



Suicide Prevention Gatekeeper Trainings, From Process to Outcomes: A Data-Driven Story



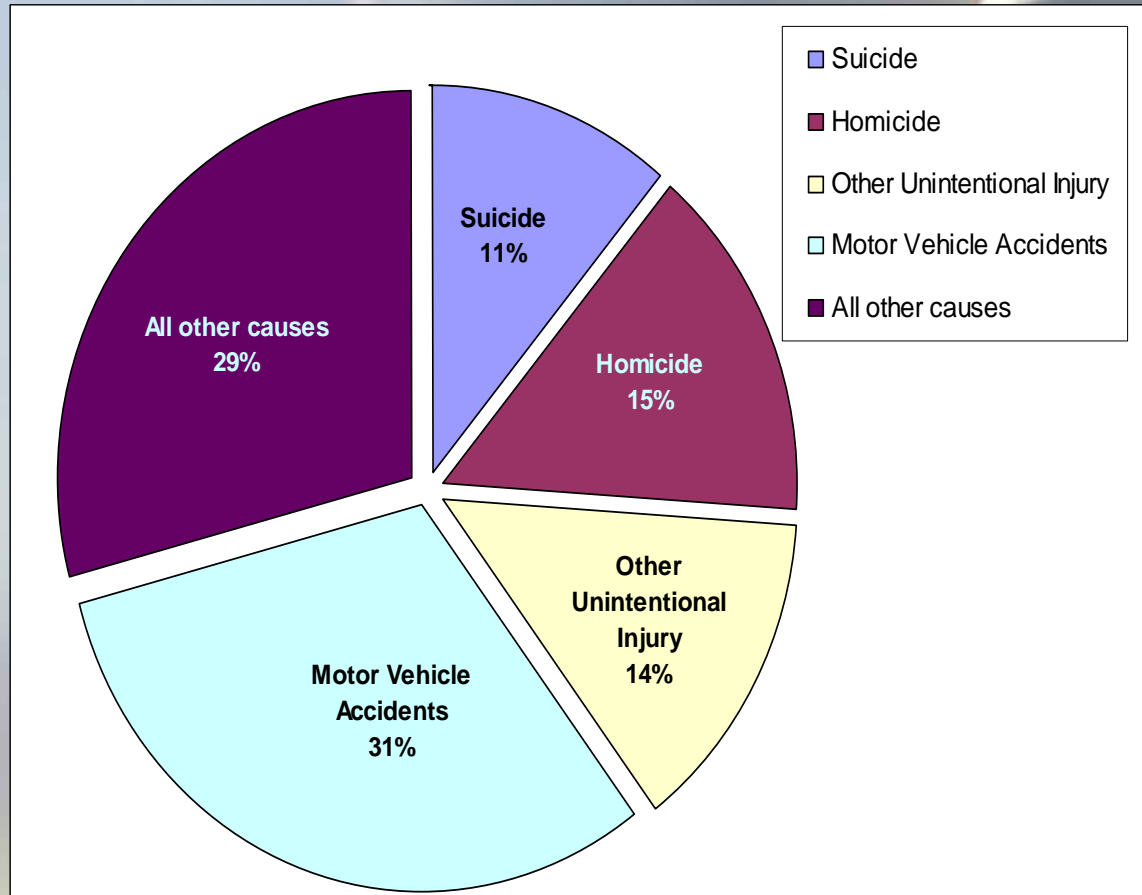
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Overview: The Problem

In 2003, precisely 4,232 adolescents and young adults aged 10-24 took their own lives, resulting in a suicide rate of 6.8 per 100,000.

In the same year, suicide accounted for 11.2% of all deaths for adolescents and young adults, making it the third leading cause of death for this age group after motor vehicle accidents and homicide.



* National Adolescent Health Information Center (2006). *Fact Sheet on Suicide: Adolescents and young adults*. San Francisco, CA: Author, University of California, San Francisco .

Responding to the Problem: Garrett Lee Smith Memorial Act (GLSMA)

- **The GLSMA, passed by Congress in October 2004, was the first federal legislation to authorize funding specifically for youth suicide prevention and early intervention programs.**
- **To date, 38 State and Tribal grantees across the United States have received funding.**
- **The suicide prevention program approaches and target populations vary in each funded State/Tribal program, but a common theme among them is the training of Gatekeepers.**

Responding to the Problem: Gatekeeper Training Activities

- **Suicide does not usually occur spontaneously. There often is time to intervene.**
- **Gatekeeping is a process in which caring individuals recognize the potential for risk behaviors in others and take action to ensure that at-risk people receive the help they need.**
- **“Universal” gatekeeper programs train staff members to increase their knowledge of risk factors and warning signs of suicidal intentions (CDC, 1992).**
- **Gatekeepers must**
 - understand the basic facts about suicide and of suicidal behavior;
 - have specific skills and knowledge needed to recognize and respond to a person who may be at-risk for suicide;
 - be able to appropriately interact, support, and assist family and friends in the aftermath of an attempted or completed suicide.

* Centers for Disease Control and Prevention (CDC) (1992).

Youth suicide prevention programs: A resource guide. Atlanta: National Center for Injury Prevention and Control.

From Process to Outcomes: A Data-Driven Story

- **Purpose:** To answer questions related to how data collection and monitoring procedures mandated through a federally funded suicide program have informed and/or impacted Gatekeeper activities, protocols, practices.
- **Means:** GLSMA also addresses the national need for research and evaluation. Along with the utilization of dollars to support program activities, the 38 funded programs are also required to participate in a cross-site evaluation.
 - This is the only large-scale national data set related to suicide prevention gatekeeper training programs with regard to who is trained; the approaches used; how those trainings are perceived and used and with what intended target population; and the impact of these activities on early identification, referral and receipt of services by youth identified at risk.
 - The data are both quantitative and qualitative in nature.

Data Sources

- **The Products and Services Inventory (PSI)** is submitted quarterly by the program staff member most knowledgeable about the development and utilization of products and services. It is designed to compile all of the prevention/intervention programs, services, and products that are used across GLS State/Tribal grantees.
- **The Training Exit Survey (TES)** is administered immediately following each training activity, and is designed to gather individual-level data from adult participants to assess the content of the training, the participants' intended use of the skills and knowledge learned, and their satisfaction with the training experience.

Data Sources (continued)

- **The Training Utilization and Penetration (TUP) interviews, conducted 2-months after the training activity, assesses whether the suicide prevention knowledge, skills, and/or techniques learned through training were utilized, to what extent, and with which populations.**
- **The Early Identification, Referral, and Follow-Up (EIRF) analysis examines the impact of these training activities. This analysis tracks those youth identified as at risk for suicide by a grantee-trained gatekeeper. The EIRF includes the demographics of identified youth, the number and type of related referrals for treatments, and the eventual receipt of treatment.**

Products and Services Inventory

Grantee Reported GLS Gatekeeper Trainings

- **Out of 37 reporting grantees*, 30 have conducted at least one gatekeeper training.**
- **Approximately 87 gatekeeper training activities have been reported by grantees. This is over half of all training and technical assistance activities being reported.**

*One currently funded grantee has not yet begun reporting on program activities

Products and Services Inventory

Grantee Reported GLS Gatekeeper Training Models

Among grantees implementing gatekeeper trainings, the models being used include the following.

Gatekeeper Training Model	% of Grantees* (N=30)
Question, Persuade, Refer (QPR)	47%
Applied Suicide Intervention Skills Training (ASIST)	40%
Locally adapted/developed model	23%
Assessing and Managing Suicide Risk	10%
safeTALK	10%
Yellow Ribbon	7%
Lifelines	7%

*Categories are not mutually exclusive. Grantees can implement more than one gatekeeper training model, thus percentages may add up to >100.

GLS Gatekeeper Activities

- **Applied Suicide Intervention Skills Training (ASIST)** (14 hours)
Prepares participants to feel more comfortable, confident and competent in identifying youth and helping prevent the immediate risk of suicide.
- **Assessing and Managing Suicide Risk (AMSR)** (1 full day)
Training for clinicians, covers 24 core competencies for risk assessment and client management.
- **Lifelines** (6 hours) School-based program intended to train teachers to increase identification of, response to, and referral of at-risk youth.
- **Question, Persuade, Refer (QPR)** (1– 2 hours)
Teaches participants how to recognize the warning signs of suicide, learn how to offer hope and how to get help in attempts to prevent suicide.
- **safeTALK (Suicide alertness for everyone)** (2.5–3 hours or full day 7 hours)
ability to recognize a person with thoughts of suicide and know how to connect them with a person trained in suicide first aid intervention.
- **Yellow Ribbon** (2 days) Community-based approach to promote and improve access and community links to mental health and substance abuse services

Training Exit Survey Description of Sample

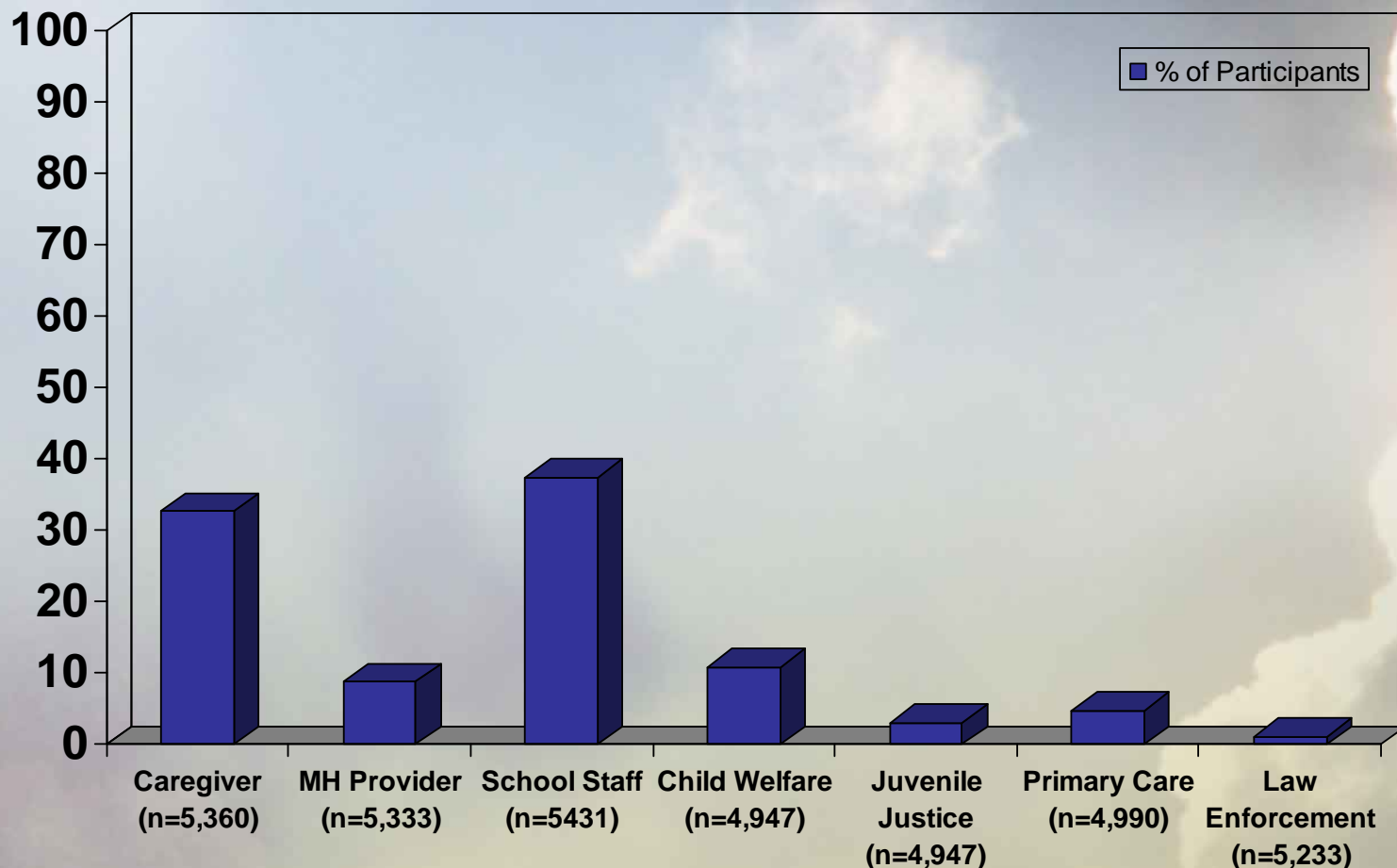
Data has been collected from 9,924 training participants who submitted TES data upon completion of a GLS training activity.

Those training participants were asked: *How do you intend to use what you learned during the training?*

This sample includes the 6,124 participants who stated that “identifying youth who might be at risk for suicide”, which is a key goal of a Gatekeeper training, was an intended use of the training activity.

	Overall Sample
Gender	(n=6124)
Male	28.1%
Female	70.0%
Other/Missing	1.9%
Average Age	39.2 (n=5814)
Race and Ethnicity	(n=5896)
African American	9.7%
American Indian	2.6%
Asian	1.1%
Hispanic Ethnicity	6.4%
Native Hawaiian/Pacific Islander	0.2%
White	82.8%

Training Exit Survey Role of Participants



* These categories are not mutually exclusive.

Training Exit Survey Benefits & Use

Who would benefit from the training (n = 6,124)?

- 88.8% say youth.
- 62.9% say caregivers.
- 57.7% say their coworkers.
- 49.7% say community members.
- 10.2% say other.

* Responses are not mutually exclusive, thus percentages can add up to > 100

Training Exit Survey Benefits & Use

In addition to being able to identify youth who might be at risk for suicide, how do participants expect to use the information they learned at the training activities (n = 6,124)?

- 45.0% will screen youth.**
- 80.4% will increase general awareness.**
- 39.6% will provide direct mental health services.**
- 17.7% will train other staff members.**
- 57.3% will make referrals.**

* Responses are not mutually exclusive, thus percentages can add up to > 100

Training Exit Survey Benefits & Use

How often would participants (n=5,762) expect to use what they learned?

- 35.2%** said daily.
- 25.5%** said once a month or more.
- 27.7%** said at least once a year.
- 11.6%** said less than once a year or never.

Training Utilization and Penetration Interviews

- **30-minute semi-structured telephone interview**
- **2 months following gatekeeper training activity**
- **Average sample size per training activity = 7.5**
- **Analysis completed on 90 interviews**
- **Process evaluation**
 - Content, utilization, and perceived impact of training
 - Barriers and facilitators of suicide prevention

Trainings Used for TUP Interviews

- **Applied Suicide Intervention Skills (ASIST) Training**
 - Four trainings; 26 respondents; 50% were MH providers
 - 2-day training for professionals and “lay” persons
 - Builds knowledge and skills to respond to suicidality
 - Uses role-play, small group discussions, and video
- **Assessing and Managing Suicide Risk**
 - 2 trainings; 20 respondents; 75% were MH providers
 - 1-day training for clinicians
 - 24 core competencies for risk assessment and client management
 - Primarily didactic

Trainings Used for TUP Interviews

- **“Home Grown”**
 - 5 trainings; 34 respondents; 35% were MH providers
 - Target audience and training times vary
 - Generally include information on suicidality, risk assessment, and response
- **Question, Persuade, Refer (QPR)**
 - 1 training; 8 respondents; 0% were MH providers
 - 1.5–3 hour training for lay persons
 - Trainees are given information on recognizing the signs of suicide and the importance of helping the individual obtain mental health assistance

TUP

Populations Targeted

- **Mental health clinicians (psychologists, psychiatrists)**
- **Other mental health providers (case managers, school counselors)**
- **Teachers and other school staff**
- **Community-based organization staff**
- **Corrections officers**
- **Community advocates and coalition members**
- **Survivors of suicide**

TUP

Participant Overview

- **As self-reported on the TES:**
 - 40 participants were mental health providers
 - 50 participants were non-mental health providers
- **HOWEVER: 70% worked in the mental health field**
- **76% of trainees reported some prior exposure to information about suicide**
- **28% had attended a related training in the past year**
 - Prior training was generally unrelated to TUP-targeted training

TUP

Across training type and population...

- **Trainees report heightened awareness of warning signs for suicide**
 - *“It’s affected me a lot actually because I listen more now and I’m now trying to look for key words, I didn’t do that in the past. I wasn’t really looking for it because I didn’t know what to look for. So now I know what I’m looking for.”*
- **Trainees report increased comfort with the topic of suicide and confidence in their ability to respond**
 - *“I’m more available to talk about suicide if need be. It’s just made me more confident in my ability to address the topic in a way that is straightforward.”*
- **Trainees report better listening skills, increased empathy**
 - *“I mean the training did gear me towards being able to be more patient and listening and hearing what they have to say opposed to okay, you’ve got a problem, let’s fix it. Just listening to what’s going on... More patience I guess.”*

TUP

Across training type and population...

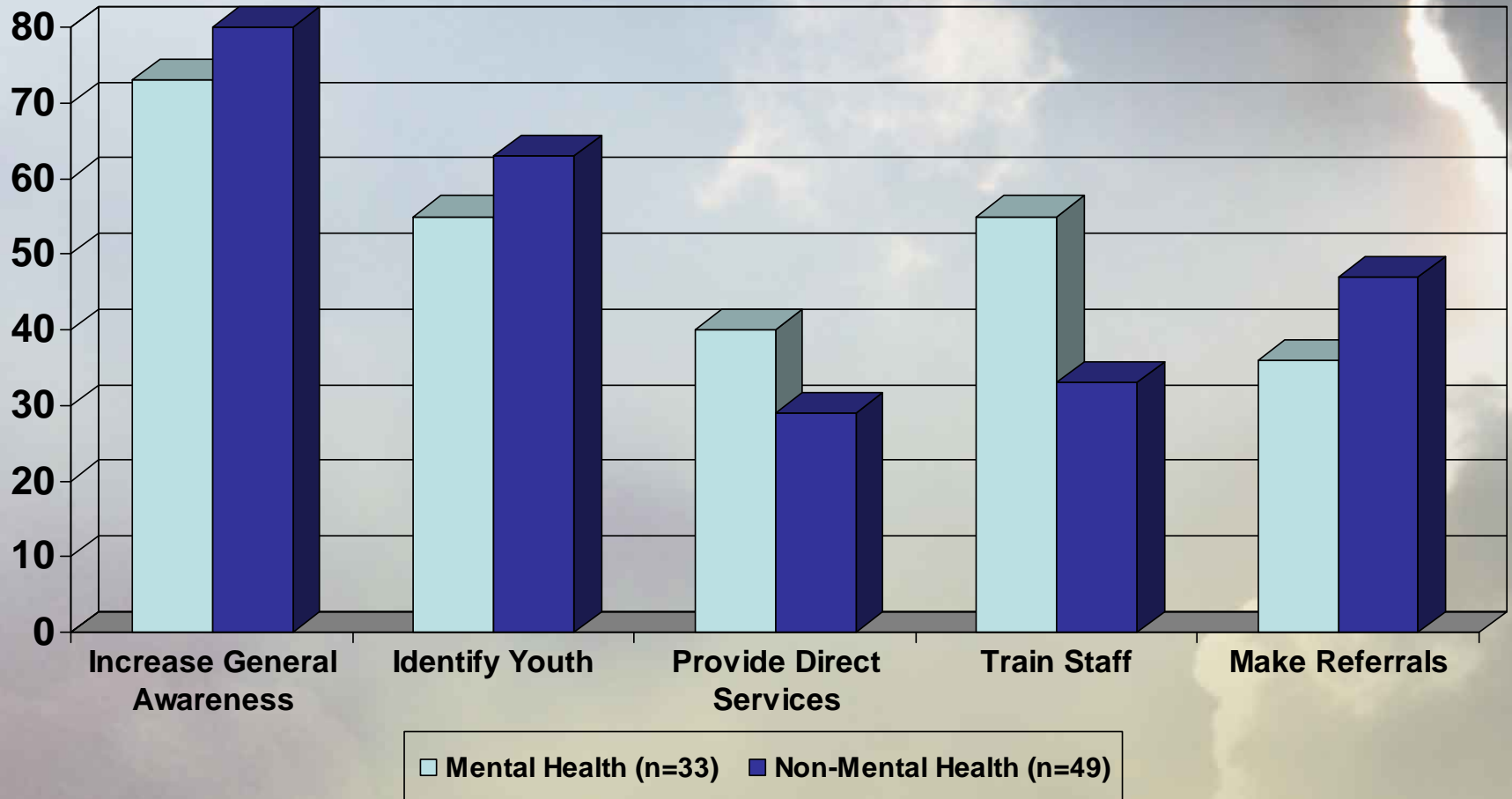
- **Trainees feel more knowledgeable and better able to discuss the subject of suicide**
 - *“I think just having knowledge yourself makes it easier to communicate with others. You have the information and you’re better able to form ideas and form phrases that would be better communicated to people.”*
- **Trainees are better equipped to assess whether someone is suicidal, and are more direct in their questioning**
 - *“I had a habit of saying ‘are you thinking about harming yourself’ or trying to buffer the question. I guess maybe I wasn’t aware that I thought it would damage the rapport with the client... But now I’ve realized by directly asking ‘are you thinking about suicide’ is actually comforting because it tells the client that you’re comfortable with the subject. It’s not something to be ashamed of, and it’s something that they can talk about openly and you’re able to handle it. I mean it sends a better message. So that’s one thing that I’ve used over and over is to remember to ask often, ask directly, and I’ve definitely been more aware of risk factors since then.”*

TUP However...

- **The degree to which trainees report these outcomes appears to differ, which could be a function of**
 - prior knowledge,
 - type of training,
 - exposure,
 - profession,
 - personal experience.

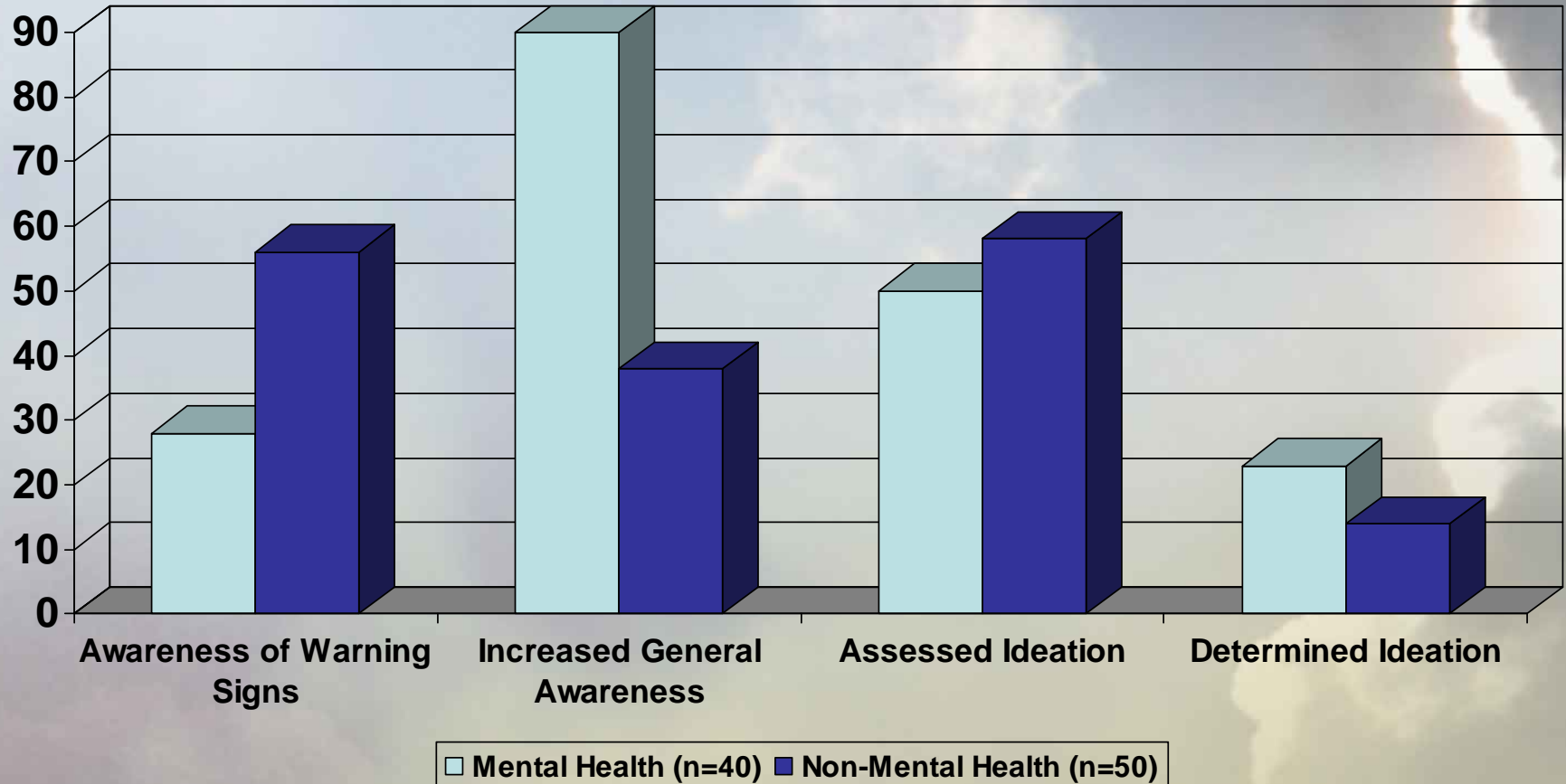
TUP

% reporting intended utilization – post training TES



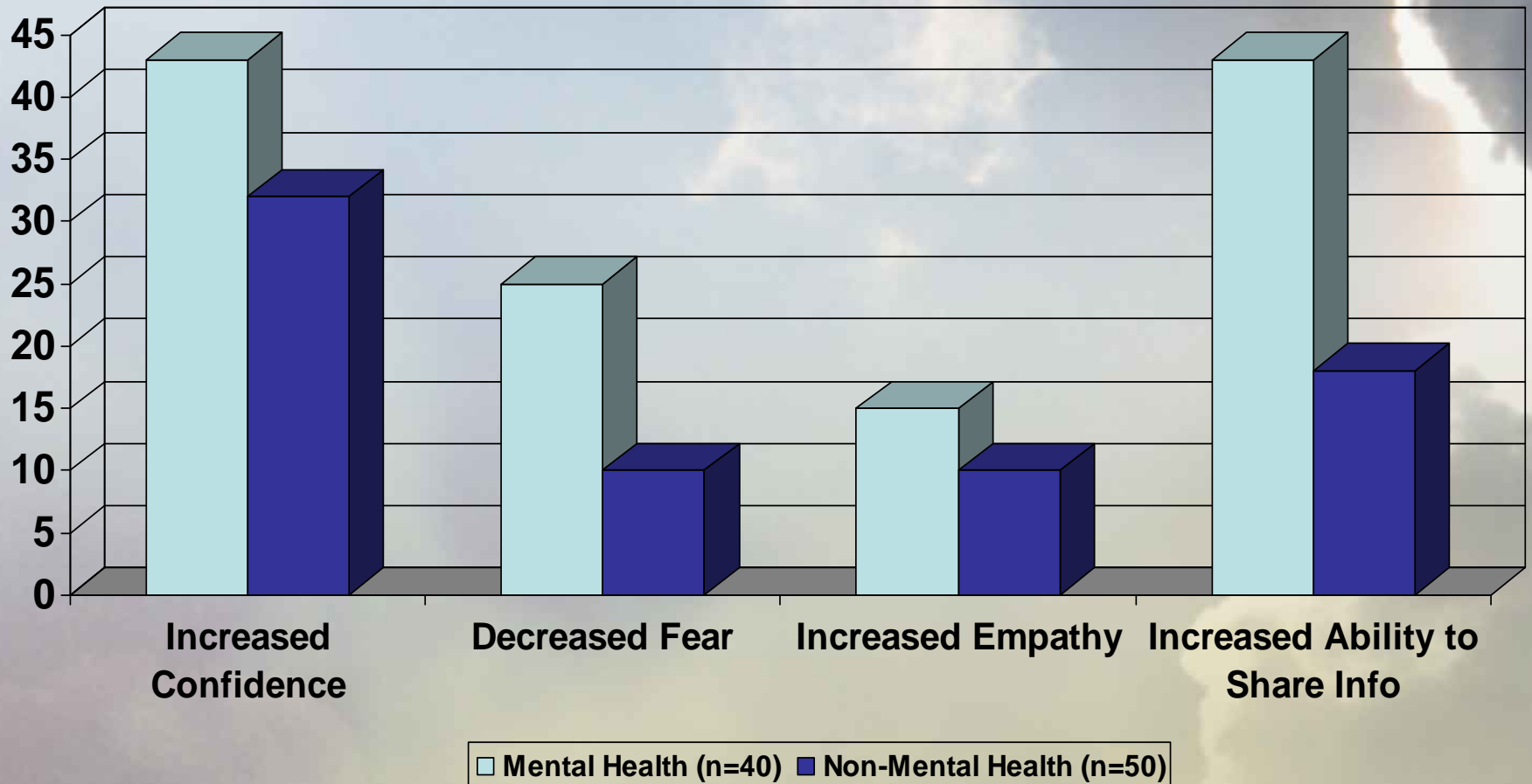
TUP

% reporting application of knowledge and skills



TUP

% reporting application of training knowledge and skills



TUP

Population-specific findings

- **Non mental-health professionals, and those without prior training or exposure, are grateful for the skills**
 - *“Before the training, if I knew that individual was hurting himself, all I knew how to do was automatically go in there and restrain him. That was my only tool because that’s how I was trained. If you have an inmate that wants to hurt himself you restrain him right away for officer and inmate safety. And now with this it’s like I said, depending on the situation, now I know I’ve got time. I’ve got time to see what the problem is without it getting to that, going to that next level.”*
- **Mental health clinicians report benefit of evaluating personal attitudes and beliefs about suicide**
 - *“Talking about how we respond to somebody that we may feel is suicidal or has expressed suicidal ideations, and some of the things that go on with us emotionally and how those can impact our reactions and ultimately our decisions in terms of dealing with these individuals.”*

TUP

Population-specific findings

- **There is a need for culturally-relevant training curriculum**
 - *“I believe there could be additions more specifically tailored to native people, even to our reservation’s community members in the sense of bringing cultural, that cultural healing process into it and recognizing that, and then also a spirituality component that may be for some people the one thing that gets them through ...”*
- **Survivors of suicide (n=6) report therapeutic benefit of training**
 - *“And I think it’s the training and the workshops and stuff that I go to that’s helped me. I recognized my signs and my symptoms and I learned how to take and get out of that situation, away from those triggers, and I don’t think I would have done that without the trainings. It gave me a purpose.”*

TUP

Across training type and population...

- **Diverse professional representation contributes to overall learning**
 - *“I think one of the things that was most useful was the diversity of people that were at the training because they had school counselors, they had drug prevention counselors, police officers there, and getting the different perspectives of all the people there and how they’ve dealt with the issue. I thought it was a good model for collaborating with other professionals.”*
- **Colleagues are the primary beneficiaries of training information**
 - *“At the beginning of the year this year at a staff meeting I did a little mini-presentation on how not to be afraid of kids when they say they’re going to commit suicide and what to do... I just think that having a person at the school who is comfortable with it and knows how to deal with it can be of benefit to them. I think the fact that I went through the training I’m kind of like a resource at the school.”*

TUP

Other relevant feedback from trainees

- **Practice is important**
 - Trainees learn from role play; those who didn't have it, want it.
 - Practice and experience were cited as facilitators of suicide prevention
- **95% of trainees report a desire for additional training**
 - Refresher training or content-specific training (i.e. population, skill-set)
 - *"It's like CPR. If you learn it once you don't remember it many years down the road. But if you do it every year, it comes right back to you."*
- **Don't underestimate the power of numbers – statistics are powerful**
 - *"I hadn't realized that it was that prevalent, particularly in our county."*
- **Training opportunities should be expanded and made available to other populations**
 - *"I think this would be even more effective if just regular community people were more involved, people that interact with youth, like lifeguards or a youth minister or someone that's going to be interacting with kids kind of in those fun situations besides more professionally...I think it would really benefit the community."*

Early Identification, Referral, and Follow-up Analysis

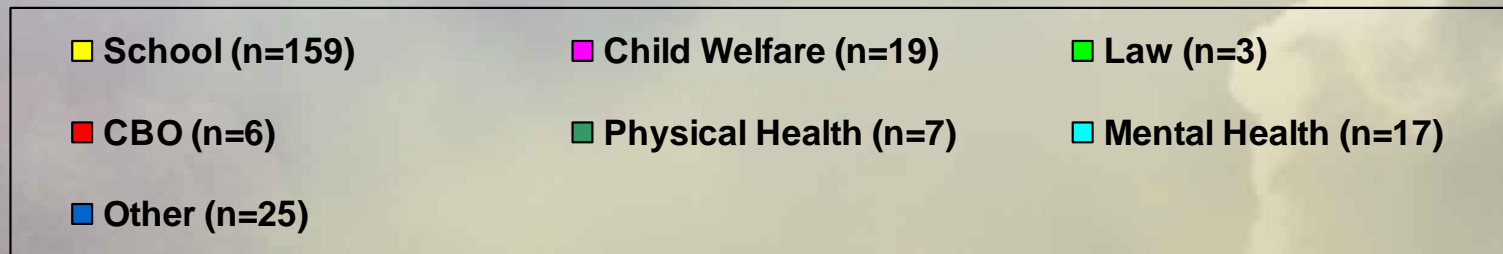
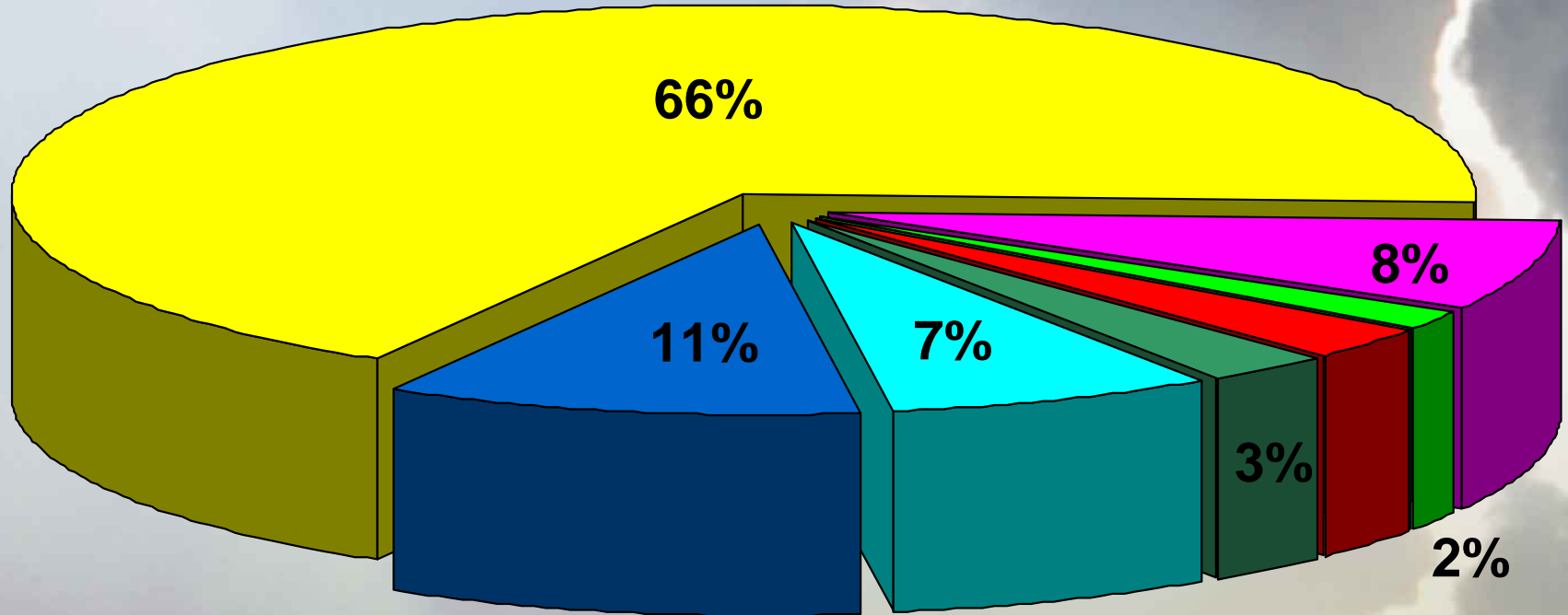
- **Measures proximal outcome of gatekeeper training activities**
- **Tracks the at-risk youth identified by gatekeepers**
 - Where is the identification happening?
 - Who is making the identification?
 - Demographics of youth
 - Types of referrals made
 - Services accessed by youth
- **Professional gatekeepers are easier to track than community gatekeepers**

EIRF Practicalities

- **Data on 237 youth identified by trained gatekeepers**
- **10 States**
- **A variety of local data collection techniques:**
 - Case review
 - Web-based survey
 - Mail-in survey
 - Referral tracking

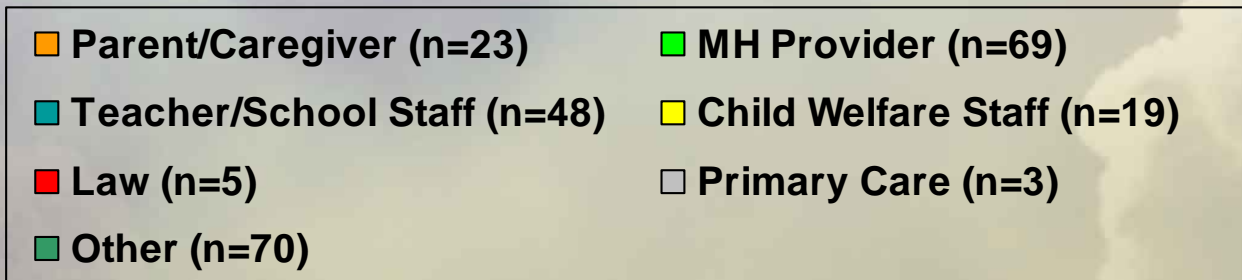
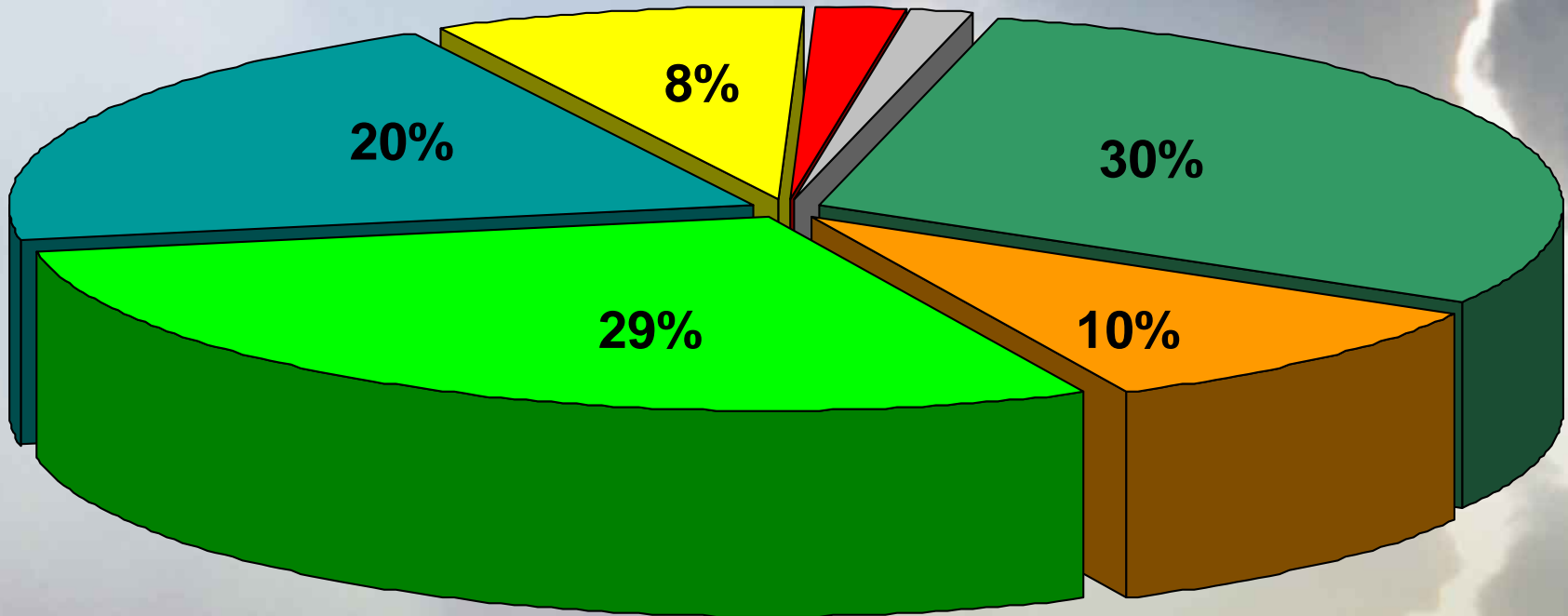
EIRF

Where are the identifications happening? (n=237)



EIRF

Who is identifying youth? (n=237)



EIRF

Looking Deeper at the Data

The data reported for EIRF analysis show that:

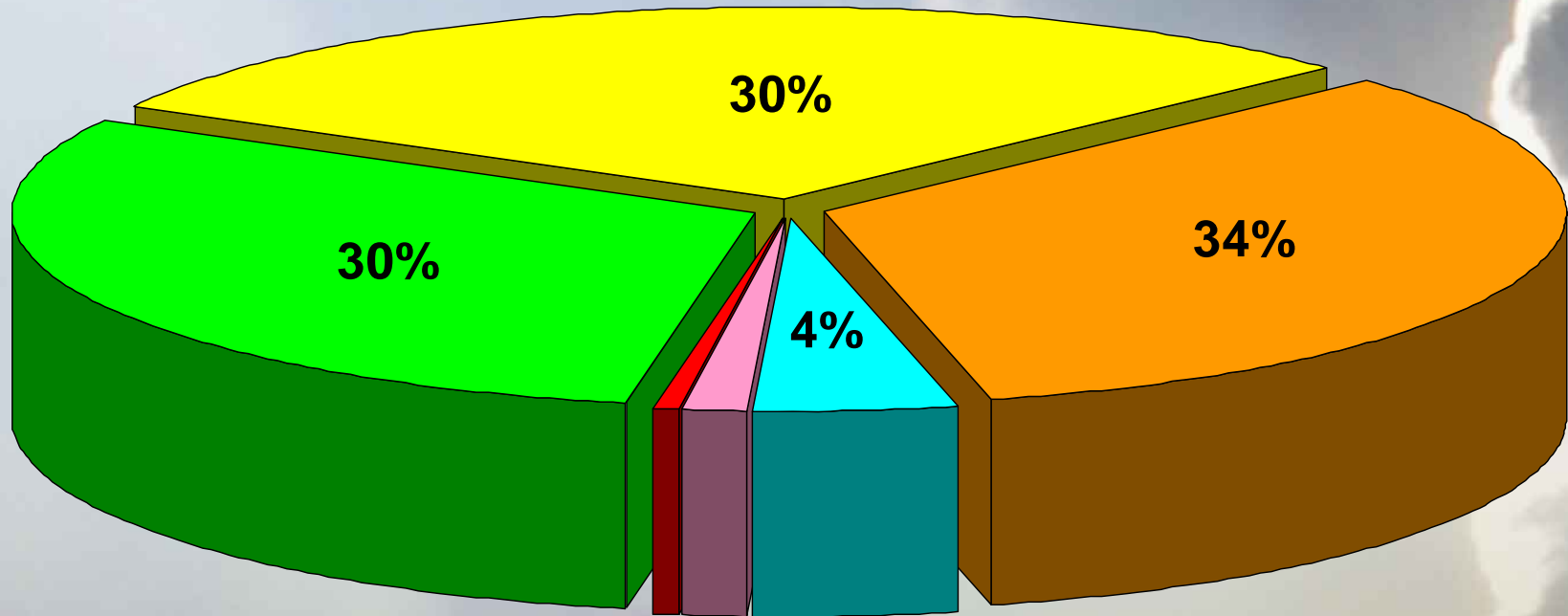
- Identifications are happening most frequently in schools (66%)
- MH providers are identifying youth most frequently (29%)

SO...

- Who is making the school-based identifications?
- Where are MH providers identifying youth?

EIRF

Who is making the school-based identifications?



■ Teacher/School Staff (n=48)

■ Mental Health Provider (n=48)

■ Other (n=53)

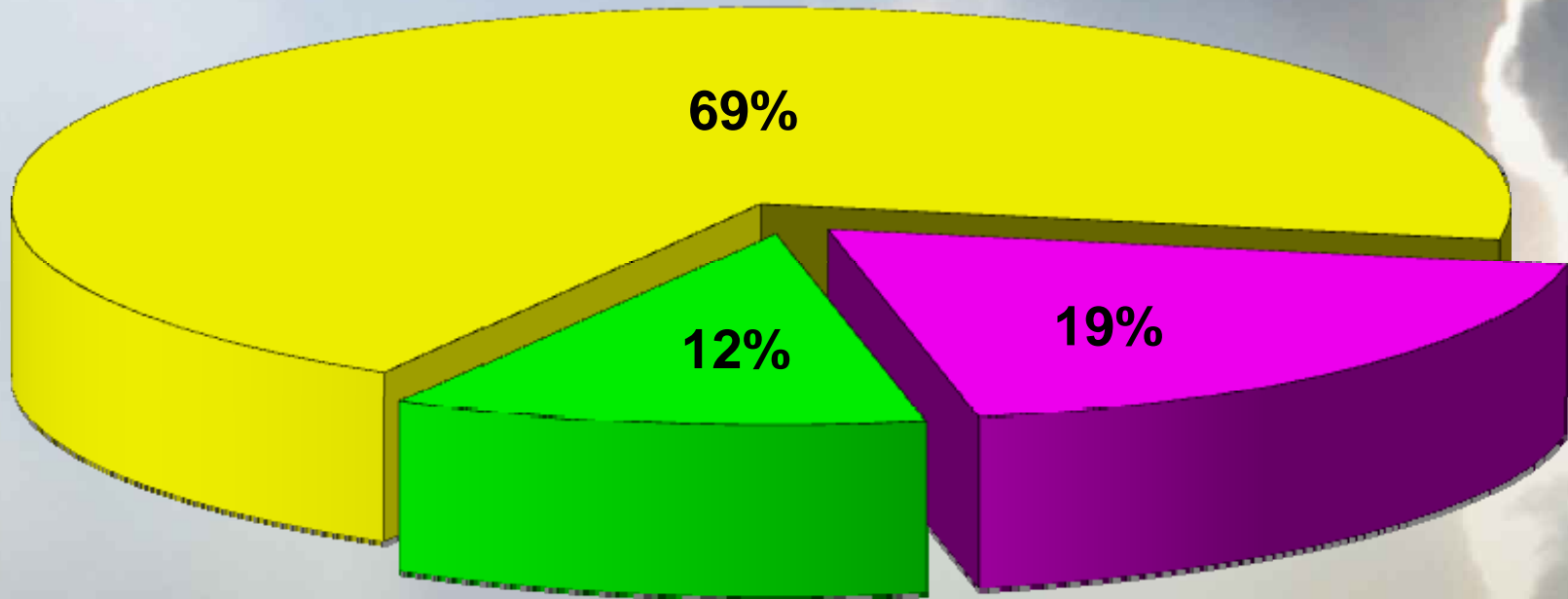
■ Parent/Caregiver (n=7)

■ Law (n=2)

■ Primary Care (n=1)

EIRF

Where are MH professionals identifying youth? (n=69)



■ School (n=48) ■ MH Agency (n=13) ■ Other (n=8)

EIRF

Demographics of Youth Identified at Risk

- **Average age = 15 years (range 5 - 24 years)**
- **Gender: 63% female**
- **Race**
 - 84% White
 - 10% Black
 - 4% American Indian/Alaska Native
 - 1% Native Hawaiian/Pacific Islander
 - 1% Other
- **Ethnicity: 17% Hispanic/Latino**

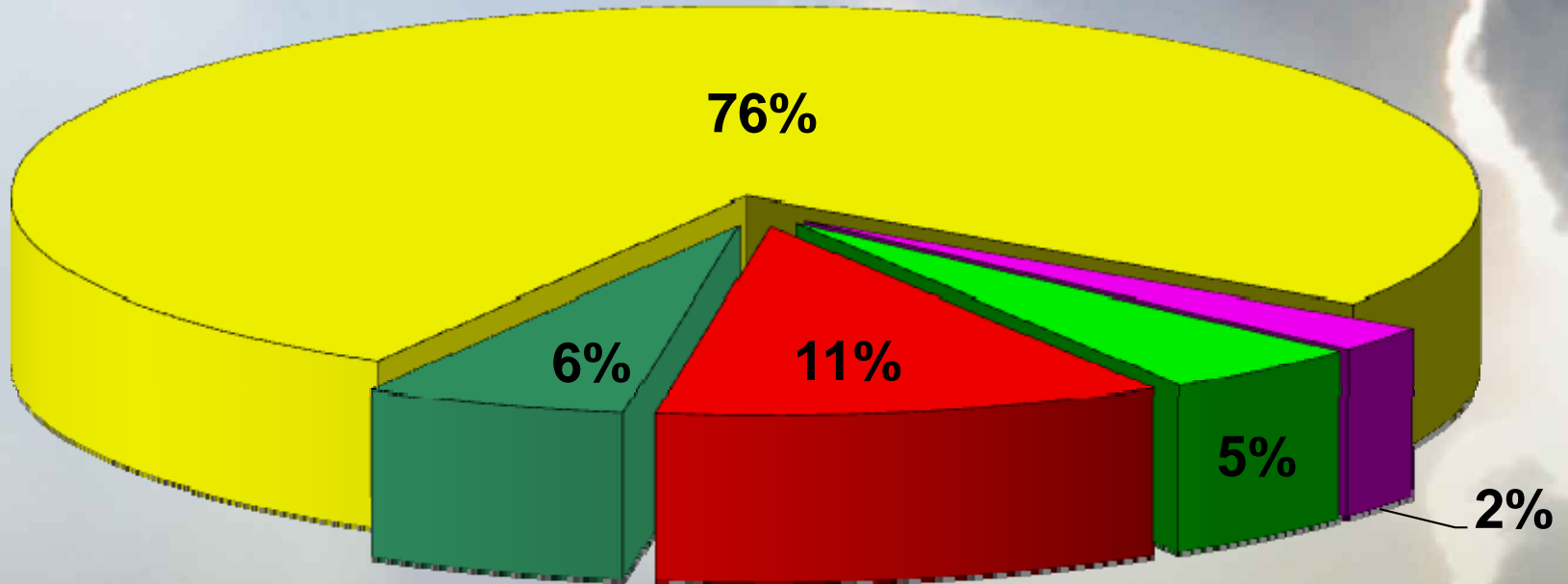
EIRF

What happened next?

- **93% of identified at-risk youth received a referral**
 - 217 out of 237 youth
 - Mental health referral or other support services
- **94% of youth referred were referred for MH services**
 - 203 out of 217 youth

EIRF

What types of referrals did youth receive? (203 referrals)



■ MH Assessment/Treatment

■ Substance Abuse

■ Psychiatric Hospitalization

■ Emergency Room/Crisis Services

■ Other

Impact of Data Collection Activity

One data collection activity has many implications:

- **Program improvement**

- Who is being identified and referred?
- What gatekeeper populations should be targeted?
- What types of trainings result in the most identifications?

- **Systems improvement**

- Improved capacity to track at-risk youth
- Improved communications between referral agencies
- Increased understanding of service access obstacles



Colorado Project Safety Net

Project Safety Net

Description of Program

- **Colorado Violent Death Review**
- **Violent Death Subcommittee/Review Team**
- **Trend of juvenile justice and child welfare contact**
- **Research**
 - Pilowsky, D.J. & L. Wu (2006). Psychiatric symptoms and substance use disorders in a nationally representative sample of American adolescent involved with foster care. *Journal of Adolescent Health*. 38 (4): 351-358
 - Hayes, L.M (2004). *Juvenile suicide in confinement: A national survey*. Mansfield, MA: National Center on Institutions and Alternatives.
 - Penn, J.V., Esposito, Schaeffer, L.E., Fritz, G.K., Spirito, A. (2003) Suicide Attempts and self-mutilative behavior in a juvenile correctional facility. *Journal of the American Academy of Child and Family Adolescent Psychiatry*, 42(7),762-769.
 - Moskos, M. & Gray, D. (2002) *Utah Youth Suicide Study Juvenile Offenders*.

Project Safety Net

Description of Program (continued)

- **Three Tiers**
 - High Interaction
 - ✓ Daily/Weekly
 - Occasional Interaction
 - ✓ Monthly/Quarterly
 - Informal Interaction
 - ✓ Coaches/Parents of Peers/Mentors

Project Safety Net

Linking Cross-site & Local Evaluation

Macro International Inc.

- Training Exit Survey
- Early Identification, Referral, and Follow-Up
- Referral Network Survey

Project Safety Net Team

- Pre-post test
- 3-/6-Month phone interviews
- Protocol development

Project Safety Net

Previous Research

- **Gatekeeper training evaluations**
 - Trainings are effective (King & Smith, 2000; Tierney, 1994)
 - Ethical, legal, & practical constraints prevent rigorous experimental designs (Cigularov, Chen, Thurber, & Stallones, under review).
- **Evaluation of community-based gatekeeper training program, Applied Suicide Intervention Skills Training (ASIST)**
- **Use two practical, yet rigorous, approaches**

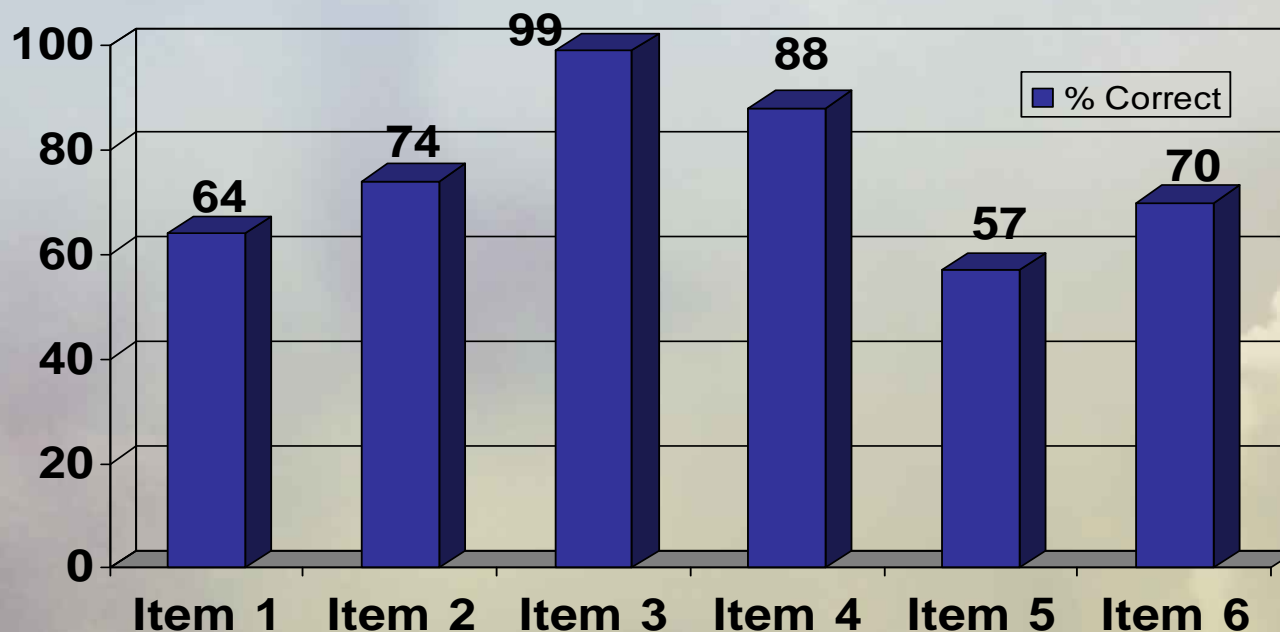
Project Safety Net Outcome Evaluation

- **Study design: Pre-post test**
- **Evaluation outcomes (Alliger et al., 1997; Kirkpatrick, 1975)**
 - Learning outcomes:
 - ✓ Knowledge
 - ✓ Self-efficacy
- **3-month follow-up**
 - Behavior

Project Safety Net Evaluation Approach #1

Has a desired level of performance been achieved?

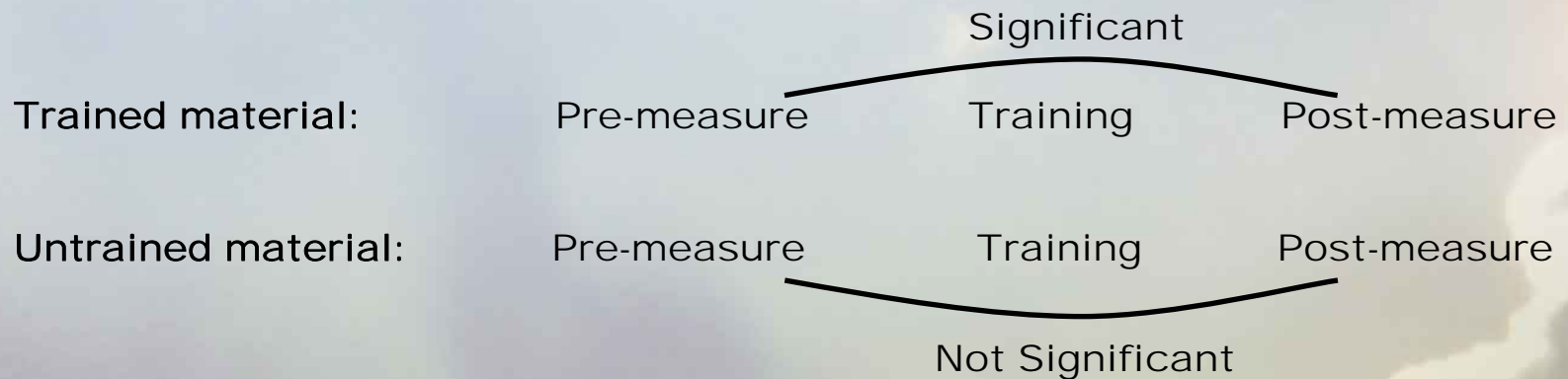
- **Minimum Competency Approach (MC: Sackett & Mullen, 1993)**
 - 70% or more answered knowledge questions correctly



Project Safety Net Evaluation Approach #2

How much change has occurred?

- **Internal Referencing Strategy (IRS: Haccoun & Hamtiaux, 1994)**



Project Safety Net Results: IRS

Knowledge Items



Self-efficacy Items



Project Safety Net Results: Follow-up

- **3-month follow-up**
 - Phone survey
 - Online survey
- **95 Respondents of 204 Participants**
 - Response rate = 47%
 - 32% intervened in the 3 months prior to the training
 - 31% intervened in the 3 months following the training

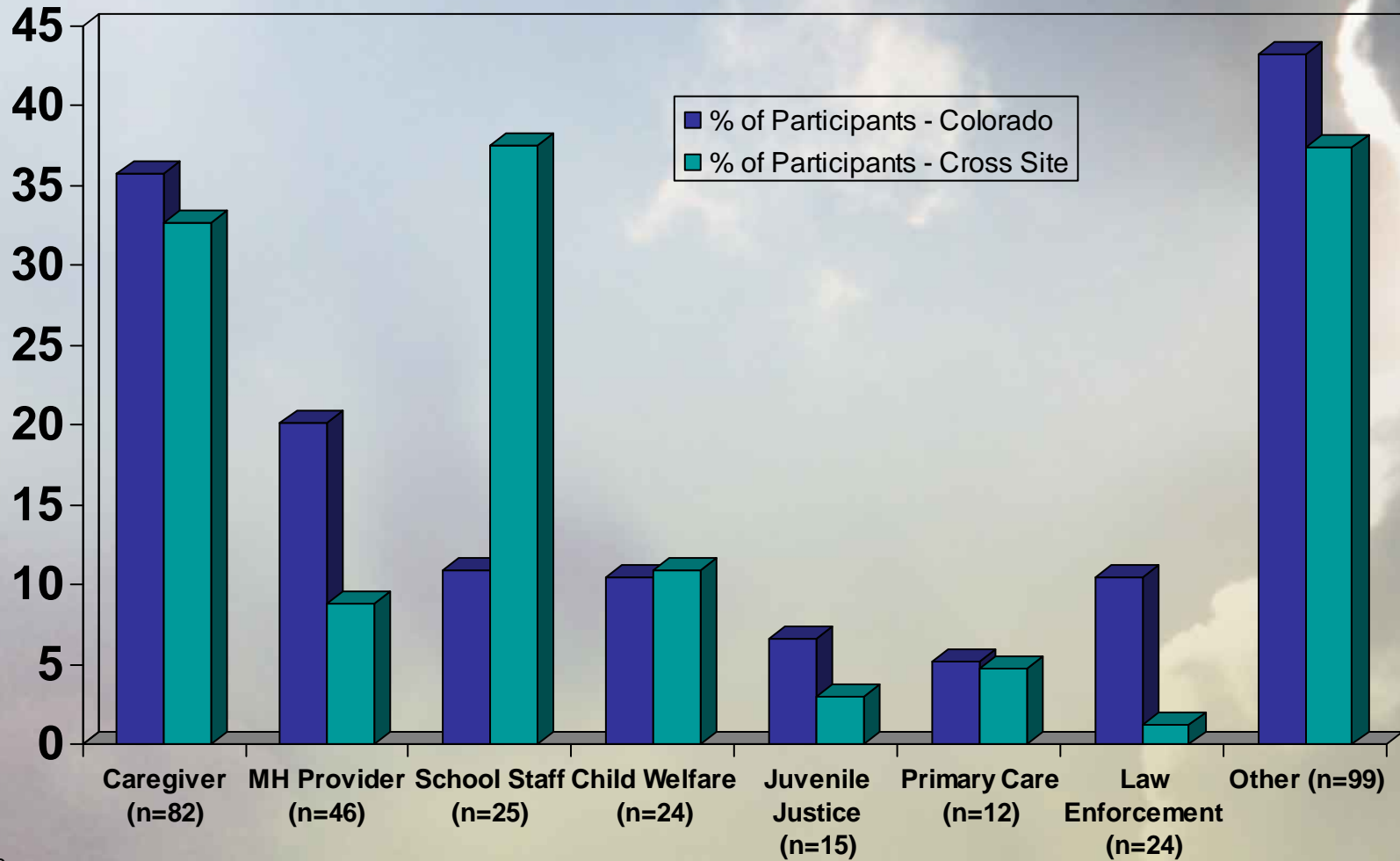
Project Safety Net

Link to Cross-site Evaluation

- Data from Training Exit Survey at the local level
- Compared following questions:
 - Role of participants
 - Benefit
 - Use

	Colorado Sample
Gender	(<i>n</i> =234)
Male	15.3%
Female	74.0%
Other/Missing	10.7%
Average Age	37.6 (<i>n</i> =229)
Race and Ethnicity	(<i>n</i> =201)
African American	1.3%
American Indian	2.6%
Asian	2.6%
Hispanic Ethnicity	17.8%
Native Hawaiian/Pacific Islander	0.0%
White	81.7%

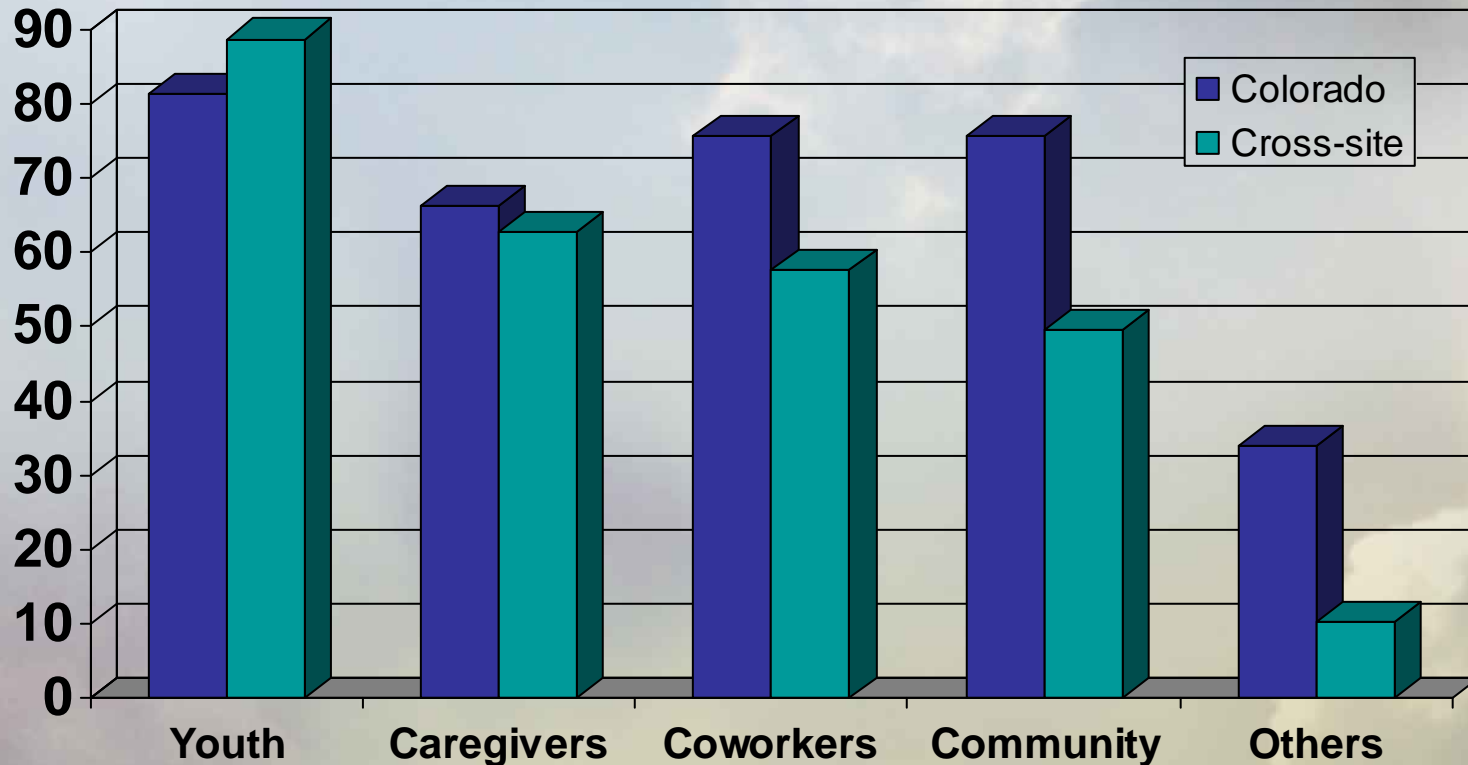
Project Safety Net Role of Participants



n = 229

Project Safety Net Benefits & Use

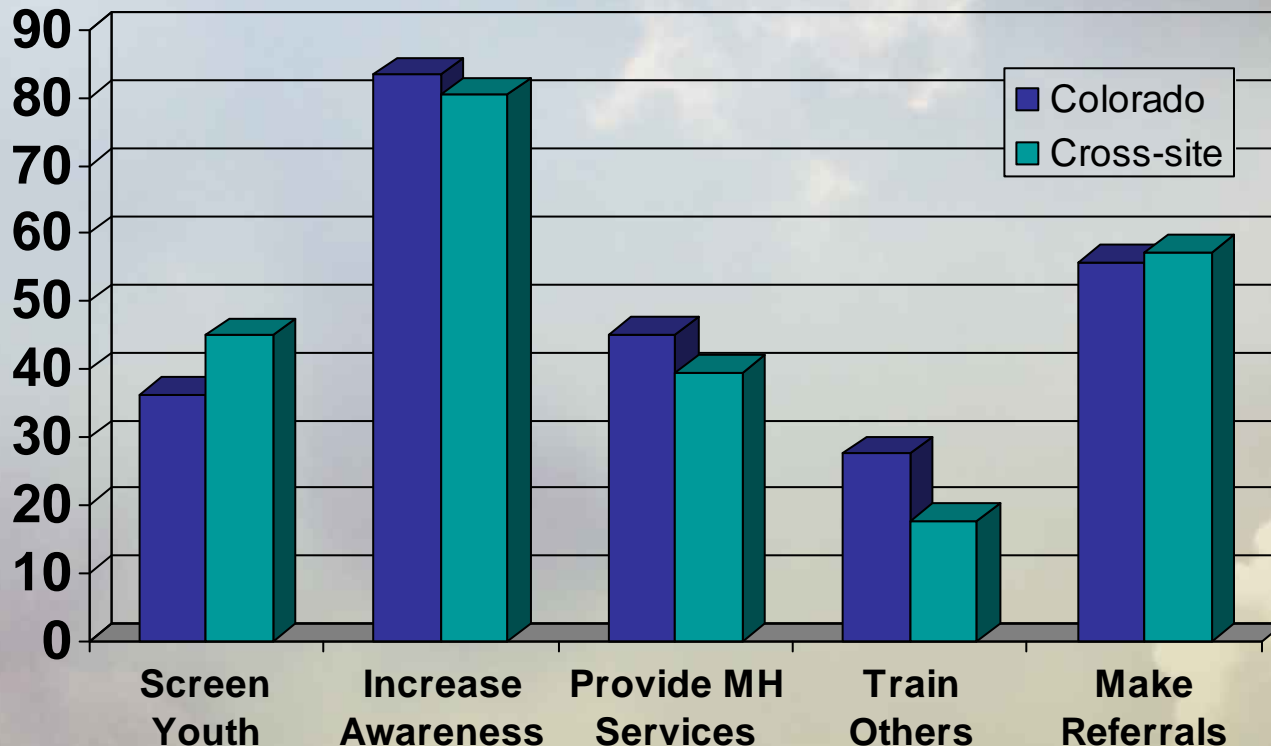
Who would benefit from the training (n = 235)?



* Responses are not mutually exclusive, thus percentages can add up to > 100

Training Exit Survey Benefits & Use

How do participants expect to use the information they learned at the training activities (n = 228)?



* Responses are not mutually exclusive, thus percentages can add up to > 100

Project Safety Net Conclusions

- **ASIST gatekeeper training is effective**
- **Need to reach certain populations**
 - Males
 - Non-white
 - Juvenile justice
- **Assess whether gatekeeper trainings are culture appropriate**
- **Identify characteristics of superior gatekeepers**
- **Identify barriers for gatekeepers**

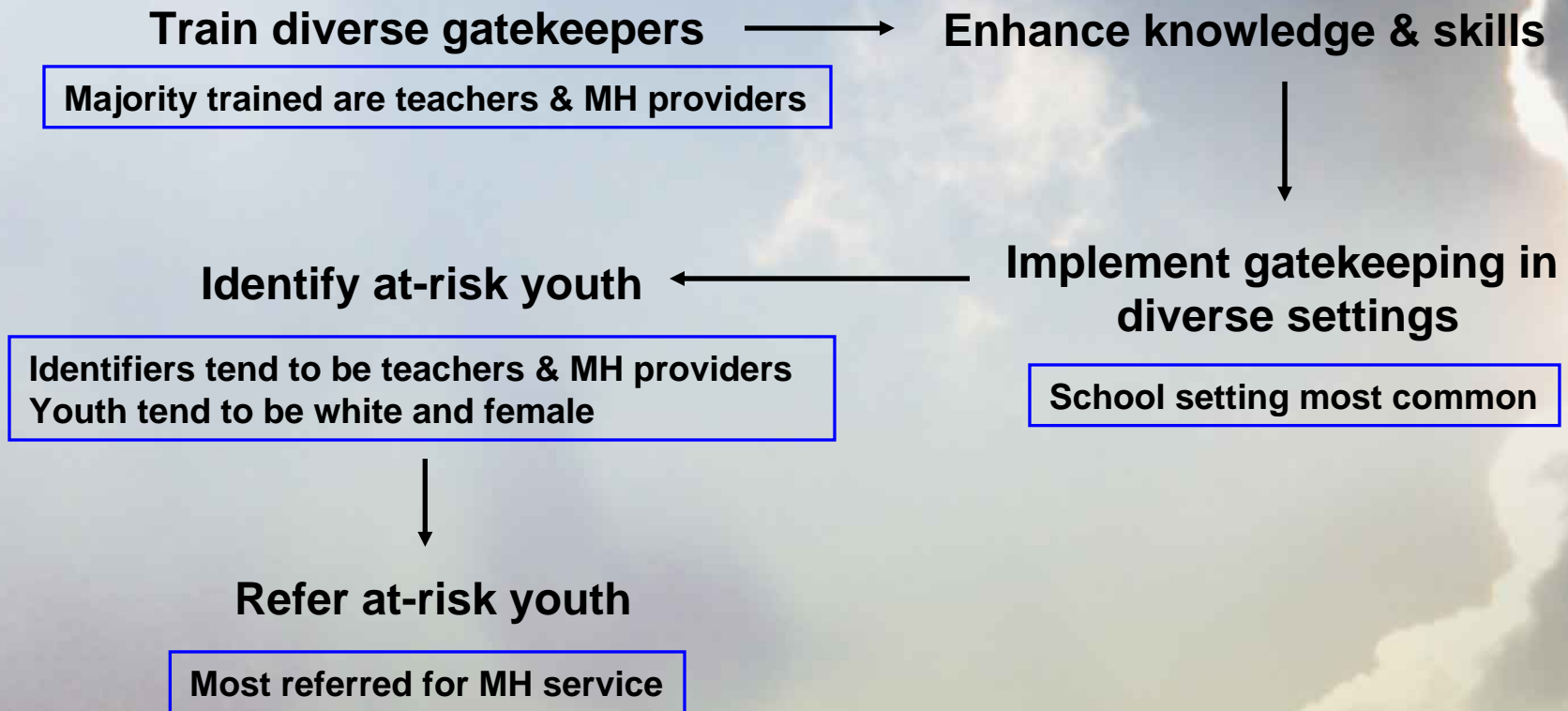
Overall Summary

- **Gatekeeper training is a pervasive suicide prevention activity**
 - Diverse groups of individuals are being trained across diverse youth-contact settings
- **Data suggests that the individuals who receive gatekeeper training:**
 - Largely reach a level of minimum knowledge competency
 - Report increased information levels and skills
 - ✓ Knowledge and awareness
 - ✓ Listening skills
 - ✓ Ability to more appropriately and comfortably assess situations
 - Have differentially higher levels of knowledge than those not trained about information specific to suicide as compared to other topics
 - Experience broad-based learning beyond identification of at risk youth
 - Experience differential learning as a function of their background, and personal/professional experiences

Overall Summary (continued)

- **Of the settings in which youth are being identified, school is the most common**
 - There is a diverse group of personnel doing the identifying
- **Of the professions that are identifying youth, mental health professionals are the most common**
 - Most of this identification is happening within a mental health or school setting
- **Once a youth is identified, it is extremely likely that they will be referred for service, most often mental health service**
 - The most common referral for mental health service is for treatment or assessment
- **Large proportion of youth identified are White**
 - Over half are female

Gatekeeper Training is Having a Proximal Impact on Youth Suicide



Filling in the Knowledge Gaps: Future Implications

- **What is the differential knowledge gain, experience, and impact of training as it relates to gatekeeper characteristics?**
- **What allows the school to serve as a microcosm of gatekeeper collaboration, and can that be implemented in other settings?**
- **Are the trainings and the respective gatekeeper trainees able to employ culturally appropriate, sensitive, and effective interventions to reach non-majority youth and males?**
- **Are there other broad-based impacts of the gatekeeper training experience? On the youth, the trainee, and/or the community?**