

Chewing Tobacco

Introduction

In today's society there are many health risks that a person can take without even knowing the full effect of it on the body. It is important that people are informed of the harms and dangers that they could be putting their bodies through. These risks are caused by behaviors such as substance abuse, poor eating habits, lack of sleep as well as many other unhealthy habits. All of these unhealthy behaviors can potentially cause death. One of the major health problems in society today is the use of tobacco.

Chewing tobacco is a widely used drug with many health risks. I chose to do my fact sheet topic on chewing tobacco because I am very interested as to why it is such a problem in today's society and how it affects the human body. As a student starting this project, I am not very aware of the effects that chewing tobacco has on the human body although I do know that they are very negative. I would like to figure out why people use the drug and for what purposes.

Section 1: Background and Problem Statement

- **Web site #1 Name:**
HP2010
- **Web address:**
<http://www.healthypeople.gov/document/HTML/tracking/OD27.htm>
- **Background Information:**

Today, oral tobacco is a major problem in our society. It is important that changes are made to the usage of tobacco for everyone's health, even non-smokers. Data show that children as young as twelve years old are using oral tobacco. There are many ways that Healthy People and other organizations are planning to solve this problem. Healthy People states that the national Public Health plan is to address and enhance non-tobacco facilities such as schools, restaurants, and public stores as well as in school held activities and events. This plan is being strongly administered by School Health Policies and Program Study (SHPPS). This group will also work on making more policies regarding the prohibition of tobacco use in working areas. They will also try to limit the use of tobacco, strictly to only ventilated areas. Actions are being made to limit the amount of advertising of tobacco products also to limit the amount of tobacco being sold to minors.

- **Web site #2 Name: Medline Plus: Smokeless Tobacco**

- **Web address:** <http://www.nlm.nih.gov/medlineplus/smokelesstobacco.html>
- **Background Information:**

Most people who use chewing tobacco use it as a substitute for smoking cigarettes; however, this substitution is unnecessary. Oral tobacco contains more nicotine than cigarettes do, making the substitution ineffective. In the long run oral tobacco is known to cause things like tooth decay, cancer of the mouth, gum from teeth separation and irritation in the mouth that could potentially turn into cancer. Not only can chewing tobacco cause oral diseases and infections but it can also cause heart disease as well as stroke. All of these are risks of using oral tobacco and are a major problem in today's society. It is very obvious that chewing tobacco is no proper substitution for smoking cigarettes. Changes need to be made in order to lessen the daily use of tobacco.

- **Web site #3 Name:**
National Cancer Institute
- **Web address:**
<http://www.cancer.gov/cancertopics/factsheet/Tobacco/smokeless>
- **Background Information:**

There are two different types of oral tobacco, one is called snuff and the other is called chewing tobacco. The difference between these two types of tobacco is that snuff is shredded tobacco that can be either moist or dry and is placed in the mouth between the cheek and gum. Sometimes if snuff is dry it can be sniffed in through the nose. Chewing tobacco, on the other hand is not shredded however. It is twisted and placed in the mouth next to the cheek. No matter what type of oral tobacco it is, users should be aware that there are many risks involved with this drug. It is possible to obtain cardiovascular disease, strokes, cancer of the mouth and many other risks of infectious diseases. Oral tobacco contains about twenty eight carcinogens, can cause many health risks and can be highly addictive. About 7.6 million Americans have used oral tobacco in the past month.

Section 2: Research

- **Web site #1 Name:**
Clinical Pharmacological and Therapeutics
- **Web address:**
<http://www.nature.com/clpt/journal/v44/n1/abs/clpt1988107a.html>
- **Summary of the research:**

As noted before, some tobacco users believe that it is better to replace smoking cigarettes with chewing tobacco. However, this theory has been proven wrong. A test of this theory was carried out by the General Research Center at San Francisco Hospital. Their interest in the topic was brought up because of the high rates of usage seen in today's society. They tested the effects of "nicotine absorption and cardiovascular

effects with smoke-less tobacco in comparison to nicotine gum and cigarettes”. The researchers chose ten healthy volunteers to participate in their research project. The researchers were testing to see the “time course of absorption of nicotine and cardiovascular effects of smokeless tobacco” and later compared it to smoking cigarettes and nicotine gum. After testing, the researchers found that there was a high level of nicotine from all forms of tobacco usage; however the overall absorption of nicotine was twice as much in the smokeless tobacco than in cigarettes. The researchers also noted that there was high blood pressure and increased heart rate for all forms of tobacco usage; however there were signs of tolerance to nicotine in smokeless tobacco. In nicotine gum there was overall lower levels of nicotine absorption and cardiovascular effects. This testing proves that replacing cigarettes with oral tobacco is a negative choice because chewing tobacco has a higher level of nicotine absorption.

- **Web site #2 Name: Science Daily: Chewing Tobacco Hampers Ability to Perform Complex Tasks**
- **Web address:** <http://www.sciencedaily.com/releases/1999/11/991117050042.htm>
- **Summary of the research:**

In a recent test on how the use of tobacco can affect a person’s ability to perform complex tasks researchers found the results to be correct, that the use of tobacco affects a person’s ability in negative ways. This test was performed by researchers from University of Maryland as well as the Arizona State University. During this test individuals were tested individually for two hours. The researchers tested ability by having the participant use a computer to draw a straight line path to a target on the screen in as minimal a time as possible. Ten of the volunteers were tobacco users and eleven of the volunteers were non-users. There was no difference in ability on the first trial of testing. In the second test, tobacco was given to the tobacco users right before the test. The results show a major difference in the ability of the tobacco users and the non-users. Over all, the test clearly showed how the usage of tobacco can negatively affect a person’s ability to complete even a simple task.

- **Web site #3 Name: Effects of smokeless tobacco (snus) on smoking and public health in Sweden**
- **Web address:** <http://tobaccocontrol.bmj.com/content/12/4/349.abstract>
- **Summary of the research:**

Not only have researchers tested the effects of tobacco on the human body but they have also conducted research on how oral tobacco affects places. One group of researchers decided to test the effects of oral tobacco on Sweden. First, the researchers lowered the availability of oral tobacco to the public. Observations before this action took place showed that there were high percentages of male and female tobacco users, however, statistics were not mentioned. After this action took place the

percent of male tobacco users' dropped from 40% in 1976 to 15% in 2002. The percentage for women dropped 34% in 1976 to 20% in 2002. Along with the dropped rates of tobacco usage there were also significantly lower rates of lung cancer as well as myocardial infarction. Conclusively, Sweden now has unusually low rates of tobacco usage allowing them the benefit of less harmful exposure to nicotine. Seeing these results of the test proved that limiting the availability can change and improve the overall health and living of a single society.

Section 3: Statistics

- **Web site #1 Name:**
Healthy People 2010: Progress Review Focus Area 27- Tobacco Use Presentation
- **Web address:**
http://www.cdc.gov/nchs/ppt/hp2010/focus_areas/fa27_2_ppt/fa27_tobacco_2_ppt.htm
- **Summary of the statistics:**

On a progress review from Healthy People 2010, it is noticeable that the use of tobacco is by far the largest cause of preventable deaths. Because of the use of tobacco there have been about 8.6 million serious illnesses noted each year. Of all types of tobacco use, spit tobacco or oral tobacco is the only type that is making no improvement. As far as places and tobacco use, it is noted that almost all public places are improving with limitations of tobacco use in their facilities. The places include schools, bars, daycares, public transportation, public and private retail stores as well as retail stores. Advertising of tobacco products has gotten notably worse for ads on the Internet; however, magazine advertisement met the goal for limiting ads shown for tobacco sales.

Statistics show that the use of spit tobacco for adolescents ranging from grades 9 to 12 is at ten percent. The percent for usage of all types of tobacco is at 40 percent. Statistics also show that in 1998 there were 21 states that had laws for tobacco sales to minors, in 2007 there were 22 states with laws for tobacco sales to minor. Although this statistic is not a great change, it still shows the small improvement of states trying to make a difference. Since there is the major dispense of nicotine in chewing tobacco some states have provided programs for coverage and treatment. In 1998, 25 states provided coverage and treatment to their citizens, in 2002, 36 states provided coverage and in 2006 almost 40 of the states provided coverage to their citizens.

Overall, we can see that there are several changes being made to try to improve the amount of tobacco usage. If these improvements keep changing over the years then eventually there will be a minimal use of tobacco in our society.

- **Web site #2 Name:**
American Lung Association: Smokeless Tobacco Products

- **Web address:**
- **<http://www.lungusa.org/stop-smoking/about-smoking/facts-figures/smokeless-tobacco-products.html>**
- **Summary of the statistics:**

According to the American Lung Association, statistics show that 3.3 percent of all adults are current smokeless tobacco users. Men are the majority of smokeless tobacco users being 6.5 percent. The percent of women is a lot less - 0.4 percent. In high schools, about 7.4 percent of high school students are current smokeless tobacco users. The percentage for male high school users is again higher than the female percentage. About 13.4 percent of high school males use smokeless tobacco while 2.3 percent of high school females use smokeless tobacco. As far as ethnicity goes, American Indian/ Alaska Natives are the biggest smokeless tobacco users at 7 percent followed by white males at 4.3 percent. White students in high school make up 10.3 percent of smokeless tobacco users, Hispanics make up 4.7 percent and African Americans make up 1.2 percent of smokeless tobacco users of high school students. Along with that, 2.6 percent of middle school students are smokeless tobacco users.

After seeing these statistics it is noticeable how much of an influence advertisement, adult behaviors as well as many other influences have on the action of students. Children using tobacco at a young level will not help the improvement in limitation of tobacco products.

- **Web site #3:**
Statistics and Facts about Smokeless Tobacco
- **Web address:**
<http://www.oda.org/upload/smokeless%20tobacco%20stats%202005.pdf>
- **Summary of the statistics:**

In an article on “Statistics and Facts about Smokeless Tobacco” it states that there are about ten million smokeless tobacco users in the US alone. Not only is that statistic dangerously high but along with that about 3 million of those users are under the age of twenty one. For females over the age of twelve, 600,000 use oral tobacco products. It is noticeable that there is a major problem with a high percentage of tobacco users being under that age of twenty one. About 46.4 percent of middle school students live in a house where there is at least one other person who uses oral tobacco products. This can influence many young children to start using oral tobacco products.

Not only is the percentage of oral tobacco users high but it is also known that 75 percent of oral tobacco users will contract a leukoplakia infection. This infection consists of white and red infected patches in the mouth that are potentially cancer causing. “Dipping” about eight to ten times a day is equivalent to smoking about 30-40 cigarettes. It is obvious that the risks in using oral tobacco are very high.

Section 4: Consumer Information

- **Web site #1 Name:**

Mayo Clinic: Smokeless Tobacco

- **Web address:**
<http://www.mayoclinic.com/health/search/search>
- **Summary of the information:**

While using oral tobacco products many people realize that there are several risks involved. Many people understand that there are health hazards involved but they assume that these health hazards will never infect them. When using oral tobacco products it is possible to obtain infections like, dry mouth, esophageal cancer, leukoplakia, aortic aneurysm, Beurger's disease, throat cancer and mouth cancer.

If a tobacco user becomes infected with esophageal cancer then they will most likely have symptoms of losing weight not meant to be lost, trouble swallowing, and fatigue. There are many risks of this infection, two listed being chewing tobacco and alcohol. Dry mouth is also a risk of using oral tobacco. Its symptoms include, bad breath, thick saliva, cracked lips, sore throat, difficulty breathing and speaking, tooth decay, increased plaque and gum disease. Other infections similar to these are throat cancer and mouth cancer. If these risks are noted by users an appointment with their doctor is in order.

Leukoplakia, also being a risk of oral tobacco, is when rough white patches are formed on the tongue, cheeks and gums in the mouth. These patches are cancer causing and are not easy to get rid of. Along with this there is also the risk of aortic aneurysm which is when a bulge forms in the aorta and has the potential to rupture. Symptoms of this are pain in the chest and abdomen and back pain. Beurgers disease is another, and is a rare disease in which clots form in the veins in the arms and legs. Symptoms include pain and swelling in hands and feet as well as open sores on fingers and toes. As we can see, there are many risks possible from the use of chewing tobacco. All these risk can be avoided if the use of tobacco is stopped immediately at an early stage.

- **Web site #2 Name:**
Family Doctor: Smokeless Tobacco
- **Web address:**
http://kidshealth.org/PageManager.jsp?dn=familydoctor&lic=44&cat_id=20138&article_set=20424&ps=204
- **Summary of the information:**

After knowing about the risks of oral tobacco some people wonder, where did it start? Chewing tobacco has been around for a long time and has played its part in history. It was mostly used by natives of North and South America, however when most Americans think of chewing tobacco they think of baseball players. Back in the 1920s, baseball players were big oral tobacco users because it helped improve their game. During the game, baseball would use chewing tobacco to keep their mouth moist. Pitchers would also use it to spit into their glove to use it for a pitch that helped the ball slide and spin off of their fingers. This pitch is not used in the sport today. Chewing tobacco then became unpopular after thirty years. This is when smoking became

popular in the 1950s. It was normal for high school students to use tobacco products on school grounds and it was also allowed in the public work place. This lasted for about twenty years until the risks of smoking started to become revealed, so chewing tobacco was brought back into play as a replacement for smoking. Today, smoking and chewing tobacco are still popular among a good portion of the population.

- **Web site #3 Name:**
CDC: Smoking and Tobacco Use (Economic Facts)
- **Web address:**
http://www.cdc.gov/tobacco/data_statistics/fact_sheets/economics/econ_facts/index.htm
- **Summary of the information:**

Not only is it important to know about the health risks and history of oral tobacco use but it is also important to understand how this drug is affecting our economy. In 2005, the United States spent about 88.7 billion dollars on tobacco products. Tobacco industries, such as Altria Group Inc. and Reynolds American Inc., make revenue dollar amounts in the billions. These industries are some of the biggest corporations in the US. These companies use their profit mostly for advertising, spending from 10 billion to 15 billion dollars. These industries are so big and so well built that trying to make tobacco limited and sell less is almost out of the question. In the United States there are twenty one states that grow tobacco, the biggest ones being North Carolina and Kentucky. Together the two states make up two thirds of the amount of tobacco grown in the United States. The largest smokeless tobacco companies are named as United States Tobacco, Swedish Match and Conwood. Tobacco users in the United States spent about 2.61 billion dollars on tobacco in 2005. It is noticeable how big the tobacco industry really is. If all these industries would close down and the use of tobacco products became illegal, then the United States would benefit greatly from the amount of money that it would be saving.

Section 5: Solutions to the Problem (or Issue)

- **Web site #1 Name:**
NIDA InfoFacts: Cigarettes and Other Tobacco Products
- **Web address:**
<http://www.drugabuse.gov/Infofacts/tobacco.html>
- **Summary of the information:**

There are many ways to avoid the health risks involved with oral tobacco. There are also many organizations and information sources available to help people stop the use of tobacco products. A tobacco user can get help with behavioral treatments, medications as well as nicotine replacement treatments. Behavioral treatments include

counseling and it also educates users on having to deal with serious health risk situations. There are departments such as the US Department for Health and Human Services as well as hotlines for users that would like assistance in quitting. Medications are available that help to stop people from using tobacco products so frequently. Some of these go by the names of Bupropion and Zyban. There are also other medicines that help the withdrawal effects. Nicotine replacement treatments consist of using things like nicotine gum, patches, inhalers, lozenges and nasal sprays.

Along with these treatment to help users stop there is also treatment research taking place to help invent and produce more effective ways of helping users quit. Researchers have looked into producing a vaccine for tobacco users who would like to quit and are trying to come up with many other effective treatments.

- **Web site #2 Name:**
ACS: Smokeless Tobacco and How to Quit
- **Web address:**
http://www.cancer.org/docroot/PED/content/PED_10_13X_Quitting_Smokeless_Tobacco.asp
- **Summary of the information:**

The American Cancer Society has set up a Web site to aid people trying to quit the use of tobacco products. This organization has provided a list of several different clinics and resource centers that are willing to provide help to those who would like to quit tobacco use. Provided are telephone-based help programs, telephone numbers to anonymous hotlines for tobacco help, sponsored classes for aid in quitting, therapy as well as a list of medicines available to ease the quitting process. These medicines include nicotine replacements, varenicline, non-tobacco snuff products, nicotine lollipops and lip balms, acupuncture, hypnosis, tobacco deterrents, laser therapy and the use of herbs. This organization has also set up a guide on how to quit the use of tobacco products along with a list of alternative resources if additional help is needed.

- **Web site #3 Name:**
A Resource to Quit Dip, Snuff and Chewing Tobacco Products
- **Web address:**
<http://www.killthecan.org/community/welcome.asp>
- **Summary of the information:**

Killthecan.org is a Web site made to guide and help people quit using smokeless tobacco products. Included on the Web site is an official mission statement about what the organization's goal is. There are also chat rooms for quitters, links for spouse support, cancer and quitter stories told by people who have overcome using tobacco products because of the organization, links for smokeless alternatives, what to expect when quitting, motivating pictures as well as FAQs. This organization has been proven

by the people who have used it for quitting. Overall, anybody who expresses an interest in quitting would benefit from using this site. This site shows an encouraging organization that wants to rid the society of tobacco products and reduce the number of people suffering from its effects.

Conclusions:

Completing this fact sheet has helped me learn more in-depth details about the effects that oral tobacco has on a person's body. Without this research project I would never have motivated myself to research the risks of oral tobacco products. I am not a user of oral tobacco products but I know a lot of friends that use tobacco products. After learning about all the potential infections involved with tobacco products it will be important for me to let them know about all the risk factors.

After reading this fact sheet I would like people to fully understand the risk of using oral tobacco. I would also like for people to understand that as a whole we can make a difference. The more we share this type of information on drugs and the effects they have on the human body, the more we will ensure a healthy environment and society.

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