The Lungs and Beyond: How Cardiovascular Disease and Cancers Caused by Commercial Tobacco Affect Low-Income Populations

In the United States, heart disease and cancer are the two most common causes of death, causing more than 1.2 million deaths in 2020 alone. Commercial tobacco use is a common link between these two conditions—it is a major contributor to both cardiovascular disease and cancer and is the leading cause of preventable death in the United States (Chart 1). In addition to costing the United States more than $430 billion per year, tobacco-related diseases disproportionately affect people and communities with low SES characteristics.

How Low SES Affects Cardiovascular Disease and Cancer

People with low SES characteristics, such as low income, are more likely to suffer from chronic diseases, including cancer and heart disease. Heart disease is the leading cause of death in America and affects people of all races and ethnicities. However, people with low SES characteristics are especially affected by heart disease. Low income, lower levels of education, unemployment, part-time employment, or living in low-resource communities are known drivers of cardiovascular disease. In fact, more than 15% of people with incomes below $25,000 have cardiovascular disease, compared to about 5% of people with incomes above $75,000. Additionally, research has shown that in counties with persistent poverty, cancer mortality is more than 12% higher than in counties that do not have persistent poverty.

Chart 1. Estimated percent of deaths caused by smoking

<table>
<thead>
<tr>
<th>Cause</th>
<th>All Deaths</th>
<th>All Cancers</th>
<th>Lung Cancer</th>
<th>Chronic Obstructive Pulmonary Disease (COPD)</th>
<th>Coronary Heart Disease</th>
<th>Stroke and Other Cerebrovascular diseases</th>
<th>Lung Cancer</th>
<th>Coronary Heart Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td>20%</td>
<td>49%</td>
<td>82%</td>
<td>79%</td>
<td>24%</td>
<td>11%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Secondhand Smoke</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General. 2014. Table 12.4

Commercial tobacco, such as cigarettes or smokeless tobacco products, is different than traditional tobacco. Harmful chemicals, like nicotine, have been added to make it more addictive. This fact sheet focuses on commercial tobacco.

Smoking in Low SES Communities

People with low SES characteristics are more likely to smoke (Chart 2), with one source noting that nearly 75% of all smokers have low incomes. Many factors contribute to increased rates of smoking among people with low SES, including aggressive marketing by tobacco companies and a higher density of tobacco retailers in communities with higher proportions of people with low SES. Thus, people with low SES characteristics disproportionately experience the burden of tobacco-related diseases, including tobacco-related cancers.
People with low SES face additional barriers to health that increase the risk of chronic diseases, including:

- reduced access to fresh, healthy foods
- increased levels of stress, including financial uncertainty, which is associated with an increased risk of heart disease
- reduced levels of physical activity
- increased exposure to pollutants, which is associated with an increased risk of heart disease
- increased exposure to secondhand smoke at home and at work
- increased exposure to radon
- reduced number of healthcare professionals to screen for tobacco use or tobacco-related diseases
- increased likelihood of late-stage disease diagnoses

A combination of these factors and smoking places people with low incomes at a higher risk of developing tobacco-related cancers, lung diseases, and heart diseases.

Supporting People Who Smoke in Low SES Communities

Help people with low incomes in your state, county, or community quit commercial tobacco by:

- Promoting tobacco-related disease screening, prevention, and treatment resources.
  - Centers for Disease Control and Prevention's (CDC) Cancer Doesn't Wait Campaign
  - American Lung Association's (ALA) Lung Cancer Screening Resources
  - The COPD Foundation's resources

- Enhancing community-clinical linkages to share resources and reduce tobacco-related diseases in areas with low access to pharmacies, healthcare, healthy food, or reliable Internet.
  - SelfMade Health Network’s Cancer Moonshot Fact Sheet Series
  - CDC’s Tips from Former Smokers Campaign and Quit Smoking Resources
  - CDC’s Million Hearts in Municipalities Toolkit

How Do Tobacco-related Diseases Affect Your Community?

The following data visualization resources can help you better understand how tobacco-related health disparities and low SES affect your community so that resources can be allocated where they are needed most:

- For low SES characteristics in your community:
  - Federal Communications Commission's Broadband Maps
  - U.S. Department of Agriculture’s Food Access Research Atlas

- For disease statistics in your community:
  - CDC and National Cancer Institute’s U.S. Cancer Statistics Data Visualization Tool, with statistics by county, gender, race, and ethnicity, includes cancer incidence and mortality rates by type of cancer.
  - America’s Health Rankings’ Cardiovascular Diseases Report
  - County Health Rankings and Roadmaps Adult Smoking Data

- For state tobacco cessation and healthcare coverage options:
  - ALA’s State Tobacco Cessation Coverage Database
  - CDC’s State Tobacco Activities Tracking and Evaluation System with:
    - State Specific Smoking Attributable Expenditures
    - Medicaid Coverage of Cessation Treatments