Lesson Three:
Environmental Hazards and Regulatory Measures

Objective

1. To use a news article to examine how environmental hazards (related to air, food, water, soil, manufactured items, and physical structures) affect individual health behaviors and health or disease outcomes.

2. To become aware that individuals and communities can express their opinions to policy makers and other authorities to address environmental and other hazards that affect their health.

3. To practice writing advocacy letters to local civic leaders, government officials, and/or school administrators.

Outcomes

1. Students will learn to analyze environmental hazards and other health issues in the media from a public health perspective.

2. Students will write a letter to local civic leaders, government officials, and/or school administrators to express their concern about a health issue facing their community, and suggest how it could be addressed, especially via youth advocacy.

3. Students will provide constructive feedback to each other about their advocacy letters.

4. Selected letters will be mailed to local civic leaders, government officials, and school administrators.

Activities

Students will participate in the following two activities:

1. Health in the News

2. Speaking Out: Writing Advocacy Letters
Activity 1: Health in the News

Purpose

The purpose of the Health in the News activity is for students to locate a news article about an environmental hazard and identify the social, economic, or political factors (i.e., upstream causes) that may contribute to the hazard and impact individual health behaviors and health and disease outcomes.

Required Materials

The Health in the News activity requires the following materials:

1. News articles from newspapers, magazines, online forums, etc. (brought in by instructor and each student).
2. Root Causes Tree (provided at the end of Lesson Three and copied for each student).
Instructions

Follow the instructions below to implement the Health in the News activity.

Prior to class

1. **Explain** the purpose of the assignment to students, and instruct them to bring in one news article related to an environmental hazard, specifically one that addresses how air (e.g., pollution), food (e.g., Salmonella, E.coli), water (e.g., industrial waste), soil (e.g., animal waste contamination), manufactured items (e.g., lead in cooking utensils), or physical structures (e.g., asbestos) may affect the health of individuals. To frame the activity and help students choose an article that will be most useful during the activity, **distribute** the Environmental Health Matrix to students (provided at the end of Lesson Three).

2. **Refer** to resources such as the National Resources Defense Council ([http://www.nrdc.org](http://www.nrdc.org)) or Environmental Protection Agency ([http://www.epa.gov](http://www.epa.gov)) for additional information.

During class

1. Use notes below to **reiterate** the purpose of and **explain** directions for this activity:
   a. Public health professionals view health in the context of a community. Instead of blaming individual people for making poor health behavior choices, public health professionals examine and work towards improving the resources (goods/services/people) or policies in a community. This enables individuals to make informed health behavior choices, promote health or reduce disease outcomes, and improve health equity across populations.
   b. This activity requires students to find a news article about an environmental hazard and, using a public health lens, identify the social, economic, and political factors that contribute to health and disease outcomes associated with that hazard. This activity helps teach students to identify and address the upstream causes leading to poor health, instead of blaming the individual.

2. **Provide** students time to read their articles. **Instruct** them to answer the following questions:
   a. Summarize the article, including key points like who, what, where, when, and why.
   b. What is the significance of the article (i.e., why is it important to know about this environmental hazard)?
c. How does the environmental hazard described in the article contribute to health and disease risk factors and health and disease outcomes?

d. Is any important information missing? What additional facts could help you better understand the whole story?

e. Does the article describe social, economic, and/or political reasons for the hazard discussed, or does it imply that individuals are to blame?

f. Does the article recommend what can be done to address this environmental hazard?

g. Who is responsible for and what can be done to solve this environmental hazard?

h. What are the health, social, economic, and political consequences of not taking action?

3. **Instruct** students to transfer key points from their article analysis to the *Root Causes Tree* (provided at the end of *Lesson Three*) to illustrate the upstream causes of the environmental hazard described in their article. Discuss results in class.

4. **Tell** students to save their articles, root causes trees, and any notes as these will be necessary to complete *Activity 2: Speaking Out: Writing Advocacy Letter*. 
Activity 2: Speaking Out: Writing Advocacy Letters

Purpose

The purpose of the Speaking Out: Writing Advocacy Letters activity is to practice social advocacy by having students write letters to local civic leaders, government officials, and/or school administrators to express concerns about environmental hazards that affect the health of their community. News articles used in the Health in the News activity will serve as the basis for the letter content.

Required Materials

The Speaking Out: Writing Advocacy Letters activity requires the following materials:

1. News articles used in the Health in the News activity (which will serve as the basis for the letter content).
2. Writing an Advocacy Letter instructions, template, and sample.
Instructions

Follow the instructions below to implement the Speaking Out: Writing Advocacy Letters activity.

Prior to Class

1. Ask students to bring their news articles, Root Causes Tree, and article analysis from Activity 1: Health in the News, to class.

During Class

1. Explain that writing letters to local civic leaders, government officials, and/or school administrators is a powerful and effective advocacy strategy that allows individuals and communities to raise awareness, express their opinions, and enact change.
   a. Each student will write a letter in response to the environmental hazard described in his/her news article (from activity one, Health in the News).

2. Distribute the Writing and Advocacy Letter instructions, template, and sample to students and instruct them to follow directions to draft a letter to a relevant civic leader, government official, and/or school administrator, using the content of their news article as the basis for their letters.

3. Divide students into groups based on topic areas identified in their articles/letters (e.g., air, water, food).

4. Instruct students to swap letters with group members and to provide each group member with feedback by answering the questions below.
   • Does the letter clearly describe how the environmental hazard affects the health of the community?
   • Does the letter suggest what can be done to address the environmental hazard and does the author offer to participate in the solution?
   • Does the letter include all essential components, such as address, signature, etc.?
   • Is the letter respectful and professional?
   • Is the letter likely to be read by the recipient?
   • What could be added to enhance the letter?

5. Each small group will select the most compelling letter to mail, one that they feel may lead to change. Final letters will be revised and mailed or emailed. Post final letters on the classroom wall for students to read. Subsequent responses from civic leaders, government officials, and/or school administrators should be discussed and appropriate follow-up should be planned.
# Environmental Health Matrix

<table>
<thead>
<tr>
<th>Category of Hazard</th>
<th>Specific Hazard Site</th>
<th>Hazard</th>
<th>Consumer Protection Regulatory Measure</th>
<th>Health/Disease Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air</strong></td>
<td>Homes, schools, and workplaces near polluted air</td>
<td>Particulates from factories, pesticides from crop dusting, noise and exhaust pollution</td>
<td>Create and enforce zoning laws to keep homes, schools, and workplaces safe from air pollution, promote Spare the Air days, use less polluting energy resources</td>
<td>Asthma, respiratory problems hypertension, stress</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>Drinking supplies, natural bodies of water, swimming areas</td>
<td>Pesticides, animal/human waste, sewage, oil, improper chemical levels</td>
<td>Establish water purification standards, conduct regular and governmental approved testing, organize community-wide clean up</td>
<td>Giardiasis, gastrointestinal problems, parasites, flu, diarrhea, skin rashes</td>
</tr>
<tr>
<td><strong>Soil</strong></td>
<td>Dumps, manufacturing plants, construction sites</td>
<td>Corroded computers or batteries, pesticide or chemical run-off</td>
<td>Require and make available safe disposal options for corrosive materials, implement systems to catch polluted water run-off</td>
<td>Gastrointestinal problems, cancer</td>
</tr>
<tr>
<td><strong>Food</strong></td>
<td>Meat, dairy, fruit, vegetables</td>
<td>Contaminated irrigation sources (via feces or sick animals), pesticides, inadequately prepared food</td>
<td>Establish government oversight at commercial sites to limit number of animals raised and slaughtered together, decontaminate soil, enforce safe monitoring of food</td>
<td>Gastrointestinal problems due to Salmonella or E. coli</td>
</tr>
<tr>
<td><strong>Manufactured Items</strong></td>
<td>Eating and cooking utensils, toys, electronics, automobiles, clothing, cleaning products</td>
<td>Carcinogenic coatings, inappropriately sized objects for age of use, unsafe automobiles, flammable materials, toxic chemical composition</td>
<td>Mandate warning labels, hold community-wide child safety education programs, enforce car manufacturing safety standards, regulate chemicals in cleaning products, announce recalls immediately</td>
<td>Injury, choking, skin rashes, respiratory problems, lead poisoning, cancer</td>
</tr>
<tr>
<td><strong>Physical Structures</strong></td>
<td>Schools, homes, work places, recreational sites/playgrounds</td>
<td>Lack of earthquake and fire standards, lead paint, radon, asbestos, unsafe equipment</td>
<td>Update and reinforce building codes, market at-home chemical testing, repair school equipment</td>
<td>Injury, mental impairment, respiratory diseases</td>
</tr>
</tbody>
</table>
Root Causes Tree

Health and Disease Outcomes

Individual Behaviors

Upstream (or Root) Causes

Outcomes

Causes

Behaviors
Writing an Advocacy Letter

Do you have an opinion about an issue facing your community? Would you like to tell someone who could help make a difference? Would you like to raise awareness about this issue among your family, friends, and community members, and get them involved? Writing a letter to a local civic leader, government official, and/or school administrator is a perfect solution. Follow the steps below and begin to advocate!

What do I write about?

- Today, write a letter in response to the article you brought to class for the first activity. Generally, when writing to a civic leader, government official, and/or school administrator you may write about any cause for which you are passionate and that needs action.
- You can write to address and provide feedback about a problem or to thank a civic leader, government official, and/or school administrator for supporting something positive.

Who do I write to?

- Find the name of your local civic leaders, government officials, and/or school administrators by asking adults at your school or at home, by reading the local newspaper, or by conducting internet research. If your article is not about a local issue, identify civic leaders, government officials, school administrators, or other relevant people who live near or are involved in the environmental hazard.
- Websites such as usa.gov, govtrack.us, opencongress.org, or your city's council/Chamber of Commerce will list necessary contact information including full name, title, and address. Copy the address exactly as listed.

What should my letter say?

- Introduce yourself (e.g., your grade in school, name of your school, where you live).
- Summarize the issue, including what it is, what has or has not been done to address it, how long it has been a problem.
- Describe how the issue impacts you, your school, and/or your local community.
- Ask for a response and say thank you.
- Credit references; if you cite other articles or people, be sure to use quotations (no plagiarism!).
- Sign your letter.

General writing rules and tips:

- Be specific and concise.
- Emphasize only your main point so that you don’t distract the reader with other topics and thus dilute your goal.
- Be clear and direct about the issue, your opinion, and your suggestions; if your letter is vague then you may receive a vague and unhelpful response (which is not what you want!).
- Limit to one page; civic leaders, government officials, and school administrators are often busy and may not have time to read more than one page.
- Be creative, yet realistic – unique letters will garner attention, but if your ideas are unattainable, such as suggesting free drinks for students every Friday at lunch, then your letter and opinions may not be taken seriously and may be dismissed.
What should my letter look like?

- See *Template Letter* and *Sample Letter*.

Other things to remember:

- Ask a teacher or another adult to review your letter before you send it – it is always helpful to have another person read for spelling mistakes and clarity.
- Type (preferable) or hand-write your letter as long as it is legible.
- Remain polite and professional, even if you are upset about the issue. Blaming the elected official or his/her staff is not as productive as being respectful and offering constructive ideas.
- Include a return address on your letter and the envelope (unless sending by email).
Template Letter

Date

Name and title of person to whom you are sending the letter
Street number and street name
Suite number or additional address information
City, State and Zip code

Subject: A few words stating what your letter is about

Dear title and last name:

Paragraph 1: Identify who you are.

Paragraph 2: Summarize the issue and include what has or has not been done to address it.

Paragraph 3: Describe how the issue impacts you, your family, your school, and/or your local community.

Paragraph 4: Suggest solution(s), and include how you or other students can contribute to the solution(s).

Thank the person for his or her time and tell him or her how he or she can reach you. Tell him or her you are looking forward to a response.

Sincerely,

Your Signature

Your printed name
Your street address
City, State, Zip code
January 1, 2013

Mayor Jose Terrell
100 Downtown Boulevard
City Hall, Suite 50
Anywhere, State 10100

Re: Unsafe equipment on high school campus

Dear Mayor Terrell:

I am a sophomore at Excel School in Anywhere, State, and am writing as a concerned student and citizen. Our school district is experiencing severe budget cuts. As a result, money is not available to maintain the running track or bleachers located on our high school campus, and students and community members are consequently in danger of injury and at risk for poor health.

Our track has cracked surfaces where it is easy to trip and the spectator bleachers are both unstable and rusted. Students and community members have experienced physical injuries, including broken ankles and skin abrasions. In addition, without proper resources for physical activity, students are not exercising as often, which can eventually contribute to a sedentary lifestyle, obesity, and diabetes. The risk for injury and poor health persists outside of school hours, as the campus is always open to students and community members; many teenagers and adults jog on the track, and many young children play unsupervised on the bleachers.

The health and safety of our student body and our community is in jeopardy, and the high school may be held liable should more serious injuries occur. It is time to take action to prevent further harm. My hope is that you will prioritize the health and safety of the students and community members in our school district and help advocate for funding to improve the high school track and bleachers. In the meantime, I also hope that you and the high school administration will restrict access to these areas until they are safe. My classmates and I are willing to speak at town council meetings or write additional letters if this will help. I look forward to hearing from you.

Thank you for your time.

Sincerely,

Martha Gomez

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