ASBESTOS: CANADA'S UGLY SECRET Introduction

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Focus

Asbestos is a mineral that was once widely used in the construction industry. But because it can cause severe lung problems, its use in this country is limited. Most asbestos produced in Canada is shipped to developing countries. In this News in Review story we look at how those sales are helping a dying industry in Canada but sickening and killing workers in countries like India.

Quote

"All forms of asbestos are responsible for a high incidence of lung cancer and are so dangerous that a safe exposure level is unknown at this time." — World Health Organization, 1988 Imagine you have worked your entire life at an asbestos mine in your hometown. It is the best job in town and also pretty much the only job in town. You have given the best years of your life to the company and now your son is all set to follow in your footsteps. Life has treated you pretty well except that you've developed a hacking cough you can't seem to shake. Your wife has not been feeling well either, so you both go to the doctor.

The doctor quietly tells you that you both have an incurable disease called mesothelioma. It is from the asbestos that you shovelled and sorted throughout your career. You are shocked—you had no idea that breathing asbestos in the mine would harm you. You are also confused about your wife's diagnosis because she has never stepped foot in a mine. That is when the doctor tells you that just washing your work clothes exposed her to the fatal asbestos fibres.

Although this story is fictional, it could be the true story of any of the thousands of people who have worked with asbestos in Canada.

Asbestos has been mined in Canada since the late 1800s and was used in

To Consider

How do you think the asbestos miner and his wife felt when they found out they were dying? What if they found out their employer knew that breathing asbestos fibres could make people very ill and maybe even kill them? What do you think should be done for affected workers? What do you think should happen to companies who knowingly endanger their workers?

everything from automotive brakes to textiles to children's play dough. It was valued for its strength, versatility, and heat resistant properties. Canada was once the largest exporter of asbestos in the world. In the 1970s, however, Canada had to rethink its relationship with asbestos after information surfaced that asbestos fibres caused cancer.

Over the following decades, those in the asbestos industry, and those who made money from the asbestos industry, battled against critics who wanted to eliminate the use of asbestos. As health concerns continued to mount, the asbestos industry faced a mountain of lawsuits. By the 1990s, the United States government was so concerned about the health impacts from asbestos that the Environmental Protection Agency banned the use of most types of asbestos. The European Union soon followed suit, along with 40 other countries.

Bowing to international pressure, Canada has virtually stopped the use of asbestos within the country. It has not stopped producing asbestos, however, and is currently the only developed nation to globally promote and export asbestos.

ASBESTOS: CANADA'S UGLY SECRET

Further Research

Visit the Web site of Ban Asbestos Network in India to learn more about concerns associated with asbestos: http:// banasbestosindia. blogspot.com

Further Research

Visit the Web site of the Chrysotile Institute, the voice of the asbestos industry, to learn more about its position on the safety and benefits of asbestos: www. chrysotile.com.

Pre-Viewing Questions

Before you watch this story, complete these questions in the spaces provided.

- 1. Is it right for businesses to sell items that they know will likely make people unhealthy? Why or why not?
- 2. We know that candy, pop, and other sugary foods are often used incorrectly (meaning we eat too much of them) and that this leads to health problems like obesity and diabetes. Should businesses that sell such products be liable if people who consume these foods incorrectly become sick? That is, should they be able to be sued? Or do you think that people themselves are responsible for what they put into their bodies?
- 3. Do you feel it is right for a country to sell a substance overseas that has been banned for use in another country? Why or why not?

Viewing Questions

Watch the story and complete the following questions.

- 1. Name three things asbestos was/is used for.
- 2. Which Canadian province mines asbestos?
- 3. What country imported 40 million tonnes of asbestos last year?
- 4. Why have 40 countries already banned the production of asbestos?
- 5. What is asbestos-related disease referred to in India?

- 6. How much has the Canadian government spent to teach the public that chrysotile (or white) asbestos is safe when used properly?
- 7. What is wrong with the way asbestos is being handled by workers in India?
- 8. How many people die each year from asbestos-related diseases?

Post-Viewing Questions

Work with a partner, or in a small group, to complete the following.

- 1. What facts did you find disturbing in the video and why?
- 2. What should Canada be doing if it is going to sell asbestos to other countries?
- 3. The asbestos industry creates many jobs in Canada, provides revenue for the Canadian government, and stimulates the Canadian economy. If asbestos production and export is completely banned in Canada, there will likely not be replacement jobs available for all those who are forced out of work. How do we balance the need for jobs and income with the ethics of producing and shipping a product that causes cancer?

4. What is the difference between allowing companies to sell pop and candy to Canadians and allowing companies to sell asbestos overseas? Is there a difference?

ASBESTOS: CANADA'S UGLY SECRET History of Asbestos

As you read the following information, ask yourself in what ways asbestos has contributed to the economy of Canada and consider the role it has played in the lives of many Canadians and their local communities.

The Boom Years

Canada has had a long relationship with asbestos. First mined in Quebec in the 1870s, the industry thrived for about 100 years. Quebec had the world's largest open pit mine—the Jeffrey Mine—which was located in the province's Eastern Townships. The industry played such a significant role in Quebec that the province actually named a town— Asbestos—after it.

The world fell in love with asbestos. Its extremely strong fibres make it virtually indestructible and very versatile. It was woven into clothes, used in building insulation, and had roughly 4 000 other applications. Sadly, it was even mixed with children's modelling dough.

By the end of the First World War, Canada had become the world's largest supplier of asbestos, expanding operations to British Columbia and Newfoundland.

The Tide Turns

By the late 1960s, it was apparent there was a problem with asbestos. More and more miners had shortness of breath, extreme fatigue, and were coughing up blood. Studies linking asbestos to diseases such as lung cancer, scarred lungs (asbestosis), and mesothelioma cancer of the stomach and chest, which is only caused by exposure to asbestos began to surface.

Twenty years later, the industry was in trouble. Quebec had become the centre of the asbestos controversy, and many customers began phasing out the mineral from their products. By 1985, three of the six mines were closed. Capacity dropped from 300 000 tonnes (from the 1970s) to 70 000. Since 1979, production has declined 44 per cent, and thousands of workers have lost their jobs.

Support from the Government

In the 1980s, the asbestos industry in Quebec tried to improve the tarnished image of asbestos that was destroying the industry. Backed by the Canadian government, the industry spent millions on research and to fight bans on the product at home and abroad. In 1984, Ottawa established the Asbestos Institute, a non-profit organization to promote the safe use of white asbestos.

But there is still money to be made. and since the mid-1980s the federal government has spent approximately \$20-million promoting the safe and responsible use of chrysotile asbestos, now mined only in Quebec. MP Pat Martin, a former asbestos miner, has called this "corporate welfare for corporate serial killers" (Bob Sass, Briarpatch, November 2007). The Canadian Medical Association Journal in 2008 referred to Canada as "an avid asbestos cheerleader" and calls the last 25 years of Liberal and Conservative government support for the industry a "shameful manipulation of science" ("Canada an 'avid cheerleader' for asbestos," cbc.ca, October 21, 2008) According to epidemiologist, Irving Selikoff, a world leader in asbestos research, approximately 270 000 people have died from asbestos-exposure injuries between 1980 and 2009 (Jock Ferguson, The Globe and Mail, January 25, 1986).

labour disputes in Quebec and Canadian history. At midnight

Did you know . . .

Asbestos, Quebec, was

the site of one of the most violent and bitter

on February 14, 1949, miners walked off the job at four asbestos mines in the Eastern Townships. The mines were owned by English-Canadian or American companies, and the workers were almost entirely francophone. The strike lasted for four months.

Quote

"Most of these health hazards come from the past use of amphibole asbestos and from inappropriate practices such as sprayed-on insulation. These practices have been discontinued in Canada since the 1970s." — Ministry of Natural Resources web site ("Asbestos: The magic mineral that was once Canada's gold," www.cbc.ca/canada/ story/2009/06/10/fasbestos-safety.html)

Exports to Developing Nations

Health concerns have resulted in the ban of asbestos in over 40 countries. But despite the decline in customers in developed nations, the market for asbestos has grown in developing nations. These new markets are valued at approximately \$93-million a year. India is now Canada's largest customer, buying about 25 per cent of the asbestos mined in Canada.

The Canadian government states that the asbestos industry does not export to

companies that do not use chrysotile in a safe manner. But Canada cannot regulate how asbestos is used in other countries. Many observers report that it is common to find workers in India shovelling heaps of asbestos while dressed in only shorts and flip flops. They wear no protective clothing or breathing apparatus. Author and consultant Barry Castleman claims, "Anyone who says there's controlled use of asbestos in the Third World is either a liar or a fool" (*The Globe and Mail*, October 27, 2007).

Discussion

Consider all the ways that asbestos has contributed to the economy of Canada and the role it has played in the lives of many Canadians and their local communities. Will asbestos have the same impact on the economies and communities of developing nations? Why or why not?

ASBESTOS: CANADA'S UGLY SECRET The Safety Debate

Asbestos, once called a miracle mineral for its strength, versatility, and flameretardant properties, is now considered to be a Class 1 carcinogen (cancer-causing agent). But what exactly is asbestos and is it really dangerous?

Asbestos is actually a naturally occurring mineral found on most of the Earth's continents. The mineral is composed of extremely strong fibres that can be spun or woven to produce such items as asphalt, cement, shingles, insulation, brake lines, furnaces, and textiles.

Types of Asbestos

There are two basic types of asbestos: amphibole and serpentine. By the 1980s it was universally agreed that amphibole asbestos was deadly—and it was banned worldwide. The type of asbestos made in Canada is chrysotile, from the serpentine family. The only form of asbestos still mined and sold in the world today is chrysotile. It is estimated that the amount of asbestos used around the world is about two million metric tonnes per year.

Is it safe?

There are varying reports about the safety of chrysotile. There are those who have argued, and continue to argue, that chrysotile is completely harmless. In 1983, for example, Ontario's Royal Commission on Asbestos, in "Asbestos in Buildings," concluded that ". . . public fear of exposure to asbestos in schools, office buildings, and drinking water was unfounded." And in 1985, former MP Robert Layton claimed that he would like to put chrysotile in his coffee to prove how safe it was (Charlotte Montgomery, *The Globe and Mail*, October 5, 1985).

The World Health Organization, however, disagrees. In 1998 it stated that all forms of asbestos were linked to lung cancer and that there is no safe exposure level. In 2007, the United States Senate Committee on Environment and Public Works voted for a complete ban on asbestos use. In July 2007, the Canadian Cancer Society issued its own statement calling for Canada to stop exporting chrysotile to developing nations because of its link to asbestos-related diseases.

Those who support the continued production and export of asbestos argue that previous health problems associated with asbestos occurred during a time where knowledge about the safe handling of possibly toxic products did not exist. They also argue that current safety standards mean that those who do work with asbestos are protected. Furthermore, supporters argue that with proper handling chrysotile asbestos is safe and has an important role to play in the economy of developing nations.

The Chrysotile Institute represents the Canadian asbestos industry. The institute was organized to market the safe handling and use of chrysotile asbestos to global markets, and it claims that this type of asbestos is valuable and safe when used properly. The following quote is taken from the *Chrysotile Institute* Newsletter (December, 2008): "... in 1993, the World Health Organization determined that there was no clear evidence that drinking water distributed in asbestos cement pipes constituted a health risk. What should be known about aqueduct pipes in emerging countries is that the lack of drinking water is responsible for eight million deaths per year, of which 50 per cent are children, that the main diseases related to the

Did you know ... Currently 96 per cent of the asbestos produced in Canada is used to make asbestos cement for construction in the developing world. — *Canadian Medical Association Journal*, October 21, 2008 absence of drinking water are diarrhea, cholera, malaria, and typhoid. Over one billion people do not have convenient and affordable access to drinking water when chrysotile can offer this possibility."

Critics of the asbestos industry argue that chrysotile is extremely dangerous, and that it is wrong to export this product to developing nations when its use in Canada is extremely limited. Gopal Krishna, of the Ban Asbestos Network of India, argues: "The chrysotile asbestos, if it safe, why is it not used in Canada? Why did the House of Commons get decontaminated of chrysotile asbestos? Use it safely in Canada and then preach to the rest of the world that it can be safely used. This is the height of hypocrisy that you don't use it yourself and tell others to use it safely" ("Asbestos: Canada's Ugly Secret," CBC, August 2009).

Although chrysotile asbestos is being used in some countries, over 40 countries have completely banned all forms of the mineral, including the European Union, Australia, and Chile. To date, Canada, Russia, Iran, and Kyrgyzstan have been successful in keeping chrysotile asbestos off the United Nation's list of banned substances. The Rotterdam Convention, which controls trade in the world's most hazardous chemicals and pesticides, gives countries the right to be informed about, and to refuse, extremely hazardous chemicals and pesticides. Chrysotile is still not listed on the Rotterdam Convention's list.

Analysis

- 1. Is asbestos safe? The material you've just read presents information on both sides of this issue. How do we determine which side is most correct?
- 2. One way you can determine how credible, or believable, a statement is is to look carefully at who the speaker is and what their affiliation or credentials are. For example, the Chrysotile Institute is the voice of the asbestos industry. So it is not surprising that the quote above says that chrysotile is safe and has many benefits. This does not mean that the information is incorrect, but we are right to be cautious of any claims the institute makes.

In your notebook, write down a selection of quotes from this feature and analyze the credibility of the information and the speaker. Based on your analysis, decide which two or three seem the strongest.

ASBESTOS: CANADA'S UGLY SECRET Asbestos by the Numbers

As you read the information in this feature, ask yourself which information could be used to create a pamphlet or poster about this issue.

Asbestos around the World

- The world's use of asbestos is around two million metric tonnes per year.
- Russia produces 40 per cent of the world's asbestos, employing over 500 000 people.
- India is the world's biggest importer of asbestos (India imported 306 000 metric tonnes of asbestos in 2006, about 153 000 metric tonnes from Russia, 64 000 metric tonnes from Canada, 49 000 metric tonnes from Kazakhstan, and 35 000 metric tonnes from Brazil).
- Asbestos is used in over 3 000 products, including asphalt, cement, rakes, roof shingles, thermal clothing, insulation, thermal and acoustic protection, paints, cardboard, paper, suspended ceilings, filters, clutches, wall coverings, boilers, and furnaces.
- Used for over 100 years, fibre cement pipes contain approximately 90 per cent cement and 10 per cent chrysotile fibres.

Asbestos and Health

• The most common diseases caused by asbestos exposure are malignant mesothelioma, a rare form of cancer that affects the thin membranes lining the abdomen and chest, and lung cancer. Other common diseases directly linked to asbestos exposure are asbestosis, a nonmalignant disease that causes scarring of the lung tissue, and asbestos pleural disease, a nonmalignant disease that causes scarring of the thin membranes lining the lung and chest. Asbestos can also cause cancer of the digestive tract, colon, larynx, esophagus, kidney, and some types of lymphoma.

- It can take from 10 to 40 years or more for symptoms of an asbestos-related condition to appear.
- In 1993, the World Heath Organization (WHO) determined that there was no clear evidence that drinking water distributed in asbestos cement pipes constituted a health risk.
- The International Labour Organization has calculated that over 100 000 people worldwide suffer premature deaths from asbestos-related cancers and disease each year.
- The WHO estimates between five and 10 million people will ultimately die from asbestos-related diseases.
- One study found that nearly 70 per cent of World Trade Center rescue and recovery workers suffered new or worsened respiratory symptoms while performing work at the World Trade Center site.

History of Health Concerns

- In 1898, British factory inspectors warned that asbestos "easily demonstrated danger to the health of workers (*Toronto Star*, August 16, 2008).
- In 1918, life insurance companies refused to insure asbestos workers.
- In the early 1900s Ontario and Quebec legislators passed laws to prevent workers from suing for health damage if they accepted workers' compensation.
- In 1930, a report was tabled in the British Parliament that linked asbestos

Did you know ... Concerns about asbestos date back to first century Rome with the writings of Roman senator Pliny. He observed that slaves who wove with asbestos were often sick. fibres to fibrosis of the lungs. Asbestos company physicians made choices beginning in that time period to not tell employees they were ill or facing terrible health consequences. (*The Globe and Mail*, January 25, 1986).

• In the 1970s the dangers associated with working with asbestos came to the forefront of public concern.

Asbestos and Canada

- Mining of chrysotile deposits started in Quebec in 1878.
- Canada sells 95 per cent of its asbestos to developing nations where workplace safety is virtually non-existent.
- Canada's best customer is India (25 per cent of all exports).

Activity

- The federal government is spending hundreds of millions of dollars to remove asbestos from the Parliament Buildings because it is considered to be dangerous to health.
- At it's peak, the industry employed thousands in Quebec, British Columbia, and Newfoundland.
- The industry currently employs fewer than 500 workers in Quebec.
- The industry currently accounts for \$93-million a year in export revenue.
- Over the past 20 years, the federal government has given the Chrysotile Institute over \$20-million (the Chrysotile Institute lobbies for the safe and responsible use of asbestos in developing nations).

Design a pamphlet, series of pamphlets, or a poster that will inform others about this issue. Make sure you incorporate visual images, or the use of colour effectively, to increase the impact of your product.

You might be able to display your products in the foyer of your school to increase public awareness of this issue.

ASBESTOS: CANADA'S UGLY SECRET International Asbestos Sales Controversy

The asbestos industry generates wealth in Canada and provides jobs for many Canadians. But there is a significant body of medical research that identifies asbestos as a carcinogen and a serious health hazard. This body of research has resulted in the Canadian government virtually halting the use of asbestos in this country. Yet the government allows, and even encourages, the export of asbestos to developing nations.

Not surprisingly, this issue generates great controversy and heated debate. As you read the following quotes, identify whether or not each supports the international sale of asbestos and record the main piece of evidence used in the argument.

"The commercial tactics of the asbestos industry are very similar to those of the tobacco industry. The asbestos industry is progressively transferring its commercial activities and the health hazards to developing countries." — Dr. Irving Selikoff quoted in an article by Andre Picard, *The Globe and Mail*, February 20, 2001

Supportive of international asbestos sales? Yes _____ No _____

Reason: _____

"It is better that society use its limited financial resources in learning how to live safely with this valuable material than in attempting to remove it totally from the environment. Physicians and others in medicine and biology, on the other hand, must continue to drive home to the public the far greater causes of morbidity, such as smoking, drug and alcohol abuse, improper diet, and inadequate exercise." — J. Amer, Report by the council on Scientific Affairs of the American Medical Association, 1991

Supportive of international asbestos sales? Yes _____ No _____

Reason: ____

"The question of health is less of an issue where the life expectancy is only 35." — Daniel Perlstein, former head of Quebec's Crown asbestos corporation, in an article by Charlotte Montgomery, *The Globe and Mail*, October 5, 1985

Supportive of international asbestos sales? Yes _____ No _____

Reason: ____

"Today's asbestos industry, with all its modern protection techniques, is absolutely harmless. There hasn't been one case of asbestos-caused disease for many years in Asbest, Russia, which has the world's largest asbestos factory. Locally produced asbestos does not cause any harm." — Tatiana Kochetova of the Asbest-based Institute Asbestos Project, a state-run scientific organization that studies the asbestos mineral, quoted in an article by Dmitry Bulgakov, *The Russia Journal*, September 9, 2009

Supportive of international asbestos sales? Yes _____ No _____

Reason: _____

"Canada and Russia's objections to listing chrysotile asbestos are embarrassingly self-interested, protecting domestic exporters interested in selling this dangerous chemical abroad. Chrysotile unequivocally meets the Rotterdam Convention's requirements, and those governments opposing its listing blatantly disregard the treaty obligations." — Clifton Curtis, Director of the Global Toxics Program of the Worldwide Wildlife Fund, in a 2004 press release

Supportive of international asbestos sales? Yes _____ No _____

Reason: _____

"To continue to do what we have been doing means that we are putting local political considerations and our desire for dollars over the health of Canadian workers and the welfare of the vulnerable people in those economically needy and unregulated nations that are most easily persuaded to buy our toxic mineral. Canada must stop the mining, processing, and selling asbestos, after setting up a mechanism to preserve the security and dignity of its asbestos workers." — *Toronto Star* editorial, September 21, 2004

Supportive of international asbestos sales? Yes _____ No _____

Reason: _____

"We do not believe that the science suggests or indicates that asbestos cannot be used safely. We will do everything that we can, given our limited resources, to ensure and to promote its safe use." — Gary Nash, assistant deputy minister of the Canadian Department of Natural Resources, in an interview with Ginny Stein, September 29, 2004, www.asbestosnetwork.com

Supportive of international asbestos sales? Yes _____ No _____

Reason: _____

"Asbestos was an early victim of junk science and enviro-fear propaganda. Had the top floors contained asbestos the towers would have stood for four hours, saving 5 000 lives." — Professor Art Robinson, founder of the Oregon Institute of Science and Medicine, after the collapse the of World Trade Center towers in New York on September 11, 2001, *The Wall Street Journal*, October 10, 2001

Supportive of international asbestos sales? Yes _____ No _____

Reason:

"All forms of asbestos, including chrysotile asbestos, are carcinogenic. This is the view of every independent organization that has examined the health risks of asbestos, including the International Agency for Research on Cancer (IARC), the World Health Organization (WHO), the UN Environmental Program, the U.S. Environmental Protection Agency, the Collegium Ramazzini, the Canadian Cancer Society, the *Canadian Medical Association Journal, The Lancet*, the International Labour Organization (ILO)." — Right On Canada, Canadian public advocacy network (www.rightoncanada.ca/?p=369)

Supportive of international asbestos sales? Yes _____ No _____

Reason: _____

"We have known about the hazards of asbestos exposure for nearly 70 years, and the evidence today that exposure to asbestos of all forms causes cancer and asbestosis is incontrovertible. Governments that attempt to suppress science and scientists do so at the peril of damaging their credibility in the international community. I call on the Canadian government to ban asbestos, as the World Health Organization has urged." — Dr. Leslie Stayner, Director of the University of Illinois School of Public Health (www.rightoncanada.ca)

Supportive of international asbestos sales? Yes _____ No _____

Reason:

"In Canada, in the U.S., in Europe, in pretty well every developed country, we have gone to great lengths to not use it at all or in only the very, very smallest quantities because in advanced countries, it can't really be used safely. And then we think that in India it's going to be used safely? What nonsense. . . . They really are merchants of death. It's as simple as that." — Amir Attaran, *Canadian Medical Association Journal* Editorial Board member and Canadian Research Chair in Global Development Policy at the University of Ottawa

Supportive of international asbestos sales? Yes _____ No _____

Reason: _____

"It is better that society use its limited financial resources in learning how to live safely with this valuable material than in attempting to remove it totally from the environment . . . we have the most essential facts and, if anything, we should surely be encouraging the search for and exploitation of chrysotile which, free from amphiboles, is a remarkably safe and valuable natural resource." — *Chrysotile Institute Newsletter*, December 2008

Supportive of international asbestos sales? Yes _____ No _____

Reason: _____

ASBESTOS: CANADA'S UGLY SECRET Activity: Should Canada stop selling asbestos?

Your Task

Write an opinion paragraph to answer the question: Should Canada stop selling asbestos to other nations? You are expected to include sufficient evidence (four or five points) in your paragraph to support your position. Be prepared to share your paragraph with your classmates.

Getting Started

Before you begin to write your opinion paragraph, complete the chart below with point-form notes. To help you complete the chart, you may wish to:

- Review some of the information in this resource guide.
- Watch this *News in Review* video a second time.

Asbestos Fact Summary Chart

	Facts FOR the sale and use of asbestos	Facts AGAINST the sale and use of asbestos
Health issues related to the use and export of asbestos		
Economic issues related to the use and export of asbestos		
Ethics related to the use and export of asbestos		
Your own subtopic		