• A volunteer-run, non-profit organization dedicated to minimizing the negative consequences of legalized marijuana in Colorado, particularly for our youth.

• Formed March 1, 2013 in response to observation that marijuana policy was being dominated and driven by for-profit marijuana industry. We were concerned that the health, safety and well-being of Colorado youth was not being considered.

• Concerned how increased marijuana commercialization will impact our communities, the state and our adolescents.
Commercialization of Marijuana in Denver

- **334 marijuana SHOPS soon to be operating in Denver**
  - 217 medical marijuana shops already open (more than Starbucks or McDonalds)
  - 117 recreational shops in application process

- **619 current medical marijuana facilities in Denver**
  - 217 shops
  - 365 cultivation facilities
  - 37 marijuana infused products manufacturers

- **Recreational Marijuana applications in Denver**
  - 117 retail shops
  - 158 cultivation facilities
  - 24 marijuana infused products manufacturers
  - 4 testing facilities

Potential to have 434 marijuana stores before 2016!

As of 12/5/13 Denver Excise and Licensing
Medical marijuana in Colorado
How well did we regulate that?

• State and City Audits
  – seed to sale system is non-existent
  – marijuana businesses operating without licenses
  – felons and those with arrest records were issued licenses and operating
  – seized marijuana not destroyed properly
  – diversion of marijuana taking place with youth and out of state
  – sales taxes underreported
  – fees inadequate for regulatory oversight
  – doctors giving inappropriate advice and doses
  – Caregivers not managing and assuming responsibilities for their patients

• Colorado medical marijuana businesses tied to Columbian drug cartel
Marijuana use highest among 18-20
Today’s Marijuana in Colorado

• It is not marijuana of the 70’s or 80’s
  – extremely potent, THC levels up to 35% vs. single digits of a decade ago

• Comes in many forms
  – Smoked, vaporized and marijuana infused products / edibles (candies, sweets and sodas etc.)

• Marijuana concentrate is available
  – highly potent, 75% THC or higher
  – 1 oz of concentrate = approx. 2,800 servings or marijuana
  – Colorado has no meaningful transaction limits
  – Not for sale anywhere else in the world
Youth Marijuana Use On the Rise

• Resurgence of marijuana use after more than a decade of decline.
  — High school seniors rate of use went up from 22% (1992) to nearly 40% (2011) *

• 1 in 15 high school seniors are smoking marijuana on a daily or near daily basis*

• In Colorado, Marijuana, not alcohol, is the number 1 reason adolescents are admitted to substance abuse programs**

*Monitoring the Future National Survey Results on Drug Use 2012 Overview
**National Survey on Drug Use and Health, 2010
“Pot Problems in Schools Increase with Legalization”
Denver Post lead story 11/11/13

Number of Drug-Related School Suspensions/Expulsions

Source: Colorado Department of Education, 2012
Denver’s youth marijuana use higher than national average

Marijuana: Youth 30-Day Use by Grade
2011 Denver vs. Colorado vs. US

SOURCE: Youth Risk Behavior Survey, US CDC (national); Healthy Kids Colorado Survey (state and Denver)
Denver ranks above the rest

Exhibit 31: Lifetime Marijuana Use by Grade

The Impact of Medical Marijuana in Metropolitan Denver, Epidemiologic Data Trends report #2, 1/2/13
Marijuana and Adolescents

• Marijuana affects adolescents differently than adults due to developing brain which continues until mid 20’s

• Average age for first use marijuana is 14 years old*

• 55 percent of marijuana users are between 12 and 18 years old *

• 1 in 6 adolescents who use become addicted vs. 1 in 9 adults**

**Crean et. An Evidence based-review of acute and long-term effects of cannabis use on executive cognitive functions, 2011
National Survey on Drug Use and Health, Substance Abuse and Mental Health Services Administration, 2010
Hall and Degenhardt, 2013
Marijuana messages sold to our kids

- Marijuana is an all-natural wellness product; an herb that is not harmful.
- It is a cure-all that helps with ADHD, concentration, sleep issues, headaches, anxiety, depression, OCD
- Marijuana is an acceptable recreational activity
- There is an increase in advertising on-line, in magazines and newspapers; even pot recipes in Denver Post
Link between marijuana exposure and increased use

• Availability of marijuana, its use and exposure leads to more use

• As perception of harm goes down, use goes up*
  – particularly true for youth as they become desensitized to marijuana
  – Studies show there is a direct correlation*
  – Colorado statistics and kid surveys exemplify this

• Denver City Council’s recent actions on public marijuana consumption are extremely important for this reason
  – Curbing open and public marijuana consumption in front yards and neighborhoods where kids are exposed to it is extremely important

Impacts of early marijuana use

– studies show marijuana can permanently change and damage teen brains
– affects the hippocampus - critical for learning and memory
– affects prefrontal cortex - governs complex decision making and analysis
– affects brain processing, impulsivity and memory
Scientific Studies
Early Marijuana Use

• Heavy youth marijuana users reduced their IQ levels as much as 8 points*
  – comparable to IQ reductions from early childhood lead exposure
  – cognitive declines affect chronic adult users as well, but are more dramatic for teens

• Association with long-term psychological effects such as psychosis / schizophrenia
  – Teens who use daily had more difficulty performing memory tasks and had abnormal brain structure similar to schizophrenics.****
  – intensity of marijuana and age of user affect the severity**

• Adolescents who use daily had a 2.5% likelihood to develop anxiety disorders.***

*Madeline H. Meier et al 2013
**Jutras-Aswad of Univ. of Montreal and Hurd NY Icahn School of Medicine at Mount Sinai 2013
***Degenhardt, Hall 2013
****Smith, Cobia, et al., Northwestern Univ. Feinberg School of Medicine, Schizophrenia Bulletin 2013, December 16, 2013
Marijuana Edibles

• Huge, multi-million dollar industry that is growing
• Very few regulations and no limitations on types that can be sold
• Creates confusion with regular food and accidental ingestions
• Marketed to be attractive to adolescents
• Almost any food can become a marijuana edible (candy, soda, chips etc...)
• Infused, sprayed or baked into food
Packaged and marketed to be attractive to kids
The industry’s “medicine” for adults
Kids breakfast cereal sprayed with marijuana concentrate
Even toddler’s food, goldfish, can become a marijuana edible
Increased visits to ER due to marijuana

- Children’s Hospital saw new category of patients (children) being rushed ER due to edibles
  - 2005-2009 there were 0 cases of admissions from accidental edible ingestions
  - After 2009, 17 reported emergencies at Children’s Hospital*

- ER visits throughout Colorado for marijuana related incidents involving youth
  - 2005-2008 there were 741 cases per year, on avg
  - 2009-2011 increased to 800 cases per year*

*Wang, Rocky Mountain Poison Control and Drug, 2013
**Legalization of Marijuana in Colorado: The Impact Rocky Mountain HIDTA Aug. 2013
Drugged Driving on the Rise

Overall traffic fatalities decreased in Colorado 16% between 2006-2011, but fatalities involving drivers testing positive for marijuana increased 114%.*

Marijuana
The Next Big Tobacco

- Similarities between Big Tobacco, decades ago, and today’s budding marijuana industry
  - Health claims on their product, despite associated risks
  - Marketing and trying to make their product attractive to kids to secure future customers
  - Influencing public policy through political pressure, lobbying and funding political candidates
  - Both industries now using the E-cigarettes and other types of vaporizers, including car and pocket hookah’s
  - Both out to make money, despite tremendous costs to society
Big Tobacco eyeing marijuana business

• “The use of marijuana ... has important implications for the tobacco industry in terms of an alternative product line. [We] have the land to grow it, the machines to roll it and package it, the distribution to market it.”

• “Estimates indicate that the market in legalized marijuana might be as high as $10 billion annually.”

From a report commissioned by cigarette manufacturer Brown and Williamson (now merged with R.J. Reynolds) in the 1970s.

• Altria, the parent company of Phillip Morris, recently bought the web domain names: AltriCannabis.com and AltriMarijuana.com
Issues yet to be resolved in Colorado

• No meaningful limitations to commercialization
  – production limits, caps on businesses, limit on number of licenses issued
• No limitations on THC strength, potency
  – over 15% THC in Amsterdam is considered a hard drug like heroin and cocaine for law enforcement purposes
• No limitations on types of edibles
• Advertising and promotions restrictions not clear
  – TV advertising permitted on primetime programs
• SMART will continue to advocate for:
  – An immediate public education campaign targeted to middle and high school students informing them and the general public on the negative impacts of early marijuana use
Washington state is much more restrictive than Colorado

- Limiting commercialization by allowing retail stores to be based on population.
  - Seattle only allowed 21 recreational marijuana shops, compared to Denver’s soon to be over 300 shops
- Caps on overall marijuana production
- Prohibition on marijuana concentrate
- Much higher taxes (75%)
- No home grows allowed
- Limits and restrictions on edibles
What the Future Holds
(Lessons from Alcohol and Tobacco)

• Lower prices encourage more consumption
• Appropriate taxation can offset public health costs
• Ease of access for adults will increase access by teens
• Higher outlet density leads to higher consumption
• More advertising leads to more consumption
Summary

• Visit and contact us at: www.smartcolorado.org
• Sign up to receive updates and action alerts before important legislative votes on marijuana issues.
• Encourage your state and local elected officials to protect our kids and communities by limiting marijuana commercialization and implementing policies that reduce, rather than promote, increased marijuana consumption.
• Learn about what your city council is doing and get involved in the process by contacting them or attending public hearings and testifying.