

The Health and Economic Impact of Tobacco Use in Florida

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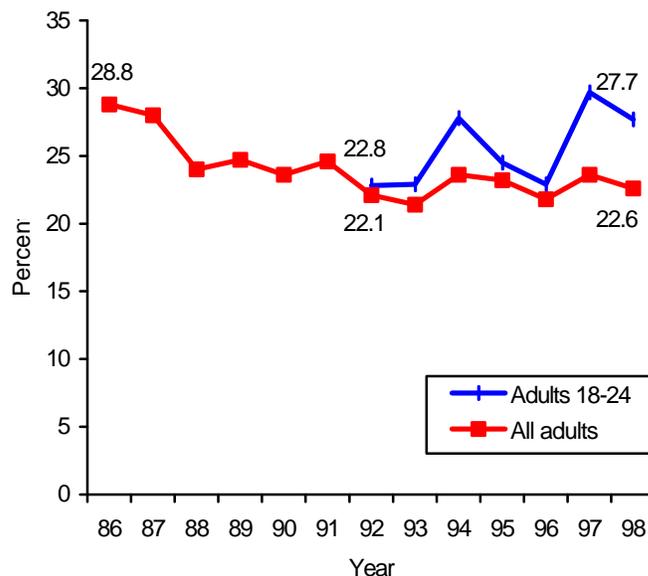
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Frequency of tobacco use in Florida

Among adults, cigarette use was as high as 29% in 1986, and has fallen to 22.6 in 1998. Most of the decrease occurred from 1986 to 1991, however, and the proportion of Florida adults who smoke cigarettes has remained between 22% and 23% since 1991. Tobacco use among young adults aged 18 to 24 years has fluctuated in the 1990s reaching a high of nearly 28% in 1997. Current cigar use among Florida adults was 6.3% in 1998.¹

Figure 1. Percentage of adults in Florida who are current cigarette users, by year, 1986-1998



Tobacco use data for teenagers show a decline in current cigarette use from 1998 to 1999, the only two years for which data are available from the Florida Youth Tobacco Survey (see Figure 2, page 2).² The decline was larger in absolute terms for middle school students than for high school students (3.5 percentage points versus 2.2 percentage points) and also in percentage terms (18.9% vs. 8.0%). In 1998, 19.5 % of Florida high-school students reported use of cigars in the past 30 days, and 6.4 % reported use of spit tobacco. In 1998, 5.1% of 4th and 5th graders reported use of any type of tobacco in the preceding 30 days, as did 11.7% of 6th graders. 14.4% of 5th graders reported they had ever tried tobacco.

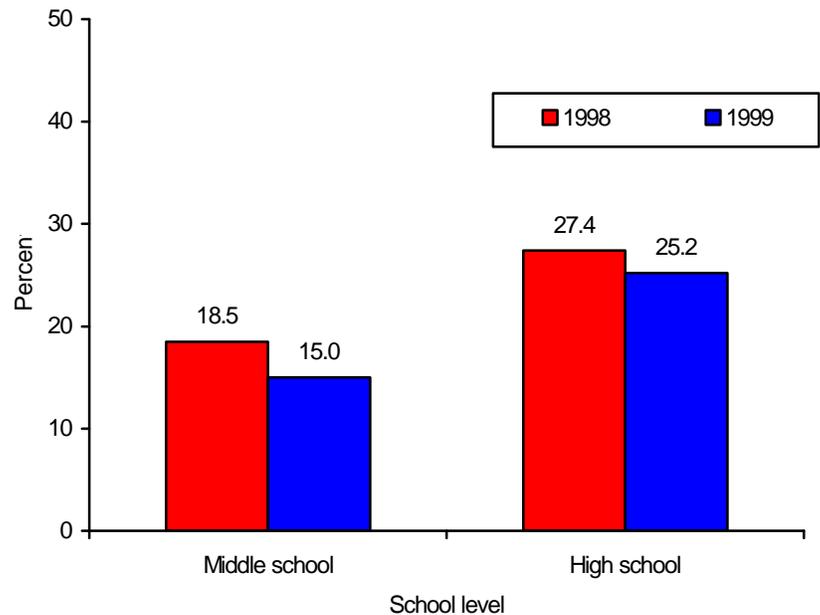
Topics addressed	Page
Smoking-attributable mortality	2
Smoking-attributable years of potential life lost and hospitalizations	2
Smoking-attributable expenditures	3
Smoking-attributable Medicaid expenditures in children and pregnant women, Florida, 1995-96	3
Impact of cigarette smoking on infant health	3

Figure 2. Cigarette use among Florida middle and high school students, FYTS 1998 & 1999

The one-year decline in youth smoking prevalence represents

- 29,410 fewer youth smokers and
- 9,705 fewer premature deaths.

(if these 29,410 children had become and remained regular smokers)



Smoking-attributable mortality

In 1998, the smoking-attributable mortality rate was 350.4 deaths per 100,000 people living in Florida.

In 1998, there were 157,160 deaths in Florida residents from all causes.³ Of these, 29,450 were attributable to smoking, or 18.74 percent of the total. Men accounted for 18,372 (62.4%) of these deaths and women for 11,078 (37.6%). Tobacco use accounted for 22.8% of mortality in men and 14.48% of mortality in women.

There were 350.4 smoking-attributable deaths in 1998 per 100,000 people living in Florida. Among these smoking-attributable deaths, 10,342 were from cardiovascular disease (including 6,868 from heart attack), 11,849 from cancer (including 9,250 from lung cancer), and 7,259 from respiratory diseases (including 4,967 from chronic obstructive lung disease).

Smoking-attributable years of potential life lost and hospitalizations

In 1998, there were 389,626 years of potential life lost among Florida residents as a result of premature death attributable to smoking, based on life expectancy. Of these, 231,746 were in men and 157,880 in women.

In 1998, there were 127,579 hospitalizations attributable to smoking, assuming that hospitalizations are related to smoking in the same way that mortality is. These constitute 712,515 hospital days and a total of \$2.6 billion in hospitalization charges attributable to smoking.

Smoking-attributable expenditures

During 1993, according to work done by Dr. Leonard Miller and colleagues at the University of California, total direct health care expenditures in Florida that were attributable to tobacco use were \$4.6 billion. Of this total, \$1.3 billion was for ambulatory care, \$495 million for prescription drugs, \$2.1 billion for hospital care, \$198 million for home health services, and \$512 million for nursing home care. They also estimated that the Medicaid program in Florida spent \$517 million in 1993 on care for smoking-attributable illnesses, and that the federal Medicare program in 1993 spent \$1.1 billion on care for smoking-attributable illnesses in Florida residents.⁴⁻⁶

In addition to the expenditures estimated by Miller et al., Hopkins and Lynch estimated the smoking-attributable Medicaid expenditures that occurred in children or during pregnancy.⁷ The following estimates were not included in the models published by Miller et al.

Smoking-attributable Medicaid expenditures in children and pregnant women, Florida, 1995-96

1. Care for low birth weight and preterm infants	\$6,293,985
Perinatal disproportionate share payments	\$832,284
2. Care for mentally retarded persons	\$12,024,541
3. Asthma (ages 6-18)	\$1,300,320
4. Otitis media (ages 0-3)	\$1,898,820
5. Respiratory disease (ages 0-5)	\$27,037,184
6. Care of women with complications of pregnancy	\$4,546,145
Total	\$53,933,279

During 1993, the total direct health care expenditures in Florida that were attributable to smoking were \$4.6 billion.

Impact of cigarette smoking on infant health

Fourteen percent of Florida infants born in 1996 and 1997 had mothers who smoked cigarettes during pregnancy. Ten percent of all infants aged 3 to 6 months are exposed to tobacco smoke for at least one hour each day.⁸ Among women who smoked before pregnancy, 45.7% quit during pregnancy and 37.3% reduced their cigarette consumption.

Infants born to mothers who smoked during pregnancy have an almost two-fold greater risk of low birth weight. After adjusting for differences in mother's education, race and marital status, which also are associated with low birth weight, the odds of a birth weight below 2000 grams are 64% higher for mothers who smoke (odds ratio 1.64). Smoking accounted for 6.9% of low birth weight in Florida in 1998.

If women did not smoke during pregnancy, an estimated 75 fewer infant deaths would have occurred among Florida infants born in 1996. In that year, if pregnant women did not smoke, the infant death rate would have been 7.0 instead of 7.4 deaths per 1,000 live births. Of this reduction, 39 preventable

(Continued on page 4)

Impact of cigarette smoking on infant health (continued)

(Continued from page 3)

deaths would result from the effect of smoking on low birth weight, 24 would result from other effects of smoking during pregnancy, and 12 would be due to the combined effect. This calculation takes into account the fact that the women who are smokers tend to have other characteristics that are known to increase the risk of low birth weight and infant mortality.⁹

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