

Surgeon General's Perspective

REDUCING EXPOSURE TO SECONDHAND SMOKE: LET'S KEEP THE MOMENTUM GOING

This year marks the 10th anniversary of the Surgeon General's report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke*.¹ Then-Surgeon General Richard Carmona proclaimed, "The debate is over. The science is clear. Secondhand smoke is a serious health hazard that causes premature death and disease in children and nonsmoking adults."² Today, in 2016, the science remains clear. Exposure to secondhand smoke (SHS) causes sudden infant death syndrome (SIDS), respiratory infections, ear infections, and more frequent and severe asthma attacks in infants and children; and coronary heart disease, stroke, and lung cancer in adult nonsmokers.^{1,3} Each year in the United States, exposure to SHS results in more than 41,000 deaths among nonsmoking adults, 400 infant deaths from SIDS, and \$5.6 billion in lost productivity.³

The 2006 report indicated that the only way to protect nonsmokers was to eliminate exposure from SHS.¹ In the 10 years since the report was published, the adoption of comprehensive laws that prohibit smoking in indoor areas of worksites, restaurants, and bars in states and communities has accelerated. As of January 2016, 26 states and the District of Columbia had 100% smoke-free indoor air laws for bars, restaurants, and worksites.⁴ As of April 2016, more than 800 municipalities had laws that require non-hospitality workplaces, restaurants, and bars to be 100% smoke-free.⁵ These laws improve air quality, reduce smoking rates, and improve community health.³ Communities that have enacted comprehensive smoke-free laws have found up to a 17% reduction in hospitalizations for acute myocardial infarctions.⁶ And, contrary to criticism, studies have shown consistently that smoke-free laws do not have an adverse economic impact on restaurants or bars.⁷

Despite this progress, the full promise of the 2006 report has not yet been realized. Although the prevalence of SHS exposure has been reduced by half in the last decade (from 53% in 1999–2000 to 25% in 2011–2012), 58 million nonsmokers—or one in four people—are still exposed. Populations at the highest risk of SHS exposure are children, African Americans, people living below the federal poverty level, and residents of rental housing.⁸ Residents of multiunit housing



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are particularly susceptible to exposure because SHS can infiltrate smoke-free living units from other units and from shared areas where smoking occurs (e.g., through doors, cracks in walls, electrical lines, and plumbing).⁹ These disparities in SHS exposure are unacceptable.

As we continue the work begun decades ago toward a tobacco-free America, another challenge is the rising use of emerging tobacco products, such as e-cigarettes, among young people. Although rates of traditional cigarette smoking are declining, e-cigarette use by high school students is rising, increasing nearly 10-fold from 2011 to 2015.¹⁰ E-cigarettes appear to have fewer toxins than traditional cigarettes, but their impact on long-term health is not yet fully known.² The aerosol produced by e-cigarettes is not harmless water vapor.¹¹ Those who inhale it directly or secondhand may be inhaling nicotine and, usually, other chemical compounds. The ingredients in e-cigarettes or their aerosols are not known because e-cigarette manufacturers are not currently required by federal law to disclose the contents of their products. An analysis of e-cigarette cartridges and aerosols revealed that some e-cigarettes contain potentially harmful ingredients, including heavy metals and chemicals.¹¹ In May 2016, the U.S. Food and Drug Administration finalized a rule that will

require manufacturers of e-cigarettes to disclose what is in their products, to include a health warning on packaging, and to prohibit the sale of these products to people younger than 18 years of age.¹²

How can we make further progress against SHS exposure? A number of promising initiatives could effectively reduce exposure and reinforce tobacco-free norms. Three examples follow.

1. New Orleans, Louisiana, smoke-free law. In January 2015, the New Orleans City Council unanimously passed, and the mayor signed into law, a comprehensive smoke-free law to protect bartenders, musicians, and casino workers from exposure to SHS and e-cigarette aerosol. This ordinance, which went into effect on April 22, 2015, expanded the existing state smoke-free law to include all bars, restaurants, and casinos in New Orleans. A study conducted after the first 100 days of implementation found that indoor air pollution levels had fallen dramatically in bars and in the city's casino.¹³ New Orleans joined six other states—Delaware, Hawaii, New Jersey, North Dakota, Oregon, and Utah—and more than 400 communities that include e-cigarettes in their smoke-free laws.^{4,5} Policy makers doubted that such a law could pass in New Orleans, but a poll conducted in October 2015, six months after implementation, indicated strong support for the law as residents experienced its benefits. Nearly 80% of voters in New Orleans supported the new law, including 64% who strongly favored it.¹⁴

2. U.S Department of Housing and Urban Development (HUD) proposed rule. In November 2015, HUD announced a proposed rule to make federal public housing entirely smoke-free indoors.¹⁵ The proposed rule will help improve the health of more than 2 million residents, including 760,000 children; save an estimated \$153 million annually by reducing health-care costs, eliminating the need to repair smoke-permitted units, and preventing smoking-attributable fires; and affect the more than 940,000 units that are currently not smoke-free, including more than 500,000 units inhabited by elderly people.^{15,16} This rule will set a powerful example that may encourage other market-rate multiunit housing complexes across the country to take similar action. The rule is the culmination of years of efforts by HUD, its federal partners, and public housing authorities to promote smoke-free public housing. More than 600 public housing authorities across the country have already made some or all of their buildings 100% smoke-free, demonstrating that this type of policy can be successfully implemented.¹⁵

3. Trinity University's 1DayStand. Trinity University in San Antonio, Texas, is working to join the list of 1,483 comprehensively smoke- and tobacco-free campuses in the United States, including 823 campuses that prohibit the use of e-cigarettes anywhere on campus.¹⁷ In November 2015, Trinity University, a private, liberal

arts college with 2,500 students, hosted “1DayStand” for the Great American SmokeOut (www.1DayStand.org). 1DayStand invites people who smoke to give it up for a day and raises awareness about the role that tobacco-free campuses play in reducing tobacco use and SHS exposure. Since November 2015, 90 college and university campuses have participated in 1DayStand.¹⁷ Trinity's one-day policy is now poised to become a full-time policy as the university aims to join the growing list of tobacco-free college campuses.

The Surgeon General's report on exposure to tobacco smoke laid out the science on the need for smoke-free indoor air.¹ We now have the knowledge and the proven approaches to achieve a tobacco-free America. All people living in America, especially children, low-income groups, and racial/ethnic minority communities, can and should be protected from the dangers of SHS. State and local policy makers can accomplish this goal by adopting comprehensive smoke-free laws, including e-cigarette laws, that cover indoor areas of workplaces, restaurants, bars, and other public places. Individuals and families can also support the adoption of smoke- and tobacco-free policies in the home. Finally, we can educate the public not only about the dangers of SHS, but also about proven approaches to eliminating SHS exposure.

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