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OFFICE OF INSPECTOR GENERAL

YOUTH USE OF SMOKELESS TOBACCO:
MORE THAN A PINCH OF TROUBLE

NATIONAL PROGRAM INSPECTION

OFFICE OF ANALYSIS AND INSPECTIONS

YOUTH USE OF SMOKELESS TOBACCO: MORE THAN A PINCH OF TROUBLE

NATIONAL PROGRAM INSPECTION

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Region VI Dallas, Texas

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MAJOR FINDINGS

° Youth start dipping and chewing at very young ages. The average age of first use is only 10 years, in fifth grade, and regular or daily use begins at only 12 years.

° This study and state use prevalence surveys confirm that use of smokeless tobacco by secondary and even primary school students has increased at a rapid rate in recent years.

° Smokeless tobacco advertising does encourage youth to try dipping and chewing according to a strong majority of study respondents.

° Many health providers and educators say youth are unaware of the health risks of dipping and chewing. About 6 of 10 junior high users and 4 of 10 senior high users say there is either no risk or only a slight risk from regular smokeless use.

° There is a considerable amount of inaccurate information on the risks of smokeless tobacco among users. For example, 81 percent of users see smokeless use as much safer than cigarettes, about 5 of 10 users believe gum and mouth problems among dippers are rare, and 25 percent think snuff does not contain nicotine. One-fourth of junior high users say regular use is not addictive and one-third do not think it may lead to mouth cancer.

° Based on self-reports, many young dippers are experiencing serious health effects. About 4 of 10 users have had site specific leukoplakia, 37 percent have experienced sores, blisters and ulcers on their gums, lips, and tongue and 20 percent have receding gums.

° Addiction is a very serious problem for many users. Many (70%) say they've tried to quit, often many times, but most (78%) fail due to "addiction", "craving" or "habit".

° The study concludes that youth use of smokeless tobacco is a growing national problem with serious current and future health consequences and recommends that the Surgeon General:

- Launch an educational public media campaign on the risks of use.

- Support school health educational efforts.

- Seek funding for basic research on smokeless tobacco use and risks.

- Provide strong national leadership on the smokeless tobacco issue.

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SUMMARY OF FINDINGS AND RECOMMENDATIONS

> "They try it because their friends are using it. Then they learn to like the flavor and taste and pretty soon they're hooked." A smokeless user

- Users are predominately white males and include both athletes and non-athletes, youth of urban and rural origins, and white and blue collar family occupational backgrounds.

- Moist snuff is, by far, the smokeless product of choice among youth. Skoal and Copenhagen, products of U.S. Tobacco, the major advertiser, dominate as the brands of initial and current use.

- Over 9 of 10 junior and senior high users report buying their own snuff and chewing tobacco without difficulty. State laws restricting sale to minors are not well-known, are very poorly enforced, and do not provide an effective deterrent to use.

- Youth start dipping and chewing at very young ages. The average age of first use is only 10 years, in fifth grade. The average age when regular or daily use begins is only 12 years. Many young users will have regularly dipped at least 5-8 years before leaving high school.

- Young users are consuming considerable amounts of snuff and are dipping at high levels of frequency and intensity. Most (70 percent) dip every day, average 5 or more dips per day, and normally keep each dip in their mouth for 30 minutes or more.

- Youth use of smokeless tobacco in junior and senior high, and even in elementary schools, has increased at a rapid rate in recent years. This is confirmed both by the perceptions of study respondents and by a growing body of prevalence of use studies.

- Youth say they start dipping and chewing for 3 main reasons: 1) peer pressure or social acceptance by using friends, 2) curiosity or desire to experience the taste and effects, and 3) use by family memebers and relatives, such as fathers, brothers, cousins and uncles.

- Smokeless users are much more likely to have family members, relatives and close friends and associates who dip or chew than non-users. Users receive much more approval, or at least acceptance, of their dipping and chewing habits from parents, siblings, friends and associates than would non-users were they to dip or chew.

- Smokeless tobacco advertising does encourage youth to try dipping and chewing according to a strong majority of users (62 percent), non-users (79 percent) and key informants (98 percent).

- Dipping and chewing are enjoying fairly broad and growing social acceptance among youth. Most or some students at their school approve of use according to 86 percent of users and 70 percent of non-users.

- About 7 of 10 users, non-users and key informants say students generally regard dipping and chewing as more acceptable, or at least equally acceptable to smoking.

- Youth say they continue using smokeless tobacco for four main reasons: 1) they enjoy the flavor and taste (64 percent), 2) they have become addicted or "hooked" (37 percent), 3) they like the effects e.g., "relaxation", or "a buzz" (22 percent) and 4) peer pressure from using friends and associates (15 percent).

- Officially, schools prohibit dipping and chewing in their classrooms, yet 30-40 percent of users say they dip in class and often put in a pinch just before class starts. Quite a few schools allow dipping and chewing on campus. About one-third even had designated or well-known dipping areas, such as the "Skoal Pole" or "Scrounge Lounge".

- Youth are very to somewhat unaware of the health risks of dipping and chewing, according to 59 percent of health providers and educators. Eighty-six (86) percent of these respondents say many youth regard smokeless use as "safe".

- While many smokeless users (89 percent) acknowledge dipping and chewing can be harmful to a person's health they are much less likely to believe there is much risk of physicial harm in use. For example, about 6 of 10 junior high users and 4 of 10 senior high users say there is either no risk or only a slight risk from regular smokeless use.

- There is a considerable amount of inaccurate information on the risks of smokeless tobacco among users. In general, non-users are somewhat better informed than users and junior high users are the worse informed. For example, 81 percent of users see smokeless use as much safer than cigarettes. About 5 of 10 users mistakenly believe gum and mouth problems are very rare among dippers. Snuff does not contain nicotine according to the erroneous views of 25 percent of users. Regular smokeless use is not addictive according to one-fourth of junior high users and one-third of them disagree that it may lead to mouth cancer.

- Improved health education on smokeless tobacco is clearly needed. A large majority of both users (70 percent) and non-users (65 percent) say their school has provided no health information on smokeless tobacco. One-third of key informants admit no efforts have been made and many say the education that is offered is often very cursory.

- About one-fourth of key informants say school officials are very or somewhat unaware of the risks of smokeless tobacco. Twenty-seven (27) percent, including some principals, health teachers, nurses and coaches, say they have never viewed or heard any educational materials on smokeless.

- Many young dippers report they are experiencing serious health effects. While more pronounced among older youth, health problems are also prevalent among junior high users. About 4 of 10 users have had leukoplakia at the site where snuff is held in their mouths. Thirty-seven (37) percent have experienced sores, blisters, ulcers or other lesions on their gums, lips, tongue and mouth. Twenty (20) percent have receding gum lines.

- Addiction is a very serious problem for many users, including 28 percent of junior high and 40 percent of senior high users. Many (70 percent) say they've tried to quit, often many times, but most (78 percent) fail. The majority (57 percent) of those unable to quit blame "addiction", "craving" or "habit" as the main reason.

- The study concludes that youth use of smokeless tobacco is a growing national problem with serious current and future health consequences. To avert a potential epidemic of oral cancer and other serious health problems among youth in future years strong state and Federal actions are needed now.

- The study recommends that the Surgeon General:

  - Launch an educational public media campaign on the risks of smokeless tobacco use.

  - Support school health educational efforts.

  - Seek funding for basic research on smokeless tobacco use and risks.

  - Provide strong national leadership on the smokeless tobacco issue.

YOUTH USE OF SMOKELESS TOBACCO: MORE THAN A PINCH OF TROUBLE

BACKGROUND

Smokeless Tobacco Use Defined

Smokeless tobacco includes two main types: chewing tobacco and tobacco snuff. Snuff "dippers" place a small amount or a "pinch" of loose shredded or finely ground tobacco or a tea bag like pouch of tobacco between their cheek and gum. Tobacco "chewers" place a wad or "chaw" of loose leaf tobacco or a "plug" of compressed tobacco in their cheek. Both chewers and dippers suck on the tobacco and spit out the tobacco juices and saliva generated. Smokeless users savor the tobacco taste and flavorings and achieve the tobacco effect through rapid absorption of nicotine through the sensitive tissues lining the mouth. These practices of "going smokeless" have experienced a dramatic resurgence in popularity and social acceptability in the last decade.

Growing Public Concern Over Rising Use

Unfettered by a Federal excise tax, which was dropped in 1966, and unrestricted by the electronic media advertising ban applied to smoked tobacco, sales of smokeless tobacco have skyrocketed in recent years. The most dramatic increase has been in sales of moist snuff. The U.S. Tobacco Company, which controls about 90 percent of this market, saw its sales more than quadruple from $94 million in 1973 to $444 million in 1984.

Although no national surveys of the incidence and prevalence of smokeless tobacco usage have been conducted in recent years, estimates of the numbers of users are substantial - ranging from an estimate of 11 million by the National Cancer Institute to a high of 22 million by the Centers for Disease Control. Numerous experts, educators and health professionals say many of these growing numbers of users are young males in their teens. In fact, a growing number of state and local surveys are confirming the rapid and extensive growth in use of smokeless tobacco by children and adolescents, as well as young adults.

Concerns over rising use of snuff by youth were dramatized by the death from oral cancer in February 1984 of Sean Marsee, an Oklahoma track star, following six years of regular snuff dipping. Ensuing coverage of this tragic event and the smokeless tobacco issue by national network television programs, such as "Sixty Minutes", "20-20", and "Hour Magazine", as well as extensive print media coverage in newspapers, Time Magazine, Readers Digest, and scholarly journals have further stimulated public concern.

A growing and extensive list of health professional and public health associations, public interest groups and government agencies have adopted position statements or resolutions opposing the use of smokeless tobacco. Included are such groups as the American Dental Association, The American Medical Association, The American Public Health Association, the National

Cancer Institute, The World Health Organization and the American Association of Dental Schools. In general, these statements catalog significant health risks associated with use, support health warning labels, favor a ban or restriction on television and other industry advertising, promote health education to discourage use by the public, and support increased taxation of smokeless tobacco, as well as restrictions on its sale to minors. Appendix B lists some of the many organizations now on record against the dangers of smokeless tobacco.

Significant health risks are associated with use of smokeless tobacco. A growing body of scientific research links smokeless tobacco use with oral cancer. Smokeless tobaccos, particularly the popular moist snuffs, contain extremely high concentrations of nitrosamines, a very potent group of carcinogens known to cause cancer in over 40 different animal species. Continued exposure to tobacco juices produces lesions in sensitive mouth tissues. The white, leathery patches, or leukoplakia, which develop at the site where tobacco is held are common among smokeless users. Evidence suggests that the long-term risk of malignant transformation of smokeless tobacco associated leukoplakia may be significant.

Periodontal diseases are also common among smokeless tobacco users, particularly gums receding from teeth at the site where tobacco is held. Discoloration of teeth and fillings, dental caries, tooth abrasion and bad breath have also been associated with use. Another serious health risk is nicotine addiction, since regular snuff dippers often achieve nicotine blood levels that equal or even exceed those of heavy smokers.

Study Origin and Purpose

In January of 1985 the Federal Trade Commission requested the Surgeon General to conduct a comprehensive review of the health effects of smokeless tobacco to aid it in processing a Public Citizen Health Research Group petition for health warnings on smokeless tobacco packaging and advertising. In response, the Surgeon General established scientific review panels to advise him regarding the carcinogenic, oral or dental, and addiction effects of smokeless tobacco use. Additionally, he asked the DHHS Inspector General's office to conduct a qualitative field survey on smokeless tobacco use among youth.

The purpose of this study is to provide the Surgeon General with a broad-based, geographically diverse survey of a sample of high school and junior high school current or former regular users of smokeless tobacco. The study, which also includes non-users and key informants, is structured to learn more about the types and levels of smokeless tobacco use, use patterns and influences, youth awareness of the health risks of use and health effects resulting from use. This study was <u>not</u> designed as a statistically valid sample for developing prevalence of use data.

METHODOLOGY

The study included a total of 525 respondents, of which 290 or 55 percent were current (251) or former (39) regular smokeless tobacco users; 109 or 21 percent were non-users and 126 or 24 percent were key informants. See Appendix A for additional details on study respondents.

Users were defined as youth having dipped or chewed over 100 times, who presently or formerly either used daily or at least 3 days per week and who dipped or chewed at least 3 times on days of use. Non-users were defined as those who had never dipped or chewed or who had only tried it a few times or who had used less than 100 times. Key informants were individuals with knowledge of youth use of smokeless tobacco such as school principals, teachers, nurses, and coaches, dentists, or hygienists, American Cancer Society representatives and state public and dental health and educational officials and researchers.

Field work was conducted in 16 states: Massachusetts, Pennsylvania, West Virginia, North Carolina, Georgia, Alabama, Louisiana, Texas, Oklahoma, Indiana, Iowa, Colorado, Arizona, Idaho, Oregon, and Washington. These states were chosen to provide representation of diverse geographical areas of the nation, because their reported high smokeless user populations, and because of their research, educational or regulatory activities.

Within each state two schools were selected after consultation with informed researchers, state public health and educational officials and school administrators. The study included 31 different schools, 11 junior high or middle schools and 20 senior high schools. At each school we interviewed an average of 8-10 users, 2-4 non-users and 3-5 key informants. Users and non-users were identified for us by school officials, such as principals, school nurses, health teachers, counselors and coaches, in accordance with the above definitions and attempting to draw a balanced sample from each appropriate grade level. Key informants were selected from within the school system, the community-at-large or from the state level.

Structured questionnaires, focused on the study aims, were developed to guide discussions with respondents. The guides were reviewed extensively by PHS and HHS officials, and selected state and local officials and researchers. They were also pretested and revised again prior to field use. Study staff administering the guides were all experienced interviewers and received two days of intensive training on the guides and smokeless tobacco issues prior to field work. All interviews were conducted on a voluntary, one-to-one basis, in a private setting with a full pledge of confidentiality to respondents.

STUDY FINDINGS

Who Are The Users?

Smokeless users are predominately males according to users (96 percent) non-users (93 percent) and key informants (98 percent). About 6 of 10 of these respondents say users of smokeless include both athletes and non-athletes, although quite a few (28 percent) note a tendency toward higher use among athletes, particularly football and baseball players. About two-thirds of our respondents say smokeless users come from both urban and rural areas. However, about 30 percent of them think usage is greater among youth with rural backgrounds, especially those with farming and ranching roots. Our respondents do not normally associate smokeless use

with any particular racial group; however, when they do, they overwhelmingly say Whites are much more likely to dip or chew than Blacks, Hispanics or others. Users and key informants consistently state that certain youth groups, such as FFA, 4H, rodeo club, hunting and fishing clubs contain relatively more young smokeless users.

Asked which youth are least likely to dip or chew, users, non-users and key informants frequently mention girls, e.g., "girls think it's gross", "girls say it's disgusting and nasty." They also single out "honor students" or "smart kids", "preppies" and kids having strong parental guidance or strict religious backgrounds. They say Blacks, Hispanics and Asian Americans rarely dip or chew, in contrast to Whites and Native Americans. However, there are exceptions to all these patterns. One key informant said, "It's hard to say who's least likely to dip or chew since most of the kids are doing it."

For more insight into what smokeless users are like see the profiles of current and former users in Appendix E.

What Smokeless Products Are Most Used And How Easily Are They Acquired?

By far, the most popular smokeless tobacco product used by youth is moist snuff. Nine of ten users say they most often dip snuff from tins (84 percent) or use snuff pouches (6 percent). Only 10 percent of users chew loose leaf, twist, or plug chewing tobacco, and even some of these dip snuff more often. None report sniffing dry, powdered snuff through their noses. Unfortunately, the more popular moist snuff is also the most potent form of tobacco in terms of its high content of carcinogenic nitrosamines and nicotine.

The dominance of the smokeless tobacco market by the U.S. Tobacco Company, the major advertiser, is reflected in teen product preferences. The overwhelming brand of first use among youth is Skoal, either in tins or in the tobacco pouch "Skoal Bandit" form so prominently advertised under the slogan implying health safety, "take a pouch instead of a puff". Another U.S. Tobacco product, Copenhagen, its strongest, is the brand most youth say they currently use. Copenhagen and Skoal account for the lion's share of currently used snuff brands, with Hawken and Kodiak also enjoying some popularity, although far less. Among tobacco chewers, the Redman, Levi Garrett, and Beechnut brands are the most popular.

Nine of ten users, among both junior and senior high students, say they personally buy their smokeless tobacco. Ninety-five percent of senior high users say it is never difficult or only slightly difficult for them to purchase smokeless tobacco as a minor. Comparable junior high figures are only slightly lower, with 90 percent saying it is never difficult or only slightly difficult to buy as a minor. This clearly indicates that, even where state laws restrict sales of tobacco to minors, they are very weakly enforced. Teens make 55 percent of their purchases from convenience stores like "7-11" and 31 percent from supermarkets or grocery stores with the remainder coming mainly from gas stations, drug stores and tobacco shops.

What Is The Duration, Frequency, Intensity, And Quantity Of Smokeless Use?

Youth are starting use of smokeless tobacco at very young ages, becoming regular users soon thereafter and consuming considerable amounts of smokeless tobacco at fairly high levels of frequency and intensity. See Table I of Appendix D.

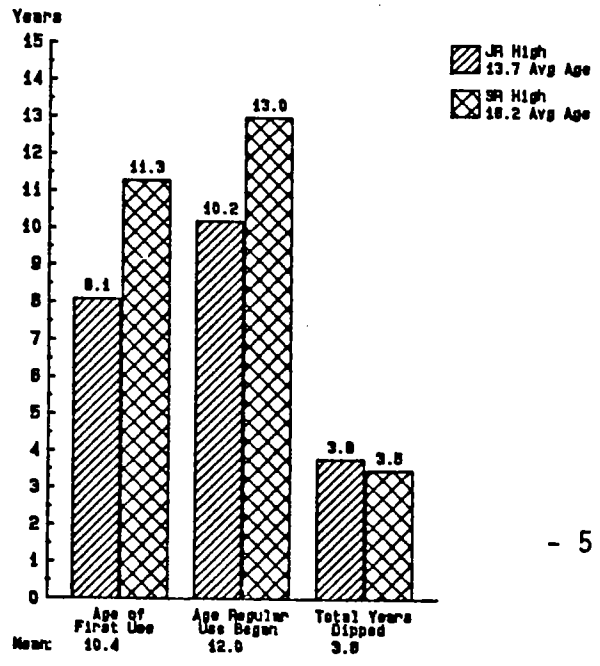
The overall average age when youth report first trying smokeless tobacco is only 10.4 years, or in the fifth grade. The reported age of initiation is lowest in the South Central (8.9 years) and the Southeastern U.S. (9.9 years) and averages 11 years in other areas.

Smokeless user reports indicate that regular or daily use follows soon after initiation. The overall average age when regular use begins is reported to be only 12.0 years old, or seventh grade. In the South East and South Central regions it is only 10.7 and 11.2 years, respectively, while other areas average 13 years.

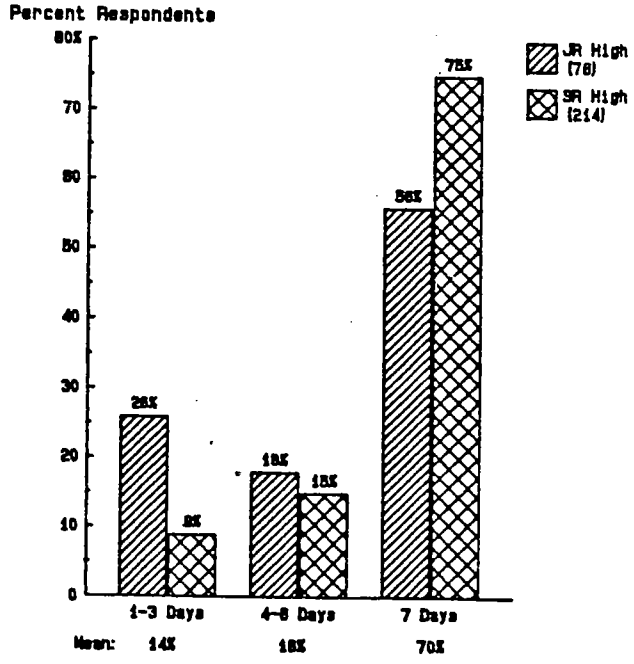
It appears there may be a trend toward even younger users. For example, junior high users say they tried smokeless an average of 3 years earlier than senior high students. Likewise, they begin using on a regular or daily basis 3 years earlier. As a result, the average total years of regular dipping for junior high users of 3.8 years even exceeds the total years dipped by older students (3.5 years). Based on these facts and the average ages of the users in our study, it is clear that many of these young users will have dipped regularly at least 5 to 8 years by the time they leave high school!

Most users (70 percent), including a majority of junior high users, said they dipped or chewed 7 out of 7 days in the week prior to being interviewed. Even more (81 percent), said they usually dip or chew every day in another question series on strength of habit.

Initiation & Duration Of Use
(Junior & Senior High Use Compared)

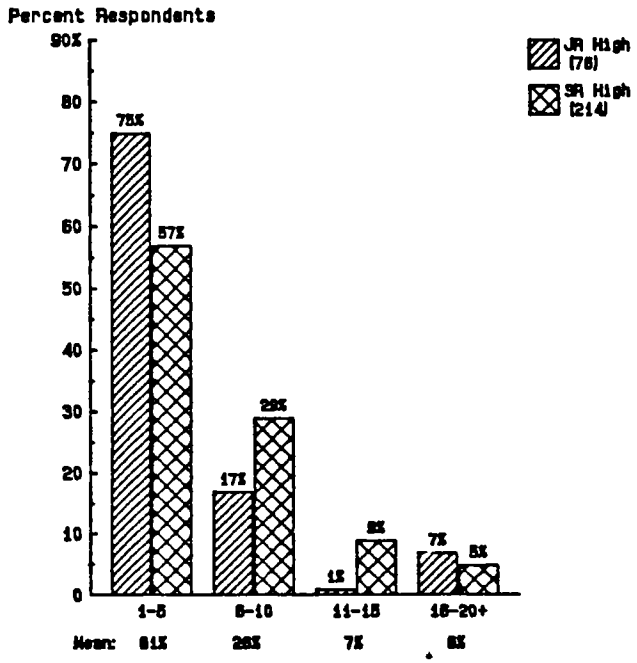


Days Dipped Or Chewed Last Week

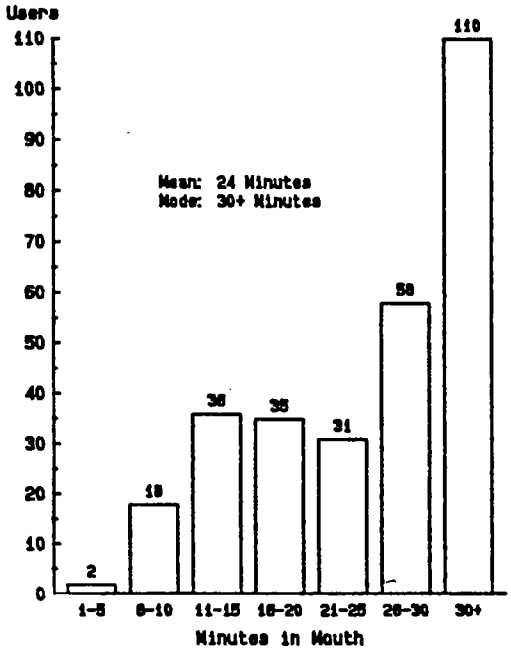


Sixty-one percent of users take 5 or less dips per day. About one of four (26 percent) take 6-10 dips and 13 percent say they take as many as 10 to 20 or more dips each day. Senior high users tend to take more dips than junior high users. The majority of users (58 percent), both junior and senior high, hold each dip in their mouths over 25 minutes, with most keeping it in over 30 minutes and often for up to 1 hour.

Dips Or Chews Per Day

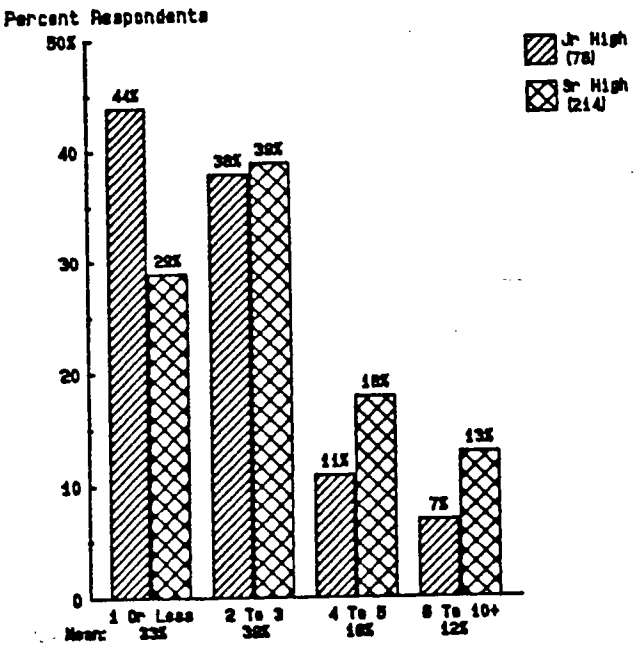


Minutes Each Dip Held In Mouth

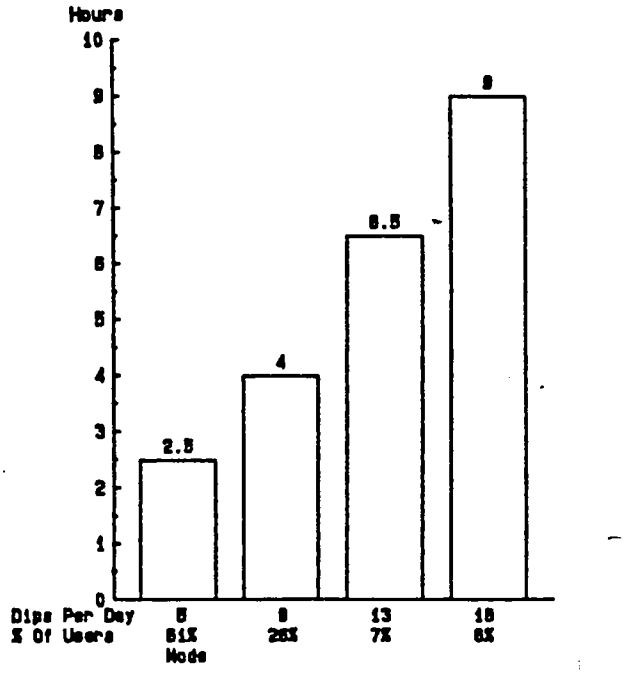


As indicated by the graphs on the following page, these rates and durations of dips result in rather high amounts of snuff consumption, as well as high rates of daily exposure of the sensitive tissues of the mouth to the harmful effects of tobacco juices. Two-thirds of our users consume 2 or more cans of snuff or pouches of tobacco each week, with 12 percent using as much as 6 to 10 or more. Even those dippers who average only 5 or 8 dips per day usually hold the tobacco in their mouths from 3-4 hours each day. For the 13 percent of users who take 11 to 20 or more dips each day, tobacco exposure times may be as high as 6 to 9 hours each day! Thirty (30) users said they sometimes even sleep with a dip or chew in their mouth.

Cans Or Pouches Used Last Week



Daily Tobacco Exposure Time



* Exposure time is the average number of daily dips multiplied by modal length in minutes of each dip.

Other Aspects of Usage

The vast majority of users (81 percent) say dipping or chewing is something they do both alone and with their friends, rather than mostly with friends or mostly alone. The most mentioned sites where youth dip or chew are:

Setting	Percent Respondents
At Home	87%
Relaxing With Friends	85%
Watching Sports	73%
At Work	49%
At Parties	48%
While Studying	47%
In The Classroom	30%

A few also said they dip or chew while hunting and fishing or, while driving around - sometimes in pick-up trucks equipped with spittoons - but only 4 percent dip while on dates.

The great majority of users dispose of the tobacco juices by spitting. When indoors, they often use styrofoam cups and soft drink cans as portable spittoons. They also spit in rest rooms, water fountains, plants and sometimes on the floors, carpets and halls. When outdoors, its easiest to just spit in the grass or shrubs, on the ground, sidewalks or out the window of an automobile.

Suprisingly, a significant number (37 percent) say they swallow the tobacco juices when they are dipping indoors and have no place to spit, as in the classroom. School nurses confirm that such swallowing occurs based on the numbers of young males they see with upset stomachs, or "flu" symptoms. The extensive amount of swallowing users report may pose a significant future risk of stomach and throat cancers, in addition to the risk of oral cancer.

What Is The Overall Trend In Youth Use Of Smokeless Tobacco?

Use of smokeless tobacco by young people has increased at a rapid rate in recent years. This is confirmed both by the perceptions of our study respondents and by a growing body of prevalence of use surveys around the nation.

Greatly increased use of smokeless tobacco by adolescents and children is being reported by numerous state and local surveys of school populations by scientific researchers and public health officials. These surveys, many of which are state-wide in scope and number thousands of respondents, have been conducted in many different geographical areas of the nation. Commonly, they show about 8 percent to 15 percent of junior and high school students use smokeless tobacco regularly. Among males, where use tends to predominate, the proportion who dip or chew often ranges from 20 percent to as high as 40 percent of all boys in some grade levels. See Appendix C for additional highlights of these survey findings.

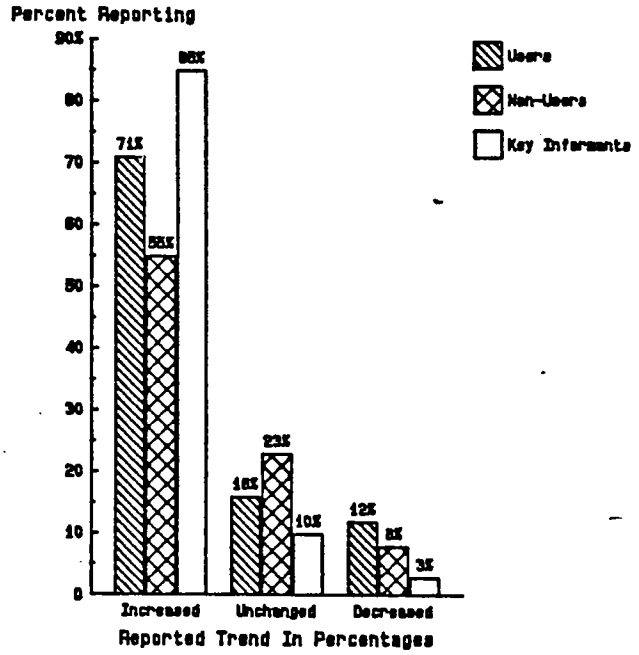
Several recent or on-going college surveys show about 11-12 percent of college students dipping snuff or chewing tobacco. One such study reported average use of 8 percent, ranging from a low of 8 percent (about 16 percent for males) at northeastern region colleges to a high of 15 percent (about 30 percent for males) at south central colleges. Studies show even higher smokeless tobacco usage among male college athletes.

Smokeless tobacco use is expanding not only on college campuses and in secondary schools, but also among elementary school students. One state found 14 percent of fifth graders and 7 percent of third graders using smokeless tobacco. Two southeastern states reported over one-fourth of fifth and sixth grade white males use some form of smokeless tobacco.

As shown by the accompanying graph, substantial majorities of smokeless users, non-users and key informants are reporting increased use of smokeless tobacco or stable use - often at rather high levels. Our key informants are particularly concerned about this rise, with 85 percent saying use has either greatly or moderately increased during the past five years. Among the reasons key informants and non-users frequently give to explain this increasing use are:

1) Peer pressure and friends influence, 2) the faddish popularity of the trend and its associated "cowboy" culture, 3) the influence of the media, especially television advertising and the "macho" image it projects, 4) endorsement by popular role models like professional athletes and celebrities, 5) the widespread misconception that smokeless is much safer than smoking cigarettes, and 6) the ease of obtaining smokeless tobacco and using it without detection.

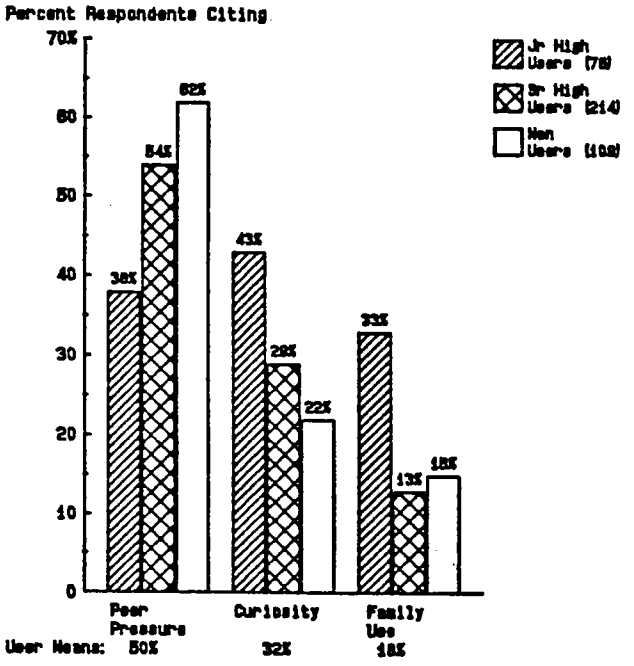
Perceived 5-Year Trend In Smokeless Tobacco Use



Why Do Youth Start Dipping or Chewing?

Users say they first tried smokeless tobacco for three main reasons. First, and most influential, is peer pressure. Their friends use it and push it and they want to be accepted, so they try it. Many youth said they started "because my friends were doing it and offered it" or because "they see other people doing it". The second most mentioned reason is curiosity or desire to experience the effects and taste. The third reason is that other family members or relatives use smokeless. Other less mentioned reasons include: something to do or to avoid boredom (8 percent), enjoyed the flavor or taste (6 percent), and to avoid smoking or to change from smoking (4 percent).

Reasons For Initiating Smokeless Use



As shown by Table II in Appendix D, non-users and key informants agree with users on the important role that peer pressure and family or relative use play in initiation. However, many more key informants (55 percent) blame the influence of industry advertising for getting kids started on smokeless. Also, more non-users and key informants cite the "macho or grown-up" image of smokeless and its appeal as a "safer alternative to smoking", than do users.

Reflecting the strong influence of peers and relatives, 58 percent of users say they were with another youth or friend, usually their own age or a little older, when they first tried smokeless and 38 percent say they were with a family member or relative. Usually this was their brother (28 percent), cousin (25 percent), father (23 percent), uncle (15 percent), or a grandparent (7 percent). The tobacco for their first dip or chew was given them by these individuals most of the time (77 percent). However, 14 percent said they personally bought their first dip or chew.

Smokeless users are somewhat more likely to have family members or relatives who dip or chew than non-users.

	USERS (290)	NON-USERS (109)
Father Uses	23%	16%
Brother Uses	32%	15%
Other Relatives Use *	73%	57%
No Relatives Use	2%	16%

* Uncles, cousins, grandparents. (Mothers and sisters of both use only 1-2 percent of time.)

Smokeless users are also much more likely than non-users to have daily close friends and associates who also dip or chew. For example, 78% of users say their best male friend uses, while this is reported by only 32% of non-users.

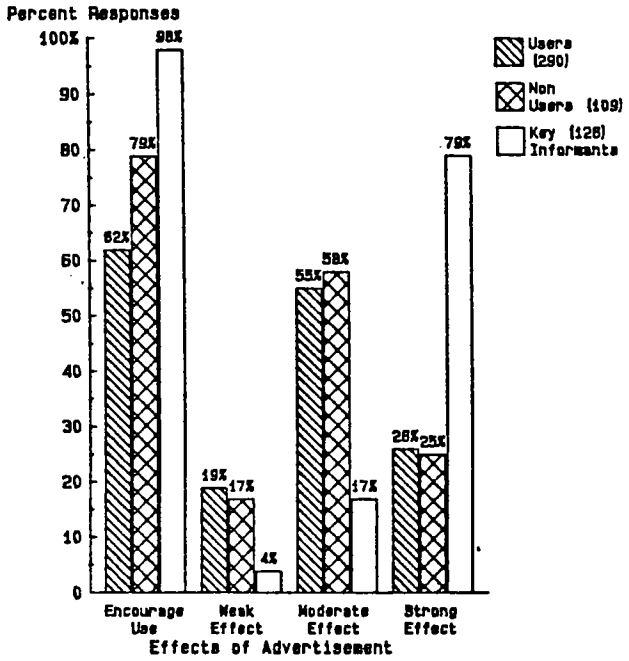
	USERS	NON-USERS
° Best Male Friend	78%	32%
° Other Male Friends	97%	80%
- Many, Most, All	(74%)	(28%)
- A Few	(23%)	(52%)
° Coaches	59%	38%
- Many, Most, All	(28%)	(13%)
- A Few	(31%)	(25%)
° Teammates	98%	43%
- Many, Most, All	(57%)	(23%)
- A Few	(41%)	(20%)

Smokeless tobacco advertising does encourage young people to try dipping and chewing according to a strong majority of users (62 percent), non-users (79 percent) and key informants (98 percent). About 8 of 10 users and non-users say these ads exert a moderate to strong effect, while 96 percent of key informants report a strong to moderate effect.

A majority of users (77 percent) say commercials using professional athletes are designed to appeal to teens (45 percent) and young adults (32 percent). Non-users closely agree with this view.

The users in our sample report viewing smokeless T.V. commercials fairly frequently. They were able to accurately identify the type of people portrayed, such as professional athletes, cowboys, outdoorsmen, musicians, and race car drivers. They describe them as "popular or well known", "tough or macho", "strong or manly", "casual or laidback", "role models", "people I'd like to be like" or "people you look up to". Some also repeated the message ads give, such as "anyone can use it", "it's better or safer than smoking" and "it relaxes you".

Smokeless Tobacco Ads Encourage Teen Use



Social Acceptability of Smokeless Tobacco Use

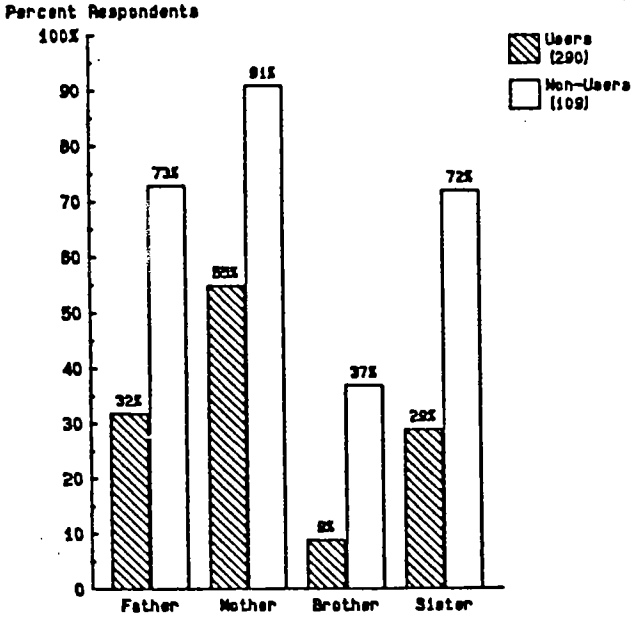
Dipping and chewing are enjoying fairly broad and growing social approval and acceptance, particularly among students.

About 7 of 10 users, non-users and key informants say students generally regard dipping and chewing as more acceptable than smoking or at least equally acceptable to smoking.

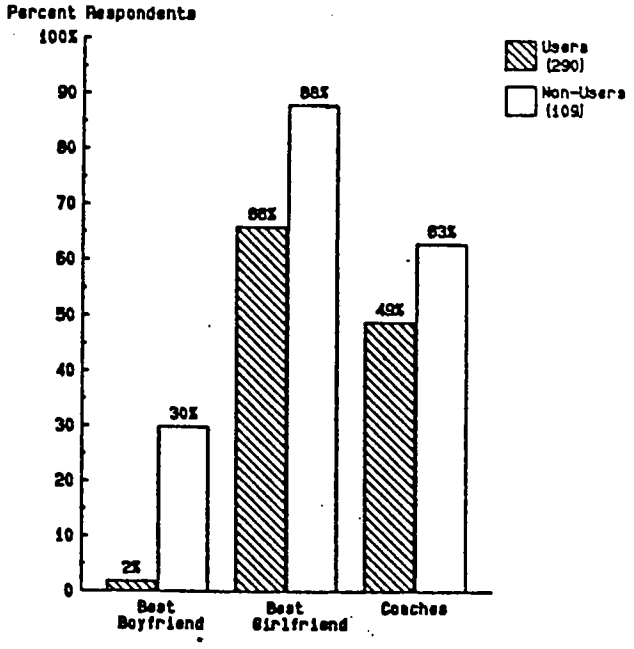
Eighty-six (86) percent of users say most (38 percent) or some (48 percent) students at their school approve of smokeless use. Even among non-users 70 percent say most (32 percent) or some (38 percent) students approve. However, about twice as many non-users (29 percent) as users (13 percent) say only a few approve. Eighty-two (82) percent of key informants report that dipping and chewing is acceptable to students in their schools or communities.

However, 95 percent of key informants personally do not "think it's ok for youth to use smokeless tobacco", primarily because of associated health risks and the nasty, unsanitary nature of this habit. An even larger majority (99 percent) say parents and schools should do their best to discourage youth from starting or continuing use of smokeless. Yet, it is noteworthy that 20 key informants or 16 percent admit they personally dip or chew. Unfortunately, most of these are coaches, who serve as important role models for many young men.

Disapproval Of Use By Significant Others



Disapproval Of Use By Significant Others

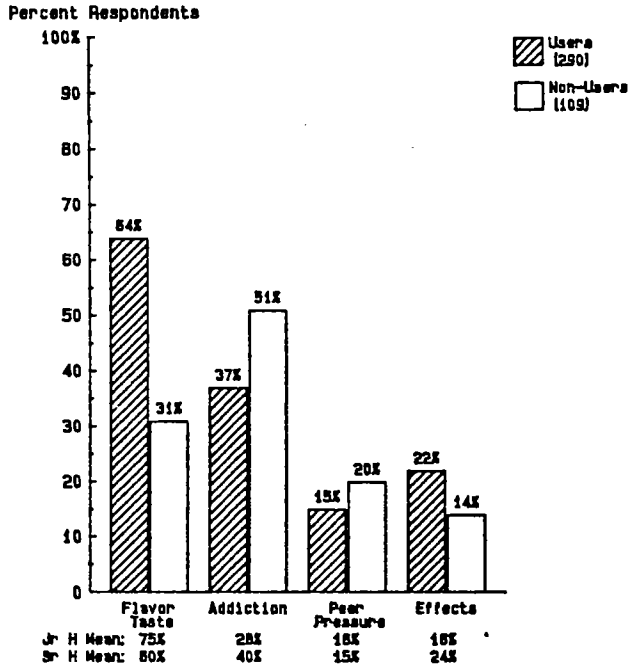


It is significant that parents, siblings and friends of non-users are much more likely to disapprove of their use of smokeless tobacco than are the comparable relatives and friends of users. Many users report their fathers (68%), mothers (45%), brothers (91%), sisters (71%), best boy friends (98%) and coaches (51%) either approve or are neutral toward their dipping and chewing habits. Apparently, parental approval, or at least acceptance, of their sons' dipping or chewing is actually even higher, for 93 percent of users say their parents know they dip or chew and 87 percent of users list their home as a setting where they regularly use smokeless tobacco. Obviously, many parents are not enforcing their preferences. Quite a few key informants point out that parents would rather see their kids dip or chew than have them smoke.

Why Do Youth Continue Using Smokeless Tobacco?

Enjoyment of the flavor and taste is the main reason users give for continuing their dipping and chewing habits. However, 37 percent of users (28 percent of Jr. High and 40 percent of Sr. High) say they have become addicted by their habit and can't quit. Twenty-two percent say they keep using for the effects they achieve, e.g., "relaxation", "buzz", "peps up". Peer pressure remains an important influence on continued use, since many of their friends are using smokeless around them and offering it to them. See Table III in Appendix D for other continuation reasons and for a comparison of junior and senior high responses.

Reasons For Continuing Smokeless Use



* The Effects Category Includes "Help Relax", "Gives a Buzz", "Peps Me Up"

Permissibility And Legality of Smokeless Use

School Usage

Schools do not officially permit dipping or chewing in the classroom according to a majority of users, non-users and key informants. School officials realize that some kids dip in class anyway because "it's very easy to hide", especially when they keep dips in for long periods and swallow the

juices. In fact, 30 percent of users say they dip in class and 41 percent say they often put in a pinch just before class starts.

Some schools allow dipping and chewing at other places on campus according to users (42%), non-users (26%) and key informants (30%). Places where dipping often occurs are parking lots, anywhere on outside grounds, and field houses or athletic practice fields. Spitting areas, designated or at least commonly known, were reported at 10 school campuses visited. These sometimes even have names like the "The Skoal Pole", "Scrounge Lounge" or "Cowboy Corner". Sometimes the smoking area doubles as a dipping area or the dipping area may be something like an old hollow tree stump where dippers congregate.

Dipping and chewing also goes on at school functions like ball games, dances, and pep rallies according to 38 percent of users, and 29 percent of non-users. School officials acknowledge it is much more difficult to enforce non-use rules in these settings.

School Policies and Enforcement Vary Widely

School policies regarding smokeless usage vary considerably. Some address smoking but do not touch on dipping or chewing, some require permits to use smokeless, others outlaw smokeless and other tobacco use. Some restrict use but allow possession of smokeless on campus. In some schools where even possession is prohibited the telltale white rings on jean pockets are beginning to fade as boys conceal their snuff tins inside the front of their jeans behind their belts, or keep them in their lockers. Schools try to strongly enforce their rules, where they exist, but admit they don't have the time or desire to be "policemen". However, some schools employ suspensions, remedial education and even transfer to alternate schools for repeat offenders and appear to be having some effect in limiting use. About 25 percent of our respondents say school rules are only weakly enforced. The attitude and leadership of school principals appears to be a key variable in determining how actively schools attempt to control or restrict use.

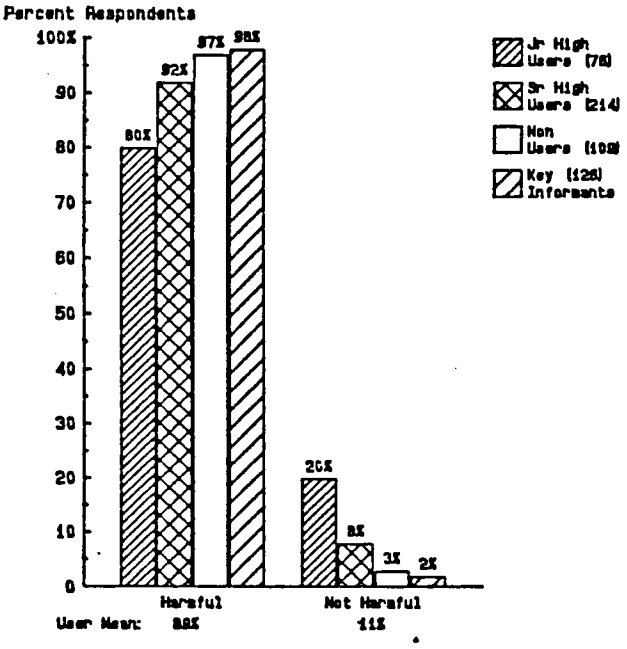
State Law Restrictions

In general, we found mass confusion and/or ignorance on the part of users, non-users and even key informants regarding the legality in their states of use and purchase of smokeless tobacco products by minors, the sale or gift of such products to minors and any legal age limits on use, purchase or sale. Several of the states in our sample do have such laws. However, the majority of respondents either are not aware of the existence of their state's laws or have an incorrect understanding of them. Many respondents incorrectly think their state has legal restrictions on use, purchase and sale when, in fact, it does not. Time and again when asked about such legal provisions, key informants would say, "I should really know that, but I don't". Two-thirds (66 percent) of key informants said state laws restricting sale or use of smokeless tobacco are only weakly enforced; 30 percent didn't know. These responses, together with the fact that 94 percent of users report it is never difficult or only rarely difficult for them to purchase as a minor, make it abundantly clear that state laws restricting use of smokeless tobacco products are not being enforced and do not provide an effective deterrent to use by minors.

How Aware Are Youth of the Health Risks of Smokeless Tobacco?

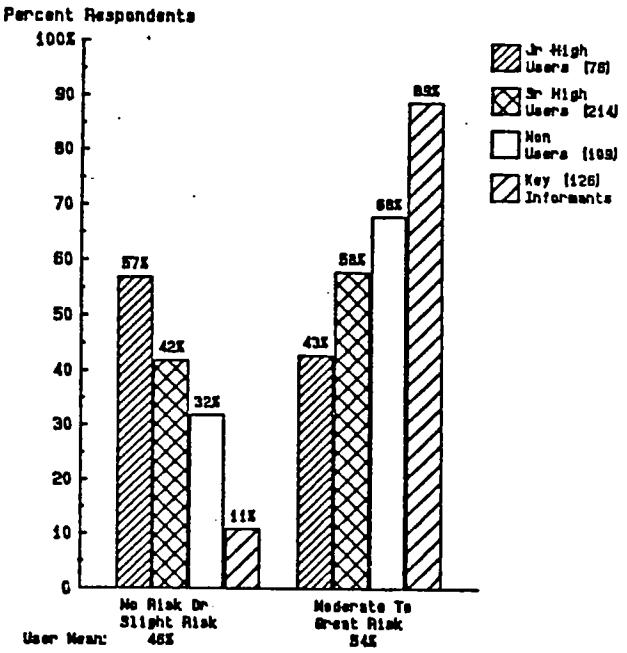
Among key informants like school officials, health providers, and health educators, 59 percent say youth are very unaware or at least somewhat unaware of health risks of dipping and chewing. When asked if any youth regard smokeless use as "safe" 86 percent of these respondents said yes, with a majority saying many or most young people share this attitude. In explanation they cite several factors: 1) even youth who know of risks often think "It can't happen to me"; 2) youth see smokeless as safer than cigarettes due to misleading advertising claims and the heavy anti-smoking emphasis; 3) absence of warning labels on smokeless products; and 4) the relative dearth, until quite recently, of smokeless risk information.

Can Smokeless Use Be Harmful To Health?



* The Not Harmful Category Includes Don't Know Responses (Jr Hi - 7%, Sr Hi - 4%, Non-Users - 2%, Key Informants - 1%)

Perceived Extent of Risk of Smokeless Use



† The No Risk/Slight Risk Category Includes Don't Know Responses (Jr Hi - 4%, Sr Hi - 5%, Non-Users - 4%, Key Informants - 4%)

Eighty (80) percent of junior high users and 92 percent of senior high users acknowledge that dipping and chewing can be harmful to a person's health. Many note the potential risks of oral cancer (79 percent) and a few (5-15 percent) mention problems like gum disease, tooth damage, mouth sores and stomach problems. Yet 1 of 5 junior high users and 8 percent of senior high users say smokeless use is not harmful to health.

User's perceptions of the extent of physical harm that might actually result from regular dipping and chewing are much lower. About 6 of 10 junior high users and 4 of 10 senior high users say they see no risk or only slight risk in regular use. In contrast, about 7 of 10 non-users and 9 of 10 key informants assess the risk of regular dipping as moderate to great. It seems very likely there is some risk denial by smokeless users who are rationalizing habits which they enjoy or cannot break.

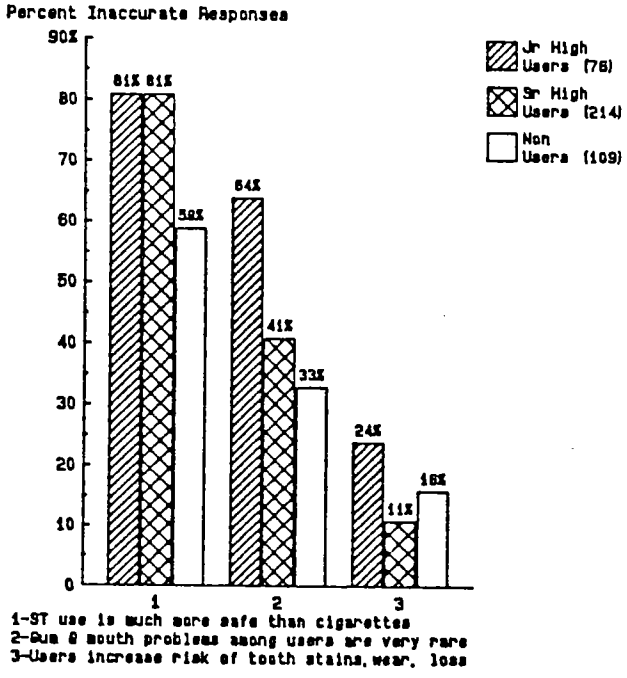
Inaccurate Knowledge of Health Risks

There is a considerable amount of inaccurate knowledge of the risks of smokeless tobacco on the part of dippers and chewers, especially junior high users. In general, non-users are better informed than users and junior high users are worse informed than older users.

Fully 81 percent of users see smokeless tobacco use as much safer than cigarettes. This widely held perception leads to a very dangerous belief that smokeless use is "OK" and a "safe alternative", which it is not.

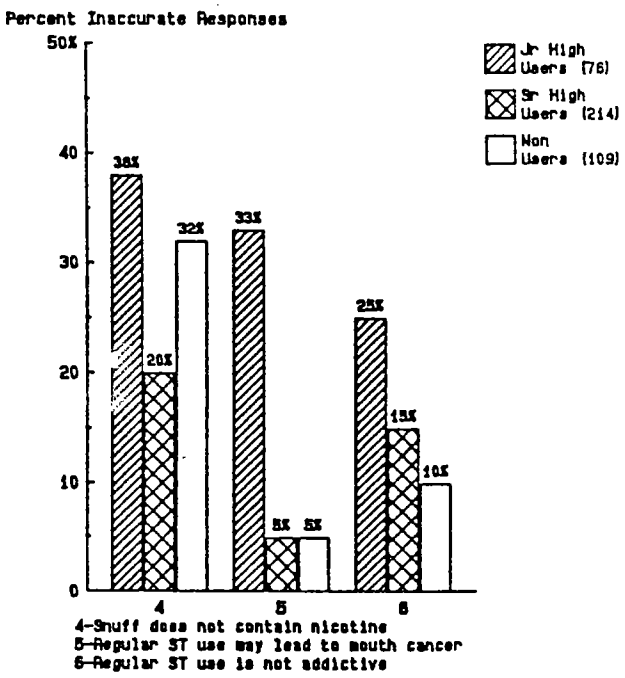
Six of ten junior high users and 4 of 10 senior high users mistakenly believe that gum and mouth problems are very rare among dippers and chewers, when, in fact, they are fairly common. Snuff does not contain nicotine according to the erroneous views of 38 percent of junior high users and 20 percent of senior high users. One of four junior high users and 15 percent of senior high users think regular smokeless use is not addictive. One-third of junior high users incorrectly disagreed with the statement that regular use of smokeless tobacco may lead to mouth cancer.

Inaccurate Knowledge Of Risks
Of Using Smokeless Tobacco (ST)



* The percentages include 'don't know' responses
* The national means for user categories 1, 2, and 3 are 81%, 47%, and 14% respectively.

Inaccurate Knowledge Of Risks
Of Using Smokeless Tobacco (ST)



* The percentages include 'don't know' responses
* The national user means for categories 4, 5, and 6 are 25%, 12%, and 18% respectively.

Improved School Health Education on Smokeless Risks Is Needed

A large majority of both users (70 percent) and non-users (65 percent) say their school has not provided any health information on smokeless tobacco. While more key informants believe schools are providing some educational coverage on smokeless tobacco, one-third admit no efforts have been made. Often this lack of school effort is attributed to the fairly recent discovery of risks to youths, lack of good educational materials, failure to perceive dipping as a serious problem, competition of higher priority problems like drugs, alcohol and smoking, and lack of staff and time. Many school officials admit that health classes, the normal means of conveying any smokeless health information, often only provide very cursory treatment of smokeless tobacco, perhaps in a tobacco unit heavily focused on smoking, or as one small item in a substance abuse unit dominated by drugs. Furthermore, since many schools permit senior high students to take only one required semester of health at any time during their four years, many students may already have formed their dipping habits before receiving health risk information.

About one-fourth of key informants say school officials are very or somewhat unaware of the risks of smokeless tobacco. Twenty-seven (27) percent, including some principals, health teachers, school nurses and coaches, say they have never viewed or heard any educational materials on smokeless tobacco. Many professing knowledge of smokeless risks derived it from non-school sources, such as the "60 Minutes" and "20-20" T.V. specials or an occassional newspaper or magazine article.

Many school respondents recognize they need to do more to educate youth on smokeless risks and to discourage them from starting and continuing dipping and chewing habits. This should be done, they say, both in health classes and in special programs, with health teachers and coaches playing a vital role. They are quick to point out that parents should also be educated on health risks so they can work together with schools in discouraging smokeless use. Parents are seen as unaware of smokeless risks by 55 percent of key informants.

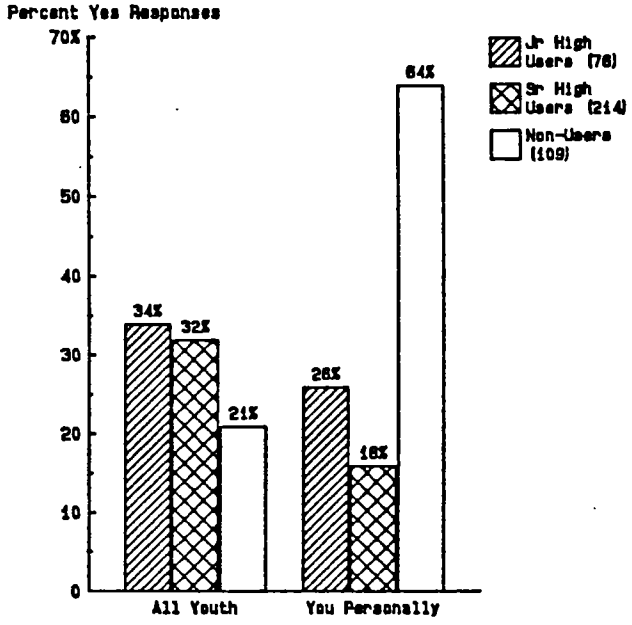
Users say the best way to inform youth of smokeless risks is television -special documentaries, public service announcements and counteradvertising. The next most effective way is through school education in the classroom and special assemblies. Users stress the importance of presenting the facts, employing examples of young users with health problems and use of pictures and audio-visual materials to graphically show problems that can occur.

Key informants and non-users agree on the importance of using the electronic media, both TV and radio, and school educational efforts, with key informants stressing the need to start education early and reinforce it over time and to train teachers on health risks. Many key informants and non-users think product health warning labels are a good way to educate on risks. One non-user said, "I know lots of kids whose only reason for using it is because it doesn't have a warning label." Key informants also urge

banning electronic media smokeless commercials and use of professional athlete role models for counteradvertising. They also favor a broad public media campaign to educate parents, communities and the general population on smokeless risks.

Fortunately, though most users say they are getting little information on smokeless risks at school, they are becoming somewhat aware of risks from other sources such as the above noted TV specials (54 percent), word-of-mouth from parents, family and friends (42 percent) and by reading newspaper or magazine articles (31 percent). Unfortunately however, 92 percent of users say they gained this knowledge of health risks after they had already begun dipping or chewing. Asked if they would still have started had they known the risks beforehand, 37 percent said they probably would not and another 13 percent were not sure.

Will Warning Labels Discourage Purchase?



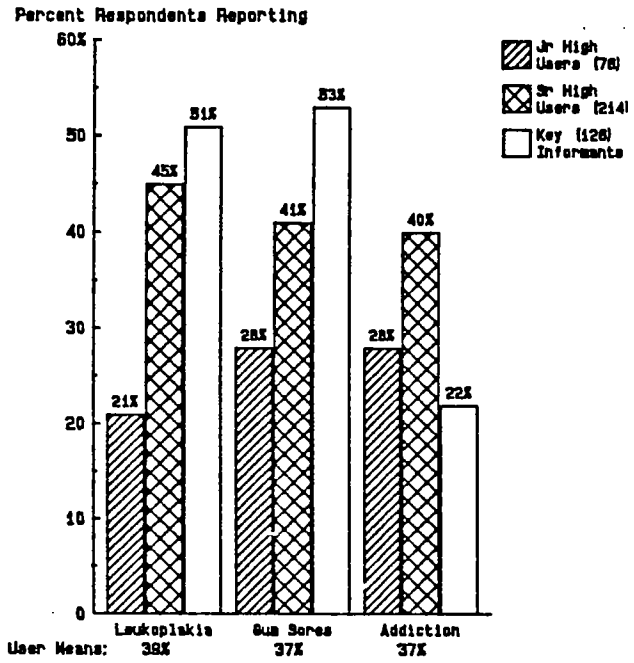
Health Warning Labels

Our respondents are not very optimistic that placing warning labels on containers of smokeless tobacco will deter young dippers and chewers from buying it. Sixty-two (62) percent of users and 3 of 4 non-users say warning labels will not make youth less likely to purchase. However, regarding the impact of warning labels on them personally, almost 2 of 3 non-users say they would be less likely to buy it if it had a warning label. Users, many of whom already have strong smokeless habits, are much less apt to say warning labels will deter purchases. Several said warning labels would have mattered more earlier when beginning use of smokeless. Junior high users are somewhat more likely than senior high users to say warning labels will impact on them personally.

What Are the Health Effects on Users?

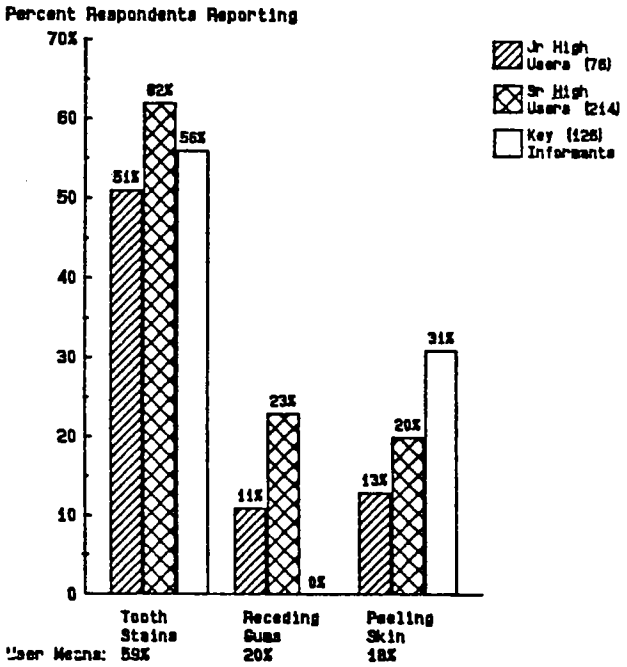
Based on user self-reports, many young dippers are experiencing serious health effects. While more pronounced among older youth, perhaps due to their higher volume and more intense use, health problems are also prevalent among junior high users. Although harmful effects run somewhat higher in the Southeast and South Central parts of the nation, those areas with earliest ages of initiation and highest total years of use, they are frequently reported by users from all geographic regions in our study.

User Health Effects



* Key Informant's percentage represents problems experienced by youth users they knew.

User Health Effects



*Key Informants: % reporting as problem by youth users they know. Receding Gums question was N/A

About 4 of 10 or a total of 113 users say they have had white, wrinkled patches, or leukoplakia, develop at the site where they hold the snuff in their mouths. Thirty-seven (37) percent of users have experienced sores, blisters, ulcers or other lesions on their gums, lips and mouth. Receding gum lines are reported by 20 percent of users and 18 percent have experienced skin sloughing off or peeling from their cheeks or gums. To reduce these problems many youth frequently shift the tobacco from side to side in their mouth to allow sores or lesions to heal. One youth said he lines his cheeks and gums with plastic to help protect sores and allow him to keep dipping. Staining of teeth and fillings is the most widely reported oral effect.

Addiction

Addiction is a serious problem for many users. Thirty-seven (37) percent of users say the reason they continue using smokeless tobacco is because they are addicted or "hooked". Said a typical user, "It's a habit. I got hooked on it, addicted to it, like smoking I guess." As shown by strength of habit, Table IV in Appendix D, many users exhibit numerous indicators of addictive behavior. For example, 81 percent dip frequently every day, 68 percent would make a special trip to the store if they ran out of snuff, 55 percent would have strong cravings and 53 percent would find it "very hard" if they tried to quit. Some, 27 percent, say they cannot even go four hours without a dip or they will get nervous or irritable.

Many users want to quit and have tried to quit numerous times only to fail due to the strong hold their habit has on them. For example, 70 percent of users say they've made a serious attempt to quit dipping or chewing. Many who attempt quitting do so out of fear of cancer or other health risks (34 percent) or because of health problems they are experiencing (15 percent). For example a former user said "my gums were going down, my teeth were all stained, it was expensive and I heard it caused cancer." Quite a few try to quit because of the urging of parents and family (18 percent) or their girlfriends or other friends (11 percent). Those who've tried to quit say it's very hard to do and 78 percent say they failed despite an average of 2-3 attempts. Even those who have stopped report making an average of two attempts before successfully quitting. Fifty-seven percent of those unable to quit blame "addiction, craving, habit" as the main reason. Said one user, "I just had to have it." Another said, "I was going crazy. I couldn't concentrate. I was jittery. I couldn't sleep. I would quit if I could, if there was a way." It is very sad to listen to these young people recite their health problems and fears and their inability to stop doing something they know is hurting them. Many seem to yearn for some miracle cure or at least special services or help for those really wanting to quit.

While the user health effects reported above might alarm many health and dental officials, many users tend to discount their seriousness. They usually regard their mouth sores, gum, teeth and stomach problems as only slightly to moderately harmful. Perhaps this is due to several factors: 1) health problems often clear up after use is curtailed or stopped or may be lessened by changing the place where the pinch is placed, 2) oral cancer is a long-term risk which has not yet affected many youth, 3) dental exams are not reported as detecting many problems and 4) rationalization and denial.

It is noteworthy that 40 percent of youth say the dentist was not aware of their dipping habit. Among users whose dentist did know about their habit 43 percent said neither the dentist nor hygienist advised them to quit.

Smokeless Use and Smoking

The current smoking behaviour of smokeless tobacco users and non-users in our sample does not differ substantially. Only slightly more smokeless

users (60 percent) than non-users (52 percent) say they've tried smoking cigarettes. A large majority of both users and non-users do not smoke, with somewhat fewer non-smokers among smokeless users (79 percent) than non-users (86 percent). Three (3) percent of both users and non-users were former daily smokers who have quit. Eight (8) percent of users and 6 percent of non-users are current daily smokers. About 6 percent of users and 5 percent of non-users say they smoke only occassionally (weekends, parties).

Among smokeless users who are also daily smokers 45 percent said they started smoking after they had been using smokeless. However, the majority were smoking before they began dipping or chewing and 56 percent of these regard smokeless tobacco as a substitute for smoking. Again, among smokeless users who also smoke occassionally, less than half started smoking after using smokeless and of the majority who were smoking before, 53 percent regard smokeless as a smoking substitute.

Possibility of Future Cigarette Smoking

	USERS	NON-USERS
Definitely/Probably Not	78%	86%
50-50 Chance Will	12%	9%
Definitely/Probably Will	9.7%	5.4%

Smokeless users report a somewhat higher probability (21.7 percent) of smoking in the future than non-users (14.4 percent). However, the majority (64 percent) of smokeless users saying they are possible future smokers, already smoke daily, or smoke occassionally. Among smokeless users who do not smoke and have not smoked only 4 percent say they will definitely or probably smoke in the future and only 7 percent say there is a 50-50 chance they will smoke in the future.

A large majority of smokeless users in our sample, regard snuff dipping as much safer than smoking and they do not smoke cigarettes now nor do they intend to smoke in the future. Among smokeless users who do smoke the majority say they started smoking before they began dipping or chewing. For them, smokeless tobacco is more of a substitute for smoking than a precursor of smoking. In summary, our findings provide only weak support for the hypothesis held by some public health officials that a nicotine addiction developed through dipping will be satisfied in later years through smoking. Further research is needed on this important issue.

What Are States Doing About the Smokeless Tobacco Issue?

Problem Identification

As indicated by Appendix C, several state health departments have conducted surveys of the use of smokeless tobacco by youth in their states. Notable among these are Massachusetts, Wisconsin, Iowa, Oklahoma, Utah, and Idaho. Significant studies showing prevalence of use have also been conducted by non-state entities in Texas (American Cancer Society), Indiana (Christen et

al), Oregon (Oregon Research Institute), Colorado (Greer and Poulson) and Georgia (Offenbacher and Weathers).

The Association of State and Territorial Dental Directors, particularly the state dental directors in Oklahoma, Utah, Idaho, and Massachusetts; together with the on-going efforts of the CDC Dental Disease Prevention Activity (DDPA), are helping to raise state and national awareness of the serious health threat posed by smokeless tobacco.

Smokeless Tobacco Education Programs

In a recently completed anaylsis of data offered by 50 state health departments by the Centers for Disease Control DDPA, 13 states reported they now offer smokeless tobacco educational programs and 7 additional states plan to do so in the future.* Thirty-three states say there is a need for such programs in their state. The remainder are unsure of the need, but none see no need for such educational programs. Only 4 of the 13 states have developed their own training materials, such as videotapes, slides, brochures and school health unit curricula. Eight states plan to develop materials and 7 states are using materials developed by other states or materials such as the American Dental Association Smokeless Tobacco brochure or the widely used brochure and trigger film, "Everything You Always Wanted to Know About Dipping and Chewing", produced by the Texas Division of the American Cancer Society.

Idaho, Oklahoma and Utah have led in developing educational materials which may include brochures, trigger films, slide-tape series for teachers and students, posters and public service announcements. Other noteworthy smokeless educational materials include "Don't Take the Risk", a slide tape series by the California Dental Association, and "The Big Dipper" a videotape developed by the Oregon Research Institute. Two states, Texas and Arizona, assign or make available oral health educators or dental hygienists to make school presentations that include smokeless tobacco.

Regulatory or Legislative Action on Smokeless Tobacco

Warning Labels

The State of Massachusetts recently issued a public health regulation requiring the following health warning label on all snuff sold in the State after December 1, 1985. "WARNING: Use of snuff can be addictive and may cause mouth cancer and other mouth disorders." According to an October 1985 issue of Smoking and Health Reporter, bills requiring health warning labels are now pending in New York, New Jersey, Delaware, Pennsylvania, Illinois, Michigan, Utah and Oregon. Additionally, California and Minnesota expect legislation to be filed this winter and Iowa is also considering such action. Both the U.S. Senate and the House recently passed bills that require health warnings on smokeless tobacco packages and in smokeless advertisements.

* "Smokeless Tobacco Education Programs Offered by State Health Departments". Cathy L. Backinger, R.D.H., M.P.H. and Margaret I. Scarlett, D.M.D. Paper presented at American Public Health Association Conference in November 1985.

Excise Taxes

Currently 21 states levy excise taxes on smokeless tobacco products, either snuff or chewing tobacco. Eight of our sample states have such excise taxes, including Alabama, Arizona, Idaho, Iowa, Oklahoma, Oregon, Texas and Washington. Additionally, the Massachusetts legislature is expected to soon propose a smokeless tobacco excise tax equivalent to cigarettes. All 50 states levy excise taxes on cigarettes. Federal legislation to reinstate the Federal excise tax on smokeless tobacco is also pending.

Restrictions on Sale or Gift of Smokeless Tobacco Products to Minors

About 40 states have laws restricting sale or gift of some forms of smokeless tobacco, or all tobacco products, to minors - defined as those below age 16, 17 or 18. All our 16 sample states except Alabama, Georgia, Colorado and Louisiana prohibit tobacco sales to minors. However, only 4 of these states, Idaho, Iowa, Oregon and Oklahoma also restrict the use and possession of smokeless tobacco products by minors. Unfortunately, most state laws restricting sale, purchase or possession of smokeless tobacco products are not very well-known and appear to be very weakly enforced.

None of our sample states restrict the advertising of smokeless tobacco products. However, it is noteworthy that in May of 1984 the New York Attorney General successfully convinced the U.S. Tobacco Company to cease use of misleading advertisements containing the slogan "Take A Pouch Instead Of A Puff" in New York.

CONCLUSION

In light of the foregoing evidence we can only conclude that youth use of smokeless tobacco is a growing national problem, with serious current and future health consequences. To avert a potential epidemic of oral cancer and other serious health problems among our youth in the years to come, strong and decisive state and Federal action is needed now.

RECOMMENDATIONS

1. LAUNCH AN EDUCATIONAL PUBLIC MEDIA CAMPAIGN

The Surgeon General should launch a broad public media campaign to educate children and youth, parents, allied health professionals, teachers, coaches, school officials and media health specialists on the health risks of smokeless tobacco. This campaign might include television and radio public service announcements and documentaries; news releases, bulletins and brochures; newspaper and magazine articles; and counteradvertising, perhaps enlisting popular professional athletes or celebrities who will tell the "downside" of dipping and chewing.

This campaign should be a coordinated effort involving the Office of Cancer Communication (OCC) of the National Cancer Institute, the Dental Disease Prevention Activity (DDPA) and the Center for Health Promotion and Education of the Centers for Disease Control, the Office of Smoking and Health and other appropriate Public Health Service organizations.

2. SUPPORT SCHOOL HEALTH EDUCATIONAL EFFORTS

The Surgeon General should direct a coordinated Public Health Service effort to develop and/or disseminate smokeless tobacco educational information and teaching aids for use in school health education classes and programs. This effort might include development of units or curricula for classroom use, updating existing curricula to include smokeless health risks, providing an informal clearinghouse for smokeless tobacco educational materials, in-service training programs or video tapes for teachers, coaches, and school nurses. States should be urged to start education on smokeless risks in primary schools with on-going reinforcement at the junior and senior high levels.

This support effort should include the CDC Center for Prevention Services, DDPA, the Center for Health Promotion and Education, and the NCI Office of Cancer Communication. It should enlist the support of the State and Territorial Dental Directors, State and Territorial Directors for Public Health Education, the National School Health Coalition and the National Education Diffusion Network. Assistance should also be sought from the American Dental Association the American Association of Public Health Dentistry and the American Public Health Association and other appropriate professional groups.

3. SEEK FUNDING FOR BASIC RESEARCH ON SMOKELESS TOBACCO USE AND RISKS

The Surgeon General should seek funding support for basic research on smokeless tobacco usage. First, steps should be taken to establish an on-going national survey and data base on the incidence and prevalence of smokeless tobacco use by youth and adults. This might be achieved through a special national adolescent survey of tobacco use by the Office of Smoking and Health, by adding some smokeless tobacco questions to NIDA's Annual Survey of High School Seniors or other on-going PHS household or school-based health surveys. Second, appropriate PHS units such as NCI, NIDA, NIDR should be encouraged to target a portion of their research budgets to fund gaps in knowledge identified by the scientific advisory panel on smokeless tobacco recently convened by the Surgeon General. Third, special attention should be directed to discovery of effective intervention or treatment methods to help youth who want to stop their smokeless tobacco habits.

4. PROVIDE STRONG NATIONAL LEADERSHIP

The Surgeon General should utilize the great influence of his position to provide strong national leadership on the smokeless tobacco issue. Possible action options:

- Issue a comprehensive, special report on the carcinogenic, oral health, addiction and other harmful effects of smokeless tobacco as soon as possible.

- Urge antismoking organizations and coalitions to add smokeless tobacco to their agendas, opposing it with the same enthusiasm given to smoking.

- Alert the nation's dentists and physicians to screen for problems caused by smokeless use during periodic dental and medical exams and urge them to warn and inform youth of health risks.

- Request states to better enforce and strengthen their laws restricting use, purchase, gift or sale of smokeless products to minors.

- Enlist the support of the Federal Department of Education and state educational officials to encourage rapid implementation of smokeless tobacco education programs and to urge more schools to adopt policies of no use or possession of any form of tobacco at school.

- Serve as an advocate and intermediary to important groups who can help address the smokeless tobacco problem, such as the American Dental Association, American Medical Association, other allied health professional associations; national associations of school principals, nurses, high school athletics; the American Cancer Society, Parent and Teacher Associations; and youth organizations such as the Future Farmers of America and 4H.

GENERAL OBSERVATION

Our study noted a fundamental difference in public policy regarding smoked and smokeless tobacco. Smoked tobaccos are subject to health warning labels, advertising restrictions and a Federal excise tax, none of which apply to smokeless tobacco. It is important for the Surgeon General to determine from available evidence whether this basic difference is justified.

The Federal Cigarette Labeling and Advertising Act of 1965 mandated health hazard warning labels on cigarette packages. In 1971 and 1972 the Federal Trade Commission began requiring warning messages in cigarette advertisements as well. The Public Health Cigarette Smoking Act of 1969 prohibited any cigarette advertisements on television and radio after 1971. The Comprehensive Smoking Education Act, beginning in October 1985, requires four strong warning labels on both cigarette packages and in advertisements.

Unlike the ban on cigarette advertising, radio and television advertising of smokeless tobacco has never been prohibited. Often professional athletes and celebrities are used to promote smokeless products in ads that are targeted toward young audiences and which suggest smokeless tobacco is a clean, enjoyable, safe alternative to smoking.

Many prominent professional and public health associations, as well as public interest groups, have strongly endorsed Surgeon General health hazard warning labels on smokeless tobacco packages. They have also called for restrictions on advertisement of these products which range from a total advertising ban, to a ban on radio and television ads, to requiring that all broadcast or print media ads be accompanied by health warning messages. Among the organizations supporting such measures are: The American Dental Association, The American Medical Association, The Association of State and Territorial Dental Directors, The Association of State and Territorial Health Officials, The American Cancer Society, The American Heart Association, The American Lung Association, The National Cancer Advisory Board and numerous state medical, dental, and public health associations.

A growing number of states are currently assessing whether to follow the state of Massachusetts example of requiring warning labels on smokeless products. Also, Federal legislation to require warning labels and advertising restrictions on smokeless tobacco was recently passed. In December of 1985 the Senate passed the Comprehensive Smokeless Tobacco Education Act of 1985 (S. 1574). This bill calls for the Secretary of HHS to establish a public information program on smokeless health risks, prescribes warning labels on smokeless tobacco packages and requires that print media advertisements include warning messages. Recently, the House passed an amended version of the Senate bill that would also ban television and radio advertisements of smokeless tobacco. The Senate approved the amended bill, clearing it for Presidential consideration.

A Federal excise tax on cigarettes has been levied for many years. In 1982 this tax was raised for the first time in 31 years to 16 cents per pack. Last year, to prevent reversion to the 1951 level of 8 cents per pack, Congress temporarily extended the tax through March 15, 1986. From 1950 to 1965 the Federal government imposed an excise tax on smokeless tobacco. This tax was repealed beginning in 1966 and has not been reenacted. Recently however, the Senate Finance Committee considered a smokeless tobacco excise tax. Several proposals have been offered to reinstitute a tax on smokeless tobacco at levels ranging from as low as 2 cents per container to a level as high as the cigarette tax. Many professional and public health experts support reinstitution of a smokeless tobacco excise tax comparable to the cigarette tax. It is estimated that enactment of a smokeless tobacco tax equivalent to the cigarette excise tax would generate approximately $150 million in revenue.

APPENDICES

TOTAL RESPONDENTS

	USERS 1/	NON-USERS 2/	KEY INFORMANTS 3/	TOTAL
Mass., Penn., W.Va.	54	12	18	84
Ga., N.C., Ala.	56	37	19	112
Tx., Okla., La.	63	29	33	125
Ind., Iowa, Colo.	57	12	25	94
Id., Ore., Wa., Az.	60	19	31	110
TOTALS	290	109	126	525
PERCENT	55%	21%	24%	

	JUNIOR HIGHS (11)		SENIOR HIGHS (20)	
	Number	Percent	Number	Percent
USERS	76	26%	214	74%
NON-USERS	33	30%	76	70%

1/ Has dipped or chewed over 100 times, presently uses daily or at least 3 days per week, dipping at least three times on days of use.

2/ Has never dipped or chewed, or has only tried it a few times or more than a few times but less than 100 times.

3/ School officials (principals, teachers, coaches, nurses), health providers (dentists and physicians), state health and education officials, researchers and public interest groups - American Cancer Society.

KEY INFORMANTS

		NUMBER	PERCENT
° SCHOOL OFFICIALS		82	65%
Principals	(20)		
Teachers	(26)		
Coaches	(22)		
School Nurses	(7)		
Counselors and Other	(7)		
° HEALTH PROVIDERS		9	7%
Dentists and Physicians			
° AMERICAN CANCER SOCIETY		7	6%
° STATE HEALTH DEPT. OFFICIALS		14	11%
° STATE EDUCATION AND OTHER STATE LEVEL RESPONDENTS		5	4%
° RESEARCHERS		9	7%
Dental Schools and Other			
TOTAL		126	100%

USER AND NON-USER DEMOGRAPHICS

	USERS		NON-USERS	
	Number	Percent	Number	Percent
° SEX:				
Males	286	98.6%	81	74%
Females	4	1.4%	28	26%
° AGE:				
Mean Age	15.5 years		15.1 years	
Age Range	11-19 years		11-19 years	
° ETHNICITY:				
Whites	263	90.7%	81	75%
Blacks	5	1.7%	15	14%
Hispanics	3	1.0%	6	5.5%
Native Americans	19	6.6%	6	5.5%
° GRADE LEVEL:				
6	5	1.7%	-	-
7	16	5.5%	13	11.9%
8	31	10.7%	10	9.2%
9	40	13.8%	17	15.6%
10	57	19.7%	22	20.2%
11	65	22.4%	17	15.6%
12	76	26.2%	30	27.5%
° SIZE CITY WHERE RAISED:				
Country/Rural Area	80	27.5%	29	26.6%
Small City (50,000<)	82	28.3%	45	41.3%
Medium City (51 - 250K)	78	26.8%	16	14.7%
Large City (251K - 1M)	40	13.8%	16	14.7%
Mixed/Can't Say	10	3.6%	3	2.7%

APPENDIX B

ORGANIZATIONS OPPOSING USE OF SMOKELESS TOBACCO

A growing and extensive list of health professional organizations, public health associations, public interest groups and government agencies have adopted position statements or resolutions on the use of smokeless tobacco. In general, these statements catalog significant health risks associated with use, support health warning labels, favor a ban or restriction on television and other industry advertising, promote health education to discourage use by the public, and support increased taxation of smokeless tobacco, as well as restrictions on its sale to minors. The following include some of the organizations that have gone on record against the dangers of smokeless tobacco:

- American Dental Association *
- American Medical Association
- Association of State and Territorial Dental Directors *
- Association of State and Territorial Health Officials *
- American Association of Oral and Maxillofacial Surgeons *
- American Association of Dental Schools
- American Public Health Association
- Coalition of Smoking or Health which includes

  American Cancer Society *
  American Heart Association*
  American Lung Association*

- World Health Organization, International Agency for Research on Cancer *
- National Cancer Institute and National Cancer Advisory Board*
- Centers for Disease Control
- Texas Dental Association
- Oklahoma Dental, Medical and Public Health Associations *

* Organizations stating smokeless tobacco use can cause oral cancer.

REPORTED SURVEYS OF ADOLESCENT AND ADULT USERS OF SMOKELESS TOBACCO IN THE UNITED STATES

JUNIOR-SENIOR HIGH SCHOOL STUDENTS 1983-1985

INVESTIGATORS/LOCATION	SAMPLE	AGE/GRADES	USAGE
1. Schaefer, Henderson, Glover, Christen Texas (1985)	N-5392 M-2534 (47%) F-2858	11-18 yrs	19% Male -0- Female 55% T started at 12 years or less 88% T started at 15 years or less
2. Offenbacher & Weathers Georgia (1983)	N-565 Male 100%	11-17 yrs	20% Male 13.3% regular usage 31% trial 50% 2 years+ usage 20% 4 years+ usage 50%+ started at age 12
3. Christen, Palenik, Niemann, et.al. Indiana (1984)	N-2226	12-18 yrs grades 6-12	9% T Grades 6-8 R 0.8-42% Avg 15% Grades 9-12 R 13-47% Avg 30%
4. McCarty & Krakow Massachusetts (1984)	N-5013 M-2406 (48%) F-2607 67 schools 1 class per grade	14-18 yrs grades 9-12	15% T 28.2% Male 2.8% Female
5. Glover, Edwards, Tedford Oklahoma (1984)	N-2098 M-1112 (53%) F-986	grades 3, 5 7, 9, 11	15% T grades 3,5,7-12% grades 9,11-20% 78% started at 12 years or younger
6. Edwards Utah (1984)	N-3232 M-1681 (52%) F-1551	10-18 yrs	Ever used Male-39.4% Female-8.5% Cont.use Male-14.4% Female-2.6%
7. Greer and Poulson Colorado (1983)	N-1119	14-18 yrs	11% T
8. Jones Wisconsin (1985)	NA	12-18 yrs grades 7-12	Daily use Males-8% Female -0- Weekly use Males-15% Female-1% Ever Males-45% Female-11%

T - Percent of total sample population.
NA - Not available
M - Male population
F - Female population
R - Range

LONGITUDINAL STUDIES 1976-1984

INVESTIGATORS/LOCATION	SAMPLE	AGE/GRADES	USAGE
1. Idaho School Tobacco Education Program, Dept. of Health & Welfare, Idaho (1982-1983)	N-8300 81 schools	Elementary and Secondary Grades	14% Elementary males (2% daily use) 25% Secondary males (11% daily use)
(1983-1984)	N-2639 27 districts	Grades 7-12	8% T 6% 7th Graders 15.5% 10th Graders 39% started before 10 years 84% started before 12 years 16% used & quit
2. Bogalusa Heart Study, Louisiana State University Medical Center, Louisiana (1976-1977)	N-3014 M-1556 F-1458	Grades 3-12	Chew - Male 13% Female 1% 20% 14yr. olds chew 15% 15yr. olds chew
(1981-1982)	N-2152 M-1068 F-1084	Grades 3-12	26% Male usage D/C 21% Male age 8-9 D/C 40% Male age 12-15 D/C 43% 14yr. olds chew 43% 15yr. olds chew
3. Oregon Research Institute Studies Oregon (1983)	N-1639 M-822 F-817	12-16 yrs. Grades 7-10	Male daily usage range 8.8-23.1% Female daily usage range 0.7-1.1% Trial by males range 65.4-76.7% Trial by females 20%
(1984)	N-3165 M-1568 F-1597 4 school districts	Grades 7-10	55% Male trial by age 12 years 60% Male usage 68% male trial 14% male daily use 19% female trial 0.7% female daily use

T - Percent of total sample population
D/C - Combined dipping and chewing

COLLEGE STUDENTS ATHLETES 1984-1985

INVESTIGATORS/LOCATION	SAMPLE	AGE/GRADES	USAGE
1. Anderson & McKeag Michigan State University (1985)	College Student - Athletes N-2039 M-1407 (69%) F-632 11 Colleges/ Universities	18+ years	20% T in last 12 months 17% regular 16% started at or below Jr High 53% started in high school
2. Noland, Bliss, Geary University of Kentucky (1985)	College Student - Athletes N-143 Male 100% 1 University	18+ years (avg. 19.7 Years)	28% dip 24% chew 22% started at 15 yrs. or younger 11% started at 12 yrs. or younger
3. Glover, Johnson, Edwards, et.al East Carolina University (1984)	N-5258 M-2608 F-2650 8 States (regional)		12% T, 22% males NE Colleges - 16% M SC Colleges - 30% M

T - Percent of total sample population.

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APPENDIX D
TABLE I

INTENSITY OF USE

	Massachusetts Pennsylvania West Virginia	North Carolina Georgia Alabama	Texas Oklahoma Louisiana	Indiana Iowa - Colorado	Wash Idaho Oregon Arizona	National
° Days Dipped Per Week						
Mean	5.8	6.0	6.3	5.1	6.0	6.0
Mode	7	7	7	7	7	7
° Number Dips Per Day						
Mean	4.9	5.8	6.4	6.6	5.6	5.6
Mode	5	5	5	5	5	5
° Minutes Held In Mouth						
Mean	25	22	26	23	23	24
Mode	28	30+	30+	30+	30+	30+
° Exposure Time On Days Dipped (Hours)						
Mean	2.0	2.1	2.8	2.5	2.1	2.4
Mode	2.3	2.5	2.5	2.5	2.5	2.5
° Number Cans/Pouches Per Week						
Mean	2.7	3.2	3.4	2.9	2.1	2.9
Mode	1	2	2	2	1	1
° Age When First Tried (Years)						
Mean	11.0	9.9	8.9	11.0	10.5	10.2
Mode	12	12	11	11	13	11-13
° Age When Regular Use Started (Years)						
Mean	12.7	10.7	11.2	13.0	12.6	12.0
Mode	12	12	13	13	13	13
° TOTAL YEARS DIPPED						
Mean	2.9	4.8	4.7	3.0	3.0	3.6
Mode	1	4	3	2	1	2-4

APPENDIX D
TABLE II

REASONS FOR USE INITIATION

	USERS	NON-USERS	KEY INFORMANTS
Peer Pressure, Friends	50%	62%	59%
Curiosity, To Try It	32%	22%	-
Family Members/Relatives Use	18%	15%	36%
It's Something To Do	8%	-	-
Like Flavor or Taste	6%	4%	21%
Safer Than Smoking	4%	7%	26%
Be Macho or Grown-up	-	27%	32%
Advertising Influence	2%	4%	55%

APPENDIX D
TABLE III

REASONS FOR CONTINUATION OF USE

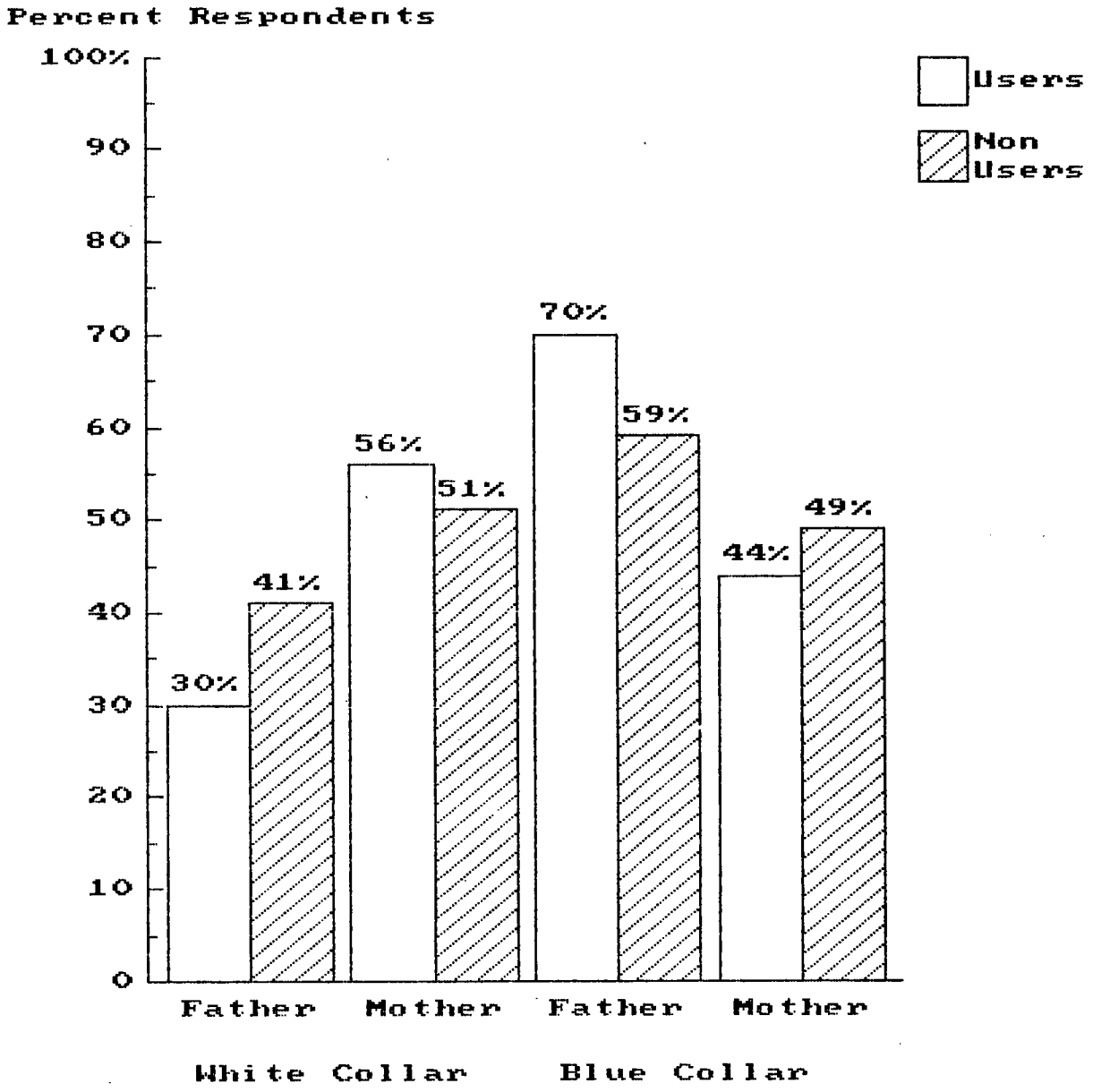
	JUNIOR HIGH USERS	SENIOR HIGH NON-USERS	ALL USERS	NON-USERS
Enjoy Flavor or Taste	75%	60%	64%	31%
Addiction, Habit, "Hooked"	28%	40%	37%	51%
For Effects: Relax, "Buzz"	16%	24%	22%	14%
Peer Pressure, Friends	16%	15%	15%	20%
Something To Do, Avoids Boredom	4%	12%	10%	N/R
Better Alternative Than Smoking	1%	5%	4%	N/R
"Macho or Grown-up" Image	4%	N/R	1%	7%

APPENDIX D
TABLE IV

STRENGTH OF HABIT AMONG USERS

	JR. HIGH	SR. HIGH	TOTAL
Usually Dip or Chew Every Day	74%	84%	81%
Would Make a Special Trip To Store If Ran Out	59%	71%	68%
Would Have Strong Cravings If Tried To Quit	49%	57%	55%
Would Be Very Hard For Me To Quit	61%	51%	53%
Often Take A Dip Or Chew Just Before Class	26%	46%	41%
Hard Not To Use Where Use Is Forbidden	42%	32%	34%
Want A Dip Or Chew First Thing In Morning	20%	31%	28%
Get Nervous If Go Four Hours Without It	36%	23%	27%
Sometimes Sleep With A Dip Or Chew	13%	9%	10%

Family Occupational Background
(Users Compared With Non-Users)



APPENDIX E

PROFILES OF CURRENT AND FORMER SMOKELESS TOBACCO USERS

The tall, slender fifteen-year-old (we will call him Don) was clearly eager to talk about his experiences with smokeless tobacco. Most of his life was spent in rural Virginia, but he now lives in another state. When Don recently moved from the country to a city of 123,000 he brought along his spittoon with a deodorizer" and what he calls "a nasty habit." The 10th-grader has regularly dipped snuff - currently Skoal - since he was six years old. Don uses about three cans of snuff each week.

He recalls that his first dip was given to him by a 10-year-old cousin, one of many relatives and friends who used smokeless tobacco then or later. He started dipping "to follow the crowd, to be a tough, macho guy." Among students, it's like a chain reaction. It "starts as a joke but a person likes it and keeps doing it."

Notably, Don views the "athletes, cowboys" and other guys "shooting the rapids" in television commercials for smokeless as "happy, self-confident" and "dependent on tobacco." He thinks such advertisements are aimed at young adults and teenagers, and that they strongly influence young people to try smokeless tobacco.

Don admits having physical effects of dipping: sore gums and "teeth being pushed back by the constant pressure of tobacco" (the latter was detected by a dentist). Additionally , it "ruins the way you feel, think and act." It "affects all body functions and it's not good for your stomach." This insightful young man knows, too late, the truth about, and consequence of, using smokeless tobacco.

Unfortunately, the gripping thing about Don's sad experience with snuff is that he is profoundly addicted to it and genuinely wants to quit dipping. He has tried to quit, he says, some 18 times, but the longest he has gone without snuff is two days. The "combination of irritability and being tempermental" is too much for the youngster. "I get real nervous and gripey and tense without it. My lip hurts if I don't have it. I get the shakes."

Though he does not specifically mention the risk of oral cancer, surely he knows that it's the ultimate risk. Like so many others he too saw "60 Minutes" on television. He thinks that the risks related to smokeless use should be publicized more by newspapers, magazines, television, radio -"all public relations situations." Meanwhile, the young man continues taking a dozen dips per day.

Jim is 16 years old and in the 12th grade. He dips every day, about 6 times per day, and uses over 4 cans of snuff per week. He leaves the tobacco in his mouth longer than 15 minutes per dip.

Jim first tried dipping when he was 11 years old. His friend/cousin was a dipper, so Jim asked him for his first dip. Jim has been a dipper since then. Jim's uncles and and his grandpa also dip, as well as most of his friends and a few of his coaches.

After 5 years of dipping Jim finds himself wanting a dip right away in the morning. He gets nervous if he goes four hours without a dip, usually takes a dip just before class, would make a special trip to the store if he ran out of snuff, and says he would have strong cravings if he tried to quit.

Jim has tried to quit, but like most other high school dippers that have tried to quit, he failed. As Jim put it, "I was going crazy. I couldn't concentrate. I was jittery. I couldn't sleep." Jim tried to quit because his dad asked him to do so, however the most common reason why a teenage dipper tries to quit is because he's heard that somehow, or in some way, cancer is connected to dipping.

Jim has noticed the white wrinkled patches in his mouth and the staining of his teeth. He read about a kid (dipper) who died of cancer. He stated that had he heard about the cancer threat before he had started dipping, he probably would still have dipped, his reason being that he was so young when he started dipping that it probably would not have mattered to him. Jim is probably correct that, at age 11, the fear of cancer would not have overridden the curiousity or peer pressure to try dipping. But Jim is unlike over half of the high school dippers interviewed, in that they stated they would not have gotten started dipping had they known then what they know now.

Jim has never smoked cigarettes. Most of the dippers interviewed were not cigarette smokers and all but two of them believed that it was safer to dip than to smoke.

Jim's last comments were, "If they gave me a miracle cure where I could take it and it would make me never want to take a dip, I would take it right now."

Fred, who is a regular snuff dipper, is an 18 year old senior at a high school in a small southwestern city. He is a handsome well-groomed young white male. He doesn't participate in athletics but is a member of FFA, Future Farmers of America.

Fred likes to dress western, wears boots and jeans and drives his own pickup truck complete with spitton for convenient disposal of his snuff. He is a hard working, self-employed young man.

He first tried snuff when a young male friend offered him some when he was eleven years old in the fifth grade. By sixth grade, he had become a regular user and has dipped heavily for the last 6 years. Fred started with Copenhagen, has tried Skoal, but has settled on Copenhagen as his preferred brand. He buys his snuff at the gas station and has never had any difficulty purchasing as a minor.

Fred says he started dipping snuff, mostly because several of his friends were using it. Currently , his best male friend and most of his other male friends dip. His Dad's brother also dips. His father doesn't dip but is neutral toward Fred's dipping. His mother and one of his sisters disapprove of his habit. His girlfriend and another sister are neutral. He views dipping as equally acceptable to smoking and says a number of students at his school approve of snuff.

Fred dips 7 days a week and takes about 15 dips a day, which works out to about 10 cans of snuff each week. Normally, he holds each dip in his mouth about 45 minutes, unless in school - where he averages about 20 minutes. Normally, he spits in his spittoon or on he ground, but in class he swallows the juices. He wants a dip right away in the morning, and gets nervous if he goes over 4 hours without a dip.

He dips both alone and with his friends in lots of different settings: at home, at work, while studying, in class, at ball games, at parties, when relaxing with friends, and even on dates. He says he likes the taste of dipping, that it relaxes him and gives him something to do.

Fred has a pretty high awareness of the health risks of his snuff habit. He knows, for example, that it can cause gum and mouth problems, mouth and throat cancer, that it's addictive and stains your teeth. Nevertheless, he says snuff is safer than cigarettes and that young people who regularly dip run only a moderate risk of physically harming themselves.

Fred has experienced sore and irritated gums, gum line recession, leukoplakia, skin peeling off his cheeks and gums and staining of his teeth. He also reports having had mouth sores and blisters under his tongue and all across his gums for about 9 months. These problems prompted him to visit the school nurse, which, in turn, led to visits to a dentist and oral surgeon. The dentist failed to detect his problem source, but the oral surgeon urged him to quit dipping. Fred stopped for 4 days before resuming his dipping habit.

Fred knows, first-hand, that snuff is addictive and that dipping is a strong habit, which is very difficult to break. He has made twelve attempts to stop dipping snuff; unfortunately, all have ended in failure.

"I was born to chew," Johnny said proudly as he described why he began using smokeless tobacco. He took his first pinch of smokeless at age 15, when he took a can of Copenhagen from a store. "I was looking for a bad habit," he continued.

Now 19 and a high school senior, Johnny has been chewing regularly for two years. He chews every day, mostly alone, and uses about four cans of moist snuff each week. He said it is never difficult to purchase smokeless, especially because he is an older teen and can buy it at the tribal smokeshop.

He recently moved to a small Indian reservation, where his chewing influence among students has been noticed by the elders. Chewing among students has noticeably increased since Johnny and a couple of other chewers moved to the reservation.

As an athlete, playing both football and basketball, he doesn't chew while playing sports because the coach is strict. If caught, he would be kicked off the team. He noted, however, that he had moved from baseball country where his previous coaches had chewed.

He displayed some disdain for kids who don't chew, describing them as either honor roll girls or nerds.

He said he had seen about 24 television commercials for smokeless tobacco in the past month and describes the people shown using smokeless as "outdoor dudes." He believes TV ads have a strong effect in encouraging young people, especially preteens, to try smokeless.

He admits it would be hard to quit chewing, and sometimes even sleeps with a pinch in his mouth. He doesn't believe smokeless tobacco is addicting, saying it does not contain nicotine. He does admit, however, that chewing can lead to mouth or lip cancer, but says that the risk depends on how much a chewer uses and whether he brushes his teeth.

He has no plans to quit.

Richmond is a 16-year-old junior who has been a regular snuff dipper for the past 3 years. He is a rather heavy user, going through about 6 cans of Skoal a week; he dips an average of 6 to 10 times a day every day of the week. Rich has spent all of his life in a rural area. He is a member of his high school football and track teams.

Like many other young men who use smokeless tobacco, Rich first tried snuff because so many of his peers used and he "just wanted to see what it was like." He admits to having a dependency on snuff, but describes it as being more psychological than physical. Often, he says, he does it "because there's nothing else to do." Rich did try unsuccessfully to quit 6 months ago because his girlfriend disapproved of the habit; he returned to snuff after 3 weeks of abstinence, he says, because of lack of willpower. He's convinced he could quit for good if he "really had to."

When asked about use of smokeless tobacco by relatives, Richmond stated that his father switched from smoking cigarettes to dipping snuff because of his son's influence. Rich is strongly anti-smoking, citing his father's improved health since stopping smoking as evidence for his argument that dipping is much safer than smoking. He acknowledges that smokeless use can lead to such problems as lip cancer and deterioration of the teeth, but qualifies this by stating, "The way me and my friends look at it, we know people who've rubbed (dipped) all their lives, and some people it affects and some it doesn't." But he is quick to add, "It's not something I want to do all my life."

Rich mentioned that his mom had persuaded him to watch the 60 Minutes episode on smokeless tobacco, and this seemed to have had a strong impact on him. He said, "When I first started (using snuff), I'd never heard about lip cancer and all that; if I'd known before, it may have had some influence (on my decision to use). Since the 60 Minutes episode, I think about it a lot more. A lot of my friends watched that show."

Rich felt that the best way to educate youth about the health risks of smokeless tobacco use is to "just advertise it more. You see a lot of warnings against smoking but not against smokeless. I've seen and noticed Surgeon General warnings for cigarettes; it's probably not a bad idea to put warnings on snuff cans."

Although Rich himself has experienced only relatively mild health side-effects from usage such as occasional leukoplakia, peeling of mouth tissue and tooth staining, in his final comments he expressed a good deal of concern over contracting

cancer. Citing the 60 Minutes episode again, he said, "My friends and I have been worried about getting lip cancer and have talked about whether or not there's some way to get checked for it." He inquired as to whether or not there existed some quick and inexpensive way to get tested for cancer.

Despite his comments that some people are simply immune from health problems resulting from use of snuff or chewing tobacco, Rich is obviously very aware of and very worried about the risk of cancer. He is an example of a young person who could greatly benefit from a greater understanding of the actual risks involved. He and his friends' concern points up the need for informational campaigns and the availability of informed health professionals to answer questions and check for existing or developing health problems.

A 17-year old high school senior in a small Southeastern textile city says, of his experience with snuff, "I wish I'd never started." Stanley, the son of a computer programmer and a teacher, first tried snuff at the age of 12. He has used it regularly for the last two years.

The six to ten dips he takes daily adds up to about seven cans of Copenhagen per week, and he keeps a dip in his mouth about 30 minutes.

When and where does he dip snuff? It runs the gamut, for he uses it while alone and when with his friends; he dips at home, at work, in class, at parties, and at spectator sports. Stanley, a wrestler and football player, also uses snuff when playing sports. Smokeless tobacco is widely used by his friends (most of his buddies and teammates dip or chew, as does his very best friend). The use of smokeless is further reinforced, since several of the school's coaches also use the products.

Incidentally, a female physical education instructor and coach at Stanley's school feels that the use of smokeless by male coaches is the reason for laxity in enforcement of the school's tobacco policy. She says the other coaches condone the use of smokeless by students. Stanley says that dipping and chewing are permitted at the campus "smoking block," adding that school restrictions on dipping and chewing are "somewhat weakly" enforced. Like so many young smokeless victims, Stanley started dipping due to what he calls "peer pressure." He was with a pal of the same age when he took his first dip. His young friend supplied that first dip, and perhaps an adequate dose of peer pressure.

Although his best girl friend and both his parents disapprove of his dipping, he continues to dip because he likes it and his friends have encouraged it. In fact, he believes that most students at his school approve of the use of smokeless and that it is certainly more acceptable than smoking.

Having read newspaper articles about the potential hazards of using snuff and having seen a thought-provoking expose on television ("Sixty Minutes"), Stanley is well aware of the risk of oral cancer and other problems. He has already experienced leukoplakia, peeling cheeks and gums, and stained teeth. But he is, so far, unable to quit dipping. He has made three or four attempts to give it up, but has resumed use each time after no more than two weeks.

So, after dipping snuff regularly for two years, it's clearly a powerful habit he can't subdue. Sadly, Stanley says, "I wish I'd never started, that's all."

Jack is a 17-year old senior whose cousin encouraged him to take his first chew of Redman when he was 13. He has been chewing daily for two years and uses three cans of Copenhagen a week. He carries a cup to spit in when indoors. Besides his cousin, both his grandpa and uncle chew. ALL of his male friends chew. On the other hand, none of his soccer coaches and only a few of his soccer teammates chew.

Although he has seen about five TV ads for smokeless during the past month, he says he pays more attention to the radio commercials which he hears frequently.

He continues to chew because, "I like the taste. It relaxes me. My friends do it. And it's something to do." He has never tried to quit. He described kids who are not likely to chew as "brainy, straight kids and nerds."

He acknowledges that dipping or chewing can be harmful to a person's health, citing potential problems such as lip cancer, stomach and throat problems if you swallow it, and teeth or gum problems. He admits he doesn't know the extent to which young people risk harm by regular use and argues that it depends on a person's usage pattern and other health habits, such as how frequently he brushes his teeth or goes to the dentist.

Jack believes that smokeless is much more safe than cigarettes and that users rarely experience gum and mouth problems. He does not know whether snuff contains nicotine. He agrees, however, that regular use is addicting and may lead to mouth cancer. Although he denies that dipping has been harmful to his own health, he admits he personally has experienced white, wrinkled patches where he keeps the tobacco.

He doesn't believe there is any way to inform students about the health risks of smokeless tobacco, saying "I don't know how anyone can stop kids from using it. They aren't going to listen anyway. We're told by adults that everything is harmful, even water, so why listen when they tell us smokeless is bad?"

Bill is athletic looking, to go along with his interests in four sports. He was 14 years old when he first tried smokeless tobacco, and he says, "Now I'm hooked." He has become more concerned about the health risks since he saw a program on 20/20. "Unfortunately," he said, "I did not see it before I started." He would like to quit but he can't seem to do it. "But I've never asked anyone to help me to stop. I've tried to stop, but I've never had the strong urge to quit. I know you can get cancer now," he added. But, in fact, he wanted to dip snuff while we were talking about the effects it had on him:

> "It kind of calms me down. It seems to help me settle down to do homework. Isn't it funny, I feel like having a dip right now. I feel nervous. Is this really confidential?"

He is not allowed to dip or chew at his school. Smokers have a designated area at the school to smoke in. He complained, "If the smokers can throw cigarette butts everywhere, why can't we spit? It makes me mad. I don't understand it."

He says to young people -

> "It is worse than smoking. You should never ever try it. I wish they had a commercial like they have for little kids:
>
> 'Slam the door to a stranger's face,
> Say no to smokeless tobacco,
> Be smart,
> Chew gum.'"

He would like to talk to someone who has quit, so he could quit.

Harley grew up among dippers and chewers. His grandfather, uncle and cousin all used smokeless tobacco. Being curious and wanting to act grownup, he tried some dip. He was four years of age at the time. He said he began regular use of snuff at age five with his older brother buying it for him.

Before quitting, he was dipping Copenhagen 20 times every day. He used six cans of snuff a week. He was dipping alone and with friends. Dipping was a favorite thing to do when riding his motorcycle.

Harley thinks television commercials have a strong influence on teenagers by depicting users as "rough, tough outdoor types."

Harley, now 16 years old, admitted the difficulty he had trying to quit dipping after 11 years of regular use. He had the strong cravings caused by the nicotine. He had to cut back gradually, chewing sunflower seeds as a substitute for dipping. He wanted his second attempt to succeed.

He stated several reasons for deciding to quit. His mother disapproved. His uncle had gotten throat cancer probably as a result of tobacco use. He had read about the Oklahoma athlete who had died from oral cancer. And his sponsors who funded his motorcross racing didn't think dipping was the image they wanted their riders to project.

He quit dipping two months ago and hopes dipping is a thing of the past.

He wore a Copenhagen hat and looked like he would be more comfortable idling time away on a street corner than in school. He was sixteen and in the ninth grade, a user of smokeless tobacco since he was five. He started, he recalled, when his cousin took a dip. "I asked him what it was, and he said, it was a chew. I said, let me have a taste."

Like so many of today's youths who use smokeless tobacco, he plays sports. He says, "I need it. If I'm playing football, I almost get shakey if I don't have it. I'll yell at my teammates if they are not doing everything just right."

On the other hand, he does not smoke since it would affect his wind. He said, "I have to be able to run and not have my chest hurt."

He was using over two cans of snuff a day until he read the article on Sean Marsee in Readers Digest. "Now," he said, "I'm trying to quit, because I saw that Sean guy's face and how short a time it took to kill him. It made me want to quit."

When asked what recommendations he had for young people concerning the use of smokeless tobacco, he responded, "I think they should outlaw it just like they should cigarettes."

Roy was introduced to smokeless tobacco at the age of eight when a friend offered him a pinch of moist snuff. Five years later, at age 13, he began dipping regularly. What started as mere curiosity became a habit. "I like something harsh in my lip," he explained.

Roy, at 17 years of age, dips every day, consuming as many as seven cans of Copenhagen a week. He dips with friends or alone. "I have some in all the time," he confessed. He can buy the snuff at any convenience store without difficulty.

Like many of his peers he is aware of the potential health consequences of dipping snuff, but he has bought into the activity for many reasons, not the least of which is habituation. To him the health risk is only moderate, despite experiencing stained teeth, irritated gums, and leukoplakia. He considers dipping much more safe than smoking.

Roy thinks television commercials are designed to appeal to young adults and have only a moderate effect on teenagers to try smokeless tobacco. He feels that "jocks like to dip because they can't smoke when training."

Roy believes that dipping snuff is in line with the tough cowboy image. He labeled nondippers as "mommy's boys."

He said he tried to quit dipping twice because of the growing expense and the disapproval of his parents and girlfriends. In fact, he stopped one time for over a year only to begin again. "I missed it," he said.

Roy will continue dipping.