

Keeping Schools Safe?

The Research on Behavioral Threat Assessments

Jennifer L. DePaoli and Stacy B. Loewe



Acknowledgments

The authors thank Nancy Duchesneau, Research Senior Manager, and Carl Felton, P–12 Policy Analyst, at The Education Trust; Lindsay Jones, CEO, and Bill Wilmot, Senior Professional Learning and Implementation Specialist, at CAST; and Lindsay Kubatzky, Director of Policy and Advocacy at the National Center for Learning Disabilities for their thoughtful feedback on earlier drafts of this report. We also thank our Learning Policy Institute (LPI) colleagues Linda Darling-Hammond, Tiffany Miller, and Roby Chatterji for contributing their research and policy expertise and input to this report. We would also like to thank Jennifer McCombs, LPI's former Director of Research, for supporting initial research. In addition, we thank the members of the LPI Communications team for their invaluable support in designing, producing, and disseminating this report.

Core operating support for LPI is provided by the Carnegie Corporation of New York, Heising-Simons Foundation, William and Flora Hewlett Foundation, Raikes Foundation, Sandler Foundation, Skyline Foundation, and MacKenzie Scott. We are grateful to them for their generous support. The ideas voiced here are those of the authors and not those of our funders.

External Reviewers

This report benefited from the insights and expertise of several external reviewers: Catherine Bradshaw, University Professor and Senior Associate Dean for Research at the School of Education and Human Development at the University of Virginia and David Osher, Fellow at the American Educational Research Association. We thank them for the care and attention they gave the report.

Suggested citation: DePaoli, J. L., & Loewe, S. B. (2025). Keeping schools safe? The research on behavioral threat assessments. Learning Policy Institute. https://doi.org/10.54300/808.437.

 $This\ report\ can\ be\ found\ online\ at\ https://learningpolicyinstitute.org/product/behavioral-threat-assessments.$

This work is licensed under the Creative Commons Attribution-NonCommercial 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc/4.0/.



Document last revised October 6, 2025

Table of Contents

Executive Summary	iii
Introduction	1
Foundations and Models	3
FBI Model	3
Federal National Threat Assessment Center Model	4
Comprehensive School Threat Assessment Guidelines Model	5
The Salem-Keizer Cascade Model	6
Concerns About Behavioral Threat Assessments	7
Risks Associated With Poorly Implemented BTAs	7
Risks About Potential Biases When Implementing BTA Systems	8
Concerns About the Focus on Law Enforcement Officials	8
Evidence and Limitations	9
Implementation Studies	9
Outcome Studies	11
Summary of BTA Research	14
Considerations and Concerns When Using School-Based BTA Systems	. 16
Consideration 1: Rooting BTAs Within a Positive, Relationship-Centered School Climate	16
Consideration 2: Creating and Training BTA Teams Appropriately	17
Consideration 3: Designing BTA Systems to Problem Solve, Not Criminalize	18
Consideration 4: Equipping Schools With Needed Counseling and Mental Health Services	19
Consideration 5: Collecting and Reporting Useful BTA Data to Support Continuous Improvement	20
Conclusion	. 21
Endnotes	. 22
About the Authors	. 28
List of Figures	
Figure 1 Adoption of Behavioral Threat Assessment Policies by State	2

Executive Summary

The ongoing occurrence of school shootings and a documented rise in reported threats have led educators and policymakers to seek ways to prevent and respond to acts and threats of school-based violence. These tragic events are often followed by calls to physically harden schools by installing metal detectors and security guards. However, the evidence does not suggest that these strategies are generally effective in preventing violence. A substantial body of research suggests that schools need to attend to the psychological safety of students as the foundation for ensuring their physical safety. This is especially true given that more than 85% of school shootings have been perpetrated by current or former students who experienced negative home and school lives, and around 80% of school shooting perpetrators had experienced bullying within the school.

One approach that attempts to address both physical and psychological safety is the use of a behavioral threat assessment (BTA) system. These systems aim to identify, assess, and manage the threat of violence targeted at schools with the ultimate goal of intervening to prevent such violence. As of April 2024, 85% of schools across the United States reported having a threat assessment team, and, as of this publication, 45 states have established some form of a BTA policy.

BTA Systems in Schools

BTA systems are intended to respond to threats of violence from students by intervening with appropriate supports—including peer support programs, counseling, and mental health care—before issues escalate. BTA systems in schools were introduced by federal initiatives developed after the 1999 shooting at Columbine High School in Littleton, CO. Since then, the primary BTA models that states have adopted or referenced in their legislation or policies are federal models from the Federal Bureau of Investigation and from the National Threat Assessment Center (NTAC), the Comprehensive School Threat Assessment Guidelines (CSTAG) model, and the Salem-Keizer model. All models encourage a process to define what constitutes a serious threat, establish a multidisciplinary team, and guide how identified threats are handled. They also identify the need for training of threat assessment teams on procedures and highlight the need for all other adults, students, and parents to understand the threat reporting and assessment process.

The federal NTAC model recommends that schools first focus on building a safe and connected school climate to break down the "code of silence" that keeps students from seeking help for themselves or their peers. Evidence supports this: A 2008 NTAC study found that student bystanders who came forward with knowledge of a threat were influenced by positive relationships with one or more adults in the school. Similarly, the CSTAG model, which is the most studied framework, relies on extensive training; uses a flexible, nonpunitive approach that discourages the use of zero-tolerance policies and profiling; and demonstrates how to design and use mental health supports to resolve threatening behavior and intervene proactively to prevent violence. Similar to CSTAG, the Salem-Keizer guidelines provide steps for BTA teams to take, beginning with answering a series of questions to determine whether the threat is unfounded or necessitates further assessment and action. These guidelines also indicate that the BTA should be initiated by a school administrator and either a school counselor or a school resource officer (SRO) trained in the school's process and protocol, then extended, if needed, to a broader, communitywide team.

Despite the guidance from these BTA models, there are many districts and schools that have adopted BTA practices but do not follow any of these specific models. Although BTAs are intended to diagnose and provide supports, they are used within school systems that are often accustomed to treating students who are viewed as problematic with exclusionary discipline tactics such as suspension, expulsion, or law enforcement action. Where BTAs have been introduced in settings with inadequate staff and training, these kinds of outcomes have been reported. As a result, concerns have been raised about the outcomes of poorly designed or enacted BTAs, which may target and potentially traumatize the most vulnerable students, including through the exclusion and criminalization of historically marginalized students. On the other hand, higher quality implementation of carefully designed and supported BTAs has been found to increase student supports and decrease levels of and disparities in disciplinary actions. With these concerns and questions, we examine the research evidence on BTAs being used in schools.

Existing Evidence on BTA Models

A growing body of literature describes school-based threat assessment practices and procedures. The large majority of studies to date have focused on one specific model—CSTAG—and were conducted by researchers at the University of Virginia (where the model originated). A small number of studies have focused on other specific BTA models.

Many implementation studies on BTA systems—in particular the CSTAG model—focus on schools that received training supports from expert trainers, which may not always be available to schools at scale. Findings suggest that BTA training can lead to changes in beliefs and knowledge, such as increased ability to accurately assess a threat, decreased support for zero-tolerance policies, and a better awareness of the goals of threat assessment. However, research also reports challenges around providing the necessary training needed in many schools.

Studies that examine the outcomes of BTAs on students find that existing biases often influenced the rates of referrals for a threat assessment. Students of color—particularly Black students—and students with disabilities were far more likely than their peers to be referred for a threat assessment. However, studies also find evidence of fewer disciplinary infractions, suspensions, expulsions, and law enforcement actions in schools using the CSTAG model than in those using a general threat assessment approach, particularly for students of color and students with disabilities. Students in the schools using the CSTAG guidelines also reported less bullying, greater willingness to seek help, fairer discipline, lower levels of student aggressive behaviors, and more positive perceptions of school climate than students in comparison schools.

Two causal studies to date found that the use of CSTAG resulted in reductions in exclusionary disciplinary actions and bullying infractions and increases in counseling support, without disparities in who was referred for a threat assessment or who received a disciplinary action. Students who made threats of violence in schools that used the CSTAG model were significantly more likely to receive counseling services and a parent conference than students in control schools, while students in the control group were significantly more likely to receive a long-term suspension or be transferred to a different school. Among CSTAG schools, those with higher fidelity to the model showed the greatest reductions in long-term suspensions and increases in counseling provided.

Considerations and Concerns When Using School-Based BTA Systems

As in many educational programs, research finds a gap between the conceptualization of threat assessment systems and their implementation. As a consequence, educators and civil rights advocates have expressed concerns about whether threat assessment systems may profile and punish vulnerable groups of students rather than identify and help those needing support. These concerns must be considered as BTA systems become increasingly prevalent across the country. For BTA systems, which are now required in most states and districts, to be positive and protective of students and schools, the research suggests that several elements are key.

Consideration 1: Rooting BTAs Within a Positive School Climate

Successful violence prevention programs rely on creating safe and supportive schools that offer strong foundations of support for student mental health and well-being. Yet, while BTA models are built on this relationship, few state policies clearly make the connection between supporting a positive school climate and successfully deterring threats and acts of violence. Research demonstrates how positive relationships serve as a foundation for learning, mental health, and emotional wellness—particularly when students feel welcome and connected to their school communities—and help prevent physical violence and bullying. Although supportive, relationship-centered schools are the foundation for school safety, policymakers often treat physical safety measures and psychological safety measures as two separate entities. More must be done to ensure that any school violence prevention strategy—including BTAs—supports strong relationship-centered schools and integrated supports.

Consideration 2: Creating and Training BTA Teams Appropriately

Policies and procedures for BTA implementation vary widely across states and districts, leaving room for significant implementation issues to arise. Each of the major school BTA models clearly identifies the need for appropriate threat assessment training as a key component of high-quality implementation, yet a number of studies have found challenges with the state of BTA training in many schools, as well as concerns about the adequacy of staffing of these teams. Little is known about the composition of teams across schools and whether, for example, they include key staff members like counselors, mental health professionals, or special education teachers when the BTA involves a student with a disability.

Consideration 3: Designing BTA Systems to Problem Solve, Not Criminalize

For any school safety strategy to be effective, it needs to be implemented with fidelity and embedded within both a strong system of support for students and comprehensive efforts to prevent violence. The purpose of BTAs as a problem-solving, violence prevention tool—not as a means to exclude and criminalize students—also should be communicated clearly to the entire school community. While BTAs are intended to diagnose and provide supports, they may reinforce exclusionary practices when used within school systems that already rely on those practices. The inclusion of law enforcement at the earliest stages of a threat assessment raises concerns about potential negative impacts on students involved in the BTA process. More research is needed on the role of school resource officers or law enforcement in BTAs, and clear guidelines should be put in place for when and how it is appropriate to include them in the BTA process and with what prior training.

Consideration 4: Equipping Schools With Needed Counseling and Mental Health Supports

The existing evidence suggests that many schools may lack the appropriate mental health supports that are key to the BTA approach, especially access to mental health counselors and services. Nationally, schools have about half as many counselors and school psychologists as recommended by professional associations, with schools that serve more students of color and students from low-income families being the least likely to have adequate personnel supports in most states. Without proper implementation processes, appropriate team members, and links to supports, schools may be operating a hollow system that fails to understand why young people make threats and thus respond inappropriately when they do.

Consideration 5: Collecting and Reporting Useful BTA Data to Support Continuous Improvement

Early research indicates that BTA data, even when mandated by law, is not always collected in a consistent, sufficiently detailed manner. In total, only 7 of the 20 states mandating school BTAs require data on BTAs to be collected and reported, and even fewer require a full breadth of data (i.e., number of students referred for BTAs disaggregated by student demographic, number of threats deemed to be serious, actions and outcomes of BTAs). Moreover, no state mandates that those data be made publicly available. It is critical that data be reported accurately to understand how these systems actually work in schools, whether they are leading to greater or less safety in schools, if there are biases in implementation, and whether they are associated with more or fewer discipline disparities.

Conclusion

In an environment where resources, time, and capacity are in limited supply, states and school districts benefit when they invest in evidence-based strategies and research-backed supports that promote physically and psychologically safe school environments. Though evidence indicates that well-designed and well-implemented BTAs can be part of a successful violence prevention strategy, there is far more to learn about what will enable these conditions in schools.

We encourage policymakers to ensure schools are well equipped to provide high-quality training and intervention supports to students receiving BTAs, especially access to mental health professionals and services. Schools should also be supported in creating positive school climates, which are the backbone of BTAs and school safety strategies in general. And in order to have an accurate picture of how BTAs are being implemented and how they are affecting students, it is critical for data reporting and collection to be required and supported by states.

Introduction

Since the 1999 shooting at Columbine High School, the frequency of mass shootings at U.S. schools has raised concerns about how safe students are in school. More recently, schools have also had to manage a growing number of threats of violence—whether in person or through social media. In 2022, the Federal Bureau of Investigation (FBI) reported receiving nearly 6,000 school threats—a 60% increase from the prior year.¹ The ongoing occurrence of school shootings and the rise in reported threats have led educators and policymakers to seek ways to prevent and respond to acts and threats of school-based violence.²

These tragic events are often followed by calls to physically harden schools by installing metal detectors and security guards. However, the evidence does not suggest that these strategies are generally effective in preventing violence.³ The larger discourse on school safety also tends to ignore the ways in which schools need to attend to the psychological safety of students as the foundation for ensuring their physical safety. The need to focus on the psychological safety of students is especially true given that over 85% of school shootings have been perpetrated by current or former students who experienced negative home and school lives, and around 80% of school shooting perpetrators had experienced bullying within the school. Many also had a history of behavioral issues that were addressed with punitive measures such as suspension, expulsion, and interactions with law enforcement, instead of mental health interventions.⁴

One way that schools have attempted to address both physical and psychological safety in school is the use of behavioral threat assessments (BTAs). These systems aim to identify, assess, and manage the threat of targeted violence—attacks in which the school is deliberately selected as the location—with the ultimate goal of intervening to prevent such violence.⁵ In the 2021–22 school year, 65% of schools across the United States reported having a threat assessment team. By April 2024, this number had jumped to 85%.⁶ Despite the prevalence of BTA systems in schools, the available evidence on their implementation and outcomes is only beginning to paint a picture of how they are being implemented and what impacts they are having on students. In this report, we aim to explore the history of BTAs and summarize the available research on these systems in schools. We then share considerations policymakers should be aware of as they contemplate the use of BTAs as a violence prevention strategy.

Behavioral threat assessments have been used in schools since the early 2000s, but the more widespread adoption of these systems across the country has happened in the years since the 2018 shooting at Marjory Stoneman Douglas High School in Parkland, FL. As of the date of this publication, 45 states have established some form of a BTA policy, either through a codified state statute or through noncodified means (see Figure 1). Twenty of these states have enacted legislation requiring school districts to establish multidisciplinary teams and processes to respond to student threats, while 9 others encourage schools to adopt them in their legislation. In the remaining 16 states, noncodified policy (i.e., guidance, training, protocols, funding) exists through the state department of education, board of education, department of homeland security, or other state agency. Five states and the District of Columbia have no policy—codified or not—regarding BTAs.

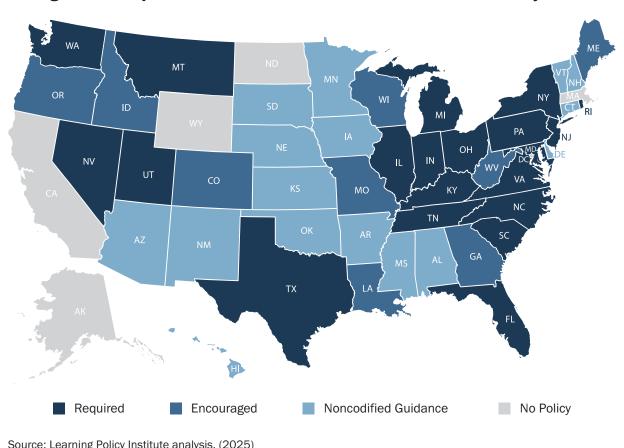


Figure 1. Adoption of Behavioral Threat Assessment Policies by State

Source: Learning Policy Institute analysis. (2025)

Foundations and Models

BTA systems in schools were introduced as a strategy based on findings and recommendations from two federal initiatives: the Federal Bureau of Investigation's (FBI's) report "The School Shooter: A Threat Assessment Perspective" and the Safe School Initiative (SSI). The FBI report drew on the threat assessment efforts of the National Center for the Analysis of Violent Crime; a behavioral analysis of 18 school shooting cases; and a symposium of school personnel, mental health providers, law enforcement, and prosecutors on school shootings and threat assessment. The SSI was launched after the 1999 shooting at Columbine High School in Littleton, CO, by the National Threat Assessment Center (NTAC) division of the Secret Service and the Department of Education's Safe and Drug-Free Schools Program.

These two federal initiatives provided the basis for understanding how BTAs should operate in schools and laid out the principles and recommendations that have been adopted by subsequent school models. They are grounded in the need for a system of prevention for school shootings and other acts of violence. The NTAC found that while there was no definitive profile of a school shooter, most school shooters exhibited some type of concerning behavior or indicated a need for help prior to committing an attack.⁸ Several follow-up reports revealed that prior to most targeted violent attacks, students in the school had knowledge of the attacker's plans but did not report their concerns. This finding suggested that proactively identifying potential school safety issues may be possible and intervening with support could help prevent attacks.⁹

As conceptualized in schools, BTAs are intended to establish a reporting system and multidisciplinary teams (e.g., school administrators, teachers, guidance counselors, mental health professionals, school resource officers [SROs]) to review and respond to reported threats of violence and other troubling behaviors. Threats are largely defined as expressions of intent to harm someone or engage in violent behavior or possession of a weapon on school grounds. BTA systems are often intended to work in concert with other safety strategies schools have in

Behavioral threat assessments are intended to establish a reporting system and multidisciplinary teams to review and respond to reported threats of violence and other troubling behaviors.

place, including school emergency operation plans intended to identify physical security gaps and respond to emergency events (e.g., weather emergencies, lockdowns, acts of violence, bomb threats).

In the following sections, we describe the primary BTA models that states have been adopting or referencing in their legislation or policies. It should be noted that while these are the four major defined approaches to threat assessment discussed in the literature, there are also many districts and schools that have adopted BTA practices that do not follow any of these specific models.

FBI Model

The FBI model lays out a systematic process for assessing threats and intervening based on the understanding that "first, all threats and threateners are not equal; second, that most threateners are unlikely to carry out their threat." In the immediate aftermath of a threat being made by a student, this model recommends that the assessor (i.e., school administrator, mental health professional, educator,

law enforcement officer) first demarcate the threat into one of four categories—direct, indirect, veiled, and conditional—and begin to assess key factors, including whether the student provides specific, plausible details of the attack; what the emotional state of the student is when the threat is made; what precipitating stressors may have caused the student to make the threat; and what predisposing factors (e.g., underlying personality traits, characteristics, temperament) may play a role in the threat. After collecting all necessary information on these factors and determining the credibility of the threat being carried out, this model suggests that the assessor can then make the preliminary determination on the level of risk the threat poses.

Building on the preliminary determination, this model then suggests a more in-depth, four-pronged assessment approach based on the "totality of circumstances" known about the student making the threat. This approach asks the assessor to examine (1) the personality of the student, (2) the student's family dynamics, (3) the school dynamics and the student's role in those dynamics, and (4) the social dynamics of the community that may be impacting the student. The FBI model emphasizes that the four-pronged approach should only be used after a student has made a threat and should not be used to profile students or to attempt to predict future violent behavior. This model also recommends that schools establish a clear, consistent system for responding to threats, which should include informing students and parents of the system, designating a threat assessment coordinator, and considering establishing a multidisciplinary threat assessment team. Additionally, the model states that to effectively use the procedures it establishes, school administrators and staff should receive training in the fundamentals of threat assessment and adolescent development, violence, and mental health issues.

Federal National Threat Assessment Center Model

The federal NTAC model, first developed in 2002, is grounded in creating a culture of respect and a climate of safety. This model recommends that schools first focus on building a safe and connected school climate to break down the "code of silence" that keeps students from seeking help for themselves or their peers. Evidence supports this: A 2008 NTAC study found that student bystanders who came forward with knowledge of a threat were influenced by positive relationships with one or more adults in the school; with such a relationship, students felt they would be taken seriously and that appropriate action would be taken. 13

The original NTAC model provided guidance for how to develop a BTA system and process, offered critical questions to ask throughout the assessment process, and identified roles for various in- and out-of-school actors to play in the system. However, it did not prescribe a strict protocol for school districts to follow. Later guidelines from the NTAC laid out an eight-step process for creating a threat assessment system, which still allowed for district adaptation based on their unique context (see National Threat Assessment Center Guidance for Creating a Comprehensive Targeted Violence Prevention Plan).

The NTAC model suggests that a BTA team be composed of school personnel from a variety of disciplines, such as teachers, administrators, counselors, mental health professionals, coaches, and SROs (i.e., sworn law enforcement officers with arrest powers that work in a school setting¹⁴). The NTAC model also provides guidance on investigative themes to address during the BTA process—including motive, inappropriate interests, access to weapons, stressors, and emotional and developmental issues—to determine the veracity of a threat. Unlike other BTA models profiled in this report, the NTAC model is intended to be used

as guidance in developing BTA processes at the site level, not as a ready-to-implement tool. For example, the Virginia Center for School and Campus Safety, under the Department of Criminal Justice Services, created its own model policies, procedures, and guidance based on the NTAC guidance in compliance with state law to support Virginia school districts in establishing and operating BTA teams.¹⁵

National Threat Assessment Center Guidance for Creating a Comprehensive Targeted Violence Prevention Plan

- Step 1. Establish a multidisciplinary threat assessment team.
- Step 2. Define concerning and prohibited behaviors.
- Step 3. Create a central reporting mechanism.
- Step 4. Determine the threshold for law enforcement intervention.
- Step 5. Establish assessment procedures.
- Step 6. Develop risk management options.
- Step 7. Create and promote safe school climates.
- Step 8. Conduct training for all stakeholders.

Source: National Threat Assessment Center. (2018). Enhancing school safety using a threat assessment model: An operational guide for preventing targeted school violence. U.S. Secret Service, Department of Homeland Security.

Comprehensive School Threat Assessment Guidelines Model

Unlike the federal models, which provide a process for schools to develop their own BTA procedures, the next model is one of two that provide more specific, step-by-step frameworks. The Comprehensive School Threat Assessment Guidelines (CSTAG) model was developed by psychologists at the University of Virginia in 2001 with support and input from a multidisciplinary work group and national experts, and it has been updated regularly since its inception.

The CSTAG model has been recognized in the federal government's National Registry of Evidence-Based Programs and Practices. ¹⁶ The CSTAG model relies on extensive training; uses a flexible, nonpunitive approach that discourages the use of zero-tolerance policies and profiling; and demonstrates how to design and use mental health supports. The CSTAG model provides a five-step decision tree to guide BTA teams to first determine whether a threat is transient (not serious) or substantive and then respond to any threats deemed to be "serious and substantive" (i.e., hit, fight, or beat up) or "very serious and substantive" (i.e., kill, rape, or cause serious injury). In terms of recommendations for establishing a BTA team, the CSTAG model states that each school within a district should have its own threat assessment team and include "one or more representatives from school administration, law enforcement, and mental health." ¹⁷

The Salem-Keizer Cascade Model

The Salem-Keizer Cascade model was developed by a school psychologist in Oregon with input from educators, school mental health professionals, youth-serving community stakeholders (e.g., law enforcement, juvenile justice, public health), and threat assessment experts. Similar to CSTAG, the Salem-Keizer guidelines provide steps for BTA teams to take, beginning with answering a series of questions to determine whether the threat is unfounded or necessitates further assessment and action.¹⁸

This model's guidelines also indicate that the BTA should be initiated by a school administrator and either a school counselor or an SRO trained in the school's process and protocol. This initial team determines whether a broader, community-wide team (e.g., other adults in the school who know the student involved, parents, other concerned adults) should be engaged. While the Salem-Keizer Cascade model has been adopted in some places—particularly in the northwestern region of the United States—there is only one published research study on its implementation or association with outcomes.

Like the federal guidelines, both the CSTAG and Salem-Keizer models encourage a process to define what constitutes a serious threat and how identified threats are handled. Similarly, all of the BTA frameworks discuss the need for extensive training of threat assessment teams on procedures, as well as additional training so that all other adults working in the building, students, and parents understand the threat reporting and assessment process.

Concerns About Behavioral Threat Assessments

Risks Associated With Poorly Implemented BTAs

Although BTAs are required or encouraged in most states and are reportedly used in nearly all districts, concerns have been raised about the outcomes of poorly designed or enacted BTAs, in particular their likelihood of targeting and potentially traumatizing the most vulnerable students. Numerous news outlets have recently reported on the consequences that may occur when threat assessment laws are implemented without an understanding of how to identify serious threats and respond to them effectively—mainly there are concerns that BTAs can become another mechanism for schools to punish students harshly and unfairly.

A *Texas Observer* investigation described a case of a Black student in the Conroe Independent School District who was referred for a threat assessment for a threat he made in response to a White student's threat toward him. While the Black student's threat was deemed to be not viable, he was still arrested, expelled, and placed into the juvenile justice system.¹⁹ Only after lawyers pointed out that the district had failed to conduct a BTA or provide mental health resources as mandated by law (and requested by his family) was his expulsion reversed. In looking more deeply at data from across the state, the *Observer* found that only half of Texas school districts had BTA teams that included members with the required areas of expertise. They also found that only 31% of districts had trained team members and 14% were not conducting BTAs according to Texas law.

A ProPublica investigation in Tennessee similarly found that threat assessments were being inconsistently carried out. In the absence of appropriate assessments and because of additional laws, BTAs were leading to harsh consequences for students.²⁰ In April 2023, after the shooting at the Covenant School in Nashville, Tennessee lawmakers passed a law requiring every school to have a BTA system in place; 2 weeks earlier, they had passed a contradictory law requiring mandatory yearlong expulsions for any student making a threat of mass violence to a school.²¹ And a year later, lawmakers revised existing statutes to increase the penalty for threatening to commit an act of mass violence on school property from a misdemeanor to a felony.²²

In the wake of the initial 2023 laws, limited data showed that exclusionary discipline (e.g., expulsion, removal to an alternative school) for students making threats greatly increased, including nearly doubling in Metro Nashville Public Schools.²³ Given the requirement that schools have a BTA system in place, threat assessments should have provided a guardrail by determining whether those threats were serious and could benefit from proactive interventions, but ProPublica's reporting found several instances in which those guardrails were not in place.²⁴

As another example, an investigation into the use of threat assessments in Albuquerque Public Schools (APS) by Searchlight New Mexico detailed an incident in which an elementary school student with autism received a BTA after an altercation with his teacher. The assessment was conducted without the knowledge of the student's parents, and the student was deemed to be a "high-level threat" but not an "imminent threat" to the school.²⁵ The extent of the BTA was only revealed to the parents after they hired a lawyer to file a formal complaint against the school district. Searchlight's ensuing review of threat assessment data in APS found that special education students and Black students were disproportionately referred for BTAs for 3 consecutive school years ending in 2018–19.

Risks About Potential Biases When Implementing BTA Systems

Outside the context of threat assessments, research continues to show that Black students are suspended at higher rates than their peers, and those disparities are further exacerbated for Black students with disabilities. Research has also found that racial disparities in suspensions are strongly associated with differential treatment of students, not differences in student behavior. One study found that 46% of the Black–White suspension gap could be attributed to differential treatment of students by race, while only 9% of the gap could be attributed to differences in student behavior.

These trends can influence the implementation of BTAs. A 2018 analysis of the literature on BTAs revealed that while studies of CSTAG have found a reduction in discipline disparities, very little attention is paid to understanding how implicit bias may impact the BTA referral process. ²⁸ This finding has contributed to concerns that BTAs, when implemented without careful attention to bias, can lead to the same disparities in exclusionary discipline for and criminalization of historically marginalized students. ²⁹ Indeed, in one recent research paper studying a BTA model, the authors noted, "Threat assessment teams must make every effort to make decisions that are fair and unbiased and to recognize the potential for implicit biases in their work." ³⁰ It is crucial that threat assessment systems are designed and implemented in ways that counteract these biases.

Concerns About the Focus on Law Enforcement Officials

BTAs are intended to provide school staff with a systematic approach to determine whether a threat is serious or not and to intervene only when a threat is determined to be serious and the student has access to the means to perpetrate an act of violence. In most cases, BTAs are meant to respond to threats of violence by intervening with appropriate supports—including peer support programs, counseling, and mental health care—before the issues escalate.

However, concerns have been raised about the inclusion of a law enforcement official or SRO as part of the BTA team from the start, which is required in all the major BTA models being used across the United States. Research shows that the presence of SROs on campuses has limited effects on school safety and can lead to negative student outcomes, particularly for Black students and students with disabilities.³¹ A study analyzing national survey data of 10th-graders found that the more security measures a school employed, including the presence of law enforcement officers during the school day, the higher the rates of suspensions and the disparities in suspension rates between Black and White students.³² Profiling students instead of focusing on threats also has the potential to harm students, particularly Black students and students with disabilities, as the available accounts show.³³ It is with these concerns in mind, and the understanding that they must be central to any discussion on BTAs, that we examine the research evidence on BTAs as they are currently being used in schools.

Evidence and Limitations

There is a growing body of literature describing school-based threat assessment practices and procedures. The large majority of studies to date have focused on one specific model—CSTAG—by researchers at the University of Virginia (where the model originated).³⁴ Importantly, CSTAG is structured with standard training and materials; it focuses on identifying when to provide mental health supports and other supportive interventions to students. A small number of studies have systematically focused on other specific BTA models or on how schools and districts implement other versions of BTAs. Most of the existing research on outcomes seeks to understand whether the implementation of the BTA approach is associated with lower levels of exclusionary practices; however, there is much more limited information on what schools elect to do *instead* of using disciplinary practices.

Thus, most of our understanding of BTA systems' implementation and potential outcomes is based on states and schools that have implemented the CSTAG model, with a focus on training outcomes, as well as documentation of who is referred for threat assessments and who receives disciplinary actions. Collectively, these studies include descriptive evidence, with limited causal evidence, that BTA implementation is associated with the reduction of exclusionary practices such as suspensions and expulsions, although there do remain differences by race/ethnicity and disability status in who is referred for a behavioral assessment. Studies on trainings of the model find that staff knowledge and perspectives change positively after the trainings. Even so, challenges exist around insufficient staffing and training, which can contribute to implementation that deviates from the original model and, in some cases, can lead to harmful outcomes for students.

Implementation Studies

Questions exist around how well BTA models can be implemented at scale, particularly given the large number of states that mandate them. Many research studies on BTA systems—in particular the CSTAG model—focus on schools that received training supports from expert trainers, which may not typically be available to schools at scale. We offer the findings from CSTAG-focused research and supplement that with studies from other locales to highlight both the positive findings and the challenges that emerge when implementing BTAs. Findings suggest that the trainings inherent in the CSTAG model can lead to changes in beliefs and knowledge, but getting a strong team in place and fully implementing a counseling-oriented BTA model can be logistically and financially challenging.

Research on the CSTAG model, which has the most training and support, finds immediate positive changes in the self-reported knowledge and perspectives of staff who participate in trainings. After school staff participated in their standard 1-day trainings, they could more accurately assess a threat, had decreased support for zero-tolerance policies, and had a better awareness of the goals of threat assessment and were more motivated to implement them in their schools.³⁵ Once this model was put into practice, several studies found that schools using the CSTAG model were able to differentiate between serious and nonserious threats reliably—one important outcome of using a threat assessment approach.³⁶

While training can begin to shift mindsets and understanding around threat assessments, implementation research suggests that putting BTA systems into practice can be difficult. These challenges include being able to fully staff BTA teams and ensure that individuals included on the team have the appropriate level of training to implement threat assessments as intended. In turn, a lack of fidelity of implementation could result in program execution that perpetuates existing biases toward students of color and other marginalized groups.

While training can begin to shift mindsets and understanding around threat assessments, implementation research suggests that putting BTA systems into practice can be difficult.

In 2020, the CSTAG research team was awarded a grant to study the implementation of BTAs across the state of Florida, one of several states that has adopted the CSTAG model as its statewide BTA system. These studies specifically focused on training and implementation of the model in response to the types of threats schools experienced and how BTA teams resolved them.³⁷

Researchers found that more than half of surveyed district specialists reported moderate or serious training needs (e.g., staff needing training, having a sufficient number of trainers, difficulties scheduling trainings) and needs associated with follow-up interventions for students, working with parents, and time for teams to conduct BTAs.³⁸ In response to these findings and in line with Florida statute, the CSTAG team provided both in-person and online training to school districts statewide.³⁹ Research on statewide implementation of BTAs in Virginia, also conducted by researchers behind the CSTAG model, similarly highlighted the need for training to support consistency and nondiscriminatory practices.⁴⁰ Two areas of training need most highlighted by school administrators and BTA team members were "general education about threat assessment for the larger school community and case management training for team members."⁴¹

Beyond CSTAG, other studies of BTA efforts using different models or homegrown variants have identified design and implementation challenges. For example, one qualitative case study in Colorado examined how school officials carried out a threat assessment on a student of concern, who ultimately shot and killed a classmate and himself on school grounds. ⁴² In this case, the district created its own threat assessment tools, based on the federal NTAC guidance. Findings indicated that inadequate training, small threat assessment team size (two vs. four or five team members), the lack of an empirically validated threat assessment tool, and the omission of regular check-ins or additional support after the initial assessment contributed to a failure to prevent the student of concern from committing an act of violence.

Collecting and gathering data to assess implementation can also be a challenge. In Texas, several studies looked at implementation of BTAs after they were mandated in schools statewide in 2019, but researchers ran into substantial challenges around reliable data.⁴³ For context, Texas's model BTA policies and procedures for school district implementation reference the federal NTAC model.⁴⁴ In one study, researchers analyzed data from the Texas Education Agency on BTAs during the 2020–21 school year.⁴⁵ This study found inconsistent implementation of BTAs, but it also found that the level of data available from schools and districts across the state varied, making it difficult to systematically assess how BTAs were being implemented and their impacts.

In a follow-up study, the researchers requested data directly from the 10 largest school districts in the state, along with 5 others selected for their high BTA or disciplinary count data. They found that BTA data were often partial or incomplete and that, in some cases, the data reported by the school district were different than what was reported by the Texas Education Agency. This finding highlights a potential challenge in having schools implement BTA systems at scale: Valid and reliable data to assess implementation can be difficult to both collect and use to hold districts accountable.

A second study in Texas surveyed school staff members and similarly identified data collection and management as an obstacle to consistent and effective BTAs. ⁴⁶ The study also found that staff turnover, the prohibitive cost of data management software, and the lack of appropriate or accessible community resources with which to connect students were significant challenges to implementing BTAs. Surveyed staff said that a positive school culture, access to community resources, and consistent communication within the BTA team and between the team and the school community were critical to successful implementation.

Thus, the evidence suggests that while there are a lot of schools and districts implementing BTAs, there is great variation in implementation. Training can be implemented at scale and begin to shift staff mindsets in preparation for implementing a BTA model. However, challenges remain around staffing and the ability to implement the full models with fidelity, raising questions about whether students' experiences in these schools align with the goals of these BTA models. We next look at research that explores associations between BTA use in schools and student outcomes.

Outcome Studies

Most of the research looking at outcomes assesses how many and which students are referred for a threat assessment and the subsequent disciplinary or intervention actions that follow. This research is largely descriptive in nature, examining outcomes at schools that have elected to implement a particular BTA model—an important start to understanding what BTAs look like within schools and districts. Some studies are able to compare BTA implementers with comparison schools, using statistical controls.

To date, there is only one truly causal study examining BTAs, by randomly assigning some schools to receive CSTAG training and others to conduct business as usual until the following year. On the whole, these studies suggest positive associations between being trained and implementing a BTA and a reduction in student disciplinary actions. Evidence, particularly on the CSTAG model, also suggests a reduction in the racial discrepancies commonly seen regarding who receives a suspension or expulsion. However, there is also evidence that biases persist around who receives a threat assessment in the first place. We provide more details on these studies in the next sections.

Descriptive Outcome Studies

Two small-scale studies of threat assessment cases in Colorado—a state that encourages but does not mandate BTAs—examined BTA student outcomes and referral practices. One study focused on three school districts using a standardized BTA process "aligned with best practice recommendations from the U.S. Secret Service and the U.S. Department of Education" (i.e., the NTAC model). Researchers found that more than half of the students referred for a BTA received some sort of disciplinary action, but there were no statistically significant differences in who received disciplinary action across demographic subgroups.⁴⁷

A second study of four Colorado school districts using BTAs also examined threat assessment practices, finding that the majority of threat cases involved male students and that Black, Hispanic, and Native American students, as well as students with disabilities, were disproportionately represented among students referred for a BTA.⁴⁸ The study did not look at the outcomes of those referrals. Similar to other studies, it also showed that the majority of cases were deemed not serious; however, threats made by students with disabilities were almost 50% more likely to be deemed serious than those made by other students.

In a large-scale study of the statewide implementation of BTAs in Virginia, the CSTAG research and development team and others examined 1,865 threat assessment cases. Threats deemed to be serious were more likely to involve possession of a weapon, threat of battery, or threat of homicide and to have an administrator as the target, underscoring the ability of the teams to differentiate threats. There were no differences in threat assessment outcomes (i.e., disciplinary actions) by gender or race, which the authors attributed to appropriate assessment of the threats.

However, the authors did find that male students, Black students, and students with disabilities were more likely initially to receive a threat assessment referral compared with their peers.⁴⁹ Thus, the authors note that the referral process itself "appears subject to the same influences that lead to the higher rates of disciplinary referrals for Black students"—as in the previously cited biases that already exist in disciplinary practices.⁵⁰ Further, an inappropriate referral—especially one that exposes a student unnecessarily to a disciplinary process or law enforcement involvement—could lead to negative experiences itself.⁵¹

Another set of studies by Cornell and colleagues examined BTA implementation in Florida, a state where the CSTAG was mandated in all schools in 2019.⁵² Among data provided by 90% of districts across the state from 2021–22, more than 80% of BTA referrals resulted in a determination of no threat (17.8%) or could be resolved as not serious (64%). Following referral for a BTA, 47.1% of students received a punitive measure—either out-of-school suspension, in-school suspension, detention, or expulsion—while 33% were referred for mental health services. Three outcomes were examined: (1) referral for threat assessment, (2) exclusionary practices, and (3) law enforcement actions. Data highlighted the following outcomes:⁵³

- · Black students were disproportionately referred for BTAs, as were students with disabilities.
- Black students referred for a BTA but ultimately deemed to be no threat or a transient threat (i.e., not serious) had a slightly elevated probability of receiving a suspension compared to White students.⁵⁴
- Compared to White students receiving similar threat classifications, Hispanic students who received
 a transient threat classification had a slightly elevated probability of being suspended, while Hispanic
 students who were deemed to be a serious threat were slightly more likely to be expelled.⁵⁵
- Black students received out-of-school suspensions and expulsions at slightly higher rates than
 their White and Hispanic peers after receiving a BTA, but at rates much lower than for the general
 population in Florida.
- Students with disabilities were less likely to receive a punitive action than their peers, suggesting that the BTA model may be helping divert some students with disabilities from being excluded from school.
- Once a threat assessment was complete, there were no statistically significant differences in law enforcement actions (i.e., arrest, charges, incarceration) for Black, Hispanic, or White students.

As noted earlier, there is minimal evidence around how much schools are using alternative approaches to disciplinary infractions when implementing a BTA. In the only study focused on the Salem-Keizer model, researchers examined outcome data over a 5-year period in a single large school district (approximately 40,000 students enrolled) in Oregon.⁵⁶ This study looked at threat assessment records to determine how often BTA teams recommended social supports versus surveillance for students and whether there were differences in the types of supports recommended by race/ethnicity. The research team defined social supports as including a wide array of nonpunitive mental health, educational, and familial supports, while surveillance entailed conducting additional monitoring at school or home, notifying or engaging law enforcement, and alerting staff and students to the student's behavior. The BTA team recommendations were evenly split across social supports and surveillance. However, White students were more likely to receive a recommendation for special education, behavioral team intervention, and changes to transportation, while students of color were more likely to receive a probation/parole officer recommendation or a recommendation for a community program. The researchers note that the difference in probation/parole recommendations for students of color could be related to preexisting inequities that have resulted in students of color being overrepresented in the juvenile legal system. This finding points to the potential for BTAs to further these inequities.

Outcome Studies That Include a Comparison Group

One of the concerns with the prior studies is that there were no comparison schools to assess whether BTAs in those studies were associated with better, similar, or worse outcomes than BTAs in other schools. Several studies attempt to fill this research gap. Two of these studies used school climate survey measures to examine differences between schools in Virginia that were using the CSTAG model and two other groups—one group of schools used locally developed threat assessment approaches, while the other group reported not using any type of threat assessment model.

Across these studies, and controlling for school-based factors (e.g., total enrollment, the percentage of students eligible for free or reduced-price meals, the proportion of minority students), students in schools using the CSTAG guidelines reported less bullying, greater willingness to seek help, fairer discipline, lower levels of student aggressive behaviors, and more positive perceptions of school climate than students in the other two groups of schools.⁵⁷

Another study focused on schools in Virginia after the state mandated that all schools use a threat assessment system. The researchers (again the CSTAG development and research team) were most interested in whether schools using the CSTAG model had fewer instances of exclusionary discipline than schools using some other approach to threat assessment. They found evidence of fewer suspensions, expulsions, and law enforcement actions in schools using CSTAG than in those using a general threat assessment approach.⁵⁸

While these descriptive comparisons are promising, it is important to note that because schools were not randomly assigned to implementing a BTA system (or a specific type of BTA system), any differences in outcomes (e.g., disciplinary actions) could be at least partially attributed to preexisting differences between the schools. For example, it is possible that schools choosing to implement a BTA model have leadership that attends more to continuous improvement and equity within their school than schools that do not opt in. That alone could be contributing to differences in outcomes, despite researchers' attempts to use statistical "controls" to make those schools seem as similar to each other as possible.

To address these methodological concerns, two studies took approaches that suggest more causal linkages between the use of the CSTAG model and outcomes. The first examined implementation of the CSTAG model in 23 high schools across Virginia, comparing schools' outcomes (i.e., school suspensions and disciplinary infractions) before they received CSTAG training and again afterward.⁵⁹ These differences over time were then compared to 26 other schools in demographically similar school divisions that did not have training on any BTA model.

This approach is called a "difference-in-difference" design, in which researchers look at the differences between years for the implementers compared to the differences between years for the nonimplementers. This study found that schools trained in the CSTAG model had a significant reduction in long-term suspensions and bullying infractions in the year after the training compared to the year before, while the comparison schools had either no change (in the case of long-term suspensions) or an increase (in bullying infractions) between the 2 years. Though this design is closer to measuring causation, the two sets of schools started with different counts on their outcomes, suggesting that other factors might be associated with the choice to be trained in and implement a BTA model.

The one existing randomized controlled study looked at 40 schools and found that staff trained in the intervention were significantly more likely than the comparison group to reduce their support for zero-tolerance approaches and less likely to say they would use suspension as a response to student threats after their training. Once BTAs were implemented, students who made threats of violence in schools that used the CSTAG model were significantly more likely to receive counseling services and a parent conference than students in control schools. Meanwhile, students in the control group were significantly more likely to receive a long-term suspension or be transferred to a different school.⁶⁰ In addition, among CSTAG schools, those with higher compliance scores showed the greatest reductions in long-term suspensions and increases in counseling provided. A subsequent analysis of these data showed no racial disparities in disciplinary outcomes for students who received a threat assessment in CSTAG schools.⁶¹ It also found that in schools using the CSTAG model, both Black and White students were much less likely to be suspended than those students in comparison schools.

Summary of BTA Research

Overall, the research on BTAs (which is very heavily based on the CSTAG model) suggests that a focus on using problem-solving practices that aim to provide appropriate interventions in response to threats can begin to move the needle on better supporting students and reducing automatic exclusionary discipline practices. In summary, the research on outcomes to date finds the following:

- Standard 1-day trainings that have been implemented across multiple states by the CSTAG team
 result in significant changes in participants' beliefs and abilities to identify substantial vs. minor
 threats, based on pre- and post-training surveys.
- Variability in implementation exists, with a need for more training, more staff allocated toward these models, and better data collection efforts.
- Descriptive studies of BTA models are largely based on the CSTAG model, which is inclusive
 of training and a focus on mental health supports; findings from these studies suggest that
 implementing threat assessments is associated with a number of reductions in disciplinary

infractions, particularly for students of color. These same studies also show that there are still some existing biases, particularly in the rates of referrals for a threat assessment. Students of color—particularly Black students—and students with disabilities are far more likely to go through a threat assessment than their peers. However, given the reduction in exclusionary disciplinary actions taken on these groups (with an even greater reduction for students with disabilities), the rates of discipline among students referred for a BTA are far lower than they are among the general student population. These studies also found evidence of fewer suspensions, expulsions, and law enforcement actions in schools using CSTAG than in those using a general threat assessment approach, and students in schools using the CSTAG guidelines reported less bullying, greater willingness to seek help, fairer discipline, lower levels of student aggressive behaviors, and more positive perceptions of school climate than students in the other two groups of schools.

• Two more rigorous studies—one quasi-experimental and one randomized controlled trial—find a more causal relationship whereby implementing the CSTAG model *leads* to reductions in exclusionary disciplinary actions and bullying infractions and to increases in counseling support. They also maintain no disparities in who is referred for a threat assessment or who receives a disciplinary action. Students who made threats of violence in schools that use the CSTAG model were significantly more likely to receive counseling services and a parent conference than students in control schools, while students in the control group were significantly more likely to receive a long-term suspension or be transferred to a different school. Among CSTAG schools, those with higher compliance scores showed the greatest reductions in long-term suspensions and increases in counseling provided.

As the nonacademic literature suggests, many schools and districts across the nation are implementing various other models that are not supported by the same level of training or emphasis on intervening with appropriate supports as CSTAG. Thus, more research is needed to truly understand how BTAs are being implemented nationally and what their results look like.

Considerations and Concerns When Using School-Based BTA Systems

As shown in the previous section, what is known about behavioral threat assessment (BTA) implementation and outcomes largely comes from studies of the Comprehensive School Threat Assessment Guidelines (CSTAG) model. While this model is prevalent in many states and districts, there are still knowledge gaps about the more general use of BTA systems, their implementation, and their impact on students. As a consequence, many educators and civil rights advocates have expressed concerns about threat assessment systems. These concerns, some of which are discussed in this section, should be considered as BTA systems become increasingly prevalent across the country.

Consideration 1: Rooting BTAs Within a Positive, Relationship- Centered School Climate

Successful violence prevention programs rely on creating safe and supportive schools built on strong foundations of support for student mental health and well-being. The literature driven by the federal government in the wake of the school shooting at Columbine High School in 1999 emphasizes the need to treat school safety measures within a comprehensive approach grounded in a caring, connected school community in which all students, staff, and families feel supported. This need is echoed in the recent School Threat Assessment Toolkit created by the National Center on School Safety, which lays out how BTAs can fit into a multi-tiered system of supports.

Successful violence prevention programs rely on creating safe and supportive schools built on strong foundations of support for student mental health and well-being.

This belief also aligns with the recommendation from the National Threat Assessment Center (NTAC) that to address threats, schools must first focus on building a safe and connected school climate to break down the "code of silence" that keeps students from seeking help for themselves or their peers. ⁶⁵ Yet, while BTA models are built on this relationship, few state policies clearly make the connection between supporting a positive school climate and successfully deterring threats and acts of violence.

Supportive and positive developmental relationships between adults and young people in schools are a key driver of creating schools in which students feel safe. Research from the science of learning and development demonstrates how positive relationships serve as a foundation for learning, mental health, and emotional wellness—particularly when students feel welcome and connected to their school communities.

For instance, the National Longitudinal Study of Adolescent Health, a study of health and well-being among more than 36,000 7th- to 12th-grade students, found that school connectedness proved to be the strongest protective factor to decrease school absenteeism, substance abuse, violence, and risk of unintentional injury (e.g., dangerous driving).⁶⁸ Results from a 2022 study also found that social support from both peers and teachers is an important protective resource and that when students reported that both of these sources of support were high, they felt their schools were safer and more

equitable.⁶⁹ Positive relationships with students and staff throughout the school can also help prevent physical violence and bullying.⁷⁰ For example, one study found that students who had prior knowledge of a potential threat were more likely to report that threat if they had positive relationships with one or more adults in the school and felt as though they would be taken seriously.⁷¹

Despite the need for supportive, relationship-centered schools as a foundation for school safety, state policymakers and educators often treat physical safety measures and psychological safety measures as two separate entities. This is particularly true when it comes to BTA systems, which operate, in some cases, under the jurisdiction of state homeland security departments or school safety centers and away from departments of education and other initiatives to support students' sense of belonging and well-being. For BTAs to be part of a larger violence prevention strategy, more should be done to ensure they are implemented within strong relationship-centered schools and integrated with student well-being and safety programs.

Consideration 2: Creating and Training BTA Teams Appropriately

Each of the major school BTA models also clearly identifies the need for appropriate school-based and threat assessment–oriented training as a key component of high-quality implementation. A systematic review of empirical threat assessment studies found that training on CSTAG for teachers and school personnel led to significant changes in knowledge and attitudes regarding school violence; a willingness to adopt a problem-solving approach to student threat and conflict; and improved staff abilities to identify and assist students who were experiencing a crisis that could lead to targeted school violence. Beyond studies of the CSTAG model, however, little is known about the state of BTA implementation and training in schools.

Additionally, a survey of experts in K–12 school threat assessment conducted by members of the CSTAG team on behalf of the National Center for School Safety found that understanding the quality and quantity of training is the highest priority for the school threat assessment field.⁷⁴ States with school-based threat assessment system policies should provide clear guidance and training on how to appropriately assess reported threats, how to support students who may perpetrate harm to themselves or others, and how to avoid discriminatory practices.

It is also unclear whether BTA teams are being adequately and appropriately staffed based on recommendations from the major models. In the majority of states that require schools to have a BTA team in place (15 of 20), state legislation or ensuing guidance either mandates or recommends a school administrator, a school counselor or other school-based mental health professional, and a law enforcement official to serve on the team (following the federal, CSTAG, and Salem-Keizer guidance). Other suggested members include teachers, school safety specialists, social workers, and human resource professionals. However, based on reviewed research and reporting, even the requirement of specific team members by law does not guarantee their inclusion in school teams. Furthermore, given the evidence showing that threats made by students with disabilities are deemed serious at a greater rate, it is important that any BTA involving a student with an individualized education plan (IEP) or a 504 plan include a team member with expertise in supporting students with disabilities.

As noted previously, the majority of states that mandate BTAs in schools recommend or require law enforcement, most often a school resource officer (SRO), be part of the BTA team. The major school BTA models also call for a law enforcement representative to be part of the core BTA team. However, beyond studies on the CSTAG model, it is not clear what training, if any, these team members receive. The Salem-Keizer guidelines emphasize that the law enforcement representative must understand their role within a multidisciplinary team that is geared toward violence prevention.⁷⁵

However, this guidance also notes that police academies do not usually train law enforcement officials in conducting threat assessments. A 2018 *Education Week* survey of SROs found that they were more likely to have received training on law enforcement techniques, such as responding to active shooters (93%), than in areas focused on the specialized needs of youth, such as child trauma (39%) or working with students with disabilities (39%). ⁷⁶ SRO training also tends not to cover key topics on appropriate implementation of BTA systems, including comprehensive training in BTA research and its application to real-life situations, risk factors, assessment of threats, threat management, and mitigation strategies.

In one of the CSTAG studies in which training was provided, threat assessments resulted in just 1% of students being arrested, indicating that when teams receive proper training, threats do not need to lead to unnecessary law enforcement actions. Research on the CSTAG model found that SROs who participated in their trainings alongside other school staff reported immediate positive changes in their knowledge of the goals of threat assessment and how to accurately assess a threat. Yet, concerns still exist that not all SROs are receiving the appropriate training.

Consideration 3: Designing BTA Systems to Problem Solve, Not Criminalize

For any school safety strategy to be effective, it needs to be implemented with fidelity and embedded within both a strong system of school support for students and comprehensive efforts to prevent violence. Yet, policies and procedures for BTA implementation vary widely across states, leaving room for significant implementation issues to arise. This possibility is especially true in states that place the responsibility for creating BTA policies and procedures in the hands of local education agencies (LEAs) or school boards.

Locally developed BTA policies and procedures can comprise everything from defining what constitutes a threat to developing mechanisms for threat reporting, providing training and guidance for students and staff, identifying a chain of personnel for threat reporting, and coordinating intervention resources. While allowing LEAs to develop their own BTA systems can allow for site-specific contextualization, it can also introduce greater room for error in implementation and ultimately diminish effectiveness and even potentially lead to student harm, as seen in the Colorado case study described previously.⁷⁷

The purpose of BTAs as a problem-solving, violence prevention tool—not as a means to exclude and criminalize students—also should be communicated clearly to the entire school community. While BTAs are intended to diagnose and provide supports, when they are used within school systems that are accustomed to treating students who are viewed as problematic with exclusionary discipline tactics such as suspension, expulsion, or law enforcement action, they may reinforce these exclusionary practices.

Previous studies have also found heightened levels of disparate discipline and legal action for students of color and students with disabilities in schools that include SROs, so the inclusion of law enforcement at the earliest stages of a threat assessment does raise significant concerns about potential negative impacts on students involved in the BTA process. The federal NTAC guidance recommends that an SRO be part of the team, but it also suggests that school personnel set a clear threshold for when law enforcement should be asked to support or take over the BTA process. The CSTAG and Salem-Keizer models state that these individuals should specifically play a law enforcement role, which may be interpreted in different ways, including in ways that result in punitive rather than supportive action.

While studies included in this review indicate that some BTAs do not lead to an increase in negative outcomes for students when BTAs are implemented with proper supports, others do suggest biased outcomes, particularly for Black students. Therefore, more research is needed on the role of SROs or law enforcement in BTAs, particularly in cases deemed not to be serious. In addition, clear guidelines could be put in place regarding when it is appropriate to include SROs or law enforcement in the BTA process in an effort to limit unnecessary interactions between students and law enforcement officials.

Consideration 4: Equipping Schools With Needed Counseling and Mental Health Services

The existing evidence suggests that many schools may lack the appropriate mental health supports that are key to the BTA approach, especially access to mental health counselors and services. The American School Counselor Association recommends a student-to-counselor ratio of 250:1, but nationally, schools average a ratio of 408:1.⁷⁹ The National Association of School Psychologists recommends a student-to-psychologist ratio of 500:1, yet in 2021–22, the national average ratio was 1,127:1.⁸⁰

Students of color and students from low-income families are more likely to bear the brunt of these shortages. One or both of these student groups have unequal access to school counselors in 38 states. In high schools serving predominantly students of color, school counselors serve 34 more students a year than counselors in schools with fewer students of color. Likely due in part to insufficient staffing, many schools lack the ability to provide diagnostic mental health assessments to evaluate students for mental health needs. During the 2019–20 school year, only 55% of public schools reported providing diagnostic mental health assessment services, and 42% offered mental health treatment services to students.

Without links to supports—including the counseling and mental health resources students may need the most—schools may be operating a BTA system that fails to understand why young people make threats and that cannot adequately intervene when threats are made. Evidence supports the notion that schools should aim to prevent violent acts through careful assessment of individual threats and by connecting students to needed support services. Therefore, BTAs should not be considered without also understanding the broader landscape of available mental health professionals and supports that are critical to properly carrying out BTAs.

Consideration 5: Collecting and Reporting Useful BTA Data to Support Continuous Improvement

As seen in Texas, early research indicates that BTA data, even when mandated by law, are not necessarily being collected in a consistent manner. In total, 7 of the 20 states that mandate school BTAs include language in legislation requiring data on BTAs to be collected and reported in some capacity. However, not all of these states require the full breadth of data (i.e., number of students referred for BTAs disaggregated by student demographic, number of threats deemed to be serious, actions and outcomes of BTAs). Moreover, of the states that require schools to collect the full scope of data on BTAs, none mandate that those data be made publicly available. Transparency would be one way to ensure BTAs are regularly reviewed and engaged in continuous improvement efforts. The lack of these data means the mechanisms for understanding BTA implementation are nearly nonexistent outside of specific research studies.

It is critical that data be reported accurately so that education leaders and researchers can understand the implications that exposure to BTAs has on students. Data should be reported not only on the discipline outcomes of BTAs but also on all interventions students receive. Having a wide breadth of data on the implementation of BTAs is also essential for knowing how these systems actually work in schools and whether they are leading to increased or reduced discipline disparities.

Data should also include disaggregated information on which students are referred for BTAs in the first place, given the research showing that Black students and students with disabilities are disproportionately referred. To identify bias in implementation of BTA systems, schools, districts, and states can review BTA data to track whether specific student groups are being referred and potentially receiving differential discipline outcomes compared to others.⁸³ States and districts can also support schools to conduct equity reviews so they can track whether BTA systems have unintended consequences for students.

Conclusion

In an environment in which resources, time, and capacity are in limited supply, states and school districts benefit when they invest in evidence-based strategies and research-backed supports that promote physically and psychologically safe school environments. Evidence on the Comprehensive School Threat Assessment Guidelines model indicates that well-designed and well-implemented behavioral threat assessments (BTAs) can become a successful violence prevention strategy that also enhances student well-being.

However, given how many schools and districts use less-structured and less-supported BTA approaches, more research is needed on how well those are being implemented and the impacts they have on students. Given concerns around inadequate training and support, demographic disparities in referrals, and the impact of law enforcement involvement in schools that are using BTA approaches, there is much for policymakers to consider when it comes to BTAs.

First and foremost, schools should be well equipped to provide intervention supports, especially access to mental health professionals and services, to students receiving BTAs. State and district leaders should also ensure that BTA team members, particularly those not well-versed in youth development, are highly trained and that the broader school community is educated in BTAs and threat reporting.

It is important that schools be supported in creating positive school climates, which are the backbone of BTAs and of school safety strategies in general. And in order to have an accurate picture of how BTAs are being implemented and how they are affecting students, it is critical for data reporting and collection to be required and supported by states. Without prioritizing these core aspects of BTAs, these systems run the risk of being ineffective at best and mechanisms for the criminalization of young people at worst.

Endnotes

- Federal Bureau of Investigation. (2023, August 9). Multi-agency reminder to refrain from school threats in the El Paso area. https://www.fbi.gov/contact-us/field-offices/elpaso/news/multi-agency-reminder-to-refrain-from-school-threats-in-the-el-paso-area
- Irwin, V., Wang, K., Cui, J., & Thompson, A. (2024). Report on indicators of school crime and safety: 2023 [NCES 2024–145/NCJ 309126]. National Center for Education Statistics, U.S. Department of Education & Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. https://nces.ed.gov/use-work/resource-library/report/compendium/report-indicators-school-crime-and-safety-2023?pubid=2024145
- 3. DePaoli, J., & McCombs, J. (2023). Safe schools, thriving students: What we know about creating safe and supportive schools. Learning Policy Institute. https://doi.org/10.54300/701.445
- 4. Densley, J., Peterson, J., & The Conversation US (2022, May 25). What we know about mass school shootings—and shooters—in the U.S. Scientific American. https://www.scientificamerican.com/article/what-we-know-about-mass-school-shootings-mdash-and-shooters-mdash-in-the-u-s/; National Threat Assessment Center. (2019). Protecting America's schools: A U.S. Secret Service analysis of targeted school violence. U.S. Secret Service, Department of Homeland Security. https://www.secretservice.gov/sites/default/files/2020-04/Protecting_Americas_Schools.pdf
- 5. It should be noted that behavioral threat assessment systems, as conceptualized, are also intended to identify and address students who express threats of self-harm.
- Burr, R., Kemp, J., & Wang, K. (2024). Crime, violence, discipline, and safety in U.S. public schools: Findings from the School Survey on Crime and Safety: 2021–22 [NCES 2024-043]. U.S. Department of Education, National Center for Education Statistics. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2024043 (accessed 02/25/25); National Center for Education Statistics. (2024). School pulse panel. https://nces.ed.gov/surveys/spp/results.asp (accessed 02/25/25).
- 7. O'Toole, M. E. (2000). The school shooter: A threat assessment perspective. Critical Incident Response Group, National Center for the Analysis of Violent Crime, Federal Bureau of Investigation. https://www.ojp.gov/ncjrs/virtual-library/abstracts/school-shooter-threat-assessment-perspective; Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2004). The final report and findings of the Safe School Initiative: Implications for the prevention of school attacks in the United States. U.S. Department of Education, Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program & U.S. Secret Service, National Threat Assessment Center. https://www.ed.gov/sites/ed/files/admins/lead/safety/preventingattacksreport.pdf
- 8. Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2004). The final report and findings of the Safe School Initiative: Implications for the prevention of school attacks in the United States. U.S. Department of Education, Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program & U.S. Secret Service, National Threat Assessment Center. https://www.ed.gov/sites/ed/files/admins/lead/safety/preventingattacksreport.pdf
- 9. National Threat Assessment Center. (2021). Averting targeted school violence: A U.S. Secret Service analysis of plots against schools. U.S. Secret Service, Department of Homeland Security. https://www.secretservice.gov/sites/default/files/reports/2021-03/USSS%20Averting%20Targeted%20School%20Violence.2021.03.pdf; National Threat Assessment Center. (2019). Protecting America's schools: A U.S. Secret Service analysis of targeted school violence. U.S. Secret Service, Department of Homeland Security. https://www.secretservice.gov/sites/default/files/2020-04/Protecting_Americas_Schools.pdf; Pollack, W. S., Modzeleski, W., & Rooney, G. (2008). Prior knowledge of potential school-based violence: Information students learn may prevent a targeted attack. U.S. Secret Service & U.S. Department of Education. https://rems.ed.gov/docs/ED_BystanderStudy.pdf
- Federal School Safety Clearinghouse. Threat assessment and reporting. https://www.schoolsafety.gov/ threat-assessment-and-reporting
- 11. O'Toole, M. E. (2000). *The school shooter: A threat assessment perspective*. Critical Incident Response Group, National Center for the Analysis of Violent Crime, Federal Bureau of Investigation. https://www.ojp.gov/ncjrs/virtual-library/abstracts/school-shooter-threat-assessment-perspective
- 12. Fein, R. A., Vossekuil, B., Pollack, W. S., Borum, R., Modzeleski, W., & Reddy, M. (2002). *Threat assessment in schools:*A guide to managing threatening situations and to creating safe school climates. U.S. Department of Education,
 Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program, & U.S. Secret Service.

 https://www.secretservice.gov/sites/default/files/2020-04/ssi_guide.pdf

- 13. Pollack, W. S., Modzeleski, W., & Rooney, G. (2008). *Prior knowledge of potential school-based violence:*Information students learn may prevent a targeted attack. U.S. Secret Service & U.S. Department of Education. https://rems.ed.gov/docs/ED_BystanderStudy.pdf
- 14. Sawchuck, S. (2021, November 16). School resource officers (SROs), explained. *Education Week*. https://www.edweek.org/leadership/school-resource-officer-sro-duties-effectiveness/2021/11
- 15. Virginia Department of Criminal Services, Virginia Center for School and Campus Safety. (2023). *Threat assessment and management in Virginia schools: Model policies, procedures, and guidelines*. https://www.dcjs.virginia.gov/sites/dcjs.virginia.gov/files/k-12 threat assessment management mppg-dec2022 mpd.pdf
- 16. Cornell, D., & Maeng, J. (2020). Student threat assessment as a safe and supportive prevention strategy: Final technical report. Curry School of Education, University of Virginia. https://education.virginia.edu/documents/yvpthreat-assessment-project-technical-report-nij2020-02-20-submitted.pdf; Shin, C. (2013). Prevention v. punishment: Threat assessment, school suspensions, and racial disparities. Legal Aid Justice Center & University of Virginia Curry School of Education. https://www.law.virginia.edu/scholarship/publication/1333736
- 17. Cornell, D. (2024). Comprehensive school threat assessment guidelines: Intervention and support to prevent violence (2nd ed.). School Threat Assessment Consultants LLC. p. 11. https://www.schoolta.com/manual
- 18. Van Dreal, J. (2016). Assessing student threats: Implementing the Salem-Keizer system (2nd ed.). Rowman & Littlefield.
- 19. Lee, J. (2023, May 3). Students pay as Texas school districts violate 'threat assessment law.' *Texas Observer*. https://www.texasobserver.org/students-pay-as-texas-school-districts-violate-threat-assessment-law/
- 20. Swaby, A. (2024, August 23). A 10-year-old pointed a finger gun. The principal kicked him out of his Tennessee school for a year. *ProPublica*. https://www.propublica.org/article/tennessee-school-threats-expulsions
- 21. Swaby, A. (2024, April 17). Tennessee is ramping up penalties for student threats. Research shows that's not the best way to keep schools safe. *ProPublica*. https://www.propublica.org/article/how-schools-should-handle-student-threats
- 22. Public Chapter No. 887, T.C.A. Title 39. (2024). https://wapp.capitol.tn.gov/apps/BillInfo/Default.aspx?BillNumber= SB2263&GA=113
- 23. Swaby, A. (2024, August 23). A 10-year-old pointed a finger gun. The principal kicked him out of his Tennessee school for a year. *ProPublica*. https://www.propublica.org/article/tennessee-school-threats-expulsions
- 24. Swaby, A. (2024, August 23). A 10-year-old pointed a finger gun. The principal kicked him out of his Tennessee school for a year. *ProPublica*. https://www.propublica.org/article/tennessee-school-threats-expulsions
- 25. Swetlitz, I. (2019, October 15). Who's the threat? Searchlight New Mexico. https://searchlightnm.org/whos-the-threat/
- 26. Leung-Gagné, M., McCombs, J., Scott, C., & Losen, D. J. (2022). Pushed out: Trends and disparities in out-of-school suspension. Learning Policy Institute. https://doi.org/10.54300/235.277
- 27. Owens, J., & McLanahan, S. S. (2020). Unpacking the drivers of racial disparities in school suspension and expulsion. Social Forces, 98(4), 1548–1577. https://doi.org/10.1093/sf/soz095
- 28. O'Malley, M. D., Wolf-Prusan, L., Lima Rodriguez, C., Xiong, R., & Swarts, M. R. (2018). Cultural-competence considerations for contemporary school-based threat assessment. *Psychology in the Schools*, 56(2), 255–275. https://doi.org/10.1002/pits.22197

- 29. Hines-Datiri, D. (2015). When police intervene: Race, gender, and discipline of Black male students at an urban high school. *Journal of Cases in Educational Leadership*, 18(2), 122–133. https://doi.org/10.1177/1555458915584676; Kupchik, A. (2016). *The real school safety problem: The long-term consequences of harsh school punishment*. University of California Press; Losen, D. J., & Martinez, P. (2020). *Lost opportunities: How disparate school discipline continues to drive differences in the opportunity to learn*. Learning Policy Institute. https://learningpolicyinstitute.org/product/crdc-school-discipline-report; Losen, D. J., Martinez, P., & Shin, G. H. R. (2021). *Disabling inequity: The urgent need for race-conscious resource remedies*. Center for Civil Rights Remedies at the Civil Rights Project, UCLA. https://civilrightsproject.ucla.edu/research/k-12-education/special-education/disabling-inequity-the-urgent-need-for-race-conscious-resource-remedies/final-Report-03-22-21-v5-corrected.pdf; Palmer, N. A., & Greytak, E. A. (2017). LGBTQ student victimization and its relationship to school discipline and justice system involvement. *Criminal Justice Review*, 42(2), 163–187. https://doi.org/10.1177/0734016817704698; Pyne, J. (2018). Suspended attitudes: Exclusion and emotional disengagement from school. *Sociology of Education*, 92(1), 59–82. https://doi.org/10.1177/0038040718816684
- 30. Maeng, J. L., Cornell, D. G., & Edwards, K. D. (2024). Threat assessment and disparities in school discipline. *Journal of Threat Assessment and Management*, 11(3), 186–196. p. 186. https://psycnet.apa.org/doi/10.1037/tam0000213
- 31. Gottfredson, D. C., Crosse, S., Tang, Z., Bauer, E. L., Harmon, M. A., Hagen, C. A., & Greene, A. D. (2020). Effects of school resource officers on school crime and responses to school crime. *Criminology & Public Policy*, 19(3), 905–940. https://doi.org/10.1111/1745-9133.12512; Owens, E. G. (2017). Testing the school-to-prison pipeline. *Journal of Policy Analysis and Management*, 36(1), 11–37; Sorensen, L. C., Avila Acosta, M., Engberg, J., & Bushway, S. D. (2023). *The thin blue line in schools: New evidence on school-based policing across the U.S.* [EdWorkingPaper No. 21-476]. Annenberg Institute at Brown University. https://doi.org/10.26300/heqx-rc69; Weisburst, E. K. (2019). Patrolling public schools: The impact of funding for school police on student discipline and long-term education outcomes. *Journal of Policy Analysis and Management*, 38(2), 338–365.
- 32. Finn, J. D., & Servoss, T. J. (2014). Misbehavior, suspensions, and security measures in high school: Racial/ethnic and gender differences. *Journal of Applied Research on Children: Informing Policy for Children at Risk*, 5(2), article 11. http://digitalcommons.library.tmc.edu/childrenatrisk/vol5/iss2/11
- 33. Sewell, K. W., & Mendelsohn, M. (2000). Profiling potentially violent youth: Statistical and conceptual problems. *Children's Services: Social Policy, Research, and Practice*, 3(3), 147–169. https://doi.org/10.1207/S15326918CS0303_2
- 34. Jackson, J. R., & Viljoen, J. L. (2024). Preventing school violence: A review of school threat assessment models. *Journal of Threat Assessment and Management*, 11(1), 48–65. https://doi.org/10.1037/tam0000204
- 35. Allen, K., Cornell, D., Lorek, E., & Sheras, P. (2008). Response of school personnel to student threat assessment training. School Effectiveness and School Improvement, 19(3), 319–332. https://doi.org/10.1080/09243450802332184; Stohlman, S., Konold, T., & Cornell, D. (2020). Evaluation of threat assessment training for school personnel. *Journal of Threat Assessment and Management*, 7(1–2), 29–40. https://doi.org/10.1037/tam0000142
- 36. Burnette, A. G., Datta, P., & Cornell, D. G. (2018). The distinction between transient and substantive student threats. *Journal of Threat Assessment and Management*, 5(1), 4–20. http://psycnet.apa.org/record/2017-56103-001; Cornell, D., Maeng, J. L., Burnette, A. G., Jia, Y., Huang, F., Konold, T., Datta, P., Malone, M., & Meyer, P. (2018). Student threat assessment as a standard school safety practice: Results from a statewide implementation study. *School Psychology Quarterly*, 33(2), 213–222. http://dx.doi.org/10.1037/spq0000220
- 37. Maeng, J., Cornell, D., Kerere, J., Huang, F., Konold, T., Afolabi, K., & Cowley, D. (2024). Statewide implementation of school threat assessment in Florida: Final technical report. School of Education and Human Development, University of Virginia. https://education.virginia.edu/sites/default/files/2024-06/yvp_fl-nij-2020-rf-cx-0002-final-technical-report_2024-06-17.pdf
- 38. Maeng, J. L., Cornell, D. G., & Warren, E. (2021). *Threat Assessment Training and Implementation Needs Survey state report*. School of Education and Human Development, University of Virginia. https://education.virginia.edu/sites/default/files/2023-06/yvp_fl-threat-assessment-training-implementation-needs-survey-state-report_03-30-2021.pdf
- 39. Maeng, J. L., Kerere, J., & Cornell, D. G. (2023). *Threat assessment and management training in Florida schools technical report*. School of Human Development, University of Virginia.
- 40. Cornell, D., Maeng, J., Burnette, A. G., Datta, P., Huang, F., & Jia, Y. (2016). *Threat assessment in Virginia schools: Technical report of the Threat Assessment Survey for 2014–2015*. Curry School of Education, University of Virginia.

- 41. Cornell, D., Maeng, J., Burnette, A. G., Datta, P., Huang, F., & Jia, Y. (2016). *Threat assessment in Virginia schools: Technical report of the Threat Assessment Survey for 2014–2015*. Curry School of Education, University of Virginia. p. 121.
- 42. Goodrum, S., Thompson, A. J., Ward, K. C., & Woodward, W. (2018). A case study on threat assessment: Learning critical lessons to prevent school violence. *Journal of Threat Assessment and Management*, 5(3), 121–136. https://doi.org/10.1037/tam0000104
- 43. Texas School Safety Center. (2023). *Model policies and procedures to establish and train on school behavioral threat assessment*. https://locker.txssc.txstate.edu/f40474bcbab5f025bb1570f1bfbf9f06/Model-Policies-and-Procedures-to-Establish-and-Train-on-Threat-Assessment.pdf
- 44. Texas School Safety Center. (2023). Model policies and procedures to establish and train on school behavioral threat assessment. https://locker.txssc.txstate.edu/f40474bcbab5f025bb1570f1bfbf9f06/Model-Policies-and-Procedures-to-Establish-and-Train-on-Threat-Assessment.pdf
- 45. Hairston, A. R., & Stafford, J. (2023). School safety and threat assessments: Assessing the student beyond the threat. Texas Appleseed. https://www.texasappleseed.org/sites/default/files/2023-05/threatassessments-finalreport-webdigital.pdf
- 46. Stern, A., Guckenberg, S., Zimiles, J., Fronius, T., & Baskerville, T. (2023). Learning from the experiences of Texas schools implementing behavioral threat assessment programs. WestEd. https://www.wested.org/resources/learning-from-the-experiences-of-texas-schools-implementing-behavioral-threat-assessment-programs/
- Crepeau-Hobson, F., & Leech, N. (2022). Disciplinary and nondisciplinary outcomes of school-based threat assessment in Colorado schools. School Psychology Review, 51(5), 609–618. p. 612. https://doi.org/10.1080/ 2372966X.2020.1842716
- 48. Crepeau-Hobson, F., & Leech, N. (2022). An exploratory investigation of threat assessment practices in Colorado schools. *Contemporary School Psychology*, 26, 458–468. https://doi.org/10.1007/s40688-021-00356-7
- 49. Cornell, D., Maeng, J. L., Burnette, A. G., Jia, Y., Huang, F., Konald, T., Datta, P., Malone, M., & Meyer, P. (2018). Student threat assessment as a standard school safety practice: Results from a statewide implementation study. *School Psychology Quarterly*, 33(2), 213–222. https://doi.org/10.1037/spq0000220
- 50. Cornell, D., & Maeng, J. (2020). Student threat assessment as a safe and supportive prevention strategy: Final technical report. Curry School of Education, University of Virginia.
- Losen, D. J., & Martinez, P. (2020). Lost opportunities: How disparate school discipline continues to drive differences in the opportunity to learn. Learning Policy Institute. https://learningpolicyinstitute.org/product/crdc-school-discipline-report; Welburn Paige, J., & Bushway, S. D. (2024). The role and impact of school resource officers. RAND. https://www.rand.org/research/gun-policy/analysis/essays/school-resource-officers.html
- 52. Cornell, D. G., Kerere, J., Konold, T., Maeng, J., Afolabi, K., & Huang, F. (2025). Referral rates for school threat assessment. *Psychology in the Schools*, 62(4), 1294–1305. https://doi.org/10.1002/pits.23399; Cornell, D. G., Maeng, J., Winter, S., Huang, F., Konold, T. G., Kerere, J., Afolabi, K., & Cowley, D. (2025). Behavioral threat assessment and equity in exclusionary school discipline. *School Psychology Review*, 1–17. https://doi.org/10.1080/2372966X.2025.2457006; Maeng, J. L., Cornell, D. G., & Edwards, K. D. (2024). Threat assessment and disparities in school discipline. *Journal of Threat Assessment and Management*, 11(3), 186–196. https://psycnet.apa.org/doi/10.1037/tam0000213; Maeng, J., Cornell, D., Kerere, J., Huang, F., Konold, T., Afolabi, K., & Cowley, D. (2024). *Statewide implementation of school threat assessment in Florida: Final technical report*. School of Education and Human Development, University of Virginia. https://education.virginia.edu/sites/default/files/2024-06/yvp_fl-nij-2020-rf-cx-0002-final-technical-report_2024-06-17.pdf
- 53. Maeng, J., Cornell, D., Kerere, J., Huang, F., Konold, T., Afolabi, K., & Cowley, D. (2024). Statewide implementation of school threat assessment in Florida: Final technical report. School of Education and Human Development, University of Virginia. https://education.virginia.edu/sites/default/files/2024-06/yvp_fl-nij-2020-rf-cx-0002-final-technicalreport_2024-06-17.pdf
- 54. Cornell, D. G., Maeng, J., Winter, S., Huang, F., Konold, T. G., Kerere, J., Afolabi, K., & Cowley, D. (2025). Behavioral threat assessment and equity in exclusionary school discipline. *School Psychology Review*, 1–17. https://doi.org/10.1080/2372966X.2025.2457006
- 55. Cornell, D. G., Maeng, J., Winter, S., Huang, F., Konold, T. G., Kerere, J., Afolabi, K., & Cowley, D. (2025). Behavioral threat assessment and equity in exclusionary school discipline. *School Psychology Review*, 1–17. https://doi.org/10.1080/2372966X.2025.2457006

- 56. Madfis, E., Silva, J. R., Crepeau-Hobson, F., & Sulkowski, M. L. (2025). School threat assessment team recommendations: Surveillance versus social support and racial/ethnic equity. *School Psychology Review*, 1–14. https://doi.org/10.1080/2372966X.2024.2439240
- 57. Cornell, D., Sheras, P., Gregory, A., & Fan, X. (2009). A retrospective study of school safety conditions in high schools using the Virginia Threat Assessment Guidelines versus alternative approaches. School Psychology Quarterly, 24(2), 119–129. https://doi.org/10.1037/a0016182; Nekvasil, E. K., & Cornell, D. G. (2015). Student threat assessment associated with safety in middle schools. Journal of Threat Assessment and Management, 2(2), 98–113. http://dx.doi.org/10.1037/tam0000038
- 58. Maeng, J. L., Cornell, D., & Huang, F. (2019). Student threat assessment as an alternative to exclusionary discipline. Journal of School Violence, 19(3), 377–388. https://doi.org/10.1080/15388220.2019.1707682
- 59. Cornell, D., Gregory, A., & Fan, X. (2011). Reductions in long-term suspensions following adoption of the Virginia Student Threat Assessment Guidelines. *NASSP Bulletin*, 95(3), 175–194. https://doi.org/10.1177/0192636511415255
- 60. Cornell, D., Allen, K., & Fan, X. (2012). A randomized controlled study of the Virginia Student Threat Assessment Guidelines in Grades K–12. School Psychology Review, 41(1), 100–115. https://doi.org/10.1080/02796015.2012.12087378
- 61. Cornell, D., & Lovegrove, P. (2015). Student threat assessment as a method for reducing student suspensions. In D. Losen (Ed.), Closing the school discipline gap: Research for policymakers (pp. 180–191). Teachers College Press.
- 62. Canello, R., Gonzalez, J., Parson, R., Abdel Magid, M., Pittman, J. C., Knox, J., & Gotham, H. (2023). Behavioral threat assessment in schools. MHTTC Network Coordinating Office; Center for Civil Rights Remedies, Center for Disability Rights, Council of Parent Attorneys and Advocates, The Daniel Initiative, Education Law Center, National Center for Youth Law, Federal School Discipline and Climate Group, National Disability Rights Network, & Open Society Policy Center. (2022). K-12 threat assessment processes: Civil rights impacts. https://www.ndrn.org/wp-content/uploads/2022/02/K-12-Threat-Assessment-Processes-Civil-Rights-Impacts-1.pdf; Education Law Center. (2021). Threat assessment for US ED RFI. https://edlawcenter.org/assets/files/pdfs/Student%20Discipline/Threat%20 Assessment%20for%20US%20ED%20RFI%20July%202021.pdf
- 63. Dwyer, K., Osher, D., & Warger, C. (1998). Early warning, timely response: A guide to safe schools. U.S. Departments of Education and Justice; Dwyer, K., & Osher, D. (2000). Safeguarding our children: An action guide. U.S. Departments of Education and Justice & American Institutes for Research.
- 64. Cornell, D., & Maeng, J. (2024). School threat assessment toolkit. National Center for School Safety. https://www.nc2s.org/resource/school-threat-assessment-toolkit/
- 65. National Threat Assessment Center. (2018). Enhancing school safety using a threat assessment model: An operational guide for preventing targeted school violence. U.S. Secret Service, Department of Homeland Security.
- 66. National Scientific Council on the Developing Child. (2015). Supportive relationships and active skill-building strengthen the foundations of resilience [Working Paper No. 13]. https://developingchild.harvard.edu/wp-content/uploads/2024/10/The-Science-of-Resilience2.pdf
- 67. Cantor, P., Osher, D., Berg, J., Steyer, L., & Rose, T. (2019). Malleability, plasticity, and individuality: How children learn and develop in context. *Applied Developmental Science*, 23(4), 307–337. https://www.tandfonline.com/doi/full/10.1080/10888691.2017.1398649; Osher, D., Cantor, P., Berg, J., Steyer, L., & Rose, T. (2020). Drivers of human development: How relationships and context shape learning and development. *Applied Developmental Science*, 24(1), 6–36. https://doi.org/10.1080/10888691.2017.1398650; Darling-Hammond, L., & Cook-Harvey, C. M. (2018). *Educating the whole child: Improving school climate to support student success*. Learning Policy Institute. https://doi.org/10.54300/145.655
- 68. McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2009). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72(4), 138–146. http://dx.doi.org/10.1111/j.1746-1561.2002.tb06533.x
- 69. Coyle, S., Weinreb, K. S., Davila, G., & Cuellar, M. (2022). Relationships matter: The protective role of teacher and peer support in understanding school climate for victimized youth. *Child and Youth Care Forum*, 51(1), 181–203. https://doi.org/10.1007/s10566-021-09620-6
- 70. National Center on Safe Supportive Learning Environments. *Teachers*. https://safesupportivelearning.ed.gov/training-technical-assistance/roles/teachers
- 71. Pollack, W. S., Modzeleski, W., & Rooney, G. (2008). *Prior knowledge of potential school-based violence: Information students learn may prevent a targeted attack*. U.S. Secret Service & U.S. Department of Education. https://rems.ed.gov/docs/ED_BystanderStudy.pdf

- 72. Cornell, D. (2011). A developmental perspective on the Virginia Student Threat Assessment Guidelines. *New Directions for Youth Development*, 2011(129), 43–59. https://doi.org/10.1002/yd.386
- 73. Ross, D., von der Embse, N., Andrews, J. L., McCullough Headley, M., & Mierzwa, C. (2022). A systematic review of threat assessment in K-12 schools: Adult and child outcomes. *Journal of School Violence*, *21*(4), 444-458. https://doi.org/10.1080/15388220.2022.2108434
- 74. Cornell, D., & Maeng, J. (2020). *Initial survey of school threat assessment experts*. National Center for School Safety. https://education.virginia.edu/documents/yvpnational-center-school-safety-initial-survey-school-threat-assessment-experts2021-01-14pdf
- 75. Van Dreal, J. (2017). Assessing student threats: Implementing the Salem-Keizer system (2nd ed.). Rowman & Littlefield.
- 76. Education Week Research Center. (2018). School policing: Results of a national survey of school resource officers. https://www.edweek.org/research-center/research-center-reports/school-policing-results-of-a-national-survey-of-school-resource-officers
- 77. Goodrum, S., Thompson, A. J., Ward, K. C., & Woodward, W. (2018). A case study on threat assessment: Learning critical lessons to prevent school violence. *Journal of Threat Assessment and Management*, 5(3), 121–136.
- 78. Gottfredson, D. C., Crosse, S., Tang, Z., Bauer, E. L., Harmon, M. A., Hagen, C. A., & Greene, A. D. (2020). Effects of school resource officers on school crime and responses to school crime. Criminology & Public Policy, 19(3), 905–940; Owens, E. G. (2017). Testing the school-to-prison pipeline. Journal of Policy Analysis and Management, 36(1), 11–37; Sorensen, L. C., Avila Acosta, M., Engberg, J., & Bushway, S. D. (2023). The thin blue line in schools: New evidence on school-based policing across the U.S. [EdWorkingPaper No. 21-476]. Annenberg Institute at Brown University. https://doi.org/10.26300/heqx-rc69; Weisburst, E. K. (2019). Patrolling public schools: The impact of funding for school police on student discipline and long-term education outcomes. Journal of Policy Analysis and Management, 38(2), 338–365.
- 79. American School Counselor Association. (2023). School counselor roles and ratios. https://www.schoolcounselor.org/About-School-Counseling/School-Counselor-Roles-Ratios
- 80. National Association of School Psychologists. (2023). State shortages data dashboard. https://www.nasponline.org/about-school-psychology/state-shortages-data-dashboard
- 81. Harper, K., & Cahill, D. T. (2018). Compared to majority White schools, majority Black schools are more likely to have security staff [Blog post]. Child Trends. https://www.childtrends.org/publications/compared-to-majority-white-schools-majority-black-schools-are-more-likely-to-have-security-staff
- 82. U.S. Department of Education, National Center for Education Statistics. (2021). Digest of education statistics: Table 233.69a. Number and percentage of public schools providing diagnostic mental health assessments and treatment to students and, among schools providing these services, percentage providing them at school and outside of school, by selected school characteristics: 2017–18 and 2019–20. https://nces.ed.gov/programs/digest/d21/tables/dt21_233.69a.asp
- 83. Cornell, D., & Maeng, J. (2024). School threat assessment toolkit. National Center for School Safety. https://www.nc2s.org/resource/school-threat-assessment-toolkit/

About the Authors

Jennifer L. DePaoli is a Senior Researcher and Director of the Whole Child Policy Table at the Learning Policy Institute (LPI), where she focuses on the science of learning and development and putting the whole child at the center of policy and practice. DePaoli has more than a decade of experience teaching and conducting research and policy analysis in K–12 education. Over the course of her career, she has studied school safety strategies, high school graduation rates and college readiness, social and emotional learning, and school choice. She received a PhD in Education Policy from Ohio State University and an MA in Middle Childhood Education from the University of Dayton.

Stacy B. Loewe is Director of Research at LPI. In this role, she ensures that high-quality research is designed and implemented in ways that make it directly relevant to practice and policy. Her work focuses on early childhood education (ECE) and organizational conditions within educational settings. Loewe has substantive expertise in the areas of attendance, measurement of early education programs and school climate, program implementation, kindergarten transitions, and braiding of ECE funding streams. She has a PhD in Developmental Psychology from the University of Chicago and a BS in Human Development and Family Studies from the University of Wisconsin–Madison.



1530 Page Mill Road, Suite 250 Palo Alto, CA 94304 p: 650.332.9797

1100 17th Street, NW, Suite 200 Washington, DC 20036 p: 202.830.0079

learningpolicyinstitute.org

The Learning Policy Institute conducts and communicates independent, high-quality research to improve education policy and practice. Working with policymakers, researchers, educators, community groups, and others, the Institute seeks to advance evidence-based policies that support empowering and equitable learning for each and every child. Nonprofit and nonpartisan, the Institute connects policymakers and stakeholders at the local, state, and federal levels with the evidence, ideas, and actions needed to strengthen the education system from preschool through college and career readiness.