

Smoking -- The Leading Cause of Preventable Death

The United States marks the 50th anniversary of the government's first report on smoking and health | Science in the News

From VOA Learning English, this is Science in the News.

I'm Anna Matteo.

And I'm Christopher Cruise.

This week we talk about smoking -- a preventable cause of cancer.

This year, the United States marked the 50th anniversary of the government's first report on smoking and health. The then-Surgeon General -- Luther Terry -- wrote that first report. It linked cigarettes to lung cancer and heart disease. The year was 1964. At that time, more than 40 percent of Americans smoked. Today, about 18 percent are smokers.

The report led to anti-smoking measures, including a requirement to place warnings on cigarette packages. The government also banned television and radio advertisements for cigarettes.

American medical researchers say anti-smoking measures have saved 8 million American lives since 1964. But cigarette smoking still kills about 443,000 Americans every year.

Dr. Joanna Cohen heads the Global Tobacco Initiative at the Johns Hopkins School of Public Health. She says the surgeon general's report has had a real effect on Americans.

"And it really led to a reduction in use and a great increase in knowledge of the harmful effects of tobacco products."

In the United States, laws now restrict tobacco use, including the sale of cigarettes to individuals under the age of 18. Laws also protect non-smokers from breathing smoke-filled air. Many cities have banned smoking in public spaces like restaurants, bars and even outdoor areas. Anyone visiting New York City's famous Central Park may receive a fine for lighting up a cigarette.

The medical community has repeatedly reported reasons why smokers should stop. A new report by the acting surgeon general says recent findings show that smoking is even worse than people believe it to be. Boris Lushniak says smoking is linked to colon, rectal and liver cancers.

“Today we know that smoking is a cause of diabetes, rheumatoid arthritis, and poor response to treatment of arthritis, erectile dysfunction, an increased risk of tuberculosis, disease and death. We’re adding colon, rectal and liver cancer to the long list of cancers caused by smoking.”

Dr. Lushniak says smoking weakens the body’s natural defenses against disease, making it easier for smokers to get sick. The new report also lists the risks for people who do not smoke, but who are surrounded by what is called “secondhand smoke.”

The research shows the damaging effects on unborn children. Pregnant women who smoke are putting their unborn children at risk for both mental and physical developmental problems. For example, their facial features may not form correctly. The dangerous chemicals in tobacco smoke can also affect the brain of an unborn child.

Health experts have been warning about links between smoking and disease for years. The World Health Organization says tobacco use causes almost 6 million deaths worldwide every year. The WHO predicts the yearly number will increase to 8 million by 2030.

Tobacco use is the leading risk factor for causing cancer. The WHO says that tobacco is responsible for over 20 percent of all cancer deaths and 70 percent of all lung cancer deaths. Smoking also causes respiratory diseases, which affect the nose and breathing passages to the surface of the lungs. Respiratory diseases include asthma, bronchitis and emphysema. Smoking can also cause cardiovascular diseases, like heart disease and stroke.

People who smoke are not only hurting themselves. They also can harm non-smokers. The WHO officials estimate that secondhand smoke kills 600,000 people each year. It says more than half of the world's children regularly breathe secondhand smoke.

Even after all the warnings, the WHO says over 1 billion people still smoke. The number of smokers is expected to grow, although rates have decreased in the higher income nations.

WHO officials say almost 80 percent of all smokers live in low- and middle-income countries. In 2010, the organization said nations in the Western Pacific Ocean have the highest smoking rates. One-third of all smokers live in East Asia and the Pacific. The area has the largest number of male smokers. It also has the

fastest-growing number of female and child smokers. Every day, diseases linked to tobacco use kill more than 3,000 people in the area.

Scientists have found more than 4,000 chemicals in cigarette smoke. At least 250 of them are known to be harmful. And more than 50 are suspected to cause cancer. They include arsenic, which can be used to kill plants and small animals. Cigarette smoke also contains formaldehyde -- a liquid used to protect the look of dead bodies.

As bad as those chemicals are, nicotine may be the most threatening of them all. Nicotine is a poison found in tobacco. It gives smokers pleasure and keeps them coming back for more.

The body grows to depend on nicotine. Studies have found that nicotine can be as difficult to resist as alcohol or the drug cocaine. Experts say nicotine can kill a person when taken in large amounts. It does this by stopping the muscles used for breathing.

So is there any way to smoke without harming your health? The majority of available research suggests not. Smoking even a few cigarettes can be dangerous. But many of the harmful effects of

smoking are reversible -- they can be undone. That is why most medical experts advise people to stop smoking forever.

The American Cancer Society says blood pressure returns to normal 20 minutes after the last cigarette. Carbon monoxide levels in the blood return to normal after eight hours. The chance of heart attack decreases after one day. After one year, the risk of heart disease for a non-smoker is half that of a smoker.

There are many products available to help people reduce their dependence on cigarettes. Nicotine replacement products provide the body with small amounts of the chemical through forms other than cigarettes. The amounts of nicotine are slowly reduced over time.

One device that has become popular among people trying to quit smoking is the electronic cigarette, known as an e-cigarette. E-cigarettes are battery-operated devices that look like a real cigarette. The smoker places a regulated amount of nicotine into the device. As they "smoke," a watery substance called "vapor" releases from the device. Because the vapor does not release the same harmful chemicals as cigarette smoke, the device is permitted in places that normally ban smoking.

However, there are campaigns to ban e-cigarettes and change legislation linked to the device. In February, the European Parliament approved new rules on e-cigarettes that member nations must approve. The European Commission says the rules will go into effect in May of 2014. They include banning advertisements for e-cigarettes, placing health warnings similar to those on cigarettes on the packages, and limiting the amount of nicotine that could be placed in the devices.

The New York Times newspaper reports that the U.S. Food and Drug Administration is also looking into new rules and regulations on the devices. However, the agency says there is not enough evidence or research to say e-cigarettes are good or bad for your health. Nor will the agency agree with the debate that e-cigarettes increase young people's desire to try other tobacco related products.

Researchers at the Center for Tobacco Control Research and Education at the University of California studied the link between the e-cigarette and real tobacco use. Stan Glantz is the director of the center. He says there is evidence the device helps a small number of adults stop smoking. But, he says, it is not the same with younger people. Mr. Glantz and other researchers completed

a study with nearly 76,000 Korean teenagers. They found that the e-cigarette did not help the young Koreans quit smoking, but instead made them heavier smokers.

The study that was published in the Journal of Adolescent Health says the young teenagers are being targeted in advertisements. Many of the ads are linked to sex and independence. They also claim the device will help you quit smoking. But Mr. Glantz says it is not likely they will quit smoking.

“We have the kind of Wild West marketing that we did in the bad old days for cigarettes. And the kids are clearly responding to that. And youth use of e-cigarettes in Korea is going up very rapidly just as it did here in the United States.”

American regulators report the number of young students using e-cigarettes increased two times from 2011 to 2012. Now 1.7 million students use the devices.

Cigarette companies manufacture e-cigarettes. There are efforts in some U.S. cities to ban the devices. Many people believe that, until there are new rules, use of e-cigarettes will lead many

people to become long-term smokers. Health experts say the best way to quit smoking is never to start.

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