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Epidemiology and Public Health Policy: Using the Smoking Ban in New York City Bars As a Case Study

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Lesson Plan

TITLE: Epidemiology and Public Health Policy: Using the Smoking Ban in New York City

Bars as a Case Study

SUBJECT AREA: Social studies, health, environmental science, English

OBJECTIVES:

 To help students understand how public health policy, as well as other types of public policy, is developed

- To help students understand that public health policy should be based on valid statistics and sound scientific research; however, political, economic, social and cultural factors also play a very important role in shaping these policies
- To teach students to analyze a policy to determine if it is actually effective in improving and promoting the health of a population
- To help students develop skills to learn how to argue for or against a policy

TIME FRAME: Three to five 40-minute periods

PREREQUISITE KNOWLEDGE: Ability to analyze scientific literature and other primary and

secondary sources; persuasive writing skills

MATERIALS NEEDED: A list of documents made available for students to review, which include:

- 1. New York City Smoke-Free Air Act of 2002 brochure. March 2003. Available at: http://www.nyc.gov/html/doh/pdf/smoke/tc5.pdf
- 2. City of New York Letter to Business Owners and Employers About the Smoke-Free Air Act of 2002. March 25, 2003. Available at: http://www.nyc.gov/html/doh/pdf/tc9.pdf
- 3. City of New York Department of Health and Mental Hygiene Press release. Employment Up in City Bars and Restaurants Since Implementation of the Smoke-Free Air Act. July 23, 2003. Available at: http://www.nyc.gov/html/doh/html/public/press03/pr081-0723.html
- 4. Centers for Disease Control and Prevention (CDC). Exposure to Environmental Tobacco Smoke and Cotinine Levels Fact Sheet. October 2002. Available at: http://www.cdc.gov/tobacco/research_data/environmental/factsheet_ets.htm
- 5. New York City Department of Health and Mental Hygiene. Fact Sheet 4: Smoke-Free Workplace Laws Don't Hurt Businesses. Available at: http://www.nyc./gov/html/doh/pdf/smoke/shsmoke4.pdf

6. Smoking as a Public Health Threat, essay written by Dr. Paul Stolley of University of Maryland School of Medicine (article included in this module)

Students are not limited to using these documents. They can do their own literature search and find other documents that are related to this issue. Other pieces of literature include articles and editorials from local newspapers, such as the *New York Times*, the *Daily News*, the *New York Post*, and the *New York Sun*, which are all available online.

PROCEDURE: Students will be asked to review the documents listed above. The review of these documents, as well as any additional literature that is relevant to this issue, will help them develop a better understanding of the issue. Students will then use this information to argue for or against the policy in a debate with their fellow students.

LINKS TO STANDARDS:

Social Studies

- Social studies programs should include experiences that provide for the study of the ways human beings view themselves in and over time:
 - Students should be able to draw upon historical knowledge during the examination of social issues.
- Social studies programs should include experiences that provide for the study of interactions among individuals, groups, and institutions:
 - Institutions such as schools, churches, families, government agencies, and the courts all play an integral role in our lives. These and other institutions exert enormous influence over us, yet institutions are not more than organizational embodiments to further the core social values of those who comprise them.
- Social studies programs should include experiences that provide for the study of relationships among science, technology, and society.

Health Education

- Students will comprehend concepts related to health promotion and disease prevention: identifying what good health is, recognizing health problems, and ways in which lifestyle, the environment, and public policies can promote health.
- Students will demonstrate the ability to access valid health information and health-promoting products and services: identification of valid health information, products and services.

ASSESSMENT TOOLS: After the debate, students can be assigned to write an op-ed piece about the issue of banning smoking in bars and clubs, in which they are able to express their own opinion about this policy. When writing the essay, students must include all of the points that were addressed during the debate, as well as any other additional relevant information that would help their argument for this issue.

Teacher's Guide to This Lesson

The purpose of this lesson is to introduce students to public health policies and how they are developed and shaped. The purpose of public health policy is to reduce the incidence of disease and premature death. This could be done by setting up guidelines that encourage people to take action to prevent disease or injury, such as encouraging parents to get their children immunized for many different diseases, or to create an environment that protects the population from hazardous health risks. The Clean Air Act and Clean Water Act are examples of environmental laws that protect the health of the public. Other examples of health policies include government regulations that health care workers, hospitals, medical offices, and other health care institutions must follow to help prevent disease and premature deaths among their patients. Such regulations include infectious disease control and required medical tests for patients.

Theoretically, public health policy should be based on valid and reliable research. This includes, but is not limited to, statistics that show how much of a problem a particular health issue actually is, the population that is affected the most by this health issue, and research that has already been done to show that this particular intervention would be effective in decreasing the number of deaths and disease related to this particular health issue. However, research is not the only factor that shapes policy. Political, economic, social and cultural factors also affect how health policy is shaped. Although a large percentage of human immunodeficiency virus (HIV) transmission in this country is through intravenous drug use, most state and local governments in the United States do not support clean needle exchange programs. They believe that by doing so they are condoning the use of drugs.

This particular lesson focuses on a recent local public health policy that was passed in New York City that bans smoking in all clubs, bars and restaurants with bars. This law was an amendment to a previous law that required restaurants to be smoke free but exempted the establishments mentioned above. Restaurants with bars, for example, were exempt from this law, as long as their patrons smoked in the bar area. This lesson is set up so that students will have a chance to debate this issue. In preparation for the debate, they will be asked to review a series of documents. As mentioned before, students are not limited to the documents given in their handout. They can do a literature search and look for other articles relevant to this issue as well. The next page includes an outline of the issue and some key points that students should consider when they are looking at the documents they are assigned to read. Students must also address all of these key points when they are debating this issue in class.

Case Study: A Smoking Ban in Bars of New York City

Factors Influencing the Policy

- Potential dangers of environmental tobacco smoke (ETS):
 - Dangers to both patrons and employees
 - Mayor pushed it as a policy to support the health and well-being of employees.
- Is ETS truly a serious environmental hazard?
- How will businesses be affected by the policy?
- Will bar employees make less money in tips? Possibly lose their jobs?
- Is it enforceable?
- Personal choice and civil liberties
- Does this policy seem feasible with regard to the character of people in the region?
 - Does it make sense to compare New York with California, which supporters of the policy often use as an example of a place where it has worked?
- Unintended effects:
 - Encourages smokers to quit
 - Improved quality of life in bars
 May result in increased smoke and noise on the sidewalks
 - Reduced societal and health care costs

Effects of This Policy

- Decreased exposure to ETS
- Economic effects:
 - Many argue that the policy will hurt the bar and restaurant industry, but others argue
 that the policy may encourage those patrons who would normally not go to bars and
 restaurants because of the smoke to frequent these places more.
- May continue to change the social norm of making public smoking unacceptable
- Decreased costs to society and health care
- Difficulties of enforcing a policy such as this

This module will be set up as a debate, with students divided between those for the issue and those against it. Students will look at different sets of documents, including documents printed by the New York City Department of Health and Mental Hygiene about the Smoke-Free Air Act, information about the dangers of environmental tobacco smoke from the CDC, newspaper articles about the issue, and information about smoking as a health threat in general.

When students make their arguments, they must consider all of the factors listed above. How teachers decide to structure the debate is up to them. However, when students are doing this assignment, each one of those listed factors should be considered.

Student Handout

Introduction

People often wonder about the logic behind certain public health policies and why they were passed. Many everyday citizens and health professionals have questioned the effectiveness of school drug education programs, such as D.A.R.E., in preventing young adults and adolescents from trying and using illegal drugs. Some question whether these drug education programs might even have a reverse effect by encouraging school-aged children to try drugs, because adolescents may often do the opposite of what they are told to do, especially if they think they are being lied to. Many school-aged children question the information that is given to them in these drug education programs.

Theoretically, public health policy should be based on sound scientific research, which includes epidemiologic research. A health policy is developed because extensive research supports that this health issue is a serious problem and that the government can play a role in either intervening to improve one's health or creating an environment that promotes health. Research should also show that the actions involved in the policy will be very effective in decreasing the incidence of a particular disease or the number of premature deaths or both. Illness and death among a population contribute to increased costs to society, such as health care expenditure, loss of productivity and increased social services for either patients with chronic diseases or those who have relied on someone who has become ill or has died prematurely. The seat belt laws that have been passed in many states exemplify a public health policy that has been very effective in decreasing the number of deaths and serious injuries caused by automobile accidents.

However, the development of policy is not always based on statistics and sound scientific research. As with any other situation, political, economic, social and cultural factors also play a very important role in why local, state and federal governments pass certain policies related to health. It is because of these factors that many question whether a certain health policy being passed will play a significant role in preventing the number of cases of a particular disease or the number of premature deaths due to this health issue. Then there is the age-old debate between public protection and personal liberty. Just as there is currently a tobacco tax imposed by many state and local governments, some governments are considering passing a tax on foods high in fat and cholesterol content to pay for the health care costs of eating these foods. Those who are opposed to these laws argue that it is one's personal choice to eat whatever is desired, as long as one is willing to deal with the consequences.

In this assignment, you will be asked to analyze a public health policy that has recently been passed. You will question for yourself whether this policy will be effective in saving the lives of many, as well as preventing the onset of disease for many, or whether this policy was economically or politically motivated, as health policies often are. As mentioned previously, a policy that is related to a particular health issue should be supported by research proving this issue to be a public health problem. Research should also demonstrate that the intervention strategy being developed for this policy should be effective as well in meeting the goals and objectives of the policy.

Smoking Ban in New York City Bars and Clubs

In December 2002 Mayor Michael Bloomberg passed Local Law 47, which was an amendment to the Smoke-Free Air Act of New York City. The original Smoke-Free Air Act banned smoking in many public spaces and places of employment, which included restaurants. Bars, clubs and restaurants that had a bar were exempt from the original Smoke-Free Air Act, but this exemption was changed when Local Law 47 was passed. Mayor Bloomberg, as well as those who supported the bill, argued that this amendment to the Smoke-Free Air Act would protect the health of bar and club employees.

Critics of this new policy argued that this law would hurt the businesses of bars and clubs by not allowing their patrons to smoke, which would also have an impact on the tips and wages that bar and club employees receive. The new smoking ban policy may even cause many bar, club and restaurant employees to lose their jobs. Supporters of the policy countered that the new smoking ban policy may actually encourage those who would normally not go to bars and restaurants with bars because of the smoke to frequent these businesses more, so the policy might even increase business. Supporters of this bill often use California as an example, whereas those who were against the bill argued that one cannot compare Californians with New Yorkers because the cultural values may be different. New Yorkers tend to value personal freedom more.

The debate between personal liberty and protection of the public also applies to this policy. Although banning smoking may protect the health of others who do not want to breathe in secondhand smoke, others argue that it is their personal liberty to light up a cigarette, even in a public place. For many, a bar should be one of the few public places where smokers should be allowed to light up. Furthermore, many question whether there really is a substantial amount of evidence that supports the potential dangers and health threats of environmental tobacco smoke (ETS). If there is not enough research to support the dangers of ETS, is it justified to develop a policy that will ban smoking in public places, especially when it might result in the amount of lost revenue for many restaurants, bars and clubs? Simply, will a ban on smoking in bars and clubs truly have an impact on decreasing the number of health problems and deaths related to secondhand smoking, and is it worth the amount of lost revenue that may result from this policy?

Another question to ask about this policy is whether this law is even enforceable. Are there going to be enough police officers and environmental health specialists to write summons for those who are found lighting up in bars, or is the city going to rely on the restaurant, bar and club owners to enforce this ban? This may put a further burden on those business owners who already resent this policy.

Your assignment is to analyze the policy for yourself and decide if such a policy is justified. Your decisions will be based on a series of government documents and articles that are related to this smoking ban in New York City. You will also look at the current research literature on ETS and smoking as a public health problem to determine if this policy is justified. This page includes some questions you should be asking yourself when you are looking over these documents.

Questions to Ask When Reviewing the Documents

- 1. What does the current research say about ETS?
- 2. Is ETS truly an environmental and occupational hazard? If so, what does the current research say about it?
- 3. Michael Bloomberg, the mayor of New York City, argued that this law will protect the health of restaurant, bar and club employees. How much of an occupational hazard is ETS, compared with other occupational concerns these employees may face?
- 4. What effect will this smoking ban have on the restaurant, bar and club industry? What kind of effect will it have on the tips and wages of the employees of these establishments?
- 5. Is it possible that this smoking ban may actually increase the patronage of people who would normally not frequent bars because of the smoke?
- 6. How does this law affect the patrons of these establishments? By preventing exposure to ETS, will the new smoking ban have that much of a significant impact on their health?
- 7. Does the smoking ban fit with the culture and attitude of New York City residents?
- 8. Does this law justify the loss of personal liberties in order to protect the health of the public?
- 9. Is this law enforceable?
- 10. What are some negative and positive unintended effects of this policy?
- 11. This law is also considered to be a quality of life issue. Could this law possibly worsen quality of life in ways that the policy did not intend to?

These are only some of the questions that you should be asking yourself when you are reviewing the following documents. You may have many other questions about this policy as well.

Below is the list of documents that you will be reviewing. The stand that you take on this policy will be based on these documents, as well as any others related to this policy.

- 1. New York City Smoke-Free Air Act of 2002 brochure. March 2003. http://www.nyc.gov/html/doh/pdf/smoke/tc5.pdf
- 2. City of New York Letter to Business Owners and Employers About the Smoke-Free Air Act of 2002. March 25, 2003. http://www.nyc.gov/html/doh/pdf/tc9.pdf
- 3. City of New York Department of Health and Mental Hygiene Press release. Employment Up in City Bars and Restaurants since Implementation of the Smoke-Free Air Act. July 23, 2003. http://www.nyc.gov/html/doh/html/public/press03/pr081-0723.html
- 4. Centers for Disease Control and Prevention (CDC). Exposure to Environmental Tobacco Smoke and Cotinine Levels Fact Sheet. October 2002. http://www.cdc.gov/tobacco/research_data/environmental/factsheet_ets.htm
- 5. New York City Department of Health and Mental Hygiene. Fact Sheet 4: Smoke-Free Workplace Laws Don't Hurt Businesses. Available at: http://www.nyc./gov/html/doh/pdf/smoke/shsmoke4.pdf
- 6. Smoking as a Public Health Threat, essay written by Dr. Paul Stolley of University of Maryland School of Medicine. (article included in your class materials)

These are only a few of the documents that would be relevant in helping you develop your argument. Your teacher may give you extra time to look for additional documents relating to this issue, such as articles and editorials from local New York newspapers. Local New York newspapers include the *New York Times*, the *Daily News*, the *New York Sun* and the *New York Post*. Because these different newspapers appeal to readers of different demographics and political views, it would be a good idea to read articles and editorials from more than one newspaper.

Additional articles about the potential dangers of ETS, particularly as an occupational hazard, are also helpful, provided that the information is valid and reliable.

Final Assignment

After the debate, write an op-ed* piece about the smoking ban. The op-ed piece should address many of the issues that were discussed during the debate and the different documents that you had to review. This op-ed piece should be based on your personal opinion and not the viewpoint you were assigned to argue for. However, the op-ed piece must address all of the key questions that were included in your handout. You do not necessarily need to be for or against the policy; you can develop your own policy that may satisfy both groups, as long as this policy is a reasonable one that can be easily enforced.

To get an idea of how to write an op-ed piece, go to the editorials section of any newspaper and get an idea of how an op-ed piece would be written. Your teacher can also help you with this assignment. An op-ed piece either expresses the viewpoint of the writer for a particular issue or offers a new solution to or perspective on the issue. An effective op-ed piece should have a strong argument with a substantial amount of information to support that argument. However, an op-ed piece should not be more than 800 words.

^{*&}quot;Op-ed" refers to the signed commentary that newspapers commonly publish on the page opposite (op) the newspaper's editorials (ed).

Suggested Debate Formats

Debates can be very difficult to set up in a classroom. They can be either too rigid and mechanical or a complete "free-for-all" in which students are screaming at each other, and no one is listening. In either case, students are not getting the benefit of a whole learning experience, so the key is trying to find a debate format that students can have a great experience with but at the same time learn the issues that are involved in any type of public policy.

One possible format is to set up the debate as if this bill were being introduced to the floor of the city council, with the class voting on the bill in the end. The teacher can assign a fair and responsible student to be the city council speaker. Other students can then be different city council members who are either in favor of or against the bill. Each student would have a chance to present his or her case against or for the bill, and at the end students would vote on the bill. This format not only is a good way to help students learn about public health policy; it also is a good way to help students understand how the legislative branch of government works. Students and teachers do not need to understand New York City politics in order to use this format; they can base it on the procedures of their own local government.

Another format that can be used breaks students into groups of four, and each of these groups would then be divided into teams of two. Two students on one team would be in favor of the policy, and two students on the other team would not be. (It is always better to assign students their position, because it is more of a challenge to argue an opinion that you are personally not in favor of.) The steps of the debate format would be as follows:

- 1. The students on each team are given 5 to 10 minutes to argue their points for or against the policy. When one team speaks, the other is not allowed to interrupt. They are only allowed to take down notes, which they can use for the next step.
- 2. Students on each team are now given 5 to 10 minutes to respond to the arguments made by the opposing team. Once again, when one team speaks, they are not allowed to interrupt.
- 3. Students on both teams are given time to find some valid points made by the opposing team. The purpose of this step is to find some common ground between the two opposing teams. This will help the group in the next and final step.
- 4. Students of both teams must work to find a consensus and develop a public smoking policy that both teams can live with.

These are, of course, only suggestions. Teachers who use this module do not need to follow either format; however, both of these formats are good ways of getting students to learn from each other and see another person's perspective, while still helping them to analyze an issue with a more objective view.

Essay: Smoking as a Public Health Threat

The reason the public health community is so concerned with environmental tobacco smoke is because cigarette smoking is perhaps the most dangerous and widely used product to threaten human health. An estimated one-third of male cancer and one-quarter of female cancer in the United States is caused by smoking. Almost all occurrences of chronic obstructive pulmonary disease (COPD), one of the 10 top causes of death in the United States, are directly due to smoking. Cancer of the larynx and oral cancers are largely caused by cigarette smoking. Smoking is an addictive habit responsible for much of the mortality and morbidity in this country and many other countries. If there is an epidemic of cancer in the United States, it is mainly attributable to the consumption of cigarettes. Cigarette smoking contributes to the epidemic of heart disease in the United States and other countries, and about 25% of heart attacks are also thought to be caused entirely or partially by cigarette smoking.

Environmental tobacco smoke or "secondhand" smoke, on the other hand, is much less of a health problem. It causes many fewer cancers and heart attacks than direct smoking. Why is the public health community so concerned about secondhand smoke when it represents so much less of a threat to health than direct smoking does?

Cigarette smoking began to be popular in the United States during World War I, when mass-produced and packaged cigarettes became available for the first time. These were mild enough to inhale and remained fresh in the package and could be shipped long distances and retain their freshness. The inhalation permitted absorption of the addicting nicotine, and along with nicotine came the carcinogens present in the smoke. By 1950 a majority of American men were smokers, and the habit gained in popularity in women over the ensuing decades. Lung cancer, 90% of which is attributable to cigarette smoking, became the leading killing cancer of men and women—and still holds that position.

Thus, it was in the interest of almost everyone in our society (except those who profit from the sale of cigarettes) to reduce smoking in the United States and around the world, as this would eliminate or reduce one of the worst health hazards to which humans are exposed and which is entirely removable, in theory at least. One way of discouraging the starting of smoking and encouraging the stopping of smoking is through peer pressure and changing attitudes of a population so that the habit is regarded as dirty, disagreeable, annoying and unacceptable in public places or around persons who do not smoke. And this is the main impetus surrounding the drive to reduce environmental tobacco smoke. Such an effort adds to the pressure on smokers to stop smoking and makes it difficult for them to smoke at work, in restaurants and theaters and other places persons congregate.

Additional Assignment

In 1994 the House and Senate passed a law called the Dietary Supplement and Health Education Act (DSHEA). Under the Dietary Supplement Health and Education Act of 1994, it is the manufacturer's responsibility to ensure that its product is safe and effective. The Food and Drug Administration (FDA) has authority only to monitor the claims made by the manufacturer to ensure that the product labels contain accurate information, especially when dealing with the safety of the product. The FDA is also responsible for monitoring reports of adverse reactions that have been linked to herbal remedies, as it is also responsible for monitoring adverse side effects associated with traditional over-the-counter and prescription drugs, and the FDA can take action to issue a recall if the product is proven to be unsafe.¹

This means that herbal remedies and nutritional supplements are sold over the counter but are not regulated under the same standards that traditional over-the-counter drugs are, because these supplements are classified more as a food than as a drug. The manufacturers of supplements that contain popular herbal remedies like St. John's wort and echinacea, for example, do not need to register and apply for approval from the FDA to market their product. Vitamin and mineral supplements are also included in this law. This has concerned many good government groups and consumer watchdog groups who believe that these drugs need to be regulated like over-the-counter drugs, and to support their view, these organizations use the instances of people who have died or become severely injured from these supplements.

On the basis of the activity that you have just done and the articles that you have read, as well as what you may know about other dietary supplements that are on the market, write an essay about the effectiveness of this system of giving responsibility to the manufacturer. Should the FDA be given more authority to regulate the marketing of these products? Should the information found on the labels of the products be more descriptive, or should the public be more responsible for the products that they take? If you do believe that there should be more regulation of dietary supplements and herbal remedies, why did a law like this pass in the first place? These are some of the issues that must be dealt with in your essay.

Reference

1. FDA. Center for Food Safety and Nutrition Web site. Dietary Supplement resource page. Available at: http://www.cfsan.fda.gov/~dms/supplmnt.html. Accessed on April 15, 2003.