Tobacco Use and Cessation: Intersections of Equity and Behavioral Health Care

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*References to tobacco throughout this presentation refer to the use of commercial tobacco and not the sacred and traditional use of tobacco by some American Indian communities.

Tobacco Use Remains a Public Health Problem
Tobacco Use is the Leading Cause of Preventable Disease, Disability, and Death in the U.S.

Impacts nearly every organ system

480,000 deaths/year

16 million living with illness

$600B in 2018


Current Cigarette Smoking Has Markedly Declined Among U.S. Adults

2021: More than 28 million US adults smoked cigarettes

*Note: Dotted lines represent changes in survey design. Adult current cigarette smokers reported having smoked at least 100 cigarettes in their lifetime and some days or every day at the time of the interview.

Sources: CDC. National Health Interview Survey.
Tobacco Product Use Among U.S. Adults, 2021

46 million adults

- Any tobacco: 18.7%
- Cigarettes: 11.5%
- E-Cigarettes: 4.5%
- Cigars: 3.5%
- Smokeless: 2.1%
- Pipes: 0.9%


Disparities in Tobacco Use Are a Public Health Problem

- Race/Ethnicity
- Education Level
- Annual Household Income
- Health Insurance Coverage
- Disability
- Sexual Orientation
- Rural/Urban
- Behavioral Health Conditions


Park-Lee, E; Ren, C; Cooper, M; Cornelius, M; Jamal, A; Cullen, K. Tobacco Product Use Among Middle and High School Students — United States, 2022. MMWR Morb Mortal Wkly Rep 2022;71:1429-1435.
**Adult Cigarette Smoking Varies by Race and Ethnicity**

**Prevalence of Current Cigarette Smoking, US Adults, NHIS 2021**

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>Prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian*</td>
<td>5.4%</td>
</tr>
<tr>
<td>Black*</td>
<td>11.7%</td>
</tr>
<tr>
<td>White*</td>
<td>12.9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.7%</td>
</tr>
<tr>
<td>Other*</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

*Non-Hispanic

*Estimates for American Indian and Alaska Native adults suppressed due to statistical unreliability*


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**Adult Cigarette Smoking Varies by Mental Health Condition**

**Prevalence of Current Cigarette Smoking, US Adults, NSDUH 2019–2020**

<table>
<thead>
<tr>
<th>Past-Year Mental Health Condition</th>
<th>Prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No mental health conditions</td>
<td>13.6</td>
</tr>
<tr>
<td>Any MI</td>
<td>22.8</td>
</tr>
<tr>
<td>Serious MI</td>
<td>27.2</td>
</tr>
<tr>
<td>MDD</td>
<td>17.6</td>
</tr>
<tr>
<td>Mild or Moderate MI</td>
<td>21.2</td>
</tr>
<tr>
<td>Serious Psychological Distress</td>
<td>24.5</td>
</tr>
</tbody>
</table>

*Any MI: any mental illness, defined as report of serious, moderate, or mild mental illness, serious psychological distress, or a major depressive disorder in the past year
Serious MI: defined as any mental, behavioral, or emotional disorder that interfered substantially or limited one or more major life activities (GAF score ≤50)
MDD: major depressive disorder*

Intersectional Populations Experience Compounded Disparities


<table>
<thead>
<tr>
<th>Group</th>
<th>No AMI</th>
<th>Any Mental Illness (AMI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>8.5</td>
<td>53.3</td>
</tr>
<tr>
<td><em>AI/AN</em></td>
<td>19.0</td>
<td>26.0</td>
</tr>
<tr>
<td><em>Asian</em></td>
<td>7.9</td>
<td>7.2</td>
</tr>
<tr>
<td><em>Black</em></td>
<td>16.2</td>
<td>21.0</td>
</tr>
<tr>
<td><em>Multiple races</em></td>
<td>29.1</td>
<td>23.4</td>
</tr>
<tr>
<td><em>NH/PI</em></td>
<td>13.5</td>
<td>~</td>
</tr>
<tr>
<td><em>White</em></td>
<td>14.8</td>
<td>24.1</td>
</tr>
</tbody>
</table>

AMI: past year any mental illness, defined as report of serious, moderate, or mild mental illness, serious psychological distress, or a major depressive disorder in the past year
*Non-Hispanic; AI/AN: American Indian or Alaska Native; NH/PI: Native Hawaiian or Pacific Islander
~ Estimate suppressed because relative standard error was >30%.


Social, Structural, and Commercial Forces Impact Tobacco Use

Targeted marketing by the tobacco industry
Geographic variability in policy protections
Tobacco industry development of flavors and novel products that appeal to specific groups
Geographic distribution of tobacco retail outlets
Stress related to discrimination and stigma
Socioeconomic stressors
Disparities in healthcare access
Cigarette Smoking Impacts Nearly Every Organ System

Cigarette Smoking Impacts Nearly Every Organ System

Cancers
- Oropharynx
- Larynx
- Esophagus
- Trachea, bronchus, and lung
- Acute myeloid leukemia

Chronic Diseases
- Stroke
- Blindness, cataracts, age-related macular degeneration
- Congenital defects—maternal smoking: oral and facial clefts
- Periodontitis
- Aortic aneurysm, early abdominal aortic atherosclerosis in young adults
- Coronary heart disease
- Pneumonia
- Atherosclerotic peripheral vascular disease
- Chronic obstructive pulmonary disease, tuberculosis, asthma, and other respiratory effects
- Diabetes
- Reproductive effects in women (including reduced fertility)
- Hip fractures
- Ectopic pregnancy
- Male sexual function—erectile dysfunction
- Rheumatoid arthritis
- Immune function

Smoking Impacts Behavioral Health

Smoking Impacts Behavioral Health

Nicotine is highly addictive
Tobacco Use Disorder is a substance use disorder

Smoking exacerbates symptoms of behavioral health conditions and is associated with:
- Greater depressive symptoms
- Greater likelihood of psychiatric hospitalization
- Increased suicidal behavior
- Drug- and alcohol-use relapse

Smoking reduces the effectiveness of some psychiatric medications
Smoking Cessation Improves Health

Benefits health at any age, no matter how long or how much someone has smoked.

Reduces the risk of premature death and can increase life expectancy by as much as a decade.

Reduces the risk of cardiovascular disease, COPD, and 12 types of cancer.

Quitting Smoking Can Support Behavioral Health

Supports treatment of behavioral health conditions.

Could improve mental health and is associated with decreases in:
- Depression
- Anxiety
- Stress

Could make substance use relapse less likely and is associated with increases in:
- Long-term abstinence from alcohol
- Long-term abstinence from other substances
Most adults who smoke want to quit
Half make a quit attempt each year
about 1 in 14 report recent successful cessation

Prevalence of Cessation Behaviors, U.S. Adults 2015

- Interest in quitting: 68.2%
- Past-year quit attempt: 55.5%
- Recent smoking cessation: 8.1%

Why is Quitting So Hard?

Tobacco dependence is a chronic, relapsing condition driven by addiction to nicotine.

- Physical
- Behavioral
- Psychological

Evidence-Based Treatment for Adult Smoking Cessation

Counseling
- individual, group, phone, web, text

Medication
- 7 FDA-approved medications

Tobacco Cessation Interventions Are Underutilized

How U.S. Adults Tried to Quit Smoking, 2015

- 57% received clinician advice to quit
- 69% did NOT use evidence-based cessation treatment
- More used medication (29%) than counseling (6.8%)
- < 5% used BOTH counseling and medication


Many Groups Experience Treatment Barriers
Supporting and Accelerating Cessation

Population Level Strategies Promote Smoking Cessation

Cessation Access
Smoke-Free Policies
Tobacco Price Increases
Media Campaigns

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Quitlines and M-Health Can Support and Extend Clinical Care

**Quitlines**
- **1-800-QUIT-NOW**
- Tailored services
- Counseling + Medications
- Multiple languages and modalities

**m-Health**
- Web-based: smokefree.gov
- Texting: text QUITNOW to 333888
- Mobile apps (evidence limited, quality variable)
  - QuitSTART
- Adjunct to telephone or stand-alone

Health Systems-Level Change Can Increase Intervention

- Engage the whole care team
- Implement screening and treatment protocols
- Integrate treatment into the clinical workflow
- Leverage electronic health records and e-referrals
- Enhance clinical decision support
- Leverage adjunct treatment services
- Measure performance Recognize success
- Employ population management strategies

Insurance Increases Treatment Access

- Increasing smoking is hard! Medicaid members get special benefits like free patches and gum, coaching and much more. Double your chance of quitting for good. Talk with your doctor today to find out more.

Comprehensive Coverage
Benefit Promotion
Increased Treatment Utilization
Barrier Free Coverage

Population Level Strategies Promote Smoking Cessation

Comprehensive Policies:
✓ Space-agnostic  
✓ Product-agnostic  
✓ Person-agnostic

Protect people from:
✓ Secondhand emissions  
✓ Addiction triggers

Smoke-Free Campus Policies Are Limited in Behavioral Health Settings

Mental Health Treatment Facilities

- 48.6%

Substance Use Treatment Facilities

- 34.5%

1National Mental Health Services Survey (N-MHSS), 2016
2National Survey of Substance Abuse Treatment Services (N-SSATS), 2016


Population Level Strategies Promote Smoking Cessation

Cessation Access

- Smoke-Free Policies

- Tobacco Price Increases

- Media Campaigns

Population Level Strategies Promote Smoking Cessation

Cessation Access  | Smoke-Free Policies  | Tobacco Price Increases  | Media Campaigns

Tips From Former Smokers® Campaign

2012 - 2018
16.4 million quit attempts  | 1 million sustained quits

Calls to 1-800-QUIT-NOW and Tips Campaign Air Dates, 2012 – 2021

Source: Murphy-Wiersma S, Davis KE, King BA, Butte D, Bond E, Graffunder C. Association Between the Tips From Former Smokers Campaign and Smoking Cessation Among Adults, United States, 2012–2018. Prev Chronic Dis 2020;7:200052
A Closer Look at Tobacco Industry Targeting

Menthol Marketing Over Time

Use of brand names is for identification and informational purposes only. It does not imply an endorsement by CDC and/or Health and Human Services of any product, service, or enterprise.

Images from Stanford Research into the Impact of Tobacco Advertising (SRITA): [https://tobacco.stanford.edu/](https://tobacco.stanford.edu/)
Targeted Tobacco Marketing

**FOCUS COMMUNITIES**

- Inner city, racial & ethnic minority groups, lower income
- Less expensive, more desirable promotions
- Buy 1, Get X Free
- Summer/Holiday promotions
- Menthol cigarettes: cheaper $1 to $1.50 off/pack $10 to $15 off/carton

**NON-FOCUS COMMUNITIES**

- Suburban areas, white, higher income
- More expensive, less desirable promotions
- Buy 2, Get X Free
- Buy 3, Get X Free
- No special seasonal promotions
- Menthol cigarettes: 50 cents off/pack $5 off/carton


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Targeted Menthol Cigarette Marketing

**Certain population groups** have faced relentless, targeted menthol cigarette marketing over decades, including:

- Black People
- LGBTQ+ People
- Youth
- Women
In high school neighborhoods in California, targeted advertising exposed African Americans to more promotions and lower prices for Newport cigarettes, the leading brand of menthol cigarettes.


In the Tobacco Industry’s Own Words

1972: Cigarettes should be “low in irritation and possibly contain added flavors to make it easier for those who never smoked before to acquire the taste for it more quickly.”

1978: “The success of NEWPORT has been fantastic during the past few years. Our profile taken locally shows this brand being purchased by black people (all ages), young adults (usually college age), but the base of our business is the high school student.”

1992: “Objective: Use Newport Vans to reach inner-city ethnic and general audience targeted smokers with sample 10’s. ... Tactics: The van program is a long term investment in our continuous efforts to influence menthol targeted smokers. All of the selected markets basically have the same criteria:
- High density of Black and or, Hispanic populations.
- High incidence of menthol usage.”

Tobacco control works – but so does industry targeting

Current cigarette smoking among U.S. adults is down to a historic low:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>42.0</td>
</tr>
<tr>
<td>2021</td>
<td>11.5</td>
</tr>
</tbody>
</table>

U.S. unit sales of menthol cigarettes, in particular, have **more than doubled** – from **16%** to **36%** – and now account for more than a third of all cigarette sales:

- **1 in 6** cigarettes sold were menthol flavored in 1963
- **2 in 6** cigarettes sold were menthol flavored in 2022


Menthol Deconstructed
What is menthol?

- Menthol is a chemical compound found naturally in peppermint and similar plants.
- Menthol can also be produced in a lab.
- Almost all cigarettes sold in the U.S. contain at least some natural or lab-created menthol.

The Menthol Effect

Menthol produces a cooling sensation, reduces irritation of smoke, and enhances the effects of nicotine

Tobacco companies add menthol to make products seem less harsh, more appealing

Menthol can make cigarettes easier to smoke but harder to quit

Use of brand names is for identification and informational purposes only. It does not imply an endorsement by CDC and/or Health and Human Services of any product, service, or enterprise.

Tobacco brand ad image from Stanford Research into the Impact of Tobacco Advertising (SRITA), https://tobacco.stanford.edu/
Menthol Tobacco Products

Menthol Smoking and Disparities
Racial and Ethnic Disparities in Cigarette Use, NSDUH 2019

### Percentage of Adults

#### Overall Who Smoke Cigarettes

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI/AN*</td>
<td>29.1</td>
</tr>
<tr>
<td>Black*</td>
<td>20.7</td>
</tr>
<tr>
<td>White*</td>
<td>19.2</td>
</tr>
<tr>
<td>Hispanic 13.8</td>
<td></td>
</tr>
<tr>
<td>NHPI*</td>
<td>13.5</td>
</tr>
<tr>
<td>Asian*</td>
<td>8.2</td>
</tr>
</tbody>
</table>

#### Percentage of Adults Who Smoke and Use Menthol Cigarettes

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI/AN*</td>
<td>38.5</td>
</tr>
<tr>
<td>Black*</td>
<td>84.9</td>
</tr>
<tr>
<td>White*</td>
<td>30.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>47.6</td>
</tr>
<tr>
<td>NHPI*</td>
<td>77.1</td>
</tr>
<tr>
<td>Asian*</td>
<td>41.1</td>
</tr>
</tbody>
</table>

*Non-Hispanic

### Source

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. Substance Abuse & Mental Health Data Archive. National Survey on Drug Use and Health, 2019.


### More than 5 in 10 US young adults aged 18-34 who smoke cigarettes reported using menthol cigarettes in 2020.

### About 4 in 10 US adults over age 35 who smoked cigarettes reported using menthol cigarettes in 2020.
Youth Use of Menthol Cigarettes (NSDUH, 2019)

Of the 2.3% of youth ages 12–17 who currently smoke cigarettes, almost half (48.6%) of them use menthol cigarettes.

Of the 1.0% of non-Hispanic Black/African American youth ages 12-17 years who currently smoke cigarettes, more than half (57.85%) of them use menthol cigarettes.

Of the 1.8% of Hispanic youth ages 12-17 who currently smoke cigarettes, more than half (57.22%) of them use menthol cigarettes.


Menthol Cigarettes’ Harm to Public Health Overall

From 1980 to 2018 in the U.S., menthol cigarettes were responsible for an estimated:

- **10.1 million** extra smokers
- **378,000** premature deaths
- **3 million** life years lost

From 1980 to 2018 in the U.S., menthol cigarettes were responsible for an estimated:

- **1.5 million** extra smokers
- **157,000** premature deaths
- **1.5 million** life years lost


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**FDA’s Proposed Rules on Menthol**

Source: “FDA Proposes Rules Prohibiting Menthol Cigarettes and Flavored Cigars to Prevent Youth Initiation, Significantly Reduce Tobacco-Related Disease and Death,” April 28, 2022.

A Threat to Health Equity

PATHWAY = Structural/Social Determinants of Health

PROBLEMS = Health Inequities/Disparities

DESTINATION: Health Equity

Arriving at Health Equity
Actions We Can Take

Address the Social Determinants of Health

... including racism

Increase Equitable Access to Population-Level Strategies

Foundational Approaches
- Tobacco Price Increases
- Smokefree Policies
- Hard-hitting Media Campaigns
- Cessation Access

Complementary Retail Strategies
- Product Availability
- Pricing & Promotion
- Advertising
- Age of Sale
- Retail Licensure


Implement Policies That Prohibit Sales of Menthol Tobacco Products

Examples:
- Licensing retailers who sell any type of tobacco products.
- Prohibiting sales of menthol and other tobacco products.
- Raising the price of menthol and other tobacco products and prohibiting price discounts.
- Curbing the advertising and marketing of menthol and other tobacco products to young people.
Champion Evidence-Based Cessation Resources for/to Your Patients

... together provide the best chance of quitting for good.

https://www.cdc.gov/TobaccoHCP

www.cdc.gov/QUIT

SmokeFree.gov

Use Inclusive, Tailored Communications and Framing Guidance

Health Equity Guiding Principles for Inclusive Communication

www.centerforblackhealth.org/

www.publichealthlawcenter.org/

www.cdc.gov/healthcommunication/Health_Equity.html

Tobacco use and dependence remain a significant public health concern.

Social, environmental, and commercial inequities are important drivers of disparities in tobacco use and cessation.

Menthol cigarettes contribute to tobacco-related health disparities.

Cessation treatments are available but are underutilized. All clinical care teams have a role in supporting quitting.

Healthcare professionals can support comprehensive strategies that drive reductions in tobacco use.

KEY TAKEAWAYS

Thank You!

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www.cdc.gov/tobacco and www.cdc.gov/quit

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-222-6348  www.cdc.gov

Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Office on Smoking and Health

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.