

# Behavioral Threat Assessment in Schools: Considerations and Outcome Measurement

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University of Maryland School of Medicine

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# **Presenter Disclosure**

**2023 Annual Conference on Advancing School Mental Health**

**There are no relationships to disclose.**

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OUR ACTIONS,  
POLICIES, AND PRODUCTS

# Agenda

- Overview of:
  - MHTTC Network
  - Partnership with National Center for School Mental Health
  - School violence and behavioral threat assessment (BTA)
- Roundtable that examines considerations for BTA use in schools
- Scoping review on measurement of outcomes in BTA
- Report that offers recommendations for improving BTA implementation

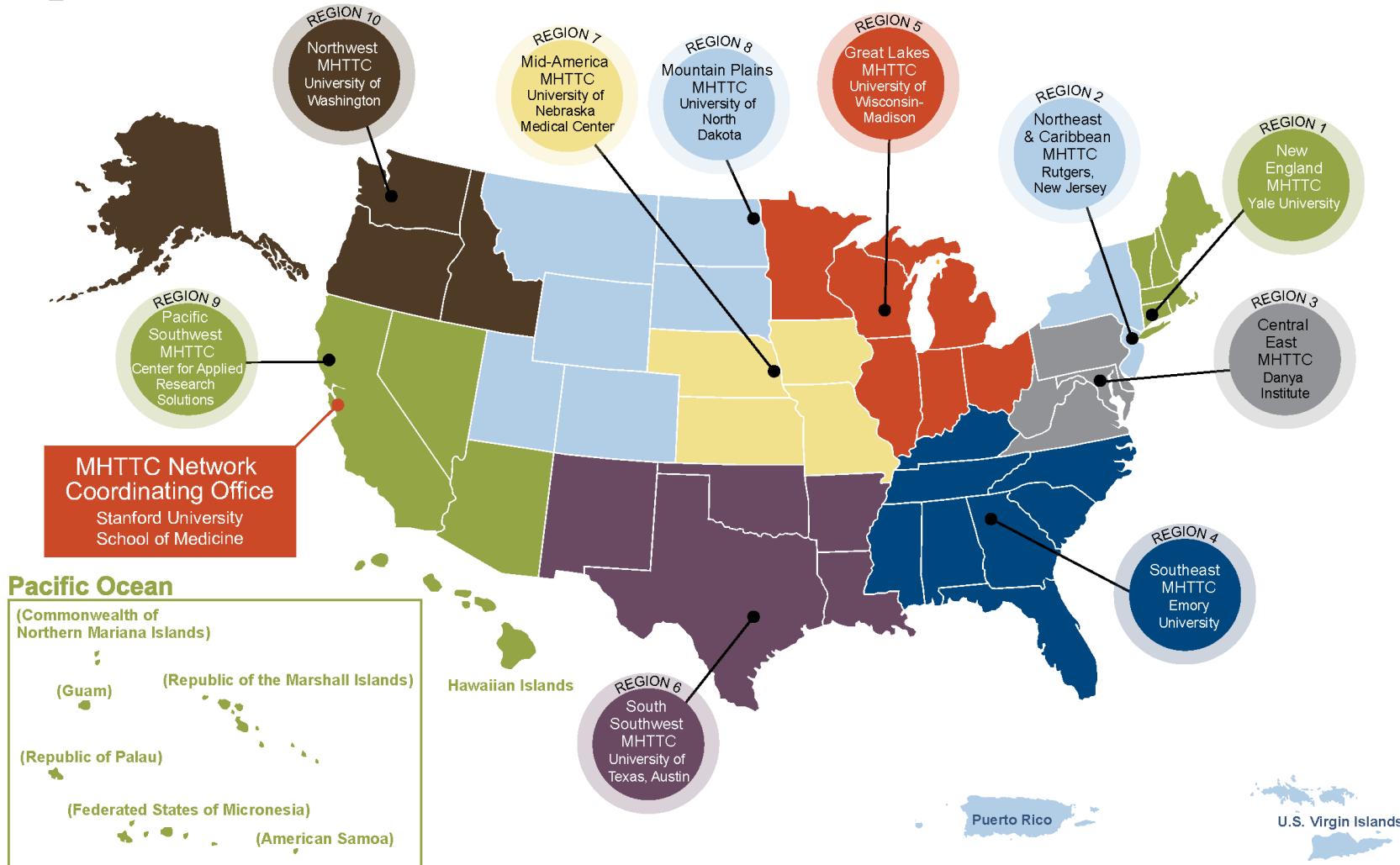
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**MHTTC**

Mental Health Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

**MHTTC Network**



# How We Provide Training and TA

- We develop yearly workplans through needs assessments, advisory boards, and input from key stakeholders including state mental health commissioners and SAMHSA Regional Directors
- Centers consider:
  - Spread of services across the region/population
  - Intensity of services: universal, targeted, and intensive
  - Flexibility to respond to emerging needs
- Implementation science informs our strategies
  - Consider the context – what is really needed to move an evidence-based practice forward?
  - Use implementation strategies specific to the need



# MHTTC School Mental Health Initiative

Bringing awareness, disseminating information, and providing technical assistance and training on the implementation of mental health services in schools and school systems



## Supporting the Mental Health Needs of Students Attending Tribal Colleges

Publication Date: November 6, 2021

Developed By: **Mid-America MHTTC**

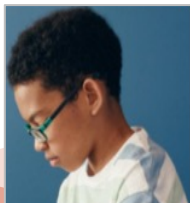


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## Supporting the Mental Health of Autistic Students

Publication Date: August 9, 2022

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Collaborating TTC: Global MHTTC  
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## Social Influencers of Health and Suicide in Black Youth

12:00pm - March 1, 2023 | Timezone: US/Eastern

Collaborating TTC: Central East MHTTC

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Collaborating TTC: National Hispanic and Latino MHTTC  
Publication Date: May 13, 2019



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The New England MHTTC has as its overarching aim to use evidence-based means to disseminate evidence-based practices, and promote resilience and

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In 2020, the New England Mental Health Technology Transfer Center (New England MHTTC) engaged stakeholders from across the region in

 **Great Lakes MHTTC Year 2 in Review**  
Great Lakes MHTTC Year 2 in Review provides an overview of the regional center's activities, accomplishments and challenges. Download the full

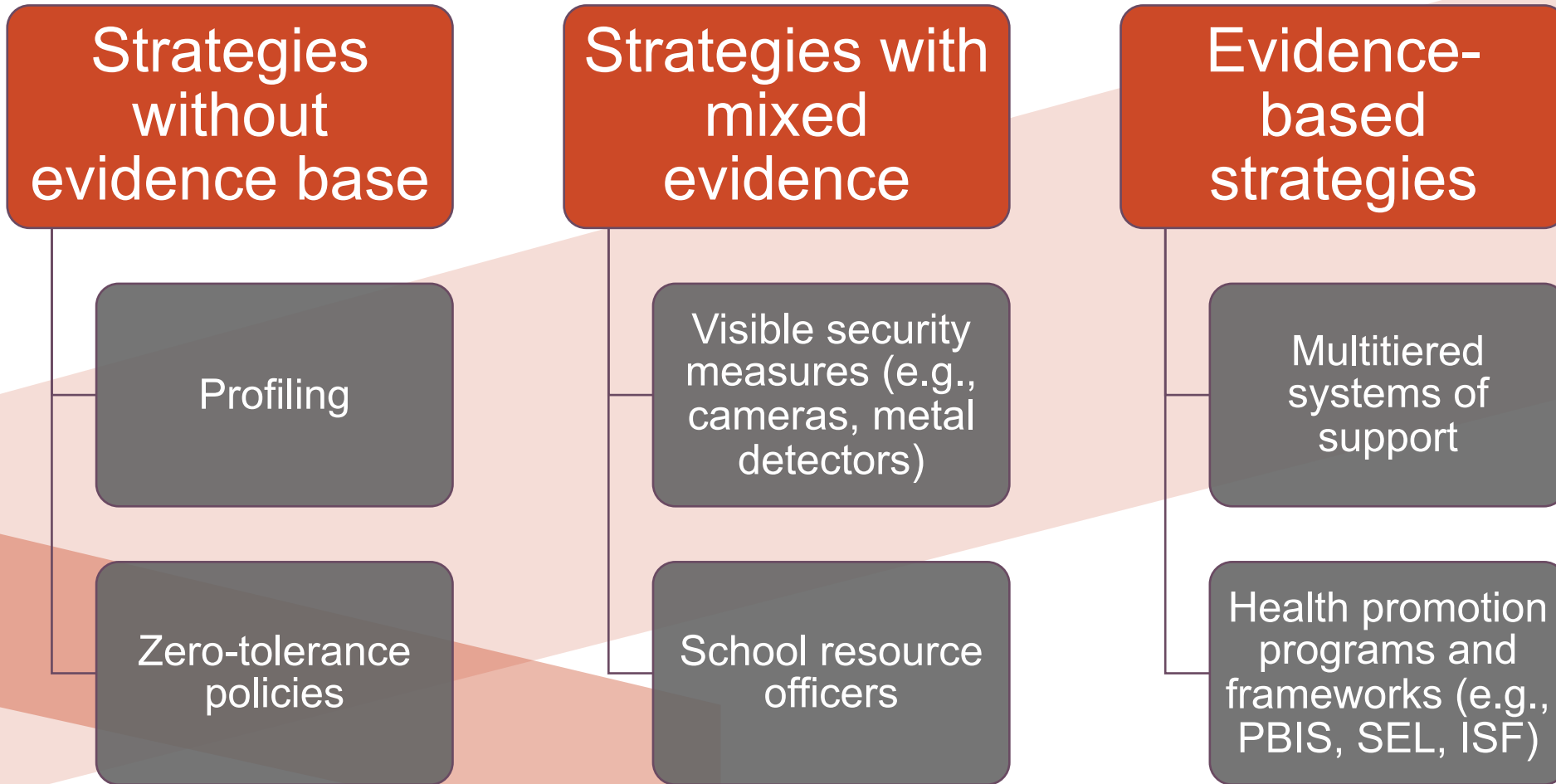
# MHTTC Partnership with the National Center for School Mental Health

- Established in 2018
- Development and maintenance of school mental health resources

# The Problem – School Violence

- Students are exposed to various forms of school violence
  - Bullying
  - Physical fights
  - Threats
  - Gun violence
- School violence negatively impacts student mental health

# Strategies to Address School Violence



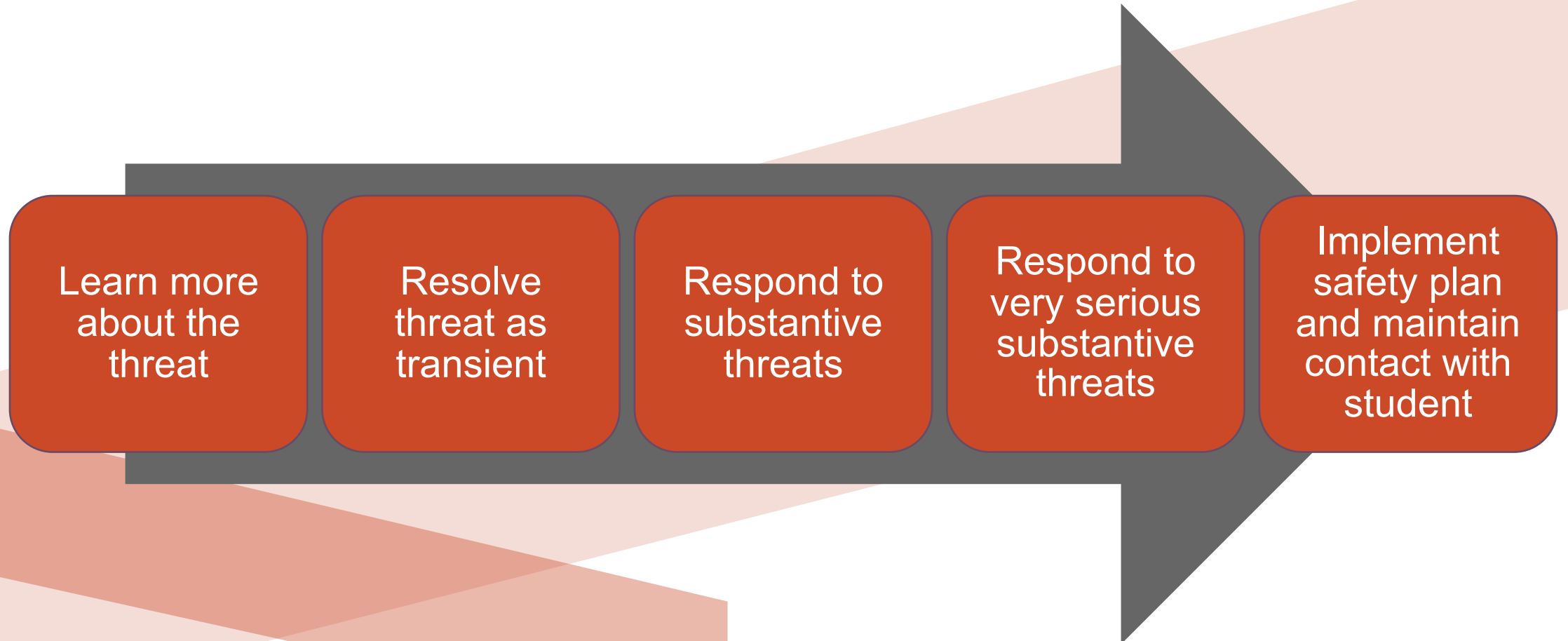
# What is BTA?

Created by Secret Service in 1990s to analyze people that had ability and desire to carry out targeted attacks

Development of BTA guidelines for adaptation to schools

Predominant model: Comprehensive School Threat Assessment Guidelines (CSTAG)

# CSTAG – 5-Step Process



Adapted from CSTAG (Cornell, 2020)

# Strengths and Limitations of BTA

## • Strengths

- Improved school climates (e.g., increased feelings of school safety)
- Reductions in severe disciplinary action (e.g., suspensions, expulsions)

## • Limitations

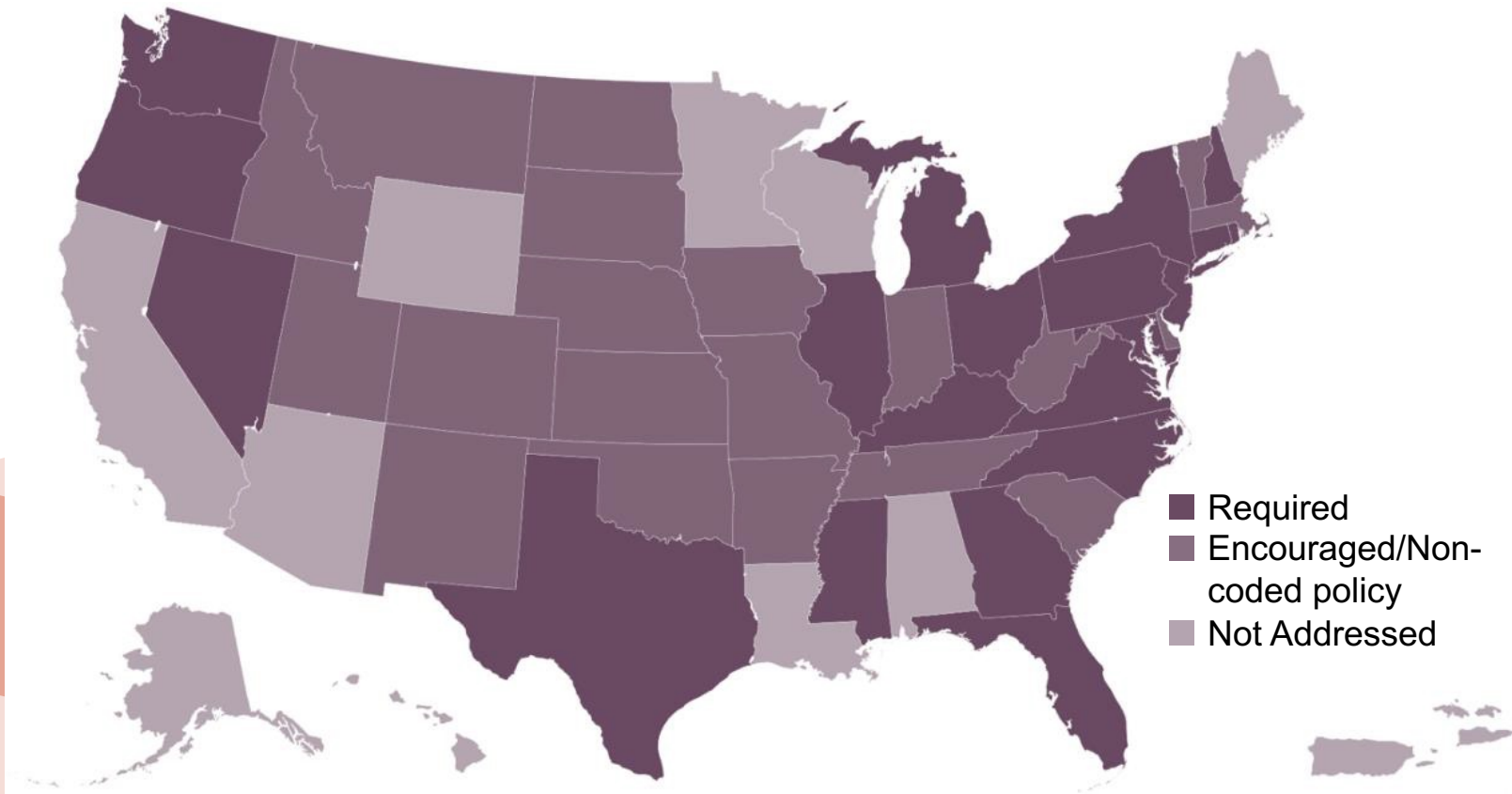
- Disparities among students with disabilities and from historically underrepresented racial/ethnic groups
- Absence of cultural competence in BTA research
- Law enforcement involvement

# BTA is Widely Adopted in Schools

- 42% of K-12 schools have a BTA team (Hansen & Diliberti, 2018)
- 41 states and territories mandate, encourage, or address BTA by law or through non-codified policies (National Association of State Boards of Education, n.d.)
  - Policies can vary widely across states

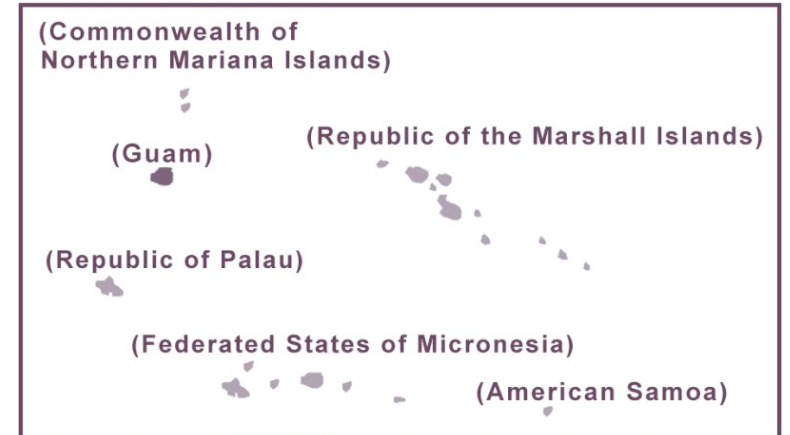


# BTA is Widely Adopted in Schools



- Required
- Encouraged/Non-coded policy
- Not Addressed

## Pacific Ocean



(National Association of State Boards of Education, n.d.)

# The Ask

- Asked by SAMHSA to develop a report on BTA and its intersection with student mental health
- **Addressed with 3 deliverables**
  - **Roundtable on BTA**
  - **Scoping review on BTA outcome measurement**
  - **BTA report**





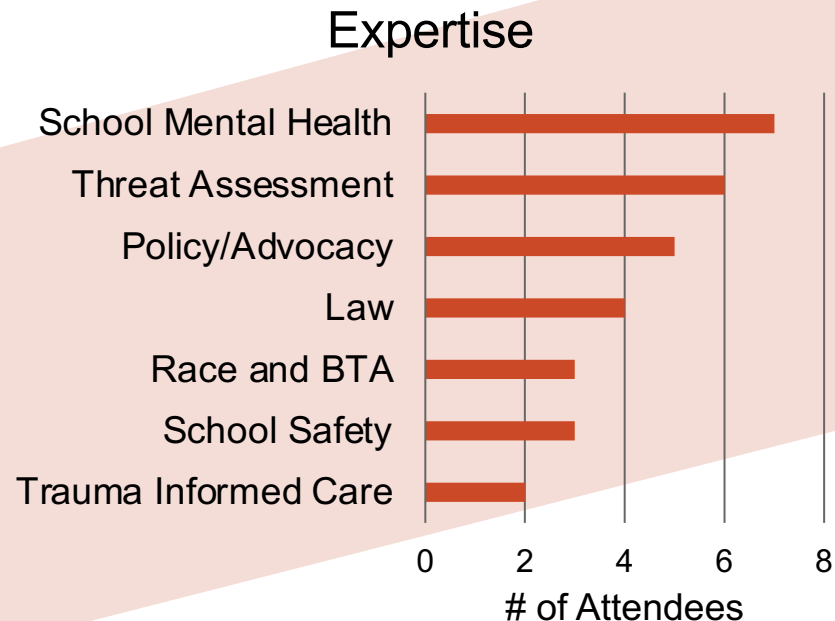
# **BTA Roundtable**

# Roundtable Purpose

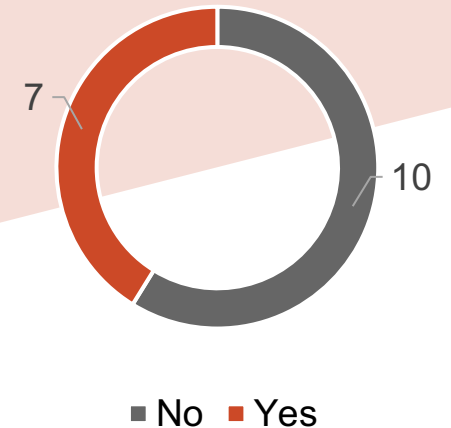
- Describe BTA
  - Purpose
  - Use in schools
  - Best practices
- Discuss considerations for BTA use in schools
- Learn more about the intersection between BTA and student mental health

# Methods – Roundtable Attendees

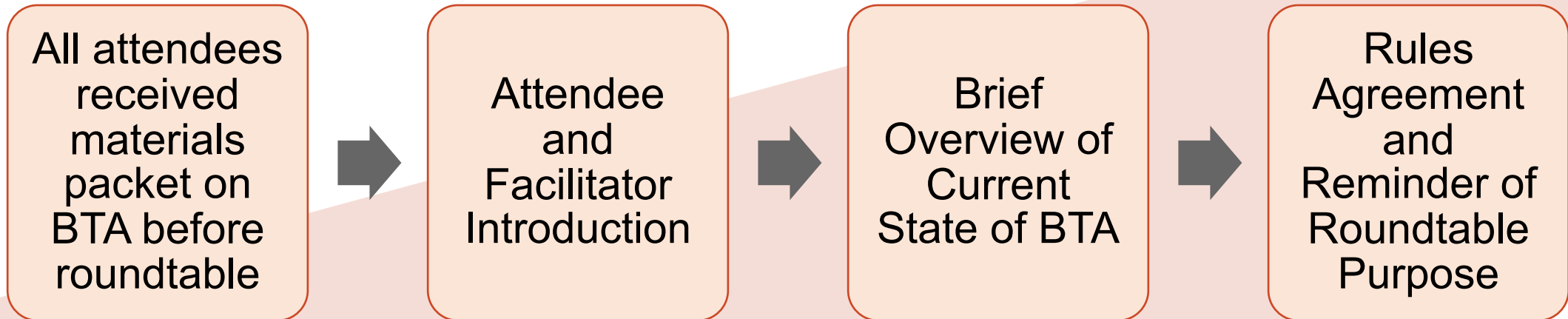
- Facilitators from school mental health subject matter experts (NCSMH)
- Diverse, multidisciplinary group of 17 people selected intentionally
  - Differing perspectives on BTA use
- \$500 stipend offered



Identifies with a Historically Underrepresented Ethnicity



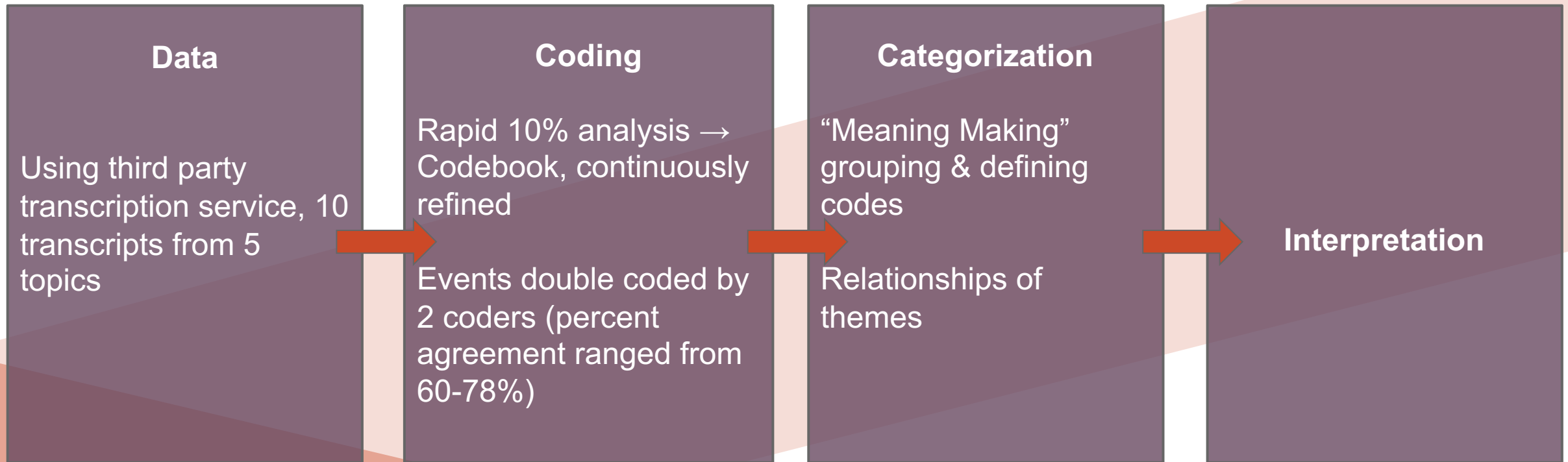
# Methods – Roundtable Preparation



# Methods – Roundtable Structure

- Virtual discussion in breakout rooms on 6 topics:
  - BTA and mental health
  - Use of BTA in schools
  - Youth and family engagement
  - Legal and privacy considerations
  - Cultural considerations
  - Implementation, training, and evaluation

# Methods – Conventional Content Analysis





# Roundtable Themes

**BTA Foundations (45% of all codes)**

BTA Implementation Considerations

BTA Implementation and Outcomes:

*Perceptions*

BTA Implementation and Outcomes:

*First-Hand Experiences*

BTA Recommendations

# BTA Foundations



## ***Sociopolitical Context***

Inadequate resources (e.g., funding, staff); Concern about disregard of laws (e.g., IDEA, FERPA)



## ***Conceptual Context***

BTA adoption from Secret Service to youth  
Bias in “threat,” “safety,” and “success” definitions

*“...when you're a refugee and you are a Muslim child...**these communities are thought to be threats**, they're teenagers...”*



## ***Historical Context***

Skepticism about BTA's equitable implementation given mistrust

*“...when I think about families and threat assessments...I think there's **resistance because there's a history.**”*

# Roundtable Themes

BTA Foundations

**BTA Implementation**

**Considerations (34% of all codes)**

BTA Implementation and

Outcomes: *Perceptions*

BTA Implementation and

Outcomes: *First-Hand Experiences*

BTA Recommendations

# BTA Implementation Considerations



## ***Team Development (+ -)***

Concerns of multidisciplinary (police presence and role), implicit bias and general training, best practices

*“...How are the team members trained? Do the team members get training in understanding implicit bias?...”*



## ***Youth, Family, and Community Engagement (+ -)***

Solutions need to be created *with*, not *for* communities, but barriers exist



## ***Stigma and Equity (-)***

BIPOC and students with disabilities disproportionately perceived as a “threat”  
BTA should work in tandem with other school mental health supports

# Roundtable Themes

BTA Foundations

BTA Implementation Considerations

**BTA Implementation and Outcomes:  
*Perceptions (10% of all codes)***

BTA Implementation and Outcomes:  
*First-Hand Experiences*

BTA Recommendations

# BTA Implementation and Outcomes: Perceptions



## ***BTA Research (+ -)***

Perceptions of research and interpretation of the validity of BTA findings varied (encouraged, skeptical, etc.)

*“I just want to acknowledge **that the research out there is mixed**...on the viability and effectiveness, as well as the racial disparity and disability aspect of it...”*



## ***BTA Outcomes (-)***

Perceptions largely perceived as negative for youth with disabilities and Black, Latinx, and Indigenous youth

# Roundtable Themes

BTA Foundations

BTA Implementation Considerations

BTA Implementation and Outcomes:  
*Perceptions*

**BTA Implementation and Outcomes:  
*First-Hand Experiences (7% of all codes)***

BTA Recommendations

# BTA Implementation and Outcomes: First-Hand Experience



## ***Experience with Outcomes (+ -)***

Positive outcomes related to multidisciplinary teams and engagement

Negative outcomes related to racial/ethnic and disability biases and inequities



## ***Experience with Implementation (+ -)***

Implementation depends on school, community, or state context

*“So, **we have regional training consultants** throughout the state... It's very much, here's free training...free resources...free whatever on how I can help support you...”*



# Roundtable Themes

BTA Foundations

BTA Implementation Considerations

BTA Implementation and Outcomes:  
*Perceptions*

BTA Implementation and Outcomes:  
*First-Hand Experiences*

**BTA Recommendations (11% of all codes)**

# BTA Recommendations



## ***Implementation***

Address team development / law enforcement's role; stigma and equity concerns; and youth, family, and community engagement challenges



## ***Conceptual/Foundational***

Address foundational questions and gaps in BTA laws

*“It’s not just defining success, it’s defining threat and then really having some guardrails about when it’s, if it’s ever appropriate to be used and when.”*



## ***Data and Information Sharing***

Increase transparency in research and with communities

Protect student privacy

*“And we have to...take the mystery out of it and really let our families see, this is the process we do, so that the first time they’re hearing about it is not when a kid is called into the office...”*

# Discussion

- BTA foundations and implementation were most often discussed
- Mixed research perceptions and positive first-hand experiences
- Recommendations often focused on policy gaps and information dissemination

# Limitations

- Results are from a sample that may not encompass everyone affected by BTA (e.g., students, families) or reflect all views
- Lack of confidentiality during discussion
- Participants self selection of breakout room topics

# Conclusion

- Best practices for BTA may not always be followed
- Student and family perspectives should be considered



# **Scoping Review on BTA Outcome Measurement**

What is the current approach to evaluating BTA outcomes in US K-12 schools?

# Methods – Search Strategy

- Created search strategy with medical school librarian
  - 7 academic databases
  - Citations from 3 recent articles on BTA
  - Google
  - Google Scholar
  - Stakeholder websites pertaining to student mental health, school safety, and BTA
- 4,413 citations identified

# Methods – Screening Criteria

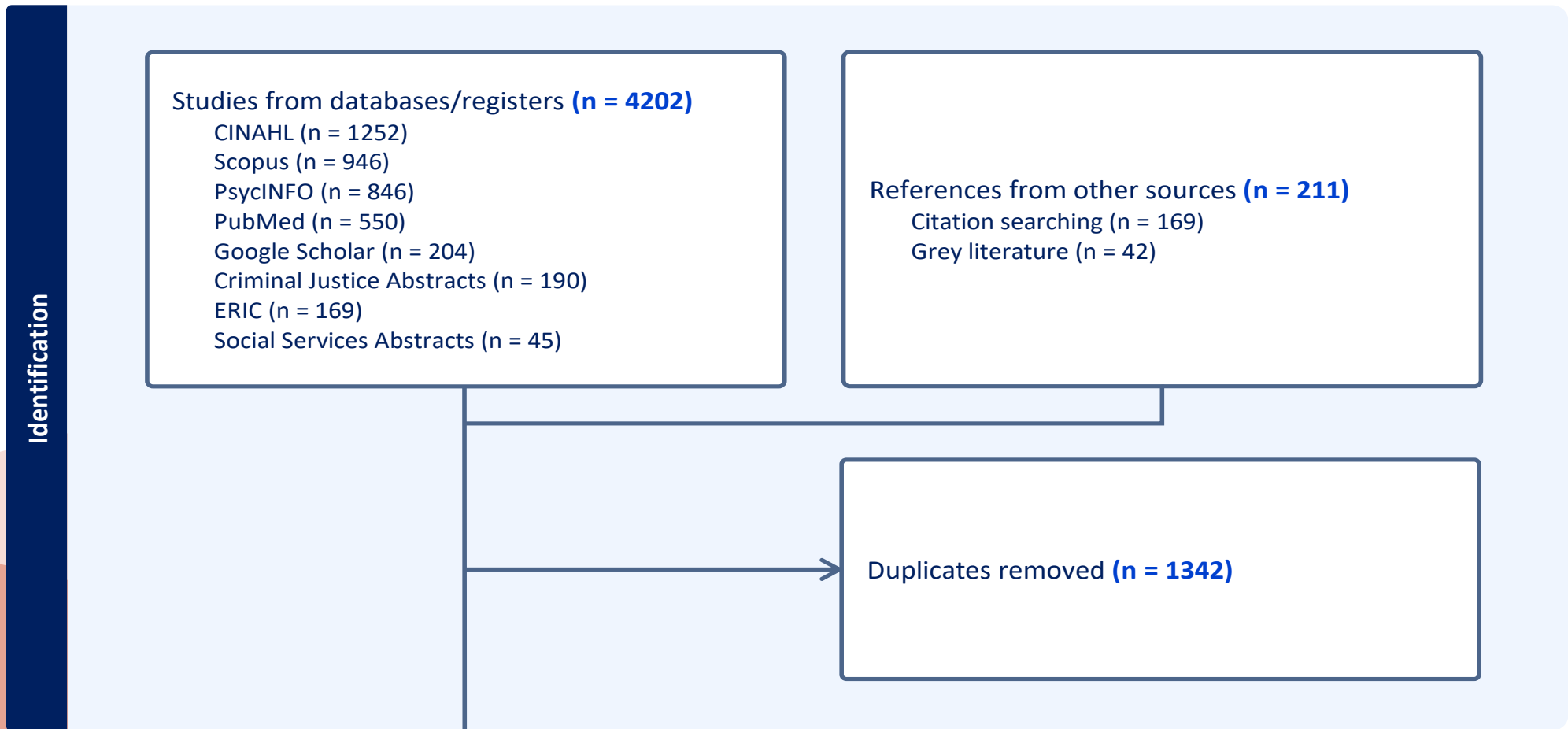
Inclusion Criteria	Exclusion Criteria
Primary focus on School Behavioral Threat Assessment School violence Assessment or intervention or school-based teams	Primary focus on suicide, self-harm, crisis management, general mental health screening that is geared towards anxiety or depression, neighborhood violence
Internal threat	External threat or threat from a staff member
Student aggressor posed a risk to others	Student posed a risk only to themselves
Publications that contain empirical data	Publications that do not contain empirical data
Primary population is K-12 schools	Primary population is not K-12 schools
Abstracts describe findings or results	Abstracts missing descriptions of findings or results
Based in US	International studies
English publication	Non-English publications
Published between April 20, 1999-March 31, 2023	Published before April 20, 1999 or after March 31, 2023



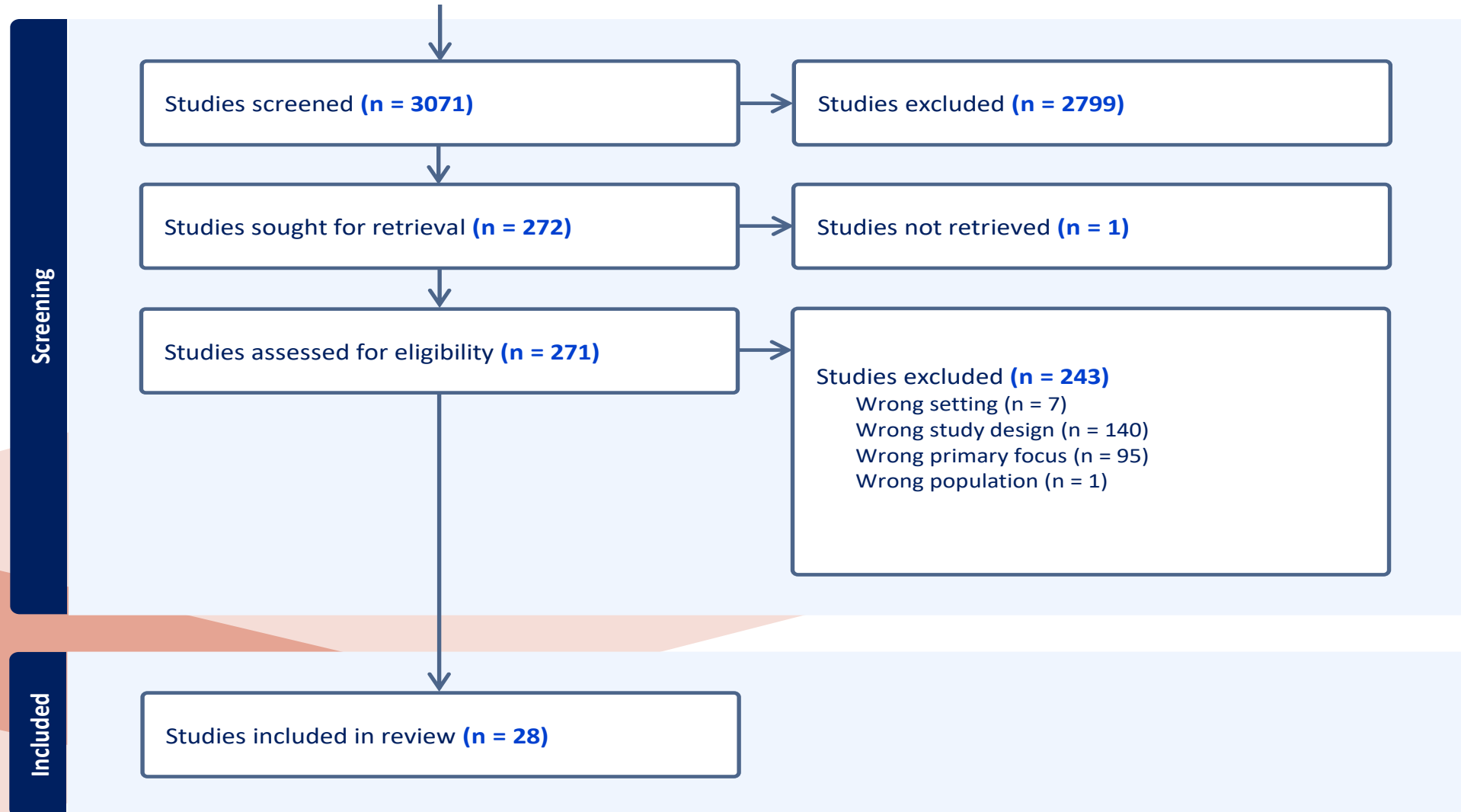
# Methods – Screening Process

- Utilized Covidence review tool to screen documents
- 2 step process
  - Documents that were obviously irrelevant during title/abstract screening were excluded by one screener
  - Remaining documents were screened by two people to determine whether inclusion criteria were met
    - Disagreements were resolved by discussion among 2 screeners and, if necessary, feedback from a third screener
    - Consensus required

# Methods – PRISMA Flow Chart



# Methods – PRISMA Flow Chart

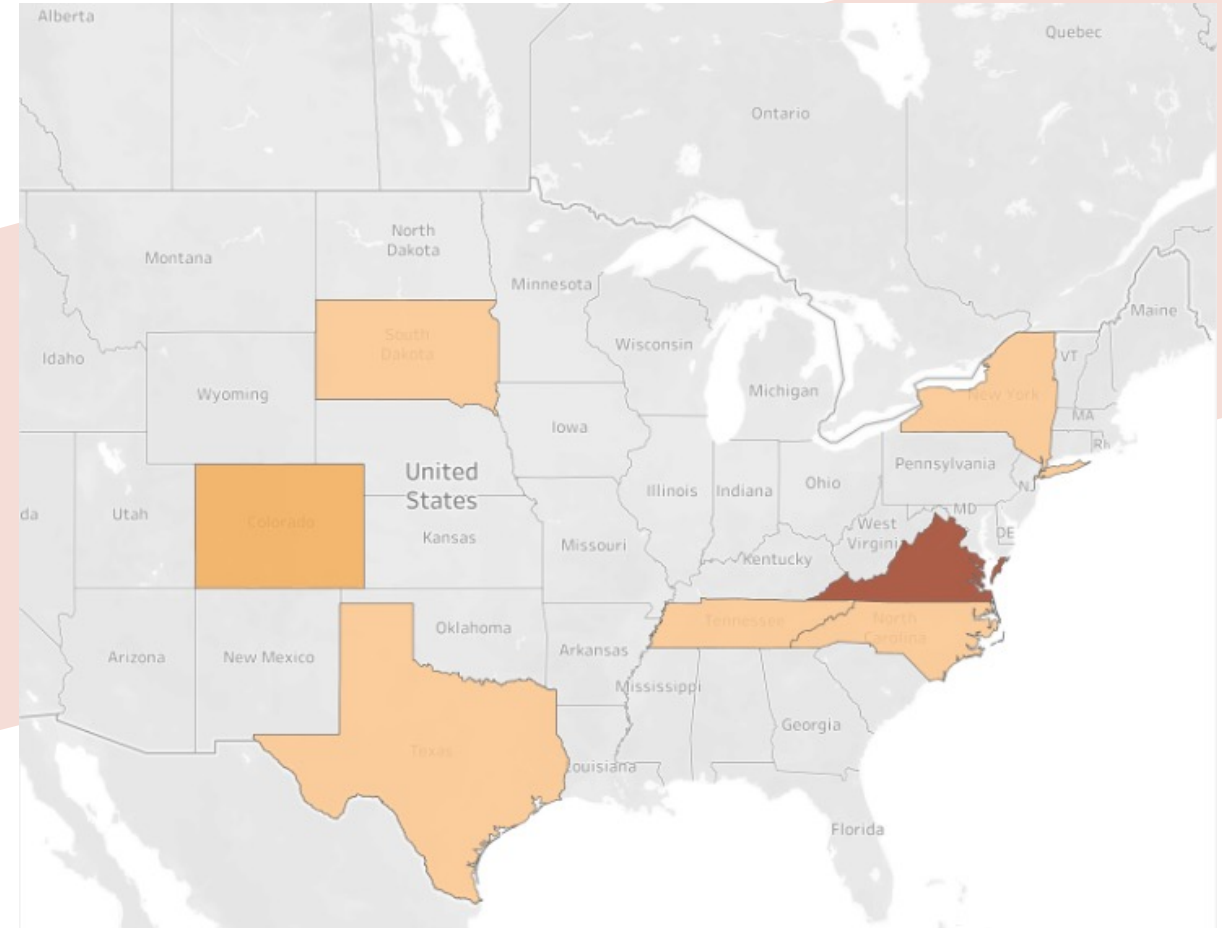


# Methods – Data Analysis

- Frequencies analyzed for:
  - Study demographics
    - Design
    - Locations for data collection and author institutions
    - Settings for data collection
    - Threat assessment guidelines that were studied
  - Units of analysis
  - Measured BTA outcomes
- Conventional content analysis to examine recommendations for future research

# Results – Demographics of Identified Documents (N = 28)

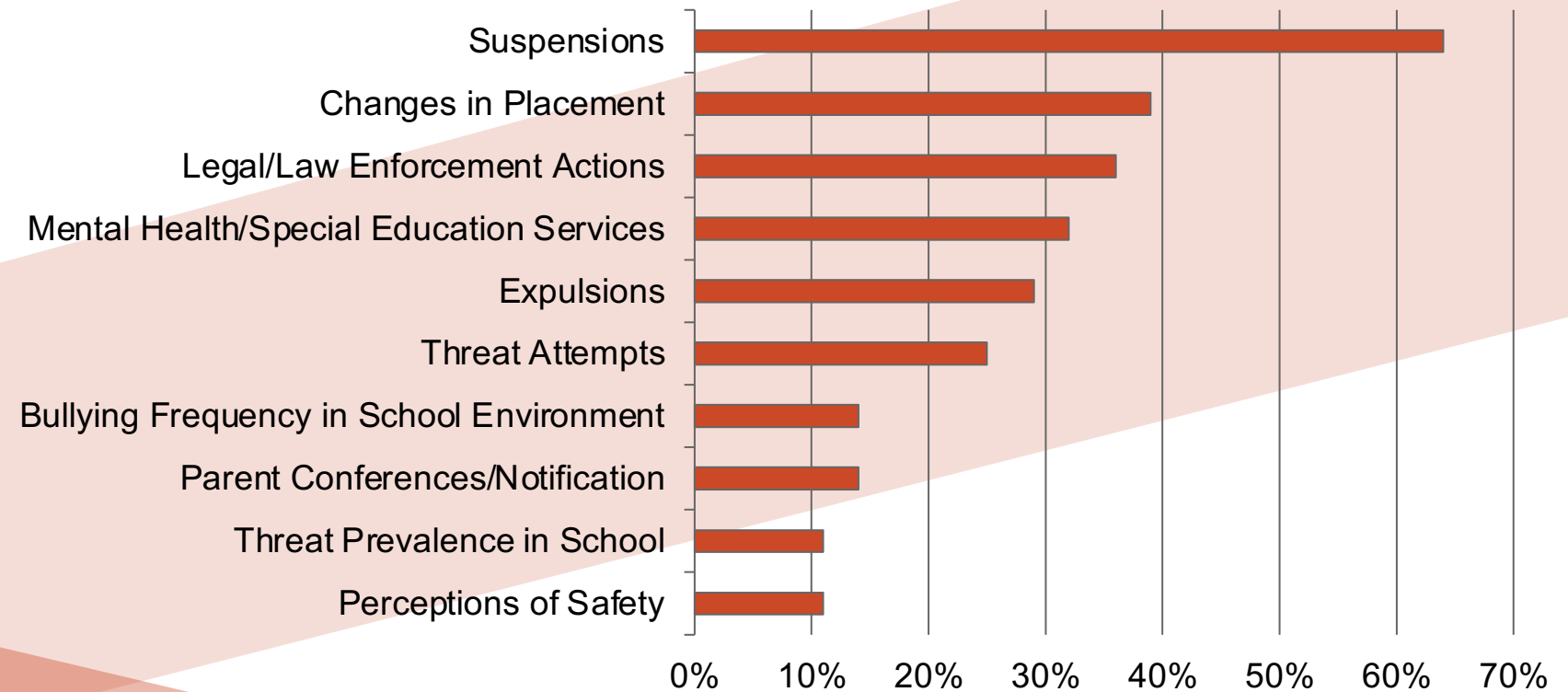
- Most documents:
  - Were conducted in an high school setting (96%)
  - Used quantitative methods (71%)
  - Utilized a cross-sectional design (96%)
  - Studied specific BTA guidelines (64%)
    - Of these (n = 18), most studied CSTAG (78%)
  - Collected data in one state (61%)
  - Were authored by University of Virginia researchers (64%)



# Results – Units of Analysis and Measured Outcomes

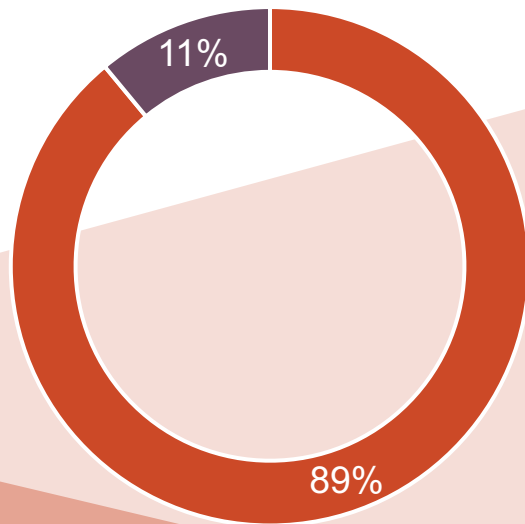
- Students (68%)
- Schools (50%)
- Other units:
  - District staff
  - Educators
  - School mental health staff

Outcomes Measured from BTA



# Results – Recommendations for Future Research

Were Recommendations Made for Future Research?



■ Yes ■ No

- 83 recommendations discovered, with themes including:
  - Threat assessment process (37%)
  - Methods (24%)
  - Responses to threats (12%)
  - Long-term effects (11%)
  - Disparities (6%)

# Recommendations – Threat Assessment Process

- Includes themes related to implementation, team composition, staff training, fidelity to guidelines, and other process-related characteristics

Qualitative studies should be conducted to understand logistics of how teams make threat assessment decisions.

Implementation can be improved by evaluating how each school using BTA procedures conducts the process.

Engagement with other stakeholders can assist in implementing violence prevention strategies and getting information about students, staff, and parents' perceptions of the process.

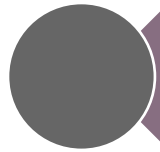
Conducting studies to determine if school administrators feel equipped to manage crises is needed.

Comprehensive studies are needed to explore fidelity of BTA implementation.

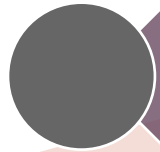


# Recommendations – Methods

- Includes themes related to study design, data sampling and generalizability, and data collection



Conducting comparative studies on different practices and models with various schools in an effort to identify differences in student outcomes and impact on school safety.



Utilizing large-scale randomized control trials can also provide evidence on the impact of BTA in reducing suspension rates and ensuring fairness.



Improving generalizability of BTA findings.

# Recommendations – Responses to Threats

- Includes themes related to investigating the various ways threat assessment teams respond to threats, whether disciplinary or supportive

Need to educate BTA teams on the benefits of supportive responses (e.g., counseling) and impact of disciplinary strategies. Differences in responses should be explored in the context of completed versus averted threats, as well as in cases that are addressed proactively as opposed to reactively.

Specific consideration is recommended in comparing schools that use BTA with schools that utilize a zero-tolerance approach.

# Recommendations – Long-Term Effects

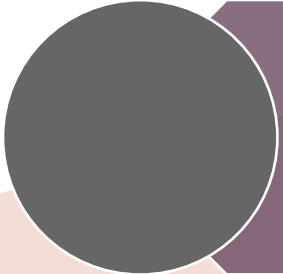
- Includes themes related to conducting longitudinal and prospective studies that follow students who made and received threats and underwent threat assessment

Outcomes studied should extend beyond violence prevention to include continuation in school, academic achievement, conflict resolution, avoidance of further disciplinary infractions, as well as those affecting the broader impacts on school climate.

Long-term student outcomes should be explored within a culturally responsive context to reveal differential effectiveness for different student groups.

# Recommendations – Disparities

- Included themes related to exploring existing disparities in threat characteristics and outcomes and assessing the potential of BTA in reducing exclusionary discipline practices among student populations, as well as to examine why BTA processes may not result in disparities for certain outcomes



Future studies should explore the impact of increasing participation among historically underrepresented populations in creating positive, safe, and equitable school cultures in an effort to show policymakers how inclusive school practices can be implemented effectively.

# Discussion

- Most documents authored by or collected data from one state, which may limit research generalizability
- Disciplinary outcomes measured more often than non-disciplinary outcomes
- Little examination of:
  - Mental health outcomes
  - Association between fidelity to BTA guidelines and BTA outcomes

# Limitations

- Documents may have been published outside of the timeframe in which we searched
- Search limited to certain databases

# Conclusion

- Limited generalizability in BTA research
- Opportunities for further investigation include:
  - BTA outcomes over time
  - Mental health outcomes
  - Association between fidelity to BTA guidelines and BTA outcomes



# **Report: BTA in Schools – Evidence, Fit, and Appropriateness**



# Report Purpose

- Describe school violence and BTA
- Report current state of BTA implementation and its effectiveness
- Describe considerations for the fit and appropriateness of using BTA in schools
- Offer recommendations for various stakeholders in addressing BTA use in schools (e.g., schools, researchers, policymakers)

# Analytic Plan and Methods

- Extant literature review on BTA and school violence prevention
- Scoping review
- BTA roundtable

# Findings – Evidence Base for BTA in Schools

## Intervention Outcomes

- Less bullying
- Mixed results on prevalence of aggressive violence
- More favorable school climates

## Postvention Outcomes

- Lower use of severe disciplinary actions (e.g., suspension)
- Students receiving special education more likely to be referred for and suspended as a result of BTA
- Students of color more likely to be referred for BTA, mixed results on discipline from BTA

# Findings – Fit and Appropriateness of BTA in Schools

- Wide variation in BTA implementation
  - Lack of explicit guidelines for use
  - School and district needs can influence adaptation of best practices
- Mental health-specific considerations
  - Misconception that people with mental illness are responsible for mass shootings and violence should not affect threat assessment and management
  - Lack of multidisciplinary BTA teams in practice
  - Trauma-informed practices not addressed

# Stakeholder Recommendations for Implementation and Study of BTA

Recommendation	Stakeholder(s)
Address school violence using a range of effective programs.	Schools/school systems
Allocate more funding for health promotion and violence prevention, including mental health resources.	Policymakers, funders
Include meaningful engagement and participation from youth, families, and communities in the adoption and implementation of school violence prevention programs.	Schools/school systems, youth, families, communities, advocates
Address racial/ethnic and mental health disability biases in BTA.	Schools/school systems, researchers
Clarify BTA policies and align them with best practices, such as including mental health staff on all BTA teams and conducting mental health screening before police investigations.	Schools/school systems, researchers, policymakers
Conduct research to fill gaps in knowledge about BTA, including mental health-related outcomes.	Researchers, funders, youth, families, communities

# Recommendations to SAMHSA for Implementation and Study of BTA

- Develop training and technical assistance on BTA to support the school mental health workforce due to its prevalence
- Convene a panel to examine BTA and student mental health
- Produce an advisory statement on BTA and student mental health

# Conclusion

- While intent of BTA is to standardize how threats are assessed and prevent school violence, inequities must be recognized
- BTA can have promising outcomes, but more research is needed
- School violence cannot be solved by schools alone

# Acknowledgements

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- Molly Lopez
- Mark McGovern



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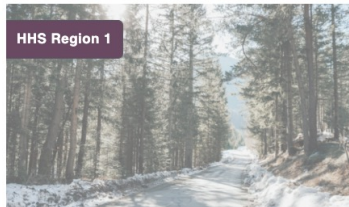
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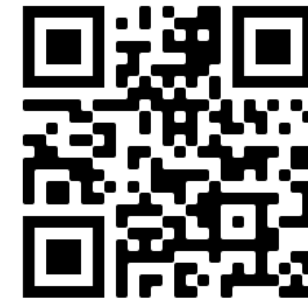
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## Q&A/Contact Us

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THANK  
YOU

# We invite you to share with us:

- What are some key takeaways from the presentation that resonate with you?
- Does your state/district/school utilize behavioral threat assessment as a school violence prevention strategy? What are other school violence prevention strategies your state/school/district has in place to supplement BTA?
- **School violence impacts us all.** When implementing school violence prevention programs such as BTA, **perspectives of all stakeholders should be considered** (students and families; communities in which BTA is implemented; school staff; school mental health, policy, and other experts). What discussions are your school/school district/organization having around BTA implementation?