her friends and teachers. They began dating two years later when David asked Tasha to a friend's party. Now, as high school seniors, David and Tasha are planning for the future. David wants to move in with his father who lives out-of-state and work at his construction firm, while Tasha wants to attend the local community college. They fight over the differences in their life plans and eventually break up. Tasha's response to their breakup escalates from sadness to anger to thoughts of suicide. She has caring parents and a sister with whom she is close. Despite her supportive family, Tasha feels lost without David. Many days she feels that she would rather take her own life than move on without him. To keep herself occupied, she remains active in school and helps organize school events. She continues to run three miles daily in her neighborhood after school which relieves some stress.

After several weeks, Tasha confides to her best friend Lien about her suicidal feelings. Lien is conflicted about how to help. Tasha has health insurance and can seek help at a local mental health clinics or attend a support group for teens, but she is not interested. Lien is tempted to tell Tasha's parents; her mother is a social worker and knows helpful experts, but Lien feels uncomfortable and decides not to tell Tasha's parents. Instead, Lien uses the school's computer system to schedule an appointment with a counselor at the on-campus health clinic. The following morning she meets with a counselor and creates a plan to help her friend.



## Health Case Scenario: Card 4

Upon completing high school, Jeffrey served overseas in the US Armed Forces for two years. He had considered joining the military for some time. He never expected the experience to be as intense as it was nor did he anticipate getting injured. In the war zone, Jeffrey witnessed the deaths of his comrades. Just before his tour ended, he nearly died when a land mine exploded, paralyzing his legs and leaving him severely wounded. He returned home and lives with his older sister, who works day shifts as a retail sales clerk. The Veterans Affairs Hospital is located nearby and arranges daily visits by a physical therapist to help Jeffrey regain daily functions. When his health improves, Jeffrey plans to enter a job training program for veterans with disabilities. Jeffrey's city accommodates individuals with disabilities; there is wheelchair access to most buildings and sidewalks. As a result, he spends his free time meeting friends at coffee shops and reading at the library.

Jeffrey is also a member of a basketball team for young athletes in wheelchairs. A wheelchair-accessible bus takes athletes to gyms in the surrounding communities. Jeffrey was physically active before the war and appreciates the opportunity to be in a gym again. In addition, he made several friends. Attendance and enthusiasm are high, but lack of funding may jeopardize the sustainability of the program.

Although Jeffrey is steadily recovering from his physical injuries, he suffers from post-traumatic stress disorder (PTSD) and often has severe flashbacks. Many nights he wakes in terror, remembering his experiences in the war zone. Despite the large number of veterans who experience similar PTSD symptoms, Jeffrey feels stigmatized by his disorder and has yet to seek help. A nearby Veterans Connect program for soldiers and families seeking mental health care requires daytime transportation. Though Jeffrey is interested in attending the program, he lacks transportation to the hospital.



## Characteristics of Healthy and Unhealthy Communities

Healthy Community	Unhealthy Community
The air in this community is smog-free and the water is not polluted.	A factory located in this community emits toxins into the air and hazardous waste into the water.
The streets in this community are lined with trees and flowering shrubs.	The sidewalks in this community have cracks, the streets have potholes, and there are few plants and trees.
There are street lights, dog leash laws, and neighborhood crime watches in this community.	There are few streetlights, many dogs are not on leashes, and vandalism is rampant in this community.
There is an abundance of parks in this community, each equipped with tennis and basketball courts, functioning water fountains, and trash and recycling bins.	Recreational facilities in this community have few or poorly maintained amenities, without restrooms and functioning playground equipment.
This community sponsors a variety of organized cultural and social programs available to residents of all ages.	This community offers few cultural or social programs, or only for select groups of people.
This community offers mixed income residences to own or rent, most of which are well maintained.	Many neighborhood lots in this community are abandoned and houses or apartments are rundown.
Transportation is efficient. Walking or bike paths are well-maintained and connect main shopping and residential areas.	Public transportation is unreliable in this community and walking or bike paths have not been developed.
Hospitals, medical clinics, doctors' and dentists' offices, and pharmacies can be found in this community.	There are limited health care services in this community for people of all income levels. Many residents rely on hospital emergency rooms for care.

## Characteristics of Healthy and Unhealthy Communities (continued)

Healthy Community	Unhealthy Community
The high school in this community offers extracurricular activities to students, such as drama clubs, student government, and intramural sports.	At the high school in this community, extracurricular activities are either not offered or are only used by certain students.
This community hosts weekly markets where local farmers sell fresh produce at affordable prices.	Produce is only available at corner convenience stores where it is poor quality, or in grocery stores in other neighborhoods.
There are few fast food restaurants in this community, and all display nutrition information on menus.	There are many fast food restaurants in this community, and none post nutritional information visible to consumers.

## Upstream Causes Story Card

Imagine you are walking along a riverbank at a local park when you notice a woman drowning just off shore. You jump in to save her. Just as you pull her from the water, you notice a man also struggling to stay afloat, and you rescue him too. The pattern continues: more individuals are at risk of drowning, and you rescue them. Becoming an impromptu lifeguard is exhausting and you fear that you cannot save everyone floating past you, especially with the strong river current. You realize you should investigate why these individuals are falling into the water in the first place – perhaps identifying the primary reason for them falling in the water will allow you to stop the problem at the source and save lives. You walk upstream and discover a bridge connecting two areas of the park. Upon close inspection, you notice a large uncovered hole in the bridge – precisely where unsuspecting individuals are falling. You immediately contact city authorities to request that they repair the hole. You suggest that they monitor their parks to prevent similar disasters.





# Upstream Causes Flow Chart

Framework

Example





# Upstream Causes Flow Chart

