

TOBACCO USE: EFFECTS AND PREVENTION

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## **TOBACCO USE: EFFECTS AND PREVENTION**

### **INTRODUCTION**

Tobacco use is the single most preventable cause of death and disease in the United States, being responsible for one in every five deaths ("Overview," 2001). Smoking and chewing tobacco may lead to all kinds of cancers from mouth and kidney cancer to lung cancer. It also causes many diseases and health conditions. Smoking does not only affect the user by any means either. Everybody around the smoker breathes in the second-hand smoke and they are also put at risk. This is obviously not a good thing, which is what brought about anti-smoking organizations that fight Big Tobacco (the tobacco companies) and educate the public about the risks of smoking.

### **ORIGIN OF TOBACCO SMOKING**

Even though nicotine has been found in Old World plants such as *belladonna* and *Nicotiana Africana*, and nicotine metabolites were discovered in pipes and human remains in the Near East and Africa, there is no evidence that tobacco was ever

actually used anywhere with the exception of the Americas ("A Capsule History," 2001).

Pottery that dates before the 11<sup>th</sup> century (year 1000) has been found depicting a Mayan smoking a roll of tobacco leaves tied with a string. Because of evidence like this, experts have concluded that tobacco was first used for smoking or chewing by American inhabitants around the time of Christ. It is believed that Columbus received dried tobacco leaves from American Indians as a welcoming gift when he arrived in America in the 1400's. He did not think anything of it, except he noticed the leaves had a unique scent. When he returned to the East, the tobacco's use was realized and it spread extremely rapidly. That is how tobacco came to be so popular, hundreds of years ago ("A Capsule History," 2001).

## **EFFECTS**

### HEALTH

Tobacco use is widely known to cause many health conditions in the users and the people around because of secondhand smoke.

Tobacco causes lung cancer, cervix cancer, larynx cancer, esophageal cancer, mouth cancer, bladder cancer, kidney cancer and pancreas cancer. Tobacco also leads to chronic lung disease, coronary heart disease, ischemic heart disease, lower respiratory tract infections, oral leukoplakia (white spots resulting from changes in skin tissue), gingival recession, circulatory system disease, hypertension, peptic ulcer disease, stroke, heart attacks, decreased lung capacity, birth defects, and many more illnesses ("The Health Consequences," 1986, Keyishian, 1997, "6 Facts," no date).

### FACTS

Women who smoke and are on birth control pills are 1000% more likely to die of a heart attack or stroke than a nonsmoker (Keyishian, 1997).

Children exposed to second-hand smoke are more likely to have ear infections, asthma, pneumonia, bronchitis, and they have lower lung capacity and slower lung growth rates (Synderman, 1998). Children whose parents smoke are more likely to become smokers themselves.

Tobacco makes hair and clothes stink, stains teeth, causes bad breath, makes you dizzy, causes hiccups, hurling, cracked lips, white spots in mouth, sores, and bleeding in mouth. Surgery to remove oral cancer from chewing tobacco results in serious changes in the face. Tobacco is the leading preventable cause of death in the United States. 80% of adult smokers started before the age of 18. 3,000 young people become smokers every day. 3,000 nonsmokers die each year of lung cancer.

1.5 million people under the age of 18 consider themselves dependant upon cigarettes. Tobacco use caused 1 in 5 deaths, or 430,000 deaths each year. Each year smoking kills more than AIDS, alcohol, drug abuse, car crashes, murders, suicides, and fires...combined! Nationally, smoking results in 5 million years of potential life loss each year. 26.4% of men and 22% of women smoke. 1 in 8 middle school students used tobacco in past 30 days. 9.6% of males in middle school and 9.2% of females in middle school smoke cigarettes.

Researchers have identified more than 4,000 chemical compounds in tobacco smoke. See *Ingredients*, page 23.

Smoking related illnesses cost the nation \$100 billion each year: \$50 billion in medical expenditures and \$50 billion in

indirect costs ("What You(th)," 2001, "6 Facts," no date, "State-specific," 1999, "Overview," 2001).

## **PREVENTION**

### ORGANIZATIONS

Hundreds of organizations, both government and non-government, have been started in the past thirty years or so with one main objective: to stop tobacco use through education of the public and speaking out against Big Tobacco. These groups have had a tremendous impact on smoking in the United States.

Because of the incredible numbers of activists and campaigners inspired by anti-smoking organizations, tobacco advertisements have been pulled from television and radio programs, smoking has been banned from innumerable public locations, and, most importantly, Americans are much more aware of the dangers of smoking!

Please see *Anti-Smoking Organizations* on pages 18-19.

### ANTI-SMOKING REGULATIONS

A key role in reducing the smoking population is played by anti-smoking laws and regulations. The year 1964 was probably the most important year as far as the 'anti-smoking era' goes. It marked the start of many major milestones. See *Major Events* on pages 20-22.

## CESSATION

There are plenty of products out there designed to help you quit smoking. They come in many forms. Here are just a few:

NicoDerm CQ is one of the major products on the market. It is a patch that is worn all day. The patch supplies the body with nicotine, instead of smoking. You gradually reduce the strength until you are no longer nicotine-dependant ("Be Smoke Free," 2002").

Nicorette is a popular gum that provides the same effect. When you get an urge you chew some gum. You chew it on a regular schedule to hopefully prevent cravings in the first place. Once again, you gradually reduce the strength until you are no longer dependant ("Quit smoking cigarettes," 2002).

ZYBAN comes in a tablet form. You take it as a dietary supplement while continuing to smoke. You then set a quit date

for yourself in about three weeks. When you quit, the nicotine-free ZYBAN will help you stay away from smoking, without using nicotine ("ZYBAN: Tell me," 2001)!

A study was conducted in Thailand to see if religious leaders had any impact on smoking. The researchers concluded religious figures did have an impact, but not a very significant one, on how many people stop smoking ("Influence of Religious," 1993).

Researchers in Florida discovered that nitrous oxide, or laughing gas, therapy, before quitting, can greatly ease the struggle. Further research is needed before this method is used (Foster, 2001).

When it comes to "low-nicotine" brands, the only safe choice is to quit completely. "Lite" cigarettes only make you puff longer, harder, and more often per cigarette ("Quit Tips," 2001).

If you are a smoker, here are some excellent reasons to quit: You will live longer and better. Quitting will lower your chance for getting a heart attack, stroke, or cancer. Your children will be healthier. You will have extra money ("Good reasons," no date)! It only takes 10-15 years for your lungs to return to almost-normal condition, meaning your chances of getting lung cancer are nearly equal to that of a nonsmoker ("Ask the Doctor," 1998).

When you first try to quit, change your routine. Take a different route to work. Eat in a different place. Drink tea instead of coffee ("You Can Quit Smoking," 2001). These will all help contribute to you successfully staying tobacco free. Writing down why you want to quit tends to help you stay focused. Here are some reasons to consider: To feel in control of my life. For better health. To set a good example to my kids. For my families protection of second-hand smoke ("Quit tips – Don't let," 2001).

Plenty of tips are available from anti-smoking commercials, news broadcasts, and your doctor. Try some of the following: Avoid drinking caffeine. Drink juice and water instead. Keep busy. Go to movies, walk your dog, play games. Go to places where you are not allowed to smoke. Carry things to put in your mouth such as gum, hard candy, or even toothpicks. Urges to smoke usually pass in a few minutes, so drink water or take deep breaths until it passes. Throw away all of your lighters, ashtrays, and cigarettes ("I Quit!," 2001)! Plan something enjoyable daily. You can reduce stress by taking a hot bath, exercising, or reading. Drink lots of fluids ("You can quit," 2001).

## **CONCLUSION**

Overall, tobacco has virtually no positive effects aside from relieving the cravings of an addicted user. Hundreds of thousands of people die from smoking each year, and that can be changed if everyone would just put some effort into trying to quit. The smoking situation in the United States is improving thanks to the many anti-smoking organizations and cessation products. Although some people will use tobacco for many years to come, the future of smoking looks very positive.

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## Anti-Smoking Organizations

This list of organizations was compiled from Yahoo!'s internet directory service ("Yahoo! Directory," 2002)

American Legacy Foundation – nonprofit organization that campaigns to reduce tobacco use in the United States (<http://www.americanlegacy.org/>)

Americans for Nonsmokers' Rights – works to enact legislation protecting nonsmokers from secondhand smoke and youth from tobacco addiction (<http://www.no-smoke.org/>)

Children Opposed to Smoking Tobacco – educates youth about risks and dangers of smoking (<http://www.costkids.org/>)

Don't Pardon Big Tobacco – allows you to fax President Bush for free telling him not to settle suit against Big Tobacco (<http://www.dontpardonbigtobacco.org/>)

Fight With Fact – Wisconsin organization dedicated to speak out against Big Tobacco with the hard facts ("Fight with Fact," no date) (<http://www.fightwithfact.com/>)

The Foundation for a Smokefree America – educating everyone about smoking and tobacco use (<http://www.tobaccofree.org/>)

Gotta Quit.com – encouraging youth to kick a bad habit

(<http://www.gottaquit.com/>)

National Center for Tobacco Free Kids – non-government initiative to protect children from tobacco addiction

(<http://www.tobaccofreekids.org/>)

North Carolina Survivors and Victims of Tobacco – share and read stories from survivors of tobacco-related illnesses

(<http://www.main.nc.us/save/>)

Smoke Free for Health – of Florida

(<http://www.smokefreeforhealth.org/>)

Smoke Free Indiana – promoting healthy lifestyles through community action (<http://www.smokefreeindiana.org/>)

Smoke Free Maryland – working to lessen tobacco caused illnesses and death (<http://www.smokefree.md.org/>)

Stomp It Out – youth and adults promoting tobacco-free communities (<http://www.stompitout.org/>)

The Whole Truth – campaign that calls for changes to and truth in smoking-related advertisements and encourages vocal protest (<http://www.wholetruth.com/>)

## Major Events

1964: The first Surgeon General's Report on smoking was released. State Mutual Life Insurance Company offers life insurance to nonsmokers at discounted rates for the first time ever. The first national anti-smoking coalition, the National Interagency Council on Smoking and Health, is formed. The American Medical Association officially calls smoking "a serious health hazard."

1965: Congress passes Federal Cigarette Labeling and Advertising Act requiring this health warning on all packages: "Caution: Cigarette Smoking May Be Hazardous To Your Health."

1967: FCC rules that the Fairness Doctrine applies to cigarette advertising, which meant stations broadcasting smoking commercials must donate airtime to anti-smoking messages.

1970: Congress passed Public Health Cigarette Smoking Act of 1969 banning all smoking ads on television and radio, and requires strong warning on cigarette packages: "Warning: The Surgeon General Has Determined That Cigarette Smoking Is

Dangerous To Your Health." The World Health Organization (WHO) takes public position against smoking.

1973: Arizona becomes first state to restrict smoking in a number of public places, and the first to do so because ETS (Environmental Tobacco Smoke) is a public hazard.

1975: Cigarettes no longer in military rations. Minnesota prohibits smoking in buildings open to the public.

1977: American Cancer Society sponsors the first "Great American Smokeout. "

1978: Utah enacts the first law banning tobacco ads on billboards, streetcars, or busses.

1980: The Public Health Service announces health objectives for the nation including reducing smoking below 25% by 1990.

1982: For the first time since 1957, Congress doubles federal excise tax on cigarettes to 16 cents.

1984: Surgeon General announces goal of a smoke free society by the year 2000.

1988: California raises tax on cigarette by 25 cents, largest increase ever.

1990: Smoking is banned on all flights less than six hours.

1991: Federal excise tax increases to 20 cents.

1992: Hospitals required to be smoke free as of Jan 1994.

1993: Smoking banned in all U.S. Postal Service buildings.

Federal Excise tax increases to 24 cents.

("Chronology Significant," no date)

## Ingredients

Cocoa – sweetener, bronchodilator allowing smokers to inhale tobacco more deeply into lungs

Ammonia – boosts absorption of nicotine

Acetaldehyde – believed to work synergistically with nicotine to enhance addiction

Menthol – added to numb throat so the user does not feel the smoke's irritating effects

Flavorings and Sweeteners – Added to mask harsh taste of tobacco smoke

Carbon Monoxide – highly toxic

Arsenic – highly toxic

Mercury - toxic

Acetone – toxic solvent

Cadmium – human carcinogen

Polonium-210 – radioactive element and carcinogen

Nitrosamines – probable human carcinogen

Formaldehyde – probable human carcinogen

("Cigarette Content and Design," 2000)