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## II. Cigarette and Smokeless Tobacco Product Use Among Children and Adolescents

Each year, the cigarette industry loses about 1.7 million customers in the United States; about 400,000 die from diseases caused by their smoking and another 1.3 million quit smoking. To offset the sales lost to smokers who die or quit smoking, cigarette manufacturers rely on young people as the primary source of new customers. Each day, approximately 3,000 young people become regular smokers, 2 serving as the industry's major domestic source of replacement smokers.

## A. Epidemiology of Tobacco Use Among Children and Adolescents

In 1965, the year following the first Surgeon General's Report 3 describing the relationship between smoking and diseases such as lung cancer, chronic bronchitis, and emphysema, 42.4 percent of the overall adult population in the United States smoked.4 By 1990, the prevalence of smoking in the United States had declined to 25.5 percent.<sup>5</sup> The greatest reduction in adult smoking occurred from 1987 to 1990, when the prevalence of smoking declined by 1.1 percentage point annually, twice the rate of decline during the preceding 20 years.6 The prevalence of smoking among adults leveled off at 25.6 percent in 1991 and was 26.5 percent in 1992. This change was due to a change in the definition of current smokers, rather than an increase in prevalence. The new definition incorporates some day (i.e., less than daily, occasional, or infrequent) smoking.<sup>7</sup> The estimate for 1992 with the old definition was 25.6 percent—the same as in 1991. In 1993, under the new definition, prevalence was 25.0 percent.8

The long-term downward trend in adult smoking contrasts with the trends in smoking among young people. The Institute of Medicine noted that the number of high school seniors who have smoked in the last 30 days remained "basically unchanged since 1980," at approximately 30 percent, and further reported that 16.7 percent of 8th grade students were current smokers (that is, had smoked within the past 30 days), and 8.3 percent smoked daily. The prevalence of cigarette smoking in

recent years among 8th and 10th grade students has risen significantly and provides cause for great concern. For example, among 8th grade students, 14.3 percent in 1991 and 18.6 percent in 1994 were current smokers; among 10th grade students, 20.8 percent in 1991 and 25.4 percent in 1994 were current smokers.<sup>10</sup>

The 1994 Surgeon General's Report reviewed several different surveys and found that the estimated percentage of adolescents who have ever smoked cigarettes ranged from approximately 42 percent (as reported by the 1991 National Household Survey on Drug Abuse) to 70 percent (as reported by the 1991 Youth Risk Behavior Survey). 11 The 1994 Surgeon General's Report also found that 28 percent of high school seniors were current smokers. 12 (The most recent data reported by the Monitoring the Future Project indicates that in 1994 the number of high school seniors who were current smokers had risen to 31.2 percent.)<sup>13</sup> Further, the 1994 Surgeon General's Report states that seven to 13 percent of adolescents were frequent or heavy smokers, consuming at least one-half pack daily or smoking 20 days or more of the 30 days in a survey period.14

Approximately 3 million children under the age of 18 are daily smokers. 15 One study found that children between the ages of 8 and 11 who are daily smokers consume an average of 4 cigarettes daily, and those who are between the ages of 12 and 17 average nearly 14 cigarettes daily. The study also estimated that adolescents consume an estimated 947 million packs of cigarettes and 26 million containers of smokeless tobacco annually and account for annual tobacco sales of \$1.26 billion. 16 Another study estimates that teenagers in 1991 smoked 516 million packs of cigarettes and spent \$962 million purchasing them. 17 As stated previously, these figures are especially significant given that all States prohibit the sale of tobacco to persons under the age of 18 (with some States prohibiting sales to persons under the age of 19 and one State, Pennsylvania, prohibiting cigarette sales to persons under the age of 21). 18 Unfortunately, few States successfully enforce their laws restricting tobacco sales to minors. 19

Studies have also suggested that the age one begins smoking can greatly influence the amount of smoking one will engage in as an adult and will ultimately influence the smoker's risk of tobacco related morbidity and mortality. Those who started smoking by early adolescence were more likely to be heavy smokers than those who began smoking as adults.<sup>20</sup> Another study

found that high school students who smoked their first cigarette during childhood smoked more often and in greater amount than those who first tried smoking during adolescence.<sup>21</sup>

The escalating use of smokeless tobacco products by underage persons presents an additional and growing public health problem. Smokeless tobacco products include chewing tobacco and snuff and are also known as "spit tobacco" or "spitting tobacco." In 1970, the prevalence of snuff use among males was lowest in those 17 to 19 years of age and the highest use was by men aged 50 or more. By 1985, a dramatic shift had occurred, and males between 16 and 19 were twice as likely to use snuff as men aged 50 and over.22 An estimated 3 million users of smokeless tobacco products were under the age of 21 in 1986,<sup>23</sup> when Congress enacted the Comprehensive Smokeless Tobacco Health Education Act (the Smokeless Act) (15 U.S.C. 4401). The Smokeless Act required the Secretary of Health and Human Services (the Secretary) to inform the public of the health dangers associated with smokeless tobacco use, required warning labels on packages, banned advertising on electronic media subject to the Federal Communications Commission's jurisdiction (such as television and radio), and encouraged States to make 18 years the minimum age for purchasing smokeless tobacco products. Despite the Smokeless Act and State laws prohibiting sales to minors, a high percentage of persons under the age of 18 use smokeless tobacco products. For example:

- 1991 school-based surveys estimated that 10.7 percent of U.S. high school seniors and 19.2 percent of male 9th to 12th grade students use smokeless tobacco.<sup>24</sup>
- A 1992 national household-based survey of U.S. children found that 11.9 percent of males 12–17 years of age were using smokeless tobacco.<sup>25</sup>
- Among high school seniors who had ever tried smokeless tobacco, 73 percent did so by the ninth grade.<sup>26</sup>

In some parts of the United States the rates are especially high. According to the 1990–91 Youth Risk Behavior Survey, the smokeless tobacco product use rates among males in grades 9 through 12 were as high as 34 percent in Tennessee, 33 percent in Montana, 32 percent in Colorado, and 31 percent in Alabama and Wyoming.<sup>27</sup>

Native American youth are especially vulnerable to smokeless tobacco product use. The rates for both males and females are extremely high, ranging from 24 percent to 64 percent, and at rates that, in some areas, are 10 times higher than those for non-Native