

Congressman

BENNIE G. THOMPSON

2nd District - Mississippi

1408 Longworth H.O.B.
Washington, D.C. 20515(202) 225-5876
Fax (202) 225-5898**FACSIMILE TRANSMISSION**

DATE:

3/11/98

TIME:

Please Deliver the Following Transmission to:

NAME

: Tom Eneadun

COMPANY/FIRM:

CITY:

STATE:

FAX NUMBER:

436-7028

PHONE NUMBER:

FROM:

Congressman Bennie G. Thompson

Tammy Boyd

J Todd Gee

Edward Jackson

Minnie Langham

Marsha McCraven

La Tario Powell

Walter Vinson

Pages, Including This Cover Page Total:

7

COMMENTS:

Lookback language per your
request. Thanks - Todd**CONFIDENTIALITY NOTICE:**

The documents accompanying this facsimile transmission contain confidential or proprietary information belonging to the sender which is privileged. The information is directed to the attention and intended for the sole and exclusive use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reliance on the contents contained herein is strictly prohibited. If you have received this facsimile in error, please immediately notify us by telephone to arrange for either destruction or return to this office of the contents of this transmission. Thank you for your cooperation!

Lookback

AMENDMENT TO S. 1638
OFFERED BY MR. THOMPSON

Page 103, strike line 1 and all that follows through line 9 on page 108 and insert the following:

1 SEC. 302. CHILD TOBACCO USE SURVEYS.

2 (a) ANNUAL PERFORMANCE SURVEY.—Not later
3 than 1 year after the date of the enactment of this Act
4 and annually thereafter the Secretary shall conduct a sur-
5 vey to determine, in accordance with subsection (b)—

6 (1) the percentage of all individuals under 18
7 years of age who used a tobacco product within the
8 past 30 days and the percentage of each
9 ethnic group of such individuals who
10 used a tobacco product within the past 30
11 days; and

12 (2) the percentage of all individuals under 18
13 years of age who identify each brand of tobacco
14 product as the usual brand smoked or used within
15 the past 30 days and the percentage of each
16 ethnic group of such individuals who
17 identify each brand of tobacco product as
18 the usual brand smoked or used within
19 the past 30 days.

1 (b) EXCLUSION OF CERTAIN AGES.—The Secretary
2 shall exclude from the survey conducted under subsection
3 (a), children under the age of 12 years (or such other less-
4 er age as the Secretary may establish to strengthen the
5 validity of the survey).

6 (c) BASELINE LEVEL.—

7 (1) IN GENERAL.—The baseline level of the
8 child tobacco product use (referred to in this title as
9 the “baseline level”) is the percentage of **each eth-**
10 **nic group of** individuals under 18 years of age
11 determined to have used the tobacco product in the
12 first annual performance survey for 1999.

13 (2) MANUFACTURERS.—The baseline level of
14 tobacco product use with respect to a manufacturer
15 is the percentage of **each ethnic group of** indi-
16 viduals under 18 years of age determined to have
17 used any tobacco product of such manufacturer in
18 the first annual performance survey for 1999.

19 (d) ADDITIONAL MEASURES.—In order to increase
20 the understanding of youth tobacco product use, the Sec-
21 retary may, for informational purposes only, add addi-
22 tional measures to the survey under subsection (a), con-
23 duct periodic or occasional surveys at other times, and
24 conduct surveys of other populations such as young adults.
25 The results of such surveys shall be made available to

1 manufacturers and the public to assist in efforts to reduce
2 youth tobacco use.

3 (e) ADMINISTRATION.—

4 (1) RESULTS.—The Secretary shall establish a
5 scientific advisory board to ensure that surveys con-
6 ducted under this section produce results that are
7 reasonably precise and valid.

8 (2) TECHNICAL ADJUSTMENTS.—The Secretary
9 may make technical changes in the manner in which
10 the surveys are conducted so long as adjustments
11 are made to ensure that the results of the surveys
12 are comparable from year to year.

13 (3) PARTICIPATION IN SURVEY.—Notwithstand-
14 ing any other provision of law, the Secretary may
15 conduct a survey involving minors if the results of
16 such survey with respect to such minors are kept
17 confidential and not disclosed.

18 **SEC. 303. REDUCTION IN UNDERAGE TOBACCO PRODUCT**
19 **USAGE.**

20 (a) ANNUAL DETERMINATION.—The Secretary shall
21 annually determine, based on the annual performance sur-
22 veys under section 302, whether the required percentage
23 reduction (as described in subsection (b)) in the underage
24 use of tobacco products for a year has been achieved for
25 the year involved. Such determination shall be based on—

1 (1) with respect to cigarette products, the aver-
2 age annual percentage prevalence of the use of to-
3 bacco products by **each ethnic groups of** indi-
4 viduals who are under 18 years of age (as deter-
5 mined under section 302(a)) for the year involved as
6 compared to the baseline level for cigarette products
7 (as determined under section 302(e)); and

8 (2) with respect to smokeless tobacco products,
9 the average annual percentage prevalence of the use
10 of smokeless tobacco products by **each ethnic**
11 **group of** individuals who are under 18 years of
12 age (as determined under section 302(a)) for the
13 year involved as compared to the baseline level for
14 smokeless tobacco products (as determined under
15 section 302(e)).

16 (b) PERCENTAGE REDUCTION IN UNDERAGE USE OF
17 TOBACCO PRODUCTS.—For purposes of this section, the
18 required percentage reduction from the baseline level in
19 the percentage underage use of tobacco products with re-
20 spect to each tobacco product shall be as follows:

21 (1) CIGARETTES.—With respect to cigarettes—
22 (A) the percentage reduction in the per-
23 centage use of cigarettes shall be at least 20
24 percent for each of the calendar years 2001 and
25 2002;

1 (B) the percentage reduction in the per-
2 centage use of cigarettes shall be at least 40
3 percent for each of the calendar years 2003 and
4 2004;

5 (C) the percentage reduction in the per-
6 centage use of cigarettes shall be at least 55
7 percent for each of the calendar years 2005
8 through 2007; and

9 (D) the percentage reduction in the per-
10 centage use of cigarettes shall be at least 67
11 percent for calendar year 2008 and each subse-
12 quent calendar year.

13 (2) SMOKELESS TOBACCO PRODUCTS.—With re-
14 spect to smokeless tobacco products—

15 (A) the percentage reduction in the per-
16 centage use of smokeless tobacco products shall
17 be at least 15 percent for each of the calendar
18 years 2001 and 2002;

19 (B) the percentage reduction in the per-
20 centage use of smokeless tobacco products shall
21 be at least 25 percent for each of the calendar
22 years 2003 and 2004;

23 (C) the percentage reduction in the per-
24 centage use of smokeless tobacco products shall

1 be at least 35 percent for each of the calendar
2 years 2005 and 2007; and

(D) the percentage reduction in the percentage use of smokeless tobacco products shall be at least 45 percent for calendar year 2008 and each subsequent calendar year.

7 (c) APPLICATION TO MANUFACTURER.—With respect
8 to the average annual percentage prevalence of the use
9 of each manufacturer's brands of tobacco product by
10 **each ethnic group** of individuals who are under 18
11 years of age, as determined on the basis of the annual
12 performance survey conducted under section 302(a), each
13 manufacturer which manufactured a brand or brands of
14 tobacco product on or before the date of the enactment
15 of this Act shall reduce the percentage of children who
16 use such manufacturer's brand or brands in accordance
17 with the percentage reductions required under subsection
18 (b).

19 (d) REPORT.—Not later than December 31, 2005,
20 the Secretary shall prepare and submit to the appropriate
21 committees of Congress a report concerning the progress
22 made in achieving percentage reductions in the use of to-
23 bacco products **by each ethnic group** together with
24 the recommendations, if any, of the Secretary for stronger
25 reductions in calendar years after 2008.

for bullo please - 2w

Office of the Assistant Secretary for Health
Office of Public Health and Science
Department of Health and Human Services

200 Independence Ave, SW, Rm 716-G
Washington, DC 20201
Phone: 202.690.7694
Fax: 202.690.6960

FAX TRANSMISSION COVER SHEET

Date: 2-18-98
To: Tom Freedman
Fax: 456-7431
Re: Jim O'Hara
From: Please Deliver on Receipt!

Tom- Please call me.

YOU SHOULD RECEIVE 10 PAGE(S), INCLUDING THIS COVER SHEET.
IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL 202.690.7694.

Have a Healthy, Active Day!

DRAFT February 13, 1998
Options for Youth Tobacco Reduction and Penalty System

BACKGROUND

Today, an estimated 4.5 million U.S. children and adolescents smoke, and they smoke nearly one billion packs of cigarettes each year. Another 1 million use smokeless tobacco. Each year, 1 million more young people become regular smokers, and nearly one out of every three young people who smoke will have their lives shortened from diseases caused by smoking.

Children are starting to smoke at younger and younger ages: Today, the average teenage smoker begins to smoke at 12½ years old and becomes a daily smoker before age 18. More than 80 percent of all adult smokers had tried smoking by their 18th birthday and more than half of them had already become regular smokers by that age. Although only 5 percent of daily smokers surveyed in high school said they would definitely be smoking five years later, close to 75 percent were smoking 7 to 9 years later.

There is accumulating evidence that the tobacco industry has targeted adolescent smokers for decades. For example, recently released RJ Reynolds documents reflect evidence that tobacco companies have long conducted research, and developed and marketed tobacco products aimed at youth. In the 1970's, in consideration of statistics that showed large and increasing numbers of youth smokers despite bans on promotion of cigarettes to them, RJR decided that although they "should not in any way influence non-smokers to start smoking there was" there was "certainly nothing immoral or unethical about our Company attempting to attract those smokers to our products...rather we should simply recognize that many or most of the "21 and under" group will inevitably become smokers, and offer them an opportunity to use our brands." Consequently, RJR found it helpful to divide the youth market into "pre-smokers," "learning smokers," and "confirmed smokers"-- "confirmed smokers" being the only group who had decided a brand preference--and from this found "sharp, perhaps exploitable, differences" among these groups "in terms of what they expect or derive from smoking."

The RJR and numerous other industry documents indicate that tobacco companies were not only unwilling to commit resources to reduce youth smoking, but instead found ways to capitalize on the social insecurities of children experimenting with tobacco and their eventual addiction to nicotine.

OBJECTIVE

The Administration believes tobacco legislation must include stiff penalties that give the tobacco industry the strongest possible incentive to stop targeting youth, and that legislation should set ambitious targets to cut teen smoking at a minimum by 30% in 5 years, 50% in 7 seven years and 60% in 10 years. Other congressional legislative bills have suggested increased targets. In addition to increasing the price of cigarettes by up to a \$1.50 a pack over the next decade, legislation should impose severe financial penalties that hold tobacco companies accountable to meet these targets.

This paper discusses the various options available for a tobacco reduction and penalty system and the related methodological issues.

INCENTIVES TO REDUCE YOUTH TOBACCO USE

Two types of incentives are available to reduce the use of tobacco products through price increases. One approach is to reduce demand by increasing the price of tobacco products, either through one-time and/or periodic up-front industry payments (e.g., to a trust fund) or through an immediate excise tax or surcharge. The other approach is to induce the tobacco industry to limit supply by imposing penalties in

the form of surcharges on the price of tobacco products that are assessed based on the magnitude of the failure to meet a youth tobacco use reduction target.

These approaches are discussed below.

1. **Price increases through payments/excise taxes:** One method of reducing youth tobacco use would be to increase the price of tobacco products by collecting annual industry payments that would be passed on to consumers in the form of higher prices or by imposing an excise tax on tobacco products.

- **Payments.** Direct payments are attractive because funds would be consistently, immediately and annually available for tobacco-related research, cessation programs, public education, counter-advertising and other anti-tobacco activities. Such payments, however, are unlikely to provide direct incentives to firms to reduce youth tobacco use.
- **Excise tax.** The immediate surcharge is likely to have the desired effect on youthful users because it is known that they are more sensitive to price than adults. This incentive could be progressively reinforced by incrementally raising the price further as targets for reduction of the prevalence of tobacco use are not met by the tobacco industry (see below).

Regardless of the approach, higher prices would reduce demand for tobacco products among both youth and adults. However, because youth smokers are much more price sensitive than adults, this strategy should be very effective in reducing youth tobacco use if the price increases are sufficiently large.

2. **Developing a penalty system based on targets for reductions in youth smoking:** Another method of reducing youth smoking would be to develop a system of financial penalties that would be assessed on tobacco companies if youth smoking is not sufficiently reduced in the future. If properly structured, this type of strategy gives the industry and/or individual manufacturers financial incentive to take actions to reduce the number of children that use tobacco. The risk of relying on increasing penalties linked to shortfalls in reductions is the potential for litigation over the measurement of the magnitude of the shortfall.

- a. **Setting youth reduction targets.** An important element of a tobacco reduction program is the establishment of target levels for reducing youth consumption of cigarettes and other tobacco products. These targets permit measurement of the effectiveness of tobacco use reduction strategies and also can form the basis for a system of monetary penalties on the industry or individual firms if future youth tobacco use does not fall sufficiently. There are several considerations in designing the targets:

- (1) **Relative or absolute targets.** Targets can be established in terms of absolute levels of youth tobacco use, in terms of relative reductions from baseline levels, or a combination of both. Discussions with survey statisticians indicate that accurate and reliable surveillance and penalty systems could be established around either type of target. The decision to use relative or absolute targets, however, could have important policy implications. These implications arise because the current distribution of cigarette brand use by teens is highly skewed: three brands dominate the youth cigarette market, Marlboro, Camel, and Newport,

with Marlboro having almost three times as many youth smokers as the next largest brand. Examples, advantages and disadvantages are discussed below.

- (a) **Absolute targets.** An example of an absolute target is the *Healthy People 2000* objective which seeks to reduce tobacco use so no more than 15 % of youth have become regular cigarette smokers by the age of 20.

The potential ability for manufacturers to manipulate smoking rates in a baseline year suggests that a system based on the achievement of absolute targets (i.e., prevalence rates unrelated to a baseline) might have some advantages.

On the other hand, a system based on absolute targets (e.g., no firm may have a youth prevalence of more than 2% in ten years) puts a much greater reduction burden on Philip Morris than on other firms. However, it may be difficult to reconcile this approach with the general goal outlined by the President of a 60% reduction in 10 years. Developing a tight absolute goal (such as the maximum 2.5% prevalence) that would require reductions by all three of the major firms would require such a large reduction from Phillip Morris that the overall industry reduction would be greater than 60%. Setting a higher absolute target would possibly put no reduction obligation on firms other than Phillip Morris because they have much lower prevalence rates.

- (b) **Relative targets.** Examples of relative targets, whereby the prevalence of youth smoking must be no more than x percent by a particular year and each manufacturer must reduce the prevalence of youth smoking of its brands by y percent over a particular period, include:

- The *June 1997 settlement*, which would mandate a 30 percent reduction from the base year in daily youth smoking in years 5-6, a 50 percent reduction from the base year in years 7-9, and a 60 percent reduction from the base year in years 10 and after.
- The *FDA rule on youth tobacco use*, which has a goal of reducing the number of children and adolescents who use tobacco products by roughly 50 percent within seven years of the rule's implementation.

A system of relative targets which focuses on reductions from current smoking levels has the potential to lock in a higher youth market share for Phillip Morris, which manufactures the dominant brand. It potentially could meet an ambitious reduction target (e.g., 60% in ten years) and continue a youth prevalence of upwards of 6%.

- (c) **Combination targets.** It may be possible to deal with some of these issues through a combination of relative and absolute reduction targets. For example, the initial targets could be relative ones based on current youth brand prevalence (aggregated by firm), but with the addition of ongoing reduction requirements until some absolute target is achieved (e.g., no firm with a prevalence or more than 1%). Such a method would continue Phillip Morris' dominance for a relatively long period, but would eventually end any advantage it may receive.

- b. **Industry or firm level penalties.** Penalties for failure to meet the targets could be levied on an industry basis, by firm, or through a combination of the two approaches. Firm-specific penalties are a more accurate way to target firms that do not reduce the number of youth using their products, but also present more challenges in terms of measurement and implementation. The following are alternative ways of assessing penalties on the industry or firms if youth tobacco use reduction targets are not met:

- (1) **Industry-wide penalty--total market share:** The June 1997 settlement proposes that the FDA establish a baseline percentage of the prevalence of youth tobacco use against which the required reductions would be measured. If the industry does not meet the reduction target for a given year (beginning in year five), it would be assessed a surcharge equal to \$80 million for each percentage point by which it falls short of the reduction target. For example, if the reduction target is 60 percent and the industry achieves a 55 percent reduction, it would be assessed a surcharge of \$400 million (\$80 million multiplied by 5 percentage points). The maximum surcharge in a given year would be \$2 billion. **The surcharge would be allocated among firms based on each firm's total domestic market share.** Thus, firms whose share of the youth market is higher than their share of the entire market (which is mostly adult) would not pay a fair portion of the penalty. Firms with high shares of the youth market and low shares of the entire market would have incentives to continue selling their products to youth.
- (2) **Industry-wide penalty--youth market/prevalence share:** A second system would ensure that firms with the highest proportion of the youth market pay the highest share of the penalty. The government would determine if the entire industry had met the youth tobacco use reduction target by measuring youth tobacco use on an annual basis. If the target was not met, a penalty (such as a surcharge on products) would be assessed on the industry based on the percentage points by which it had fallen short of the target. **This penalty would be allocated based on each firm's share of the youth market or youth prevalence** (as opposed to the provision in the settlement that would divide the penalty based on each firm's share of the entire market). This system would hold the entire industry accountable for achieving the reductions and prevent firms from free riding on the reduction efforts of other firms. Each firm would have an incentive to reduce overall youth smoking as well as its share of youth smokers.
- (3) **Firm-only penalty:** Another option would be to set reduction targets for individual firms (not the whole industry) and measure the percentage reduction in youth who use brands produced by specific firms. If a firm failed to reach its target, it would be assessed a surcharge on its products. It may not be desirable to apply targets and penalties to firms with very small shares of the youth market (1 percent or less) in order to focus on the firms with higher youth prevalence.
- (4) **Industry-wide and firm-specific penalty:** This system would impose both an industry-wide penalty and an additional penalty on firms that fall short of a firm-specific target. Both an industry target and firm-specific targets would be established. If the industry failed to meet its reduction target, a penalty would be imposed in the form of a surcharge on all tobacco products. If specific firms failed to reach their own targets, they would have to pay an additional surcharge. The firm penalty would be imposed only if a firm failed to reach its

target by a large margin. Because it requires two sets of targets, this system would be more complex to administer and harder to explain to the public than the previous systems.

c. **Escalating Versus Flat Penalties:** Under the above systems, the penalties would be based on the amount by which the industry (or an individual firm) missed the percentage reduction in youth tobacco use targets. Two basic options are available for the triggering and scaling of the penalty.

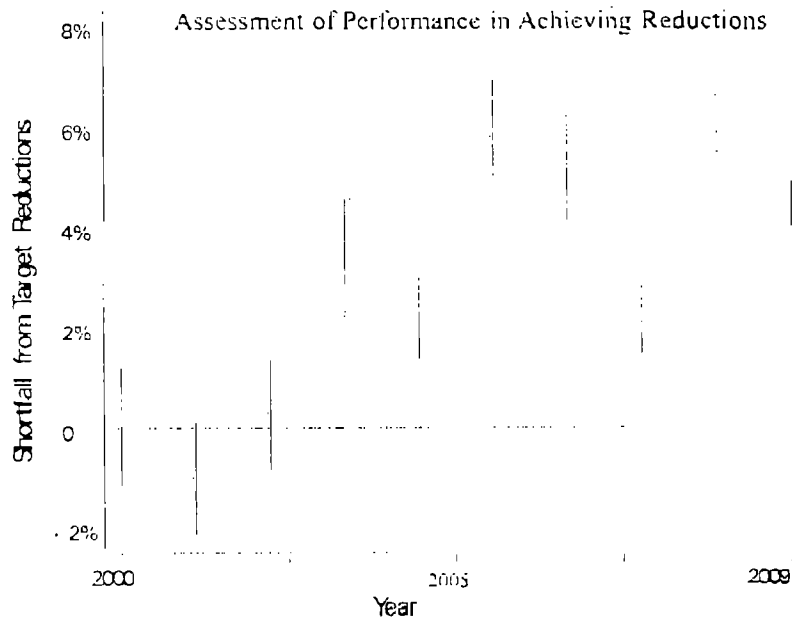
- (1) **Flat penalty.** The simplest option establishes a flat penalty which is assessed if the actual reduction achieved falls below a specified target reduction.
- (2) **Graded set of penalties.** To avoid the all-or-none imposition of the penalty determined by whether the industry or firm falls on one or the other side of a thin, but not infinitely thin, boundary (the threshold), a graded set of penalties which increase as the magnitude of the shortfall or of the ratio of the shortfall to its uncertainty (standard error) increases could be imposed. The gradation could increase in a linear fashion: i.e., the surcharge per percentage point would increase with each additional percentage point shortfall.

Alternatively, the gradation could increase exponentially in an accelerating manner, for example, in proportion to the square of the shortfall. In either case, the estimate's uncertainty could be taken into account by using the ratio of the shortfall to the standard error instead of the shortfall or the square of the shortfall. However, it is probably preferable to scale the penalty to the shortfall rather than to the shortfall adjusted for a measure of uncertainty such as the standard error because constructing an adequate measure of uncertainty is mathematically complex. There is less of a concern with the confidence interval in an escalating system because it is equally likely that the estimate would overestimate tobacco use prevalence as it would underestimate prevalence due to statistical fluctuations.

(3) **Related Issues/options.**

- (a) **Standard error.** To take into account statistical uncertainty, the threshold for the imposition of the penalty could be some multiple of the ratio of the shortfall of the reduction to the uncertainty in the measurement (standard error) of the shortfall. The threshold could be chosen to correspond to a 5% (or 1%) probability that a shortfall of the observed magnitude or greater could have occurred by chance alone.
- (b) **Control charts.** The industry's and individual firms' performance in achieving the goals of reduction in consumption of tobacco products should be tracked and made known to the public. This can be done conveniently by means of graphs called "control charts," well-known in the quality-improvement community. Two alternative presentations can be considered:
 - (i) a plot of the amount by which the actual prevalence exceeds the targeted prevalence over time, or
 - (ii) the ratio of the excess to the targeted reduction (or fraction or percent of targeted reduction actually achieved) vs. time (Figure 1). Control charts also display control

bands (at ± 1 , 2 and 3 standard errors) which may be used to denote thresholds for the triggering of penalties.



- Figure 1 -

- (5) **Severity adjustment.** A severity adjustment would address the problem of a firm with a large share of the overall and/or youth market being penalized the same as a firm with a small share of the market. For instance, if firm X with 60% of the market missed its reduction target by 10%, and firm Y with 3% of the market missed its target by 10%, under a firm specific penalty system they would be penalized the same. A severity adjustment, based on, for example, the firms' share of the youth market, would account for its share of the youth prevalence rate.

MEASUREMENT SYSTEM

Because of the dependence of the triggering of the penalties and their magnitude on estimates of prevalence of tobacco use among the underage population, the accuracy and the precision of the measurements of the rates is of prime concern. The magnitude of the problem is illustrated by the range of currently available estimates. For instance, the NHSDA and YRBS estimates for past month cigarette use can be compared for 10th and 12th grade students in 1995--

Percent Using Cigarettes in Past Month

	<u>10th grade</u>	<u>12th grade</u>
NHSDA	25.7%	30.9%
YRBS	33.1%	38.2%

1. **Methods study:** A methods study is needed to fully understand the reason(s) for the differences, but different question wording, different response categories, and the extent to which the respondents feel their responses are confidential and anonymous have been suggested as possible explanations for the differences. The design of a survey that will satisfactorily support the projected policy initiative must address simultaneously (1) how to assure that valid estimates of prevalence rates are obtained, and (2) what the size of the sample of the population to be surveyed must be and how the sampling is to be designed to provide sufficiently narrow confidence intervals to support the implementation of thresholds for the imposition and scaling of penalties.
2. **Type of survey to use and confidence intervals:** The June 1997 settlement requires data on the prevalence of youth tobacco use to come from the MTF survey or a comparable survey that uses identical methodology. The MTF surveys only children in grades 8, 10, and 12, which does not provide a representative sample of school children aged 12-17. It does not collect the information on brands used by children necessary to implement a penalty system that allocates the penalty based on firms' market shares. In addition, the survey does not have a tight confidence interval around its prevalence estimates.

A new tobacco use survey would provide both point in time estimates of the prevalence of youth tobacco users (annually beginning with a base year of 1999 or 2001) and estimates of the percent reduction in youth prevalence between two points in time (i.e., between the baseline in 1999/2001 and 2003/2005). In either case, confidence intervals of less than ± 1 percent could be obtained from a sample of 50,000 students in grades 7-12 or from a sample of 25,000 youths of age 12-17 in households. Given samples of this size, very precise point estimates could be made down to a prevalence level of 2 percent (the confidence interval would still be below 1 percent). An ongoing survey of this type would permit the determination of shortfalls in the reduction of prevalence rates at any point in time and of smoothed and statistically more robust estimates in trends over time in the deviation from specified targets.

3. **Measuring monthly tobacco use vs. daily use:** The June 1997 settlement proposes using the MTF survey to measure "daily use" of tobacco (one or more uses per day during the previous month), as the measure of "current use." However, this measure does not capture early experimenters or occasional users, many of whom are likely become dependent on nicotine. Early experimenters use tobacco infrequently initially, but over time build up tolerance to nicotine and gradually increase their tobacco use. It also does not measure well use of other tobacco products (e.g. smokeless tobacco, cigars) which are typically used less often or in addition to cigarettes.

A new stand-alone tobacco survey would incorporate "past month use" of tobacco (any use during the previous 30 days). This survey would capture early experimenters, occasional users, daily users, and users of other tobacco products. Early experimenters use tobacco infrequently initially, but over time build up a tolerance to nicotine and gradually increase their tobacco use. Occasional users may use tobacco more frequently and on a regular basis as compared to early experimenters, but less frequently than once a day (e.g. only on the weekends). And from the RJR and other tobacco industry documents it is clear that tobacco companies target these "learning" or undecided smokers.

Users of other tobacco products (e.g. smokeless tobacco, cigars) may use these products infrequently, occasionally, or in addition to cigarettes. Only the "past month use" measure would capture the various forms of tobacco products used and how often each is used separately or in

combination

The "past month use" measure is the measure used on the three major federal surveys that assess tobacco use among youth (i.e., the MTF, YRBS, and the NHSDA). Any effort to triangulate data between surveys will need to incorporate a similar measure.

4. **How to determine each firm's prevalence of youth tobacco users:** The proportion of each tobacco firm's youth market share could be determined using one of the following options. Additional methodological work would need to be completed to determine reliability of these methods.
 - a. **Usual Brands:** Each firm's proportion of the youth market could be determined by asking youth users in a survey to report which brand of tobacco they usually used in the past month. This would be the most straightforward approach provided that youth could identify their usual brand. However, it does not allow a distinction to be made between users who used different quantities of the usual brand. For example, the users who reported their usual brand as Marlboro cigarettes but only smoked three in the past month would count the same as users who smoked 300 Marlboro cigarettes. Nor does it account well for the users who use multiple brands. For example, a user could report Marlboros as his or her usual brand, but out of ten packs of cigarettes six are Marlboros and the other four are each a different brand.
 - b. **Quantity:** The quantity of tobacco products used by youth could be determined by asking youth users to report which tobacco products they used and how much of each product they used in the past month. This approach would more comprehensively determine each firm's share of the youth market because it asks about every product consumed and the amount of each product consumed in the past month. For example, a user who only smoked cigarettes would be asked to identify all the brands smoked in the past month and of each brand the number of cigarettes smoked. Surveys have not asked these questions in this way before. Work would have to be done to test whether or not a youth user could recall for the past month all the brands of all the tobacco products they used and the quantity of each used. For youth who switched brands often this might be particularly difficult to assess.
5. **Respondents who report tobacco use but no usual brand or an unknown brand:** Although the percentage of responses for no usual brand or unknown brand will not be known until the survey is conducted, three options exists—
 - a. Disregard "no usual brand" and "unknown" responses when determining firms' shares of the youth market (just use responses that identify a usual brand).
 - b. Consider "no usual brand" and "unknown" responses in determining firms' shares of the market, which would leave a portion of the market unallocated to any firm. This would mean that part of the penalty is left unpaid.
 - c. Allocate "no usual brand" or "unknown" to usual brands based on statistical methods/other variables (e.g., "hot decking").
6. **Which age range to measure.** It is recommended that monitoring of youth tobacco use be done in

persons 12-17 years old. It appears this is 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. It is also strongly recommended that the age of initiation of first tobacco use in all persons surveyed be monitored, 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.

7. **When baselines would be available:** If the new survey measures just usual tobacco brands (see 5-C), less preliminary methodological work would be required than if it measures quantity. A prevalence baseline from a survey using the usual brands method could be available in 1999 or 2001. A baseline from a survey using the quantity method could be available as early as 2001. The Year 2000 Decennial Survey conducted by the Census Bureau will preclude the household surveys being in the field at the same time.
8. **Use adjusted prevalence rates:** Prevalence rates should be estimated annually and then adjusted based on a multi-year running average. This average rate would be the one used to assess industry/firm performance in meeting the targets. An average rate smooths the statistical fluctuations of annual point estimates and has greater accuracy than an annual estimate.
9. **How to validate survey:** A new survey could be validated using the other three major federal surveys that measure tobacco use among young people: the MTF, the YRBS, and the NHSDA (see 5.B). In addition, biological samples could be taken from some respondents in the new survey to measure the validity of their answers or a pre-existing survey (such as the NHANES) that takes biological samples could be relied on.

Tobacco -
penalties

Office of Economic Policy

Department of the Treasury
Washington, D.C. 20220

FAX

Date: 2/17/98
Number of pages including cover sheet: 3

Name	Fax Number	Phone Number
To: Bruce Reed	456-5542	456-6515
Josh Gotbaum	395-4995	395-9188
Jerry Mande	456-6027	456-6018
Tom Friedman	456-7431	456-5587
Cynthia Rice	456-7431	
Toby Donenfeld	456-6231	456 6265
From:	202-622-2633	

REMARKS: ☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please commentFor the 5:00 conference
call on Tobacco

February 17, 1997

The Appropriate Mix of Industry and Company-Specific Youth Lookback Penalties

In combatting youth smoking, youth lookback penalties can serve two functions - providing two forms of insurance that we meet our youth targets:

- Industry penalties provide *price insurance*: they can be used to increase prices further in the event that the base payments (or excise tax equivalents) and other restrictions specified in the main part of the legislation fail to reduce teen smoking sufficiently;
- Company specific provide *non-price insurance*: penalties can be established to provide incentives to individual companies to reduce youth use of their particular brands through non-price mechanisms

Industry Penalties

The appropriate role for industry penalties is to increase prices to ensure that youth smoking targets are met. As a result, industry penalties should be determined by *the required price increase per percentage point to meet a given target*. For example, the following table illustrates the suggested structure of penalties for the Harkin youth targets:

Year	Targeted % Reduction	Base Real Price \$98	Real Price to Hit Targeted Reduction*	Real Price Change to Get % pt of % reduction	\$Millions per % pt of % reduction	Billions of Packs
2000	15	2.03	2.41	0.030	\$636	21.2
2001	20	2.02	2.58	0.033	\$660	20.2
2002	25	2.06	2.76	0.035	\$712	19.3
2003	30	2.05	2.95	0.042	\$740	18.3
2004	40	2.04	3.38	0.048	\$775	16.3
2005	50	2.03	3.90	0.057	\$800	14.3
2006	55	2.02	4.19	0.063	\$822	13.3
2007	60	2.01	4.52	0.071	\$863	12.2
2008	65	2.00	4.90	0.081	\$887	11.0

* Assumes no non-price effects -- price level illustrative of price increase required for price effects alone to generate targeted teen reduction in the model.

Note that the appropriate non-linear structure of penalties suggests that they might increase over time, but that there is no obvious justification for penalties that increase as we miss the target by a larger amount (as in the Conrad bill).

- Indeed, ideal penalties might decline as we miss the target by more, since the further you are from the target, the more responsive youths are to price increases.

Note also that the appropriate means of carrying out the industry penalty is through a price-per-pack amount.

- The total payments presented above are very sensitive to other factors which determine the total number of packs sold (e.g. the effectiveness of non-price interventions for adults; the underlying price increase embedded in the bill; trends in smoking behavior).

Company Penalties

For company penalties, the goal is somewhat different: it is to incentivize the particular companies to reduce teen smoking of their brand through non-price means. In this case, the appropriate penalty should be determined by *the foregone profit per youth smoker*.

Our analysis points to a *break-even after-tax payment of \$454 per youth smoker* (with "youth smoker" as measured in the youth surveys). If tax deductibility is permitted, that amount would have to be increased to \$668 per youth smoker.

- These numbers were derived from a full analysis of the implied stream of profits over time that would be expected to be received from a teen smoker over the course of their lifetime. The analysis takes into account a variety of factors, including (1) per pack profits; (2) the likely number of packs of cigarettes smoked per day over different periods of the typical smoker's life, (3) the probability that a teen smoker that is kept from smoking as a teen will ultimately smoke as an adult anyway; (4) discounting to present value of future profits and payment streams; (5) the distribution of teen smokers by age within the teen smoking surveys; (6) the effect of not using a double-counting adjustment mechanism; (7) the responses of teen decisions to smoke to price increases, etc.

A penalty that was exactly equal to the present value of profits would leave the company indifferent about reducing youth smoking (under the assumption that the company would be unable to pass along any of the cost in the form of a price increase).

Therefore, to create a strong incentive for companies to reduce youth smoking, the penalty should be specified as a *multiple* of the implied present value of profits. The multiple would also guard against the possibility that companies could pass some of the cost on to higher prices (for example, in the event that most companies faced penalties from insufficient reduction of teen use of their brands).

One form the company-specific penalty structure could take would be to have a penalty of about three times profits -- about \$1500 per youth smoker -- to the first 20 percentage points of failed percent reduction, and then a penalty of six times profits -- about \$3000 per youth smoker -- to any failed percentage point reduction beyond 20 percentage points of failed percent reduction.