DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
Atlanta GA 30333

November 1985

Dear Colleague:

The Dental Disease Prevention staff at the Centers for Disease Control are engaged in a continuing effort to help keep a wide variety of individuals and organizations informed about matters of interest and importance in dental public health. It seems that before one "Dear Colleague" letter is printed and mailed, enough new information has become available to merit the development of the next letter. Updates on issues covered in the last letter, such as fluoridation in San Francisco and San Antonio, are included in this issue.

Also included is a special section focusing on infectious diseases. Infectious diseases which have implications for dental health providers and their patients pose potentially serious consequences if appropriate preventive measures are not taken. The Infectious Diseases Section of this letter will provide a hepatitis B update, reports on cytomegalovirus and AIDS, and use of sterilants in the dental office. The article, "Oral Hairy Lesion (Hairy Leukoplakia) Associated with Acquired Immunodeficiency Syndrome," was recently published in the Centers for Disease Control publication, Morbidity and Mortality Weekly Report (MMWR), September 13, 1985. Because dental care providers are in a unique position to recognize hairy leukoplakia and other oral symptoms associated with AIDS, the article has been reprinted in this issue.

Another article published in the MMWR, July 5, 1985, "Dental Caries in American Indian and Alaskan Native Children," has also been reprinted. Although there has been a decline in dental caries in the United States, caries remain a serious problem for this and other special population groups.

Two bills have been recently introduced in the United States House of Representatives concerning smokeless tobacco: one to require labeling for all smokeless tobacco products and advertisements, and one to establish a Federal initiative regarding the dangers of smokeless tobacco. Both are described.

Again, we appreciate your contributions to this letter. With your input, we can continue to provide the most current information concerning the prevention of oral diseases and the promotion of oral health.

Stephen B. Corbin, D.D.S., M.P.H.
Acting Chief
Dental Disease Prevention Activity
Center for Prevention Services

SPECIAL SECTION ON INFECTIOUS DISEASES

CYTOMEGALOVIRUS POSES POTENTIAL RISK TO DENTAL PROFESSIONALS

Cytomegalovirus (CMV) infection represents a potential health hazard for dental professionals; the apparently endemic disease, which can be transmitted through saliva and is usually asymptomatic, has been shown to be common among children attending day-care centers.

Recent studies conducted in Birmingham, Alabama, reported in the February 1, 1985, MMWR listed the following CMV prevalence data for five day-care centers in Birmingham: (A) 49 percent; (B) 40 percent; (C) 32 percent; (D) 9 percent; (E) 13 percent.

CMV infection, although usually asymptomatic, can cause a form of lymphatic disease resembling mononucleosis in older children and adults. Although CMV can be found in urine, saliva, and other secretions, it is probably most readily transmitted by the latter two. It can also be spread by blood transfusions, breast milk, sexual intercourse, and transplanted organs. CMV infection is of greatest concern when infection occurs in utero, and it may account for approximately 0.1 percent of deaths among newborn infants. Infection can be acquired from other children or the mother, either in utero, at birth, or during the perinatal period.

Because of these findings, dental care professionals are being urged to carefully follow proper clinic sterilization and hygienic procedures to avoid the transmission of infections.

AIDS CONFERENCE HELD IN ATLANTA

Thirteen thousand, two hundred and twenty-eight AIDS cases were reported to the Centers for Disease Control between June 1, 1981 and September 16, 1985. Twenty-two of these cases have occurred in dentists, dental hygienists, or dental assistants. All but one were members of recognized risk groups. The one remaining female dental assistant was married to a man with AIDS.

An international conference on acquired immunodeficiency syndrome (AIDS) was held in Atlanta on April 15-17, 1985. The conference was sponsored by the Department of Health and Human Services and the World Health Organization, in cooperation with the Emory University School of Medicine and Morehouse School of Medicine.

Over 3,000 participants from 50 countries attended sessions on all major aspects of the syndrome, including clinical manifestations, prevention, control, and epidemiology. The commitment of these workers and the record of accomplishments so far has generated considerable optimism that progress in the control and prevention of AIDS will continue.

CDC projects the cumulative number of cases in the United States to exceed 20,000 by mid-1986. Direct and indirect costs have been estimated to be $5.6 billion for the first 9,000 cases reported.

AIDS is a highly fatal disease that is clinically manifested by impaired cellular immunity and opportunistic diseases. AIDS patients represent a small percentage (about 6-10 percent) of the number of persons infected with the etiologic agent, human T-lymphotropic virus, type III (HTLV-III), a retrovirus.

Risk groups include: homosexual men; intravenous drug users; recipients of blood, blood components, and clotting factor concentrates contaminated with HTLV-III; and children born to infected mothers. Manifestations of HTLV-III infection have a broad clinical range, extending from asymptomatic infections and carriers to a series of nonspecific symptoms including generalized lymphadenopathy and others such as fever, fatigue, loss of appetite and weight, oral candida, and the newly described oral hairy leukoplakia. This constellation of symptoms is sometimes referred to as AIDS-related complex (ARC). ARC may be the end point of HTLV-III infection for some, but other patients develop one or more opportunistic diseases and are then diagnosed as having AIDS.

Epidemiologic evidence suggests that up to 1,000,000 people may already have been infected with HTLV-III. Evidence was presented at the conference suggesting that infection may persist indefinitely, and that the potential for transmission may be lifelong.

The incubation period for development of AIDS is several months to 5 or more years.

A test, using the enzyme-linked immunosorbent assay (ELISA) technique, is available to detect antibody to HTLV-III. Reactive ELISA tests should be repeated. Persons with repeatedly reactive ELISA tests should be referred to a physician for evaluation. The natural history of HTLV-III infection is not well characterized, but is a topic of current research.

Judging by the numerous inquiries from the dental profession and the general public about AIDS, concern has been raised about the risk of acquiring AIDS from patients and whether it is safe to treat AIDS patients in the dental office. Because of what is know about the sensitivity of the AIDS virus to certain environmental stresses such as heat and certain disinfectants as the appropriate dilution, current recommendations for treatment of hepatitis B patients should be adequate to treat patients with AIDS.

Expanded knowledge about the AIDS virus (HTLV-III/LAV) has maintained the validity of the recommendations made by CDC in the September 2, 1983, MMWR for health care workers and allied professionals, including dental care personnel. The recommendations for dental care personnel are as follows:

1. Personnel should wear gloves, masks, and protective eyewear when performing dental or oral surgical procedures.

2. Instruments used in the mouths of the patients should be sterilized after use. (Different materials will require different methods for effective sterilization.)

DDPA is finalizing more specific recommendations for the dental profession in an infectious diseases pamphlet which will address infectious agents, including the AIDS virus. Copies should be available from DDPA by the end of the year.

UPDATE ON HEPATITIS B OUTBREAK IN INDIANA

The first reported outbreak of hepatitis B (HB) traceable to a dentist that has involved fatalities was reported in an MMWR article dated February 8, 1985. Between April 1, 1984, and February 1, 1985, nine cases of clinical HB were reported. Two cases resulted in fatal fulminant hepatitis (see April 1985 Dear Colleague letter). Blood screening of 703 patients treated by the dentist after March 1, 1984, identified an additional 15 asymptomatic cases; all of these were positive for IgM class antibody to hepatitis B core antigen. The 49-year-old general family dentist involved in this outbreak did not routinely wear gloves when treating patients and denied having any lacerations or dermatitis on his hands. He had no history of hepatitis symptoms or knowledge of HB carriers in his practice.

The mode of transmission was thought to be direct transfer of infected blood from the dentist's hands during dental procedures, probably through tiny skin abrasions. Excessively vigorous hand scrubbing may have been the cause of the abrasions. Investigator Dr. Frederic E. Shaw, Jr., of CDC's Hepatitis Branch, identified traumatic dental procedures such as surgery, crown preparation, and extractions as having the highest potential for transmission of HB.

The overall attack rate for patients treated after March 1, 1984, was 3.4 percent. This is consistent with rates seen in other outbreaks. CDC is continuing to investigate the cause of such a high fatality rate; delta virus has been ruled out.

Seven other HB outbreaks traced to dentists or oral surgeons have been reported. Common characteristics of the implicated dental professional are:

1. All were asymptomatic HB carriers.

2. All who were tested were positive for HB e antigen (HBeAg).

3. None wore gloves routinely.

Outbreaks of this type are preventable by the use of HB vaccine in dental professionals, preferably early in their careers.

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Epidemiologic Notes and Reports

Oral Viral Lesion (Hairy Leukoplakia) Associated with Acquired Immunodeficiency Syndrome

From October 1981 to June 1985, 13 (11%) of 123 patients with hairy leukoplakia (HL) seen in San Francisco, California, were additionally diagnosed as having acquired immunodeficiency syndrome (AIDS). Eighty (73%) of the 110 patients who did not have AIDS at the time of HL diagnosis were followed (*1*). Twenty of these developed AIDS within 1-33 months (mean 7.5 months) of HL diagnosis. Seventy-nine serum specimens from the 123 patients with HL were tested for antibody to human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV) by indirect immunofluorescence (*2*). Of these, 78 (99%) were positive. The one negative result was also negative by Western blot test. All cases met the CDC case definition for AIDS.

Oral viral "hairy" leukoplakia of the tongue appears as raised white areas of thickening on the tongue, usually on the lateral border. The lesions may not respond to traditional antifungal therapy and appear to have unusual virologic features. *Candida* has been reported on the surface of the HL lesions. A number of viruses, including papilloma, herpes, and Epstein-Barr, have been identified by electron microscopy in biopsies obtained from the HL lesions. HL was first identified in San Francisco in 1981. The lesion has also been reported in patients examined in Los Angeles, California; Baltimore, Maryland; Ann Arbor, Michigan; Paris, France; Copenhagen, Denmark; and London, England.

Reported by D Greenspan, BDS, J Greenspan, BDS, University of California, San Francisco, School of Dentistry; H Goldman, DDS, New York University Dental Center, New York City; Dental Disease Prevention Activity, Center for Prevention Svcs, CDC.

Editorial Note: HL may be of diagnostic value as an early indicator of HTLV-III/LAV infections, especially when observed in combination with other clinical findings. Approximately 95% of patients with AIDS and AIDS-related complex are reported to have cervical lymphadenopathy and other head and neck manifestations of disease, which may be detected by dentists or others undertaking oral or facial examination (*3*).

Health-care providers, including dental personnel, are in a unique position to identify clinical oral symptoms and their potential association with AIDS. Kaposi's sarcoma (KS), candidiasis, recurrent herpetic infections, and papillomas are oral manifestations that have been associated with AIDS. Unresolved candidiasis may be one of the earliest signs of AIDS in persons in groups at risk of acquiring AIDS. Oral KS is virtually pathognomonic of AIDS in males aged 25-44 years. Squamous cell carcinomas, non-Hodgkins lymphomas, and malignant melanomas have also been reported to occur in the oral cavity in association with AIDS.

While careful histories and physical examinations alone will not identify persons with AIDS or related symptoms, oral findings, including this newly reported oral lesion, are important diagnostic tools for health-care providers in early identification and treatment of AIDS.

References

1. Greenspan D, Greenspan JS, Conant M, Peterson V, Silverman S Jr, DeSouza Y. Oral "hairy" leucoplakia in male homosexuals: evidence of association with both papillomavirus and a herpes-group virus. Lancet 1984;ii:831-4.
2. Levy JA, Hoffman AD, Kramer SM, Landis JA, Shimabukuro JM, Oshiro LS. Isolation of lymphocytopathic retroviruses from San Francisco patients with AIDS. Science 1984;225:840-2.
3. Hardie J. A 1985 update on AIDS. Journal of the Canadian Dental Association 1985;51:499-503.

QUATERNARY AMMONIUM COMPOUNDS NOT EFFECTIVE AS "COLD STERILANT" AGAINST HEPATITIS B

Some dental instruments and other articles used in the treatment of dental patients can be negatively affected by sterilization through dry or steam heat techniques. In dental practices, these articles are commonly disinfected with quaternary ammonium compounds. Quaternary ammonium compounds include benzalkonium chloride and cetylpyridinum chloride. These compounds are ineffective for disinfection against hepatitis B virus and other pathogenic organisms.

Sterilization is a procedure which destroys all microbial life. Disinfection, on the other hand, is a procedure which reduces the number of microbes, but, depending on technique, may vary greatly in its ability to reduce the number of organisms on the surface of a contaminated article. The agents used to disinfect are called germicides and are classified as high, intermediate, and low level.

Quaternary ammonium compounds are low level germicides that are unable to destroy a variety of microbial life, including M. tuberculosis, poliovirus, other spore-forming bacteria, and certain small non-lipid viruses. The latter would include hepatitis and poliovirus type I and II.

Other suggested reading:

Anonymous. Quaternary ammonium compounds not acceptable for disinfection of instruments and enviromental surfaces in dentistry. JADA, 97: November 1978, pp. 855-6.

Dwire, Kathleen, and James, John. Comparative testing and evaluation of germicidal solutions used for the sterilization or disinfection of medical and dental instruments and equipment. ADM Lab Journal, 12: July 1982.

Favero, M.S. Chemical disinfection of medical and surgical materials, p 469-92. (In Block, S.S., ed. Disinfection, sterilization and preservation. 3rd ed. Philadelphia, Lea & Febiger, 1983.)

SMOKELESS TOBACCO SECTION

SMOKELESS TOBACCO SLIDE PRESENTATION

Offered by California Dental Association

"Don't Take the Risk" is a smokeless tobacco educational slide/tape presentation offered by the California Dental Association (CDA). Targeted at 9-to 18-year-olds, the presentation focuses on the health risks associated with chewing tobacco and snuff use. The program is designed to be used in conjunction with a lecture or discussion led by dental professionals. The slide/tape series is available for loan through CDA or by purchase for $150. Contact Ms. Kristen Kelleher at the following address for additional information:

California Dental Association
818 'K' Street Mall
P.O. Box 13749
Sacramento, California 95853
(916) 443-0505 or (800) 421-8702

CONGRESS CONSIDERS WARNING LABELS FOR SMOKELESS TOBACCO PRODUCTS

A bill to require labeling for all smokeless tobacco products and advertisements was introduced into the United States House of Representatives in July by Representative Mike Synar (D-Oklahoma) for himself, Representative Samuel S. Stratton (D-New York), Representative Michael Allen Andrews (D-Texas), and Representative Ron de Lugo (D-Virgin Islands).

The first part of the bill reads as follows:

SECTION 1. SHORT TITLE

This Act may be cited as the "Comprehensive Smokeless Tobacco Education Act."

SEC. 2. FINDINGS

The Congress finds that--

(1) scientific research has determined that--
  (A) the use of smokeless tobacco is a cause of oral and pharyngeal cancer, oral leukoplakia, gum disease, and tooth loss: and
  (B) smokeless tobacco contains nicotine and is addictive;
(2) promotional efforts by the smokeless tobacco industry are aimed at increasing the use of smokeless tobacco products by adolescents;
(3) the use of smokeless tobacco by adolescents is increasing;
(4) there is a widespread lack of knowledge among the general public of the health risks associated with the use of smokeless tobacco; and
(5) State and local efforts are insufficient to educate the public on the dangers of smokeless tobacco use.

SEC. 3. SMOKELESS TOBACCO WARNING

(a) General Rule.--It shall be unlawful for any person to manufacture, package, import for sale or distribution within the United States, or cause to be advertised any smokeless tobacco product unless--

(1) the product bears, in accordance with the requirements of this section, one of the following labels:
"WARNING: THIS PRODUCT MAY CAUSE MOUTH CANCER
"WARNING: THIS PRODUCT MAY CAUSE GUM DISEASE AND TOOTH LOSS
"WARNING: THIS PRODUCT CONTAINS NICOTINE AND IS ADDICTIVE":
(2) in the case of television advertising, the label statement appears for the duration of the advertisement; and
(3) in the case of radio and television broadcast advertising, the label statement is read once during each advertisement of a smokeless tobacco product.
(b) LABEL FORMAT.--The label statement required by subsection (a) shall appear--
(1) in the case of the smokeless tobacco product package--
(A) on the top of the package or in another prominent location on the package, and
(B) in conspicuous and legible type in contrast by typography, layout, and color with all other printed material on the package, and
(2) in the case of print and television advertising
(A) in a conspicuous location and in conspicuous and legible type in contrast by typography, layout, and color with all other printed material in the advertisement; and [a specific format of including the warning inside a circle with an arrow pointing to it is specified.]
The bill defines "smokeless tobacco" as "any finely cut, powdered, or leaf tobacco that is intended to be placed in the oral cavity or nasal passage."

The Committee on Energy and Commerce currently has the bill under study.

HAZARDS OF SMOKELESS TOBACCO FEATURED IN READER'S DIGEST

On September 26, 1985, a full page ad from Reader's Digest appeared in the New York Times with the headline "18-year-old Sean Marsee was too smart to smoke. But Sean's doctor believes tobacco killed him." The ad contains a reprint of the article, "Sean Marsee's Smokeless Death" which appeared in the October 1985 issue of Reader's Digest. Full text appears later in this issue. The article tells the story of Sean's use of snuff for 6 years, ending in his death from oral cancer in 1984. The article also highlights the Massachusstts Public Health Department hearing on whether to label snuff a hazardous substance and discusses ways in which people can "...help prevent repetitions of the tragedy that befell Sean Marsee." Single copies of the Times page can be obtained by writing to the following address:

Dental Disease Prevention Activity
Center for Prevention Services
Centers for Disease Control
1600 Clifton Road
Atlanta, GA 30333

18-year-old Sean Marsee was too smart to smoke. But Sean's doctor believes tobacco killed him.

Since our founding in 1922, Reader's Digest has taken the lead in warning Americans about the dangers of tobacco—publishing 89 such articles. Until now, our warnings have been about the dangers of smoking tobacco. But as many as ten million Americans, many of them youngsters, chew tobacco or use snuff—and may feel these products are safe. Are they safe? Here, from an original article in our October issue, is a report on how smokeless tobacco increases the risks of cancer—and the tragic case of one high-school star athlete.

Sean Marsee's Smokeless Death

By Jack Fincher

The angry red spot with its hard white core was the size of a half-dollar. It belonged, thought Dr. Carl Hook, in the mouth of a 75-year-old who had been dipping snuff since the age of three, not on the tongue of the high-school boy who sat across from him. "I'm sorry, Sean," said the Ada, Okla., throat specialist. "It doesn't look good. We'll have to do a biopsy."

Sean Marsee was stunned. He didn't smoke or drink. You couldn't and win 28 medals running anchor leg on the 400-meter relay. A tapered five-foot-five, 130 pounds, Sean had always taken excellent care of his body: watching his diet, lifting weights, running five miles a day six months of the year.

Now this. How could it be? True, he was never without a dip. He used up a can of snuff, a type of smokeless tobacco, every day and a half, holding it in his mouth to get a nicotine jolt without smoking. It was popular among high-school athletes who didn't want to break training. "But I didn't know snuff could be that bad for you," Sean said. "No warning label or anything. And all those ads on TV...."

A Mind of His Own. Eighteen-year-old Sean had been secretly using "smokeless"—chewing tobacco briefly, then snuff—since he was 12. His mother, Betty, a registered nurse, had hit the roof when she found out. Didn't he know tobacco is hazardous, smoke or no smoke?

Sean refused to believe her. Would sports stars sell snuff on TV if it hurt you? Why, even his coach, Jim Brigance, a bear for conditioning, knew boys on his team dipped and didn't make a big thing of it.

Finally, Betty dropped the subject. It had been Sean who pulled his sister Marian out of the lake when she fell through the ice; Sean who was his sister Melissa's model for an ideal husband; Sean who taught his younger brothers Shannon and Jason to hunt, fish and trap; Sean who planned to join the Army Airborne as a career and to get his college education paid for. The oldest of her five children had a mind of his own.

Besides, Betty, a single parent working the hospital night shift in Ada, had enough to think about just raising the children. Then Sean had come to her with his ugly sore. Betty took one look; her heart sank. And now Dr. Hook was saying, "I'm afraid we'll have to remove that part of your tongue, Sean."

The high-school senior was silent. "Can I still run in the state track meet this weekend?" he finally asked. "And graduate next month?" Dr. Hook nodded.

The tumor biopsy was positive. And, in May, June and November of 1983, Sean underwent three operations. Each one mutilated his young body in another area where the cancer had spread—his tongue, his neck, his jawbone. He now had to breathe and feed through tubes.

The Marsees brought Sean home for Christmas. Even then, he remained optimistic, until the day in January when he found lumps in the left side of his neck. Later, Betty answered when the hospital phoned the results of another biopsy. Sean knew the news was bad by her silent tears as she listened. When she hung up, he was in her arms, and for the first time since the awful nightmare started, grit-tough Sean Marsee began to sob.

After several minutes, he straightened and said, "Don't worry. I'm going to be fine." Like the winning runner he was, he still had faith in his finishing kick.

For the last two weeks of Sean's life, his adjustable hospital bed dominated the living room. Coach Brigance visited often, sometimes with a check from Talihina-area residents, teachers and classmates who knew how hard-pressed the Marsees must be.

Almost to the end Sean insisted on caring for himself, packing his wound and cleaning and reinserting his breathing tube several times a day.

One day Sean confessed to Betty that he still craved snuff. "I catch myself thinking," he said, *"I'll just reach over and have a dip."* Then he added that he wished he could visit the high-school locker room to show the athletes "what you look like when you use it." His appearance, he knew, would be persuasive. A classmate who had come to see him fainted dead away.

Early on February 25, 1984, Sean smiled a tired smile at his sister Marian and flashed an index finger skyward. An hour later he died.

Photos tell Sean's tragic story

Time Bomb in the Mouth. Last February, Betty Marsee was among 54 witnesses who testified at a Massachusetts Public Health Department hearing on whether to label snuff a hazardous substance.

Scientists testified that the connection between snuff and oral cancer, the nation's seventh leading cause of cancer death, cannot be questioned. The culprit: highly potent cancer-causing compounds called nitrosamines, one of which forms in the mouth through the chemical interaction of saliva and tobacco. According to Stephen Hecht, an organic chemist with the American Health Foundation, a dip of snuff delivers roughly the same amount of nicotine as a cigarette and *ten times* the nitrosamines.

There are now 6 million to 10 million consumers of snuff, and sales are rising 8 percent annually. "The more I dipped, the more I liked it," said Paul Hughes, 18, a six-four football co-captain from North Easton, Mass. "Makes you feel—you know, calms you down. When I tried to stop, I couldn't." Alan Lawrence, his co-captain of the football team in Taunton, Mass., said, "In our school, about three-quarters of the kids who play sports do it. As an everyday thing." Added Andover dental hygienist Joan Walsh, "Many equate it with gum chewing."

Scientific witnesses for the Smokeless Tobacco Council argued that no undisputed scientific evidence exists proving its product causes any human disease or is clinically addictive. Nitrosamines have produced cancer in some laboratory animals, but have not been shown to cause cancer in any human being, they pointed out.

But representatives of the American Cancer Society, American Heart Association, American Lung Association, American Dental Society, the U.S. Addiction Research Center and the Centers for Disease Control joined researchers from the National Cancer Institute in condemning the practice of dipping. Concluded Assistant Surgeon General Robert Mecklenburg, chief dental officer of the U.S. Public Health Service: "Why should a chemical time bomb be allowed to tick without warning in the mouths of children?"

Health scientist Elbert Glover of East Carolina University recently conducted two quit-smokeless-tobacco clinics in which only one of 41 participants was able to go for more than four hours without the use of smokeless tobacco. "This, to me," Glover says, "means that smokeless can be highly addictive."

Since the Massachusetts hearing, that state now requires warning labels on snuff cans, and eight other states have similar mandatory warnings under consideration. The Federal Trade Commission has asked the Surgeon General to conduct a comprehensive review of existing scientific evidence on health effects before taking action.

Dr. Gregory Connolly, director of dental health for the Massachusetts Department of Public Health, concedes that "we don't know how much oral cancer is caused by snuff. But we do know that each year we have about 29,000 new cases of oral cancer and 9000 deaths in this country. Tobacco of one kind or another is believed to account for about 70 percent of it. According to the National Cancer Institute, if you use snuff regularly you increase your risk fourfold."

Shortly before his death, Sean Marsee told his mother that there must be a reason God decided not to save him. "I think the reason is what we're doing right now," says Betty Marsee. "Keeping other kids from dying—that's Sean's legacy."

How you can help prevent repetitions of the tragedy that befell Sean Marsee:

- Write your Congressman to support the efforts of Rep. Henry Waxman (D., Calif.) to ban smokeless advertising on television and radio, and to require national health-warning labels on all smokeless-tobacco products.
- Write to Rep. Dan Rostenkowski (D., Ill.), Chairman of the House Ways and Means Committee, and to Sen. Bob Packwood (R., Ore.), Chairman of the Senate Finance Committee, to demand that there be an excise tax on all smokeless-tobacco products.
- Find out if your state is one of the 26 that prohibit the sale of snuff and chewing tobacco to minors. If it is not, ask your state legislators why. If it is, try to determine if the law is being enforced.
- Make sure that your children read about what happened to Sean Marsee. And insist that your local school system educate the student body about the dangers of dipping.

SMOKELESS TOBACCO USE IN WISCONSIN

From recent surveys of tobacco products use in urban Wisconsin and smokeless tobacco use in rural Wisconsin, the following data have been reported by Rhys B. Jones, D.D.S., M.S., Dental Coordinator, Wisconsin Division of Health:

"The smokeless tobacco usage in Dane County is predominantly male, although 11 percent of the girls in grades 7 through 12 have tried smokeless tobacco. More boys in Dane County use smokeless tobacco than smoke. Six percent smoke daily compared to 8 percent who use smokeless tobacco daily."

Table II show the trends by grade, with an increase to 15 percent daily users among 12th grade boys. It is apparent that the boys who start using smokeless tobacco in the early grades use more and more of the products each year. They tend to become daily users, implying an addictive potenial. Trends in other drug substances in comparison to smokeless tobacco are as follows: alcohol experimental use is up somewhat, but frequent use is down; marijuana experimental and frequent use is down somewhat; tobacco smoking is down overall in terms of heavy use, but up in females.

Dane County, Wisconsin's second most populous county, is representative of urban Wisconsin. Rural Wisconsin data show higher usage patterns than urban. Data from the Wisconsin Division of Health's Project Model Health Evaluation clearly show greater usage in a rural school system when compared to Dane County. Table III summarizes usage patterns in rural 7th and 8th grade boys and girls. Thirty-five percent of 8th grade girls have tried smokeless tobacco in rural schools, and 4 percent are regular users. Twenty-two percent of 8th grade boys are regular users in rural schools, compared to 12 percent of 8th grade boys in Dane County. Rural girls and boys use smokeless tobacco more and start at much younger ages. In fact rural 8th grade boys use smokeless tobacco regularly at a level equal to 12th grade boys in Dane County.

TABLE I

Dane County
Tobacco Products Use - Grades 7-12

	Girls	Boys
Never smoked	58%	61%
Never used smokeless tobacco	89%	55%
Smoked daily	9%	6%
Used smokeless tobacco daily	0%	.8%
Smoked weekly	14%	12%
Used smokeless tobacco weekly	1%	15%

TABLE II

Dane County
Smokeless Tobacco Use - Boys by Grade

	Not at all	Regularly (>1/wk)	Daily
7th grade	68%	9%	3%
8th grade	55%	12%	6%
9th grade	53%	12%	3%
10th grade	50%	16%	8%
11th grade	53%	14%	11%
12th grade	52%	22%	15%

TABLE III

Rural Wisconsin School
Smokeless Tobacco Use

	Not at all	Regularly (>1/wk)
7th grade girls	80%	2%
8th grade girls	65%	4%
9th grade boys	37%	18%
8th grade boys	28%	22%

CONGRESS CONSIDERING SMOKELESS TOBACCO INITIATIVE

A Federal initiative to combat the dangers of smokeless tobacco is being considered by members of Congress.

A bill, which was introduced in July in the United States House of Representatives by Representive Cardiss Collins (D-Illinois), would provide assistance to States to establish programs to combat the dangers of smokeless tobacco, would amend the IRS Code to disallow a deduction for smokeless tobacco advertising expenses, would impose an excise tax of 32 cents an ounce on smokeless tobacco, and would establish a trust fund for cancer research and smokeless tobacco educational activities.

The first part of the bill reads as follows:

"SECTION 1. SHORT TITLE

This Act may be cited as the "Smokeless Tobacco Control Act of 1985."

SEC. 2. FEDERAL PROGRAM

(a) DEVELOPMENT.--The Secretary of Health and Human Services, acting through the Office of Smoking and Health of the Department of Health and Human Services, shall--

(1) develop educational programs and materials and public service announcements respecting the dangers to human health from the use of smokeless tobacco; and

(2) make such programs, materials, and announcements available to States, local governments, and school systems.

In developing such programs, materials, and announcements, the Secretary shall consult with the Secretary of Education, medical and public health entities, consumer groups, and other appropriate entities.

(b) REPORT.--One year after date of the enactment of this Act and each year thereafter, the Secretary shall report to the Congress the activities undertaken under subsection (a) in the year reported on.

SEC. 3. ASSISTANCE PROGRAM

The Secretary of Health and Human Services, acting through the Office of Smoking and Health of the Department of Health and Human Services, may make grants to States--

(1) to assist in the development of educational programs and materials and public service announcements respecting the dangers to human health from the use of smokeless tobacco,

(2) to assist in the distribution of such programs, materials, and announcements throughout the State, and

(3) for the purposes of assuring that individuals will able to make a mature judgement respecting the use of smokeless tobacco, to establish a minimum age for the purchase of smokeless tobacco.

No grant may be made under this section unless an application for a grant is submitted to and approved by the Secretary.

SEC. 4. SMOKELESS TOBACCO DEFINED

For purposes of section 2 and 3, the term "smokeless tobacco" means any finely cut, ground, powdered, or leaf tobacco that is designed to be placed in the oral cavity or nasal passage."

Monies for the trust fund would equal the amount of excise taxes collected under this Bill. The money would be used for the grants authorized in Section 3 and for cancer research by the National Institutes of Health, with emphasis on the relationship between smokeless tobacco and oral and other forms of cancer. At least 50 percent of the funds would be used for grant purposes.

GENERAL INFORMATION

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Epidemiologic Notes and Reports

Dental Caries in American Indian and Alaskan Native Children

A study conducted by the Indian Health Service (IHS) of the U.S. Public Health Service in 1983-1984 showed that American Indian and Alaskan Native (AI/AN) children develop more tooth decay than the general population of U.S. schoolchildren (*1*). This study involved patients seen in IHS dental clinics in the 11 geographic areas of the IHS, including Alaska. Among AI/AN children, an average of 6.8 decayed, missing due to caries, and/or filled permanent teeth (DMFT) was identified for approximately 5,800 children 5-19 years old. The National Caries Prevalence Survey (NCPS), conducted by the National Institute of Dental Research in 1979-1980, reported that 5- to 17-year-olds in the overall U.S. population had an average of 4.8 DMFT (*2*).

Results from the IHS study indicate that 19% of 5- to 19-year-old dental patients were caries-free. By contrast, 37% of 5- to 17-year-olds from the NCPS were reported to be caries-free. Approximately 33% of AI/AN children treated in dental offices had seven or more DMFT; 15% of other U.S. children had the same rate. On average, 12-year-old AI/AN children had 6.5 DMFT, and by age 17 years, 11.9 DMFT. U.S. schoolchildren surveyed from a national random sample had 2.6 DMFT at 12 years and 6.3 DMFT at 17 years of age (Figure 2). Although the 1990 U.S. Public Health Service objective stating that 40% of 9-year-old children should be caries-free (*3*) has been achieved (51% reported from NCPS), 2.3% of AI/AN children of the same age group were reported as caries-free from the IHS study.

Severe, rampant tooth decay caused by prolonged bottle feeding (milk, formula, juices, or sweetened beverages) of infants and young children is called nursing-bottle caries. Based on the characteristic dental caries pattern of nursing-bottle caries (affecting the upper front primary teeth and, frequently, the back teeth), up to 50% of AI/AN preschool-aged children who seek dental services suffer from this disease. Eighteen percent of preschool-aged AI/AN children (under 5 years old) had caries-free primary teeth, while over 40% had seven or more decayed and/or filled primary teeth (DFT). Children with nursing-bottle caries had almost four times the amount of tooth decay as those children who had not had nursing-bottle caries.

Reported by Indian Health Svc; Dental Disease Prevention Activity, Center for Prevention Svcs, CDC.

Editorial Note: Although major differences in the sampling methods make direct comparisons of the IHS data with the NCPS data difficult, the higher incidence of tooth decay in AI/AN children cannot be explained by these differences alone. Also, since infrequent users of the IHS-care system who were studied had as much dental decay as more frequent users, the sampling methodology in itself may not account for the major differences in caries prevalence between the AI/AN population and the general U.S. population. The differences in data collection indicate the need for standardization of surveillance methods and reporting of data.

Because the IHS data were collected from a sample of dental patients, they do not necessarily represent the actual dental caries prevalence among all AI/AN children. The magnitude of dental caries in these children remains a serious problem. IHS and Native American communities are placing increased emphasis on both the extent and quality of dental caries prevention activities, which include: community water fluoridation, supplemental fluorides, and pit and fissure sealants. The IHS anticipates that future surveys will reflect the impact of these activities by a decrease in caries prevalence. The IHS is also increasing its emphasis on the prevention of nursing-bottle caries by educating health professionals and parents.

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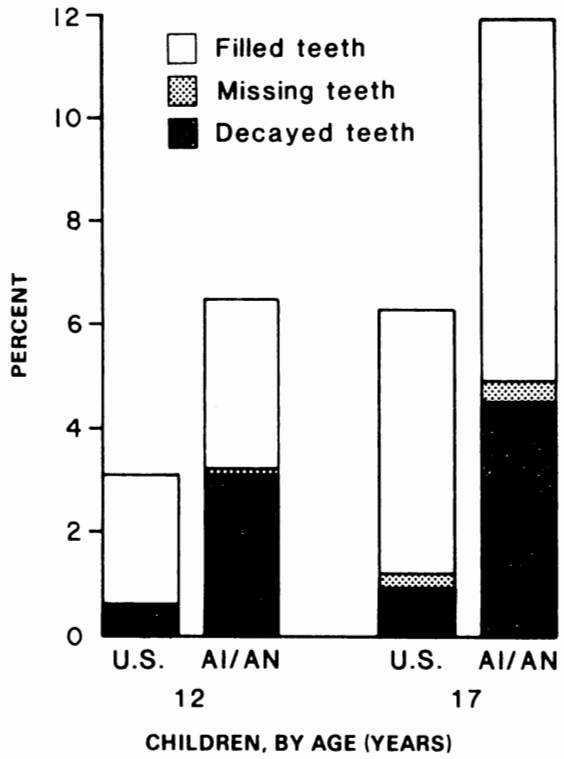
2. National Institutes of Health, National Institute of Dental Research, National Caries Program. The prevalence of dental caries in United States children, 1979-1980; the national caries prevalence survey. Washington, D.C.: Public Health Service, U.S. Department of Health and Human Services, 1981. (NIH publication no. 82-2245).
3. U.S. Public Health Service. Promoting health/preventing disease: objectives for the nation. Washington, D.C.: U.S. Department of Health and Human Services, 1980.

FIGURE 2. DMFT* status for U.S. and American Indian/Alaskan Native children†



*Decayed, missing (due to caries), and/or filled permanent teeth.

†From the 1979-1980 National Caries Prevalence Survey and 1983-1984 Indian Health Service Survey.

BENEFITS OF FLUORIDATION REAFFIRMED

Hardison, J.R., Wicker, J.U., and Van Cleave, M.L. The results of twelve years of continuous fluoridation in Memphis, TN. Tenn. Dent. Asso. J., 64:31-5, Oct. 1985.

In October 1982, a representative sample consisting of 1,450 school-age children in Memphis, Tennessee, was surveyed in order to determine dental health status and the effect of consuming optimally fluoridated water. Results of this survey were compared to a similar survey conducted in 1969 (Memphis' water supply was fluoridated in February 1970). A residence history was included in the survey to determine fluoridation history.

The mean DMFT (decayed, missing and/or filled permanent teeth) declined from 2.11 in 1969 to 0.55 in 1982, representing approximately a 74 percent reduction in dental caries. For primary teeth, a 70 percent reduction of dental caries was reported. In the 1969 survey, only 13.3 percent of the sample of children were caries-free, while 53.6 percent were caries free in 1982.

This survey is a recent example that indicates fluoridation's continuing role in the prevention of dental caries.

DENTAL INSURANCE INCREASES

The "1984 Update, Source Book of Health Insurance Data, 1982-83," published by the Health Insurance Association of America, reports that there has been a 97.2 percent increase in the number of people covered by private dental health insurance from 1977 to 1982. This percent reflects an increase of approximately 50 million people, which brings the total of people in the United States covered by dental health insurance in 1982 to over 100 million.

It was also estimated that dental health insurance benefit payments were $7.3 billion in 1982. This figure represents both public and private third party carriers.

CALIFORNIA REVISES POLICY ON FLUORIDATION OF COMMUNITY WATER SUPPLIES

California has revised its policy on the fluoridation of community water supplies to allow its Department of Health Services to take a more visible and proactive stand with respect to water fluoridation.

The new policy reads as follows: "Tooth decay is one of California's greatest health problems, affecting 95 percent of the population. Almost nine out of every ten of our children have experienced this disease by age 17. Unfortunately, though the means to prevent up to 65 percent of tooth decay is available to communities in the form of community water fluoridation, most California communities remain unfluoridated.

"The Department of Health Services believes that fluoridation of public water supplies is the safest, most economical, most effective, and most equitable means available to a community to prevent tooth decay and to reduce both personal and public expenditures for dental care. Almost 40 years of research and extensive community experience have demonstrated beyond a reasonable doubt that:

- Fluoridation reduces tooth decay by as much as 65 percent.
- Fluoridation can reduce the cost of dental care by as much as 50 percent.
- Fluoridation benefits the entire community, regardless of ability to pay for dental care.
- Fluoridation poses no known health risks to consumers.

The Department of Health Services strongly supports the fluoridation of community water supplies to optimal levels wherever the natural level is less than optimal and stresses that this preventive measure is the single most important commitment a community can make to the oral health of its children and to future generations."

FLUORIDATION UPDATE: SAN FRANCISCO

On August 5, the San Francisco Board of Supervisors voted 5-3 not to allow the fluoride issue to appear on the November ballot (see September 1985 issue). According to the August 6 San Francisco Examiner, one supervisor stated that a fluoride ballot was a bad idea ". . . because in too many cases campaigns based on fear and misinformation have won out . . ." in other cities where fluoride has been placed on the ballot. The Examiner also stated, "Anti-fluoride leader, Supervisor Wendy Nelder, intends to launch a petition drive to collect the 7,332 signatures needed to place the question of the substance's use on the ballot next June."

FLUORIDATION UPDATE: SAN ANTONIO

Although San Antonio's City Council approved an ordinance for fluoridation on May 30 (see September 1985 issue), more than the 40,488 required signatures have been collected on petitions to put the issue on the November 5 ballot.

FLUORIDATION PSA

The Centers for Disease Control (CDC), in cooperation with the American Dental Association (ADA), has produced a public service announcement (PSA) about fluoridation. The PSA features United States Surgeon General C. Everett Koop, who discusses the benefits of community water fluoridation in both a 30 and

60-second message. Because a limited number of PSA's were produced, single copies are available from CDC or ADA. Please contact either organization for more information.

Dental Disease Prevention Activity
Center for Prevention Services
Center for Disease Control
Atlanta, Georgia 30333
(404) 329-1830
FTS 8-236-1830

Council on Dental Health and Health Planning
American Dental Association
211 E. Chicago Avenue
Chicago, Illinois 60611
(312) 440-2868

HEALTHY MOTHERS/HEALTHY BABIES COALITION FORM ORAL HEALTH SUBCOMMITTEE

The Healthy Mothers/Healthy Babies Coalition has formed an Oral Health Subcommittee.

The Healthy Mothers/Healthy Babies Coalition is a coalition of more than 70 national organizations with the purpose of promoting good health for mothers during their pregnancy and their children during their first years of life with particular emphasis on the first year.

Benefits to be derived from an Oral Health Subcommittee include obtaining dental disease prevalence data and increasing awareness of contributions which can be made by various dental organizations in reducing the impact of oral diseases. The subcommittee could play a role in the development, review, and dissemination of dental information to HM/HB Coalition membership, their State and local counterparts, and various distribution centers, including health departments, day-care programs, community health centers, and the medical community. Targeting risk groups and developing a model for dental networking with State HM/HB Coalitions are also being considered as possible activities.

A meeting of the Oral Health Subcommittee was held September 23 and 24 in Washington, D.C., and was attended by representatives from 16 Federal agencies and dental organizations. Ms. Lisa Watson, American Dental Association, was elected chairperson of the subcommittee. The subcommittee also voted to accept nursing bottle caries as its first project. The term "nursing bottle caries" will now be referred to as "baby bottle tooth decay" (BBTD), because it was felt that this term would better understood by the general public. Committees for the BBTD project were formed to: (1) collect prevalence data; (2) collect and review education resources; and (3) collect and review scientific research. A committee was also formed to promote formation of oral

health subcommittees at the State and local levels of the Healthy Mothers/Healthy Babies Coalition.

CALL FOR BABY BOTTLE TOOTH DECAY EDUCATION MATERIALS

The Oral Health Subcommittee of the Healthy Mothers/Healthy Babies Coalition hopes to develop a resource lost of baby bottle tooth decay (BBTD) education materials.

If your organization or agency has developed pamphlets or other education materials on BBTD, please forward samples, including information on cost and availability, to:

Dental Disease Prevention Activity
Center for Prevention Services
Centers for Disease Control
Atlanta, Georgia 30333

For more information call Cathy Backinger at (404) 329-1830, FTS 236-1830.

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