

2025 and 2027 National Youth Risk Behavior Survey

Appendix B

Justification

Attachment B: Justification for a national survey of health-risk behaviors among high school students

The national Youth Risk Behavior Survey has important public health implications. A limited number of health-risk behaviors, which are often established during adolescence, account for the overwhelming majority of immediate and long-term causes of mortality, morbidity, and social problems among adolescents and adults. In the United States, 75% of all deaths among youth and young adults aged 10-24 years result from three causes: unintentional injuries (41%), suicide (17%), and homicide (17%) (CDC, 2023b).

Among youth aged 15-19 years, substantial morbidity and social problems also result from the estimated 146,973 births (CDC 2023a); 479,924 cases of chlamydia, gonorrhea, and syphilis (CDC, 2023d); and 1,452 cases of human immunodeficiency virus (HIV) (CDC 2023c) reported annually. In the United States, 38% of all deaths result from cardiovascular disease (20%) and cancer (18%) (CDC 2023b).

These leading causes of morbidity and mortality among youth and adults in the United States are related to six categories of priority health-risk behaviors: 1) behaviors that contribute to unintentional injuries and violence, including bullying and suicide; 2) tobacco use and electronic vapor product use; 3) alcohol and other drug use; 4) sexual behaviors that contribute to unintended pregnancy and STDs, including human immunodeficiency virus (HIV) infection; 5) unhealthy dietary behaviors; and 6) physical inactivity. These behaviors frequently are interrelated and are established during childhood and adolescence and extend into adulthood. To monitor priority health-risk behaviors in each of these six categories among high school students nationally, CDC developed the National YRBS, which has been conducted biennially since 1991. Additional questions assessing other critical public health issues, such as obesity, have been added over time.

Priority health-risk behaviors result in tremendous economic cost. For example, in the area of unintentional injuries and violence, using data from the Medical Expenditure Panel Survey and the National Health Accounts, injury-related medical expenditures in 2002 were as high as \$73.4 billion, accounting for 10.1% of total medical expenditures that year (Machlin, 2005).

Regarding tobacco use, the economic impact of smoking and exposure to secondhand smoke is enormous in terms of increased medical costs, lost productivity, and other factors. The estimated annual smoking-related productivity losses for the U.S. were estimated in 2018 to be \$184.9 billion (Shrestha et al 2022). This figure does not include costs associated with smoking-attributable health-care expenditures, smoking-related disability, or secondhand smoke-attributable morbidity and mortality. This also does not account for the economic impact due to electronic vapor or “e-cigarette” use in the US, which are associated with \$15.1 billion in annual healthcare expenditures (Wang et al 2022). In total, smoking-attributable health care expenditures and productivity losses exceed \$300 billion annually (Shrestha et al 2022).

In terms of alcohol and other drug use, in the United States in 2010, the estimated economic cost of excessive drinking was \$249 billion. The government paid for \$100.7 billion (40.4%) of these costs. Binge drinking accounted for \$191.1 billion (76.7%) of costs; underage drinking \$24.3 billion (9.7%) of costs; and drinking while pregnant \$5.5 billion (2.2%) of costs. (Sacks et al, 2015). In addition, the cost of alcohol-attributable crime was \$73.3 billion and the cost to government was \$94.2 billion (Bouchery et al, 2011). In 2007, the cost of illicit drug use totaled more than \$193 billion in the United States (National Drug Intelligence Center, 2011). This number has continued to rise as opioid use has increased. In 2017, the estimated costs of opioid use disorder and fatal overdoses were estimated to cost the United States nearly \$1.02 trillion (Florence et al, 2017).

Related to sexual behavior, the latest data from CDC indicated lifetime direct medical costs of one or more of the eight most common sexually transmitted infections (STIs) is currently estimated at \$15.9 billion a year. Expenditures among youth ages 15-24 who have contracted one or more STIs account for 26% (\$4.2 billion) of this number. Even curable STIs have a high annual cost of \$1.2 billion (Chesson et al 2021). These figures represent conservative estimates because they do not account for non-medical indirect costs, such as lost wages and productivity due to STI-related illnesses, out-of-pocket costs, costs associated with mother-to-infant transmission, or costs related to prevention and screening. In addition, teen pregnancy costs taxpayers \$9.2 billion annually in lost tax revenues, increased public assistance expenditures, health care costs for the children of teen mothers, foster care costs, and criminal justice costs (Hoffman, 2008).

In terms of nutrition, physical activity, and obesity, a 2015 report concluded that average total annual health care expenditures per year from 2006-2011 was \$1.05 trillion. Approximately 12.5% of these expenditures, or \$131 billion, was associated with inadequate levels of physical activity (Carlson, 2015). According to Biener et al. (2017), the percentage of medical expenditure for the treatment of obesity-related illness has risen from 20.6% in 2005 to 27.5% in 2010 to 28.2% in 2013.