

for Sullivan
SW

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FAX TRANSMISSION COVER SHEET

Date: 1-27-98

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To: Tom Freedman

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Re:

From: Jim O'Hara

Tom: Please call me.

Thanks.

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Have a Healthy, Active Day!

DRAFT

Tobacco Surveillance System
Age Group

It is recommended that monitoring of youth tobacco use be done in persons 12-17 years old. This is determined to be the optimal age range based primarily on the review of existing data sets (e.g., NHANES III) which indicate that smoking prevalence is very low in persons younger than 12 years old, and also because all states have laws prohibiting the sale of tobacco products to persons under the age of 18.

However, it is also strongly recommended that we monitor the age of initiation of first tobacco use in all persons surveyed, to determine if the age of smoking initiation ever decreases. If age of first use ever does decrease substantially, then the inclusion of persons younger than age 12 would be necessitated.

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Tobacco Surveillance System **Past Month Use as the Measure of Current Use**

There are several reasons to incorporate past month use (i.e., any use during the previous 30 days) as the measure of current use, despite the fact that the June 1997 settlement proposes using the Monitoring the Future Survey (MTFS) measure of daily use (one or more uses per day during the previous month). The most important reason is that the surveillance system should be able to capture early experimentation. Since young tobacco users build up tolerance to nicotine and gradually increase their frequency of use, then a measure that incorporates more frequent use, such as daily smoking, would miss a considerable number of experimenters. Many of these experimenters will eventually become dependent on nicotine. Daily use is too late in the process to capture preliminary steps, when prevention may be most effective.

Past month use includes both occasional and daily users. In the 1997 MTF surveys, 46% ($9.0/19.4 \times 100\%$) of 8th grade students who smoked in the past month smoked daily, 60% ($18.0/29.8 \times 100\%$) of 10th grade students who smoked in the past month smoked daily, and 67% ($24.6/36.5 \times 100\%$) of 12th grade past month smokers smoked daily.

Additionally, many users of smokeless tobacco (ST) alternate between cigarettes and ST; they may not be daily users of each, even though they are consuming substantial amounts of tobacco and may actually consume tobacco on a daily basis. Furthermore, use in the past 30 days is a standard measure on the three major federal surveys that measure tobacco use among young people (i.e., the Monitoring the Future Surveys, the Youth Risk Behavior Survey [YRBS], and the National Household Survey on Drug Abuse [NHSDA]). Any effort to triangulate data between surveys will need to incorporate a similar measure.

Finally, a comparison of trends from the MTFs indicates that past month smoking and daily smoking change over time at fairly similar rates. For example, among high school seniors from 1976-1984, past month smoking prevalence dropped 24% (from 38.8% to 29.3%); daily smoking declined by 35% (from 28.8% in 1976 to 18.7% in 1984). The rates of increase in the 1990s were somewhat similar, as well. From 1991 to 1997, past month smoking increased by 28% (from 28.3% in 1991 to 36.5% in 1997); during the same time period, daily smoking increased by 32% (from 18.5% in 1991 to 24.6% in 1997). The rate of increase for 10th grade students was 43% for past month smoking (from 20.8% in 1991 to 29.8% in 1997) and 42% for daily smoking (from 12.6% in 1991 to 18.0% in 1997). The rate of increase for 8th grade students was 35% for past month smoking (from 14.3% in 1991 to 19.4% in 1997) and 25% for daily smoking (from 7.2% in 1991 to 9.0% in 1997).

From 1992 to 1997, past month ST use by high school seniors decreased by 14% (from 11.4% to 9.7%); daily use by seniors increased by 2% (from 4.3% to 4.4%). From 1991 to 1997, past month ST use by 10th grade students decreased by 11% (from 10.0% to 8.9%); daily ST use decreased by 33% (from 3.3% to 2.2%). The rate of decline for 8th grade students was 20% for past month ST use (from 6.9% to 5.5%) and 37% for daily ST use (from 1.6% to 1.0%).

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Tobacco Surveillance System
Smokeless Tobacco Problem Summary

The YRBS and MTFs have consistently produced estimates of ST prevalence that are three times higher than those seen in the NHSDA. The estimates produced by the NHSDA for persons aged 12-17 years did not change substantially when the NHSDA switched modes from an interview to a paper and pencil questionnaire, even though the estimates for smoking almost doubled. The increases in smoking were likely explained by both increases in privacy (thus permitting more disclosure of sensitive information) and by changes in their editing procedure.

It is not clear why the ST estimates are so different between the two survey modes. One possible explanation is that the NHSDA uses a different question. MTF asks, "How frequently have you taken smokeless tobacco during the past 30 days?" YRBS asks, "During the past 30 days, on how many days did you use **chewing tobacco or snuff**, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?" NHSDA asks, "What is the most recent time you used chewing tobacco or snuff or other smokeless tobacco?" The 1992 YRBS-NHIS, a household survey which provided more privacy for respondents by using a "Walkman" headset mode of reading the survey and used questions that were identical to the school-based YRBS, provided estimates of ST use that were closer to those of the school-based surveys than the NHSDA. These findings suggest that increased privacy yields higher estimates. However, further methodological work is needed to resolve the discrepancies between the two surveys.

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Tobacco Surveillance System Pros and Cons of School-based and Household-based Surveys of Young People

School-Based		Household	
<u>Pros</u>	<u>Cons</u>	<u>Pros</u>	<u>Cons</u>
- Much cheaper than household. More efficient in terms of field work (i.e., schools and classes) which is one of the factors making it cheaper than the household.	- Lower overall response rate than household. School participation can be a problem (i.e., MTF). If requirements for active consent increase over time, prevalence estimates may be biased.	- Higher overall response rate than school-based.	- Cost -- Much more expensive than school-based (3 to 4 times more expensive). Surveyors need to screen multiple households to find children in the target age range (20% of households have at least one 12-17 year old).
- Student response rate is similar to individual response rate in household. However, overall response rate is primary issue.	- Limited number of questions (usually interview time is set at one class period); questionnaire is less complex than household.	- Covers a broad population, including all ages, dropouts, home-schooled youths, graduates.	- Some difficult to reach populations are not covered (e.g., homeless and institutionalized), and others may be underrepresented (e.g., criminals)
- Students or others at school can report data on school characteristics that may be useful for analysis.	- Clustering increases the design effect, which reduces the precision for the same sample size; thus, school samples have larger sample sizes to compensate.	- Generally tighter confidence intervals because design effects are lower than school-based for the same sample size.	- Fieldwork spread over 12 months.
- More valid estimates due to anonymity (respondents more likely to be honest with self-administered questionnaire in a classroom)	- Dropouts are missed, as are the few students in this age range who are home schooled.	- Households do use cluster designs but the cluster effect of youths within county group PSUs in household-based designs is lower than for youths within schools in school-based designs.	- Unsure if CAPI interviewing will improve reliability/validity of responses, especially for young respondents.

- Data collection usually short (3 months) . So time between field work and clean/edited analysis file is shorter than household	- Young students may overstate "cool" behaviors or understate "uncool" behaviors.	- Generally the questionnaires are much longer and more complex than with school-based (this can be a Pro and/or a Con	- Less efficient (in terms of interviewer time) to use household than school-based which adds to the cost differential
	- School "burn out"...there is a limit to the number of times we can go to schools (i.e, regular YRBS & MTF, etc)	- Respondents (or parents) can provide data on household characteristics (such as insurance, income, and family structure) that may be useful for analysis	

DRAFT**Tobacco Surveillance System**
Other Surveys

Current data collected by Federal and state entities do not provide adequate information to implement and fully monitor the comprehensive tobacco use prevention and control program envisioned in the future. In addition to the need for a "stand alone" survey on youth tobacco use prevalence, which would provide the foundation for measuring progress on youth tobacco use reduction goals (and consequently an industry penalty system), there is also a critical need for a number of other survey constructs that are critical to measuring and monitoring tobacco control and prevention efforts, developing effective cessation programs and public education programs, and informing and guiding biomedical and other tobacco-related research. For example, the tobacco surveillance system needs to include surveys on --

- ▶ Susceptibility
- ▶ Access to tobacco products
- ▶ Enforcement of tobacco control programs
- ▶ Knowledge and attitudes
- ▶ Exposure to interventions
- ▶ Exposure to media (pro- and anti-tobacco)
- ▶ Adult use of tobacco products
- ▶ Environmental tobacco smoke (ETS) exposure
- ▶ Nicotine dependence
- ▶ Cessation

Current surveillance systems could be expanded to accommodate some of these surveys, e.g., monitoring of ETS exposure and adult use of tobacco products. Some, like monitoring of the enforcement of the FDA and Synar Amendment regulations, would require new vehicles.