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 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

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

2021: More than **28 million** US adults smoked cigarettes

* Year

---

* 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.
Disparities in Tobacco Use Are a Public Health Problem


Park-Lee, E; Ren, C; Cooper, M; Cornelius, M; Jamal, A; Callen, E. 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 Mental Health Condition


<table>
<thead>
<tr>
<th>Past Year Mental Health Condition</th>
<th>Prevalence of Current Cigarette Smoking</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>

AMI: 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
MDD: major depressive disorder


Tobacco Marketing Targets the Behavioral Health Community

*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.

Source: tobacco.stanford.edu
Stress and Smoking

Cigarette Smoking Impacts Nearly Every Organ System

**Cancers**
- Oropharynx
- Larynx
- Esophagus
- Trachea, bronchus, and lung
- Acute myeloid leukemia
- Liver
- Stomach
- Kidney and ureter
- Pancreas
- Colorectal
- Cervix
- Bladder

**Chronic Diseases**
- Stroke
- Blindness, cataracts, age-related macular degeneration
- Congenital defects–maternal smoking: oral/face/limbs
- Periodontitis
- Aortic aneurysms, early abdominal aortic aneurysm
- 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
- Erectile dysfunction
- Male sexual function–erectile dysfunction
- Rheumatoid arthritis
- Immune function

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

The Menthol Effect

*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.
Secondhand Smoke Causes Disease & Death

- Children
  - Middle ear disease
  - Respiratory symptoms, impaired lung function
  - Lower respiratory illness
  - Sudden infant death syndrome

- Adults
  - Stroke
  - Nasal irritation
  - Lung cancer
  - Coronary heart disease
  - Reproductive effects in women: low birth weight


Smokeless Tobacco Impacts Health

Evidence for Health Effects of E-Cigarettes is Limited

Cardiovascular
Some or limited evidence
- Short-term increases in heart rate and diastolic blood pressure after nicotine intake
- Short-term increases in systolic blood pressure, endothelial dysfunction, and arterial stiffness

Insufficient or no available evidence
- Long-term changes in heart rate, blood pressure, cardiac function
- Subclinical atherosclerosis
- Clinical CV outcomes

Respiratory
Some or limited evidence
- Increased cough and wheeze in adolescents
- Increased asthma exacerbations
- Adverse effects on respiratory system (animal models)

No available evidence
- Respiratory disease in humans

Cancer
Limited evidence
- Intermediate cancer biomarkers (animal models)

No available evidence
- Intermediate cancer endpoints (humans)

Oral Health
Limited evidence
- Oral tissue cell damage

Reproductive Health
Insufficient or no available evidence
- Fetal development
- Pregnancy outcomes


There Is No Safe Tobacco Product. All Tobacco Products Carry a Risk.
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.

Could make substance use relapse less likely and is associated with increases in:
- Long-term abstinence from alcohol
- Long-term abstinence from other substances

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

Supports behavioral health treatment.
Cessation Remains a Challenge

Most adults who smoke want to quit: 68%
Half make a quit attempt each year: 55%
About 1 in 14 report recent successful cessation: 7.4%


Adults with Behavioral Health Conditions Want to and Try to Quit

Prevalence of Cessation Behaviors, U.S. Adults 2015

<table>
<thead>
<tr>
<th>Behavior</th>
<th>No Psychological Distress</th>
<th>Psychological Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest in quitting</td>
<td>68.2%</td>
<td>67.4%</td>
</tr>
<tr>
<td>Past-year quit attempt</td>
<td>55.5%</td>
<td>53.0%</td>
</tr>
<tr>
<td>Recent smoking cessation</td>
<td>8.1%</td>
<td>~</td>
</tr>
</tbody>
</table>

*Psychological Distress based on Kessler Scale; Serious Distress = Kessler Score ≥12
~Data not reported because sample size is >50 or the relative standard error of the estimate is >30%

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


People with Behavioral Health Conditions Experience Treatment Barriers
Clinical Cessation Treatment

Tobacco Cessation Brief Clinical Intervention

- **Ask** about current tobacco use
  - NO: Provide a message of prevention
  - NO: If recently quit (last 1 to 12 months), assess challenges, confidence, and need for support

- **Advise** to quit
  - NO: Not willing at this time
  - NO: Provide a brief motivational message, set expectations, and leave the door open to future conversations

- **Assess** willingness to make a quit attempt
  - YES: 1. Brief counseling
  - YES: 2. Medication, if appropriate
  - YES: 3. Refer to additional resources

- **Assist** the quit attempt

- **Arrange** a follow-up appointment (in person or by telephone)

Source: A Practical Guide to Help Your Patients Quit Using Tobacco [link provided]
ASK: Patients Want Support, Respect, and Guidance

✓ Straightforward and non-judgmental
✓ Clear, strong, and personalized message
✓ Empathetic and supportive
✓ No lecture or negative framing
✓ Open the door

It’s Okay if Patients Aren’t Ready

✓ Set the stage for the future
✓ Leave the door open
✓ Follow-up
Tobacco Cessation Brief Clinical Intervention

Variety of Types
Multiple Settings
Multiple Components
Dose Matters
ASSIST: Quitlines Can Support and Extend Clinical Care

- Tailored service
- Counseling ± Medication
- Multiple languages and modalities

1-800-QUIT-NOW
1-855-DÉJELO-YA

ASSIST: M-Health Can Support and Extend Clinical Care

- Web-based
  smokefree.gov
  espanol.smokefree.gov
- Texting
  text QUIT to 47848
  el texto DÉJELO YA al 333888
- Mobile apps
  QuitSTART
ASSIST: Seven FDA-Approved Medications

<table>
<thead>
<tr>
<th>Medication Type</th>
<th>Medication</th>
<th>Long-acting</th>
<th>Short-acting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patch</td>
<td>OTC</td>
<td>Long-acting</td>
<td>Short-acting</td>
</tr>
<tr>
<td>Gum</td>
<td>OTC</td>
<td>Short-acting</td>
<td>Short-acting</td>
</tr>
<tr>
<td>Lozenge</td>
<td>OTC</td>
<td>Short-acting</td>
<td>Short-acting</td>
</tr>
<tr>
<td>Nasal Spray</td>
<td>Prescription</td>
<td>Short-acting</td>
<td>Short-acting</td>
</tr>
<tr>
<td>Oral Inhaler</td>
<td>Prescription</td>
<td>Short-acting</td>
<td>Short-acting</td>
</tr>
<tr>
<td>Bupropion</td>
<td>Prescription</td>
<td>Prescription</td>
<td>Prescription</td>
</tr>
<tr>
<td>Varenicline</td>
<td>Prescription</td>
<td>Prescription</td>
<td>Prescription</td>
</tr>
</tbody>
</table>

Learn About Quit Smoking Medicines: www.cdc.gov/quitsmokingmeds


E-Cigarette Use For Adult Cessation?

Bottom Line: No e-cigarette has been approved by FDA as a smoking cessation aid.

Conclusion 17-1. “Overall, there is limited evidence that e-cigarettes may be effective aids to promote smoking cessation.”

2018

“The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of electronic cigarettes (e-cigarettes) for tobacco cessation in adults, including pregnant persons.”

2021

Conclusion. “The evidence is inadequate to infer that e-cigarettes, in general, increase smoking cessation. However, the evidence is suggestive but not sufficient to infer that the use of e-cigarettes containing nicotine is associated with increased smoking cessation compared with the use of e-cigarettes not containing nicotine.”

2020

“There is high-certainty evidence that ECs with nicotine increase quit rates compared to NRT and moderate-certainty evidence that they increase quit rates compared to ECs without nicotine Evidence comparing nicotine EC with usual care/no treatment also suggests benefit, but is less certain.”

2022

Tobacco Cessation Brief Clinical Intervention

**Ask**
- about current tobacco use

**Advise**
- to quit

**Assess**
- willingness to make a quit attempt

**Assist**
- the quit attempt
  - 1. Brief counseling
  - 2. Medication, if appropriate
  - 3. Refer to additional resources

**Arrange**
- a follow-up appointment (in person or by telephone)


ARRANGE: Follow Up

**Who?**

**How?**

**When?**
System Level Strategies Can Improve Treatment Delivery

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

Health Systems-Level Change Can Increase Intervention

Integrating Tobacco Treatment into Routine Care: *The Tobacco Cessation Change Package*

[Image]

www.cdc.gov/TobaccoHCP
https://millionhearts.hhs.gov/files/Tobacco_Cessation_change_Pkg.pdf
Population Level Strategies Promote Smoking Cessation

**Population Level Strategies**

- **Cessation Access**
- **Smoke-Free Policies**
- **Tobacco Price Increases**
- **Hard Hitting Media Campaigns**

**Sources:**

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**Insurance Increases Access**

**Quitting Smoking is Covered with Medicaid!**

**Comprehensive Coverage**

**Benefit Promotion**

**Barrier Free Coverage**

**Increased Treatment Utilization**

**Sources:**
Population Level Strategies

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

Protect people from:
- Secondhand emissions
- Addiction triggers

**“Golden Age” of Tobacco Education Campaigns**

**16.4 million** quit attempts

**1 million** sustained quits

2012 - 2018

**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-Wolfe B, Davis KE, King BA, Beistle D, Rodes R, Graffunder C. Association Between the Tips From Former Smokers Campaign and Smoking Cessation Among Adults, United States, 2012–2018. Prev Chronic Dis 2020;17:200052
Opportunities for Tips® in Healthcare Settings

Handouts  Posters  Notepads

Download free resources at: www.cdc.gov/TipsHCP

Population Level Strategies

Cessation Access  Smoke-Free Policies  Tobacco Price Increases  Hard Hitting Media Campaigns

Comprehensive Tobacco Prevention and Control
Tobacco use and dependence remain a significant public health concern.

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

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

Integration of cessation interventions into routine clinical workflows can improve treatment reach.

Healthcare professionals can support population-level strategies that drive cessation.

Contact: Brenna VanFrank, MD, MSPH
ydj5@cdc.gov
www.cdc.gov/tobaccoHCP

Thank You!

I wish I had known how much strength I really had in me.

-Smokefree Michele