

I'm putting together a sabbatical leave proposal for the 2018-2019 academic year. As part of my Sabbatical I'd like to visit institutions working on engaging state and federal government agencies in prevention. I'm beginning All the best,
Nate

COLLEGE OF HEALTH & HUMAN SCIENCES

DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

KNOWLEDGE AND USE OF EVIDENCE-BASED PROGRAMS AND PRACTICES AMONG COLORADO EXTENSION PROFESSIONALS

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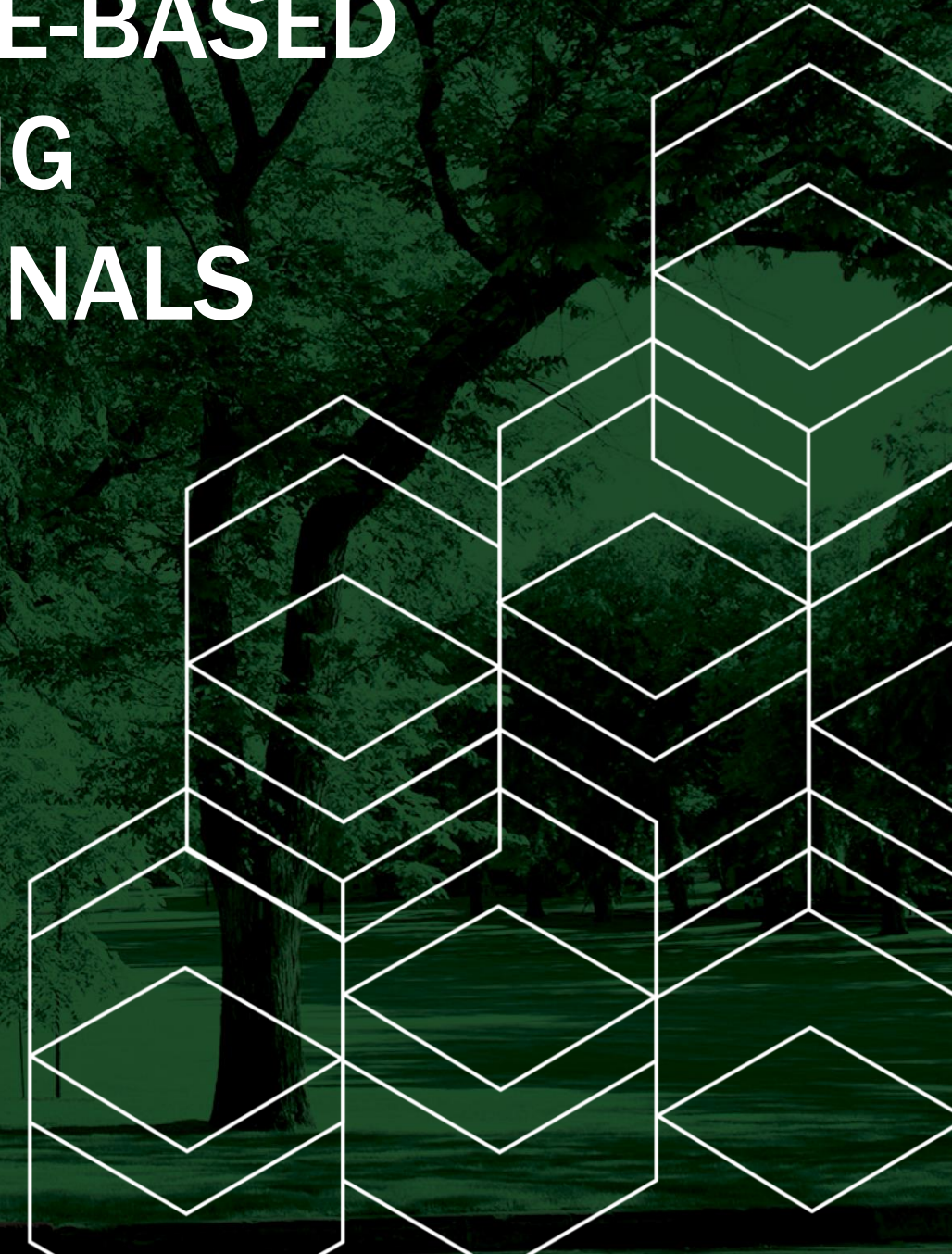
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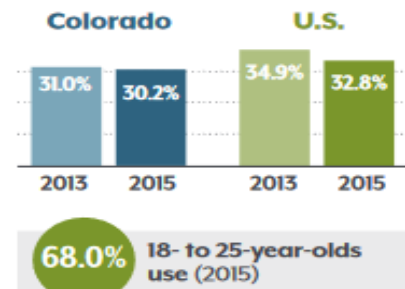
The Behavioral Health Needs of Coloradoans

- Nationally, nearly one out of every four adults has experienced a mental and/or substance use disorder, the consequences of which affect individuals, their families, communities, and society at large.
- Each year in Colorado, about 260,000 adults and children need treatment for severe mental health issues (about a third of people who need treatment get it).
- Colorado's opioid overdose rate climbed 179% between 2001 and 2015 to 558 overdose deaths.

RURAL AND MOUNTAIN REGIONS DISPROPORTIONATELY AFFECTED

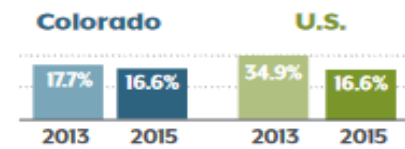
Rate of Alcohol Use:

One of three high school students report currently drinking alcohol, a rate that didn't change from 2013 to 2015. Colorado youth are near the national average.



Binge Drinking:

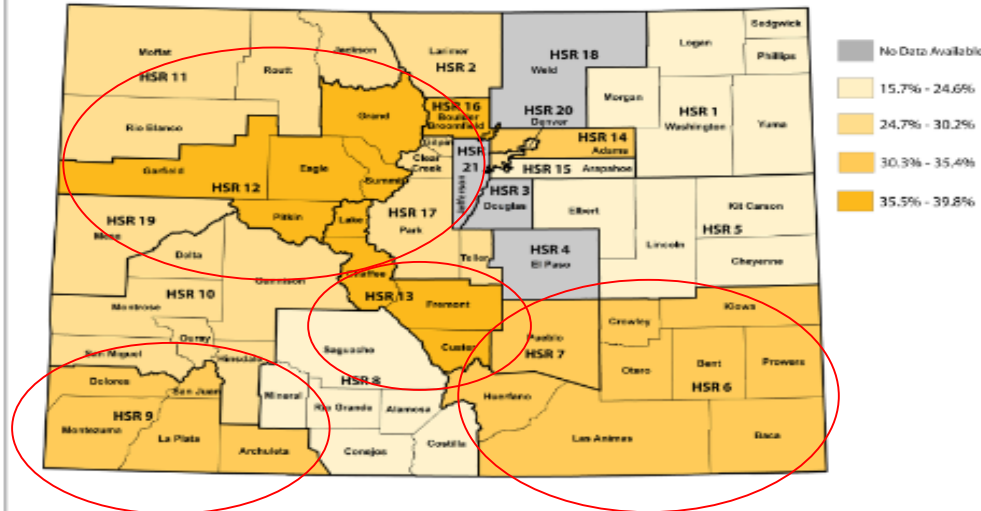
One of six high school students report binge drinking in the last 30 days.



Colorado Youth: Who's Most Likely to Use Alcohol?

Four of 10 (40 percent) high school students in the Interstate 70 mountain counties of Eagle, Garfield, Grand, Pitkin and Summit say they've had at least one drink in the past month, the state's highest rate of alcohol use. The second highest rate is reported by high schoolers in the counties of Boulder and Broomfield at 38 percent.

Percentage of High Schoolers Who Drank At Least Once in the Past 30 Days

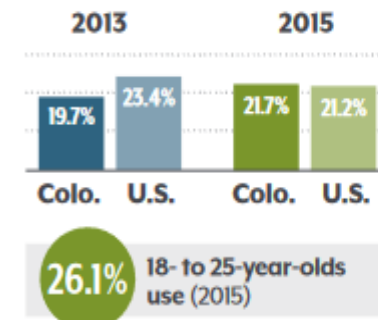


Current Alcohol Use by Grade: Two of Five Seniors Regularly Drink

Current alcohol use steadily increases by grade, with an apparent jump between 8th and 10th grade.

Rate of Marijuana Use: Staying Steady

One of five middle school and high school students report currently using marijuana, a rate that didn't change from 2013 to 2015.



Access

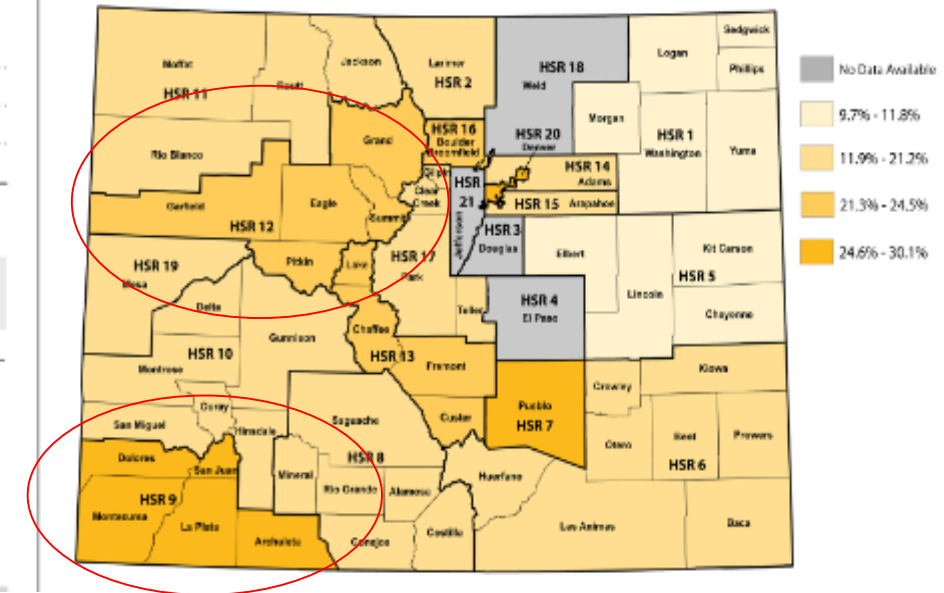
Top Five Colorado Counties: Rate of recreational and medical marijuana shops.

State average: 12.7 per 100,000

Colorado Youth: Who's Most Likely to Use Marijuana?

High school students on the Western Slope and in southwest Colorado had higher rates of use than those on the Eastern Plains. Pueblo County has the state's highest rate — 30.1 percent.

Percentage of High Schoolers Who Have Used Marijuana at Least Once in the Past 30 Days



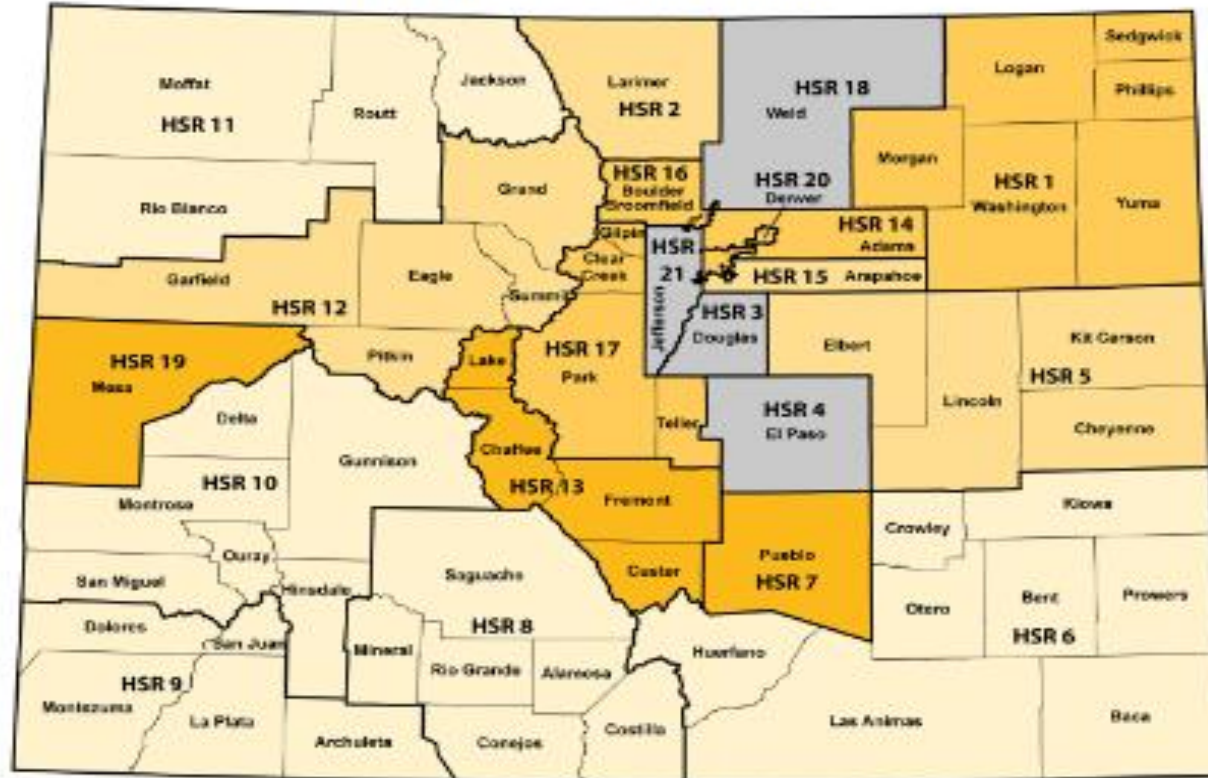
Source:

https://www.coloradohealthinstitute.org/sites/default/files/file_attachments/Making%20the%20Wise%20Investment.pdf

Mental Health

Students who suffer from mental health issues are at greater risk for substance use. Mesa and Pueblo counties, along with counties in the southeast corner and the Upper Arkansas Valley, report the highest rates of children with emotional difficulties and high school students who were sad or hopeless for at least two weeks in a row in the past year.

High Schoolers Who Felt Sad or Hopeless Almost Every Day for Two Weeks or More in a Row



Highest Rates in the State

HSR 19 (Mesa)

37.8%

HSR 7 (Pueblo)

34.5%

HSR 13 (Lake, Fremont, Chaffee, Custer)

34.2%

Statewide

29.5%

Legend: No Data Available (Grey), 23.3% - 26.3% (Light Yellow), 26.4% - 28.6% (Yellow), 28.7% - 31.8% (Orange), 31.9% - 37.8% (Dark Orange)

Source:

https://www.coloradohealthinstitute.org/sites/default/files/file_attachments/Making%20the%20Wise%20Investment.pdf

PREVENTION: WE KNOW WHAT WORKS!

FIGURE 2. Risk Factors for Behavioral Health Problems in Young People.⁴

| Risk For Health and Behavioral Problems | Substance Abuse | Delinquency | Teen Pregnancy | School Dropout | Violence | Depression & Anxiety |
|--|-----------------|-------------|----------------|----------------|----------|----------------------|
| Peer/Individual | | | | | | |
| Early and Persistent Antisocial Behavior | ● | ● | ● | ● | ● | ● |
| Rebelliousness | ● | ● | | ● | ● | |
| Gang Involvement | ● | ● | | | ● | |
| Friends Who Engage in the Problem Behavior | ● | ● | ● | ● | ● | |
| Early Initiation of the Problem Behavior | ● | ● | ● | ● | ● | |
| Constitutional Factors | ● | ● | | | ● | ● |
| School | | | | | | |
| Academic Failure Beginning in Late Elementary School | ● | ● | ● | ● | ● | ● |
| Lack of Commitment to School | ● | ● | ● | ● | ● | |
| Family | | | | | | |
| Family History of the Problem Behavior | ● | ● | ● | ● | ● | ● |
| Family Management Problems | ● | ● | ● | ● | ● | ● |
| Family Conflict | ● | ● | ● | ● | ● | ● |
| Favorable Parental Attitudes and Involvement in the Problem Behavior | ● | ● | | | ● | |
| Community | | | | | | |
| Availability of Drugs | ● | | | | ● | |
| Availability of Firearms | | ● | | | ● | |
| Community Laws and Norms Favorable toward Drug Use, Firearms and Crime | ● | ● | | | ● | |
| Media Portrayals of the Behavior | ● | | | | ● | |
| Transition and Mobility | ● | ● | | ● | | ● |
| Low Neighborhood Attachment and Community Disorganization | ● | ● | | | ● | |
| Extreme Economic Deprivation | ● | ● | ● | ● | ● | |

PREVENTION: WE KNOW WHAT WORKS!



FOR HEALTHY YOUTH DEVELOPMENT

[FIND PROGRAMS](#) [BLUEPRINTS CERTIFICATION](#) [NEWS & EVENTS](#) [FAQS](#) [ABOUT BLUEPRINTS](#)



PROVIDING A REGISTRY OF

Experimentally Proven Programs

SAMHSA

Substance Abuse and Mental Health
Services Administration

[Find Treatment](#) [Practitioner Training](#) [Grants](#) [Data](#) [Programs](#) [New](#)

Programs / EBP Resource Center

EVIDENCE-BASED PRACTICES RESOURCE CENTER

Evidence-Based Practices Resource Center

SAMHSA is committed to improving prevention, treatment, and recovery support services for mental and substance use disorders.

This new Evidence-Based Practices Resource Center aims to provide communities, clinicians, policy-makers and others in the field with the information and tools they need to incorporate evidence-based practices into their communities or clinical settings. The Resource Center contains a collection of scientifically-based resources for a broad range of audiences, including Treatment Improvement Protocols, toolkits, resource guides, clinical practice guidelines, and other science-based resources.

PREVENTION: WHAT WORKS IS COST EFFECTIVE

For questions on benefit-cost results relating to Public Health & Prevention, contact [Eva Westley](#).

| Program name <small>(click on the program name for more detail)</small> | Date of last literature review | Total benefits | Taxpayer benefits | Non-taxpayer benefits | Costs | Benefits minus costs (net present value) | Benefit to cost ratio | Chance benefits will exceed costs |
|--|--------------------------------|----------------|-------------------|-----------------------|-----------|--|-----------------------|-----------------------------------|
| School-based | | | | | | | | |
| Positive Action <small>UPDATED</small> | Sep. 2018 | \$33,181 | \$8,577 | \$24,604 | (\$1,025) | \$32,156 | \$32.36 | 95 % |
| Mentoring: School-based by teachers or staff <small>NEW</small> | May. 2018 | \$20,706 | \$5,253 | \$15,453 | (\$3,352) | \$17,354 | \$6.18 | 71 % |
| School-based programs to increase physical activity | Nov. 2015 | \$15,654 | \$3,803 | \$11,851 | (\$477) | \$15,177 | \$32.78 | 65 % |
| Good Behavior Game <small>UPDATED</small> | Mar. 2018 | \$10,282 | \$2,958 | \$7,324 | (\$155) | \$10,127 | \$66.29 | 76 % |
| Caring School Community (formerly Child Development Project) <small>UPDATED</small> | Apr. 2018 | \$10,843 | \$2,877 | \$7,967 | (\$1,063) | \$9,780 | \$10.20 | 61 % |
| Promoting Alternative Thinking Strategies (PATHS) | Jun. 2015 | \$8,135 | \$1,952 | \$6,183 | (\$366) | \$7,769 | \$22.22 | 63 % |
| Coping and Support Training (CAST) | Aug. 2017 | \$7,451 | \$2,444 | \$5,008 | (\$465) | \$6,987 | \$16.03 | 81 % |
| Sunshine Circle Model <small>NEW</small> | Aug. 2018 | \$5,308 | \$1,774 | \$3,535 | (\$159) | \$5,149 | \$33.33 | 91 % |
| Seattle Social Development Project | Apr. 2012 | \$8,726 | \$3,335 | \$5,391 | (\$3,826) | \$4,900 | \$2.28 | 60 % |
| School-Wide Positive Behavioral Interventions and Supports (SWPBIS) <small>UPDATED</small> | Jan. 2018 | \$4,658 | \$1,243 | \$3,416 | (\$630) | \$4,029 | \$7.40 | 70 % |

| Date of last literature review | Total benefits | Taxpayer benefits | Non-taxpayer benefits | Costs | Benefits minus costs (net present value) | Benefit to cost ratio | Chance benefits will exceed costs | |
|---|----------------|-------------------|-----------------------|----------|--|-----------------------|-----------------------------------|-------------|
| Home- or Family-based | | | | | | | | |
| Nurse Family Partnership <small>UPDATED</small> | Mar. 2018 | \$16,885 | \$4,494 | \$12,391 | (\$12,022) | \$4,863 | \$1.40 | 62 % |
| Parent Management Training - Oregon Model (Prevention population) | May. 2015 | \$5,479 | \$1,622 | \$3,857 | (\$669) | \$4,810 | \$8.19 | 60 % |
| Healthy Families America | Jul. 2017 | \$7,781 | \$5,088 | \$2,693 | (\$5,160) | \$2,621 | \$1.51 | 58 % |
| Computer-based substance use prevention programs | Dec. 2014 | \$2,177 | \$573 | \$1,603 | (\$72) | \$2,104 | \$30.15 | 70 % |
| Other home visiting programs for at-risk families <small>UPDATED</small> | Apr. 2018 | \$10,428 | \$2,822 | \$7,606 | (\$8,637) | \$1,791 | \$1.21 | 51 % |
| Home Instruction for Parents of Preschool Youngsters (HIPPY) | Aug. 2017 | \$5,513 | \$1,974 | \$3,539 | (\$4,102) | \$1,411 | \$1.34 | 52 % |
| Strengthening Families for Parents and Youth 10-14 <small>UPDATED</small> | Aug. 2018 | \$1,935 | \$590 | \$1,345 | (\$564) | \$1,372 | \$3.43 | 58 % |
| Family Matters | Jun. 2016 | \$1,458 | \$401 | \$1,057 | (\$200) | \$1,258 | \$7.30 | 73 % |

PREVENTION: WE HAVE THE FRAMEWORKS!

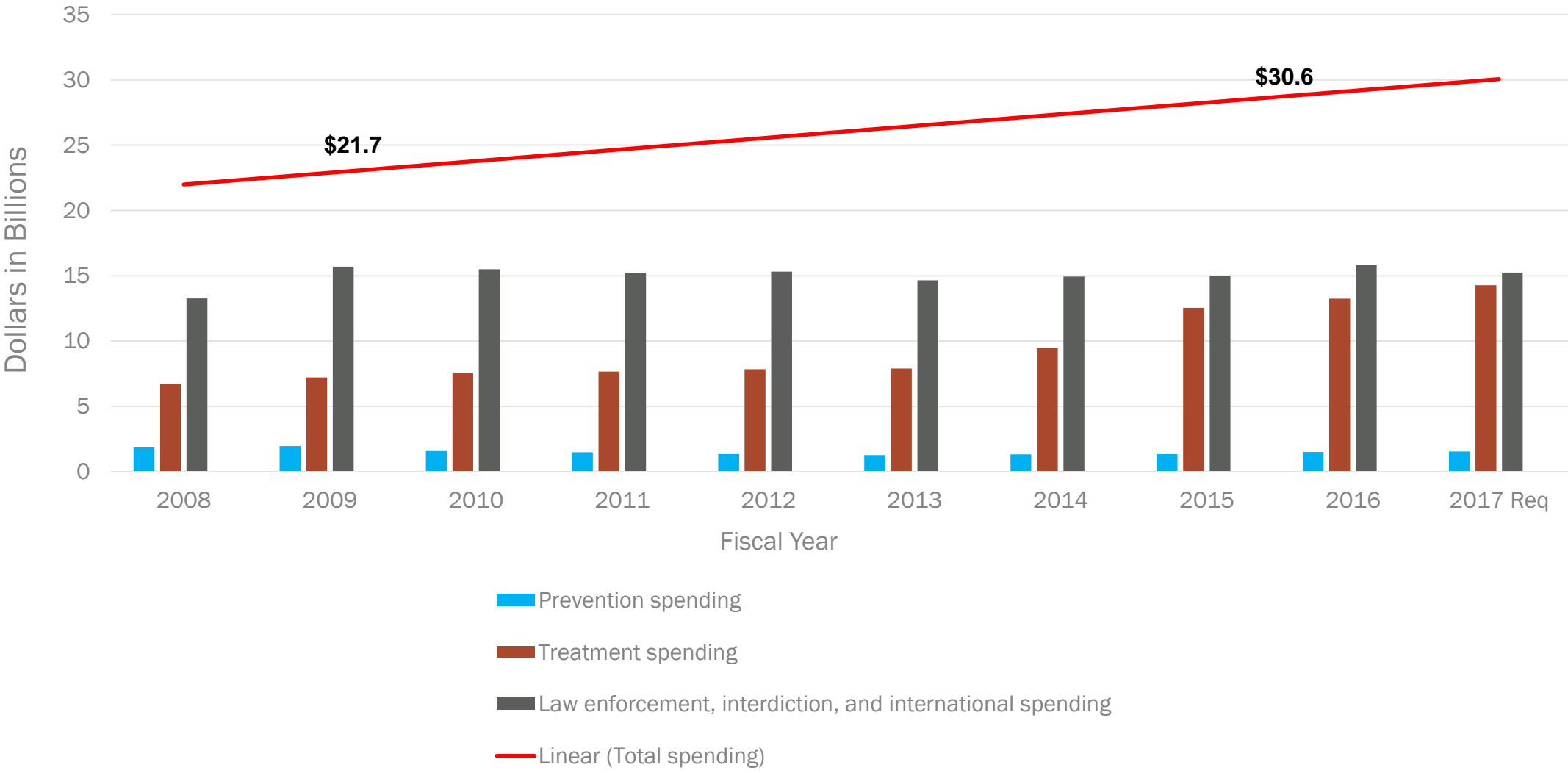
Figure 4. SAMHSA's Strategic Prevention Framework



Despite all that we know about prevention saving lives...

- Effective prevention programs still do not reach the majority of those in need in Colorado.
- State agencies responsible for substance use disorder services spend 7.5 times more on treatment than prevention.
 - 82.5% Of the Colorado Office of Behavioral Health's SAMHSA Block Grant for mental health and substance use goes to treatment.
 - Only 20% of remainder goes to primary prevention

Federal Drug Control Spending for FY 2008-2017

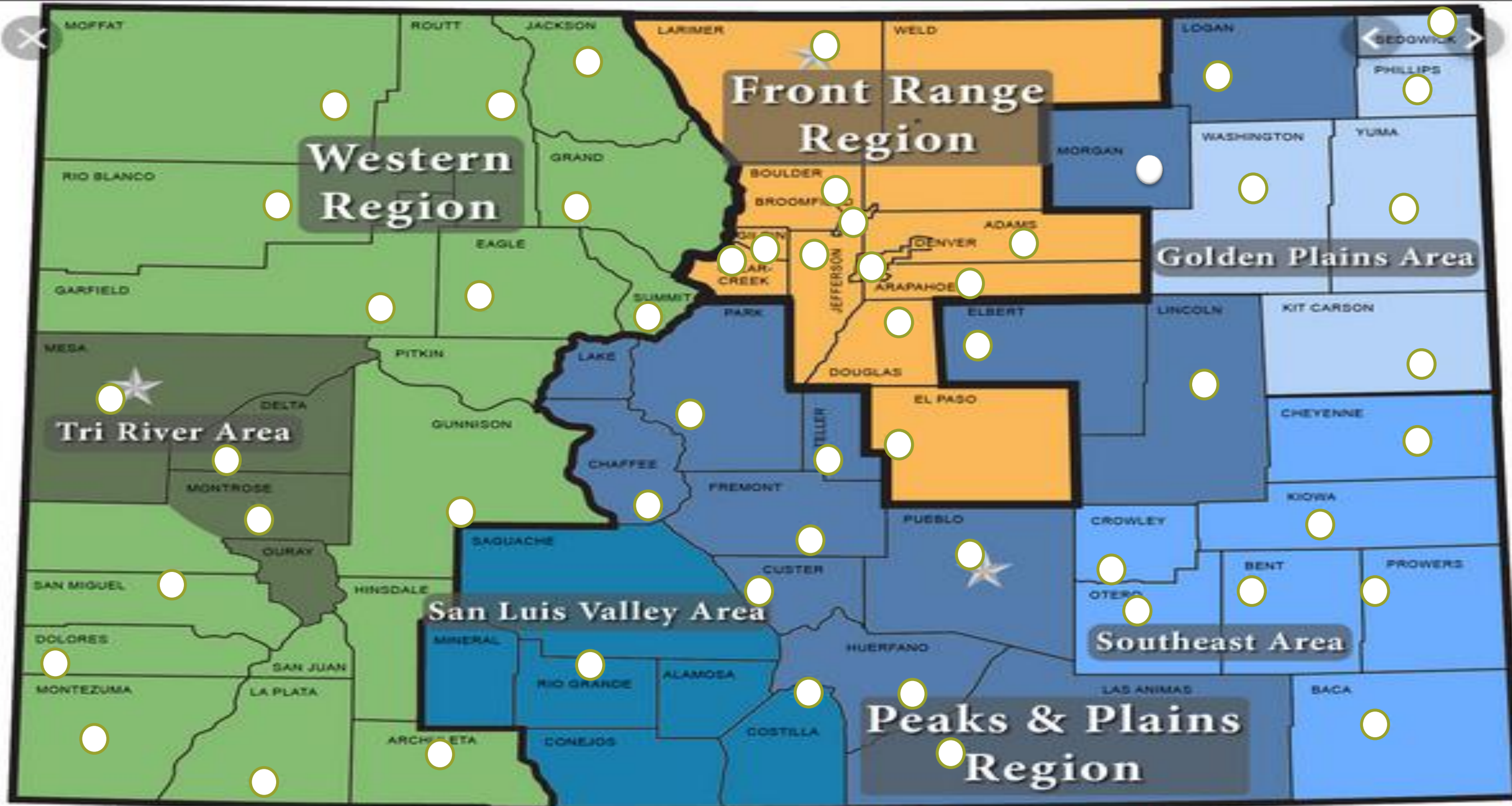


Source: Office of National Drug Control Policy -National Drug Control Budget Funding Highlights for Fiscal Years 2016 & 2017

Despite all that we know about prevention saving lives...

- As a result, there is a critical need for prevention services across the country, in Colorado, and especially in rural, mountain, and plains regions.
- Former Surgeon General David Satcher described the gap between what we know about how to prevent these problems, and what is actually implemented as “lethal to Americans.”

WHAT IF WE COULD LEVERAGE UNIVERSITY EXTENSION PARTNERSHIPS FOR PREVENTION?



PREVENTION RESEARCH CENTER (PRC) MISSION AND VISION

Mission:

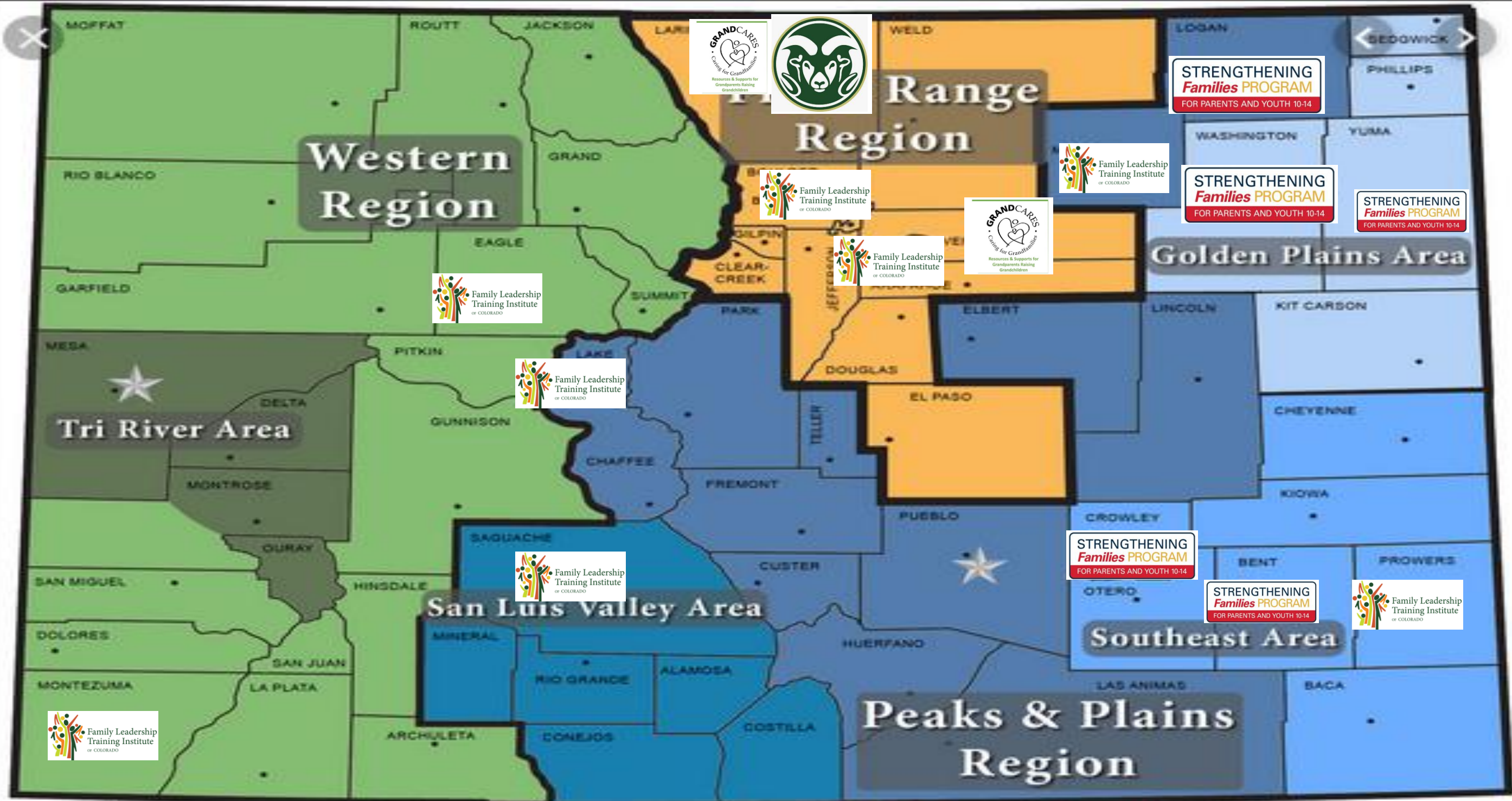
- Promoting healthy development for individuals and families through research, training, and engagement.

Vision:

- Communities meet the needs of individuals and families through coordinated, effective prevention services.

PRC FOCUS AREAS WITH SELECT CURRENT ACTIVITIES

- ❑ **Promoting Behavioral Health Across the Lifespan**
 - Positive youth development and social-emotional learning
 - Substance use prevention and recovery
- ❑ **Supporting Family Resilience**
 - Family-focused intervention
 - Intergenerational family supports
- ❑ **Strengthening Community Services and Systems**
 - Systems change for comprehensive health
- ❑ **Elevating Prevention Science in Research, Practice, and Policy**
 - Graduate and undergraduate student training
 - Continuing education for front-line prevention practitioners



STRENGTHENING Families PROGRAM
FOR PARENTS AND YOUTH 10-14



STRENGTHENING Families PROGRAM
FOR PARENTS AND YOUTH 10-14

STRENGTHENING Families PROGRAM
FOR PARENTS AND YOUTH 10-14



Golden Plains Area



Tri River Area



STRENGTHENING Families PROGRAM
FOR PARENTS AND YOUTH 10-14

STRENGTHENING Families PROGRAM
FOR PARENTS AND YOUTH 10-14



San Luis Valley Area

Southeast Area

Peaks & Plains Region



★ **Regional Offices**
County Offices

2000 x 1579



Colorado State University
Extension A Division of the Office of Engagement

Map updated 03/14/2013

CAN UNIVERSITIES ENGAGE WITH COMMUNITIES THROUGH EXTENSION AT A BROADER, COORDINATED, STATE-WIDE SCALE?

- What we need to know first....
 - Do Extension professionals (perceive) support for the implementation of evidence-based programs?
 - What are university Extension professionals knowledge, awareness, and use of evidence-based prevention programs and practices?

WHO WE ASKED – OUR PARTICIPANTS

- 101 CSU Extension professionals were sent email invitations to participate in the study. Email invitation request specific to 4-H (n=64) and Family and Consumer Sciences (FCS; n=37) professionals.
 - Participants were compensated with a \$25 Amazon gift card for completing the survey.
- 40 Extension professional completed the survey.
 - 27% FCS
 - 25% 4-H
 - 28% Other
 - 20% Multiple Roles

WHO WE ASKED – OUR PARTICIPANTS

- 85% were female
- 83% Caucasian.
- Region
 - Western 28%
 - Peaks and Plains 23%
 - Front Range 38%
 - Not Indicated 11%

USE OF EVIDENCE-BASED PROGRAMS (EBPS)?

- 56% of participants reported searching for EBPs.
- 28% of all participants reported using EBPs for youth.
- When asked about use of specific EBPs (e.g., FLTI, GRANDcares, SFP 10-14), 45% reported using at least one.

| <u>Construct</u> | <u>Mean</u> | <u>Range</u> | |
|---|-------------|--------------|----------------------------|
| Support for Prevention | 3.37 | 1-5 | Neutral to Agree |
| Perceived Value of Prevention | 3.53 | 1-4 | Somewhat True to Very True |
| Individual Knowledge of EBPs | 3.12 | 1-5 | Neutral or Mixed |
| Extension Knowledge of EBPs | 3.03 | 1-5 | Neutral or Mixed |
| Extension Commitment to Evidence-based Programming | 3.32 | 1-5 | Neutral to Agree |
| Commitment to Evaluation | 2.84 | 1-4 | Sometimes |
| Resources and Support for Collaboration and Partnerships | 3.12 | 1-5 | Neutral or Mixed |
| Obstacles to Prevention Programming | 2.77 | 1-5 | Disagree to Neutral |
| | | | |
| Extension Reputation is Strong | 3.17 | 1-4 | Agree |
| Extension a point of contact for adolescent problem behaviors | 1.60 | 1-5 | Not at all to Rarely |
| | | | |
| Focus on Prevention | | | |
| Substance use | 4.37 | 1-5 | Important + |
| School Drop Out | 3.97 | 1-5 | Important |
| Delinquency/Crime | 3.79 | 1-5 | Important |
| Risky Sexual Behaviors | 3.77 | 1-5 | Important |
| Overweight/Obesity | 3.40 | 1-5 | Somewhat Important |

WHAT CONTRIBUTES TO USE OF EBPS?

- Knowledge of Prevention Programming was significantly related to greater use of EBPs ($t = 3.455$ $p < .001$).
- Perceived Value of Prevention was significantly related to greater use of EBPs ($t = 2.01$, $p < .10$).
- Extension as a Point of Contact was significantly related to greater use of EBPs ($t = 4.49$, $p < .001$).

HOW DO WE INCREASE KNOWLEDGE AND PERCEIVED VALUE OF EBPS?

- Training

| | <u>Somewhat Likely to Likely</u> |
|---|----------------------------------|
| Online Prevention Science Webinars | 70% |
| Regional In-Person Prevention Science Workshops | 70% |
| In-Person Trainings at CSU | 50% |
| Online Prevention Science Certificate | 45% |
| Online Masters | 23% |

FOLLOW-UP INTERVIEWS WITH EXTENSION PROFESSIONALS

Participants:

- All 40 participants were sent an invitation to participate in a one-on-one interview using Zoom.
- 11 extension professionals participated in the interview.
 - Participants were compensated with a \$75.00 gift card to Amazon for completing the interview.

Procedures:

- Semi-structured interview protocol was created and used during each interview (Seidman, 1998).
- Interviews lasted anywhere from 10 to 35 minutes and were recorded for data analysis purposes.
- Research assistant conducted all interviews, transcribed the data, and participated in qualitative data analysis.

Data Analysis:

- Coding procedures, using a combination of methods, outlined by Allen (1989) and Bogdan and Bilken (1998) were used to condense the data into themes and categories.
- Ongoing conversations and reflections between the coders enabled us to subject the data to intense scrutiny.
- The current analysis presents findings related to the participants' knowledge and use of EBPS and Communities that Care.

PARTICIPANT DEMOGRAPHICS

| Pseudonym | Current Position | Years in Current Position | Previous Experience | Region | CTC Involvement |
|-----------|----------------------------------|---------------------------|------------------------------------|-------------------------|-----------------|
| Adrian | 4-H, FCS Agent | < 1 year | community education | Western Region | no |
| Alex | FCS Agent, Community Development | < 5 years | community education and engagement | Front Range Region | no |
| Cameron | 4-H Agent | < 1 year | community education | Western Region | no |
| Kai | 4-H, FCS Agent | < 5 years | academic research | Western Region | yes |
| Kieran | FCS Agent | < 1 year | community education | Western Region | no |
| Everen | Specialist | < 10 years | specialist within Extension | Front Range Region | no |
| Rowan | FCS Agent | < 5 years | community health technician | Peaks and Plains Region | no |
| Lennon | Specialist | < 10 years | academic research and education | Western Region | no |
| Taylor | Specialist | < 5 years | community education | Front Range Region | no |
| Austen | Other Foci Agent | < 10 years | community education | Front Range Region | no |
| Elliott | FCS Agent | < 25 years | community education | Front Range Region | no |

Major Themes

Supporting Sub-Themes

'Evidence-based' is undefined and non-standardized within Extension.

EBP: Unclear, undefined, unstandardized working definition of "evidence-based"

Agents are focused on sharing researched-backed information rather than using evidence-based methods to deliver this information

Extension employees are not the only individuals that implement programming. Volunteers are often used in these roles, especially 4-H. This could be a barrier to evidence-based program implementation.

Extension's commitment to program evaluation does not seem to be the strongest

Selecting programming for communities is the product of many different influences

Programming should be community centered - agents are tailoring and altering programs to suit their community and their passions

Community voice and buy-in matters; Community assessments impact program selection

What other universities/states are doing matters and influences program choices

Money matters when selecting programming

Communications with CTC and sharing information about CTC is not common practice within Extension.

CTC is not widely known among Extension employees

CTC is often compared/related to 4-H

CTC's interactions with Extension can be frustrating and they (CTC) tend to work in isolation

DISCUSSION AND NEXT STEPS

- Strength of these results and findings from the interviews points to both barriers and opportunities for growth among CSU Extension as a system and at the individual professional level
 - Planning and Reporting Unit foci and “stronger “direction from Planning Leadership Team
 - Professional Development Opportunities
- Limitations of the data
 - Bias in unknown ways related to extension professionals’ knowledge or experience – may not be entirely representative of those that did not respond to the survey or the follow-up interview
- Next Steps
 - Working with CSU Extension Leadership to create a community needs assessment related to individual, family and community wellness
 - Prevention Research Center & Extension – online training on EBPs

THANK YOU!

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