Substance Use Patterns and Health Impacts

Colorado Substance Abuse Trend and Response Task Force
August 4, 2017
Data Sources

• Behavioral Risk Factor Surveillance Survey (BRFSS)
  ➢ Annual self-reported, telephone-based survey (Adults 18+)
  ➢ Largest survey asking about adult substance use in Colorado

• Healthy Kids Colorado Survey (HKCS)
  ➢ Every 2 years, self-reported, school-based survey (HS & MS)
  ➢ Largest survey asking about youth substance use in Colorado
High School Substance Use in CO
(past 30 days)

Source: Colorado HKCS, 2016
High School Alcohol Use (2015)

1 in 3 high school students had at least one drink in the past 30 days

1 in 6 high school students binge drink

LGBT students are more likely to have drank alcohol in the past 30 days compared to heterosexual students

Source: Colorado HKCS, 2016
High School Marijuana Use (2015)

1 in 5 high school students used marijuana in the prior 30 days

1 in 19 used daily or near-daily

40% of high school seniors who had ever used marijuana first tried it by age 14

Use is highest in 11th and 12th grades

Source: Colorado HKCS, 2016
Behavioral Risk Factor Surveillance Survey 2016
Binge Drinking
19%

Near-daily Tobacco Smoking
16%

Near-daily Marijuana Use
5%

More Rx Pain Reliever*
2%

*The last time you used prescription pain reliever, did you take any of it more frequently or in higher doses than directed by a doctor?

Source: Colorado BRFSS, 2016
Colorado Binge Drinking Across the Lifespan

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle School</td>
<td>2.8</td>
</tr>
<tr>
<td>High School</td>
<td>16.6</td>
</tr>
<tr>
<td>18-24 years</td>
<td>26.4</td>
</tr>
<tr>
<td>25-34 years</td>
<td>30.9</td>
</tr>
<tr>
<td>35-44 years</td>
<td>24.0</td>
</tr>
<tr>
<td>45-54 years</td>
<td>18.1</td>
</tr>
<tr>
<td>55-64 years</td>
<td>11.4</td>
</tr>
<tr>
<td>65+ years</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Source: Colorado BRFSS, 2016
Colorado Binge Drinking by Gender

Source: Colorado BRFSS (2016)
Colorado Binge Drinking by Race/Ethnicity

Source: Colorado BRFSS (2016)
Binge Drinking by Health Statistics Region

Source: Colorado BRFSS, 2016
Binge Drinking
Frequency & Intensity

Binge drinkers average:

7 drinks per binge

4 episodes per month

Source: Colorado BRFSS, 2016
Adult Marijuana Use in Colorado

Overall adult use is steady at 13-14%

More adult men use (16.4%) than adult women (11.0%) (in the prior 30 days)

2.7% of all adults reported driving a vehicle within 2-3 hours after using marijuana (that calculates to over 100,000 Coloradoans)

Source: Colorado BRFSS, 2014-16
Near-daily Marijuana Use by Age (2016)

More than 1 in 10 younger adults, 18-34 years old, use marijuana daily or near-daily (20+ days/month)

- 18-25 years: 11.0%
- 26-34 years: 10.8%
- 35-64 years: 5.8%
- 65+ years: 1.4%

Source: Colorado BRFSS, 2016
Prescription Pain Relievers, BRFSS 2016
How long has it been since you used any prescription pain reliever?

- **83%**
  - Had ever used a prescription pain reliever

- **15.8%**
  - Within the past 30 days (or currently)

- **17.6%**
  - 30 days to 12 months

- **49.8%**
  - More than 12 months

- **16.7%**
  - Never

Source: Colorado BRFSS, 2016
Prescription Pain Relievers, 2016

Main reason for use

- **80%**
  - For short-term pain
- **12%**
  - For long-term pain
- **4%**
  - For both
- **3%**
  - For other physical symptoms

Ever used

- **83%**
  - Prescribed to me by a doctor for pain
- **96%**
  - Prescribed to me for other reason
- **2%**
  - Person gave me or I took
- **1%**
  - Other

Source: Colorado BRFSS, 2016
Prescription Pain Relievers, 2016

The last time you used prescription pain reliever, did you take any of it more frequently or in higher doses than directed by a doctor?

2.4% SAID YES.

This did not ask about misuse (not your prescription or taking only for the experience or feeling they caused).

Source: Colorado BRFSS, 2016
2 Overarching Indicators
tracked for
the Colorado Consortium for
Prescription Drug Abuse Prevention

Use:
1. Non-medical use of prescription pain relievers

Impact:
2. Drug overdose deaths involving prescription opioids
Rx Opioid Misuse in 2013-2014

Percent of Coloradans who misused prescription pain relievers in the past year

- Colorado Age 18-25*: 9.3%
- Colorado Age 26+: 4.1%
- National (age 12+): 4.9%
- Colorado (age 12+): 4.1%

*Difference between 10.7% in 2012-2013 and 9.3% 2013-2014 is statistically significant at the 0.05 level. From the National Survey on Drug Use and Health for 2013-2014: http://www.samhsa.gov/data/sites/default/files/NSDUHsaeShortTermCHG2014/NSDUHsaeShortTermCHG2014.htm
Poison Center Calls, ED Visits and Deaths
Colorado Calls to the Poison Center

Source: National Poison Data System
ED Visits - data through Sept 2015

Source: Colorado Hospital Association Discharge Data
**Health Impact:**

*Prescription opioid overdoses*

300 (32%) of the 912 drug poisoning deaths in Colorado involved **Rx opioid pain relievers** in 2016.

Source: Colorado death certificate data 2016, Vital Statistics Unit
**Health Impact: Drug overdose deaths**

*Age-adjusted rates, Colorado residents, 2006-2016*

- Prescription opioid pain reliever (T40.2-T40.4)
- Cocaine (T40.5)
- Only non-specified drug (T50.9)
- Heroin (T40.1)
- Psychostimulants with abuse potential (T43.6)
- Marijuana (T40.7)
- Alcohol (X45,X65,Y15)

*Source: Colorado death certificate data 2016, Vital Statistics Unit*

*Statistically different from previous year*
Health Impact: Opioid overdose deaths

Age-adjusted rates, Colorado residents, 2006-2016

- Prescription opioid pain reliever (T40.2-T40.4)
- Specified drug(s) other than opioid pain relievers
- Only non-specified drug (T50.9)
- Heroin (T40.1)
- Fentanyl (T40.4 with literal text)

Note:
Heroin is a subset of the category of specified drug(s) other than opioid pain relievers. Fentanyl is included in prescription opioids. Some unspecified drugs may be opioid drugs.

Source: Colorado death certificate data 2016, Vital Statistics Unit
Summary

**Alcohol**

- Alcohol is still the most prevalently used substance
- Binge drinking is not just a youth or young adult issue
- Alcohol rates 4 to 30 times greater than other drugs, depending upon the indicator (not all shown)

**Marijuana**

- Use is highest in young adults and older teens
- 2.7% of all adults drove after using marijuana
- Poison center calls and ED visits increased for several years and may now be declining
Summary

Opioids

• Rate of prescription opioid overdose deaths is decreasing.

• Heroin death rate in 2016 has doubled since 2012.

• Heroin is driving the increase in drug overdose death rate.

• Misuse of prescription opioids difficult to measure in surveys.

Other drugs

• Psychostimulant overdose rate continued to slowly increase since 2012.

• Cocaine overdose death rate doubled in 1 year, though still very low at 1.8 deaths per 100,000 population.
Thank you!

Kacy Crawford, MPH
Alcohol Epidemiologist
kcrawford@state.co.us

Daniel Vigil, MD, MPH
Manager - Marijuana Health Monitoring and Research Program
daniel.vigil@state.co.us

Barbara Gabella, MSPH
Senior Scientist in Injury Epidemiology
bgabella@state.co.us
Misuse of Prescription Pain Relievers

National Survey on Drug Use and Health

2014 and prior

Without a prescription of their own

or

only for the experience or feeling that the drugs caused

2015

Use in any way not directed by a doctor

• without a prescription;
• in greater amounts, more often, or longer than told to take a drug; or
• in any other way not directed by a doctor.

Rx Pain Relievers Use in the Past Year

National Survey on Drug Use and Health, 2015 vs. CO BRFSS, 2016

Total in U.S. 37.8%

Total Colorado 33.4%

Within the past 30 days (or currently) 15.8%

30 days to 12 months 17.6%