A Federal Plan for Ending the Tobacco Epidemic

Howard Koh, M.D., MPH

U.S. Department of Health and Human Services, Washington, DC.
SRNT Annual Meeting – Houston, TX, USA, March 14, 2012
Received May 30, 2012; accepted June 7, 2012

Thank you so much Dr. Fiore for your most kind introduction. Allow me to begin by thanking you all for the privilege of attending the 18th annual meeting of the Society for Research on Nicotine and Tobacco (SRNT). I am humbled to know that I am speaking today before many of the leading tobacco control scientists in the world. I have greatly admired SRNT for many years. And in preparation for this talk, I had the good fortune to review the impressive scientific program for the next several days. Congratulations to President Robert West, Program Committee Chair Dr. Megan Piper and the Program Committee, the Board of SRNT, and everyone who has traveled here to Houston to make this gathering a great success.

This meeting is personally so meaningful to me. For assembled here are dozens—if not hundreds—of pioneers who have educated me and challenged me to do more over the course of my career. Over the years, I have admired your science, heard your lectures, read your publications, and been inspired by your passion and your perseverance. So, thank you everyone.

And before I go on, let me say that there is no one here that I admire more than our good friend Dr. Michael Fiore. As you just heard, I had the joy of meeting Mike over 30 years ago at Boston City Hospital. Over the years, I have watched with great pride as Mike embarked on an extraordinary career of science and service—in tobacco cessation, medicine, and public health. His seminal research has shaped our field for generations to come. And just as importantly, his humanity and humility are treasures to behold. He is truly a national and global leader—so please join me in giving Dr. Fiore a warm round of applause.

As you heard from Mike, I have been a colleague of yours on the journey of tobacco control for several decades now—as a researcher, as a Professor at Harvard School of Public Health, as a former State Health Commissioner for the Massachusetts Department of Public Health, and now as your Assistant Secretary for Health.

But what started me on this path—and what continues to motivate me everyday—are my experiences as a clinician for over 30 years. Beginning when I was a young doctor at Boston City Hospital, I have tried my best to cure disease and save lives. But throughout my clinical career, I have been confronted by the avalanche of illness and death that results from tobacco addiction. It is heartbreaking when our patients tell us they are literally dying to stop smoking, but have not yet been able to do so. It is tragic when our lung cancer patients say they started smoking as kids years ago—to be cool and to impress the other kids next door. Seeing so many of my patients suffering preventable suffering and dying preventable death has been a source of great professional and personal anguish.

I remember being first introduced to the time-honored hospital teaching ritual of “Attending Rounds.” In this exercise, students and interns would present an “interesting patient” to an attending faculty member and, in turn, that professor would lead us in a discussion about optimal patient care and management. I remember being a young intern presenting a new patient with lung cancer. And, in the Attending Rounds, we collectively reviewed the history, the physical exam, the biopsy results, the staging, treatment options, and the grim prognosis. Then, as the session was ending, the Attending concluded—“You know—this is all due to tobacco. Someone should do something about this.”

So that’s why I am here with you today. Because years later, I can tell you that “someone” is you. And that someone is me. And that someone is all of us gathered here, to support each other to end the tobacco epidemic—the premier public health challenge of our time.

As the Assistant Secretary for Health, I have the honor of advancing a broad portfolio of public health issues on behalf of the Secretary, the Department of Health and Human Services (DHSS), and the country. Within this portfolio, a special responsibility is to integrate the department’s commitments to tobacco control during this extraordinary time in our nation’s history. I am delighted to tell this audience that we have an incredible team of committed leaders at the DHSS, led by our Secretary, Kathleen Sebelius. We care deeply, as you do, about achieving our shared goal of a society free of tobacco-related death and disease.

Some of my DHSS colleagues are in the audience today: leaders at the Centers for Disease Control and Prevention (CDC), such as Dr. Tim McAfee, who is speaking in a plenary session this afternoon, leaders at the National Institutes of Health (NIH), such as Dr. Robert Croyle, a tremendous public servant, and leaders at the Food and Drug Administration (FDA), such as Dr. Bopper Deyton and Dr. Cathy Backinger at the new Center for Tobacco Products. And, we have many other tobacco control leaders at the Office of the Assistant Secretary for Health, especially Rosie Henson and Simon McNabb, as well...
This is truly a historic moment that builds upon a half century of effort. There is no doubt that our country has made great progress since the historic 1964 Surgeon General’s Report (U.S. Department of Health Education and Welfare, 1964). From that point until today, adult smoking rates in the United States have been cut in half (from 42.4% [1965] to 19.4% [2010]) (Centers for Disease Control and Prevention [CDC], 2011c). We know that more than half of all adults who have ever smoked have now successfully quit (CDC, 2011a). And every person who quits can celebrate a magnificent achievement for themselves and their families—understanding that they have earned a chance to substantially improve their health. But a deeply troubling concern is that too many in our society believe that the problem of tobacco use has been solved and that it is time to move on to something else.

While some refer to the tobacco epidemic as a problem of the past, we recognize too well that it clouds our present and threatens our future. Here, in the United States, approximately 45 million adults smoke cigarettes, killing an estimated 443,000 people each year (CDC, 2011c). Approximately, 8.6 million people in our country have chronic illnesses related to smoking (Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, & Office on Smoking and Health, 2011). On average, adults who smoke cigarettes die 14 to 20 years earlier than nonsmokers (CDC, 2002; Doll, Peto, Boreham, & Sutherland, 2004; Peto, Lopez, Boreham, Thun, & Heath, 1992). And globally—as we will review at the upcoming World Conference on Tobacco in Singapore—there is no greater threat—tobacco killed 100 million people in the 20th century and is projected to kill 1 billion people this century (American Cancer Society & World Lung Foundation, 2011). In short, tobacco dependence remains a public health catastrophe that should be intolerable and unacceptable. But for too long we as a society have been forced to tolerate the intolerable and accept the unacceptable.

Last week, the latest Surgeon General’s Report was released on youth smoking (U.S. Department of Health and Human Services [DHSS], 2012a). Thank you to the many SRNT members who served as authors, editors, and reviewers for this Report. It documents that today more than 3.6 million middle-school and high-school students—the population of the city of Los Angeles—smoke cigarettes. Also of concern is the fact that at least 1.7 million young people use other tobacco products, such as smokeless tobacco, little cigars, and hookahs. And concurrent use is also a major issue. In fact, of these high-school tobacco users, half of the boys and nearly one-third of the girls are concurrently using more than one form of tobacco (U.S. DHSS, 2012a).

Furthermore, we now understand, even more clearly than before, that youth smoking is not an accident. It does not just happen by chance. Over the last few years, the tobacco industry has spent an estimated $10 billion per year on marketing and promotion of tobacco products (U.S. DHSS, 2012a); this exceeds $1 million an hour—over $27 million a day—in the United States alone (Campaign for Tobacco-Free Kids, 2010). Notably, a major conclusion in the recent Surgeon General’s Report finds that advertising, marketing, and promotional activities by tobacco companies cause the onset and continuation of smoking among adolescents and young adults. Research documents a dose-response relationship: the more young people are exposed to marketing and promotional activities, the more likely they are to smoke.

Far too many kids still see smoking images and messages that normalize this dependence. For example, in 2010, nearly a third of the top-grossing movies produced for children contained images of smoking (U.S. DHSS, 2012a). Only half of our states have comprehensive clean indoor air ordinances (CDC, 2011b). Tobacco marketing and other images and messages normalize tobacco dependence in magazines, on the Internet, and at retail stores. In short, kids see smoking in the movies they watch, the video games they play, the Web sites they visit, and in the communities where they live.

The tobacco industry states that their only intent is to promote brand choices among adult smokers. But there is a difference between stated intent and documented impact (United States v. Philip Morris USA Inc.). Because, regardless of intent, the impact of tobacco marketing and promotion is to encourage underage youth. In fact, nearly 90% of smokers start by age 18 years; and more than 80% of underage smokers choose brands from among the top three most heavily advertised (U.S. DHSS, 2012a). Also, each of the 1200 deaths/day due to smoking is replaced by at least two new smokers under the age of 26 years (U.S. DHSS, 2012a, 2012b). We have all witnessed this cycle of dependence and despair for far too long. No wonder former FDA Commissioner David Kessler once called tobacco addiction “a pediatric disease” (Committee on Environmental Health, Committee on Substance Abuse, Committee on Adolescence, & Committee on Native American Child Health, 2009).

But in the midst of these challenges lies this opportunity: we know how to end the tobacco epidemic. Scientists from SRNT and elsewhere have shown that a broad strategy of coordinated, multicomponent interventions works. We know that mass media campaigns, price increases, smoke-free policies, school-based education, and increased access to cessation assistance can reduce tobacco use (Brinn, Carson, Esterman, Chang, & Smith, 2010; Carson et al., 2011; Friend & Levy, 2002; Friend, Lipperman-Kreda, & Grube, 2011; Hyland & Cummings, 2010; Koh & Sebelius, 2010; Murray, Bauld, Hackshaw, & McNeill, 2009). Ideally, we employ all these strategies together. But we can also be flexible. For as it says in the good book, “blessed are the flexible—so that ye shall not be bent out of shape.”

On a population level, these comprehensive tobacco control programs markedly reduce tobacco use, prevent heart attacks, lower cancer rates, and reduce the incidence of chronic disease (Au et al., 2009; Glantz, 2008; Jemal, Center, & Ward, 2009; Kabir, Connolly, Clancy, Koh, & Capewell, 2008; Kabir, Connolly, Koh, & Clancy, 2010; Tsie et al., 2011). The more states and the nation as a whole spend on these coordinated tobacco control programs, the more effective these programs become,
Ending the tobacco epidemic

and the longer we invest, the larger the impact. I was proud to oversee one such program as the Massachusetts Commissioner of Public Health from 1997–2003 (Koh et al., 2005).

Using this scientific foundation, the Obama Administration has reinvigorated and accelerated our collective national efforts on tobacco control. First, the President signed the Family Smoking Prevention and Tobacco Control Act into law on June 22, 2009, that grants the FDA unprecedented authority to regulate tobacco. I remember that day so clearly because it was my first day of work as the Assistant Secretary for Health! In fact, I had just been confirmed by the U.S. Senate that previous Friday and reported to work that Monday, June 22, only to learn that my first task was to travel to the Rose Garden and support the President as he signed this historic bill into law. At that moment I understood that this job was going to be very special!

And then, on March 23, 2010, the President signed the Affordable Care Act into law. Health reform is now the law of the land and we are implementing it everyday. Health reform offers not only the promise of insurance coverage for millions but also great advances for prevention and public health, particularly tobacco control (Koh & Sebelius, 2010). For example, at the individual level, all new health plans must provide beneficiaries high-value preventive services, such as tobacco cessation counseling, without cost sharing. And at the national level, a new Public Health and Prevention Fund has helped support quitlines, health department infrastructure, and many other critical services.

So, we have set the stage for a new day for prevention. And, I have had the honor of being tasked by the Secretary to chair the DHHS committee that created and is implementing this plan. Allow me to share some information about the four pillars of the first-ever DHHS Strategic Plan titled, Ending the Tobacco Epidemic: Progress Toward a Healthier Nation (U.S. DHSS, 2010) and how DHHS hopes to work with SRNT to advance the goals of this plan:

Advance Knowledge: Accelerate Research to Expand the Science Base and Monitor Progress

We need to accelerate addiction science and tobacco control research and do so in a transdisciplinary fashion. We need research in basic science, in clinical medicine, in policy, and in public health and to employ the concept of disciplinary diversity in our research, from bench to bedside, and from bedside to community. For example, we want to accelerate the development of more effective medications to help smokers quit, which depends on a better understanding of neuropharmacology and the identification of promising molecular targets. We need better translational research to clarify the role that mental illness and other comorbidities play in tobacco use. We need better health services research to identify the best ways to promote effective treatments for the more than 70% of smokers who visit a primary care physician each year (Fiore et al., 2008). Identifying the most effective clinical treatments for tobacco dependence that can be integrated into busy health care settings is essential for managing the chronic disease of tobacco dependence. And we need more policy research on areas such as pricing, clean indoor air policies, and media strategies used by states and municipalities in their communities.

The FDA Center for Tobacco Products recently unveiled a list of 56 research questions (including topics such as genetics, biomarkers, product characteristics, and marketing strategies) that provide a call to action to every member of SRNT (Food and Drug Administration & Center for Tobacco Products, 2012). We are depending on your cutting edge science to fill these research gaps as quickly as possible, enabling the FDA to apply their regulatory authorities in an effective, science-based manner. In fact, FDA and NIH are collaborating to leverage research grants, which fund projects that address these 56 priorities.

As one department, DHHS is implementing new research and surveillance activities to address gaps in knowledge about what works in tobacco prevention and control. We especially need to develop new prevention and treatment interventions for high-risk populations—including those with mental health and substance abuse diagnoses, and the poor—and removing barriers to accessing these interventions. DHHS is also expanding science concerning evolving tobacco product changes, industry practices, and public perception of products to better inform and support FDA’s regulatory actions. Allow me to highlight just a few of the recent research advances:

- A new DHHS initiative—the "Population Assessment on Tobacco Health Study" (PATH)—represents a nationwide $118 million study, led by the FDA Center for Tobacco Products and the National Institute on Drug Abuse that will study 40,000 smokers and nonsmokers over 5 years and attempt to answer the simple yet profound question, "Why do people use tobacco?"
- The National Cancer Institute’s State and Community Tobacco Control Research Initiative is supporting innovative research on under-studied aspects of tobacco control policy and media interventions. The initiative, which includes seven research project sites around the country and one coordinating center, is intended to yield findings to directly inform state and community tobacco control programs and practitioners.
- Across the NIH, innovative work is assessing the impact of the α5 nicotinic receptor gene on nicotine’s aversive properties and withdrawal symptoms (Baker et al., 2009; De Biasi & Dani, 2011; Gallego et al., 2012; Janes et al., 2012; Portugal & Gould, 2008; Saccone et al., 2007; Weiss et al., 2008).
- CDC conducts studies that analyze the health and economic impact of eliminating exposure to second-hand smoke, including the following:
  - Analysis of acute myocardial infarction hospitalization costs that would be averted if states without comprehensive smoke-free laws implemented them.
  - Analysis of cost savings that could be realized by implementing smoke-free policies in public housing.
  - Analysis of economic impact of local smoke-free laws in nine states.
  - Analyses through Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC), which contains two distinct Internet-based computational programs to estimate the economic and disease impact of smoking on adults and infants.
Improve the Public’s Health: Strengthen the Implementation of Evidence-Based Tobacco Control Interventions and Policies in States and Communities

DHHS is strengthening efforts to implement proven tobacco control interventions at the state and local level. Some key achievements include the following:

- Investments in evidence-based tobacco control programs in states and communities to address the stall in the decline of prevalence. The CDC Community Transformation Grants ($102 million in 2011) will support the implementation, evaluation, and dissemination of evidence-based community preventive health activities to reduce chronic disease rates, prevent the development of secondary conditions, address health disparities, and develop a stronger evidence base for effective prevention programming.
- A coordinated national cessation strategy that includes
  - Expanding insurance coverage for tobacco use cessation.
  - Supporting the National Network of Quitlines.
  - Implementing innovative text-messaging interventions for pregnant women, adolescents, and adults.
- Increased local, state, and tribal enforcement of tobacco regulation.
- Expanded reach through eHealth and mHealth resources, including SmokefreeTXT, the NIH Web site www.smokefree.gov (also available in Spanish www.espanol.smokefree.gov) and teen.smokefree.gov with related efforts to reach kids through Twitter and Facebook.

Engage the Public: Change Social Norms Around Tobacco Use

A reinvigorated DHHS comprehensive communication agenda will promote a culture change around tobacco use. We will employ mass-media counter-marketing campaigns to prevent youth initiation, promote cessation among adults, and change social norms. We have also launched innovative social media initiatives to assist smokers interested in quitting by providing information and resources in mobile-based formats.

Tomorrow, the CDC will launch a national media campaign “Tips from Former Smokers,” which is designed to prevent initiation among youth, promote cessation among adults, and inform the public about the health consequences of tobacco. This campaign represents the first national comprehensive paid DHHS counter-advertising effort in our nation’s history. And later, the FDA will also launch an education campaign to inform the public about the effects of regulation.

Last year the FDA announced new graphic warning labels for cigarette packages and advertisements—the first proposed change to the warnings in more than 25 years. The powerful images—supported by the best available science and evidence—were originally scheduled to be placed on every pack of cigarettes sold in United States by the fall of 2012. But the launch date of these graphic warning labels is now uncertain due to tobacco industry legal actions. In response to that delay, DHHS stated, “This Administration is determined to do everything we can to warn young people about the dangers of smoking, which remains the leading cause of preventable death in America. This public health initiative will be an effective tool in our efforts to stop teenagers from starting in the first place and taking up this deadly habit. We are confident that efforts to stop these important warnings from going forward will ultimately fail” (U.S. DHSS, 2012).

Lead by Example: Implement Model Tobacco Control Policies Across the U.S. Government

DHHS is leveraging existing systems and resources to lead by example. First, we need to take care of our own federal employees. So, since January 1, 2011, the U.S. Office of Personnel Management, led by Director John Berry, has made tobacco cessation treatment available to all Federal employees, their dependents, and retirees. This major accomplishment involves requiring all Federal Employees Health Benefits insurance plans to provide comprehensive barrier-free coverage, including counseling and medication, when appropriate. As a result, 8 million Americans now have access to barrier-free evidence-based smoking cessation treatments consistent with the 2008 U.S. Public Health Service Guideline Treating Tobacco Use and Dependence (Fiore et al., 2008).

Second, DHHS made all of its properties tobacco-free as of July 1, 2011. This DHHS tobacco-free campus policy prohibits the use of all tobacco products (including cigarettes, cigars, pipes, smokeless, snus, and e-cigarettes) at all times in all facilities. The policy applies to all interior space owned, rented, or wholly leased; all outside property or grounds owned or leased, including parking areas; private vehicles on the property; and employer-owned vehicles.

Third, we want to assure that all DHHS health care delivery sites provide comprehensive, evidence-based cessation treatment. In that regard, we are working closely with all the federally qualified health centers through HRSA, as well as Indian Health Services sites to increase number of sites that collect and use performance measures for tobacco use.

Fourth, we need to make sure the public insurance programs run by DHHS support the goals of the Strategic Action Plan. In this spirit, CMS has expanded cessation services for pregnant women enrolled in Medicaid, expanded quitline services for Medicaid enrollees, and extended insurance coverage for smoking cessation counseling for Medicare beneficiaries who smoke. And Medicaid has launched a demonstration project in 10 states to explore if incentives can promote preventive actions, including tobacco control actions.

This is just the beginning. We have so much more to do together. As I close, I want to thank you again for your dedication, your perseverance, and your tremendous sense of mission. DHHS is committed to working with you every step of the way. None of this is easy. But I am convinced that with your science, your leadership, and our partnership going forward, the nation will succeed in giving our kids a fighting chance for better health for the future. Thank you.
Ending the tobacco epidemic

References


