



# School-Based Behavioral Threat Assessment

## A Review and Practical Considerations

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Violence in school settings continues to be a concern even though student victimization—along with victimization in general in the United States, both in and out of schools—has declined steadily over the past several decades (Gramlich, 2024; Irwin et al., 2024). To address concerns about safety, schools often default to what are known as “hardening tactics” (e.g., metal detectors, security guards, cameras), despite evidence that school hardening alone does not reduce violence or increase student safety (Gonzalez et al., 2016). And while there is increased use of security measures and law enforcement in schools, the evidence does not support these tactics (Fisher et al., 2023; Fronius et al., 2025). These measures alone cannot effectively prevent all incidents, nor do they seek to support school community members who commit or threaten to commit violent acts (Fisher & Petrosino, 2022; Schildkraut & Grogan, 2019). School-based behavioral threat assessment (BTA) is an alternative approach to addressing school safety and improving school climate. It focuses on prevention and intervention before an incident occurs and on redirecting students, as appropriate, toward supports and services that can address the underlying causes of potential behavioral incidents.

School-based BTA is indeed increasing in the United States as a strategy for addressing issues of school safety, including school violence. In 2020, 64 percent of public schools in the country reported they had a threat assessment team (Wang et al., 2022), which was up from 43 percent of public schools during the 2017–18 school year (Diliberti et al., 2019). A more recent report produced for the U.S. Secret Service (Diliberti et al.,



2025) suggests that up to 85 percent of schools in the United States had a Behavioral Threat Assessment Management team in place as of 2024.

To support schools and districts in their understanding of the evidence base related to BTA, WestEd's Justice and Prevention Research Center (JPRC) conducted a literature review focused on the empirical evidence about the effectiveness of school-based BTA. In addition to providing a review of the evidence, this report highlights state-level policies, common programmatic models, and the implementation practices of school-based BTA teams. Lastly, it offers a set of practical considerations for jurisdictions that may be planning for or be in the early stages of adopting school-based BTA.





## What Is School-Based Behavioral Threat Assessment?

In school settings, BTA is “a formalized process of identifying, assessing, and managing students who may pose a threat of targeted violence in schools” (Wang et al., 2022, p. 3). Importantly, school-based BTA is not limited to assessment; it is an ongoing, problem-solving process that includes intervention, support planning, and case management to address the underlying causes of concerning behavior and reduce risk over time. This approach is grounded in key principles identified by the U.S. Secret Service National Threat Assessment Center (NTAC) and the U.S. Department of Education, including a focus on preventing school violence, understanding behavior in context, and gathering information from multiple sources, using an investigative, fact-based approach to determine whether a student poses a threat (Fein et al., 2004).

Research, as further described below, highlights the potential of school-based BTA as a way to identify school safety issues and, when a legitimate threat is identified, intervene before it escalates. Research performed over decades by the U.S. Secret Service NTAC consistently demonstrates that student perpetrators of targeted school violence communicate their intentions before carrying out an attack. In its landmark Safe School Initiative (SSI), the NTAC examined 37 incidents of K–12 school shootings and found that in 81 percent of cases, at least one person knew the shooter was thinking about or planning the incident, and in 59 percent of cases, more than one person had prior knowledge (Vossekuil et al., 2002). This finding has been reinforced in subsequent NTAC studies using more recent data.

In *Protecting America’s Schools*, which analyzed 41 incidents of targeted school violence at K–12 schools from 2008 to 2017, the NTAC found that all attackers exhibited concerning behaviors, 80 percent elicited concern from bystanders, and 66 percent communicated their intent to attack in advance (U.S. Secret Service National Threat Assessment Center, 2019). The same report noted that in two



thirds of the cases, at least one person observed a threatening communication or concerning behavior related to the intent to attack but did not report it.

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## What Are the Leading Models and Evidence on School-Based Behavioral Threat Assessment?

Several school-based BTA models are in use,<sup>1</sup> each with its unique features and methodologies. While these models share a common goal—preventing violence and promoting school safety through early identification and management of threats—the field has evolved to include both widely used frameworks and locally adapted approaches. Over the past 2 decades, a small number of models have significantly influenced the implementation landscape in U.S. schools and continue to guide the development and implementation of local practices. These include the Virginia Student Threat Assessment Guidelines—renamed the Comprehensive School Threat Assessment Guidelines (CSTAG) to reflect its use beyond Virginia—and the NTAC model. At the same time, states and districts are increasingly adapting these frameworks or developing context-specific models to align with local policy, resources, and needs.

### The Comprehensive School Threat Assessment Guidelines

The CSTAG model was developed by Dr. Dewey Cornell and originally adopted as a strategy within Virginia public schools. The CSTAG model emphasizes preventing targeted violence and other harmful behaviors by promoting early intervention and support for individuals in distress. The CSTAG model is designed to provide school-based BTA teams with a systematic approach that takes into consideration both youth developmental characteristics and school educational missions. The model uses a five-step decision tree process for conducting threat assessments: (a) evaluate the threat, (b) attempt to resolve the threat as transient, (c) respond to a substantive threat, (d) conduct a safety evaluation for a very

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<sup>1</sup> For example, use of the Salem Keizer Threat Assessment Model, although not included in this report, is increasing.



serious substantive threat, and (e) implement and monitor the safety plan (Cornell, 2020).

The model encourages a collaborative and multidisciplinary approach involving educators, mental health professionals, law enforcement, and other relevant stakeholders. It places emphasis on distinguishing between transient (less serious, more common) and substantive (serious and specific) threats by considering the context of the behavior and assessing the individual's capacity for violence. In considering the developmental and educational context of the threat, it encourages the use of supportive intervention rather than punitive measures.

### **U.S. Secret Service National Threat Assessment Center Model**

The NTAC guidelines for schools incorporate findings from the SSI, which included a study carried out in large part as a response to the Columbine High School shooting in 1999 (Fein et al., 2004). The guidelines were developed through a collaboration of the U.S. Secret Service and the United States Department of Education. Informed by principles defined within the SSI, the NTAC guidelines outline key components of a comprehensive targeted violence prevention framework designed to identify and address threats early (Cornell & Maeng, 2024, U.S. Secret Service National Threat Assessment Center, 2018). These components include

- establishing a multidisciplinary threat assessment team,
- defining prohibited and concerning behaviors,
- creating a central reporting mechanism,
- establishing clear protocols for information-sharing and law enforcement collaboration,
- implementing structured assessment procedures,
- developing and applying risk management and intervention strategies,



- fostering a positive school climate, and
- providing ongoing training for staff and stakeholders (U.S. Secret Service National Threat Assessment Center, 2018).

While these components outline the structure of a comprehensive prevention system, the NTAC model also emphasizes an investigative, behavior-focused approach to assessment, guided by key questions that examine the student's motives, stressors, communications, and access to means, as well as the presence of protective factors and available supports (Fein et al., 2004).

### **Common Characteristics of School-Based Behavioral Threat Assessment Models**

Across models, school-based BTA is grounded in a multidisciplinary, team-based approach. Schools using this approach typically have a threat assessment team composed of administrators, mental health professionals, law enforcement, and other relevant personnel (Cornell, 2020). This structure allows teams to draw on diverse perspectives and information sources to better understand and respond to student behavior.

These models emphasize the early identification of concerning behaviors through clear reporting and information-sharing processes. They also include structured protocols for evaluating the seriousness of a threat, considering factors such as context, intent, and the individual's capacity for violence. Importantly, BTA models extend beyond assessment to include intervention and management strategies designed to reduce risk and support students. This includes developing and implementing intervention plans, monitoring student progress, and adjusting responses as needed. Finally, school-based BTA models prioritize balancing safety with the rights and developmental needs of students, reinforcing a preventative and supportive approach rather than a purely disciplinary one.



## **Emerging Trends in School-Based Behavioral Threat Assessment: Digital Threat Assessment**

An emerging area within school-based BTA involves the integration of Digital Threat Assessment practices. Research on targeted violence and school shootings has consistently demonstrated that many individuals—up to 74 percent by some estimates—communicate concerning behaviors, violent ideation, or intent prior to an attack, including through online platforms and digital communication (U.S. Secret Service National Threat Assessment Center, 2019). For example, the U.S. Secret Service study on targeted violence (Vossekuil et al., 2002) and subsequent research on leakage and pre-attack behaviors (Peterson et al., 2021) have found that individuals frequently communicate threats or warning behaviors to peers before acts of violence occur. Additional research examining adolescent school shooters has highlighted the growing role of online communication and social media in the expression of warning behaviors and violent intent (Abel et al., 2022). In response, school-based BTA teams are increasingly adapting traditional assessment practices to incorporate digital communication, social media activity, online leakage, and other technology-mediated behaviors into information gathering, assessment, intervention, and case management processes. This development reflects the continued evolution of school-based BTA practices as schools respond to changing student communication patterns and emerging safety concerns.

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## **A Brief Review of the Evidence on School-Based Behavioral Threat Assessment**

Research on the effectiveness of BTA has been limited to a few studies, primarily of the CSTAG model (Cornell, 2020). The small number of studies to date on CSTAG implementation have used experimental or quasi-experimental designs to compare schools using CSTAG with schools using an alternative form of threat



assessment or none at all, and these studies have found evidence supporting the effectiveness of the CSTAG model (Cornell et al., 2011).

Specifically, research indicates that schools using CSTAG have fewer bullying incidents and have improved perceptions of school climate and teacher safety. It also leads to less reliance on zero-tolerance policies, with declines in both short- and long-term suspensions, especially when implemented as designed. Schools using CSTAG are also more likely to provide counseling and parent conferences to students making threats rather than disciplinary placements. Long-term CSTAG implementation correlates with perceptions of fairer discipline, less student aggression, and fewer long-term suspensions (Cornell et al., 2011; Nekvasil & Cornell, 2015; Shin et al., 2013). And while the evidence suggests that BTA generally does not lead to disproportionate experiences by race and ethnicity, at least one study has shown that students receiving special education services were suspended disproportionately relative to other students following threat assessment, consistent with other studies that have examined exclusionary discipline experiences within this student population (Maeng et al., 2020). There is considerable need for additional rigorous studies on the effects of threat assessment and on its impact on students, staff, and the school (Cornell, 2020).

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## **What Is the State Policy Landscape Supporting School-Based Behavioral Threat Assessment?**

Not only is school-based BTA being increasingly used but it is also now mandated in some states (Arundel, 2022). As of fall 2025, BTA was required in 20 states, and 45 states in total had adopted at least some type of policy around BTA in schools (DePaoli & Loewe, 2025). However, the specifics of these laws can vary significantly from state to state. The variation can include differences in the composition of threat assessment teams, the frequency and type of training required, the way data are managed and shared, the level of state oversight, and the nature of the collaboration with law enforcement and mental health agencies.



Generally, state policies on BTA teams are designed to establish effective frameworks for identifying, evaluating, and responding to potential threats to public safety (NASP School Safety and Crisis Response Committee, 2020). One common aspect of some state policies is the formation of multidisciplinary teams consisting of professionals from diverse backgrounds, such as school administrators, law enforcement professionals, mental health specialists, and social services personnel. A multidisciplinary team can help facilitate and better understand students who make threats because each individual could have a different perspective on, relationship to, or understanding of the student. States emphasize the importance of maintaining robust reporting mechanisms to facilitate the timely sharing of information about potential school threats (Fein, 2002). In addition, several states require that districts or schools use standardized risk assessment protocols to systematically evaluate the level of risk posed by individuals, considering factors such as the nature of the behavior, mental health status, follow-up interventions, and contextual elements (Louvar Reeves & Brock, 2018).

Some state-level examples include the following:

- **Virginia:** In 2013, Virginia became the first state to mandate threat assessment teams in all K–12 public schools. The law requires each school to have a threat assessment team that receives training and follows specific guidelines for assessing and responding to threats.
- **Florida:** In 2018, after the Marjory Stoneman Douglas High School shooting, Florida passed legislation requiring all schools to establish threat assessment teams to identify potential threats to school safety.
- **Texas:** In 2019, Texas passed laws that require school districts to adopt and implement threat assessment protocols. The state provides guidelines for the establishment and training of threat assessment teams.
- **Illinois:** In 2019, Illinois mandated threat assessment procedures and the creation of threat assessment teams in schools, with specific requirements for team composition and training.



- **Ohio:** Since 2023, Ohio has required schools to implement BTA teams to identify and manage student threats.

Undoubtedly the legislation landscape will continue to evolve across states that have yet to adopt a policy and will be adjusted further within states that have policies as they learn from local implementation practices.

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## What Are Some Practical Considerations for Schools Adopting Behavioral Threat Assessment?

The landscape for school-based BTA continues to evolve, and there are opportunities to learn both from the implementation challenges and from the facilitators of BTA implementation as experienced by schools and districts. To that end, WestEd researchers authored an [implementation study report](#) focused on BTA practices in Texas schools, which surfaced challenges and facilitators that are likely common elsewhere (Stern et al., 2023).

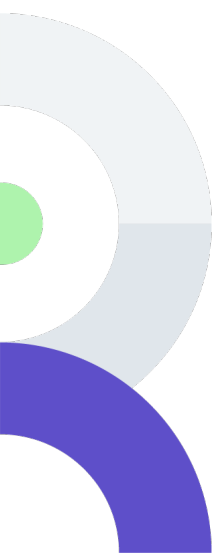
A few examples of the challenges experienced locally include

- finding time to meet as a BTA team, with most teams meeting on an as-needed basis only;
- lacking institutionalized processes to handle the data that teams collect as part of each threat assessment, which is exacerbated by a lack of shared data practice knowledge across multiple team members;
- purchasing dedicated software as a solution to data challenges, which is often expensive and cost prohibitive for many schools; and
- connecting students to other services in the community (e.g., behavioral health or substance use treatment services), which requires schools to identify the services, have proximity and access to the services, and establish buy-in from parents and students.



While these challenges are considerable, schools engaged in our study were also optimistic about the promise of BTA and offered some factors that help facilitate this work successfully, including

- having a multidisciplinary team in place, which appears to be critical for success;
- establishing a comprehensive set of resources in the school and community to support students and families, which is bolstered by strong buy-in from families and community stakeholders;
- creating a positive school culture that includes transparent communication with the community and trusting relationships between students and staff to ensure threats are reported to the BTA team; and
- ensuring consistent communication through meetings, formal reporting processes, and informal interactions (e.g., texts) to ensure constant and consistent contact between team members and to facilitate communication out to the broader school community.





## Conclusion

BTA teams and models in K–12 schools have the potential to foster a safe and secure learning environment through a preventative approach involving multidisciplinary teams that focus on early intervention and collaboration to identify and manage potential threats before they escalate. While hardening tactics have been traditionally employed, the empirical evidence supports the need for more nuanced strategies, such as BTA, that focus on prevention and intervention. The evidence to date supports the effectiveness of BTA in identifying threats, improving school climate, and reducing reliance on zero-tolerance discipline policies; however, there remains a need for further research in a greater number of states and localities that vary in context and population to fully understand the potential impact of BTA on school safety, school climate, and students and staff.

As BTA becomes more prevalent, often driven by state-level mandates, finding ways to address practical implementation issues is essential. The challenges of time constraints, data management, software costs, and the task of connecting students to community services are notable; however, there is strong evidence that multidisciplinary teams, comprehensive resources, a positive school culture, and consistent communication can help schools successfully implement a BTA model. The ongoing evolution of BTA practices and policies suggests a trend toward a more holistic approach to school safety that prioritizes the well-being of the school community alongside the necessity of preventing violence. Moving forward, learning from the experiences of schools across the country will be crucial in refining threat assessment strategies and ensuring that schools provide safe and supportive environments for all students.



## References

- Abel, M. N., Chermak, S., & Freilich, J. D. (2022). Pre-attack warning behaviors of 20 adolescent school shooters: A case study analysis. *Crime & Delinquency*, 68(5), 786–813. <https://doi.org/10.1177/0011128721999338>
- Arundel, K. (2022). *New Jersey schools must have threat assessment teams under new state law*. K–12 Dive. <https://www.k12dive.com/news/new-jersey-schools-must-have-threat-assessment-teams-under-new-state-law/629314/>
- Cornell, D., & Maeng, J. (2024). *School threat assessment toolkit*. National Center for School Safety.
- Cornell, D. G. (2020). Threat assessment as a school violence prevention strategy. *Criminology & Public Policy*, 19(1), 235–252.
- Cornell, D. G., 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.
- DePaoli, J. L., & Loewe, S. B. (2025). *Keeping schools safe? The research on behavioral threat assessments* [Brief]. Learning Policy Institute. <https://learningpolicyinstitute.org/product/behavioral-threat-assessments-brief>
- Diliberti, M., Jackson, M., Correa, S., & Padgett, Z. (2019). *Crime, violence, discipline, and safety in U.S. public schools: Findings from the School Survey on Crime and Safety: 2017–18* (NCES 2019-061). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. [https://cwlibrary.childwelfare.gov/discovery/delivery/01CWIG\\_INST:01CWIG/1218602280007651](https://cwlibrary.childwelfare.gov/discovery/delivery/01CWIG_INST:01CWIG/1218602280007651)



Diliberti, M. K., Moore, P., Jackson, B. A., Morris, K., Buckland, W., Alathari, L., Driscoll, S., Drysdale, D., & Glidden, J. (2025). *The state of behavioral threat assessment and management in K–12 public schools: Findings from a 2025 American School Leader Panel Survey*. Homeland Security Operational Analysis Center; RAND Corporation.

[https://www.rand.org/pubs/research\\_reports/RRA3658-1.html](https://www.rand.org/pubs/research_reports/RRA3658-1.html)

Fein, R., Vossekuil, B., Pollack, W., Borum, R., Modzeleski, W., & Reddy, M. (2004). *Threat assessment in schools: A guide to managing threatening situations and to creating safe school climates*. Safe and Drug-Free Schools Program, Office of Elementary and Secondary Education, U.S. Department of Education; National Threat Assessment Center, U.S. Secret Service.

<https://www2.ed.gov/admins/lead/safety/threatassessmentguide.pdf>

Fein, R. A. (2002). *Threat assessment in schools: A guide to managing threatening situations and to creating safe school climates*. DIANE Publishing.

Fisher, B., & Petrosino, A. (2022). *What a systematic review of 32 evaluations says about the impact of school-based law enforcement*. WestEd.

Fisher, B. W., Petrosino, A., Sutherland, H., Guckenburg, S., Fronius, T., Benitez, I., & Earl, K. (2023). School-based law enforcement strategies to reduce crime, increase perceptions of safety, and improve learning outcomes in primary and secondary schools: A systematic review. *Campbell Systematic Reviews: Better Evidence for a Better World*, 19(4), Article e1360.

<https://doi.org/10.1002/cl2.1360>

Fronius, T., Lam, A. C., & Baskerville, T. (2025). *The impact of school police reform on student safety and school experiences*. WestEd.



- Gonzalez, J. M. R., Jetelina, K. K., & Jennings, W. G. (2016). Structural school safety measures, SROs, and school-related delinquent behavior and perceptions of safety: A state-of-the-art review. *Policing: An International Journal of Police Strategies & Management*, 39(3), 438–454.
- Gramlich, J. (2024, April 24). *What the data says about crime in the U.S.* Pew Research Center. <https://www.pewresearch.org/short-reads/2024/04/24/what-the-data-says-about-crime-in-the-us/>
- 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, Institute of Education Sciences, U.S. Department of Education; Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2024145>
- Louvar Reeves, M. A., & Brock, S. E. (2018). School behavioral threat assessment and management. *Contemporary School Psychology*, 22, 148–162.
- Maeng, J. L., Cornell, D., & Huang, F. (2020). 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>
- NASP School Safety and Crisis Response Committee. (2020). *Behavior threat assessment and management: Best practice considerations for K–12 schools, brief overview*. National Association of School Psychologists. <https://www.nasponline.org/btam>
- 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.



- Peterson, J., Erickson, G., Knapp, K., & Densley, J. (2021). Communication of intent to do harm preceding mass public shootings in the United States, 1966 to 2019. *JAMA Network Open*, 4(11), Article e2133073. <https://doi.org/10.1001/jamanetworkopen.2021.33073>
- Schildkraut, J., & Grogan, K. (2019). *Are metal detectors effective at making schools safer?* WestEd.
- Shin, C., Ciolfi, A. A., & Cornell, D. G. (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>
- Stern, A., Guckenburg, S., Baskerville, T., Zimiles, J., & Fronius, T. (2023). *Learning from the experiences of Texas schools implementing behavioral threat assessment programs*. WestEd.
- U.S. Secret Service 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 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.
- Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2002). *The final report and findings of the Safe School Initiative*. U.S. Secret Service; U.S. Department of Education.
- Wang, K., Kemp, J., & Burr, R. (2022). *Crime, violence, discipline, and safety in U.S. public schools in 2019–20: Findings from the School Survey on Crime and Safety* (NCES 2022-029). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. <https://nces.ed.gov/pubs2022/2022029.pdf>



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