Tobacco Use Among Middle and High School Students—United States, 2011-2014

MMWR Introduction

Tobacco use and addiction mostly begin during adolescence and young adulthood. Young people using any form of tobacco is unsafe. CDC and the Food and Drug Administration (FDA) analyzed data from the 2011-2014 National Youth Tobacco Surveys (NYTS) to determine the prevalence and trends of current (past 30 days) use of nine tobacco products among US middle and high school students. In 2014, e-cigarettes were the most commonly used product among middle (3.9%) and high school (13.4%) students. Between 2011 and 2014, statistically significant increases were observed among these students for current use of both e-cigarettes and hookah pipes ($p < 0.05$), while decreases were observed for current use of more traditional products, such as cigarettes and cigars, resulting in no change in overall tobacco use. Consequently, 4.6 million middle and high school students continue to be exposed to harmful tobacco product constituents, including nicotine. Nicotine exposure during adolescence—a critical window for brain development—may have lasting adverse consequences for brain development, causes addiction, and may lead to sustained tobacco use.

In 2014, an estimated 4.6 million middle and high school students currently used any tobacco product. An estimated 2.2 million of these students currently used 2 or more tobacco products. Among high school students, 24.6% (3.7 million) currently used any tobacco product, including more than 50% (1.9 million students) currently used 2 or more tobacco products. Among middle school students, 7.7% (910,000 students) currently used any tobacco product, including more than one third (360,000 students) currently used 2 or more tobacco products.

Current e-cigarette use tripled from 2013 (4.5%, or 660,000) to 2014 (13.4%, or 2 million) among high school students. Among middle school students, prevalence increased by a similar magnitude, from 1.1% (120,000) to 3.9% (450,000). From 2013 to 2014 large increases were also observed for current hookah pipe use, with prevalence almost doubling for high school from 5.2% (770,000) to 9.4% (1.3 million) and middle school from 1.1% (120,000) to 2.5% (280,000) during this period.

MMWR Highlights

Tobacco use in the past 30 days among high school students, 2014

- An estimated 24.6% (3.7 million students) used any tobacco product and more than 50% of these students (1.9 million) used 2 or more tobacco products.
- An estimated 13.4% used e-cigarettes, 9.4% used hookah pipes, 9.2% used cigarettes, 8.2% used cigars, and 5.5% used smokeless tobacco.
- By race or ethnicity, 26.7% of Hispanics used any tobacco product, followed by 26.5% of non-Hispanic whites, 17.2% of non-Hispanic blacks, and 15.3% of non-Hispanic other races.
- By sex, 28.3% of males and 20.9% of females used any tobacco product.

Tobacco use in the past 30 days among middle school students, 2014

- An estimated 7.7% (910,000 students) used any tobacco product, including an estimated 360,000 students who used 2 or more tobacco products.
- An estimated 3.9% used e-cigarettes, 2.5% used hookah pipes, 2.5% used cigarettes, 1.9% used cigars, and 1.6% used smokeless tobacco.
- By race or ethnicity, 11.8% of Hispanics used any tobacco product, followed by 7.3% of non-Hispanic blacks, 6.4% of non-Hispanic other races, and 6.2% of non-Hispanic whites.
- By sex, 8.8% of males and 6.6% of females used any tobacco product.