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TOBACCO'S DEADLY SECRET: THE IMPACT OF TOBACCO MARKETING ON WOMEN AND GIRLS

HEARING

BEFORE THE

OVERSIGHT OF GOVERNMENT MANAGEMENT, RESTRUCTURING, AND THE DISTRICT OF COLUMBIA SUBCOMMITTEE

OF THE

COMMITTEE ON GOVERNMENTAL AFFAIRS UNITED STATES SENATE

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TOBACCO'S DEADLY SECRET: THE IMPACT OF TOBACCO MARKETING ON WOMEN AND GIRLS

TUESDAY, MAY 14, 2002

U.S. SENATE,
OVERSIGHT OF GOVERNMENT MANAGEMENT, RESTRUCTURING,
AND THE DISTRICT OF COLUMBIA SUBCOMMITTEE,
OF THE COMMITTEE ON GOVERNMENTAL AFFAIRS,
Washington, DC.

The Subcommittee met, pursuant to notice, at 10:07 a.m., in room SD–342, Dirksen Senate Office Building, Hon. Richard J. Durbin, Chairman of the Subcommittee, presiding.

Present: Senators Durbin and Carper.

Staff Present: Marianne Upton, Majority Staff Director; Kelly O'Brien, office of Senator Durbin; and Andrew Richardson, Minority Staff Director.

OPENING STATEMENT OF SENATOR DURBIN

Senator DURBIN. Good morning. The hearing will come to order.

I apologize for being tardy, but I was on the floor of the Senate making a speech, deathless prose, which you will all get to read in the Congressional Record at your leisure.

I am pleased to welcome you all to today's hearing before the Senate Subcommittee on Oversight of Government Management, focusing on "Tobacco's Deadly Secret: The Impact of Tobacco Marketing on Women and Girls."

Since 1950, there has been a 600 percent increase in women's death rate from lung cancer. Lung cancer is now the leading cause of cancer deaths among women, surpassing breast cancer. Cardiovascular disease is the number one killer of women of all ages. More women than men die of stroke. Within the next few years, researchers believe that more women than men will die from chronic obstructive pulmonary disease, COPD.

How did we reach this point? For starters, all of these life-threatening conditions have one thing in common. Smoking is a key risk factor for developing these illnesses. And on top of this, the tobacco industry has been pushing this deadly product on women for decades. Numerous studies have documented that tobacco industry marketing is a key factor influencing the susceptibility to and initiation of smoking among girls.

As early as the 1920's, the tobacco industry started targeting women, taking advantage of social trends to make their point. Ads have been dominated by themes of social desirability and of inde-

pendence. They feature slim, attractive, athletic, and famous models. They target women from a variety of ethnic backgrounds. They make misleading health claims.

In fact, we know that increases in smoking rates among women and girls can be directly linked to these slick ad campaigns and to historical increases in the level of advertising aimed at females.

In 1968, Philip Morris launched its first woman-specific brand of cigarette—Virginia Slims—with its "You've Come a Long Way, Baby" campaign. Six years after the introduction of Virginia Slims and other brands aimed at women, the smoking initiation rate of 12-year-old girls had increased by 110 percent. And now Virginia Slims has launched a new slogan: "Find Your Voice."

Today, after decades of targeting lite and low-tar brands to women, women are more likely than their male counterparts to smoke lite and ultra-lite cigarettes, and women are more likely than men to switch to these cigarettes.

We are here to counter years of marketing that have resulted in addicting generations of women with the facts about the epidemic of smoking-related disease among women. The cigarette companies continue to target women using the same themes in their advertising. New products are picking up where lite and low-tar left off. The image of smoking being tied to independence, weight control, sophistication, and power continues in many popular women's magazines.

Unfortunately, still far too few voices are countering the messages these ads send and still fail to inform women of health risks of smoking. It has been shown that the number of tobacco ads in magazines compared to the number of articles about health risks and smoking has been astonishingly disproportionate.

Recently, some companies have reduced their magazine advertising budgets, yet advertising and marketing directed at women and kids remains very high. The industry continues to sponsor and support women's professional and leadership organizations, domestic violence programs, and the arts. This attempt of the tobacco industry to position itself as an ally of women should not silence the critics. We need to do more to set the record straight.

One place we can start is magazines, where many women get their health information. Just open a popular women's magazine—this one is called *First For Women*—and try to find an article about the dangers of smoking—or, worse yet, note the articles that actually do talk about women's health risks and see if they mention smoking as a contributing factor.

In this women's magazine called *First For Women,* the February 11, 2002 issue, this page talks about "Five Ways to Cut Your Risk of Stroke." They list: "eat more veggies; prevent fluid retention; drink moderately; get more calcium; and take vitamin C."

Is there something missing from this list? Not one of these listed causes has anything to do with tobacco or smoking, despite the fact that cigarette smoking is the key preventable risk factor for stroke.

We have a fact sheet here that was issued by *Family Physicians,* in which they talk about the risk factors for stroke. Compare it to the women's magazine. Instead of veggies, fluids, vitamin C, and calcium, they talk about diabetes, high blood pressure, high choles-

terol, smoking, heart disease, and a variety of other specific medical problems.

Is this just a coincidence that this women's magazine would not even mention not smoking as one of the things you can do to avoid stroke?

Incidentally, this same magazine has a very nice ad on the back for Doral cigarettes, showing a very sophisticated woman in a leopard suit.

Perhaps as a result of this shortage of articles covering the health risks of smoking, women do not have the facts about the health threats they face and the ways to prevent them. Just last year, a survey found that only 13 percent of women were aware that lung cancer is responsible for the major of cancer deaths among women. Last Sunday in Chicago and across the United States, we had the "Why Me Run." And thank goodness—had a great organization, focusing on breast cancer. I have so many friends who are involved in this, and they come forward every year to focus on this tragedy, this scourge of breast cancer across America.

Yet I am certain that you could stop virtually anybody involved in that effort and ask them point blank, what is the No. 1 leading cancer cause of death among women in America, and they would get it wrong. It is lung cancer. Sadly, it is lung cancer. And it is because women's magazines and other sources of information for women just have not delivered this message.

Another survey revealed that women lack understanding of the dangers of heart disease and stroke. Only 8 percent of women in America believe that heart disease and stroke are the greatest health threats to women.

This lack of understanding about the serious health threats facing women needs to be overcome if we are to reduce the burden of these diseases. Approximately 22 percent of American women and at least 1.5 million adolescent girls still smoke, with prevalence ranking highest among American Indian and Alaskan Native women. Smoking among girls actually increased in the 1990's, increasing from 27 percent in 1991 to 34.9 percent in 1999. And despite increased knowledge of the adverse health effects of smoking during pregnancy, estimates of women smoking during pregnancy currently range from 12.9 percent to as high as 22 percent. This has to stop. We need to do more.

We need to provide women with accurate information about the health risks of tobacco. We need to ensure that the FDA has the power it needs to regulate ads that make unfounded health claims and ads that target kids. We need to make more resources available to help addicted women quit. Smoking cessation programs must be more accessible and affordable.

I hope that this hearing will be a wake-up call. I was told that a hearing focusing the smoking-related health epidemic among women would not get much attention from the media. That alone is a perfect example of why we are watching lung cancer rates among women on the rise.

I challenge the media and magazines across America to talk straight with American women about this issue and to print the real truth: Smoking is killing women.

I would like to welcome our first panel of witnesses. Cassandra Coleman, of Chicago, along with her daughter Nzingha are here. I want to thank you especially for making the trip to Washington.

You may see in the back that there is a wall entitled "Their Story." This wall was created by the National Coalition for Women Against Tobacco. It was designed as a documentary for the real consequences of tobacco use for women. The wall will be in Illinois on June 5, and Ms. Coleman has volunteered to participate in the project. Your courage will certainly help others.

Nzingha, you are welcome to come up and join your mom at the table.

Dr. Elizabeth Whelan, of the American Council on Science and Health, is here, as well as Dr. Charles King, of the Graduate School of Business at Harvard University.

I thank you all for coming. We are looking forward to your testimony this morning.

It is customary in this Subcommittee—in fact, it seems to be the rule—that we swear in all the witnesses. Therefore, if I could ask you to please stand and raise your right hands.

Do you swear the testimony you are about to give before this Subcommittee is the truth, the whole truth, and nothing but the truth, so help you, God?

Ms. COLEMAN. I do.

Miss COLEMAN. I do.

Ms. WHELAN. I do.

Mr. KING. I do.

Senator DURBIN. Thank you.

Let the record note that the witnesses, including Nzingha, have answered in the affirmative.

I would like to ask you if you would now make an opening oral statement, and if you could limit it to around 5 minutes, your entire written statement will be made part of the record, and we may have a few questions to follow from there.

Ms. Coleman, would you like to start?

TESTIMONY OF CASSANDRA COLEMAN, CHICAGO, ILLINOIS, ACCOMPANIED BY DAUGHTER, NZINGHA COLEMAN

Ms. COLEMAN. Yes. Good morning, Chairman Durbin and Members of the Subcommittee.

Let me begin by thanking you for holding this hearing and for inviting me to testify here today.

My story is also the story of two wonderful children—my 13-year-old son Nijell, and my 10-year-old daughter Nzingha, who is with me today.

My son's name means "success" in Swahili, and Nzingha is named for a 16th century African queen who fought with strength and courage to free her people from the slave trade. I never realized how well I had named them until they helped me to stop smoking, because Nzingha and Nijell truly helped me quit smoking and helped free me from the addiction to nicotine.

Growing up as a young girl in Chicago, most of the women around me smoked. One of my role models was my sister-in-law, a tall, beautiful woman with long hair. She smoked, and she was gorgeous. I remember thinking that I wanted to be just like her.

I also remember watching television with my friends and seeing all the sophisticated and sexy ladies on my favorite programs; they all smoked, too. So everyone seemed to be smoking cigarettes, and I could not wait to try them.

I was about 11 years old when I started smoking. My friends and I would buy cigarettes from the vending machines. In those days, a pack of cigarettes cost 50 cents. If anyone asked us what we were doing, we just said we were buying them for our parents.

I had problems carrying Nzingha when I was pregnant with her, and she was born 5 weeks early. She had a low resting heart rate and other problems that placed her in the intensive care unit after her birth for 3 days. I remember seeing her with so many tubes running into her tiny body. It reminded me of a poster I had seen at Cook County Hospital just 4 days before her birth; it warned pregnant women what smoking could do to their children, and there was a picture of a little baby with all kinds of tubes, just like the ones in my daughter.

Nzingha got out of the hospital and came home, but I kept smoking.

In the months that followed, I had to take her to the emergency room over and over with breathing problems. The doctors told me she had upper airway disease. By the time she was 6 months old, she was getting nebulizer treatments four times a day.

This went on year after year, and the doctors told me to quit smoking, but I kept on smoking.

When Nzingha was almost 4, I took her to the emergency room with an especially bad asthma attack. They told me that her condition was so bad that if I had arrived just 5 minutes later, she probably would have died. A nurse pulled me aside and told me, "You are killing her with your cigarettes." But I kept on smoking.

Instead of quitting, I put air cleaning machines around my house and started smoking in the bathroom to try and keep the smoke away from my kids. But that did not help much. When Nijell was about 8 years old, he developed asthma and joined his sister in getting regular nebulizer treatments.

And me? I just kept on smoking.

Then, a couple of years ago, I began to have breathing problems of my own. I constantly felt weak, low on energy, short of breath, and I developed a cough that made me feel like there was always something in my lungs. When I went to get checked out, the medical people could never find anything really wrong with me. They would just tell me to slow down with my smoking. I remember one of the doctors found out how much I smoked and asked me, "Do you want to live or die?"

Well, of course, I wanted to live, but I also wanted to keep on smoking. So I did.

And I continued to feel worse and worse. Finally, in January of last year, I was coming out of the bathroom after having a cigarette when I saw my daughter curled up on her bed, crying. When I asked her what was wrong, she said, "Get away from me. You stink. You are trying to kill me with cigarettes."

Imagine hearing that from your own child. I promised her and myself then and there that I would quit smoking—and I knew I needed help. I called Cook County Hospital and made an appoint-

ment for the smoking cessation program. I went the next week—and I was motivated. I kept seeing Nzingha's face, and I knew I had to do it for her and for Nijell.

I had the help of a wonderful doctor, Dr. Arthur Hoffman, who worked with me and taught me breathing techniques. He taught me how to relax and how to resist the urge to smoke.

It was not easy, but I did it. I quit, cold turkey. I am proud to tell you that after 25 years of smoking two packs of cigarettes a day, I have not had a cigarette in a year, and I am never going to have one again.

I am now working part-time in the smoking cessation program at Cook County Hospital, trying to help others quit. I cannot tell you how much better I feel every day. I had gotten to the point where I could not even walk up the steps to my house without difficulty. Now I can almost run up those steps. I walk, I exercise more, and I do not have coughs and colds like I used to.

My children could not be happier. Nijell and Nzingha are doing so much better, and we have not been to the emergency room in over a year. And because I have quit, the rest of my life is going to be a lot longer than it would have been. That means more years raising and loving my children, and more years that I can help other women and girls avoid my mistakes.

We have to help the women, but it is the girls we really have to talk to. I tell as many girls as I can that smoking is a nasty and dangerous habit, and I tell them how hard it is to quit. Sometimes in the smoking cessation program, I talk to people who have abused hard drugs, and they have told me that it is easier to kick a heroin or a cocaine habit than it is to quit smoking cigarettes.

I also feel that young women need to resist the messages we get every day about smoking from the media; whether it is a soap opera or a magazine ad, images that make cigarettes seem attractive only lead women to an early grave.

Again, Mr. Chairman, I would like to thank you for this opportunity to tell you my story. I hope that together, we can prevent many more women from becoming victims of tobacco.

Senator DURBIN. Thank you—really—thank you for coming. I will have some questions for you, and I will have a question or two for your daughter, too.

Dr. Whelan.

TESTIMONY OF DR. ELIZABETH M. WHELAN,[1] PRESIDENT, AMERICAN COUNCIL ON SCIENCE AND HEALTH, NEW YORK, NEW YORK

Dr. WHELAN. Good morning. I am Elizabeth Whelan, and I am president of the American Council on Science and Health, which is a consumer education and advocacy group in New York City. My background includes master's and doctoral degrees in epidemiology and public health from the Harvard School of Public Health and the Yale School of Medicine.

[1] The prepared statement of Dr. Whelan with attachments appears in the Appendix on page 33.

I really appreciate the opportunity to address this critical issue here today, related to women's magazines and their dubious record in reporting on the dangers of cigarette smoking.

Back in the mid-1970's, I began regularly contributing health-related articles to the popular magazines. Since cigarette smoking was then and is now the leading preventable cause of death in the United States, I necessarily had to include many references to smoking in my articles.

I was astonished, at least at first, that my articles were regularly edited, and that the pejorative references to smoking were taken out. Sometimes the articles were simply spiked. For example, on one occasion, I was assigned a piece called "Protect Your Man from Cancer." Of course, I focused on the role of smoking in the causation of lung, bladder, pancreatic, oral, and esophageal cancers.

The piece was returned to me with full payment, noting that there were too many ads in the magazine that month to run such a piece.

With this personal experience on the difficulty of placing anti-smoking messages, I decided to take a very close quantitative look at the extent of coverage—or the lack thereof—of cigarette-related issues in these women's magazines.

The first survey that my organization did was published in the early 1980's. We examined health-related articles in 18 magazines dating back to 1965 and found that although the magazines covered an array of health-related issues, there was a near complete lack of coverage of smoking and health in most of the magazines. Only one-third of the magazines—the ones that did not take cigarette ads—covered this topic; the majority failed to mention the facts at all.

This was happening at a time when there was an explosion of information in the medical literature about the dangers of smoking, so this finding was particularly disturbing.

Following that, we did surveys in the 1980's and 1990's, and they only reinforced our findings. Incredibly, while ignoring cigarettes as a health risk, these magazines regularly warned women about remote or purely hypothetical risks such as reducing your risk of cancer by keeping your alarm clock 3 to 5 feet from your bed so you are not exposed to the electromagnetic field, or they would warn us about the health risks of lead wrappers on wine bottles—but nothing about smoking.

Surveys between 1997 and 2000 showed that there was a gradual improvement, but still relatively little coverage of smoking and health.

In 1997, ACSH found that cigarette ads outweighed anti-smoking ads 6 to 1. In 1998, the ratio doubled to 11 to 1. In 2000, even with the addition of some anti-tobacco ads, the ratio of cigarette ads to anti-smoking messages was 10 to 1.

In the year 2000, there were some 2,400 health-related articles published; cigarette smoking and health represented 1 percent of that total.

These magazines are guilty both of omission and commission. What I mean by that is they do not cover cigarette-related diseases in general. But in terms of commission, they edit out cigarette smoking mentions where it would otherwise typically be. For exam-

ple, *Glamour's* list of "Eight Simple Health Savers" would include advice about taking calcium supplements and working out, but no mention of smoking. *Elle's* "New Year's Resolutions" made no mention of it, either.

Our last survey was in the year 2000, a year that marked the beginning of the American Legacy anti-smoking ads and the withdrawal by Philip Morris of cigarette ads from some 41 magazines. It will be interesting to see how these changes in advertising affect editorial content. There is reason to believe that things may improve. For example, just looking at the 2002 issue of *Self Magazine,* it contains a two-full-page article on smoking cessation.

But we should keep in mind also that the presence of cigarette ads is just one factor—although an important one—in explaining why magazines have not covered cigarette hazards extensively. The topic of cigarette-related disease is a real downer, and these magazines seek to entertain.

In conclusion, while the coverage may be improving—and this is yet to be seen—we must recall the astounding blackout on coverage demonstrated in our surveys between 1965 and 2000. Women who today are in their mid-fifties are being diagnosed with lung cancer, emphysema, and more, caused by cigarette smoking. These are the same women who were reading magazines in the 1960's and 1970's, magazines which withheld and distorted the health risks of smoking while using their pages to promote cigarettes as glamorous, sexy, and yes, even safe. Thank you.

Senator DURBIN. Thank you, Dr. Whelan. Dr. King.

TESTIMONY OF CHARLES KING III, J.D., Ph.D.,[1] ASSISTANT PROFESSOR, HARVARD BUSINESS SCHOOL, BOSTON, MASSACHUSETTS

Mr. KING. Mr. Chairman, distinguished Members of the Subcommittee, my name is Charles King. I am an Assistant Professor at the Harvard Business School, and I am here today to talk about cigarette advertising to children.

Cigarette smoking is the leading cause of preventable death in the United States. Reducing smoking among adolescents is therefore a public health priority.

According to the Centers for Disease Control and Prevention, (1) approximately 80 percent of adult smokers started smoking before the age of 18; (2) every day, nearly 5,000 young people under the age of 18 try their first cigarette; and (3) more than 6.4 million children living today will die prematurely because of a decision they will make as adolescents—the decision to start smoking cigarettes.

In 1998, the attorneys general of 46 States signed a Master Settlement Agreement with the four largest tobacco companies in the United States. The agreement prohibits tobacco advertising that targets people younger than 18 years of age. Last year, Dr. Michael Siegel of the Boston University School of Public Health and I published a study in the *New England Journal of Medicine* analyzing the effect of the Master Settlement Agreement on the exposure of

[1] The prepared statement of Mr. King with an attachment appears in the Appendix on page 74.

young people 12 to 17 years of age to cigarette advertising in magazines. Our analysis was based on magazine advertising before and after the tobacco settlement by 15 major cigarette brands in 38 leading national magazines.

What we found was disheartening. The Master Settlement Agreement appears to have had little effect on cigarette advertising in magazines and on the potential exposure of young people to these advertisements in the 2 years after it was signed.

Our study showed that nearly all cigarette brands in our sample reached large numbers of young people in the United States with their magazine advertisements. "Reach" is a standard measure of audience penetration used in media planning and buying. It represents the percentage of a particular population that has at least one opportunity to see an advertisement in a magazine, not the percentage that actually does see the advertisement.

Two years after the settlement, 11 of the 15 cigarette brands studied still reached more than two-thirds of all young people.

Could I have Figure 1, please? Thank you.

Comparing the reach of the three cigarette brands most popular among young people—Marlboro, Newport, and Camel—with the 12 other brands in our study, we found that on average, these three brands reached a significantly larger percentage of young people.

Figure 1 presents the trends in the average proportion of young people reached by magazine advertisement for the three cigarette brands most popular among young people and the 12 other brands from 1995 to 2000.

In the 2 years after the settlement, Marlboro, Newport, and Camel on average continued to reach more than 80 percent, or 18.4 million young people.

We also found that the three brands most popular among young people consistently devoted a larger share of their magazine advertising budgets to youth-oriented magazines. For the purpose of our analysis, we defined "youth-oriented magazines" as those with more than 15 percent young readers or more than 2 million young readers.

Could I have Figure 2, please? Thank you.

Figure 2 presents the trends in the proportions of expenditures for magazine advertising of the three most popular brands and of the other cigarette brands that were allocated to youth-oriented magazines for 1995 to 2000.

During the 2 years following the Master Settlement Agreement, Marlboro, Newport, and Camel continued to devote most of their advertising dollars to advertising in youth-oriented magazines.

For the 15 brands of cigarettes studied, overall expenditures for advertising in the 38 magazines studied actually rose 33 percent in 1999—the first year after the settlement was signed—to their highest levels during 1995 to 2000.

Despite reductions in expenditures for cigarette advertising in youth-oriented magazines in the second year after the settlement, the overall level of exposure for young people to this advertising remained high.

The decline in advertising in youth-oriented magazines in 2000 reflects in part Philip Morris' decision to discontinue advertising in youth-oriented magazines starting in September 2000. Brown and

Williamson also reduced its level of advertising in magazines with a high proportion of youth readers, but neither RJR Reynolds nor Lorillard substantially changed its level of advertising in youth-oriented magazines during the first 2 years after the settlement. Last month, a California superior court began hearing a lawsuit alleging that RJR Reynolds had violated the Master Settlement Agreement by targeting young people with its advertising.

The voluntary policy adopted by Philip Morris does not appear adequate to protect young people from substantial exposure to cigarette advertising in magazines. If Philip Morris had eliminated youth-oriented magazines for all of 2000, we estimated that Marlboro would still have reached more than 57 percent of young people, or 13.1 million young people, with its magazine advertising.

Finally, magazine advertising remains but one small part—4.6 percent—of the tobacco industry's total marketing expenditures of $8.2 billion in 1999. Other marketing tools include coupons, direct mail, internet advertising, newspaper advertising, point-of-sale advertising, promotional allowances to retailers, sponsorship of public entertainment, retail value-added programs (such as buy-one-get-one-free), the distribution of samples and the distribution of specialty items.

Many of these promotional techniques have previously been found to have great appeal for young people. Yet most of them are neither measured nor monitored outside the tobacco companies. This makes the Master Settlement Agreement's prohibition against targeting young people difficult to enforce.

No effort to reduce smoking among young people will succeed without a complete understanding of the entire marketing mix available to tobacco companies and the ability to monitor it.

I would like to conclude with three main points. One, the goal of the national tobacco settlement to reduce the exposure of young people to tobacco marketing has not been met. Two, although the settlement explicitly prohibits targeting youth, young persons continue to be bombarded by cigarette advertising in magazines. And three, magazine advertising represents less than 5 percent of the total marketing and promotional expenditures of tobacco companies. Yet most of the other 95 percent, which can also be directed at children, is not monitored.

Thank you, Mr. Chairman, for this opportunity.

Senator DURBIN. Thanks, Dr. King. I appreciate it. Let me ask a few questions if I can.

Could I start with you, Nzingha? Would you mind if I asked you a question or two?

Could you tell me how old you are?

Miss COLEMAN. Ten.

Senator DURBIN. And where do you go to school?

Miss COLEMAN. Thomas Jefferson Elementary School.

Senator DURBIN. And where is that located?

Miss COLEMAN. In Chicago.

Senator DURBIN. South Side, West Side, North Side?

Miss COLEMAN. West side.

Senator DURBIN. OK. So you are 10 years old—would that put you in the fourth grade?

Miss COLEMAN. Yes.

Senator DURBIN. A pretty good guess.

Do any of your fellow students at school smoke now?

Miss COLEMAN. Yes.

Senator DURBIN. How many do you think?

Miss COLEMAN. I know there are two in my class who smoke——

Senator DURBIN. You are not going to get them in trouble—just give us the numbers.

Miss COLEMAN. There are two people in my class who smoke.

Senator DURBIN. Two people who smoke in the fourth grade.

Were they smoking in the third grade?

Miss COLEMAN. Yes.

Senator DURBIN. In the second grade?

Miss COLEMAN. Yes.

Senator DURBIN. When did they start smoking?

Miss COLEMAN. I would say when we were in first grade.

Senator DURBIN. In first grade they started smoking, and they are still smoking. Are they boys or girls?

Miss COLEMAN. Boys.

Senator DURBIN. Boys in this situation.

Do they ever talk to you at school about smoking and tobacco and how dangerous it is?

Miss COLEMAN. Are you talking about the teachers?

Senator DURBIN. Yes.

Miss COLEMAN. Yes.

Senator DURBIN. They do. OK. And do you think they tell a pretty good story about the danger of tobacco?

Miss COLEMAN. Yes.

Senator DURBIN. How many of your fellow students in your class do you think have problems with asthma?

Miss COLEMAN. Me and this other boy, Martel.

Senator DURBIN. And how big is your class—how many students?

Miss COLEMAN. I would say about 20.

Senator DURBIN. OK. I learned when I went to the University of Chicago Hospital a few years ago that the No. 1 diagnosis for children in emergency rooms is asthma, which I did not know and have since learned.

So as you have been growing up, you have been aware of the problem that tobacco smoking can create for children with asthma; is that right?

Miss COLEMAN. Yes.

Senator DURBIN. OK. Do you realize what a big role you played in your mom's important decision?

Miss COLEMAN. Yes.

Senator DURBIN. You should be very proud that you gave your mother the will to go through this very difficult change in her life.

Miss COLEMAN. I am very proud that my mom quit smoking.

Senator DURBIN. You should be.

Ms. Coleman, it is a tough addiction. You have talked about, and I have seen it in my family, up close, and I realize just how painful it is to go through it, but it takes that one event, that one thing that just scares you into quitting. For one of my parents, it was a diagnosis of lung cancer, and it was too late. But you were fortunate in that Nzingha got you to the point where you could change.

Ms. COLEMAN. Yes.

Senator DURBIN. And you now work at the cessation clinic?

Ms. COLEMAN. Yes. I have been there since May of last year, and I have another month. I am working on a grant right now, and the grant will be running out.

Senator DURBIN. How many clients participate in the smoking cessation program?

Ms. COLEMAN. I would say that we make appointments for at least 50 new people a month; at least 50 people a month come in to get help for smoking.

Senator DURBIN. And how do they find the program?

Ms. COLEMAN. From advertising; a lot of the pharmacists at Walgreen's let them know about the program; and basically, word-of-mouth.

Senator DURBIN. You must hear a lot of stories about women—and men, too, for that matter—who have gone through the kind of experience you have where they make this decision. What can you tell us about their experiences?

Ms. COLEMAN. I just recently met a young man, 33 years old, who had had three heart attacks, and they were all due to smoking. He never drank, never did drugs, he worked out—everything. It was from smoking.

Since I have been there, I have also met a young lady, 32 years old, who has had three open heart surgeries, and they all extended from smoking. She told me she was 27 years old when she had her first heart attack.

I meet a lot of people with lung cancer.

Senator DURBIN. Could I ask your daughter one last question?

Nzingha, do you ever go to the movies?

Miss COLEMAN. Yes.

Senator DURBIN. Do you ever notice some of the actors smoking in those movies?

Miss COLEMAN. Yes.

Senator DURBIN. I have noticed a lot of that, too. What do you think about that?

Miss COLEMAN. I think it is making more people smoke.

Senator DURBIN. It kind of makes it look more glamorous, doesn't it?

Miss COLEMAN. Yes.

Senator DURBIN. I think that was what your mom was saying earlier, that when she got started, she thought it was a glamorous thing to do.

Thank you for being here. We appreciate it very much.

Miss COLEMAN. You are welcome.

Senator DURBIN. Dr. Whelan, your surveys have been going on for a few years, and you have seen some changes. In fact, some magazines that were the bad actors in days gone by have started to change their policies in terms of the advertising and also in terms of the articles that they publish concerning lung cancer. What do you think is bringing this about?

Dr. WHELAN. Well, I think that bringing attention to the paucity of coverage over the years has quite frankly embarrassed them. I think more and more readers are bringing this to their attention.

This is a very tricky issue in the sense that I think we have to separate what I call the omission versus the commission. Starting

with the commission, what is most egregious is the example like the one you just gave about stroke, where they take on a health issue, they choose to take it on, and then they absolutely misrepresent the role of smoking. They can do an article on 100 ways to live a long and healthy life, and there will be no mention of smoking. I think this has become quite intolerable, and hopefully, we will see less of those.

The second topic, though, is the omission of articles on cigarette-related disease. This is going to be trickier because, No. 1, the magazines are under no obligation to cover this topic. On the other hand, given that they have chosen to cover all topics, it seems odd that they are leaving this out. But the question they will ask, and they have asked me, is how much is enough. They say that we assume our readers are intelligent adults and know the dangers of smoking, and we do not want to be their nanny.

So we need to find a balance here, but the most important thing is I think they learned their lesson about omitting references to smoking when it is glaringly obvious that they should be there.

Senator DURBIN. I mentioned earlier, and I want to make sure it is clear for the record—I was comparing breast cancer and lung cancer. It is my understanding that breast cancer is the most prevalent cancer among women, but lung cancer is the most prevalent cause of cancer deaths among women. So both are extremely serious, and I don't want to diminish one for the other; they both should be focused on.

But let me ask you a question relative to that. Do you find these same women's magazines writing more articles about breast cancer than lung cancer?

Dr. WHELAN. Oh, definitely. The ratio is probably 10 or 15 to 1 the coverage of breast cancer over lung cancer. But that is true in many aspects of disease prevention in terms of the marches that you mentioned, the campaigns. They are focused on breast cancer or women's cancers, which by their definition means ovarian and breast cancer.

Lung cancer, as you correctly pointed out, is definitely a woman's cancer and deserves that attention. It is the No. 1 leading cause of cancer death in American women.

Senator DURBIN. I am trying to draw a conclusion here as to why they reach this point in their policy about health articles, and certainly, it appears that money had something to do with it at some point when ad revenue may have been jeopardized by articles about lung cancer among women. But is it also a situation that, when you are talking about lung cancer, you are talking about changing your personal life style, that is the kind of scolding or nagging part that they do not want to engage in, as opposed to breast cancer where, sadly, we are still stretching and looking for connections between environment and life style that might lead to breast cancer?

Dr. WHELAN. Yes. First of all, there is no doubt in my mind that the cigarette advertisements play a major role in the failure to cover this topic over the last 50 years. This was clear when we looked at magazines that did not take cigarette ads. *Reader's Digest* comes to mind right away; they took a leadership role beginning in 1952, bringing these facts to their readers.

But beyond the revenue, which plays a major role, is that so-called nanny factor, that magazines do not want to take on this nagging kind of role. And certainly, lung cancer is perceived and should be perceived as largely self-induced through smoking morbidity, and it is something that they have difficulty covering.

Senator DURBIN. How can we influence magazine editors to tell the whole story?

Dr. WHELAN. They are doing that now. We are influencing them. The American Council on Science and Health surveys have influenced them for over 20 years. They are well aware that we are watching and counting and looking, and I think that type of putting a light on it is the way that we have to do this. But I think the magazine editors are focusing on the reality that there is something enormously inconsistent about taking on the role of providing health information and telling your constituency that you are dedicated to helping them have good health and then to fill your magazine with advertisements for the leading cause of preventable death. There is a disconnect there, and I think they realize that.

Senator DURBIN. Can you give us a list of the good magazines when it comes to these issues and those that have a bad record?

Dr. WHELAN. It is really hard to do that other than to list magazines like *Good Housekeeping* or *Reader's Digest,* which are magazines that do not take cigarette ads. It is difficult because it changes from year to year.

Self Magazine, for example, has generally covered more smoking-related issues than have, for example, *Vogue* or *Glamour* or *Harper's Bazaar,* but again, there is variation.

Senator DURBIN. We are going to have testimony later from Dr. Beato from the Department of Health and Human Services that smoking prevalence is higher among women living below the poverty line—nearly 30 percent of those women smoke—but level of education also plays a key role here.

In your magazine research, have you ever examined the readership of women's magazines to determine more specifically which populations they reach?

Dr. WHELAN. We have not done so by poverty or income level, but only in terms of demographics. These magazines are very much targeted toward a young audience, and we can see from the models that the young women are the target of the ads. Middle-aged women, sadly, are addicted and perhaps do not need as much advertising to keep them smoking.

Senator DURBIN. Most of these magazines have websites. If some of those who are following this hearing or this issue wanted to send email messages to the magazine editors, asking why they have not written more articles about the No. 1 cause of cancer death among women—lung cancer—do you think that might have an impact?

Dr. WHELAN. It will have an enormous impact. Even one letter, the editors have told me, catches their attention; five letters causes a meeting. Definitely I would encourage people to go to the websites and express this view. We just want the facts, that is all.

Senator DURBIN. That is a good point, and maybe if there is something positive I can recommend to the CSPAN viewers who are watching this, it is if you have a favorite magazine, and you have not seen an article in it about cancer and women that you can

remember, get on the website and send a letter to the editor of that magazine. I might recommend that.

We are going to have to recess so I can go vote on the floor. I am sorry that I am going to have to step away probably for about 10 or 15 minutes, so we will stand in recess until I return.

Thank you.

[Recess.]

Senator DURBIN. The Subcommittee hearing will resume. My apologies for the vote on the floor, but I made it.

Dr. Whelan, we were just talking about magazine websites. If the readers have a concern about the issue that we are discussing at this hearing, whether the magazine that they are subscribing to is covering in a fair and comprehensive way the cancer threats to women and whether it has enough focus on smoking and lung cancer, that the readers should get on the website to the magazine and send an email to the editor. I agree with you completely. As you said, one gets their attention, five calls for a meeting, so 10 may change editorial policy. So let us make a point of recommending that to those who are following this.

Dr. WHELAN. We encourage that.

Senator DURBIN. Definitely. Thank you.

Dr. King, let me thank you for your testimony. Your study shows that even though some adult magazines may not have much of a youth readership, their advertising reach was significant enough to expose a large number of young people to tobacco ads that they carried. Give me an example of the kind of magazine you are talking about.

Mr. KING. We classify magazines like *Cosmopolitan* and *Glamour,* for example, as being adult-oriented magazines because they fail the 15 percent/2 million rule. But if you look at the number of young readers that those magazines have, *Glamour* has 1.95 million young readers, and *Cosmopolitan* has 1.79 million young readers. Although they are adult magazines, those numbers are much larger than the absolute numbers of young readers that we find in all of the youth-oriented magazines that we include. *Elle, Mademoiselle,* and *Vogue* all have fewer absolute numbers of youth readers.

So many of what we classify as adult-oriented magazines in fact, because of their large subscription base and large readership, have, although a much smaller percentage of young readers, much larger numbers in absolute terms.

Senator DURBIN. Is it accurate to say that according to your findings, some of the most significant expenditures for tobacco advertising of youth brands took place among women's magazines?

Mr. KING. Certainly the women's magazines represent a significant amount of advertising, particularly if you are concerned with exposure to young women, because these are magazines that are targeted. I am sure that not many women read *Hot Rod,* and I am also sure that not many young men read *Mademoiselle* and *Elle*—although, of course, there will be a few exceptions.

So in terms of exposure to young women, these are magazines of particular interest.

Senator DURBIN. Is it accurate to say that since the Master Settlement Agreement, magazine advertising expenditures for youth

brands of cigarettes have actually risen in both adult- and youth-oriented magazines?

Mr. KING. Yes. We found that for the three brands most popular among young people—Marlboro, Newport, and Camel—that in the 2 years following the settlement, their advertising expenditures in both the adult-oriented magazines and the youth-oriented magazines increased over the levels prior to the settlement.

Senator DURBIN. And what do you infer from this finding?

Mr. KING. I infer from this finding that the Master Settlement Agreement has not met its goal of reducing exposure to adolescents and children.

Senator DURBIN. Are the tobacco companies spreading themselves thinner but wider in their effort to sustain their access to kids?

Mr. KING. I think that is a little bit difficult to tell from the nature of the studies such as the one we have done here. Remember that we only sample 38 magazines, and the tobacco companies typically advertise in between 100 and 150 magazines. So we do not actually see all the magazines in our sample. It is certainly possible.

Senator DURBIN. Well, I thank you all for testifying. I particularly want to thank Ms. Coleman and her daughter Nzingha. When I came back into the hearing room, there was a lady standing outside who said, "Nzingha Coleman stole the show in there," and that is exactly the way it should be, because we are talking about the impact that this advertising has on people your age. And again, thank you for missing a day of school and coming out to testify. It wasn't a bad day, was it?

Miss COLEMAN. No.

Senator DURBIN. We are glad you could be with us today.

Ms. Coleman, your story is an important one, and we thank you for sharing it with us.

Dr. Whelan, we will continue to work with you.

Dr. King, thank you for your analysis, too.

Let me at this point invite the next panel to come up to the table.

Dr. Cristina Beato is Deputy Assistant Secretary for Health, U.S. Department of Health and Human Services.

Dr. Diane Stover is head of the Division of General Medicine and Chief of the Pulmonary Service at Memorial Sloan-Kettering Cancer Center in New York City—one of the best.

And an old friend and colleague of mine, Matt Myers, is president of the National Center for Tobacco-Free Kids.

Now that you have all comfortably sat down, I am going to ask you to stand for the oath.

Please raise your right hand. Do you swear that the testimony you are about to give to this Subcommittee is the truth, the whole truth, and nothing but the truth, so help you, God?

Dr. BEATO. Yes.

Ms. STOVER. Yes.

Mr. MYERS. I do.

Senator DURBIN. Let the record note that the witnesses answered in the affirmative.

At this point, I will invite you to give your opening remarks. Dr. Beato, if you would proceed first.

TESTIMONY OF DR. CRISTINA BEATO,[1] DEPUTY ASSISTANT SECRETARY FOR HEALTH, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, WASHINGTON, DC.

Dr. BEATO. Thank you, Mr. Chairman.

Good morning, and thank you for inviting me to participate in this panel. My name is Cristina Beato, and I am the Deputy Assistant Secretary for Health. Before joining the Department of Health and Human Services, I served as the Associate Dean for Clinical Affairs and the Medical Director at the University of New Mexico Health Sciences Center.

President Bush and Secretary Thompson have made women's health, prevention, and eliminating health disparities a top priority. As the 2001 Surgeon General's Report on Women and Smoking indicated, smoking-related diseases have truly become a women's health issue. Women who smoke are subject to all the same risks as men, including cancer, cardiovascular disease, and chronic obstructive pulmonary disease. In addition, women are at risk of infertility, adverse reproductive outcomes, altered menstrual function, lower bone density leading to osteoporosis, and increased fracture risk.

As you are very well aware and have brought to our attention, Mr. Chairman, lung cancer surpassed breast cancer as the leading cancer death among women in 1987, and this is a totally preventable illness.

However, we know what works to prevent initiation and promote cessation of smoking, and we believe that, working together, we can achieve the administration's goals of reducing the prevalence of smoking among women to 12 percent or less and among girls to 16 percent or less.

We have seen some successes. The prevalence rate of smoking among women has declined since it peaked at 33.9 percent in 1965. By the year 2000, smoking prevalence among women was at 21 percent. Most of this decline occurred from the years 1974 to 1990. While the decline slowed in the early 1990's, the rates have begun to decline more rapidly in recent years.

Smoking prevalence is higher among women living below the poverty level—nearly 30 percent—as compared to those women above the poverty level—20 percent. The education level among women plays a key role. Among women with 9 to 10 years of education, there is a 31 percent prevalence; among women with over 16 years of education, there is only an 8 percent prevalence.

Prevalence rates among racial and ethnic populations adds another dimension to our need to better understand women and smoking. In the year 2000, 42 percent of American Indian or Alaska Native women, 22 percent of Caucasian women, 21 percent of African women, 13 percent of Hispanic women, and 8 percent of Asian women were still current smokers.

The prevalence rates among women are still much too high, but we believe that through our expertise, programs, and funding, we

[1] The prepared statement of Dr. Beato appears in the Appendix on page 89.

are continuing to work on lowering these rates. The Surgeon General's Report on Women and Smoking includes a number of practical recommendations that will move us toward these goals. Today I would like to share with you just some of the ongoing and planned activities at the national and state levels that are designed to implement these recommendations.

Addressing the burden of tobacco within specific populations is essential if we are to achieve the President's and the Secretary's goals and eliminate the disparities that exist in tobacco use and tobacco-related disease. This is one of the reasons why the Surgeon General recommended expansion of the diverse constituency that is working on tobacco issues.

Women of all ages, races, and ethnic backgrounds are affected by tobacco. To this end, the Department has engaged in collaborations with a number of nonprofit organizations through our Centers for Disease Control and Prevention National Networks Program. These networks represent priority populations to prevent and reduce the use of tobacco and exposure to secondhand smoke. These nonprofit organizations reach women and girls, and one organization focuses exclusively on women.

In addition, the CDC funds seven tribal-serving organizations. They have been funded to begin to build capacity in our Native American/Alaska Native community, where the prevalence of tobacco use among women is the highest.

The Surgeon General's Report on Women and Smoking states that success in reducing tobacco use will require implementation of programs that focus on prevention and cessation. Women who stop smoking greatly reduce their risk of dying prematurely, and quitting smoking is beneficial at all ages.

The Task Force on Community Preventive Services provides a solid scientific foundation upon which to build our efforts to promote cessation among women. We know that women are more likely than men to be willing to access assistance when they try to quit, and that using assistance increases the likelihood of success. Therefore, the Department and its partners are working to improve the availability of cessation treatments to all of the women who smoke.

Some States have developed quit lines that are designed to increase access and reduce the cost of cessation treatments. States are also taking steps to ensure that an increasing number of women have access to these services. Research has demonstrated that behavioral counseling is effective alone and can enhance the efficacy of pharmaceutical treatment; however, rates of utilization and most counseling options have been very low. Experience has shown us that smokers are more likely to use a telephone quit line than to attend classes. Telephone counseling is attractive because it is more accessible and also more private. Counseling by telephone has also been shown to reduce the ethnic disparities in the use of smoking cessation. In California, African American and Hispanic smokers are active participants in a statewide quit line, with the latter encouraged by the availability of Spanish language services and materials.

Very particularly, smoking can affect a woman's ability to get pregnant, increasing the risk of conception delay and infertility.

The good news is that smoking among pregnant women has declined 19 percent, from 89 percent to 13 percent in 1998. Sadly, however, 13 percent is still too many pregnant women and girls who continue to smoke.

Infants born to smoking women have a lower than average birth weight. Women smokers are also less likely to breastfeed their infants. It is estimated that eliminating material smoking may lead to a 10 percent reduction in all infant deaths and a 12 percent reduction in deaths from perinatal conditions.

Furthermore, because women are more likely to stop smoking during their pregnancy than at any other time in their lives, it is vital that we seize the opportunity to reach out to women during pregnancy and assist them in quitting for good.

The age of initiation of smoking is an important indicator of smoking behavior. Smoking initiated at an early age increases the risk of smoking-related illness or death. The risks associated with smoking at an early age makes it imperative that we focus on young girls and make sure that they never start smoking.

Comprehensive programming at the State level plays an important role in reducing smoking among women. The CDC has come out with "Best Practices for Comprehensive Tobacco Control Programs," an evidence-based analysis that can help States determine their funding priorities, plan and execute effective comprehensive tobacco control and prevention programs.

Following the start of the statewide tobacco control program in 1989, the lung cancer rate among women in California has declined, even though it is still increasing for the rest of our country. This decline underscores the importance of investing in tobacco control at the State level. Other States are seeing dramatic results as well. For example, in the State of Massachusetts, the rates of smoking during pregnancy have dropped sharply from a prevalence of 25 percent in 1990 to 13 percent in 1996. Most of the decline occurred after 1992, when the Massachusetts Tobacco Control Program was implemented with funds from an increase of the tobacco excise tax. Nationwide prevalence of smoking during pregnancy declined much more slowly during the same period.

Several of the Surgeon General report recommendations focus on increasing awareness of the health effects of tobacco on women and on boosting knowledge that non-smoking is the norm among women. Without increasing this type of awareness, we are unlikely to see expanded efforts that address this growing epidemic at either the individual or the societal levels.

At the State and local levels, activities designed to promote awareness are increasing. For example, the Wisconsin Tobacco Control Board, drawing on the revenue from Wisconsin's settlement with the tobacco industry, funds the Wisconsin Women's Health Foundation to implement the First Breath Program, which offers counseling to pregnant women at regional prenatal care units, coordinated with the Department of Agriculture's Women, Infants, and Children sites. The program includes educational materials, information about how to use the telephone quit line, and opportunities for pregnant women to join local support groups. These program sites have been established in all the regions of Wisconsin,

including two tribal clinics. These initiatives are implemented on a pilot basis.

The Department continues to be a leader in tobacco counter-marketing efforts and is pleased to have enlisted the aid of numerous celebrities in our counter-marketing initiatives. This year, we unveiled a new poster campaign featuring celebrity spokes-model Christy Turlington. The poster is entitled, "Smoking is Ugly." It illustrates that lung cancer kills more women than breast cancer, uterine cancer, and ovarian cancer combined.

We are also proud of our forthcoming television public service campaign staring Esai Morales of NYPD Blue. This new initiative, which will be launched later this month, will be aimed at decreasing tobacco use in our Hispanic communities.

Secretary Thompson has urged the entertainment industry to expand its role in discouraging women, and girls in particular, from smoking. In a speech before the National Council for Families and Television in January of this year, the Secretary stated: "We need help in reaching our young women with a very simple message: Smoking is not glamorous, smoking is deadly, and we as a society must not glorify smoking—ever. The television industry and the Federal Government can be powerful partners in delivering that message to women and girls throughout America and around the world."

In conclusion, there are some exciting innovations in tobacco prevention and cessation that have already begun to reap results. However, many challenges remain. Nowhere is this more clear than in the area of research. The National Institutes of Health, and in particular the National Cancer Institute, are leading the research effort for the Department. To move the research effort forward, NCI is working with both public and private partners to set priorities and promote action on effective intervention strategies. These efforts include the Transdisciplinary Tobacco Use Research Centers, which are public-private collaborations, at seven sites around the country, to understand the biological, behavioral, and cultural factors that explain why women smoke and, most important, if they do, how to help them quit. In addition, we will encourage the reporting of gender-specific results from studies of factors influencing smoking behavior, smoking prevention and cessation interventions, and the health effects of tobacco use, including new products. The Surgeon General's report reviewed some of the literature on women and smoking, but there is still much more that needs to be done.

As science advances, I think it is critical that we continue to address this totally preventable women's health issue. President Bush, Secretary Thompson, and the Department with all of our partners can be successful in meeting the challenges ahead.

We appreciate your interest in this very serious issue, and we are looking forward to working with you. I would be happy to answer any questions.

Senator DURBIN. Thank you very much, Dr. Beato. Dr. Stover.

TESTIMONY OF DIANE E. STOVER, M.D., FCCP,[1] HEAD, DIVISION OF GENERAL MEDICINE, AND CHIEF, PULMONARY SERVICE, MEMORIAL SLOAN-KETTERING CANCER CENTER, NEW YORK, NEW YORK, ON BEHALF OF THE AMERICAN COLLEGE OF CHEST PHYSICIANS

Dr. STOVER. Mr. Chairman and Members of the Subcommittee, good morning.

I am pleased to have the opportunity to appear before you today and to address the serious threat to women's health of smoking and the marketing effects of the tobacco industry.

My name is Diane Stover, and I am Chief of the Pulmonary Service and Head of General Medicine at Memorial Sloan-Kettering Cancer Center in New York City. I appear before you today on behalf of the American College of Chest Physicians and its philanthropic arm, the CHEST Foundation. And I am proud that the College and the CHEST Foundation were able to sponsor Ms. Coleman and her daughter's first trip to Washington to be here with you today.

Senator DURBIN. Thank you for that.

Dr. STOVER. The ACCP is a 15,000-plus-member international and multi-specialty medical society comprised of pulmonologists, cardiologists, thoracic surgeons, intensivists, and many other members of the health care team. We are the physicians who treat people worldwide suffering from lung disorders, the majority of which are caused by tobacco use.

As a physician working on the front lines, I have seen first-hand how lung cancer can ravage a life, both a man's as well as a woman's. The number of women we are treating is increasing at an alarming rate, and in fact, the saying "Smoke like a man, die like a man," is becoming more and more of a reality.

I must confess that I am here today not only as a professional but as a parent. Several years ago when I was driving my daughter to middle school, there, standing outside the school were many of her classmates—smoking. These were the same children who several years before were in grammar school, thought it was disgusting, and were begging their parents to stop.

I knew then, not only as a physician but as a parent, that I had an obligation not only to my daughter and her friends but also to all girls and women, to educate them on the disastrous and devastating health impact of tobacco.

It was at that time that the ACCP created the Task Force on Women, Girls, Tobacco and Lung Cancer, whose mission simply is to make women and girls tobacco-free worldwide.

Smoking-related disease among women is truly a fullblown epidemic. As cited by the Surgeon General, smoking among high school girls in the 1990's increased to a high of 35 percent.

Why should we care? Because along life's continuum, smoking impairs the ability of girls and women to fully realize their potential—in the classroom, as mothers, in the workforce, and at life's end.

There is accumulating data to suggest that, cigarette-for-cigarette, females may be more susceptible than males to the cancer-

[1] The prepared statement of Dr. Stover appears in the Appendix on page 97.

causing agents of tobacco, putting women at nearly twice the risk of men to develop lung cancer. In recent years, mortality among men has decreased, yet in women it continues to increase dramatically.

Smoking among women and girls causes unique health problems and diseases throughout their lives. As you have heard, among adolescent girls and women who smoke, they can have reduced rates of lung growth; increased rates of wheezing and asthma; and they are more likely to have menstrual abnormalities.

Women of childbearing age have reduced fertility, and if they take birth control pills, a greatly increased risk of heart attack and stroke, particularly if they are over the age of 35.

During pregnancy, the incidence of spontaneous abortions and many other catastrophes are increased. The fetuses of women who smoke or who are exposed to secondhand smoke are more likely to suffer growth retardation, premature birth, stillbirth, and neonatal death. There are higher rates of sudden infant death syndrome, bronchitis, asthma, and ear infections in their children, as you have very well heard from Ms. Coleman and her daughter.

Older women who smoke are more likely to suffer early onset of menopause, higher rates of osteoporosis, and an increase in lung cancer and many other cancers. In fact, one-third of all cancers are related to smoking.

In response to this horrific epidemic, the Women's Task Force, with the support of the ACCP and the CHEST Foundation, have launched many educational initiatives. These include a speaker's kit which is now on CD–ROM, with an accompanying website which is a versatile educational tool addressing four key audiences: Health care professionals and lay educators, girls, teens, and adult women.

We have created a Speakers Bureau of more than 400 ACCP members, and we have developed school-based pilot programs which educate kids through various methods about the dangers of tobacco use.

Let me close by saying a few words about smoking cessation programs. These include self-help programs, behavior modification techniques, clinical interventions with nicotine and non-nicotine replacement therapy, as well as community and educational-based efforts.

Although quitting on one's own is the choice made by many smokers—as you know it, "cold turkey"—smoking cessation programs with or without nicotine replacement therapy can increase the success rate of smoking cessation many-fold. And although studies show that there are no major differences between men and women when it comes to the effectiveness of smoking cessation methods, women may have a higher relapse rate.

Pregnant women who smoke offer a unique opportunity to emphasize the smoking cessation message since these women never had more frequent contact with the health care system than during this particular life event. The American College of Obstetricians and Gynecologists has advised that a five-step counseling session, together with pregnancy-related educational materials, increases success rates by 30 to 70 percent.

But as underscored by the Surgeon General's report, there is a need for more research to determine the effect of nicotine replacement therapy on pregnant women and their offspring.

As a physician on behalf of my patients and as a parent on behalf of the children, I would like to thank you for bringing attention to and raising awareness of this horrific epidemic of nicotine addiction and tobacco use—the No. 1 preventable cause of disease worldwide and the No. 1 cause of lung cancer in both men and women worldwide.

We are hopeful that with your support and the support of your colleagues, we can save the one out of three children who start smoking today and who will die as adults sometimes 30 to 40 years prematurely solely because they smoked.

Thank you again for this opportunity to address this distinguished Subcommittee. I would be happy to answer any questions.

Senator DURBIN. Thanks, Dr. Stover.

Matt Myers is President of the Campaign for Tobacco-Free Kids, and as long as I have been fighting this battle on Capitol Hill, he has been my ally and friend.

Matt, we want to welcome you to the Subcommittee and invite your testimony.

TESTIMONY OF MATTHEW L. MYERS,[1] PRESIDENT, CAMPAIGN FOR TOBACCO-FREE KIDS

Mr. MYERS. Thank you, Mr. Chairman.

It is a particular pleasure to be here. It is a particular pleasure to be here because you have been a leader as long as we have been working on this issue. And one of the things that distinguishes your leadership is that it always translates into action, so that we have faith that the words we speak today will be translated into something that will make a difference in people's lives.

And Senator Carper, we are also delighted that you are here. You have been a long-time leader as well, first as Governor and then as a member of the board of the American Legacy Foundation. So we appreciate your interest.

I will ask that my whole statement be put in the record and will instead just focus on a couple of key points since I am the last witness in a long hearing.

The three points that I really would like to make are that, first, looking at today's marketing and advertising, despite the rhetoric of the tobacco industry, the problem of tobacco marketing targeting women is no less severe today than it has been in all of the historic ads that you showed, Senator Durbin, during your earlier presentation.

Second, we have a potentially new and emerging crisis with regard to women and smoking, and that is, while women have not yet learned that low-tar tobacco products are not safer, the tobacco industry is already introducing a whole new generation of products that are designed to keep America's women smoking, because America's women switch to low-tar in much greater numbers than men out of a concern for their health and safety.

[1] The prepared statement of Mr. Myers appears in the Appendix on page 105.

Third, we need to focus on solutions, and we have solutions that this body can address as well as the kind of important voluntary solutions that we have discussed earlier in terms of reaching directly out to magazines and others that affect women, and I would like to talk about each of those.

Let me start with today's marketing. We have heard a good deal of rhetoric from the tobacco industry subsequent to the Master Settlement Agreement that they do not want to target our children, that they do not want to target nonsmokers. From Dr. King, we have seen that the numbers do not tell the same story; but when you look beyond the numbers, it is even worse.

When you look at the themes that we see in tobacco marketing today targeting women, they are even more offensive and even more blatant than those we saw before. It was after the Master Settlement Agreement that Philip Morris introduced the "Find Your Voices" campaign. Not only is that theme disturbing, its targets were disturbing. It was targeted at ethnic women from populations that have traditionally not smoked.

Those ads were not designed to get people to switch brands; those ads were to reach new ethnic populations with low smoking rates among women and designed to get them smoking.

When confronted with that advertising theme in a court case, a Philip Morris executive switched the theme, but not the overall message. "Find Your Voices" simply became "A Voices Campaign." The message was still designed to associate smoking with freedom, independence, and the types of themes that emerging populations would care about most.

Second, we wish that the move of the tobacco manufacturers out of magazines represented a real decline in their targeting of women. It does not. It represents a switch in their marketing dollar. In the most recent Federal Trade Commission report on tobacco marketing, not only does it show an increase in tobacco marketing in magazines—it shows a 67 percent increase in the kind of promotional expenditures and free giveaways that have the greatest impact on our young people.

What kinds of things am I talking about? Go to a local store. We picked this up just about 3 weeks ago. It is from Camel—"Buy Two Packs, Get One Free"—but with the imagery that is clearly designed and aimed at men or women of that age population. There is no question whom these are targeted at, and there is no question that the "Buy Two, Get One Free" is part of a very broad marketing campaign designed to make these cigarettes both more attractive and more accessible to our young people, with the tragic results that you have heard from all of the others.

This is just the tip of the iceberg. I hope that today's hearing is the start of a long-term focus on how the tobacco industry is targeting our young men and women.

There is a second issue that I hope this Subcommittee will focus on, and that is the fact that the National Cancer Institute last November found that lite and low-tar cigarettes actually produce no health benefit to our population. What the report did not focus on but what is important for this hearing is the fact that it is women who switch in much greater numbers to lite and low-tar tobacco products because they believe that these products are safer.

Eighty-seven percent of the cigarettes smoked in this country today are lite and low-tar; over 60 percent of the lite and low-tar smokers are women. They were concerned about their health, and they did something about it that they thought would make a difference. It did not.

We are about to emerge on the same crisis all over again. With the release of the National Cancer Institute report, the tobacco industry has taken a new tack—new products. It is not lite and low-tar; it is a whole host of new products with broad promises. You showed some of them in your presentation.

Omni cigarettes—what does a full-page ad for Omni cigarettes look like? "Name another brand that significantly reduces carcinogens as much as Omni, the only cigarette to significantly reduce carcinogens that are among the major causes of lung cancer."

The tobacco company says that that is not a health claim. Find me a consumer who will not take away the message that says you have a choice not to quit, just as you did 40 years ago with lite and low-tar cigarettes.

Another one is Advance cigarettes—"All of the taste, less of the toxins." If history is a predictor of the future—and we know that it is—it is women who will switch in massive numbers to these products designed to do something about their health and safety.

That is why we get to solutions, and that is why we truly ask this Subcommittee's help. First and foremost, these things would not happen if we had meaningful FDA regulation over tobacco products. If the regulations that the FDA proposed in 1996 were in place today, the kinds of ads that we have seen would not have been allowed today. They would not be allowed in magazines with heavy youth readership. If the FDA had authority over tobacco, before they made outrageous claims like these, they would have to substantiate them, so that when people who were concerned about their health and safety switched, they would know that those products were in fact safer, and there would be restrictions on the advertising to make sure it was not designed to encourage young people and young children to start.

There is a second area that we would ask this Subcommittee to focus on, and you have been a leader, Senator Durbin. That is to ensure that poor people who want to quit smoking are not prevented from doing so because they lack the resources. We need to ensure that smoking cessation is covered by our Medicare and Medicaid programs. We cannot afford not to do that. Medicare and Medicaid costs are skyrocketing. Smoking is a significant portion of those costs. It is the poor people in our country who smoke at disproportionate rates. If we are concerned about health care costs, there is nothing we can do that would help drive those costs down and save the American taxpayer money more effectively than to pass the legislation you have proposed to provide smoking cessation coverage.

Last, we would ask you to work with us to do just as you have said—to have a joint effort, to ask those who advertise tobacco products to do so in a more responsible manner, to ensure that these stories are covered and to ensure that advertisers take the voluntary steps that they could take on their own to decrease youth exposure and the exposure of young women to tobacco products.

We conducted a survey only 1 month ago looking at youth exposure to tobacco marketing. We had hoped that over 3 years after the Master Settlement Agreement, we would see a significant decline. Sadly, we did not. Youth are still exposed to tobacco marketing at three times the rate as adults. And if you look at the cigarette brands that are up at the top, they are the same ones that our kids smoke, and Marlboro, smoked by more young girls and more young boys than all other brands combined, tops the list.

There are things that we can do to address this problem, and we thank you for your leadership in holding this hearing today as a next step. Thank you.

Senator DURBIN. Thanks a lot, Matt.

Mr. MYERS. Senator, can I just add one thing which is really quite important—and this relates to Senator Carper as well; he can take some credit.

Senator DURBIN. Yes.

Mr. MYERS. There are some good things happening that we have not talked about. We have talked a lot about magazines. In this month's issue of *Good Housekeeping* is the beginning of a new campaign by the American Legacy Foundation which I think is very important for people to understand.

This is called The Letters Campaign, featuring real people with real problems, suffering from tobacco use, designed to encourage women to smoke. It is accompanied, fortunately, by a first-rate editorial in *Good Housekeeping* talking about these issues. It is the American Legacy Foundation using the power of our advertising dollar to get magazines to do the right thing. We will never be able to match the tobacco companies dollar-for-dollar, but our hope is that women's magazines will take this opportunity to liberate themselves from the slavery of tobacco marketing and use this as an opportunity to begin to send the right message to our citizens.

Senator DURBIN. Thank you.

Dr. Beato, let me say that you have made a compelling argument in your testimony for a bill that I have introduced, and I would like to ask you to comment on it.

We know that a significant percentage of women on Medicaid smoke and that indeed the smoking prevalence among pregnant women on Medicaid is 23.8 percent, nearly twice that of all pregnant women.

Are you aware of the fact that Medicaid does not require State Medicaid programs to cover smoking cessation therapies or smoking cessation counseling?

Dr. BEATO. Some States do not, Senator, but there are other States that do, through a HRSA program—there are 67 programs currently around the country—in 37 States—that do offer smoking cessation programs. ACOG's Five Steps counseling session is covered under their prenatal care.

Senator DURBIN. Do you think it should be a requirement that all State Medicaid programs offer smoking cessation programs and counseling?

Dr. BEATO. I believe that States should strongly be encouraged to follow that, yes.

Senator DURBIN. But strong encouragement and making it mandatory are two different things. Do you think it should be mandatory?

Dr. BEATO. I believe for a public health issue, yes, States should make this mandatory.

Senator DURBIN. OK. Let me ask you about another aspect of this which you alluded to in your testimony. When Nzingha Coleman was up here, I asked her about the prevalence of smoking in movies and on television, which drives my wife crazy. She said, "I cannot believe that the producers in Hollywood are letting this happen in movies that kids are seeing." It just glamorizes smoking to see some beautiful young actress smoking.

I know we have a tricky assignment here in dealing with our historic constitutional protections of free speech and so on, but what do you think we can do, Congress working with this administration, to highlight and deal with this challenge?

Dr. BEATO. I think really trying to approach it as a public-private partnership, as Secretary Thompson has alluded to; also, I believe, exploring more the in-depth research on behavior science, especially among adolescents. We know that adolescents who get adequate and very good information still choose to smoke or do other unhealthy behaviors. How do we study that problem from a behavioral aspect to address that.

I think there is a lot of promise looking at those research components, and NCI is going to have some of that in their gender-specific studies for particularly women and smoking. But I have a 14-year-old daughter and I, like my colleague sitting next to me, am very concerned about the messages that our children are getting. And I can tell you that when the movie "Erin Brockovich" came out, and Julia Roberts was lighting up all the time, that was a very powerful message that swayed girls in the wrong direction, because this was a liberating film, you might say, but was certainly giving the wrong message in that way.

Senator DURBIN. I think I am going to write Julia Roberts a letter. She and I do not correspond regularly, but she was here just last week on Capitol Hill testifying about her concern about Rett's syndrome, a very serious disease. I would like to suggest to her that she also take a look at this public health issue. We need an actress like her to step up and say something publicly. It could make a difference.

Dr. BEATO. I think those kinds of partnerships are what will give us success.

Senator DURBIN. Dr. Stover, the most compelling part of your testimony—and I was not aware of it, and I have studied this issue a lot—is the suggestion that women are more susceptible to lung cancer with the same exposure to tobacco as a man. Has this been tested and written about over a long period of time?

Dr. STOVER. The data are accumulating and they suggest that women may be more susceptible. There are epidemiologic data, and now there are molecular biologic data emerging. It is really not understood why, but the theory is that the carcinogens in tobacco smoke are handled differently between the sexes, and generally, there are two things that can happen to the carcinogens, the can-

cer-producing substances. They can be excreted, or they can be changed into more cancer-producing materials.

Men are thought generally to excrete them more easily, and women are thought to hold onto them for a longer period of time and change them into more cancer-producing products. And hormones are thought to perhaps play a role; androgens make them go out in the urine, and estrogens make them go the opposite way, to be changed or transformed into more serious substances.

Senator DURBIN. This seems like a very significant fact. Again, when we talk about women's magazines that focus on health, this would seem to be an obvious issue that they should highlight to their readers to let them know that if you smoke the same number of cigarettes as your husband, for example, according to the studies, you are more likely statistically to develop lung cancer than he is. I think this is worth pursuing, and I hope that the chest physicians will consider contacting some of the leading women's magazines to see if they would accept an article on this subject. I think that would be a valuable thing to do.

I might also add parenthetically, since Dr. Beato and you have both made reference to your adolescent children, that I have said during the course of debating this issue over the years that I have never met a parent who has said, "I got the greatest news last night—my daughter came home and told me she started smoking." I have never heard a parent say that, because we all live in dread of that possibility. Luckily, my wife and I raised three who do not smoke, and we are very happy with that outcome, as most parents would be.

Matt, I am going to save my questions because Senator Carper has arrived, and I want to give him a chance to ask some questions.

OPENING STATEMENT OF SENATOR CARPER

Senator CARPER. Thank you, Mr. Chairman, and to each of our witnesses, thanks for joining us today. I know some of you by reputation, and the reputations that you have are good ones. We are mindful of your contributions on these fronts and very appreciative.

Senator Durbin and I came to the House together almost 20 years ago, and almost from day one, he made his mark as a champion in the House of Representatives, and now in the Senate and across the country, to discourage people from smoking and for those who do, to try to get them to stop. I do not know how many lives have been saved because of your efforts, but my guess is quite a few.

He and I kid a lot about all kinds of things, but on a very serious note, I would say thank you for a wonderful contribution in this area.

As Mr. Myers suggested, I got to be involved a little bit in the American Legacy Foundation as outgoing chairman of the National Governors Association. The American Legacy Foundation was created under the Master Settlement Agreement, and about $1.5 billion was to be directed to the efforts of the American Legacy Foundation to try to convince young people, just like these young people sitting right over here to our left along the wall, from ever starting

to smoke, or if they are getting started, to try to convince them to stop.

I served as the founding vice chairman of the American Legacy Foundation for about a year and a half, and it was a great privilege to be a part of that start-up. seeing the two-page advertisement that you just showed us, Mr. Myers, reminds me of why were we excited when we got that going.

I called the American Legacy Foundation in preparation for this hearing and asked if they had any recent statistics on teen smoking. I had read about some encouraging statistics in the media, and I called Shelley Hilton, who was the president, to congratulate her and the Foundation. They sent me over some information, and I just want to read it into the record if I can, because I find it encouraging that the numbers on teen smoking, after going the wrong way for a number of years, are now going the right way.

"In December 2001, the principal investigators of 'Monitoring the Future,' a national youth survey conducted annually since 1977, reported the continued decline of cigarette smoking among youth in grades 8, 10, and 12."

Let me just ask the young people over here what grade you are in. Eighth grade. OK. I have an eight-grader at home, 13 years old.

Anyway, the data from the survey indicated that current smoking rates among students in grades 8, 10, and 12 have been declining since 1977 and that smoking among younger students like the ones who are here today began to decline in the previous year, in 1996.

Let me just mention a couple of the numbers. Current smoking among students in grade 12 declined from 31.5 percent in 2000 down to 29.5 percent in 2001. Among eighth-graders and tenth-graders, smoking declined from about 14.6 percent among eight-graders to 12.2 percent, and from 24 percent among tenth-graders down to 21 percent. That is in a span of a year.

Now, those may not sound like huge drops, but to see that kind of decline literally in the space of a year suggests to me that something positive and something good is happening. I think it is a combination of things—the efforts of some of the people who have been before us here, and certainly the efforts of our Chairman, but also, as States scrap for dollars to try to balance their budgets, one of the places they look is sin taxes, and one of the sin taxes that comes to mind for a lot of people is the tax on tobacco. In Delaware, we are trying to balance our budget, and one of the places we are going to do it is to significantly increase the tax on tobacco products. So that is going on.

We have cigarette companies themselves that have raised prices in order to pay for the cost of the Master Settlement Agreement. And we have seen some very, very effective media campaigns. To our young people here, I would say that the American Legacy Foundation does not rely on guys like Senator Durbin and me to come up with ideas to connect with young people—they rely on the young people. The young people literally conceive the ideas and help direct the creation, whether it is stuff we put on the website or TV ads, radio ads, and even some of the print media. It comes from the young people, who are better able to figure out how to connect. And the long and short of it is that it is working.

Every now and then, I do not know that we need to stop and smell the roses, but we need to stop and realize that something good is happening here, and I just wanted to underline that fact today.

Mr. Myers, you mentioned the FDA proposal from 1996 that was not adopted. Do you have any idea what the position of the Bush Administration is on those broad proposals or some portions of them?

Mr. MYERS. I am not a representative of the Bush Administration, so I would hesitate to speak for them. Secretary Thompson has said that he generally supports FDA regulation, but he has made that statement on his personal behalf.

We would hope that this would be an issue that we could all unite behind. If there is one thing we ought to be able to agree on, it should be that the most deadly product in this country should not be the least regulated product. And at the same time, the kind of marketing that counteracts the work of the American Legacy Foundation and counteracts the money that the States are spending to discourage tobacco use should not be permitted. We ought to have those kinds of controls over it so that when a mom and dad sit across the kitchen table from their kids, they should not have to face $22.5 million of tobacco advertising that is giving the opposite message.

Senator CARPER. Yes, Dr. Stover.

Dr. STOVER. I would just add that nicotine is definitely a drug, and it not only has psychologic effects but definite physiologic effects on the body. And it is a very addicting drug, as we all know.

Senator CARPER. Thank you.

Mr. Chairman, thanks for your good work, and thanks for holding this hearing. And thanks to each of you for being here today.

And to the young people, those eight-graders who showed up to join us at this hearing, we are delighted that you are here and hope that you will be setting the right kind of example for my eighth-grader and my sixth-grader.

Thank you.

Senator DURBIN. Thanks, Senator Carper.

Dr. Stover, you made reference to a website. Can you tell us what that is, so that those who are following this hearing may access it for the Chest Physicians program?

Dr. STOVER. The speakers kit is speakerskitchestnet.org. But the Chest Foundation and the ACCP also has a website. Everything is on the CD–ROM, which you can get on the table here.

Senator DURBIN. OK. I just thought you might be able to read it into the record; maybe you might want to search for it for a moment while we proceed with some other questions. I will go to Mr. Myers, and maybe we can come back to you.

Matt, let me ask you about the one advertisement that you showed us, the full-page advertisement for *Omni.* This is amazing, and I think most people need to be reminded why we are talking about FDA regulation. Here, we have a full-page ad—and where was that published?

Mr. MYERS. This one is in *USA Today,* but they have run these full-age ads everywhere in the country.

Senator DURBIN. So imagine for a minute that this company—whoever makes this cigarette—is saying that they are selling a product that causes less cancer, contains less cancer-causing agents, than other products.

Mr. MYERS. Correct.

Senator DURBIN. Now, we have the strange situation in American law where tobacco is treated neither as a food nor as a drug; it is somehow in between, exempt from regulation. If I wanted to put an advertisement together for apples that I was growing in my orchard that said "has fewer cancer-causing agents than other apples," I would have to go through rigorous testing to establish the truth of that claim before I could possibly publish it without having some repercussions; is that not correct?

Mr. MYERS. That is absolutely correct, and the other thing that they, of course, do not tell us is that there are 69 known carcinogens. They have taken out four. What about the other 65? And in this case, they have added a metal called palladium metal which people are smoking. Do we have tests about the health effects of that?

Think of yourself as a food manufacturer or a drug manufacturer. If you added palladium metal and then smoked it, you would have to tell the Federal Government how much you have added, and you would have to do tests on it, you would have to disclose it to the public before you could market it let alone make these kinds of totally unsubstantiated claims.

Senator DURBIN. So this is the only product in America where they can make claims like this without any truth or any background testing, where they do not have to disclose ingredients, including ingredients that may be lethal or toxic, and they are totally above any government regulation in that activity.

Mr. MYERS. That is the law today, sir.

Senator DURBIN. And of course, that is one that we have been battling for a long, long time.

Dr. Stover, you have seen the net result of all of this when you have people who turn to this product and end up in your hospital.

Dr. STOVER. Yes. One of my teachers, a very astute man, said of the low-tar cigarettes "If you are run over by 10 mack trucks or 100, you are still dead." I think that says it all.

Senator DURBIN. Dr. Beato, speak to this issue for a moment if you will. I know this may be a little delicate for you to talk about new FDA jurisdiction, and I do not know if you come here with any message from your Secretary on the issue. But you can understand from what we have said here the concern we have that if we do not take over some form of regulation of this industry that this kind of advertising, this kind of activity, this lack of disclosure to consumers, is going to continue on to the peril and danger of young people and men and women across America.

Dr. BEATO. You are absolutely correct. The first thing, Mr. Chairman, the Department of Health and Human Services has a website as well for women, and that is www.4women.gov, where we also have preventive measures of which smoking cessation is one. So I wanted to make that available for women in the audience or other family members to use that.

Second, to answer your question, it is definitely a sensitive issue. There is a Supreme Court ruling that also complicates the picture. So I think it is a very complex picture, but I can certainly assure you that from a public health perspective, this Secretary and this President want public health and prevention to be a priority.

The issues of the legal component are left up to you, sir, and your colleagues, but we certainly welcome anything that we can help with to really bring out the message that this is a cancer-causing event and we want to emphasize prevention.

Senator DURBIN. Let me mention something else that may come as a surprise to some. There is not unanimity among the tobacco companies on the FDA issue. There are some tobacco companies, major tobacco companies, that support FDA regulation and others that oppose it. So to say that they have put a united front against this concept of FDA regulation is not a fact, and I know that personally, having spoken to some of their executives. It was a strange day when a tobacco company executive asked for an appointment in my office some months ago and came in to tell me that; I did not know what to expect, but I was encouraged by it.

So I think it really opens the door for us to be more forthright in addressing this issue, and I hope we can work with the administration to do that. Secretary Thompson's statements on this subject have been very encouraging, so we hope we can work with you on that.

Dr. Stover, did you find your website?

Dr. STOVER. Yes, I did. It is www.chestnet.org.

Senator DURBIN. Thank you.

Matt, I will give you the last word on this since you have followed this for so long and you were in on these negotiations leading up to the Master Settlement Agreement. Can you comment on the way you see it today, the progress that Senator Carper noted and the challenges ahead?

Mr. MYERS. Mr. Chairman, we have seen real progress in the last 4 or 5 years, but we have a long way to go. If we are going to succeed, we do need the administration's help to pass good and meaningful FDA jurisdiction. It is good that Philip Morris supports one form of FDA jurisdiction, but what they propose is riddled with loopholes, as you know.

We think that working together, we can do something about this kind of advertising of these kinds of products in a way to protect the American public, but it is going to require everyone to support meaningful and effective FDA jurisdiction, passed promptly. With your leadership, we are really hopeful that maybe we can get it done.

Senator DURBIN. Thank you all very much. I thank this panel.

I also want to thank my staffers, Kelly O'Brien and Marianne Upton, who worked very hard to put this hearing together.

The Subcommittee will stand adjourned.

[Whereupon, at 12:05 p.m., the Subcommittee was adjourned.]

A P P E N D I X

Tobacco's Deadly Secret: The Impact of Tobacco Marketing on Women and Girls

Written Testimony

Tuesday May 14, 2002

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As President and Founder of the American Council on Science and Health, a consumer education and advocacy group dedicated to providing consumers with scientifically sound health information based in New York City, I appreciate this opportunity to address this critical issue related to women's magazines and their dubious record in reporting the dangers of smoking to American women.

My background includes masters and doctoral degrees in epidemiology and public health from the Yale School of Medicine and Harvard School of Public Health. I have authored, co-authored, or edited over two dozen books on topics such as cigarette smoking, the relationship of nutrition, environment, lifestyle and human health, including *Panic in the Pantry*, *Preventing Cancer*, *Toxic Terror*, *A Smoking Gun—How the Tobacco Industry Gets Away with Murder*, and *Cigarettes: What the Warning Label Doesn't Tell You.* I also have made numerous editorial contributions to publications such as the *Journal of the American Medical Association*, the *Wall Street Journal*, the *New York Times*, the *Washington Times* and *USA Today*, among others.

Back in the early and mid-1970s, I began regularly contributing health-related consumer articles to popular women's magazines, including *Glamour*, *Harper's Bazaar* and others. My topics included how to reduce risks of cancer and heart disease and how to boost the odds of a healthy, successful pregnancy. Given that cigarette-smoking was then and is now the leading cause of preventable death in the United States, and that cigarette smoking is a major threat to a developing fetus, in my articles I necessarily focused on the dangers posed by smoking. I was astonished that my articles were regularly edited so that pejorative references to smoking were purged. On one occasion, I prepared an article on cancer and the environment for *Harper's Bazaar*—beginning with

a section on lung cancer and the role of smoking. When the article came into print, I found the section on lung cancer buried in the back of the piece. In another case, I was assigned a piece called "protect your man from cancer." Of course, I focused on the role of smoking in the causation of lung, bladder, pancreatic, oral and other cancers—and the manuscript was returned with full payment noting that there were too many ads in the magazine that month to run the piece.

But this seems to have always been the "norm"—under-reporting or non-reporting of the dangers of cigarettes. Since the 1950s, when scientists first established beyond a doubt a causal association between cigarette smoking and premature disease and death, both broadcast and print media have faced charges of inadequately communicating to the pubic the serious and often fatal consequences of smoking. An article published in the *Columbia Journalism Review* (*CJR*) in 1978 surveyed the media coverage of cigarette smoking and noted that magazines rarely reported the hazards of cigarette smoking and those exceptions to this rule generally occurred in magazines that refused cigarette advertising.[1]

With my personal experience—having had my material on the dangers of smoking spiked from women's magazines—and the observations of the *CJR* review, I decided to take a close, quantitative look at the extent, or lack thereof, of coverage of issues related to cigarettes and health in women's magazines. The American Council on Science and Health continues to monitor this topic today and has conducted seven such surveys.

The first ACSH survey of popular magazines' coverage of smoking hazards was in 1982. ACSH examined the health-related articles in eighteen popular magazines, dating back to 1965, and found that, although the magazines covered a variety of health topics, there was a distinct lack of coverage on issues related to smoking.[2]
Only one-third of the magazines surveyed reported the hazards of smoking both frequently and accurately. The majority either confused or obfuscated the facts, or failed to mention any health hazards of smoking. However, the quality of those that did was excellent. The magazines with the best coverage were *Reader's Digest*, *50 Plus*, *Good Housekeeping*, *Seventeen*, *Prevention* and *Time*. *Reader's Digest's* crusade against smoking was unmatched in zeal, although *Good Housekeeping* and *Prevention* were also extremely informative about smoking dangers and adamant in telling their readers to quit. At the other extreme, *Redbook* and *Ms.* never discussed the hazards of smoking, while *Mademoiselle*, *Cosmopolitan*, and *Parade* rarely did.

The abundance of cigarette advertisements emerged as a likely factor in explaining the paucity of coverage. Out of eighteen magazines, only five did not accept cigarette advertising as a matter of policy, and these five magazines presented the best coverage of smoking and health. At a time when information concerning the established impact of smoking on health was widespread in the scientific literature, and when the 1982 Surgeon General's report *The Health Consequences of Smoking- Cancer* revealed that an estimated 320,000 Americans would die that year as a result of cigarette smoking, the blackout on coverage of the health risks of smoking was truly astonishing.[3]

ACSH follow-up surveys in 1986[4] and 1990[5] reinforced earlier findings that a significant negative correlation existed between the number of pages of cigarette

advertising accepted by a magazine and the percentage of total health articles in that magazine devoted to smoking as a cause of disease. For example, in the 1990 survey, *InHealth*, *Saturday Evening Post*, *Reader's Digest*, and *Good Housekeeping* had the highest percentages of cigarette articles per health topic articles out of the 20 magazines surveyed—and none accepted cigarette ads. On the contrary, *Better Homes and Gardens*, *Self*, *Madamoiselle*, and *Cosmopolitan* had the highest average numbers of cigarette ads per issue—and the absolute lowest percentage of cigarette articles per health topic articles.

Over the years, while failing to alert readers to the dangers of smoking, these magazines continued to warn women about remote or purely hypothetical dangers. For example, *Family Circle* warned readers to keep alarm clocks three to five feet from their beds to avoid cancer risk from emanating electromagnetic fields, and *Harper's Bazaar* recommended covering a halogen lamp with a plastic cover to block out potentially harmful UV rays.

While a 1996 ACSH survey of five months' worth of thirteen different women's magazines showed scanty coverage of the hazards of smoking, a great improvement was seen in these same magazines' coverage of the issue from the previous decade.[6] *McCall's* carried a warning about the risks of secondhand smoke. *Ladies' Home Journal* mentioned the role of cigarette smoking in a discussion on the causes of colon cancer—a proven link that had not been widely covered in the popular media. *Elle* lamented that physicians frequently failed to inquire about women's smoking habits, while *Woman's Day* highlighted the importance of quitting smoking as a way to reduce stroke risk. *Glamour*, commenting on groups that claim a connection between abortion and increased

risk of breast cancer, asked: "Why don't these groups tell women how dangerous it is to smoke?"

But such references to cigarettes represented only a fraction of these magazines' total health coverage. Hard-hitting discussions of the issue were few and far between, and many articles that mentioned smoking failed to put its health risks into perspective. For example, a *Woman's Day* article on "The Worst Health Mistakes Women Make…" ranked "putting off Pap smears" and "not exercising" high on the list and placed "still lighting up" low on the list. *Family Circle's* "41 Ways to Live Long" practically omitted smoking from the list, while *Glamour* failed to include smoking as a potential cause of infertility. And, while they were deemphasizing the risks from smoking, the magazines were playing up risks that were trivial at best or, at worst, non-existent—like warnings of "deadly" Red Dye #3, allergens in bio-engineered foods, and the threat posed by "Mad Cow" disease (a health problem that had never occurred in the U.S.). In this five-month time period, these magazines contained over 300 cigarette advertisements.

Surveys of popular women's magazines from 1997-2000 showed that although the reporting was getting better, there was still ample room for improvement. Magazines are under no obligation to educate the public on the dangers of cigarette smoking. However, if they do choose to cover health issues, readers would understandably expect that coverage to reflect their interests and also the relative significance of those health issues. Therefore, in those magazines choosing to present health information, one would expect cigarette smoking to receive attention commensurate with its ranking as the nation's leading cause of preventable, premature death.

In 1997, ACSH found that cigarette ads outweighed anti-smoking messages by six to one, and in 1998, the ratio had nearly doubled to eleven to one.[7] [Appendix 1] In 2000, we saw the new addition of anti-tobacco ads, but the ratio of cigarette ads to anti-smoking messages was still ten to one.[8] Even more astonishing, the total ratio of cigarette ad pages to full-fledged anti-smoking articles, was thirty to one. [Appendix 2]

The 1997 and 1998 women's magazines generally refrained from blatantly promoting tobacco in editorial copy and graphics, whereas previous ACSH surveys (1992 and 1996) had noted several articles or fashion spreads featuring photos of models smoking cigarettes. Several magazines identified smoking as a risk factor for serious health conditions, including its relationship with heart disease (*McCall's*, *Self*, and *Family Circle*), lung cancer (*McCall's* and *Madamoiselle*), and premature death (*McCall's* and *Woman's Day*) among others.

In 1999-2000, articles about the health effects of tobacco still made up less than one percent of the 2,414 health-related articles published. For example, the most frequently mentioned cancer was breast cancer with fifty-three articles, while only three magazines even mentioned lung cancer. And lung cancer, not breast cancer, is the leading cause of cancer death among women. These magazines are guilty of both omission and commission: not only do they not cover cigarette-related diseases, they also edit smoking mentions where they would otherwise typically be. For example, on *Glamour's* list of "8 Simple Health Savers" was advice on taking calcium supplements and working out, but there was no mention of stopping smoking. And *Elle's* "New Year's Resolutions" made no mention of the desirability of quitting smoking either. Out of all of the magazines analyzed, *Self* illustrated the greatest commitment to women's health by carrying the

lowest number of tobacco advertisements (twelve) and the highest number of anti-smoking messages (twenty-six). Thus, the total number of anti-smoking messages in *Self* magazines was more than double the number of cigarette ads.[8]

Why do magazines downplay the risks of smoking—and in some cases even promote the habit? Perhaps the editors don't want to be seen as "health nannies." Perhaps they feel that harping on the dangers of smoking is a "downer"—or perhaps they rationalize that most of their readers don't smoke anyway and so don't need to be reminded of the hazards. But in all likelihood, the primary reason a discussion of smoking's dangers remains largely outside the purview of these publications is because of what's inside—namely, a lot of cigarette advertisements. Since cigarette ads generally account for a substantial portion of the magazines' advertising revenues, it's understandable that the editors are reluctant to tell the truth about tobacco.

ACSH last surveyed magazines in the year 2000. There have been some substantive changes in cigarette advertising since then. The year 2000 marked the beginning of anti-tobacco ads placed in a variety of magazines (including those surveyed over the past two decades by ACSH) by the American Legacy Foundation, which was created with funds from the1998 Master Settlement Agreement to promote tobacco prevention and control. In June 2000, Philip Morris announced that it would be pulling cigarette ads from forty-two magazines, specifically those with two million or more readers under eighteen or with a teen readership of greater than fifteen percent. Included on the list were several magazines used in ACSH's surveys. This action was in response to accusations that it violated provisions of the Master Settlement Agreement by continuing to market tobacco to kids. Other tobacco companies, such as R.J. Reynolds,

refused to follow the Philip Morris lead, claiming that restricted advertising would not impact youth smoking.

It will be interesting to see how the reduction in cigarette advertising will affect the future editorial content of women's magazines. There is reason to believe that the reporting on the dangers of cigarette smoking will improve now that there are fewer cigarette ads and more anti-smoking ads. For example, the March 2002 issue of *Self*—which had run twelve tobacco ads in the previous survey period—contained a two-page article on smoking cessation (that issue did not contain any tobacco ads). A review of the 2001 issues of *Woman's Day* (there are eighteen issues per year)—conducted specifically for this testimony—shows twenty-two tobacco ads, four anti-tobacco ads, and at least a few articles mentioning smoking's role in lung cancer, stroke, osteoporosis, and unhealthy skin. In the previous one-year survey, *Woman's Day* had a total of thirty-nine cigarette ads, no anti-tobacco ads, and one anti-smoking article.

While the coverage by women's magazines of the dangers of cigarette smoking may improve—that is yet to be seen—we must recall the astonishing blackout on coverage documented by the ACSH surveys from 1965 to 2000. Women who are now in their mid 50's and are being diagnosed with lung cancer, emphysema and more from smoking, are the same women who were reading magazines in the 1960s and 1970s, which intentionally withheld and distorted the health risks of smoking—while using their pages to promote cigarettes as glamorous, sexy—and yes, safe.

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APPENDIX 1

You've Come a Long Way . . . or Have You?
Popular Women's Magazines Are Still Downplaying the Risks of Smoking

by Alicia Lukachko, M.P.H. and Elizabeth M. Whelan, Sc.D., M.P.H., M.S.
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Executive Summary

The National Health Council reports that 35 per-cent of American adults of both sexes rely on magazines for health news. Each month, millions of American women look to their favorite women's magazines as primary sources of health information. This is not surprising: Many consumer magazines devote whole sections of each issue to health topics, and their editors sift through mountains of medical news to bring their readers stories that are both catchy and easy to understand. But in the editorial pursuit of novelty, some important health messages—particularly about the risks of smoking—are often overlooked.

For years the American Council on Science and Health (ACSH) has surveyed the accuracy and relevance of the health and smoking coverage in 13 popular women's magazines. * Over the past decade these surveys have noted significant improvements in the magazines' overall health coverage. Today's women's magazines focus less on hyperbole-laden exposés of oddball health scares and more on major causes of disease and death. Blatant promotions of smoking have faded, while mentions of smoking's dangers have increased dramatically. Such mentions were virtually absent 10 years ago.

Despite this progress, however, ACSH's most recent two-year survey (covering the May through September issues of 13 different magazines in both 1997 and 1998, for a total of 130 individual issues) found that popular women's magazines continue to downplay the hazards of cigarette smoking. When com-pared to the ample spreads given over to such health topics as nutrition and exercise, the space devoted to information about smoking is glaringly scant.

ACSH's latest survey found a decline of more than 50 percent from spring-summer 1997 to spring-summer 1998 in the number of antismoking messages the women's magazines published. (For purposes of the ACSH survey, an "antismoking message" is defined as an article or a mention that discourages smoking. An "article" is defined as a piece of writing that generally exceeds 150 words. A "mention" is defined as a few isolated lines or an editorial comment about smoking that occurs in an article or editorial on a subject other than smoking.)

Smoking is the leading cause of preventable death in the United States today, yet articles about tobacco made up fewer than 1 percent of all the health-related articles in the magazines surveyed in 1997–1998. During this period only one out of 519 health-related articles in the 13 magazines surveyed featured smoking. In contrast, 53 articles—roughly 10 percent—focused on nutrition. Eating a balanced diet is, of course,

an important aspect of maintaining one's health, but warnings about smoking certainly deserve at least as much space as tips on good nutrition.

On the whole, women's magazines send mixed signals about smoking. ACSH's latest survey found relatively few antismoking messages, and the messages that were found were undermined by the magazines' general lack of information on tobacco risks. In some cases, magazines offered inappropriate and unscientific recommendations with regard to tobacco; in other cases, articles about tobacco-related diseases de-emphasized or neglected the role played by smoking.

But far more disturbingly, most popular women's magazines continued to advertise tobacco products even as the magazines' editors proclaimed a commitment to their readers' health. On average, the magazines surveyed carried about three cigarette ads per issue, for a total of 399 such ads over the two 5-month periods covered. In 1997 cigarette ads outweighed antismoking messages by a ratio of six to one; in 1998 that ratio almost doubled, to a rate of 11 cigarette ads for every mention of smoking's risk.

Women's magazines' juxtaposition of tobacco ads with antismoking information may weaken the potentially powerful health messages the magazines' editors seem to want to convey. One page warns readers about the perils of smoking; the next promotes cigarettes. The hypocrisy of magazines' advocating healthy lifestyles while continuing to advertise cigarettes compromises not only the health of America's women, but the credibility of their favorite magazines.

Introduction

The American Council on Science Health (ACSH) has been playing "visitor from Mars" again: posing as a recently arrived, health-conscious "E.T." who decides to survey the contents of America's women's magazines to learn how to prevent premature disease and death. As in previous surveys, ACSH has examined how 13 popular women's magazines choose to address the issue of smoking and health. This latest study indicates that while women's magazines are editorially unequivocal about certain topics (the benefits of low-fat diets and exercise, for example), they continue to downplay the dangers of smoking.

Methods

ACSH's latest survey covered two 5-month periods: May through September 1997 and May through September 1998. The study involved the following magazines: Cosmopolitan, Elle, Family Circle, Glamour, Harper's Bazaar, Ladies' Home Journal, Mademoiselle, McCall's, New Woman, Redbook, Self, Vogue and Woman's Day.

In an attempt to include a broad spectrum of magazines and readers in the survey, ACSH sampled a wide variety of women's magazines aimed at different reader-ships. The magazines surveyed varied greatly in terms of total numbers of female readers, from a low of about 2.5 million women (Harper's Bazaar) to a high of about 23 million (Family Circle). The median ages of readers ranged from a low of 27 (Mademoiselle) to a high of 46 (Ladies' Home Journal). In all, 130 individual issues were analyzed. (See Table 1, page 22.)

Assessing the quality of the health coverage in these magazines is not simple. Women's magazines present health issues to their readers in a variety of ways, using forms that differ from traditional self-contained, bylined articles running several columns or pages in length. These magazines frequently offered their health information in snippets: as factoids, sidebars, and short pieces running to only a few paragraphs—even to only a few sentences. This survey was not designed to deter-mine the relative impact of such varying formats on the average reader.

In all the magazines surveyed, information about smoking was usually offered in short forms; often, only in what this survey has defined as a "mention"—a one-or two-line item or a passing comment about smoking in an article on a topic other than smoking. For the purposes of the survey—and to account for the fact that most of the smoking information presented in these magazines came in shorter forms—the term "article" is used to refer both to traditional articles and to shorter pieces (generally those exceeding 150 words) that focus on the topic specified (e.g., either the general subject of "health" or a more specific topic, such as "heart disease"). "Mentions" of smoking, as defined above, were counted separately. Finally, any "article" or "mention" that served to discourage smoking was considered an antismoking "message."

In tabulating cigarette ads for the survey, every full page of cigarette advertising was counted as one ad. Cigarette ads spanning two or more pages thus were counted as two or more separate ads.

General Health Coverage

A Commitment to Health

Each of the 13 magazines surveyed showed an editorial commitment to health. All had clearly identified health sections and regularly ran numerous, easy-to-read, health-focused articles. The regular health sections in these magazines bore such headings as "Health and Fitness" (Glamour and Cosmopolitan); "Wellness" (New Woman) and "Your Body" (Mademoiselle). (See Table 2, page 22.)

The average number of health-related articles per issue for the periods of May through September 1997 and May through September 1998 was approximately eight; the total number of health-related articles in all magazines for the two 5-month periods surveyed was over 1,000 (see Table 3, page 23).

Over the two periods surveyed, Self and Glamour ran the greatest number of health articles, with 10-issue totals of 172 and 167, respectively. At the other end of the spectrum, Harper's Bazaar ran the fewest health articles—a mere 23 over the ten issues studied. But regard-less of the variations in the numbers of health articles carried by individual magazines, the issue of women's health appeared to be a priority for all.

Given popular women's magazines' apparent commitment to health, one would expect them to cover the major causes of morbidity and mortality among their readers—to run articles on such topics as heart disease, cancer, stroke, respiratory disease, and motor-vehicle accidents. And, because these magazines tend to pay particular attention to disease prevention, one would also expect them to focus on the leading preventable causes of premature death.

According to the Centers for Disease Control and Prevention (CDC) and other health authorities, cigarette smoking is the principal cause of preventable death in the

United States today. Abuse of alcohol and other drugs, neglect of preventive care, inappropriate treatments, and various lifestyle factors such as reckless driving and promiscuous sexual behavior are other leading preventable causes of premature death. But although American women's magazines have improved the quality and scope of their health reporting over the years in which ACSH has been conducting its surveys, the magazines still fail to accurately reflect current public health statistics in the health-related topics they choose to cover.

Health Hyperbole

Previous ACSH surveys noted a tendency in women's magazines to shun coverage of leading causes of death and well-established preventive measures in favor of covering hyped health risks. A 1992 ACSH survey criticized women's magazines for exaggerating the seriousness of such "threats" as cancer-causing electromagnetic fields around alarm clocks and refrigerators; the emission of radiation by computers; dangerous thrill rides at amusement parks; and, yes, the weather.

Such sensationalized health coverage can still be found from time to time in current issues of women's magazines. This latest survey unearthed articles that alarmed readers about such rare or purely hypothetical risks as

- the biological hazards of indoor air (May 1997 Self);
- hair-washing injuries (May 1997 Glamour);
- lead contamination from hair dye (June 1997 Self);
- lightning strikes and wild-animal attacks (August 1998 Ladies' Home Journal);
- increased lung-cancer risk from breathing diesel fumes (September 1998 McCall's);
- miscarriages associated with organic chemical contaminants—trihalomethanes (THMs)—in tap water (July 1998 Redbook);
- the hazards of sex in a hot tub (July 1997 Glamour); and—Deborah Kerr and Burt Lancaster take note—
- the hazards of sex on the beach (July 1998 Glamour).

Getting Better, but Room for Improvement

Sensational health stories aside, the magazines studied in this survey offered sound coverage of many timely and relevant health issues. Articles discussed heart disease, cancer, osteoporosis, asthma, and alcohol-related illness. Several magazines accurately covered such current health debates as the controversy over food irradiation; the now-banned combination diet pill "fen-phen" (fenfluramine plus phentermine); the popular anti-impotence drug Viagra; and tamoxifen, a "designer estrogen" recently approved by the U.S. Food and Drug Administration to lower the incidence of breast cancer. The women's magazines surveyed also stressed the importance of healthy behavior, advising readers to eat a varied diet, to get preventive screening for disease, to exercise, to practice safe sex, and to use seat belts. Articles routinely highlighted the dangers of excessive sun exposure, drunk driving, and the failure to wear bicycle helmets.

Some topics received heavy coverage to the exclusion of other important health stories, however. The magazines surveyed devoted article after article to premenstrual syndrome (PMS); to the benefits of vitamin supplements; to alternative medicine; and to

such evergreen women's-magazine staples as headaches, stress, and weight loss. Yet heart disease, the leading killer of American women, was relegated to a few meager moments in the spotlight. Of 519 health-related articles published over five months in 1998, only 10 were about heart disease (see Table 4, page 24).

In the same months of May through September 1998, there were 20 articles on breast cancer but only two on lung cancer (see Table 4). Breast cancer strikes 180,000 women each year, more than any other cancer. It is, without question, an important women's health issue. Nevertheless, lung cancer, not breast cancer, is the leading cause of cancer death among American women. In every year since 1987, more women have died from lung cancer than from breast cancers.[1] And lung cancer mortality rates for women continue to increase.[1] In spite of these sobering—and readily available—statistics, however, the magazines surveyed rarely discussed lung cancer.

The Division of Cancer Prevention and Control of the National Cancer Institute (NCI) reported findings similar to ACSH's in a 1997 study assessing cancer coverage in women's magazines. The NCI study concluded that women's magazines' cancer coverage "focused mostly on breast and skin cancers and neglected two very important cancers—lung and colon."[2]

Cigarette smoking also received relatively little coverage in the women's magazines surveyed by ACSH. In 1998 the number of articles on nutrition was 53 times greater than the number of articles on tobacco (see Tables 4 and 5, page 24). In view of the many illnesses related to tobacco use, one would think that warnings about the dangers of smoking would be at least as important to these magazines' health-conscious editors as recommendations for a good diet.

Coverage of Cigarette Smoking: One Step Forward, Two Steps Back

Risks and Rates of Cigarette Smoking

The CDC estimates that cigarette smoking—America's leading cause of preventable death—claims over 430,000 lives per year in the U.S. alone. One fifth of all deaths from heart disease (the leading cause of death among both men and women) result from tobacco use. Smoking accounts for about one third of all cancer deaths and is the single most important cause of lung cancer: Eighty-seven percent of lung cancers are caused by smoking. Smoking also contributes to many other malignancies, among them tumors of the bladder, esophagus, larynx, mouth, and pancreas.[1]

Although the prevalence of adult smoking has dropped significantly since the 1960s (from 42% then to 25% today), the rate of decline has slowed over the past decade. Today, roughly 23 percent of all women smoke; according to the National Health Interview Survey (NHIS), the highest percentage of use (26.8%) is among women aged 25 to 44. Also, according to the Youth Risk Behavior Surveys (YRBS), cigarette use among high school students increased by 32 percent between 1991 and 1997.

The American Lung Association notes that women who smoke are 12 times more likely than nonsmoking women to die prematurely from lung cancer. Each year, smoking is implicated in approximately 70,000 respiratory system–related cancers in women.[1] And tobacco use is a significant risk factor in several other diseases and complications that primarily affect women, notably osteoporosis and infertility.[3]

One Step Forward: Reporting on Smoking Risks

Compared to past ACSH surveys that reported a complete absence in the magazines studied of information about the hazards of tobacco, this survey revealed what appears to be a positive trend in women's magazines toward greater and more accurate reporting of smoking risks. The latest ACSH survey found a total of 54 antismoking messages over the two 5-month periods studied (See Table 6, page 25).

In 1997 and 1998 women's magazines generally refrained from blatantly promoting tobacco in editorial copy and graphics. Previous ACSH surveys (1992 and 1996) had noted several articles or fashion spreads featuring photos of models smoking cigarettes. Such examples appear to be dwindling but have not disappeared entirely: In its July 1998 "fitness" issue Elle managed to glamorize smoking in two articles. The first included a picture of a popular female comedian who—as Elle took pains to inform its readers in a caption—needs "nicotine to relax." The second, an intimate interview with actress Minnie Driver, offered readers an enticing description of this potential role model ritualistically lighting up a cigarette.

Studies have shown that the inclusion of cigarettes in fashion spreads causes young people who view these lifestyle-fantasy images to associate smoking with attributes that they value. Furthermore, the seemingly nonchalant inclusion of smoking in such pictures validates young people's belief that smoking is a normal part of everyday life.4 And this finding may not be limited to "young people": It seems very likely that people of any age can be influenced by the perceived behavior of celebrities they admire.

On a more positive note, many of the magazines surveyed responsibly identified smoking as a risk factor for serious health conditions. Readers were told of the relationship between smoking and

- heart disease (May 1997 McCall's; July 1997 Self; June 1998 Family Circle; August 1998 Family Circle);
- lung cancer (June 1998 McCall's; August 1998
- Mademoiselle; September 1998 McCall's);
- colorectal cancer (May 1998 McCall's);
- cancers of the esophagus, bladder, kidney, and pancreas (August 1997 Woman's Day);
- lung disease (September 1998 Self);
- osteoporosis (June 1997 Woman's Day; August 1997 Cosmopolitan; July 1998 McCall's);
- depression (August 1998 Self);
- infertility (July 1998 Self);
- low birth weight and infant death (September 1997 Glamour);
- breech birth (May 1997 Glamour);
- sleep apnea (June 1997 Vogue; June 1997 Ladies' Home Journal);
- asthma (September 1997 New Woman);
- headache (June 1997 Woman's Day);
- vision problems (September 1998 Self);
- cramps (May 1997 Self);
- allergies (May 1997 Woman's Day; June 1997 Woman's Day);
- gum disease (June 1997 Elle);
- premature aging (June 1997 Mademoiselle); and

• premature death (June 1997 McCall's; May 1998 Woman's Day).

Several magazines offered tips and encouragement to readers trying to quit smoking (May 1997 Glamour; May 1997 New Woman; June 1997 Mademoiselle; September 1998 Family Circle). One article, in the July 1997 issue of Self, condemned cigarette manufacturers for targeting women and urged the preventive-medicine community to develop antismoking campaigns geared toward young women.

Among the relatively few articles specifically about tobacco, several deserve to be singled out for their strong antismoking statements. In August 1998 Mademoiselle ran a short piece entitled "Lung Cancer Is a Woman's Disease." The article addressed the misconception—held by many Americans—that breast cancer is the leading cause of cancer death among women. Mademoiselle gave its readers the relevant lung cancer/smoking statistics and advised women to "kick the habit" because this real leading cause of women's cancer deaths is highly preventable.

In September 1997, in an article called "Who Said Cigars Were Cool?", Vogue urged its readers to ponder the following before joining the rush to light up a newly trendy cigar: "cancer, heart disease, brown teeth, bad breath, wrinkled skin and looking really silly." Two things stood out about this piece. It was noteworthy, first, that Vogue chose to devote a full page to an article about smoking, making this piece exceptional for its length as well as its message. It was also noteworthy, however, for an unfortunate omission: The article's health warnings stopped with its condemnation of cigars. The piece ignored cigarettes, the form of smoking most hazardous to women.

Two Step Back: Mixed Messages About Smoking

On the whole, the women's magazines covered in this latest survey tended to send mixed messages about cigarette smoking. The magazines provided readers with relatively little information about the dangers of smoking, downplayed or overlooked smoking's role in tobacco-related diseases, and sometimes offered readers unscientific and inappropriate recommendations. Furthermore, by accepting and running cigarette advertising, these magazines contradicted their editorial anti-smoking messages.

Scarcity of Information About Smoking

Considering the number of articles these magazines ran on nutrition and health in general, the number of antitobacco messages was meager.

From May through September 1997 tobacco-related articles made up approximately one percent of all health-related articles (six smoking articles out of 552). In the same months in 1998 this already minuscule percentage fell to 0.2% (one smoking article out of 519). Over that five-month period in 1998, the magazines surveyed ran 44 articles on nutrition and only one on smoking—a significant drop in smoking coverage from 1997. The total number of antismoking messages in the 13 magazines over the comparable five-month periods fell 54 percent, from 37 in 1997 to 17 in 1998. (See Tables 5 and 6, pages 24 and 25.)

As mentioned, full-length articles on smoking—those that ran longer than a few short paragraphs or sentences—were rare. Most of the antismoking messages tabulated in this survey took the form of factoids, snip-pets, and sidebars. Admittedly, it is hard to judge the relative impact of full articles and short-form snippets on readers. But the fact

that these magazines rarely bothered to devote more than a few lines to smoking seemed to say, however implicitly, that tobacco is not a leading threat to women's health.

Neglect or De-emphasis of the Role Smoking Plays in Tobacco-Related Disease

In marked contrast to the many responsible mentions the surveyed magazines made of smoking, several articles neglected or de-emphasized the role of smoking in their discussions of tobacco-related diseases.

An article in August 1998 Vogue failed to mention abstinence from smoking as a factor in the prevention of osteoporosis. (The article did mention increased calcium intake, resistance training, and hormone replacement therapy.) A June 1998 McCall's article discussed ways to pre-vent heart disease and colon cancer, but did not include the simple advice not to smoke. Another McCall's article, in May 1997, cited triggers and treatments for asthma, but ignored the effects of cigarette smoke—a known exacerbating factor for the condition. And an August 1997 Family Circle article about heart disease cited drinking purple grape juice, taking aspirin, and eating a varied diet as preventive measures, but neglected to mention refraining from tobacco.

In other articles, the hazards of smoking, although noted, were downplayed. Apiece in September 1998 Redbook listed the top nine ways to prevent cancer. The article's recommended steps began with consuming less red meat and more fish, eating tomatoes and soy, and using the microwave for cooking. Quitting smoking was mentioned in the fine print of the article's introduction, but that particularly crucial way to prevent cancer was conspicuously absent from the article's boldly featured "Top 9."

Another piece, this time in August 1998 Ladies' Home Journal, opened as follows:

> You've heard the recommendations for preventing heart disease so many times, you can probably recite them from memory: Watch your weight, exercise, don't smoke. . . . All are important, but exciting new research points to ways you can lower your risk even more.

Here, the jaded tone of the prose seemed to trivialize well-established science in favor of sensationalized preliminary studies. LHJ's readers were subtly encouraged to overlook a humdrum litany of healthy behaviors (among them the vital admonition, "don't smoke") in favor of "exciting new research." The lead paragraph further misled LHJ readers by suggesting (erroneously) that by following dietary practices guided by the new research—in this case, research on vitamin E, folic acid, and fish oil—readers could "lower . . . risk even more" than they could by sticking with proven practices.

Unscientific and Inappropriate Recommendations

In some instances articles that discussed the dangers of smoking offered unscientific and inappropriate recommendations to readers.

An article about lung cancer in September 1997 Ladies' Home Journal described the effects of lung cancer on the body and noted that 87 percent of such cancers are caused by a preventable behavior—smoking. The article went on to advise readers that if they must smoke, they should eat carrots.

Some epidemiological evidence has suggested an association between beta-carotene and a reduced risk of lung cancer, but those benefits (if any) would certainly not outweigh the harmful effects of smoking. One large study found, in fact, that ingesting beta-carotene slightly increased the risk of lung cancer in smokers.5

An August 1998 Family Circle article on medical screening discouraged readers from smoking cigarettes before a blood-pressure screening. But this advice, however prudent, missed the obvious point: People should abstain from smoking at all times, not just before a medical screening.

Juxtaposing Cigarette Ads with Antitobacco Messages

A 1998 study by the Society for the Advancement of Women's Health Research reported that 17 of the 21 largest circulation women's magazines carried some tobacco advertising.6 Thus, despite many of these publications' apparent commitment to women's health, they continued to advertise a deadly product—cigarettes. Arrayed around articles detailing the serious health risks of cigarettes were glossy, sexy ads showing healthy-looking people smoking. Such images conflicted with the magazines' antismoking messages and could certainly have confused readers, especially younger ones, about the real dangers of smoking.

Over the two periods covered by the latest ACSH survey, the amount of cigarette advertising varied greatly from publication to publication (see Table 7, page 25). The total number of cigarette ads a magazine ran over one of the 5-month periods ranged from lows of two (Harper's Bazaar, May through September 1997) and zero (New Woman, May through September 1998) to highs of 32 (Cosmopolitan, May through September 1997) and 35 (Vogue, May through September 1998). Over the 10 months studied (May through September 1997 and May through September 1998), the 13 magazines surveyed carried an average of three cigarette ads per issue. Mademoiselle, Cosmopolitan, Vogue, and Glamour ran the most cigarette ads over the survey periods; Harper's Bazaar, Family Circle, and Self were among those that carried the fewest.

The magazines surveyed demonstrated some significant shifts in their tobacco advertising between spring-summer 1997 and the same period in 1998. Vogue's cigarette advertising increased from 21 ads over five months in 1997 to 35 ads in the same five months in 1998. Glamour showed a similar increase, from 21 ads in 1997 to 32 in 1998. But cigarette advertising in other magazines decreased over the same period: Total cigarette advertising in McCall's and Redbook declined by about half.

The cigarette advertising in women's magazines may be undermining the magazines' potentially powerful antismoking messages. Research has shown that women's magazines that carry cigarette ads are less likely to run articles on smoking.4,6 ACSH's survey did not detect the above-mentioned relationship (possibly due to the ACSH survey's relatively small sample size and short, staggered study periods), but the 13 magazines studied clearly promoted cigarette use through the advertisements they ran far more often than they discouraged smoking through their editorial content.

In 1997 the ratio of cigarette ads to smoking messages in the 13 magazines surveyed was 6 to 1 (see Table 8, page 26). By 1998 this imbalance had almost doubled, with tobacco ads outweighing smoking information by a factor of 11 to 1. A 1998 study examining women's magazines and tobacco in Europe also reported that positive images

of smoking in tobacco advertisements were more common in many magazines than coverage of smoking and health.4

Leader of the Pack

On a more positive note, the total number of cigarette ads carried by all of the magazines surveyed (May through September 1997 and May through September 1998) fell by about 14 percent. A single magazine—New Woman—may deserve some of the credit for this decline.

Since Rodale Press bought New Woman at the end of 1997, the magazine has turned away tobacco advertising. Rodale, a publisher of health-oriented magazines and books, says that "it actively practices what it preaches." And, according to publisher Laura McEwen, the tobacco-free New Woman has experienced no negative effects, either financial or otherwise, from its rejection of cigarette ads.

Conclusion

Compared to those of a decade ago, today's popular women's magazines have come a long way in pro-viding readers with sound and relevant health information. Women's magazines routinely run articles addressing leading causes of morbidity and mortality and offer their readers some warnings about smoking risk. Unfortunately, these accomplishments may be diminished by the mixed messages the magazines still send about tobacco. Future researchers might do well to investigate the relative effects that side-by-side cigarette advertisements and antismoking messages have on the women who read these magazines.

The glaring shortage of information in women's magazines about the health effects of smoking and the hypocrisy of these magazines' claiming to promote healthy lifestyles while advertising tobacco are both difficult to dismiss.

Some editors and publishers argue that their readers are already aware of the perils of smoking, so there's no need to "nanny" them. But these same editors continue to run articles on the dangers of obesity, a presumably equally well-known (and well-publicized) risk factor for heart disease, diabetes, post-menopausal breast cancer, and other health problems.

Some publishers hide behind the legality of cigarettes. Yet smoking, regardless of its legal status, remains the leading cause of preventable death in America today. No matter how these publishers may try to excuse their actions, they still can't get around the fact that magazines that accept cigarette ads are promoting a deadly product to their readers.

If magazines really want to promote women's health, they should present the risks of smoking accurately—and they should reject cigarette advertising.

It's that simple. America's women's magazines should follow the lead of New Woman—one of their own—and "kick the habit."

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Table 1: Total Readership and Median Age of Female Readers of 13 Women's Magazines

Magazine	Number of Female Readers (000)	Median Age of Female Readers
Cosmopolitan	12,329	32.4
Elle	3,580	30.6
Family Circle	20,988	45.0
Glamour	10,750	31.3
Harper's Bazaar	2,458	41.6
Ladies' Home Journal	14,855	46.3
Mademoiselle	5,331	27.6
McCall's	14,357	44.4
New Woman	4,215	37.2
Redbook	11,009	41.2
Self	3,994	33.1
Vogue	7,353	33.0
Woman's Day	20,736	44.1

Table 2: Titles of Health Sections in Popular Women's Magazines

Magazine	Title of Health Section
Cosmopolitan	Health and Fitness
Elle	Beauty/Fitness/Health
Family Circle	Beauty, Fashion, Fitness and Health
Glamour	Health and Fitness
Harper's Bazaar	Beauty and Health
Ladies' Home Journal	Health
Mademoiselle	Your Body
McCall's	McCall's Health
New Woman	Wellness
Redbook	Health & Fitness
Self	Mind/Body; Medical; Nutrition; Peak Fitness
Vogue	Health and Beauty
Woman's Day	Health

Table 3: Total Health-Related Articles, May–September 1997 and May–September 1998

Magazine (Ranked by Number of Health-Related Articles)	Health-Related Articles, May–September 1997	Magazine (Ranked by Number of Health-Related Articles)	Health-Related Articles, May–September 1998
Glamour	98	*Self*	99
Self	73	*Glamour*	68
New Woman	56	*New Woman*	63
Ladies' Home Journal	56	*Redbook*	60
Redbook	47	*Cosmopolitan*	38
Cosmopolitan	41	*Family Circle*	38
Family Circle	34	*McCall's*	33
McCall's	32	*Woman's Day*	32
Woman's Day	32	*Ladies' Home Journal*	28
Vogue	26	*Mademoiselle*	20
Elle	25	*Vogue*	15
Mademoiselle	22	*Harper's Bazaar*	13
Harper's Bazaar	10	*Elle*	12
Total	**552**	**Total**	**519**

Table 4: Total Health-Related Articles by Topic, May–September 1998

Magazine	Articles on Heart Disease	Articles on Nutrition	Articles on Breast Cancer	Articles on Lung Cancer
Cosmopolitan	0	3	3	0
Elle	2	1	0	0
Family Circle	2	4	3	0
Glamour	0	5	0	0
Harper's Bazaar	0	1	0	0
Ladies' Home Journal	1	2	2	0
Mademoiselle	0	3	0	1
McCall's	0	4	0	1
New Woman	2	8	5	0
Redbook	0	5	4	0
Self	2	14	2	0
Vogue	0	0	0	0
Woman's Day	1	3	1	0
Total	**10**	**53**	**20**	**2**

Table 5: Smoking Mentions* and Smoking Articles, May–September 1997 and May–September 1998**

Magazine	Smoking Mentions, May–September 1997	Smoking Articles, May–September 1997	Smoking Mentions, May–September 1998	Smoking Articles, May–Septemb r 1998
Cosmopolitan	1	0	1	0
Elle	1	0	0	0
Family Circle	1	0	3	0
Glamour	5	1	0	0
Harper's Bazaar	0	1	1	0
Ladies' Home Journal	3	0	1	0
Mademoiselle	1	1	0	1
McCall's	1	0	3	0
New Woman	2	2	0	0
Redbook	1	0	1	0
Self	6	1	5	0
Vogue	1	0	0	0
Woman's Day	8	0	1	0
Total	**31**	**6**	**16**	**1**

*** A "mention" is defined as a few isolated lines or an editorial comment about smoking that occurs in an article or editorial on a subject other than smoking.**
**** An "article" is defined as a piece of writing that generally exceeds 150 words.**

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APPENDIX 2

Tobacco and Women's Health: A Survey of Popular Women's Magazines August 1999–August 2000

Written for the American Council on Science and Health by Catherine L. Maroney, M.A., M.P.A.

Executive Summary

Many women—young and old—devote a significant amount of time to reading women's magazines. Some turn to these publications for relaxation and/or to review the latest fashions, but others also seek reliable lifestyle and health information. Those seeking medical advice will often depend more on these magazine articles than on their doctors or other healthcare professionals.

Is their trust justified? According to the Centers for Disease Control and Prevention's (CDC) Office of Women's Health, approximately 22 million adult women currently smoke cigarettes and more than 140,000 women die each year from smoking-related diseases. Yet, research has shown that popular women's magazines give little or no coverage to some of the most serious health conditions that result from smoking cigarettes (Whelan, 1996). During the 1970s, the health topics covered in popular women's magazines were found not to include lung cancer or the other myriad dangers of cigarette smoking, despite knowledge that the death rates from lung cancer, emphysema, and heart disease—and the number of women smokers—were all increasing (Weston & Ruggiero, 1985). Popular magazines among African-American women from 1987 to 994 also did not cover tobacco-related cancers (Hoffman-Goetz et al., 1997).

In contrast to the shortage of health articles addressing the negative aspects of smoking, women's magazines were found to carry a high number of cigarette advertisements (Krupka et al., 1990). More disturbing, however, was the apparent message of independence, self-reliance, attractiveness, and leanness of female smokers often portrayed in these advertisements. Additionally, those women's magazines that included cigarette advertisements were reported to have little or nothing to say about the hazards of smoking (Warner et al., 1992).

Thus, the American Council on Science and Health (ACSH) evaluated a representative sample of women's magazines (12 women's magazines with a large female readership for the period from August 1999 through August 2000) to determine the quantity and nature of their health, lifestyle and fitness messages. We used as an indicator the magazines' acceptance of cigarette advertisements. We then assessed the presence of smoking-related messages in their articles and photographs. Finally, we evaluated the quality and nature of the magazines' health messages. Of particular interest was how the magazines' coverage of the profound health problems associated with smoking, especially lung cancer, compared to that of other real or alleged health risks.

The ACSH survey revealed that these women's magazines accepted cigarette advertisements and published many health-related articles, but that the overwhelming majority of these articles focused on fitness, mental health, nutrition, gynecology, and

diet; less than one percent of the health-related articles had an anti-smoking theme. Moreover, there was no shortage of cigarette ads. These findings show the hypocrisy of women's magazines that advocate for healthy lifestyles yet continue to publish cigarette advertisements and fail to provide adequate coverage on the health-related consequences of smoking.

Introduction

The American Council on Health (ACSH) is once again looking at how popular women's magazines address the issue of smoking and health. In past studies, ACSH examined the content of 13 popular women's magazines and found that they sent mixed signals about smoking to their readers. On one hand these magazines appeared to have a commitment to health, yet most published a significant number of cigarette advertisements or neglected to include basic information on the negative health-related consequences of cigarette smoking.

What did magazines tell their readers this time? ACSH evaluated a representative sample of twelve magazines directed at women for the validity of their health, lifestyle and fitness messages. This time, the focus was upon how their coverage of smoking-related illnesses, especially lung cancer, compares to that of other real or alleged health risks.

Methods

ACSH's latest survey covered a 13-month period, from August 1999 to August 2000. The twelve magazines included in the analysis were Cosmopolitan, Elle, Family Circle, Glamour, Harper's Bazaar, Ladies' Home Journal, Mademoiselle, McCall's, Redbook, Self, Vogue, and Woman's Day. These magazines were chosen based on their large numbers of women readers (Table 1) (Papazian, 1997). These magazines were the same magazines included in the previous ACSH study in 1997–1998 except for New Woman, which ceased publication. The median ages of readers ranged from a low of 27 (Mademoiselle) to a high of 46 (Ladies' Home Journal).

A total of 160 individual issues were analyzed out of a possible 166 (96 percent). The 6 issues not analyzed were unavailable through either public libraries or the respective magazine's back issue department and did not introduce bias to the study. Among the 12 magazines included in the study, 10 publish 1 issue per month, while Woman's Day and Family Circle publish 2 issues during the months of September, November, February, April, and June, and 1 issue for each of the remaining months.

Health information in these magazines was offered in a wide variety of forms, including one-line mentions, short articles of a few paragraphs, and lengthy, in-depth pieces. For each magazine, ACSH counted the number of health-related articles, flagging those that focused on the effects of smoking. Any health information given in less than a page was deemed a "short article," while any health-related article of a page or longer was a "long article." Health articles that covered the negative aspects of smoking, such as lung cancer, were included in the totals for both health-related articles and anti-smoking-related articles.

ACSH also counted any mention of smoking in articles that were unrelated to health. These were called "smoking mentions" and were further classified as pro-smoking (such as reference to an actor's chain-smoking habit) or anti-smoking (such as

an admonition to quit smoking in an article about dermatology and wrinkles). Any pictures of famous people and/or models smoking or holding cigarettes were also counted as pro-smoking mentions. The broader term "smoking message" was used to encompass any anti-smoking article and/or smoking mention. Finally, the numbers of cigarette and anti-tobacco advertisements were both counted. For the ads, each full page of advertisement equaled one ad; for example, a two-page spread of a Virginia Slims ad counted as two ads.

During the process of tabulating the health articles, ACSH recorded the main topic for each article. "Fitness" articles included anything dealing with exercise and its health benefits. "Mental Health" articles covered topics such as stress, depression, energy level, and mental illness. "Nutrition" articles encompassed foods for health and supplements, whereas the category "Diet" included articles that were geared towards weight-loss. "Gynecology" articles focused on issues such as contraceptives, sexually transmitted diseases, and sexual health.

Results

Commitment to General Health

The magazines examined in the study were found to be self-committed to general health, but failed to cover the number one cause of cancer death in women: lung cancer.

From August 1999 through August 2000, there were 2,414 health-related articles published among the issues analyzed. The trends across all the magazines include a huge preponderance of information about getting in shape, shedding those unwanted 5 pounds, and sex-related health topics filled with advice on ways to improve your love life. The most frequently covered topics in descending order were fitness (338 articles; 14 percent), mental health (245 articles; 10 percent), nutrition (243 articles; 10 percent), gynecology (218 articles; 9 percent), and diet (168 articles; 7 percent). (See Table 2.)

The magazines often had trivial—or nonexistent—health risks highlighted in their articles, such as the harms associated with consumption of exotic cheese, instead of articles that focused on the more serious health conditions having scientific evidence showing harm.

Although cigarette smoking is the leading cause of preventable premature death in the United States, only 1 percent (24 articles) of all the health-related articles had an anti-smoking theme (see Table 3). Even then, only two of these anti-smoking articles were more than one-page long—"The Killer Cancer Doctors Ignore," appearing in the September 1999 issue of McCall's, and "The Scary Truth About Social Smoking," in the December 1999 issue of Mademoiselle. There was a disparity of anti-smoking articles among the magazines; Self accounted for the majority of the anti-smoking articles (54 percent), while both Vogue and Glamour had none. The rest of the magazines each had one anti-smoking article, with the exceptions of Family Circle and McCall's, which had two each. Regarding cigarette ads, there was an average of 4.5 cigarette ads per magazine issue. In all, only 4 of the 12 magazines published anti-tobacco ads (see Table 3).

Lung Cancer—Not Breast Cancer—is the Leading Cause of Cancer Death among Women

Imprecise coverage of these two health topics may contribute to the misconception that breast cancer, not lung cancer, is the leading cause of cancer death among women. While breast cancer is a serious women's health issue, and the most common form of cancer in American women, it is lung cancer that kills more women than any other cancer. Between the years 1960 and 1996, deaths from lung cancer among women increased by more than 400 percent—exceeding breast cancer deaths every year since the mid-1980s, according to the Centers for Disease Control and Prevention. By the mid-1990s, the American Cancer Society (ACS) estimated that annually approximately 64,300 women died from lung cancer and 44,300 died from breast cancer. According to a 2001 report, Women and Smoking: A Report of the Surgeon General, nearly 68,000 women will die from lung cancer this year—27,000 more than those who will die from breast cancer (http://www.cdc.gov/tobacco/sgr/sgr_forwomen/ ataglance.htm).

In the survey, the most frequently mentioned cancer was breast cancer with 53 articles (see Table 4). Of those magazines that did publish anti-smoking articles, only three magazines mentioned lung cancer. McCall's was the only magazine with a long article specifically on lung cancer, while Family Circle and Ladies' Home Journal were the only other magazines to mention lung cancer. On the contrary, the same number of magazines offered information over the 13 months on how to survive a shark attack. Moreover, in the one long article that discussed lung cancer, the risks associated with smoking seemed to be downplayed. That is, instead of highlighting the 90 percent of lung cancer patients who are smokers, it focused on the 10 percent of patients who are nonsmokers. This type of information conveys the notion that cigarette smoking is not a major risk factor for lung cancer. Thus both the quantity and quality of lung cancer coverage is deficient and may mislead women into believing that it is not as serious a condition as it truly is.

Heart Disease

Inasmuch as heart disease is the number one killer of American women, it is gratifying that compared to previous studies by ACSH, heart disease is receiving better magazine coverage. Five of the 12 magazines had short articles on the topic, with Family Circle tallying nine short articles and Self including 11 short articles. Nevertheless, many people still remain vastly under-educated as to the risk factors and warning signs of heart disease. According to the American Heart Association, smoking more than doubles the risk of a heart attack in both men and women. This fact needs to be emphasized more. ACSH found short articles that recommended lifestyle changes such as eating a healthy breakfast every day, reducing stress, and drinking tea to ward off heart disease. While these may lower the risk of heart attack, one of the biggest factors that contribute to heart disease is smoking. Indeed, not one magazine included a long article on heart disease.

What the Warning Label Doesn't Tell You

When, or if, these magazines included information regarding the health effects of smoking, they typically highlighted lung cancer with the occasional mention of heart disease. There is much evidence, however, that shows cigarette smoking is associated with many other diseases and health problems. Many of these health problems were covered extensively in these magazines, but they failed to disclose that smoking is a contributing risk factor.

According to the ACS, smoking tobacco accounts for at least 30 percent of all cancer deaths. Although approximately 90 percent of lung cancers can be attributed to such smoking, it is also associated with cancer at many other sites: bladder, cervical, esophageal, laryngeal, kidney, pancreatic, and stomach cancer are just some of the smoking-related cancers often overlooked. And it isn't just cancer. Other smoking-related conditions that might develop include chronic bronchitis, emphysema, vascular disease, asthma, cataracts and even the common cold.

Finally, many of these magazines—especially Self, McCall's, and Harper's Bazaar—included articles on infertility and pregnancy. All of the long articles that dealt with these issues focused on expensive, alternative options for when there is difficulty conceiving, including egg donation, in vitro fertilization, and various high-tech procedures. Not addressed among these pages, however, was that fertility rates of women who smoke are about 30 percent lower than non-smokers and that male smokers have been found to have decreased sperm count and impaired sperm motility (ACSH, 1996). Would it not be more responsible for the magazines to educate their readers on factors that may affect their ability to conceive, rather than just offering advice on the expensive alternatives available?

Beauty Secrets for Beautiful Skin

Smoking cigarettes, or just being around those who are smoking, can have negative effects for your skin. First, smoking results in the constriction of blood vessels, thus reducing the amount of blood and nutrients that flow to the skin. Second, the tobacco smoke in the air can irritate the skin's surface and potentially dry it (ACSH, 1996). Both exposures may significantly damage the skin. The consequences include increased wrinkling and a higher risk of psoriasis and, possibly, the development of severe acne.

The magazines covered in this analysis included a substantial number of articles on dermatology, or in the broader sense, skin care: 26 short articles and 15 long articles. "The Doctors' Guide to Great Skin," "Turn Back the Clock," and "Saving Face" were just some of the long articles that had pages of "expert" advice on ways to keep that healthy glow. If you have prematurely aging skin—broken blood vessels around your cheeks or nose, fine lines or a sallow cast to your complexion—Glamour exclaims that you have been "less than religious about applying sunscreen." Other articles, in addition to applying sunscreen, recommended getting 8 hours of sleep a night, drinking 8 glasses of water daily, and eating a balanced diet; none mentioned quitting smoking or reducing exposure to secondhand smoke.

Role Models

It was not uncommon to read an article about a celebrity and learn of his/her thoughts and/or habits concerning smoking. For instance, in Glamour, the television actress Kathy Griffin wrote, "if you are an actress, you're not supposed to eat at all. You're supposed to chain-smoke and drink coffee." In a December 1999 Elle interview with supermodel Milla Jovovich the reader learned that "soap, water, moisturizer, and cigarettes" are her beauty secrets.

These pro-smoking mentions, however, were not limited to the rich and famous. The magazines typically featured articles that provided insight into the minds of the

opposite sex. Under sections that alluded to what men think, messages targeted young women and appeared to encourage them to start or continue smoking as a way to project a sexy and sophisticated image that many men would find more attractive. For instance, in a June 2000 Glamour article a female reader is quoted: "When I noticed a good looking guy fishing for a cigarette, I thought, this is my chance, so I quickly took out a lighter. But since I am not a smoker, it took a few tries for the flame to catch, and I wound up looking like a big dork while he sat there waiting with a cigarette dangling out of his mouth."

In another issue, under a section called "Glamour asks, Men Answer," one male respondent confessed that he found it sexy when his girlfriend blew rings of smoke. In all fairness to Glamour, however, they also asked men, "What makes you lose her number?" and printed the response, "If she smokes. I hate the smell of smoke in women's clothes and hair. How can you get close to someone like that? It's like you're smoking a cigarette when you kiss them."

A Picture is Worth a Thousand Words

Women may find themselves sitting in a waiting room or standing in line at the grocery store with only a limited amount of time available. As a result, rather than becoming engrossed in an article, they merely flip through the pages to glance at the photographs of glamorous models and movie stars. Tobacco advertisements of beautiful women and pictures of celebrities with cigarettes glamorize smoking to magazine readers. Indeed, Vogue had over four times the number of pro-smoking mentions than anti-smoking mentions. Further, all of the pro-smoking mentions in Vogue consisted of pictures of people holding and/or smoking a cigarette. Harper's Bazaar and Elle also contained pictures that portrayed pro-smoking images, but Harper's Bazaar had no space devoted to anti-smoking mentions (see Table 3).

For the period studied, the total ratio of cigarette ad pages to anti-smoking articles was 30:1. Ranking the highest—that is, the worst—was Cosmopolitan, with 128 cigarette ads for every 1 anti-smoking article, followed by Glamour, with 115 cigarette ads and no articles. The only magazine to have slightly more anti-smoking articles compared to cigarette ads was Self (12 cigarette ads). The total average number of cigarette advertisements per month, however, remained steady at 4 or 5, with the exception of a high average of 9 in December 1999 and a low average of 3 in April 2000 (see Table 5).

Making the List

The blatant condoning of cigarette use, in the form of pro-smoking pictures and mentions, has declined from the level seen in previous ACSH studies, but the anti-smoking reporting does not appear to have increased. It is not enough simply to "stay neutral" on this issue—the readers of these magazines need to be informed of the enormity of the health effects of smoking. To avoid this issue, however, is not really to remain neutral; it downplays the importance of abstaining from tobacco, as if it were not an important health factor. Such "non-reporting" is most evident in general health articles, such as how to delay aging and the top 10 ways to live longer or avoid cancer, very few of which mention quitting smoking as one of the "top 10" or crucial factors. For example, Glamour lists "8 Simple Health Savers," that include such advice as taking a calcium supplement and forming a workout clique, but readers are not advised to discard

their cigarettes. In the January issue of Elle, a two-page article encourages its readers to hide from the sun, stop crash dieting, take vitamins, and get to the gym, because these New Year's Resolutions, a "precious few—the kind that can dramatically change the way you look and feel—are worth keeping." On the other hand, Family Circle did include quitting smoking as number 12 under its list of "20 Ways to Add Years to Your Life." We wonder, however, if it would have remained on the list—losing out to eating soy and avoiding unnecessary x-rays—had the list been reduced to 10 rather than 20 ways to add years. In fact, not smoking should be number 1 on all these lists.

Whom Can You Trust?

Congratulate Your "Self"

The lack of serious reporting of the health-related consequences of cigarette smoking sends the message, however implicit, that smoking is not an important issue to the readers of these magazines. Self should be applauded for including at least one (and up to 4) anti-smoking messages in 12 of the 13 issues studied. Out of all the magazines analyzed, Self illustrated the greatest commitment to health by carrying the lowest number of tobacco advertisements and the highest number of anti-smoking messages of all the magazines. In addition to this achievement, the total number of anti-smoking messages compared to cigarette ads in Self magazine was more than double.

While Self illustrated a commitment to health by carrying very little tobacco advertising (0–2 pages/issue) and the largest number of anti-smoking messages of all the magazines, we should encourage them to go further. Just as Self magazine has the "Self Challenge" every year which encourages readers to team up and support each other to change their nutrition and fitness habits over the course of 3 months, they could easily challenge their readers to quit smoking.

Vogue: One Step Forward and Two Steps Back

While magazines such as Self are improving, others, such as Vogue, are regressing. In March 1999, ACSH presented Vogue with the Council's first-ever "Shattering the Smoke Screen of Silence" award for its publication of a feature article criticizing smoking. However, our August 1999 to August 2000 study found over half of the issues of Vogue included pictures of models and/or famous people smoking. There were no anti-smoking articles in any of the issues, and only 3 anti-smoking mentions. Vogue is primarily a fashion magazine with little health reporting; but, when the magazine did cover health issues, the focus was on such topics as breast cancer, eating disorders, fertility, plastic surgery, and dermatology. While these issues are important for the readers of Vogue, smoking is at least as, if not more, important.

A New Era

Coming of Age: Anti-Tobacco Advertisements

This year marked the beginning of anti-tobacco advertisements, in keeping with the tobacco settlement guidelines. In magazines such as the Ladies' Home Journal, which are targeted toward women with children, Phillip Morris ads featuring milk and cookies encouraged smoking parents not to leave cigarettes where their children could find them.

In August 2000, one of these ads was published on the back cover of a magazine. Magazines such as Mademoiselle, which are targeted toward a younger audience, featured ads from thetruth.com, sponsored by the American Legacy Foundation. These hard-hitting ads utilize slogans such as "Tobacco advertising. It's like peer pressure with a $15,000,000 a day budget." While it is not part of this study to determine the impact of these advertisements, it is interesting to note the ratio of cigarette ads to anti-tobacco ads in the few magazines (4 in total) that did carry the anti-tobacco ads. Is an average ratio of 1 anti-tobacco ad to every 32 cigarette ads really enough to catch the attention of young readers?

Hope for the Future

In June 2000, Philip Morris announced it would be pulling cigarette advertisements from 42 magazines: those with 2 million or more readers under 18 or with a teen readership of greater than 15 percent. Included on the list were several magazines used in this study: Cosmopolitan, Elle, Glamour, Mademoiselle, Self, and Vogue. This change was not expected to take place until the October 2000 issue of these magazines. While the average number of cigarette ads per monthly issue dropped from a total average of 6 in August 1999 to 4 in August 2000, it was not a steady decline. Rather, there was a fluctuation during the year with a high average of 9 in December 1999 and a low average of 3 in April 2000. Some researchers have suggested that magazines include a larger number of cigarette ads during the early winter months in order to counter New Year's resolutions to quit the habit (Basil et al., 2000).

It will be of particular interest to see if other tobacco companies follow in the steps of Philip Morris and pull their ads from these magazines. However, a decrease in the number of cigarette ads should not be a reason for magazine editors to decrease the number of anti-smoking articles. Findings from past studies indicate that a decrease in the proportion of magazines accepting cigarette advertising might also result in a decrease in the coverage given to the health-related aspects of smoking (Amos et al., 1991).

Conclusion

In the past, ACSH conducted similar surveys of popular women's magazines. In 1997, ACSH found that cigarette ads outweighed anti-smoking messages by six to one, and in 1998, the ratio almost doubled to eleven to one. Unfortunately, this ACSH study reveals that there was not much improvement by the year 2000: cigarette ads outnumbered anti-smoking messages—which included the new addition of anti-tobacco advertisement —by ten to one. Furthermore, articles about the health effects of tobacco still made up less than one percent of all the health-related articles published.

If magazine editors find ample room to publish articles on staying fit and living a healthy lifestyle, then they should be able to devote some of this space to articles covering the serious health consequences associated with smoking. If not, they should at least mention the hazards of smoking in these health-related articles. Instead, these magazine editors are guilty of both omission and commission. Not only do they not cover cigarette-related diseases; they also edit out articles from where they would otherwise

naturally be, such as in lists of how to live a long and healthy life. Meanwhile, they publish a plethora of cigarette ads and pro-smoking images that glamorize smoking.

This study demonstrates the lack of coverage of lung cancer and other health-related consequences from smoking in popular women's magazines. That these magazines publish a substantial number of cigarette advertisements and health-related articles on various topics, but do not cover the health consequences related to smoking, is a disservice to their readers.

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TABLE 1. Total Readership and Median Age of Female Readers of 12 Women's Magazines (Papazian, 1997)

Magazine	*Numbers of Female Readers (000)*	*Median Age of Female Readers*
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McCall's	14,357	44.4
Redbook	11,009	41.2
Self	3,994	33.1
Vogue	7,353	33.0
Woman's Day	20,736	44.1

TABLE 2. Number of Health-related Articles (Short or Long) for the Five Most Represented Health Topics, August 1999–August 2000

Magazine	*Issues Analyzed*	*Fitness*	*Mental Health*	*Nutrition*	*Gynecology*	*Diet*
Cosmopolitan	13	32	3	5	42	37
Elle	12	4	3	0	5	2
Family Circle	17	19	16	11	5	17
Glamour	13	19	13	16	37	8
Harper's Bazaar	13	10	0	11	4	0
Ladies' Home Journal	13	6	6	13	7	10
Mademoiselle	11	3	4	7	11	2
McCall's	13	12	5	26	4	12
Redbook	13	11	59	10	43	20
Self	13	207	73	142	46	56
Vogue	13	1	2	1	0	1
Woman's Day	16	14	61	1	14	3
TOTAL	**160**	**338**	**245**	**243**	**218**	**168**

***Fitness articles included anything dealing with exercise and its health benefits.**
Mental Health articles included stress, depression, and mental illness.
Nutrition articles included foods for health and supplements.
Gynecology articles included contraceptives, STDs, and sexual health.
Diet articles included weight-loss information.

TABLE 3. Number of Cigarette Ads, Health-Related Articles, and Smoking-related Messages in 12 Women's Magazines, August 1999–August 2000

Magazine	*Issues* Analyzed	*Cigarette* Ads	*Anti-Tobacco* Ads	*Long Health* Articles	*Short Health* Articles	*Anti-Smoking* Mentions	*Anti-Smoking* Articles	*Anti-Smoking* Message	*Pro-Smoking* Mentions
Cosmopolitan	13	128	0	28	176	2	1	3	0
Elle	12	55	0	29	53	4	1	5	5 (1 pictu
Family Circle	17	22	1	83	123	8	2	10	1
Glamour	13	115	0	46	107	3	0	3	1
Harper's Bazaar	13	42	0	18	38	0	1	1	6 (4 pictures)
Ladies' Home Journal	13	43	1	73	105	1	1	2	0
Mademoiselle	11	92	4	30	58	1	1	2	0
McCall's	13	48	0	62	61	5	2	7	0
Redbook	13	39	1	74	183	3	1	4	0
Self	13	12	0	147	642	13	13	26	0
Vogue	13	85	0	34	24	3	0	3	13 (pictures)
Woman's Day	16	39	0	79	141	8	1	9	0
TOTAL	**160**	**720**	**7**	**703**	**1711**	**51**	**24**	**75**	**26**

TABLE 4. Average Number of Cigarette Advertisements in Monthly Issues of 12 Women's Magazines. August 1999–August 2000

Magazine	*8/99*	*9/99*	*10/99*	*11/99*	*12/99*	*1/00*	*2/00*	*3/00*	*4/00*	*5/00*	*6/00*	*7/00*	*8/00*
Cosmopolitan	9	10	8	7	17	8	22	12	6	7	5	12	5
Elle	5	5		3	8	4	7	3	5	3	5	4	3
Family Circle	4	2	3	2	2	1	0	1	1	1	1	0	1
Glamour	8	8	7	8	17	6	5	11	7	8	11	11	8
Harper's Bazaar	5	5	1	3	9	3	3	2	3	2	3	3	0
Ladies' Home J.	5	2	3	3	8	4	3	3	0	4	3	3	2
Mademoiselle	9	8	11	7	11		5	9	3		7	13	9
McCall's	5	3	3	4	11	3	3	3	1	2	4	3	3
Redbook	3	3	3	3	10	3	2	2	2	3	1	2	2
Self	1	1	0	0	0	2	2	2	0	2	0	2	0
Vogue	7	9	5	9	13	5	4	4	3	7	11	3	5
Woman's Day	5	4	1	1	2		2	3	3	3	2	4	4
AVERAGE	**6**	**5**	**4**	**4**	**9**	**4**	**5**	**5**	**3**	**4**	**4**	**5**	**4**

TABLE 5. Ratios of Breast Cancer Articles to Anti-Smoking Articles in 12 Women's Magazines, August 1999–August 2000

Magazine	*Issues Analyzed*	*Breast Cancer Articles*	*Anti-Smoking Articles*	*Ratio*
Cosmopolitan	13	3	1	3:1
Elle	12	0	1	0:1
Family Circle	17	9	2	9:2
Glamour	13	2	0	2:0
Harper's Bazaar	13	4	1	4:1
Ladies' Home Journal	13	4	1	4:1
Mademoiselle	11	0	1	0:1
McCall's	13	4	2	2:1
Redbook	13	8	1	8:1
Self	13	15	13	1.2:1
Vogue	13	1	0	1:0
Woman's Day	16	3	1	3:1
TOTAL	**160**	**53**	**24**	**2.2:1**

Table 6: Total Antismoking Messages (Articles + Mentions), May–September 1997 and May–September 1998

Magazine	Total Antismoking Messages, May– September 1997	Total Antismoking Messages, May–September 1998
Cosmopolitan	1	1
Elle	1	0
Family Circle	1	3
Glamour	6	0
Harper's Bazaar	1	1
Ladies' Home Journal	3	1
Mademoiselle	2	1
McCall's	1	3
New Woman	4	0
Redbook	1	1
Self	7	5
Vogue	1	0
Woman's Day	8	1
Total	**37**	**17**

Table 7: Total Cigarette Ads, May–September 1997 and May–September 1998

Magazine	Total Cigarette Ads, May–September 1997	Magazine	Total Cigarette Ads, May–September 1998
Cosmopolitan	32	*Vogue*	35
Mademoiselle	31	*Glamour*	32
Glamour	23	*Mademoiselle*	31
Vogue	21	*Cosmopolitan*	29
New Woman	19	*Elle*	14
Redbook	18	*McCall's*	10
McCall's	18	*Redbook*	9
Elle	14	*Ladies' Home Journal*	8
Woman's Day	12	*Woman's Day*	8
Ladies' Home Journal	9	*Self*	4
Family Circle	8	*Harper's Bazaar*	4
Self	7	*Family Circle*	1
Harper's Bazaar	2	*New Woman*	0
Total	**214**	**Total**	**185**

Table 8: Ratios of Cigarette Ads to Antismoking Messages, May–September 1997 and May–Septembver 1998

Magazine (Ranked by Number of Cigarette Ads)	Cigarette Ads/Antismoking Messages, May–September 1997	Magazine (Ranked by Number of Cigarette Ads)	Cigarette Ads/Antismoking Messages, May–September 1998
Cosmopolitan	32/1	*Vogue*	35/0
Mademoiselle	31/2	*Glamour*	32/0
Glamour	23/6	*Mademoiselle*	31/1
Vogue	21/1	*Cosmopolitan*	29/1
New Woman	19/4	*Elle*	14/0
Redbook	18/1	*McCall's*	10/3
McCall's	18/1	*Redbook*	9/1
Elle	14/1	*Ladies' Home Journal*	8/1
Woman's Day	12/8	*Woman's Day*	8/1
Ladies' Home Journal	9/3	*Self*	4/5
Family Circle	8/1	*Harper's Bazaar*	4/1
Self	7/7	*Family Circle*	1/3
Harper's Bazaar	2/1	*New Woman*	0/0
Total Ratio	**214/37 = 6:1**	**Total Ratio**	**185/17 = 11:1**

STATEMENT OF
CHARLES KING III, J.D., PH.D.
ASSISTANT PROFESSOR
HARVARD BUSINESS SCHOOL
BOSTON, MASSACHUSETTS

BEFORE THE
COMMITTEE ON GOVERNMENTAL AFFAIRS

SUBCOMMITTEE ON OVERSIGHT OF GOVERNMENT MANAGEMENT,
RESTRUCTURING, AND THE DISTRICT OF COLUMBIA
UNITED STATES SENATE

May 14, 2002

Main Points

- The goal of the national tobacco settlement to reduce the exposure of young people to tobacco marketing has not been met.

- Although the settlement explicitly prohibits targeting youth, young persons continue to be bombarded by cigarette advertising in magazines.

- Magazine advertising represents less than 5 percent of the total marketing and promotional expenditures of the tobacco companies. Yet most of the other 95 percent, which can also be directed at children, is not monitored.

Mr. Chairman and distinguished Members of the Subcommittee:

My name is Charles King III. I am an Assistant Professor at the Harvard Business School. I am here today to talk about cigarette advertising to children.

Reducing cigarette smoking among adolescents is a public-health priority. According to the Centers for Disease Control and Prevention:

1) Approximately 80% of adult smokers started smoking before the age of 18.
2) Every day, nearly 5,000 young people under the age of 18 try their first cigarette.
3) More than 6.4 million children living today will die prematurely because of a decision they will make as adolescents — the decision to smoke cigarettes.[2]

In 1998, the attorneys general of 46 states signed a Master Settlement Agreement with the four largest tobacco companies in United States. The agreement prohibits tobacco advertising that targets people younger than 18 years of age.

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[1] Healton C, Messeri P, Reynolds J, et al. Tobacco use among middle and high school students – United States, 1999. MMWR Morbid Mortal Wkly Rep 2000;49:49-53. Johnston LD, O'Malley PM, Bachman JG. The Monitoring the Future national survey results on adolescent drug use: overview of key findings, 1999. Rockville, MD: National Institute on Drug Abuse, 2000 (NIH Publication No. 00-4690).
[2] Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Tobacco Information and Prevention Source (TIPS), Overview, 2002. (Available: http://www.cdc.gov/tobacco/issue.htm. Accessed: May 9, 2002).

Last year, Dr. Michael Siegel, M.D., M.P.H, of the Boston University School of Public Health, and I published a study in the *New England Journal of Medicine* analyzing the effect of the Master Settlement Agreement on the exposure of young people, 12 to 17 years of age, to cigarette advertising in magazines.[3] Our analysis was based on magazine advertising before and after the tobacco settlement by 15 major cigarette brands in 38 leading national magazines.

What we found was disheartening. The Master Settlement Agreement appears to have had little effect on cigarette advertising in magazines and on the potential exposure of young people to these advertisements in the two years after it was signed.

Our study showed that nearly all the cigarette brands in our sample reached large numbers of young people in United States with their magazine advertisements. "Reach" is a standard measure of audience penetration used in media planning and buying. It represents the percentage of a particular population that has at least one opportunity to see an advertisement in a magazine, not the percentage that actually does see the advertisement. Two years after the settlement, 11 of the 15 cigarette brands studied still reached more than two-thirds of all young people.

Comparing the reach of the three cigarette brands most popular among young people – Marlboro, Newport and Camel[4] – with the other 12 brands in our study, we found that on average these three brands reached a significantly larger percentage of young people. Figure 1 presents the trends in the average proportion of young people reached by magazine advertising for the three cigarette brands most popular among young people and the 12 other brands in 1995 to 2000. In the two years after

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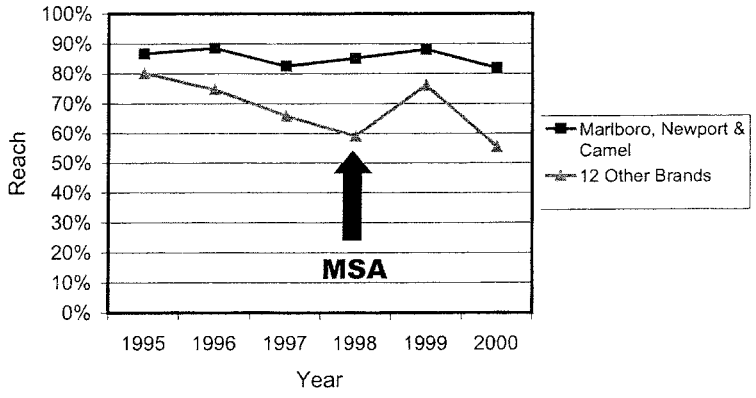
[3] King C, Siegel M. The master settlement agreement with the tobacco industry and cigarette advertising in magazines. N Engl J Med 2001;345:504-511.

[4] According to the 1998 national Monitoring of the Future survey, Marlboro has an average market share among smokers in the 8th, 10th, and 12th grades of 64.3 percent, Newport has 19.1 percent, and Camel has 7.9 percent. These data on brand preferences and market shares were derived the responses of 2048 smokers who were in the 8th grade, 2708 who were in the 10th grade, and 2335 who were in the 12th grade.28. Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. Cigarette brand preferences among adolescents (Monitoring the Future Occasional Paper 45). Ann Arbor, MI: Institute for Social Research, University of Michigan, 1999.

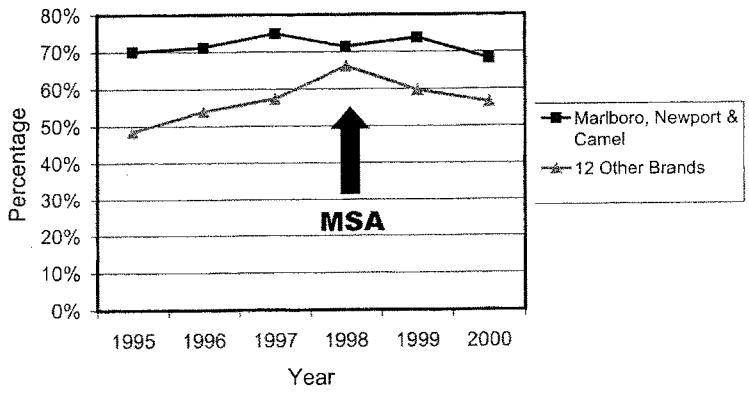
the settlement, Marlboro, Newport and Camel, on average, continued to reach more than 80 percent, or 18.4 million young people.

Figure 1. Trends In Average Number of Young People Reached by Magazine Advertising



We also found that the three brands most popular among young people consistently devoted a significantly larger share of their magazine advertising budgets to youth-oriented magazines. For the purpose of our analysis, we defined youth-oriented magazines as those with more than 15% young readers or more than 2 million young readers. Figure 2 presents the trends in the proportions of expenditures for magazine advertising of the three most popular brands and of the other cigarette brands that were allocated to youth-oriented magazines from 1995 to 2000. During the two years following the settlement, Marlboro, Newport and Camel continued to devote most of their advertising dollars to advertising in youth-oriented magazines.

Figure 2. Trends in the Proportions of Magazine Budget Allocated to Youth-Oriented Magazines



For the 15 brands of cigarettes studied, overall expenditures for advertising in the 38 magazines actually rose 33% percent in 1999, the first year after the settlement was signed, to their highest levels during 1995 to 2000. Despite reductions in the expenditures for cigarette advertising in youth-oriented magazines in the second year after the settlement, the overall level of exposure of young people to this advertising remained high.

The decline in advertising in youth-oriented magazines in 2000 reflects, in part, Philip Morris' decision to discontinue advertising in youth-oriented magazines starting in September 2000.[5] Brown & Williamson also reduced its level of advertising in magazines with a high proportion of young readers, but neither R.J. Reynolds nor Lorillard substantially changed its level of advertising in youth-oriented magazines during the first two years after the settlement. Last month, a California Superior Court began hearing a lawsuit alleging that R.J. Reynolds had violated the

[5] Philip Morris to stop ads in magazines read by youth. New York Times. June 6, 2000:C27. Levin M. Philip Morris will drop ads in magazines read by youths; Tobacco: no. 1 cigarette maker hopes to defuse investigation of its adherence to settlement. Los Angeles Times. June 6, 2000:C3.

Master Settlement Agreement by targeting young people with its advertising.

The voluntary policy adopted by Philip Morris does not appear adequate to protect young people from substantial exposure to cigarette advertising in magazines. If Philip Morris had eliminated youth-oriented magazines for all of 2000, we estimated that Marlboro would still have reached more than 57 percent of young people, or 13.1 million young people, with its magazine advertising.

Finally, magazine advertising remains but one small part – 4.6% – of the tobacco industry's total marketing expenditures of $8.2 billion in 1999.[6] Other marketing tools include coupons, direct mail, Internet advertising, newspaper advertising, point-of-sale advertising, promotional allowances to retailers, sponsorship of public entertainment, retail-value added programs (such as "by one, get one free"), the distribution of samples, and the distribution of specialty items. Many of these promotional techniques have been previously found to have great appeal for young people.[7] Yet most of them are neither measured nor monitored outside the tobacco companies. This makes the Master Settlement Agreement's prohibition against targeting young people difficult to enforce. No effort to reduce smoking among young people will succeed without a complete understanding of the entire marketing mix available to tobacco companies and the ability to monitor it.

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[6] Federal Trade Commission. Federal Trade Commission: cigarette report for 1999. Washington, DC: Federal Trade Commission, 2001.

[7] Hastings G, MacFadyen L. A day in the life of an advertising man: review of internal documents for the UK tobacco industry's principal advertising agencies. BMJ 2000; 321:366-71. Lynch BS, Bonnie RJ, eds. Committee on Preventing Nicotine Addiction in Children and Youths, Division of Biobehavioral Sciences and Mental Disorders, Institute of Medicine. Growing up tobacco free: preventing nicotine addiction in children and youths. Washington, DC: National Academy Press, 1994. U.S. Department of Health and Human Services. Preventing tobacco use among young people: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.

I conclude with three main points:

- The goal of the national tobacco settlement to reduce the exposure of young people to tobacco marketing has not been met.

- Although the settlement explicitly prohibits targeting youth, young persons continue to be bombarded by cigarette advertising in magazines.

- Magazine advertising represents less than 5 percent of the total marketing and promotional expenditures of the tobacco companies. Yet most of the other 95 percent, which can also be directed at children, is not monitored.

Thank you, Mr. Chairman, for this opportunity.

The New England Journal of Medicine

Special Article

THE MASTER SETTLEMENT AGREEMENT WITH THE TOBACCO INDUSTRY AND CIGARETTE ADVERTISING IN MAGAZINES

CHARLES KING III, J.D., PH.D., AND MICHAEL SIEGEL, M.D., M.P.H.

ABSTRACT

Background In 1998, the attorneys general of 46 states signed a Master Settlement Agreement with the four largest tobacco companies in the United States. The agreement prohibits tobacco advertising that targets people younger than 18 years of age.

Methods We analyzed the trends in expenditures for advertising for 15 specific brands of cigarettes and the exposure of young people to cigarette advertising in 38 magazines between 1995 and 2000. We defined cigarette brands as "youth" brands if they were smoked by more than 5 percent of the smokers in the 8th, 10th, and 12th grades in 1998; all others were considered to be "adult" brands. We classified magazines as youth-oriented magazines if at least 15 percent of their readers or at least 2 million of their readers were 12 to 17 years old. "Reach," a standard measure of exposure to advertising, was defined as the number of young persons who read at least one issue of a magazine containing an advertisement for a particular brand of cigarette during a given year.

Results In 2000 dollars, the overall advertising expenditures for the 15 brands of cigarettes in the 38 magazines were $238.2 million in 1995, $219.3 million in 1998, $291.1 million in 1999, and $216.9 million in 2000. Expenditures for youth brands in youth-oriented magazines were $56.4 million in 1995, $58.5 million in 1998, $67.4 million in 1999, and $59.6 million in 2000. Expenditures for adult brands in youth-oriented magazines were $72.2 million, $82.3 million, $108.6 million, and $67.6 million, respectively. In 2000, magazine advertisements for youth brands of cigarettes reached more than 80 percent of young people in the United States an average of 17 times each.

Conclusions The Master Settlement Agreement with the tobacco industry appears to have had little effect on cigarette advertising in magazines and on the exposure of young people to these advertisements. (N Engl J Med 2001;345:504-11.)

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REDUCING cigarette smoking among adolescents is a public health priority.[1,2] Research suggests that the advertising and promotion of cigarettes strongly influence the initiation of smoking.[3-6] Thus, reducing the exposure of children to cigarette advertising is important. There is evidence, however, that cigarette companies may have targeted young people in their magazine advertising[7-22] and that cigarette advertising in magazines is likely to reach a substantial number of young people.[23]

In November 1998, the attorneys general of 46 states signed a Master Settlement Agreement with the four largest tobacco companies in the United States. The agreement states that cigarette companies may not "take any action, directly or indirectly, to target youth . . . in the advertising, promotion or marketing of tobacco products."[24] In June 2000, Philip Morris announced that, beginning in September 2000, it would restrict its cigarette advertising to magazines whose proportion of young readers was less than 15 percent and that had fewer than 2 million readers from 12 to 17 years old.[25,26] R.J. Reynolds declined to adopt a similar policy.[26]

Monitoring and enforcing the tobacco settlement require a careful examination of the trends in cigarette advertising in magazines and the exposure of young people to this advertising. We studied advertising expenditures and exposure before and after the Master Settlement Agreement and evaluated the effectiveness of restricting cigarette advertising to magazines for which young readers represent less than 15 percent of the overall readership and that have fewer than 2 million young readers.

METHODS

Study Design

We conducted separate analyses for advertising expenditures and the exposure of young people to cigarette advertisements. First, we analyzed trends in brand-specific expenditures for advertising in magazines between 1995 and 2000. We classified magazines as either youth-oriented (those for which young readers represented at least 15 percent of the overall readership or that had at least 2 million young readers) or adult-oriented (all others). We also classified cigarette brands as either "youth" brands (those smoked by more than 5 percent of the smokers in the 8th, 10th, and 12th grades) or "adult" brands (all others). Then we compared the trends in advertising expenditures for youth brands of cigarettes with those for adult brands, and we compared the patterns of advertising for these brands in youth-oriented and adult-oriented magazines. We also examined the trends in advertising expenditures by different cigarette companies. Because the Master Settlement Agreement was signed

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in November 1998, expenditures between 1995 and 1998 are referred to as presettlement expenditures, and expenditures in 1999 and 2000 are referred to as postsettlement expenditures.

Second, we analyzed the trends in the potential exposure of young people to brand-specific cigarette advertising in magazines with the use of market-research techniques. We then compared the trends for youth and adult brands of cigarettes before and after the Master Settlement Agreement.

Selection of Magazines

We selected all magazines for which complete data were available on the brand-specific expenditures for cigarette advertising and on the numbers of young and adult readers between 1995 and 2000. The potential sample consisted of the 60 magazines that accept tobacco advertising and for which Mediamark Research (New York) had measured the number of young readers during any year between 1995 and 2000. Twelve magazines were excluded because data were missing on brand-specific advertising for one or more years, nine were excluded because data were missing on young readers for one or more years, and one was excluded because data were missing on both cigarette advertising and young readers. Thus, the final sample consisted of 38 magazines (Table 1).

Selection of Cigarette Brands

We selected all cigarette brands for which complete data on magazine advertising were available for 1995 through 2000 and for which data on the brand preferences among young smokers were available for 1998. We included 15 brands, representing more than 97 percent of the youth market: Basic, Benson & Hedges, Marlboro, Merit, Parliament, and Virginia Slims from Philip Morris; Camel, Doral, Salem, and Winston from R.J. Reynolds; Capri, Carlton, Kool, and Misty from Brown & Williamson; and Newport from Lorillard.

Sources of Data

Competitive Media Reporting (New York) provided estimates of the annual expenditures for cigarette advertising in each magazine for 1995 through 2000, according to the brand of cigarette. These estimates are based on the number of pages of advertising and the price per page set by the magazine, not on the actual cost of the advertising negotiated with a publisher. All advertising expenditures were converted to 2000 dollars with the use of the Consumer Price Index.

Mediamark Research estimated the number of young readers (12 to 17 years old) and adult readers (≥18 years old) for each magazine for 1995 through 2000.

Classification of Magazines

To analyze the effectiveness of restricting cigarette advertising to magazines for which young readers represent less than 15 percent of the overall readership and that have fewer than 2 million young readers, we divided the magazines in our sample into two groups on the basis of these criteria. The Food and Drug Administration originally proposed these criteria,[28] which Philip Morris later adopted.[25,16] We classified the magazines on the basis of the average percentage of young readers and the average number of young readers during the six years of the study. We classified 18 magazines as adult-oriented magazines and 20 as youth-oriented magazines (Table 1). The classification of a magazine as adult-oriented, however, does not indicate that it does not have a substantial number of young readers; many adult-oriented magazines do (e.g., *Time*).

Classification of Youth and Adult Brands

Using the 1998 national Monitoring the Future survey,[27] we classified cigarette brands as youth brands (smoked by more than 5 percent of the smokers in the 8th, 10th, and 12th grades) or as adult brands (smoked by 5 percent or less of the smokers in the 8th, 10th, and 12th grades). On the basis of this criterion, we classified three brands, representing 91.3 percent of the youth market, as youth brands: Marlboro (with an average market share among smokers in the 8th, 10th, and 12th grades of 64.3 percent), Newport (19.1 percent), and Camel (7.9 percent). We classified 12 brands as adult brands: Parliament (with an average market share among young smokers of 1.3 percent), Winston (1.1 percent), Kool (0.9 percent), Basic (0.5 percent), Virginia Slims (0.5 percent), Doral (0.5 percent), Benson & Hedges (0.3 percent), Salem (0.3 percent), Merit (0.2 percent), Misty (0.2 percent), Capri (0.1 percent), and Carlton (0.0 percent). These data on brand preferences and market shares were derived from the responses of 2048 smokers who were in 8th grade, 2708 who were in 10th grade, and 2335 who were in 12th grade.[27]

Estimation of Advertising Reach and Frequency

The research department of Initiative Media North America (Los Angeles) provided estimates of the "reach" and frequency of advertising for each of the 15 brands of cigarettes that were advertised in the 38 magazines in our sample between 1995 and 2000. Reach, the standard measure of exposure to advertising, was defined in our analysis as the number of young people 12 to 17 years of age who read at least one issue of a magazine containing an advertisement for a particular brand of cigarette during a given year.[29-31] Reach represents the number of people who read a magazine carrying an advertisement, not the number who actually see the advertisement.[33,30,31]

Frequency was defined as the average number of times that a young person who was reached by advertising for a particular brand of cigarettes was potentially exposed to the advertisement during the year.[29-31] For example, a frequency of 15 associated with a reach of 1 million means that the 1 million young persons who read at least 1 issue of a magazine containing an advertisement for a particular brand of cigarettes read an average of 15 issues of that magazine, each containing an advertisement for that brand of cigarettes. Major companies and advertising agencies routinely rely on estimates of reach and frequency in planning and evaluating advertising campaigns.[30,32]

Effective reach was defined as the number of young persons potentially exposed three or more times to advertising for a particular brand during a given year. The advertising literature suggests that being exposed three times to a given advertisement represents an effective level of exposure,[30,33] but being exposed even once may be effective.[34,35] The cited studies did not, however, measure the effective frequency of cigarette advertising specifically.

Estimations of reach and frequency rely on surveys of the readership of magazines and a computer-generated tabulation of the frequency distribution — the number of readers who are exposed to any given number of issues of any combination of magazines in a given year.[30,32,36-40] To calculate the reach and frequency, Initiative Media used the Interactive Market Systems Modal model.[32] For each magazine in the sample, Initiative Media estimated the annual number of insertions of an advertisement for each brand. Initiative Media then estimated the reach and frequency of each brand on the basis of the brand's schedule of advertising in the 38 magazines and the young readership of each magazine. The estimations accounted for the duplication of audiences both between magazines and between different issues of the same magazine.[30,32,36-40]

RESULTS

Trends in Expenditures for Cigarette Advertising

For the 15 brands of cigarettes we studied, the overall expenditures for advertising in the 38 magazines decreased by 7.9 percent from 1995 ($238.2 million) to 1998 ($219.3 million), increased by 32.7 percent in 1999 ($291.1 million) — the first year after the settlement with the tobacco companies — and returned to presettlement levels in 2000 ($216.9 million).

Expenditures on advertising for youth brands in

TABLE 1. TRENDS IN EXPENDITURES ON CIGARETTE ADVERTISING IN MAGAZINES, 1995 THROUGH 2000, ACCORDING TO MAGAZINE.*

MAGAZINE	AVERAGE PERCENTAGE OF YOUNG READERS, 1995–2000	AVERAGE NO. OF YOUNG READERS, 1995–2000	EXPENDITURES FOR YOUTH BRANDS						EXPENDITURES FOR ADULT BRANDS					
			1995	1996	1997	1998	1999	2000	1995	1996	1997	1998	1999	2000
		millions	millions of dollars											
Adult-oriented magazines														
Ladies' Home Journal	4.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0	8.2	5.9	3.8	3.4	6.7	3.8
Family Circle	4.1	1.01	0.0	0.0	0.0	1.1	0.0	0.0	7.3	8.6	4.6	2.9	6.3	3.3
Better Homes and Gardens	4.2	1.54	1.1	1.8	0.4	1.8	0.2	0.0	9.0	10.3	8.4	7.1	13.4	8.4
Woman's Day	4.6	1.05	2.0	2.0	0.2	2.2	0.1	0.0	10.0	9.5	7.6	4.1	6.8	6.2
McCall's	5.5	0.92	0.6	0.4	0.0	1.3	0.1	0.0	6.2	5.2	5.2	2.9	5.2	5.0
Redbook	6.3	0.85	1.2	0.0	0.0	1.8	0.0	0.0	6.1	2.5	4.5	2.1	5.1	2.2
Time	7.2	1.78	4.7	3.4	2.7	3.7	9.0	9.3	8.8	6.4	4.5	3.7	4.6	4.3
Newsweek	8.0	1.78	0.6	1.1	0.5	0.0	0.2	0.0	5.4	5.4	2.7	3.2	6.4	1.2
National Enquirer	9.4	1.65	0.0	0.0	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.7	2.9
Cosmopolitan	10.4	1.79	4.0	3.6	4.3	5.8	6.3	6.3	6.4	6.2	4.8	4.7	7.7	6.0
Field & Stream	10.6	1.46	3.0	2.7	1.8	1.7	3.2	3.6	4.4	3.2	3.0	3.4	3.9	3.6
Star	11.0	1.04	0.0	0.0	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.6	0.7
Soap Opera Digest	12.8	1.11	0.9	1.4	1.7	1.2	1.3	1.4	2.0	1.5	2.1	2.0	2.9	1.1
GQ	12.9	0.91	1.7	2.6	2.1	2.1	2.3	3.0	1.0	1.1	1.7	2.2	3.1	1.7
Popular Mechanics	13.1	1.40	3.6	1.5	1.4	1.6	1.2	1.2	2.4	1.8	2.4	1.7	3.2	1.8
Ebony	13.7	1.80	0.6	0.3	0.7	0.7	0.6	0.6	1.8	1.8	1.2	1.1	2.2	1.1
Glamour	14.6	1.95	1.7	2.5	2.8	3.8	4.1	4.3	3.2	3.6	3.6	3.8	5.4	3.6
Jet	14.9	1.52	0.4	0.3	0.6	0.4	0.4	0.5	1.0	1.1	0.9	1.1	1.9	1.0
All adult-oriented magazines	9.3	1.35	26.3	23.6	18.9	29.2	29.2	31.7	83.4	74.0	60.9	49.4	85.9	58.0
Youth-oriented magazines														
People	8.5	3.34	11.8	11.1	6.8	9.7	11.9	11.1	19.5	18.8	18.1	17.5	25.1	13.1
TV Guide	12.8	5.75	2.8	3.3	3.0	3.8	2.8	1.9	13.9	13.9	9.2	12.7	19.8	9.0
Self	15.2	0.77	0.2	0.0	0.0	0.0	0.0	0.0	1.0	1.7	1.6	0.7	0.5	0.8
Harper's Bazaar	15.2	0.53	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.8	0.7	0.6	2.1	2.1
Essence	15.6	1.25	0.5	0.3	0.6	0.6	0.5	0.6	1.4	1.5	1.2	1.1	2.7	1.1
Car and Driver	16.4	1.39	2.6	3.1	3.2	2.9	4.3	4.0	1.9	1.5	1.2	0.5	0.6	2.0
Elle	16.7	0.80	1.2	1.0	1.1	1.1	1.3	1.8	0.4	1.7	1.3	1.5	2.5	1.3
Mademoiselle	16.9	1.09	1.3	1.7	2.4	2.3	2.6	2.9	1.4	2.6	2.2	2.2	3.0	2.0
Vogue	17.1	1.84	1.6	1.5	2.1	3.0	3.0	1.9	2.4	2.7	2.6	2.4	3.2	1.3
Outdoor Life	17.2	1.20	1.5	1.6	1.9	1.1	1.2	1.6	1.5	1.6	1.9	1.4	2.4	1.5
Sports Illustrated	17.7	4.95	22.5	16.8	14.3	20.8	23.8	18.5	17.3	18.0	18.4	24.7	27.5	21.3
Motor Trend	18.0	1.27	2.0	1.8	1.7	2.5	2.2	2.9	0.7	2.3	2.7	2.4	3.7	2.0
Premiere	18.6	0.45	0.8	1.3	1.3	1.6	1.4	1.4	1.6	2.1	1.1	0.9	2.0	1.5
Road & Track	18.7	1.13	1.7	1.5	1.5	1.2	2.3	2.1	2.1	1.2	2.1	0.4	1.1	0.3
Popular Science	18.8	1.54	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.1	1.0	1.5	0.4	0.0
Rolling Stone	21.0	2.25	3.7	3.8	4.6	5.4	7.4	6.6	2.5	3.0	5.6	7.9	8.5	5.1
Ski	23.3	0.59	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skiing	24.0	0.57	0.0	0.0	0.2	0.3	0.1	0.2	0.0	0.0	0.0	0.0	0.2	0.3
Hot Rod	25.0	2.14	1.8	1.5	1.6	1.6	2.1	1.6	0.3	0.8	1.0	1.8	2.3	1.8
Sporting News	26.1	1.15	0.5	0.6	0.4	0.5	0.5	0.6	1.0	1.3	0.8	2.0	1.0	1.3
All youth-oriented magazines	18.1	1.70	56.4	50.5	46.6	58.5	67.4	59.6	72.2	77.6	72.5	82.3	108.6	67.6
Total	13.9	1.53	82.7	74.2	65.6	87.6	96.6	91.3	155.5	151.6	133.4	131.7	194.5	125.6
Percentage of total expenditures allocated to youth-oriented magazines	—	—	68.2	68.2	71.1	66.7	69.7	65.3	46.4	51.2	54.4	62.5	55.8	53.8

*Data on expenditures for cigarette advertising were obtained from Competitive Media Reporting. Data on young and adult readers were obtained from Mediamark Research. Young readers were defined as those 12 to 17 years old; adult readers were defined as those 18 years old or older. Youth brands were defined as those that were smoked by more than 5 percent of the smokers in the 8th, 10th, and 12th grades in 1998, according to the Monitoring the Future study.[27] The youth brands we studied were Marlboro, Newport, and Camel. The adult brands were Winston, Parliament, Kool, Basic, Virginia Slims, Doral, Benson & Hedges, Salem, Merit, Misty, Capri, and Carlton. Youth-oriented magazines were defined as those for which young readers made up at least 15 percent of the overall readership, on average, between 1995 and 2000 or that had an average of at least 2 million young readers during this period. Expenditures are expressed in 2000 dollars.

adult-oriented magazines increased by 11.0 percent from 1995 ($26.3 million) to 1998 ($29.2 million), remained constant in 1999 ($29.2 million), and increased by 8.6 percent in 2000 ($31.7 million) (Table 1). Expenditures on advertising for youth brands in youth-oriented magazines increased by 3.7 percent between 1995 ($56.4 million) and 1998 ($58.5 million), increased by 15.2 percent in 1999 ($67.4 million), and returned to a level slightly higher than the presettlement level in 2000 ($59.6 million).

Expenditures on advertising for adult brands in adult-oriented magazines fell by 40.8 percent from 1995 ($83.4 million) to 1998 ($49.4 million), rose by 73.9 percent in 1999 ($85.9 million), and dropped by 32.5 percent in 2000 ($58.0 million) (Table 1). Expenditures on advertising for adult brands in youth-oriented magazines increased by 14.0 percent from 1995 ($72.2 million) to 1998 ($82.3 million), rose by 32.0 percent in 1999 ($108.6 million), and fell to below presettlement levels in 2000 ($67.6 million).

As compared with expenditures during the presettlement period (1995 through 1998), the average annual expenditures in youth-oriented magazines during the two years after the tobacco settlement were 53.8 percent higher for Camel ($20.0 million vs. $13.0 million per year), 8.0 percent higher for Marlboro ($37.6 million vs. $34.8 million per year), and 13.2 percent higher for Newport ($6.0 million vs. $5.3 million per year) (Table 2). The overall expenditures of Brown & Williamson and Philip Morris for advertising in youth-oriented magazines increased from 1998 to 1999 (by 130.8 percent and 16.2 percent, respectively) but then decreased in 2000 (by 76.1 percent and 30.6 percent, respectively) to below presettlement levels (and to the lowest level for the study period for each company). Expenditures by R.J. Reynolds on advertising in youth-oriented magazines increased by 19.1 percent from 1998 to 1999 and decreased by 8.1 percent in 2000 but remained higher than presettlement levels. Expenditures by Lorillard on advertising in youth-ori-

TABLE 2. TRENDS IN EXPENDITURES ON CIGARETTE ADVERTISING IN MAGAZINES, 1995 THROUGH 2000, ACCORDING TO CIGARETTE BRAND AND COMPANY.*

CIGARETTE BRAND OR COMPANY†	EXPENDITURES IN YOUTH-ORIENTED MAGAZINES						EXPENDITURES IN ADULT-ORIENTED MAGAZINES					
	1995	1996	1997	1998	1999	2000	1995	1996	1997	1998	1999	2000
	millions of dollars											
Youth brand												
Camel	9.1	13.4	12.6	16.9	19.6	20.4	3.7	4.8	5.0	4.7	5.7	6.3
Marlboro	41.8	32.2	29.6	35.4	42.1	33.1	20.7	17.5	12.9	20.7	19.8	20.7
Newport	5.5	5.0	4.5	6.2	5.7	6.2	1.9	1.3	1.0	3.7	3.6	4.7
Total	56.4	50.5	46.6	58.5	67.4	59.6	26.3	23.6	18.9	29.2	29.2	31.7
Adult brand												
Basic	10.2	10.6	9.0	11.9	12.4	6.4	3.7	2.6	2.1	2.9	13.5	13.1
Benson & Hedges	4.8	4.2	3.6	3.8	3.8	0.2	12.5	6.5	6.4	7.0	7.3	0.8
Capri	4.6	4.8	2.0	0.0	1.7	0.0	11.2	10.6	6.7	0.0	3.7	0.0
Carlton	2.9	3.4	0.0	0.0	3.7	0.0	8.7	9.4	0.0	0.0	5.9	0.1
Doral	6.3	13.3	9.4	8.3	11.8	12.5	4.4	6.7	9.9	8.1	8.7	5.4
Kool	13.1	12.6	4.5	10.7	15.8	5.8	7.1	4.2	1.0	2.0	4.6	2.5
Merit	9.6	10.2	9.8	8.8	7.9	5.2	13.4	10.9	10.6	10.1	12.7	7.8
Misty	3.2	4.9	4.2	0.0	3.5	0.1	6.1	7.8	6.5	0.0	7.4	0.0
Parliament	2.2	2.5	2.2	2.7	7.8	3.9	0.6	0.6	0.7	0.8	1.3	0.8
Salem	0.6	0.0	0.1	0.8	3.4	2.9	0.5	0.0	0.0	0.0	0.4	1.5
Virginia Slims	8.1	9.1	9.0	8.5	8.7	8.5	12.6	13.9	11.6	11.2	11.9	17.1
Winston	6.5	1.9	18.8	26.8	28.1	22.0	2.6	0.7	5.5	7.4	8.5	9.0
Total	72.2	77.6	72.5	82.3	108.6	67.6	83.4	74.0	60.9	49.4	85.9	58.0
Company												
Brown & Williamson	23.8	25.8	10.7	10.7	24.7	5.9	33.1	32.0	14.1	2.0	21.6	2.7
Lorillard	5.5	5.0	4.5	6.2	5.7	6.2	1.9	1.3	1.0	3.7	3.6	4.7
Philip Morris	76.8	68.7	63.1	71.1	82.6	57.3	63.4	52.1	44.3	52.7	66.5	60.1
R.J. Reynolds	22.5	28.6	40.8	52.8	62.9	57.8	11.2	12.3	20.4	20.2	23.5	22.1
Total	128.5	128.1	119.1	140.7	176.0	127.2	109.7	97.6	79.8	78.6	115.2	89.7

*Data on expenditures for cigarette advertising were obtained from Competitive Media Reporting. Youth-oriented magazines were defined as those for which young readers made up at least 15 percent of the overall readership, on average, between 1995 and 2000 or that had an average of at least 2 million young readers during this period. Youth brands of cigarettes were defined as those smoked by more than 5 percent of the smokers in the 8th, 10th, and 12th grades in 1998, according to the Monitoring the Future study.[27] Expenditures are expressed in 2000 dollars.

†Basic, Benson & Hedges, Marlboro, Merit, Parliament, and Virginia Slims are sold by Philip Morris; Camel, Doral, Salem, and Winston by R.J. Reynolds; Capri, Carlton, Kool, and Misty by Brown & Williamson; and Newport by Lorillard.

ented magazines fell by 8.1 percent in 1999 but increased by 8.8 percent in 2000.

Throughout the study period, tobacco companies consistently allocated to youth-oriented magazines a higher percentage of their expenditures for the advertising of youth brands of cigarettes than of expenditures for the advertising of adult brands (Table 1 and Fig. 1). Between 1995 and 2000, 65.3 percent to 71.1 percent of the expenditures on advertising for youth brands was allocated to youth-oriented magazines, whereas only 46.4 percent to 62.5 percent of such expenditures for adult brands was allocated to youth-oriented magazines.

Trends in the Exposure of Young People to Cigarette Advertising

Between 1995 and 2000, the average proportion of young people in the United States who were potentially exposed to cigarette advertisements in magazines each year ranged from 81.9 percent to 88.4 percent for youth brands of cigarettes and from 55.5 percent to 80.1 percent for adult brands (Table 3). The average proportion of these young people who were reached by cigarette advertisements was higher for youth brands than for adult brands throughout the study period (Fig. 2). The average reach of the advertisements for the youth brands remained relatively stable throughout the study period. The average reach of the advertisements for the adult brands declined by 30.7 percent from 1995 to 2000, despite a substantial increase in 1999.

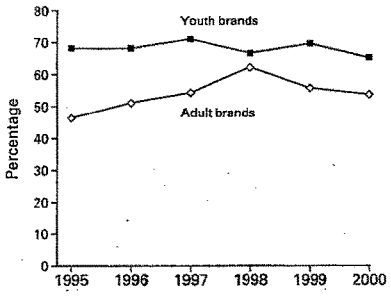

Figure 1. Trends in the Proportions of Expenditures for Magazine Advertising of Adult and Youth Brands of Cigarettes That Were Allocated to Youth-Oriented Magazines in 1995 through 2000.

Data are from Competitive Media Reporting. Adult-oriented magazines were defined as those for which young readers made up less than 15 percent of the overall readership between 1995 and 2000 and that had an average of fewer than 2 million young readers. Youth brands of cigarettes (Marlboro, Camel, and Newport) were defined as those that were smoked by more than 5 percent of the smokers in the 8th, 10th, and 12th grades in 1998, according to the Monitoring the Future study.[27] Adult brands of cigarettes (Basic, Benson & Hedges, Capri, Carlton, Doral, Kool, Merit, Misty, Parliament, Salem, Virginia Slims, and Winston) were defined as those that were smoked by 5 percent or less of the smokers in the 8th, 10th, and 12th grades in 1998. The differences between adult and youth brands were significant ($P=0.001$ by the two-tailed paired-sample t-test).

The proportion of young people reached by magazine advertising for individual youth brands of cigarettes ranged from 75.0 percent to 95.2 percent (Table 3). The overall reach was relatively stable throughout the period for each of the three youth brands.

The proportion of young people who were potentially exposed three or more times in a given year to cigarette advertising (effective reach) for youth brands between 1995 and 2000 ranged from 61.3 percent to 87.9 percent. The average effective reach ranged from 69.4 percent to 77.6 percent for the youth brands and from 40.9 percent to 66.9 percent for the adult brands.

The average frequency of potential exposure to magazine advertising for the three youth brands of cigarettes between 1995 and 2000 ranged from 10.2 to 32.8 per year. The overall average frequency ranged from 16.7 to 25.4 per year for all the youth brands and from 8.0 to 14.7 per year for all the adult brands.

Despite the reductions in expenditures for cigarette advertising, advertisements for individual youth brands of cigarettes reached between 75.0 percent and 87.5 percent of all young people 12 to 17 years of age in the United States in 2000 (Table 3) and reached between 61.3 percent and 77.4 percent of young people at least three times. In 2000, the average number of times a young person was potentially exposed to a magazine advertisement for a youth brand of cigarettes ranged from 12.2 to 21.2. On average, advertisements for youth brands of cigarettes reached 81.9 percent of the nation's young people an average of 17.1 times each during 2000.

The Effect of Restricting Cigarette Advertising to Adult-Oriented Magazines

The average percentage of young readers of the 38 magazines ranged from 4.0 percent (*Ladies' Home Journal*) to 26.1 percent (*Sporting News*) (Table 1). The mean number of young readers of the magazines ranged from 0.45 million (*Premiere*) to 5.75 million (*TV Guide*). Although the average percentage of young readers was about twice as high for the youth-oriented magazines (18.1 percent) as for the adult-oriented magazines (9.3 percent), the absolute difference between the average young readership of the youth-oriented magazines (1.70 million) and that of the adult-oriented magazines (1.35 million) was small.

Our analysis of exposure suggests that although restricting advertising to magazines for which young readers represent less than 15 percent of the overall

TABLE 3. TRENDS IN THE EXPOSURE OF YOUNG PEOPLE TO CIGARETTE ADVERTISING IN MAGAZINES, 1995 THROUGH 2000, ACCORDING TO THE BRAND OF CIGARETTES.*

CIGARETTE BRAND	OVERALL REACH AMONG YOUNG TARGET AUDIENCE											
	ALL MAGAZINES						ADULT-ORIENTED MAGAZINES ONLY					
	1995	1996	1997	1998	1999	2000	1995	1996	1997	1998	1999	2000
	percent of all young people exposed											
Youth brand												
Camel	85.1	84.3	80.4	**78.0**	84.7	83.3	51.8	50.3	**43.2**	34.2	37.1	**35.8**
Marlboro	95.2	93.2	91.4	**91.1**	92.1	87.5	70.6	63.5	**59.8**	60.2	63.0	57.1
Newport	79.4	87.7	75.8	**86.3**	87.2	75.0	38.4	50.2	**25.3**	51.5	60.3	41.2
Adult brand												
Basic	90.7	87.3	83.8	**86.8**	87.1	78.8	50.3	41.6	**33.9**	37.7	52.1	47.5
Benson & Hedges	86.6	84.7	80.9	**83.4**	83.9	28.0	64.6	59.2	**53.7**	55.3	58.9	25.9
Capri	64.6	62.1	53.2	**0.0**	48.3	1.3	50.7	43.8	**40.3**	0.0	31.9	0.0
Carlton	75.3	77.7	0.0	**0.0**	72.7	8.7	54.6	49.5	**0.0**	0.0	43.2	8.7
Doral	77.2	85.2	78.5	**80.0**	84.9	80.5	37.9	40.5	**44.0**	39.8	45.9	34.7
Kool	91.7	89.4	64.4	**86.9**	90.0	71.0	63.5	50.4	**23.1**	35.0	47.9	33.2
Merit	89.3	86.6	87.5	**87.5**	85.8	76.1	67.2	56.9	**58.3**	58.1	62.8	52.7
Misty	76.1	75.8	75.7	**0.0**	71.6	22.7	50.8	46.2	**43.1**	0.0	46.8	2.7
Parliament	72.8	76.4	71.8	**78.6**	80.2	70.7	32.6	29.8	**29.5**	30.9	30.7	26.2
Salem	64.0	0.0	22.5	**33.2**	39.3	68.8	41.6	0.0	**0.0**	0.0	16.7	34.7
Virginia Slims	82.4	82.5	81.0	**81.8**	80.8	74.5	63.2	59.3	**56.9**	55.5	57.5	56.7
Winston	90.8	88.9	90.9	**91.2**	90.0	85.1	62.6	47.5	**49.0**	53.4	51.1	52.7
Average												
Youth brands	86.6	88.4	82.5	**85.1**	88.0	81.9	53.6	54.7	**42.8**	48.6	53.5	44.7
Adult brands	80.1	74.7	65.9	**59.1**	76.2	55.5	53.3	43.7	**36.0**	30.5	45.5	31.3
	millions											
Total no. of young people 12–17 yr old in the U.S. (total target audience)	21.9	22.5	22.5	**22.8**	23.2	23.0	21.9	22.5	**22.5**	22.8	23.2	23.0

*The estimates of exposure were generated by Initiative Media North America with the use of data obtained from Competitive Media Reporting and Mediamark Research and with Interactive Market Systems Modal software. Reach is defined as the percentage of young people 12 to 17 years old who read at least one issue of a magazine containing an advertisement for a particular brand of cigarettes in a given year, on the basis of the sample of 38 magazines included in this study. The number of young people who were potentially exposed can be derived by multiplying this percentage by the total number of young people (reported in the last line of the table). Adult-oriented magazines were defined as those for which young readers represented less than 15 percent of the overall readership, on average, between 1995 and 2000 and that had an average of fewer than 2 million young readers during that period. Youth brands were defined as those that were smoked by more than 5 percent of the smokers in the 8th, 10th, and 12th grades in 1998, according to the Monitoring the Future study.[27]

readership and that have fewer than 2 million young readers would reduce the extent of young people's exposure to cigarette advertising, their exposure would still be substantial (Table 3). On the basis of the 2000 levels of advertising, advertising for Marlboro would still reach 57.1 percent (13.1 million) of the nation's young people, and these young people would potentially be exposed to Marlboro advertisements an average of 8.3 times during the year. Newport advertisements would still reach 41.2 percent (9.5 million) of the nation's young people an average of 9.3 times during the year, and Camel advertisements would reach 35.8 percent (8.2 million) of the nation's young people an average of 5.8 times during the year. On average, advertisements for youth brands of cigarettes would still reach 44.7 percent of the nation's young people 7.8 times per year. Since the analysis assumes that none of the advertising dollars taken away from youth-oriented magazines would be reinvested in adult-oriented magazines, which seems unlikely, our estimates represent an optimistic scenario.

DISCUSSION

The Master Settlement Agreement with the tobacco industry appears to have had little effect on cigarette advertising in magazines. We found that both before and after the 1998 Master Settlement Agreement, tobacco companies consistently allocated to youth-oriented magazines a higher proportion of their expenditures for the advertising of youth brands than of expenditures for the advertising of adult brands and consistently maintained higher levels of exposure among young people to advertising for youth brands than to advertising for adult brands. Despite reductions in the expenditures for cigarette advertising in youth-oriented magazines in the second year after the settlement, the overall level of exposure of young people to this advertising remained high. Although the

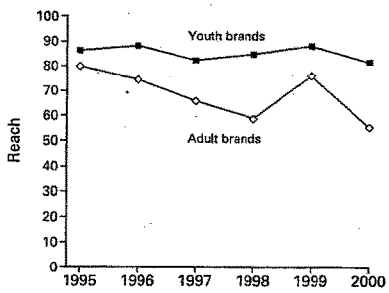

Figure 2. Trends in the Average Proportion of Young People in the United States Reached by Magazine Advertising for Youth and Adult Brands of Cigarettes (Reach) in 1995 through 2000.

Reach is defined as the proportion of all young people 12 to 17 years old who read one or more issues of a magazine containing an advertisement for a given brand of cigarettes during a given year. Data are from Competitive Media Reporting. Youth-oriented magazines were defined as those for which young readers represented more than 15 percent, on average, of the overall readership between 1995 and 2000 or that had an average of more than 2 million young readers. Youth and adult brands were defined as in Figure 1. The differences between adult and youth brands were significant (P=0.004 by the two-tailed paired-sample t-test).

proposed restriction of cigarette advertising to magazines for which young readers represent less than 15 percent of the overall readership and that have fewer than 2 million young readers would reduce the exposure of young people to cigarette advertising in magazines, such a policy, even under the most optimistic assumptions, would not protect young people from substantial exposure to such advertising.

The decline in advertising in youth-oriented magazines in 2000 reflects, in part, Philip Morris' decision to discontinue advertising in youth-oriented magazines starting in September 2000.[25,26] Brown & Williamson also reduced its level of advertising in magazines with a high proportion of young readers, but neither R.J. Reynolds nor Lorillard substantially changed its level of advertising in youth-oriented magazines during the first two years after the settlement. Nevertheless, the voluntary policy adopted by Philip Morris does not appear adequate to protect young people from substantial exposure to cigarette advertising in magazines. Our findings suggest that more stringent policies may be required. Such policies might better be guided by an analysis of the reach and frequency of cigarette advertising rather than by an arbitrary criterion based on the percentage of young readers.

Our results are subject to several limitations. First, we analyzed only a sample of magazines. Several major magazines with substantial readership among young people (including *Spin, Entertainment Weekly, Vibe, Sport, Life,* and *Allure*) were excluded because data on their readers were missing for certain years. Our estimates of both advertising expenditures and the potential exposure of young people are therefore conservative.

Second, our measures of exposure include only the number of young people who saw magazines carrying the advertisements, not the number of young people who actually saw the advertisements. Research has demonstrated, however, that cigarette advertisements contain colorful, attractive, and prominently placed imagery that appeals to young people.[3]

Finally, magazine advertising remains but one small part (4.6 percent) of the tobacco industry's total marketing expenditures ($8.2 billion in 1999).[41] Other marketing tools include coupons, direct mail, Internet advertising, newspaper advertising, point-of-sale advertising, promotional allowances to retailers, sponsorship of public entertainment, retail value-added programs (such as "buy one, get one free"), the distribution of samples, and the distribution of specialty items. Many of these promotional techniques have previously been found to have great appeal for young people.[3,19,42] No effort to reduce smoking among young people or other groups will succeed without a complete understanding of the entire marketing programs of tobacco companies.

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Testimony
Before the Subcommittee on Oversight of Government Management, Restructuring, and the District of Columbia, Committee on Governmental Affairs
United States Senate

The Impact of Smoking on Women's Health

Statement of
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U.S. Department of Health and Human Services

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Good morning, and thank you for inviting me to participate in this panel. My name is Cristina Beato and I am the Deputy Assistant Secretary for Health. Before joining the Department of Health and Human Services (DHHS), I served as the Associate Dean for Clinical Affairs and Medical Director at the University of New Mexico Health Sciences Center.

President Bush and Secretary Thompson have made women's health, prevention, and eliminating health disparities a top priority. As the 2001 Surgeon General's Report on Women and Smoking indicated, smoking-related diseases have truly become a women's health issue. Women who smoke are subject to all the same risks as men, including cancer, cardiovascular disease and chronic obstructive pulmonary disease. In addition, women are also at risk of infertility, adverse reproductive outcomes, altered menstrual function, lower bone density and increased fracture risk. Lung cancer surpassed breast cancer as the leading cancer death among women in 1987. However, we know what works to prevent initiation and promote cessation of smoking, and if we work together, we can achieve the Administration's goals of reducing prevalence of smoking among women to 12 percent or less, and among girls to 16 percent or less.

We have seen some success. The prevalence rate of smoking among women has declined since it peaked at 33.9 percent in 1965. By 2000, smoking prevalence among women was at 21 percent. Most of the decline occurred from 1974 to 1990. While the decline slowed in the early 1990s, rates have begun to decline more rapidly again in recent years. Smoking prevalence is higher among women living below the poverty level - nearly 30 percent - as compared to those above the poverty line- 20 percent. Education level among women plays a key role: among women with 9 to 11 years of education there is 31 percent prevalence; among women with over 16 years of education there is 8 percent prevalence. Prevalence rates among racial and ethnic populations adds another dimension to our need to better understand women and smoking. In 2000, 42 percent of American Indian or Alaska Native women, 22 percent of Caucasian women, 21 percent of African American women, 13 percent of Hispanic women and 8 percent of

Asian/Pacific Islander women were current smokers. The prevalence rates among women are still much too high, but through our expertise, programs and funding we are continuing to work on lowering these prevalence rates.

The Surgeon General's Report on Women and Smoking includes a number of practical recommendations that will move us toward these goals. Today I would like to share with you some of the on-going and planned activities at the national and state levels that are designed to implement these recommendations.

Addressing the burden of tobacco within specific populations is essential if we are to achieve the President's and the Secretary's goals, and eliminate the disparities that exist in tobacco use and tobacco-related diseases. This is one of the reasons why the Surgeon General recommended expansion of the diverse constituency that is working on tobacco issues. Women of all ages, races, and ethnic backgrounds are affected by tobacco. To this end, DHHS has engaged in collaborations with a number of non-profit organizations through the Centers for Disease Control and Prevention's (CDC) National Networks Program. CDC funds, to name a few, the Association of Asian Pacific Community Health Organizations (AAPCHO); BACCHUS and GAMMA Peer Education Network; Employee & Family Resources; The Health Education Council; The Latino Council on Alcohol and Tobacco (LCAT); and the National Hispanic Leadership Network for Tobacco Control. These networks represent eight priority populations to prevent and reduce the use of tobacco and exposure to second-hand smoke. These non-profit organizations reach women and girls, and one organization focuses exclusively on women. In addition, CDC funds seven tribal-serving organizations: Aberdeen Area Tribal Chairmen's Health Board (AATCHB); Alaska Native Health Board (ANHB); California Rural Indian Health Board (CRIHB); Intertribal Council of Arizona (ITCA); Muskogee Creek Nation Northwest Portland Area Indian Health Board (NWPAIHB); and the Inter-tribal Council of Michigan. They have been funded to begin to build capacity in the Native American/Alaska Native community, where the prevalence of tobacco use among women is the highest.

The Surgeon General's Report on Women and Smoking states that success in reducing tobacco use will require implementation of programs that focus on prevention and cessation. Women who stop smoking greatly reduce their risk of dying prematurely, and quitting smoking is beneficial at all ages. The recommendations of the Task Force on Community Preventive Services provide a solid scientific foundation upon which to build our efforts to promote cessation among women. The *Guide to Community Preventive Services* was produced by the independent non-governmental Task Force on Community Preventive Services and staffed by the CDC. The *Guide* recommends several interventions to encourage tobacco use cessation: provider reminder systems alone or in combination with provider education programs, and cessation quitline services are some of the recommended interventions. We know that women are more likely than men to be willing to access assistance when they try to quit, and that using assistance increases the likelihood of success. Therefore, the Department and its partners are working to improve the availability of cessation treatments to all women who smoke. Some states have developed quitlines that are designed to increase access to and reduce the cost of cessation treatments. States also are taking steps to ensure that an increasing number of women have access to these services. Research has demonstrated that behavioral counseling is effective alone and can enhance the efficacy of pharmaceutical treatment; however, rates of utilization of most counseling options have been very low. Experience has shown that smokers are more likely to use a telephone quitline than to attend cessation classes. Telephone counseling is attractive because it is more accessible and private. Telephone counseling has also been shown to reduce ethnic disparities in the use of smoking cessation services. In California, both African American and Hispanic smokers are active participants in the statewide quitline, with the latter especially encouraged by the availability of Spanish language services and materials.

The California Smokers' Helpline was initiated in 1991. The California Smokers' Helpline is available in six languages (English, Spanish, Mandarin, Cantonese, Vietnamese and Korean) and has a TTY line for the hearing impaired. Protocols are tailored to adults, teens or

pregnant callers. The Helpline currently serves about 45,000 callers per year, of whom 34 percent are ethnic minorities. The quitline's protocol has demonstrated its effectiveness through a large randomized trial that indicated that overall the quitline doubled cessation rates. Smokers who received multiple telephone counseling sessions had a higher one-year quit rate than those who received only one session. Other studies have confirmed these results.

Smoking can affect women's ability to get pregnant, increasing their risk of conception delay and infertility. The good news is that smoking among pregnant women has declined from 19 percent in 1989 to 13 percent in 1998. Sadly, that 13 percent means too many pregnant women and girls continue to smoke. Infants born to women who smoke during pregnancy have a lower average birth weight. Women smokers also are less likely to breastfeed their infants. Eliminating maternal smoking may lead to a 10 percent reduction in all infant deaths and a 12 percent reduction in deaths from perinatal conditions. Furthermore, because women are more likely to stop smoking during pregnancy than at other times in their lives, it is vital that we seize this opportunity to reach out to women during pregnancy to assist them in quitting for good.

It is also important to recognize that direct smoking is not the only way in which women are exposed to the dangers of tobacco. The Surgeon General's Report on Women and Smoking concludes that significant, prolonged exposure to environmental tobacco smoke (ETS) is a factor in lung cancer and coronary heart disease among women who are lifetime nonsmokers . Furthermore, infants born to nonsmoking women exposed to ETS during pregnancy have a small decrease in birth weight and a slight increase of intrauterine growth retardation compared to infants of nonexposed women. Some women continue to be exposed to a completely preventable health hazard.

The age of initiation of smoking is an important indicator of smoking behavior. Smoking initiated at an earlier age increases the risk of smoking-related illness or death. The risks associated with smoking at an early age make it imperative that we focus on young girls and make sure they never start smoking.

Comprehensive programming at the state level plays an important role in reducing smoking among women. CDC's "Best Practices for Comprehensive Tobacco Control Programs" provides an evidence-based analysis that can help states determine funding priorities, plan, and execute effective comprehensive tobacco control and prevention programs. Following the start of the statewide tobacco control program in 1989, lung cancer rates among women in California have declined even though they are still increasing for the rest of the country. This decline underscores the importance of investing in tobacco control at the state level. Other states are seeing dramatic results as well. For example, in Massachusetts, rates of smoking during pregnancy have dropped sharply, from a prevalence of 25 percent in 1990 to 13 percent in 1996. Most of the decline occurred after 1992, when the Massachusetts Tobacco Control Program was implemented with funds from an increase of the tobacco excise tax. In comparison, nationwide prevalence of smoking during pregnancy declined much more slowly during the same period. With the support of a dedicated excise tax, Arizona was able to begin funding a comprehensive tobacco control program in 1996 that includes all nine *Best Practices* components. Between 1996 and 1999, smoking prevalence declined significantly in Arizona among all groups including women, Hispanics, and people with low income and low education. Other states are now beginning the process of developing comprehensive tobacco control programs and, as a result, interesting and innovative state-level efforts are beginning to proliferate. I will highlight some of these state-level programs, as I discuss some of the other recommendations in the Surgeon General's Report.

Several of the Report's recommendations focus on increasing awareness of the health effects of tobacco on women and on boosting knowledge that non-smoking is the norm among women. Without increasing this type of awareness, we are unlikely to see expanded efforts that address this growing epidemic at either the individual or the societal levels. In response, DHHS has collaborated with the internet-based services providers Oxygen Network and Thrive Online to develop *Women and Smoking: 7 Deadly Myths*. This 17-minute educational video premiered

in 2001 on Thrive Online and is now available on video. This past fall we released a tool kit that we developed that will accompany the *7 Deadly Myths* video. The tool kit contains materials and ideas to help women's organizations spread the message about women and smoking in a variety of ways. The video, along with the tool kit, has helped women better understand the common myths about smoking and empowers women to stay smoke free.

At the state and local levels, activities designed to promote awareness are increasing. For example, the Wisconsin Tobacco Control Board, drawing on revenue from Wisconsin's settlement with the tobacco industry, funds the Wisconsin Women's Health Foundation to implement the "First Breath" program, which offers counseling to pregnant women at regional Prenatal Care Coordination and the Department of Agriculture's Women, Infants and Children (WIC) sites. The program also includes educational materials, information about how to use the state telephone quitline, and opportunities to join local support groups. Program sites have been established in all regions of Wisconsin, including two tribal clinics. These initiatives are implemented on a pilot basis.

In Washington state, the state tobacco prevention program plans to provide training to Maternity Support Services and WIC staff on providing a brief cessation intervention to pregnant women, including information on reduction of exposure to secondhand smoke and motivational interviewing. The program plans to implement the Tobacco Cessation During Pregnancy performance indicator for all Maternity Support Services staff to ensure that all women enrolled in the Medicaid Maternity Support Services program receive counseling on smoking cessation and on reduction of exposure to secondhand smoke.

DHHS continues to be a leader in tobacco counter marketing efforts, and is pleased to have enlisted the aid of numerous celebrities in our counter-marketing initiatives. This year we unveiled a new poster campaign featuring celebrity spokes-model Christy Turlington. The poster, entitled, "Smoking Is Ugly," illustrates that lung cancer kills more women than breast,

uterine, and ovarian cancers combined. We are also proud of our forthcoming television public service campaign featuring TV star Esai Morales *of NYPD Blue*. This new initiative, which will be launched later this month, will be aimed at decreasing tobacco use in the Hispanic community. Furthermore, Secretary Thompson has urged the entertainment industry to expand its role in discouraging women and girls from smoking:. In a speech before the National Council for Families and Television in January of this year, the Secretary stated, "We need help in reaching our young women with a very simple message: Smoking is not glamorous. Smoking is deadly. We as a society must not glorify smoking. Ever. The televison industry and the federal government can be powerful partners in delivering that messages to women and girls throughout America and around the world."

In conclusion, there are some exciting innovations in tobacco prevention and cessation that have already begun to reap results. However, many challenges remain. Nowhere is this more clear than in the area of research. The National Institutes of Health, and in particular the National Cancer Institute, is leading the research effort for the Department. To move the research effort forward, NCI is working with both public and private partners to set priorities and promote action on effective intervention strategies. These efforts include the Transdiciplinary Tobacco Use Research Centers which are public-private collaborations at seven sites around the country to understand the biological, behavioral and cultural factors that explain why women smoke and how to help them quit. In addition we will encourage the reporting of gender-specific results from studies of factors influencing smoking behavior, smoking prevention and cessation interventions, and the health effects of tobacco use, including new products. The Surgeon General's report reviewed some of the literature on women and smoking, but there is still much more that we need to know.

As the science advances I think it is critical that we continue to address this preventable women's health issue. President Bush, Secretary Thompson, and DHHS with all of our partners can be successful in meeting the challenges ahead. We appreciate your interest in this issue and look forward to working with you. I would be happy to answer any questions.

Statement of Diane E. Stover, M.D., FCCP
On Behalf of the American College of Chest Physicians

Before the Senate Subcommittee on Oversight of Government Management, Restructuring and the District of Columbia

Tuesday, May 14, 2002

Mr. Chairman and members of the committee, good morning. I am pleased to have an opportunity to appear before you today and to address the serious threat posed to women's health by smoking and the marketing efforts of the tobacco industry.

My name is Diane Stover and I am the Chief of the Pulmonary Service and the Division Head of General Medicine at Memorial Sloan-Kettering Cancer Center in New York City. I appear before you today on behalf the American College of Chest Physicians and its philanthropic arm, The CHEST Foundation. The ACCP is a 15,000+ member international multi-specialty medical society comprised of pulmonologists, cardiologists, critical care physicians, thoracic surgeons, and other members of the health care team. We are the physicians who treat people worldwide suffering with various lung diseases – the majority of which are caused by tobacco use.

As a physician working on the front lines, I have seen first-hand how lung cancer can ravage a life – a man's or a woman's. But the number of women we treat is increasing at an alarming rate. In fact the saying "Smoke Like A Man Die Like A Man" is becoming more and more of a reality.

I must confess that I am here today not just as a professional, but also as a parent. Four years ago, as I was driving my thirteen-year old daughter to school one morning, I was absolutely shocked by what I saw. There, standing outside the school were many of my daughter's classmates smoking. These were children who several years before thought it was a disgusting habit and were begging their parents to stop smoking. It was at that moment that I knew what I had to do. It became crystal clear that not only as a physician, but as a parent, I had an obligation to my daughter and to all girls and women to educate them on the devastating and disastrous health impacts of tobacco.

Together with my colleagues at the ACCP, I knew we could take responsible steps to prevent tobacco use early in young women's lives. As a result, in 1997, the ACCP created the *Task Force on Women & Girls, Tobacco & Lung Cancer*. I have chaired this Task Force throughout its five-year existence, whose mission is simply to make women and girls tobacco free.

Smoking-related disease among women truly is a "full blown epidemic."

As cited by the Surgeon General, smoking among high school age girls increased to an alarming 30% during the 1990s. In 1999, nearly 35% of all high school girls were smoking. And why should we care? Because along life's continuum, smoking impairs the ability of girls and women to fully realize their potential – in the classroom, as mothers, in the workforce, and at life's end.

Let me explain. Accumulating data suggest that dose for dose, females are more susceptible than males to the cancer-causing agents in tobacco, putting women at nearly twice the risk of men to develop lung cancer from smoking. In recent years mortality from lung cancer has been declining among men, while for women it is dramatically increasing. We also know that smoking among girls and women causes health problems and diseases specific to women throughout their lives. Allow me to highlight some of these issues for you:

Adolescent girls and young women who smoke have:

- Reduced rates of lung growth;
- Higher rates of asthma;
- Higher rates of wheezing; and
- Menstrual abnormalities (including painful menstruation, lack of menses and menstrual irregularity);

For women of child bearing age, smoking is associated with:

- Reduced fertility (*i.e.*, on the average, it takes about a year longer for a woman who smokes to conceive compared with a woman who does not smoke);
- A greatly increased risk of heart attack and stroke for those who take birth control pills, especially for women over 35 years of age.

During pregnancy, women who smoke are more likely to suffer from:

- Excess bleeding;
- Premature rupture of membranes;
- Abruptio placentae and placenta previa;
- Ectopic pregnancy;
- Spontaneous abortion;
- Premature and difficult labor;

During pregnancy, the fetus of a woman who smokes – or that of a non-smoker who is exposed to second hand smoke – is more likely to suffer from:

- Growth retardation;
- Premature birth;
- Low birth rates;
- Still birth;
- Perinatal death; and
- Negative behavior as a toddler

Women who smoke around their infant children greatly increase the risk that their children will develop asthma, pneumonia, bronchitis, and fluid in the middle ear.

Older women who smoke suffer from early onset of menopause, higher rates of osteoporosis, more facial wrinkling and most worrisome of all, increased incidence of lung cancer and many other cancers. As do men, they have increased risk of heart attacks, with sudden death, strokes and peripheral vascular disease.

As you can see, this is a long list of health problems specific to girls and women, literally from cradle to grave. In response to this horrific epidemic, with the support of the ACCP's philanthropic arm, The CHEST Foundation, the Women's Task Force has launched the following educational initiatives:

- We developed a Speaker's Kit, now on CD-Rom, with an accompanying web site. This versatile educational tool fosters community alliances to address four key audiences: health professionals/lay educators, girls, teens, and adult women;

- We created a Speakers Bureau composed of more than 400 ACCP members who are ready to participate in anti-tobacco efforts across the country and around the world;

- We developed school-based pilot programs in Oklahoma, Florida, and Illinois with the Speaker's Kit serving as the foundation for these programs. In Illinois, for example, we partnered with the Chicago Public Schools and the Chicago Health Corps to educate approximately 1,000 kids in 3rd – 5th grade about the dangers of tobacco use through interactive role playing, discussion, and real examples using a healthy and diseased pig lung!

- Also in Illinois, we're working with the Cook County Department of Public Health on a tobacco prevention program for 2,500 fourth graders in 18 suburban Cook County schools. This initiative has involved teachers, school nurses, children, and parents.

Let me close by saying a few words about smoking cessation programs. There are numerous smoking cessation methods available to smokers who want to kick the habit. These include self-help programs, behavioral modification techniques including the common "cold turkey" method, clinical interventions with both nicotine and non-nicotine replacement therapy, as well as community and educational-based efforts.

Many studies have assessed the effectiveness of smoking cessation programs. We know that quitting has immediate and long-term health benefits for women of

all ages, whether or not they presently have smoking related diseases. The self-help method, or quitting on one's own, is the choice made by most smokers, though the popularity of nicotine and non-nicotine replacement therapy is growing. Studies also show that although there are differences in why men and women smoke there are no major differences between men and women when it comes to the effectiveness of smoking cessation methods.

The Surgeon General's report on women and smoking suggested that the pharmacological approach to quitting is more effective among women smokers, but the report underscored the need for more research to determine the effects of nicotine replacement therapy on pregnant women and their offspring. The American College of Obstetricians and Gynecologists has advised that a 5-step counseling session, together with pregnancy-related educational materials, increases success rates by 30 to 70 percent. ACOG also strongly recommends more research to determine the efficacy and safety of nicotine replacement for pregnant women.

We know that many of these cessation strategies work, but as former Surgeon General Satcher pointed out in his report, we still have a long way to go if we are to meet our public health objectives of cutting smoking in half among women and girls. As he so eloquently put it "we know more than enough to prevent and

reduce tobacco use. Now, we must commit the attention and resources to translate this knowledge into action to save women's lives."

Working with community leaders, the ACCP and The Chest Foundation are proud to be leaders in their field, making significant strides to combat tobacco use among girls and women. I would like to acknowledge this committee's leadership in drawing attention to tobacco use in general – the number one preventable cause of disease worldwide and the number one cause of lung cancer in both men and women.

I'd also like to thank you for raising awareness of this critically important health care issue through today's hearing on Women and Smoking. We are hopeful that with your support, and the support of your colleagues, we can all work together to achieve our common goal – to make our children's futures brighter and healthier.

Thank you again for this opportunity. I would be happy to answer any questions you may have.

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CAMPAIGN for TOBACCO-FREE Kids®

Statement of Matthew L. Myers
President
Campaign for Tobacco-Free Kids

Before the U.S. Senate Subcommittee on Oversight of
Government Management, Restructuring,
and the District of Columbia
Committee on Governmental Affairs
May 14, 2002

Good morning, Mr. Chairman and members of the Subcommittee. My name is Matthew Myers. I am the President of the Campaign for Tobacco-Free Kids, a national organization created to protect children from tobacco by changing public policies to limit the marketing and sales of tobacco to children, and by actively countering the special interest influence of the tobacco companies.

Mr. Chairman, I want to thank you for your continued leadership on the issue of tobacco control. I, and many others, are very grateful for your willingness to stand up for our kids and take on the tobacco companies. You have a long and successful history on this issue. You led the fight to ban smoking on airline flights and most recently you have fought to ensure that the Department of Justice lawsuit against the tobacco companies is aggressively pursued. And there have been many other victories, both large and small, between those two battles.

Today's hearing is another example of your leadership. Tobacco use is a serious women's health issue, with women now accounting for 39 percent of all smoking-related deaths each year, a proportion that has more than doubled since 1965. You are right to recognize that decreasing tobacco use among girls and women would have a profound, positive impact on the health status of women.

My testimony today will focus on the history of tobacco industry marketing to women and girls as well as the latest industry marketing ploys. And I will also

discuss how both an increase in cessation services and FDA regulation of tobacco products can help counter the industry's efforts.

Tobacco Industry Targeting of Women and Girls

For decades, the tobacco industry has targeted women and girls with marketing and advertising. The consequences have been disastrous for women's health – over 178,000 women will die this year of tobacco-caused disease. It is not a coincidence that in 1987, twenty years after the introduction of Virginia Slims and other cigarettes targeted directly at women, lung cancer surpassed breast cancer as the leading cancer killer among women. Smoking is also a major cause of coronary heart disease among women. For many of the diseases caused by smoking, research has shown that women are more at risk than men. And women also suffer gender-specific risks from tobacco, including harm to their reproductive health and complications during pregnancy.

The tobacco companies have long understood the importance of women and girls in the overall market for cigarettes and as a source of new customers. They have conducted extensive market research on the attitudes of women and girls to better understand how to target their products and their advertising. By focusing their research on how females view themselves, their aspirations and the social pressures they face, the cigarette companies have developed some of the most aggressive and sophisticated marketing campaigns in history for reaching and influencing women and girls. The consequences of these campaigns are

staggering. While smoking rates were falling among boys during much of the 1970's they rose among teenage girls. More recently, smoking among girls and young women increased dramatically from 1991 through 1997, and only since then has it begun to tail off. Smoking rates among women over 18 have barely declined over the past 10 years and women are now almost as likely as men to smoke.

The Early Years

Though the slogans have changed over time, the tobacco industry's targeted marketing of women can be traced back to the 1920s. At first, women were depicted in cigarette ads as non-smoking admirers of smoking men but by 1927 advertisements with women smoking began to appear in women's magazines. One of the most famous early cigarette advertising campaigns directed at women was Lucky Strikes' "Reach for A Lucky Instead of A Sweet."

Despite the advent of targeted advertising, smoking among women did not really gain social acceptability until World War II. During that era, cigarette companies began to target women more directly, using the fashion, beauty, and sophistication themes that still continue today. The companies also used images of women in the military and the work place. For example, Camel's ad slogan during World War II was "First in the Service" and highlighted successful women in the military. While these new advertising campaigns focused on women's growing role in the American workplace, they still portrayed smoking as a stylish

and feminine act. This theme of smoking as a way of achieving independence, while at the same time remaining stylish and attractive, became less popular after the war ended, but would later reappear.

The Advent of Women-Specific Brands in the 1960s

The tobacco company's full-scale effort to expand the number of their female customers intensified in the late 1960s. The tobacco companies began to create specific brands of cigarettes for women to capitalize on and associate smoking with the changing role of women in society and an increased desire for independence.

With the introduction of Virginia Slims by Philip Morris in 1968, women became a major target of the tobacco industry. Cigarette ads for this brand portrayed tobacco use as a way for women to express their independence, as well as a way to be stylish and sexy with tag lines such as the infamous "You've Come A Long Way Baby." Sadly, these ads were powerful and successful. Six years after the introduction of Virginia Slims and other brands aimed at the female market, the smoking initiation rate of 12-year-old girls had increased by 110 percent. Increases among teenage girls of other ages were also substantial. Despite Philip Morris' claims that it has changed, the Virginia Slims advertising theme has not changed much since its introduction. After its 1998 settlement with the states, Virginia Slims launched the "Find Your Voice" ad campaign that targeted ethnic women from population groups that have traditionally smoked at

low rates. These ads featured strikingly beautiful women from around the world, once again linking smoking and Virginia Slims to attractiveness. A Philip Morris executive in June 2000 agreed to remove the "Find Your Voice" slogan only after being questioned in the landmark Florida smokers trial about the campaign, but rapidly replaced it with a campaign based on similar themes and messages.

The tobacco companies fully recognized the importance of women and girls as a key to their future success. For example, an internal R.J. Reynolds document stated that "Younger adult female smokers will continue to gain importance among [young adult] smokers due to their stronger incidence trend versus [young adult] male smokers."

As the tobacco companies print ads came under increasing scrutiny, the tobacco companies began to switch how they targeted kids and women. The 1990's has seen an explosive increase in the use of promotional campaigns connected with their advertising messages. These campaigns reinforce the image of smoking being stylish and sexy by offering free merchandise like clothing and CDs, and most recently, spa vacations. Studies have shown that there is a direct relationship between the awareness of and involvement with promotional items and smoking initiation by youth.

Targeting Women with "Low Tar" and "Light" Cigarettes

In the 1950s, realizing that many women were concerned about the long-term health risks of smoking, the tobacco companies began advertising new filters with claims that they would reduce or even eliminate health risks. This was followed in the 1960s by tobacco company campaigns promoting "low tar" or "light" cigarettes to women as a "softer" or even "safer" option. As a 1978 Philip Morris document stated, "Today, women make up the majority of low tar smokers. Almost half of all women have switched to low-tar."

An example of tobacco industry marketing strategy can be seen in the True ad campaign from the 1970s. This campaign, which showed golfers and tennis players as well as young women, read "All the fuss about smoking got me thinking I'd either quit or smoke True. I smoke True. The low tar low nicotine cigarette. Think about it." Concerned about their health, women responded. Today, far more women then men smoke light and ultra-light cigarettes (63 percent of women and 46 percent of men). Women are also more likely than men to switch to light or ultra-light cigarettes.

The cigarette companies continued to market these products despite being well aware that the actual or implied health claims in their ads were either misleading or entirely false. In fact, a National Cancer Institute (NCI) report indicates that the introduction of "lights" did not improve the public health and may have led to an increase in the incidence of disease caused by smoking. That is because the

introduction of lights led many smokers not to quit and smokers of lights to compensate by smoking more, inhaling more deeply or blocking ventilation holes. The NCI noted that there is no evidence that smoking light or ultra-light cigarettes reduces the risk of myocardial infarction, lung cancer or COPD.

Cigarette Company Targeting of Women and Girls Today

The image of smoking being tied to independence, stylishness, weight control, sophistication and power continues today.

Since signing the state tobacco settlement in November 1998, the tobacco companies have sought to convince the public and policy makers that they are now reformed and responsible. A study published in the August 16, 2001, issue of *The New England Journal of Medicine* provided evidence that the tobacco companies have not changed and are violating the promise they made in the settlement to stop marketing their deadly products to children.

As part of the settlement, the tobacco companies promised not to "take any action, directly or indirectly, to target youth." The New England Journal of Medicine study, which examined tobacco advertising in youth-oriented magazines, found that, rather than ending or reducing their advertising in such magazines after the settlement, the tobacco companies continued to advertise at the same or greater levels in 1999 and 2000 for the three brands most popular with youth, Marlboro, Camel and Newport. In addition, the settlement has not reduced youth exposure to advertisements for these brands, with ads for each

brand reaching more than 80 percent of youth in the United States an average of 17 times each in 2000. Even after Philip Morris announced it was cutting back advertising, overall advertising in magazines with high youth readership remained higher then it was before the state settlement.

There is a growing body of evidence that the tobacco companies have systematically violated both the spirit and the intent of the settlement's prohibition on targeting children. Rather than curtailing their marketing and strictly complying with the provisions of the settlement, the tobacco companies have increased their marketing expenditures to record levels, shifted money to forms of advertising and promotion most effective at reaching kids and exploited every loophole in the settlement to continue business as usual. Magazine advertising is but a small part of the industry's overall marketing, and previous studies have shown that other forms of advertising and promotions effective at influencing kids have skyrocketed as well.

The most recent data available from the Federal Trade Commission indicates that in 1999, the first year after the settlement, the marketing expenditures of the tobacco companies actually increased by 22 percent to a record $8.24 billion. Much of this increase was in ways effective at reaching kids, such as high-visibility store shelf displays, discounts on cigarette brands favored by children, offers of a free pack of cigarettes if one was purchased and free gifts such as hats and lighters.

In addition to these concerns about industry marketing practices, we know that some newly introduced products are being touted as "reduced risk" and we expect that they will disproportionately affect women, just as "low tar" and "light" had the greatest impact on women who were concerned about the health risks of smoking. Brown and Williamson is marketing Advance cigarettes with the slogan "All of the taste... Less of the toxins" and Vector Tobacco has embarked on an extensive marketing campaign of Omni with ads proclaiming "Reduced Carcinogens. Premium Taste." The tobacco companies would very much like to repeat the history of "light" and low tar" cigarettes with these new products.

The Policy Response: Expanded Coverage of Cessation Products and Services and FDA Regulation of Tobacco

Senator Durbin, Congress should pass the legislation that you and Senator Brownback have introduced that would expand the availability of clinically effective cessation services under the Medicaid and Medicare programs.

Approximately 46 million Americans are already regular smokers. We need to make sure that every smoker who wants to quit isn't prevented from doing so because they can't afford the treatment. In fact, surveys indicate that 70 percent of smokers want to quit but have a very difficult time because nicotine is so powerfully addictive. Cessation products and services, which have been proven to be successful, should be made more readily available and more affordable.

Helping people stop using tobacco produces significant and immediate health benefits. The risk of coronary heart disease is substantially reduced within one or two years after they stop smoking. Fifteen years after they have quit smoking, the risk of death for ex-smokers is similar to the risk of people who have never smoked. And helping adults to quit smoking protects their children from the dangers of secondhand smoke, and can reduce the number of newborn babies who suffer and are put at serious risk because their mothers smoked during pregnancy and after giving birth. In addition to saving lives and improving public health, quitting smoking reduces medical costs significantly. A 1995 study published in the *Archives of Internal Medicine* found that continuing smokers experienced a 7 to 15 percent increase in hospital visits and a 30 to 45 percent increase in hospital admissions, compared to those who quit, in the 5 to 6 years of follow-up.

Significant progress has been made in improving the effectiveness of cessation programs. A 1998 study in the *New England Journal of Medicine* found that full health insurance coverage of cessation services resulted in over twice as many smokers quitting than would quit under the standard plan coverage. The increase in the annual rate of cessation from offering full coverage would be achieved at a cost of $328 per benefit user, which compares favorably to the average annual costs of medical treatment for hypertension ($5,921) or heart disease ($6,941).

S. 854, would provide much needed help to individuals enrolled in Medicare or Medicaid. Just providing assistance to pregnant women in Medicaid would result in significant health gains and reduced health care costs. While the percentage of women who smoked during pregnancy declined between 1989 and 2000, far too many pregnant women still smoke. Current estimates indicate that 12 to 20 percent of pregnant women smoke and the majority of these women are on Medicaid.

The Surgeon General has indicated that some 20 percent of low-birth-weight births are linked to smoking during pregnancy. Eliminating smoking during pregnancy could lead to a significant reduction in infant deaths. New research indicates that smoking during pregnancy may impair normal fetal brain and nervous system development. Sudden Infant Death Syndrome has also been linked to smoking. The direct medical costs of a complicated birth are significantly higher for smokers, 66 percent higher, than for non-smokers. One study estimates costs savings of between $1142 and $1358 for each pregnant smoker who quits.

Senator Durbin, in addition to passing your cessation legislation, Congress should act now to grant the U.S. Food and Drug Administration effective authority to regulate the manufacturing, marketing and sale of tobacco products. Legislation pending in both the House and Senate would grant the FDA the authority to:

- Ensure that tobacco products are not sold illegally to children.
- Restrict tobacco company marketing that impacts youth, including marketing aimed at girls.
- Prohibit or restrict unsubstantiated health claims or health claims that discourage people from quitting or encourage them to start using tobacco. As the tobacco industry prepares to market the next generation of allegedly "reduced risk" products, the FDA should have the authority to stop a repetition of the "lights" public health disaster that has disproportionately affected women.
- Require tobacco companies to test their product's component parts for health and safety purposes and prohibit any health claims – whether explicit or implied - unless they are scientifically verified and would promote the public health.
- Regulate the tobacco industry in the same way that it regulates other manufacturers of products we consume, including requiring the disclosure of ingredients and additives and what they know about the health effects of their products, and the reduction or elimination of harmful components when technologically possible.

Not all legislation that has been introduced regarding FDA regulation of tobacco products would reduce tobacco use among women and girls. Not surprisingly, the legislation supported by Philip Morris is so filled with loopholes that it would not result in any meaningful change. Effective tobacco legislation has been

introduced by Senators Tom Harkin (D-IA), Lincoln Chafee (R-RI), and Bob Graham (D-FL) and on the House side by Congressman Greg Ganske (R-IA), John Dingell (D-MI), and Henry Waxman (D-CA).

Congress should respond to the tobacco industry's deception and wrongdoing, including its targeting of women and girls, by acting quickly to expand access to cessation services and grant FDA effective authority over tobacco products.

Mr. Chairman, thank you for holding this hearing today. I look forward to continuing to work with you on cessation and FDA legislation as well as other initiatives to reduce the terrible toll that tobacco takes on our nation's health.

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