

Karen W. Geletko

MPH – Florida State University College of Medicine, Department
of Behavioral Sciences and Social Medicine

What are the most effective strategies for individuals trying to quit smoking? What approaches typically fail?

The most effective strategy for quitting smoking is a combination of behavioral counseling/support (individual or group) and pharmacotherapy, either over the counter nicotine replacement therapies such as the patch, gum, or lozenge or prescription medications such as varenicline (Chantix) and bupropion (Zyban). Medications help to manage the physical dependence and discomfort of withdrawal symptoms, while behavioral support helps to manage the psychological dependence of smoking.

Approaches that do not work will vary according to the individual. For example, some people may find success with unconventional approaches such as acupuncture or hypnosis, while others will not. In general, trying to quit without assistance (i.e. medications and counseling) leads to failure of over 70% of the time. Even those who use medications, especially nicotine replacement therapies, tend to use them incorrectly which can contribute to an unsuccessful quit attempt. It takes the average person 8-11 attempts before successfully quitting. An unsuccessful attempt is not a failed attempt but an opportunity to assess what worked and what did not and use it as a learning tool for future attempts.

Should e-cigarettes be regulated and taxed as cigarettes or as medical devices?

The FDA classifies e-cigarettes as an "other tobacco product" because it contains nicotine which is derived from tobacco. Research indicates e-cigarettes are not safe but are less harmful than conventional cigarettes but just how much is still an evolving science and there is currently not enough scientific evidence to classify them as a medical device. Therefore, e-cigarettes should remain classified as a tobacco product and regulated and taxed as such until more research is available providing considerable evidence to support the claim of using them as a medical device.

How can state and local authorities encourage people to quit smoking? Is there a role for employers? Health insurance companies?

State and local authorities can encourage people to quit smoking by enacting tobacco control policies such as increasing tobacco tax to decrease affordability and consumption, the establishment of tobacco free spaces/places, and restrictions on the sale, distribution, and advertisement of tobacco products. While tobacco cessation is more cost-effective and has a greater health effect than most other clinical interventions, it is far less effective than price, image, and exposure interventions to reduce smoking prevalence rates. Additionally, states need to increase their tobacco prevention spending as less than 3% of their tobacco revenue (tobacco settlement dollars and tobacco taxes) is allocated to programs to help smokers quit and prevent kids from smoking.

Employers can enact tobacco-free workplace policies as it encourages employees who smoke to quit. Offering worksite group cessation classes before the enactment of such policies further encourage quitting. Employers should improve or provide health insurance policies to cover comprehensive tobacco cessation treatments (pharmacotherapy and counseling) for employees. Employees who quit using tobacco yield significant cost savings for employers who spend almost \$4,000 per smoker per year in direct medical costs and lost productivity. Employers should also consider the adoption of a nonsmoker hiring policy to further their productivity cost savings.

## Methodology

In order to assess the impact of tobacco use on a smoker's finances both over a lifetime and in a single year, WalletHub calculated the potential monetary losses — including the cumulative cost of a cigarette pack per day over several decades, health-care expenditures, income losses and other costs — brought on by smoking and exposure to secondhand smoke.

For our calculations, we assumed an adult who smokes one pack of cigarettes per day beginning at age 21, when a person can legally purchase tobacco products in the U.S. We also assumed a lifespan of 48 more years, taking into account that 69 is the average age at which a smoker dies.

#### **Out-of-Pocket Costs**

To determine per-person Out-of-Pocket Costs Over a Lifetime, we took the average cost of a pack of cigarettes in each state and multiplied that figure by the total number of days in 48 years. For Costs per Year, we multiplied the average cost by 365 days.

#### **Financial Opportunity Cost**

To determine the per-person Financial Opportunity Cost, we calculated the amount of return a person would have earned by instead investing that money in the stock market over the same period. We used the historical average market return rate for the S&P 500 minus the inflation rate during the same time period to reflect the return in present-value terms.

### Health-Care Cost per Smoker

Direct medical costs to treat smoking-connected health complications are one of the biggest financial drains caused by tobacco use. To calculate related health-care costs, we obtained state-level data from the Centers for Disease Control and Prevention — namely the annual health care costs caused by smoking — and divided that amount by the total number of adult smokers in each state.

#### Income Loss per Smoker

Previous studies have shown that smoking can lead to loss of income, either because of absenteeism, workplace bias or lower productivity due to smoking-related health problems. This can create a wage gap between smokers and nonsmokers. To represent the negative relationship between earnings and smoking, we assumed an average 18 percent decrease in the median household income for each state. We arrived at this figure after a recent survey from National Longitudinal Surveys found that smokers earn 18.1 percent less than nonsmokers.

### Other Costs per Smoker

Nonsmokers are generally entitled to a homeowner's insurance credit of between 5 and 15 percent, according to the Independent Insurance Agents & Brokers of America. Given that fact, we assumed an 11.1 percent increase (i.e. the inverse of a 10 percent credit, or the average between the two percentages) in the average homeowner's insurance premium for each state to represent the penalty cost for smokers.

We then took into account the costs for victims of secondhand-smoke exposure. To calculate these costs, we used the per-nonsmoker expenditure in the state of New York as a proxy. We then multiplied that figure by the number of nonsmokers in each state to obtain the total costs of exposure to secondhand smoke at the state level. Finally, we divided the resulting total by the number of smokers in each state. This approach assumes that, in a perfect society, smokers would also pay the costs related to the harmful smoke that tobacco releases into the air.

# Formula for Financial Cost of Smoking

Financial Cost of Smoking = Out-of-Pocket Costs + Financial Opportunity Cost + Related Health-Care Costs + Income Loss Due to Smoking-Related Issues + Increase in Homeowner's Insurance Premium + Secondhand Smoke-Exposure Costs.

Sources: Data used to create this ranking were collected from the U.S. Census Bureau, Centers for Disease Control and Prevention, Insurance Information Institute and Campaign for Tobacco-Free Kids.