Tobacco Use in CO
Who are the current smokers?

Moving the Mark Revisited
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Behavioral Risk Factor Surveillance System (BRFSS)
- Random-digit dialed landline and cell phone survey
- English or Spanish
- Adults aged 18+ living in Colorado
- Sample: 11,500-13,500 weighted to be representative of the adult population in Colorado

Healthy Kids Colorado Survey (HKCS)
- Paper survey voluntarily completed by high school students
- Random sample of schools and classrooms
- Sample: 15,000-25,000 weighted to be representative of all high school students (grades 9-12) in Colorado

Pregnancy Risk Assessment Monitoring System (PRAMS)
- Mailed paper survey with telephone follow-up if no response
- Random sample of women who had a recent live birth
- Sample: 1,700-2,000 weighted to be representative of all women who had a recent live birth in Colorado
As of 2015, there were approximately 600,000 adult Coloradans who currently smoke cigarettes.
Current tobacco use among adults

- Current smoker: 15.6%
- Daily smoker: 10.3%
- Use smokeless tobacco, males: 7.5%

Data Source: Behavioral Risk Factor Surveillance System, 2015
## Current tobacco use among high school students

<table>
<thead>
<tr>
<th>Product</th>
<th>2015</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarettes</td>
<td>8.6%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Cigars</td>
<td>8.9%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Chewing tobacco, snuff, or dip</td>
<td>4.9%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Cigarettes, cigars, or chewing tobacco/snuff/dip</td>
<td>14.3%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Electronic vapor products</td>
<td>26.1%</td>
<td></td>
</tr>
<tr>
<td>Cigarettes, cigars, chewing tobacco/snuff/dip, or electronic vapor products</td>
<td>30.3%</td>
<td></td>
</tr>
</tbody>
</table>

*Data on current electronic vapor product use is not available in 2013.*

*Data Source: Healthy Kids Colorado Survey, 2013 and 2015*
Quarter-century trend in Colorado cigarette sales

Source: Rate per capita calculated by the CO Department of Public Health using tax revenue data from the CO Department of Revenue and population estimates from the State Demographer's Office
Perceived risk of* and access to† cigarettes among high school students

Data Source: Healthy Kids Colorado Survey, 2015

* among all high school students
† among underage high school students
Current target population:

Adults aged 18-24 without a college education

Current target population:

Pregnant women

* Among those who smoked 3 months before pregnancy

Data Source: Pregnancy Risk Assessment Monitoring System, 2014

* Among those who smoked 3 months before pregnancy

Data Source: Pregnancy Risk Assessment Monitoring System, 2014
Successes

- Overall decrease in cigarette smoking among youth and adults
- CO has lower prevalence than U.S.

Challenges

- Decreasing trend in sales but small increase 2015-2016
- Rise of e-vapor products
- Among high school students:
  - 30% use tobacco products
  - 1/6 report no or slight risk of smoking 1+ pack/day
  - More than half report easy access to cigarettes
- High prevalence of smoking among priority populations:
  - Adults aged 18-24 without college education
  - Pregnant women
Who are the current smokers?
Prevalence by demographics and demographics of current smokers

Disparities

Who is more likely to smoke?

Burden

Who are the current smokers?
Statement on structural inequity

The Colorado Department of Public Health and Environment acknowledges that social, economic and environmental inequities result in adverse health outcomes and have a greater impact than individual choices. Reducing health disparities through systems change can help improve opportunities for all Coloradans.
Current smoking among adults by sex

Sex of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by age

Age of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by race/ethnicity

Race/ethnicity of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among Hispanic adults by preferred language*

Preferred language* of Hispanic current smokers

*Language survey was completed in

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by sexual orientation

Sexual orientation of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by socioeconomic status (SES)

SES of current smokers

*Low SES: uninsured, income below 200% FPL, no HS diploma/GED, or unable to work

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by poverty level

Poverty level of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by education level

Education level of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by insurance type

Insurance type of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by employment status

Employment status of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by industry

Industry of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by occupation

Occupation of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Current smoking among adults by housing type

Housing type of current smokers

Data Source: Behavioral Risk Factor Surveillance System, 2015
Summary - Who are the smokers?

**Disparities**
- Adults <65 years
- Males
- Native American & Black
- English-speaking Hispanic
- LGB
- Low SES
- <College degree
- <200% FPL
- Uninsured & Medicaid
- Unemployed & unable to work
- Renters

**Burden**
- Adults 25-64
- Males
- White & Hispanic
- English-speaking Hispanic
- Heterosexual
- Low SES
- High school grads & some college
- Private insurance & Medicaid
- Employed
  - Construction workers
- Homeowners

Data Source: Behavioral Risk Factor Surveillance System
Current smoking among adults by region

Data Source: Behavioral Risk Factor Surveillance System, 2015
Where do current smokers live?

Data Source: Behavioral Risk Factor Surveillance System, 2015
What else do we know about smokers?
### Health care access and utilization

<table>
<thead>
<tr>
<th>Service</th>
<th>Non-smoker</th>
<th>Current Smoker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had pap test within past three years (females ages 21-65) (2014)</td>
<td>86.4</td>
<td>76.4</td>
</tr>
<tr>
<td>Had mammogram within past two years (females ages 50-74) (2014)</td>
<td>76.9</td>
<td>56.7</td>
</tr>
<tr>
<td>Meet recommendations for colorectal cancer screening (ages 50-75) (2014)</td>
<td>69.2</td>
<td>51.9</td>
</tr>
<tr>
<td>Received flu shot within past year (2015)</td>
<td>47.1</td>
<td>31.6</td>
</tr>
<tr>
<td>Had routine check up within past year (2015)</td>
<td>64.4</td>
<td>55.0</td>
</tr>
<tr>
<td>Have 1+ regular providers (2015)</td>
<td>78.5</td>
<td>64.0</td>
</tr>
</tbody>
</table>

*Data Source: Behavioral Risk Factor Surveillance System, (year)*
Health behaviors

- Consume sugary drinks <1 time/day
  - Non-smoker: 75.0%
  - Current smoker: 46.5%

- Meet aerobic physical activity recommendations
  - Non-smoker: 62.1%
  - Current smoker: 52.3%

- Eat vegetables 1+ times/day
  - Non-smoker: 83.7%
  - Current smoker: 73.8%

- Eat fruit 1+ times/day
  - Non-smoker: 66.2%
  - Current smoker: 53.7%

Data Source: Behavioral Risk Factor Surveillance System, 2015
Chronic health conditions

Age-adjusted to the 2000 standard US population
Data Source: Behavioral Risk Factor Surveillance System, 2015
### Mental Health

<table>
<thead>
<tr>
<th>Measure</th>
<th>Year</th>
<th>Non-smoker</th>
<th>Current smoker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious psychological distress*</td>
<td>(2013)</td>
<td>7.6</td>
<td>2.0</td>
</tr>
<tr>
<td>4+ adverse childhood experiences</td>
<td>(2014)</td>
<td>12.8</td>
<td>25.7</td>
</tr>
<tr>
<td>Current depression**</td>
<td>(2014)</td>
<td>5.4</td>
<td>14.8</td>
</tr>
<tr>
<td>Ever depression</td>
<td>(2015)</td>
<td>17.4</td>
<td>31.8</td>
</tr>
<tr>
<td>14+ days poor mental health</td>
<td>(2015)</td>
<td>8.6</td>
<td>20.8</td>
</tr>
</tbody>
</table>

*Score of 13-24 on 6-item Kessler scale questions
**Score of 20-24 on 8-item Patient Health Questionnaire

Data Source: Behavioral Risk Factor Surveillance System, (year)
Co-Occurring Substance Use

Data Source: Behavioral Risk Factor Surveillance System, 2015
Summary: What else do we know about current smokers?

Health care access and utilization
- Less likely to have a regular provider
- Less likely to have annual wellness visit and be up-to-date on preventive services

Health behaviors
- Less likely to consume fruits and vegetables
- More likely to consume sugary drinks
- Less likely to meet physical activity recommendations

Chronic health conditions
- More likely to be diagnosed with COPD, arthritis, cancer, cardiovascular disease, and depression
- More likely to have multiple chronic conditions

Data Source: Behavioral Risk Factor Surveillance System
Summary: What else do we know about current smokers?

Mental health
- More likely to have psychological distress or depression
- More likely to have 4+ adverse childhood experiences

Co-occurring substance use
- More likely to use marijuana
- More likely to be a heavy drinker or binge drink
- More likely to use chewing tobacco
Who are the current smokers:

1. Working in construction
2. 18-24 without any college education
3. Low SES
Who are the current smokers who are working in construction?*

* Includes those who are employed or out of work for <1 year

✝ Unemployed means they have been out of work for <1 year and indicated construction as most recent industry of employment


<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>17.0</td>
</tr>
<tr>
<td>Uninsured</td>
<td>36.3</td>
</tr>
<tr>
<td>Regular check-up in past 12 months</td>
<td>37.8</td>
</tr>
<tr>
<td>Low SES</td>
<td>72.6</td>
</tr>
<tr>
<td>&lt;200% FPL</td>
<td>50.9</td>
</tr>
<tr>
<td>No HS/GED</td>
<td>33.5</td>
</tr>
<tr>
<td>Unemployed†</td>
<td>4.9</td>
</tr>
<tr>
<td>18-24 No College</td>
<td>12.5</td>
</tr>
<tr>
<td>14+ days poor mental health</td>
<td>16.1</td>
</tr>
</tbody>
</table>
Who are the current smokers who are 18-24 without any college education?

Data Source: Behavioral Risk Factor Surveillance System, 2015
Who are the current smokers who are low SES*?

*Low SES: uninsured, income below 200% FPL, no HS diploma/GED, or unable to work

Data Source: Behavioral Risk Factor Surveillance System, 2015
Questions?

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Extra Slides
Quit attempt in the past 12 months

High school students

46.0%  
54.0%

Adults

30.9%  
69.1%

Data Sources: Healthy Kids Colorado Survey, 2015
Behavioral Risk Factor Surveillance System, 2015
Secondhand smoke exposure

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposed in home or car in past 7 days</td>
<td>15.7%</td>
</tr>
<tr>
<td>Exposed in home while someone was smoking in past 7 days</td>
<td>16.2%</td>
</tr>
<tr>
<td>Exposed in car while parent was smoking in past 7 days</td>
<td>14.1%</td>
</tr>
<tr>
<td>Exposed in home</td>
<td>46.5%</td>
</tr>
<tr>
<td>Health care provider advised about child's exposure</td>
<td>31.3%</td>
</tr>
<tr>
<td>Caregivers of children aged 1-14 years</td>
<td>32.4%</td>
</tr>
</tbody>
</table>

Data Sources: Child Health Survey, 2015
Healthy Kids Colorado Survey, 2015
Pregnancy Risk Assessment Monitoring System, 2014
Current smoking among high school students by region

Data Source: 2015 Healthy Kids Colorado Survey
Chronic health conditions

Crude prevalence
Data Source: Behavioral Risk Factor Surveillance System, 2015
Dual use of cigarettes and marijuana

3.9% of adults (approx. 150,000)

- Average age: 38 years
- Mostly male (62%)
- Half have no post-high school education (52%)
- Nearly ¾ are low SES (72%)
- 17% are lesbian, gay, or bisexual
- Higher among those who are unemployed or unable to work

Data Source: Behavioral Risk Factor Surveillance System, 2015
Adult cigarette smoking (%) -- CO and select states, 2011-2015