

# Smoking Prevalence and Management Among Cancer Survivors

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**PROBLEM IDENTIFICATION:** Continued smoking after a cancer diagnosis can lead to development of potential treatment interactions, secondary cancers, and comorbid conditions. The purpose of this article is to examine the prevalence of smoking after diagnosis and present current management strategies.

**LITERATURE SEARCH:** The terms *cancer, survivorship, behavior, smoking, and quitlines* were searched in PubMed and CINAHL® from the start of the databases to December 2016. Statistics, guidelines, and background information were obtained from websites of organizations such as the American Cancer Society, National Cancer Institute, National Institutes of Health, and Centers for Disease Control and Prevention.

**DATA EVALUATION:** Of 17 relevant articles, 12 were analyzed to identify variables among survivors who continued to smoke versus those who successfully quit. Five articles were analyzed to identify characteristics of successful smoking cessation interventions.

**SYNTHESIS:** Survivors who are younger, female, and not partnered and those who report less socioeconomic and psychosocial support may be at greater risk for continued smoking. Peer counseling, cognitive behavioral therapy exercises, and use of frameworks to guide interventions are unique properties of successful cessation interventions.

**IMPLICATIONS FOR RESEARCH:** Continued research on cancer-specific tobacco cessation interventions and exploration of why current evidence-based therapies are not working in this population are warranted.

**KEYWORDS** cancer; survivors; health behaviors; smoking; smoking cessation; tobacco use cessation

**ONF, 45(1), 55-68.**

**DOI** 10.1188/18.ONF.55-68

More than 36 million adults, about 15% of adults aged 18 years and older, reported being current cigarette users in 2015, despite it being the leading cause of preventable death in the United States (Jamal et al., 2016). Although the latest rate of smoking adults (15%) has decreased from 21% in 2008, the Healthy People 2020 target of 12% has yet to be reached (Office of Disease Prevention and Health Promotion, 2017). Current smoking rates in the United States are higher among men, people aged younger than 65 years, non-Hispanic American Indians/Alaska Natives or people of multiracial ethnicities, people with a high school degree or less, people living below the poverty level, and people with a disability or limitation (Centers for Disease Control and Prevention [CDC], 2017).

Tobacco use is a known risk factor for many types of cancer, including the following: acute myeloid leukemia, bladder cancer, cervical cancer, colon/rectal cancer, esophageal cancer, gastric cancer, laryngeal cancer, liver cancer, lung cancer, oral cancer, pancreatic cancer, pharyngeal cancer, renal cancer, and tracheal cancer. However, some cancer survivors continue to smoke cigarettes. The current smoking rate among cancer survivors is about 18%–27% (Harding, 2012; Mayer & Carlson, 2011; Sterba et al., 2017; Tseng, Lin, Martin, Chen, & Partridge, 2010; Underwood et al., 2012; Wang, McLoone, & Morrison, 2015). Smoking cessation is vital to the survival and quality of life of this population, because continued smoking can lead to development of potential treatment interactions, secondary cancers, or exacerbation of comorbid conditions, and it can have negative effects on quality of life (Armenian et al., 2016; Brown et al., 2003; CDC, 2017; Leach et al., 2015; Wang et al., 2015). Survivors who continue to smoke have a significantly lower overall survival rate compared to those with the same cancers who do not smoke, and outcomes, including total symptom burden, treatment toxicities, and