

# Children and Secondhand Smoke: Clear Evidence for Action

Smoking rates in the United States have dropped since the first Surgeon General's report on the health effects of smoking was published in 1964.<sup>1</sup> Decades of declining prevalence have slowed, however, with some 19.3% of US adults still smoking,<sup>2</sup> and 53.6% of children showing biochemical evidence of exposure to secondhand smoke (SHS).<sup>3</sup> It is well known that tobacco use leads to disease,<sup>4</sup> and that SHS exposure is also harmful; indeed, there is no known safe level of exposure.<sup>5</sup> According to the most recent estimates from the World Health Organization, >600 000 people worldwide die prematurely every year of exposure to SHS.<sup>6</sup> Of these deaths attributable to SHS, 28% occur in children.<sup>6</sup> This number excludes the millions of children worldwide who experience morbidity from SHS exposure.

Although the impact of SHS exposure on the severity of pediatric lung diseases such as asthma and bronchiolitis is well known,<sup>5</sup> we are only beginning to understand the long-term effects of SHS exposure on cardiovascular health and the pediatric antecedents of adult heart disease. Data from a study by Geerts et al<sup>7</sup> in this issue of *Pediatrics* document that the harmful effects of SHS are found even earlier than expected, with in utero exposure associated with changes in arterial structure and distensibility in early childhood. Whether this difference persists is not known, but it suggests that the vascular changes that lead to cardiovascular disease can be traced to parental smoke exposure. This study provides 1 more piece of evidence for the importance of smoking cessation, in particular, among families with young children and those planning to have children.

Pediatricians and other pediatric health care providers have a unique role to play with young families. Because 26% of 18 to 44 year olds have no health insurance,<sup>8</sup> many young parents will only interface with the health care system through their child's doctor. Given pediatric providers' focus on health promotion/disease prevention and the frequency of planned well-child visits over the first years of life, the pediatrician's office is an ideal place to stress the importance of protecting children from the harms of SHS, to advise parents to quit tobacco, and to support their cessation efforts. This is shown in another important article by Rosen et al<sup>9</sup> in this issue of *Pediatrics*: a meta-analysis of published intervention trials that were designed to protect children from tobacco smoke exposure through parental cessation or modification of parental smoking patterns. This meta-analysis finds that counseling in the pediatric office setting for parental smoking cessation is effective, although cessation rates are modest. Analyses in this article reveal that encouraging parents to quit specifically to protect their children's health is also a motivating tactic for cessation efforts. Additional trials are indicated to improve the effectiveness of tobacco interventions delivered during the pediatric health care

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## ABBREVIATIONS

AAP—American Academy of Pediatrics

SHS—secondhand smoke

Opinions expressed in these commentaries are those of the author and not necessarily those of the American Academy of Pediatrics or its Committees.

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encounter. Nonetheless, it is critically important that health providers act upon the available evidence and encourage parents to quit tobacco and to protect their children from SHS exposure. Many clinicians admit that they do not feel confident in addressing parental tobacco use, however, and parental reports of whether clinicians actually provided advice to quit are low. National data from the Social Climate Study of Tobacco Control document that only approximately half of parents who smoke report ever having been advised to quit by their child's doctor.<sup>10</sup> Pediatricians need ongoing training and support in the current best practices to deliver parental smoking cessation interventions. Such training is readily available through the American Academy of Pediatrics (AAP) Richmond Center of Excellence, which is the AAP's "home" for pediatric tobacco control. The Richmond Center of Excellence has a vast array of resources publicly available on the AAP Web site ([www.aap.org/richmondcenter](http://www.aap.org/richmondcenter)) to support practice change and clinical interventions, as well as links to formal continuing medical education via PediaLink, EQIPP, the

Association for the Treatment of Tobacco Use and Dependence, the American Medical Association, the Bloomberg Center at Johns Hopkins University, and more. Free downloadable materials include information about parental tobacco cessation, exposure reduction, how to engage families and teens in the prevention of adolescent tobacco initiation, and practice change.

The AAP has partnered with organizations from around the world to improve efforts in tobacco control as they relate to children. Many of these efforts involve supporting policies that will protect children from exposure to SHS, including smoke-free laws to promote clean air in places where children spend their time, such as outdoor areas, public spaces, and public housing. These policies must support access to effective and comprehensive tobacco cessation programs, which should include community-based and workplace programs to increase access for working families. Beyond policies, however, is the need for specific funding. Of note, the interventions cited in the meta-analysis were all components

of research studies; thus, the interventions themselves were supported through the funding agencies. Unfortunately, the interventions in many studies do not continue beyond the research period because of the lack of ongoing funding, even when a clinically significant intervention has been found. We need to better identify ways to sustainably implement successful tobacco interventions beyond their period of research study, and widely put these interventions into practice to effect broad behavior change.

We can see from this issue of *Pediatrics* that the effects of SHS may go deeper, and linger longer, than we had previously understood. We must use the evidence available to help motivate adults to change their smoking behavior to protect their children and others from the harms of SHS and increase their efforts to quit. Evidence from this issue suggests that "using" the child as the incentive to quit may be the idea that changes a parent from a present smoker to a former smoker, improving the life, health, and long-term well-being of children and their families.

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