Lesson Ten: 
Upstream Causes and Health Advocacy Review

Objective

1. To review upstream causes of health and disease.
2. To reiterate the importance of using social advocacy to enact change in a community.

Outcome

1. Students will more fully understand how social, economic, and political factors (i.e., upstream causes) influence individual health behaviors, which in turn affect risk factors and health or disease outcomes.
2. Students will be prepared for and motivated to engage in social advocacy efforts that improve the health of their community.

Activity

Students will participate in the following two activities:

1. Upstream Causes Pathway
2. Project Reflection
Activity 1: Upstream Causes Pathway

Purpose
The purpose of the Upstream Causes Pathway activity is to strengthen students’ understanding of the pathway that connects social, economic, and political factors to individual health behaviors, risk factors, and health or disease outcomes. This activity simultaneously reinforces information learned about specific health topics discussed throughout the curriculum.

Required Materials
The Upstream Causes Pathway activity requires the following materials:

1. One ream of 8.5 x 11 inch paper or one package of index cards.
2. Pens.
Instructions

Follow the instructions below to implement the *Upstream Causes Pathway* activity.

**Prior to Class**

Using health topics discussed during previous class activities (e.g., *Upstream Causes Flow Chart* or *Root Causes Tree*) and students’ health advocacy projects, create sets of *Upstream Causes Pathways* cards that will show the interconnectedness of upstream factors and health and disease outcomes. Cards will represent social, economic, and political factors, individual behavior choices, health or disease risk factors, and health or disease outcomes.

**NOTE:** Health or disease outcome may be defined broadly, such as outcomes related to mental health (e.g., chronic stress, depression), environmental health (e.g., air, water, soil, housing, pollution), education (e.g., low literacy, school drop-out, limited occupational skills), injury (e.g., sports, automobile, bicycle and skateboarding accidents, domestic violence).

Student learning will be enriched by maximizing the number of upstream causes, individual behavior choices, risk factors and health or disease outcomes described in each set of cards. There may be multiple upstream causes, risk factors, and health or disease outcomes causes per set.

The number of *Upstream Causes Pathway* sets will depend on the number of students in your class and division of student groups.

Alternatively, examples have been provided at the end of *Lesson Ten* and can be used directly.

**During Class**

1. **Divide** students into small groups according to the number of *Upstream Causes Pathway* sets.

2. **Distribute** one set of *Upstream Causes Pathway* cards to each group.

3. **Explain** to students that they will arrange cards according to the pathway of upstream causes of health, such as was done in *Upstream Causes Flowcharts* in previous lessons. In other words, they will lay the cards sequentially, according to the social, political, and economic factors that influence individual behaviors, which in turn influence risk factors and health or disease outcomes.

To further explain the activity, complete one pathway together as a class. Begin by stating a health or disease outcome and work backwards, constantly asking questions such as why did this happen or what was the cause, until you have a pathway that connects social, economic, and political factors to individual behavior choices to health or disease outcomes.
The flowchart below is duplicated from Lesson 2 Activity 4: Diabetes Detectives: A Case Study of Upstream Causes of Health. It includes probing questions that explain the connections among each level of the upstream causes pathway.

**Example**

<table>
<thead>
<tr>
<th>Upstream Causes</th>
<th>Individual Behavior Choice</th>
<th>Health or Disease Risk Factor</th>
<th>Health or Disease Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building of a dam, removal of water rights, changes in farming practices, government subsidies supporting unhealthy foods</td>
<td>Inability to grow healthy foods, consuming processed and high caloric foods from government food subsidies, farming less and being less active</td>
<td>Obesity, diabetes</td>
<td>Heart attack, stroke, hypertension, blindness, amputation</td>
</tr>
</tbody>
</table>

4. When students complete their Upstream Causes Pathway, **instruct** groups to rotate to review the Upstream Causes Pathway of another group and ask them to answer the following questions:
   a. Do you agree with pathway? How would you arrange the sequencing of the cards differently?
   b. What other factors could be added in the pathway?
   c. What social advocacy efforts could be used to address this health issue? Add your suggestions to a blank card.

5. Student groups will share their responses with the group who originally created the Upstream Causes Pathway and discuss any differences of opinion.

6. Each group will share responses out loud to the class.
7. **Suggested sequencing of Upstream Causes Pathway cards are listed below (by categories: health or disease risk factors or outcomes; individual behaviors; upstream causes). Cards within each category can be arranged in any order.**

**Oral Health**

a. Health or disease risk factors or outcomes
   - Cavities in teeth

b. Individual behaviors
   - High consumption of sweetened foods and beverages
   - Inconsistently brushing teeth and not flossing

c. Upstream causes
   - Lack of fluoridated water
   - Limited education about the importance of dental hygiene
   - No affordable dental insurance for regular dental cleanings and check-ups

**Mental Health**

a. Health or disease risk factors or outcomes
   - Suicide

b. Individual behaviors
   - Depression

c. Upstream causes
   - Bullying from peers at school or on the Internet
   - Family history of depression
   - Inadequate access to mental health counseling and services or medical care
   - Inadequate insurance for medical care
   - Stressors at home or school

**Injury Prevention #1**

a. Health or disease risk factors or outcomes
   - Homicide

b. Individual behaviors
   - Carrying a handgun
   - Drive-by shooting
   - Member of a gang

c. Upstream causes
   - Budget cutbacks cannot fund extracurricular or academic programs for youth
   - Discrimination against ethnic or other group
   - Few positive programs for youth
• Lack of a sense of belonging to a group
• Lack of handgun regulations and enforcement

**Injury Prevention #2**

a. Health or disease risk factors or outcomes
   • Automobile accident
   • Paralysis or death

b. Individual behaviors
   • Driving under the influence of alcohol or illicit substances
   • Not wearing a seatbelt
   • Speeding
   • Talking on cell phone or texting while driving

c. Upstream causes
   • Availability of alcohol and illicit substances to minors
   • Lack of and/or poor enforcement of traffic safety laws

**Chronic Disease**

a. Health or disease risk factors or outcomes
   • Diabetes
   • Heart disease
   • High blood pressure
   • High cholesterol
   • Obesity
   • Stroke

b. Individual behaviors
   • High consumption of unhealthy foods and beverages, such as chips, candy, processed snacks, and soda

c. Upstream causes
   • Abundance of fast food restaurants and corner stores selling unhealthy foods and beverages
   • Government subsidies for farmers growing corn, which is used to produce unhealthy processed foods and sugary beverages
   • Inexpensive cost of unhealthy foods and beverages, such as chips, candy, processed snacks, and soda
Activity 2: Project Reflection

Purpose

The purpose of the *Project Reflection* activity is to review key concepts learned in previous lessons, particularly upstream causes and social advocacy.

Materials Needed

The *Project Reflection* activity requires the following materials:

1. Paper and pen for each student.
Instructions

Follow the instructions below to implement the Project Reflection activity.

Prior to Class

1. **Display** the following quotations for students (on the board or projector):

   “Of all the forms of inequality, injustice in health is the most shocking and the most inhumane of all.” – Martin Luther King, Jr.

   “A small body of determined spirits fired by an unquenchable faith in their mission can alter the course of history.” – Mahatma Gandhi

   **NOTE:** Feel free to use additional inspirational quotations related to public health and health or social advocacy.

During Class

1. **Instruct** students to provide a written response to the following questions:
   a. How do the displayed quotations relate to the main curriculum themes of: 1) Upstream Causes of Health, and 2) Health and Social Advocacy?
   b. What did you learn from the classroom- and community-based activities that impacts your own health and the health of your community?
   c. How will you use the knowledge and skills gained from this curriculum to improve your own health behavior choices and the health of your community?
Upstream Causes Pathways Cards

Cavities in teeth

High consumption of sweetened foods and beverages

Inconsistently brushing teeth and not flossing

Lack of fluoridated water

Limited education about the importance of dental hygiene

No affordable dental insurance for regular dental cleanings and check-ups

Oral Health

Oral Health

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Oral Health

Oral Health

Oral Health
Suicide

Bullying from peers at school

or on the Internet
Suicide

Bullying from peers at school or on the Internet

Inadequate access to mental health counseling and services or medical care

Stressors at home or school

Depression

Family history of depression

Inadequate insurance for medical care

Mental Health

Mental Health

Mental Health

Mental Health
Homicide

Drive-by shooting

Budget cutbacks cannot fund extracurricular or academic programs for youth

Few positive programs for youth

Lack of handgun regulations and enforcement

Carrying a handgun

Member of a gang

Discrimination against an ethnic or other group

Lack of a sense of belonging to a group

Injury Prevention #1

Injury Prevention #1

Injury Prevention #1

Injury Prevention #1

Injury Prevention #1

Injury Prevention #1
Injury Prevention #2

Automobile accident

Paralysis or death

Driving under the influence of alcohol or illicit substances

Not wearing a seatbelt

Speeding

Talking on cell phone or texting while driving

Availability of alcohol and illicit substances to minors

Lack of and/or poor enforcement of traffic safety laws
<table>
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<th>Heart Disease</th>
</tr>
</thead>
<tbody>
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<td><strong>Chronic Disease</strong></td>
<td><strong>Chronic Disease</strong></td>
</tr>
<tr>
<td><strong>High blood pressure</strong></td>
<td><strong>High cholesterol</strong></td>
</tr>
<tr>
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</tr>
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<td><strong>Stroke</strong></td>
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