# Multi-Tiered System of Supports to Address Childhood Trauma

Evidence and Implications

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When California's students return to school this fall, schools can play a pivotal role in preventing, assessing, and addressing trauma in order to support students' well-being. We summarize the existing evidence base on multi-tiered trauma-informed practices that offer increasingly intensive tiers of support. Although many multi-tiered models of trauma-informed approaches have been implemented in schools, the evidence base demonstrating their wholescale effectiveness is limited. The most compelling evidence comes from approaches within the more intensive tiers. Moreover, most of the recent guidance on addressing trauma comes from expert and practitioner experiences and recommendations, including the novel adaptations that some schools made amid the shift to distance learning. Finally, districts and schools seeking to become trauma informed should consider establishing a coherent systemwide trauma-informed approach, including care for educators themselves.

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## Introduction

A confluence of recent events—the COVID-19 pandemic alongside social ruptures highlighting systemic racial injustices—have exposed some children to traumatic events, potentially influencing their emotional and physical well-being.

When California's students return to school in fall 2020—be it at distance, in person, or some combination of both—schools can play a pivotal role in preventing and assessing trauma as well as in helping students recover from potentially traumatic experiences. While exposure to traumatic events may not necessarily lead students to experience or show signs of trauma, districts and schools should be prepared to support students who may have had an increased likelihood of exposure to traumatic experiences.

Although there is no one consistent framework for addressing trauma via schools,<sup>1</sup> they may want to adopt a "trauma-informed" approach using a Multi-Tiered System of Supports (MTSS) model. These models rely on evidence-based practices within increasingly intensive tiers of support.<sup>2</sup> Some schools and districts are already familiar with the MTSS framework, as roughly one in four schools in California have already adopted a multi-tier program, known as Positive Behavior Intervention and Supports (PBIS), to promote positive behaviors.<sup>3</sup>

At its foundation, a MTSS model of a trauma-informed approach in schools includes universal schoolwide supports, known as Tier 1, which can serve as a preventative measure before students might need more targeted and intensive supports. Leveraging Tier 1 supports for students who have been exposed to traumatic events can be critical because schools may not know exactly who has experienced trauma nor the extent of that trauma. Supports targeted to groups known to have encountered trauma and that are experiencing its effects form Tier 2, while intensive individualized supports for the highest need cases of trauma comprise Tier 3. In considering a MTSS approach, schools will be faced with crucial decisions about which approaches are most feasible and realistic given limited funds alongside uncertainties in how schooling will be delivered over the 2020–21 year.

There are three aims of this policy brief:

- 1. We summarize the existing evidence base on multi-tiered trauma-informed approaches in schools.
- 2. We highlight examples of practices and resources to help mitigate and/or prevent trauma symptoms by supporting students' mental well-being.
- 3. We consider the types of system-level supports and structures that schools and educators might need for fall 2020 and beyond to address and prevent trauma.

This brief shows that although many MTSS models of trauma-informed approaches have been developed for and implemented in schools, the evidence base demonstrating their overall effectiveness is limited. Evidence often comes from small-scale studies situated in localized in-person schooling contexts.<sup>5</sup> Further, studies often show how trauma-informed practices are linked to, but not necessarily a direct cause of, better student outcomes.<sup>6</sup> The most promising evidence comes from Tier 2 or 3 practices that use approaches based on cognitive behavioral therapy (CBT) for children identified with trauma.<sup>7</sup> Importantly, there is no evidence of MTSS trauma-informed approaches in distance school settings.

Although evidence-based practices of MTSS trauma-informed approaches are limited, much of the recent guidance on how to support students who have experienced trauma comes from expert and practitioner experiences and recommendations, including the novel adaptations that some schools made amid the shift to distance schooling during spring 2020. Finally, to become "trauma sensitive," districts and schools will need to invest in several key supports in order to establish a clear "blueprint" for the adoption of a trauma-informed approach, including care for educators themselves.

### Background: Trauma and Multi-Tiered Trauma-Informed Practices in Schools

What is trauma? The U.S. Department of Health and Human Service's Substance Abuse and Mental Health Services Administration (SAMHSA) conceptualizes *individual trauma* as resulting from "an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being." Based on this conceptualization, three critical components underlie trauma: (a) the occurrence of an event—either singular or repeated over time—that is threatening, physically or psychologically; (b) the individual's experiences and feelings of the event as traumatic; and (c) the effects of that trauma, which can be long or short term as well as immediate or delayed.<sup>10</sup>

For districts, schools, and educators, recognizing possible consequences of trauma is critical especially in the wake of grief and loss. Both can lead to a range of reactions that negatively impact learning, including school disengagement alongside disconnectedness from others. Feelings of grief and loss among students may be highly prevalent in the wake of the COVID-19 pandemic. Students have experienced unexpected and abrupt changes in their daily lives and, in particular, those changes may have disproportionately affected students who relied on school as a safe place from traumatic experiences in their neighborhoods and homes. The pandemic has also left many vulnerable and underserved students susceptible to traumatic grief or separation, given how COVID-19 has devastated their families financially as well as through the loss of life and illness of loved ones.



During the pandemic, many students likely witnessed images and videos of the murder of George Floyd by a police officer in Minneapolis, Minnesota. For many students, this may have been the first time they were exposed to or made aware of the existence of police brutality as well as a criminal justice system that allows the killing of unarmed Black men and women to go unexplained and unanswered. Witnessing such tragic events can be linked to secondary traumas, which can further compound the ongoing racial traumas experienced by Black children and adolescents exposed to racism, particularly individual and systemic racism within their own schools.<sup>13</sup>

**What is "trauma-informed"?** As defined by the National Child Traumatic Stress Network (NCTSN), a "trauma-informed" approach is one that occurs at the systems level and involves all key educational stakeholders—from school leaders and educators to school staff—in addressing and responding to children's traumas and possible traumatic stress. Trauma-informed practices can typically be infused throughout schools to generate conditions and climates that acknowledge and are responsive to trauma.<sup>14</sup>

**Multi-tiered trauma-informed approaches.** A MTSS includes multiple levels of approaches and interventions. In general, Tier 1 forms the foundation of the system and provides universal supports while Tier 2 offers supports targeted to specific groups and Tier 3 provides intensive individualized supports.<sup>15</sup>

*Tier 1 practices.* Tier 1 practices are universally provided to students, irrespective of the level of trauma in their lives. <sup>16</sup> These approaches can play a critical role in addressing trauma exposure because schools and districts may not immediately know the extent to which trauma may have affected students. Though research shows that children can be resilient in the wake of traumatic events, the effects of trauma can also be delayed. <sup>17</sup> Moreover, children may have borderline symptoms of trauma that continue to be overlooked. <sup>18</sup> Thus, in offering the broadest coverage possible, Tier 1 approaches may help prevent and mitigate the effects of trauma before they further escalate and negatively affect students' long-term well-being.

Tier 1 supports are often structured around a mix of several key components, including a prevention component focused on creating an overarching traumasensitive school environment that fosters students' safety and well-being. To generate such environments, schools typically have invested in boosting students' mental health and social-emotional skills as well as their coping skills and their resilience. Well-known multi-tiered programs such as PBIS have been used as a framework. Tier 1 PBIS primary prevention strategies, for example, can help to build positive school climates by establishing clear behaviors and expectations among students. There are also components focused on building schoolwide awareness and understanding of trauma among educators and school staff via training and professional development.

In some instances, this training extends to parents and community stakeholders as well.<sup>20</sup> Finally, there are Tier 1 components that address broad-based screening for trauma and associated social-emotional and behavioral issues.<sup>21</sup>

Tier 2 and Tier 3 practices. In reviews of MTSS trauma-informed approaches, <sup>22</sup> Tiers 2 and 3 are usually delivered by expert psychologists or mental health and social welfare professionals (vs. educators) to children who have been identified as needing support for trauma in either group-based (typically Tier 2) or individual (typically Tier 3) settings. Thus some approaches, like Cognitive Behavioral Intervention for Trauma in Schools (CBITS), might appear as both Tier 2 and 3 practices since they are structured so that children who are identified as needing interventions receive both group and individual sessions. One important distinction between Tiers 2 and 3 is not only whether the approach is group versus individual but also the intensity with which services are delivered. In some cases, Tier 3 can include referrals to external professionals who can provide the most intensive support services.<sup>23</sup>

#### **Evidence Base on Multi-Tiered System of Supports Trauma-Informed Approaches**

Five recent studies have reviewed the evidence base on trauma-informed approaches.<sup>24</sup> Although these reviews incorporate evidence from studies of multi-tiered approaches it is important to note that the majority of these reviews include studies that may have focused only on the effects of more intensive and individualized supports in Tiers 2 and 3. Based on these studies, there are five key takeaways about multi-tiered trauma-informed approaches:

1. Multi-tiered trauma-informed approaches show promise, but the evidence is limited, correlational, and situated in very specific contexts. The most comprehensive review of 13 multi-tiered approaches to address trauma via schools<sup>25</sup> shows a link between particular MTSS trauma-informed approaches and improved student outcomes. For example, two studies highlighted in the review showed a reduction in depression and posttraumatic stress disorder (PTSD).<sup>26</sup> However, it is important to note the contexts of these two studies. For instance, one study that found reductions in depressive symptoms focused on 30 refugee children who were English language learners and received four tiers of support.<sup>27</sup> Similarly, a MTSS approach targeted to 115 children in a rural school-based program in Louisiana led to declines in PTSD.<sup>28</sup> A key takeaway: these studies are based on very localized and small contexts that are limited in their applicability to much larger scale school systems across California.

#### 2. There is a "lack of evidence" of schoolwide trauma-informed approaches.

A related review of research on trauma-informed schoolwide approaches discovered no studies that were: (a) based on rigorous study designs to establish causality (e.g., randomized



controlled trials), (b) conducted exclusively within school settings, and (c) based on a systemwide trauma approach (vs. trauma-specific interventions). Thus, the researchers concluded that there was "a lack of evidence of trauma-informed approaches in schools." Further, the authors recommended caution when deciding to pursue a schoolwide trauma-informed approach.<sup>29</sup>

**3.** Trauma-informed practices targeted to trauma-affected youth show possible "effectiveness," but the evidence is also largely correlational. Based on a review of 33 studies of trauma-informed practices conducted between 1998 and 2018, 30 evidence shows that certain interventions to support children who encountered trauma were, to some extent, effective (e.g., linked to declines in trauma symptoms). For example, the Healthy Environments and Response to Trauma study (HEARTS)—a MTSS approach carried out in four schools in the San Francisco Unified School District that serve predominately youth of color from low-income families—found that children receiving trauma-specific therapy experienced decreases in trauma-related symptoms. As noted however, in studies like these, the evidence was not necessarily based on well-controlled randomized trials; thus the results show links—but not necessarily a causal connection—between trauma-informed practices and children's outcomes.

4. Cognitive behavioral therapy-based interventions (Tiers 2 and 3) have been shown to reduce trauma symptoms. CBT interventions focus on shifting the thought patterns of individuals and equipping them with coping strategies and aids in building their confidence.<sup>33</sup> A review of Tier 2 and 3 prevention programs<sup>34</sup> as well as a summary of CBT methods<sup>35</sup> show that several CBT-based interventions with a trauma focus have been effective and, in some cases, the evidence of their effectiveness has been backed by rigorously controlled study designs. Within a MTSS framework, CBT interventions are targeted to adolescents with the highest levels of need and are implemented in groups (Tier 2) or individually (Tier 3). These researchers noted the effectiveness of CBT-based interventions,<sup>36</sup> including Trauma-Focused CBT<sup>37</sup> and Cognitive Behavioral Intervention for Trauma in Schools Program.<sup>38</sup>

While the aforementioned CBT interventions were conducted in person, one recent trend in CBT-based interventions is the delivery of CBT via computers, known as Computerized-CBT (C-CBT). Based on a recent systematic review and meta-analysis of C-CBT programs for children and adolescents,<sup>39</sup> C-CBT has been linked to lower anxiety and depression among 12 to 25-year-olds. However, there is no definitive evidence that C-CBT has an effect on the outcomes of children under 11 years.

# **Examples and Resources for Practice**

Given the largely inconclusive evidence base of multi-tiered trauma-informed approaches, what can districts and schools who want to explicitly address and prevent trauma do? Amid the advice that has come out in the past few weeks and months are several current examples of practices to address trauma symptoms, including promoting students' mental health. These are strategies that have potential to be implemented at scale and/or to be embedded in teachers' practices. There are also key resources that have been developed to help schools and educators incorporate trauma-informed approaches.

**Virtual mental health interventions.** Prior to the pandemic, many schools had already focused on boosting students' access to mental health services as part of a broader strategy to become trauma informed. However, schools engaged in promoting and delivering mental health interventions are now faced with providing these mental health interventions at distance. Evidence that has examined the effectiveness of virtual mental health services among youth shows promising potential.

For example, one recent systematic review focused on online mental health interventions targeted at 12 to 25-year-olds<sup>40</sup> showed that students experienced improved mental health if they participated in online mental health promotion initiatives that educated adolescents about their mental health and emphasized building skills such as mental health literacy. For example, a small-scale randomized evaluation of a program targeting 14 to 24-year-olds in Australia<sup>41</sup> demonstrated that self-monitoring of their mood, stress, and daily activities by mobile phone decreased depression and enhanced their emotional self-awareness. Finally, students who participated in online interventions that focused on preventing mental health symptoms via virtual CBT programs experienced reductions in anxiety and depression.<sup>42</sup>

Online adaptations to trauma-informed practices in California. Beyond the evidence base, there are several examples of how schools have shifted their trauma-informed practices to a virtual format after transitioning to distance learning in spring 2020. One common trend across several school districts in California is the online adaptation of mental health services (e.g., wellness rooms and/or counseling) previously offered in person. Also, several schools maintained connections with their students through social media and video conference platforms in order to support their wellbeing. For instance, Antioch and La Cañada Unified School Districts maintained remote wellness centers that offered students online information on mental health and wellbeing. Beyond remote wellness initiatives, one-on-one counseling supports were also available in many districts—like Glendale Unified School District, which relied on a pool of master's degree interns to offer students with individualized counseling and therapy services by phone or online.



**Resources for trauma-informed practices.** In addition to these example practices, several key resources are available for districts, schools, and educators who are seeking ways to incorporate trauma-informed practices into their teaching and learning environments. Although there has been a proliferation of resources online in the wake of COVID-19, we highlight three that are useful in understanding trauma and the specific actions that systems and educators can take to address trauma.

- 1. Trauma-Informed Practices within a Positive Behavioral Interventions and Supports Framework: A Guide for Implementation.<sup>46</sup> This **guide** is intended for schools that have already adopted a multi-tiered PBIS approach and would like to understand how to integrate trauma-informed approaches within their existing PBIS framework.
- 2. Trauma-Informed School Strategies during COVID-19.<sup>47</sup> This **guide** outlines the 10 core areas of a trauma-informed school system and provides guidance to schools and administrators about how to adopt trauma-informed approaches, including how to support school staff, create trauma-informed learning environments, and address cultural responsiveness.
- 3. "Police Violence and COVID-19 Have Been Traumatizing. Here Are Tools That Can Help Schools." In this **article**, Dr. Heather Hill provides several concrete strategies for schools to address trauma and includes a list of free screening tools to understand children's exposure to and symptoms of trauma.

# A Systems Approach to Trauma-Informed Care

In response to the potential traumas that students may have recently experienced, schools that are deciding whether to adopt trauma-informed approaches should carefully consider the systems that may need to be put into place to support trauma-informed service delivery. <sup>49</sup> A broader systems-level approach rather than a piecemeal one will require a holistic plan that is both comprehensive and collaborative. Further, this may be an opportune time for schools who have already adopted a MTSS trauma-informed approach to revisit their overarching strategy and leverage their continuous improvement processes to evaluate their efforts and plan for how those efforts will need to look different amid various schooling scenarios over the 2020–21 year.

According to the Trauma and Learning Policy Initiative, when developing a strategy to adopt a trauma-informed approach, schools should ask themselves four key questions: (a) Why do we feel an urgency to be a trauma-sensitive school, (b) how do we know we are ready to create a trauma-sensitive school, (c) what actions will address staff priorities and help us become a trauma-sensitive school, and (d) how do we know we are becoming a trauma-sensitive school?<sup>50</sup>

For schools that are considering a MTSS approach to trauma-informed care, one systems-based model comes from the NCTSN's framework.<sup>51</sup> This 3-tier model includes: Tier 1 ("Creating a Safe Environment and Promoting Health and Successful Students"); Tier 2 ("Early Interventions/Identifying Students and Staff At Risk"); and Tier 3 ("Intensive Support"). Within each tier there are ten key focal areas that are necessary so that trauma-informed practices are embedded into schools to ensure long-term sustainability. One critical area, which might be overlooked, is ensuring that school staff and educators themselves are provided with opportunities to care for their own mental health and well-being as well as attending to any forms of secondary traumatic stress.

Based on our review of the evidence and expert advice on MTSS systems-level approaches, we offer districts and schools some key considerations as they approach the challenges of schools reopening in fall 2020 and possible efforts to employ trauma-informed practices:

- Develop a coherent systems-wide understanding of the ways in which schools can successfully implement trauma-informed practices to strengthen their academic mission while mitigating the effects of trauma in the wake of COVID-19 and racial injustices.
- Recognize that Tier 1 supports for all students include creating welcoming spaces, be they in person or at distance, where students are acknowledged, encouraged, and share a sense of belonging.
- Ensure that Tier 1 supports are implemented in ways that are sensitive to complex factors that affect students' sense of safety and investment in schools as environments of which they are a part.
- Ensure that Tier 2 and Tier 3 supports are made available to students and implemented without stigma.
- Focus on teacher and staff wellness. This includes supporting self-care practices to alleviate stress, integrating protocols for routinely checking in with staff to identify and respond to signs of secondary stress, and providing access to support services for staff and teachers without stigma.<sup>52</sup>

Finally, it will be crucial to engage stakeholders, parents, staff, teachers, community members, and school boards in decisions to address and mitigate, intentionally and systematically, potential traumas in students. Districts should consider embedding a set of shared and agreed-upon trauma-informed practices in formal documents such as district and school improvement plans as well as their Learning Continuity Plans for 2020–21. These conceptual commitments will need to be paired with clear actions so that school districts can create and sustain strong, supportive, and trauma-informed environments for all students.



#### **Endnotes**

- Thomas, M. S., Crosby, S., & Vanderhaar, J. (2019). Trauma-Informed practices in schools across two decades: An interdisciplinary review of research. *Review of Research in Education*, 43(1), 422–452. doi.org/10.3102/0091732X18821123
- <sup>2</sup> Chafouleas, S. M., Johnson, A. H., Overstreet, S., & Santos, N. M. (2016). Toward a blueprint for trauma-informed service delivery in schools. *School Mental Health*, 8, 144–162. doi.org/10.1007/s12310-015-9166-8
- Romney, L. (2018, January 31). System of positive rewards to reduce student discipline takes off in California. EdSource. edsource.org/2018/system-of-positive-rewards-to-reduce-student-discipline-takes-off-in-california/593071
- <sup>4</sup> Chafouleas et al., 2016.
- <sup>5</sup> Berger, E. (2019). Multi-Tiered approaches to trauma-informed care in schools: A systematic review. *School Mental Health*, *11*, 650–664. doi.org/10.1007/s12310-019-09326-0; Thomas et al., 2019.
- <sup>6</sup> Fondren, K., Lawson, M., Speidel, R., McDonnell, C. G., & Valentino, K. (2020). Buffering the effects of childhood trauma within the school setting: A systematic review of trauma-informed and trauma-responsive interventions among trauma-affected youth. *Children and Youth Services Review, 109*, Article 104691. doi.org/10.1016/j.childyouth.2019.104691
- <sup>7</sup> Chafouleas et al., 2016.
- 8 Chafouleas et al., 2016.
- <sup>9</sup> Substance Abuse and Mental Health Services Administration (SAMHSA). (2014, October). SAMHSA's concept of trauma and guidance for a trauma-informed approach. store.samhsa.gov/product/SAMHSA-s-Concept-of-Trauma-and-Guidance-for-a-Trauma-Informed-Approach/SMA14-4884. Quotation on p. 7.
- 10 SAMHSA, 2014.
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2017). Treating trauma and traumatic grief in children and adolescents (2nd ed.). Guilford Press; National Child Traumatic Stress Network (NCTSN), Schools Committee. (2017). Creating, supporting, and sustaining trauma-informed schools: A system framework. nctsn.org/resources/creating-supporting-and-sustaining-trauma-informed-schools-system-framework
- Cohen, J., Goodman, R., Kliethermes, M. D., & Epstein, C. (2020). Helping children with traumatic separation or traumatic grief related to COVID-19. National Child Traumatic Stress Network. nctsn.org/resources/helping-childrenwith-traumatic-separation-or-traumatic-grief-related-to-covid-19
- Jernigan, M. M., & Daniel, J. H. (2011). Racial trauma in the lives of Black children and adolescents: Challenges and clinical implications. *Journal of Child & Adolescent Trauma*, 4(2), 123–141. doi.org/10.1080/19361521.2011.574678
- Halladay Goldman, J., Danna, L., Maze, J. W., Pickens, I. B., & Ake, G. S. III. (2020). Trauma-Informed school strategies during COVID-19. National Child Traumatic Stress Network. nctsn.org/resources/trauma-informed-school-strategiesduring-covid-19
- <sup>15</sup> Chafouleas et al., 2016; Fondren et al., 2020.
- Rossen, E., & Cowan, K. (2013). The role of schools in supporting traumatized students. *Principal's Research Review*, 8(6), 1–8. cqrcengage.com/naspweb/file/YEfwxfQ75YH/prr\_nov13\_trauma\_sensitive\_schools.pdf
- Le Brocque, R., De Young, A., Montague, G., Pocock, S., March, S., Triggell, N., Rabaa, C., & Kenardy, J. (2017). Schools and natural disaster recovery: The unique and vital role that teachers and education professionals play in ensuring the mental health of students following natural disasters. *Journal of Psychologists and Counsellors in Schools, 27*(1), 1–23. doi.org/10.1017/jgc.2016.17
- <sup>18</sup> Le Brocque et al., 2017.
- <sup>19</sup> Horner, R. H., Sugai, G., & Anderson, C. M. (2010). Examining the evidence base for school-wide positive behavior support. Focus on Exceptional Children, 42(8). doi.org/10.17161/foec.v42i8.6906
- <sup>20</sup> Berger, 2019
- <sup>21</sup> Eklund, K., & Rossen, E. (2016, September). *Guidance for trauma screening in schools*. National Center for Mental Health and Juvenile Justice. nasponline.org/x37269.xml
- <sup>22</sup> Berger, 2019.
- <sup>23</sup> Berger, 2019.
- <sup>24</sup> Berger, 2019; Fondren et al., 2020; Maynard, B. R., Farina, A., Dell, N. A., & Kelly, M. S. (2019). Effects of trauma-informed approaches in schools: A systematic review. Campbell Systematic Reviews, 15(1–2), Article e1018. doi.org/10.1002/cl2.1018; Stratford, B., Cook, E., Hanneke, R., Katz, E., Seok, D., Steed, H., Fulks, E., Lessans, A., & Temkin, D. (2020). A scoping review of school-based efforts to support students who have experienced trauma. School Mental Health. Advance online publication. doi.org/10.1007/s12310-020-09368-9; Thomas et al., 2019.
- <sup>25</sup> Berger, 2019.
- <sup>26</sup> Cross Hansel, T., Osofsky, H. J., Osofsky, J. D., Costa, R. N., Kronenberg, M. E., & Selby, M. L. (2010). Attention to process and clinical outcomes of implementing a rural school-based trauma treatment program. *Journal of Traumatic Stress*, 23(6), 708–715. doi.org/10.1002/jts.20595; Ellis, B. H., Miller, A. B., Abdi, S., Barrett, C., Blood, E. A., & Betancourt, T. S. (2013). Multi-Tier mental health program for refugee youth. *Journal of Consulting and Clinical Psychology*, 81(1), 129–140. doi.org/10.1037/a0029844

- <sup>27</sup> Ellis et al., 2013.
- <sup>28</sup> Cross Hansel et al., 2010.
- <sup>29</sup> Maynard et al., 2019. Quotation on p. 1.
- <sup>30</sup> Thomas et al., 2019.
- Dorado, J. S., Martinez, M., McArthur, L. E., & Leibovitz, T. (2016). Healthy environments and response to trauma in schools (HEARTS): A whole-school, multi-level, prevention and intervention program for creating trauma-informed, safe and supportive schools. *School Mental Health, 8*(1), 163–176. doi.org/10.1007/s12310-016-9177-0
- 32 Thomas et al., 2019.
- <sup>33</sup> American Psychological Association. (2017, July). What is cognitive behavioral therapy? apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral
- 34 Fondren et al., 2020.
- 35 Chafouleas et al., 2016.
- <sup>36</sup> Chafouleas et al., 2016.
- <sup>37</sup> Cohen et al., 2017.
- 38 Stratford et al., 2020.
- <sup>39</sup> Pennant, M. E., Loucas, C. E., Whittington, C., Creswell, C., Fonagy, P., Fuggle, P., Kelvin, R., Naqvi, S., Stockton, S., Kendall, T., & Expert Advisory Group. (2015). Computerised therapies for anxiety and depression in children and young people: A systematic review and meta-analysis. *Behaviour Research and Therapy, 67*, 1–18. doi.org/10.1016/j.brat.2015.01.009
- <sup>40</sup> Clarke, A. M., Kuosmanen, T., & Barry, M. M. (2015). A systematic review of online youth mental health promotion and prevention interventions. *Journal of Youth and Adolescence*, 44(1), 90–113. doi.org/10.1007/s10964-014-0165-0
- <sup>41</sup> Kauer, S. D., Reid, S. C., Crooke, A. H. D., Khor, A., Hearps, S. J. C., Jorm, A. F., Sanci, L., & Patton, G. (2012). Self-Monitoring using mobile phones in the early stages of adolescent depression: Randomized controlled trial. *Journal of Medical Internet Research*, 14(3), Article e67. doi.org/10.2196/jmir.1858
- <sup>42</sup> Clarke et al., 2015.
- <sup>43</sup> Castaneda, V. (2020, April 15). Coronavirus pandemic prompts mental-health workers to connect with students online. Los Angeles Times. latimes.com/socal/la-canada-valley-sun/news/story/2020-04-15/coronavirus-pandemic-prompts-mental-health-workers-connect-students-online; Udesky, L. (2020, May 5). During COVID-19, how does a trauma-informed school pivot to distance learning? ACES Connection. acesconnection.com/blog/during-pandemic-middle-school-uses-aces-science-restorative-practices-to-connect
- 44 Castaneda, 2020; Udesky, 2020.
- 45 Castaneda, 2020.
- <sup>46</sup> Wayne County Regional Educational Service Agency (RESA). (2019, August). Trauma-informed practices within a positive behavioral interventions and supports framework: A guide for implementation. resources.finalsite.net/images/ v1574437273/resanet/czyiilwqr34ovaferhax/TraumaInformedPracticeswithinaPBISFramework.pdf
- <sup>47</sup> Halladay Goldman et al., 2020.
- <sup>48</sup> Hill, H. C. (2020, June 15). Police violence and COVID-19 have been traumatizing. Here are tools that can help schools. *Education Week*. edweek.org/ew/articles/2020/06/15/police-violence-and-covid-19-have-been-traumatizing.html
- <sup>49</sup> Chafouleas et al., 2016.
- <sup>50</sup> Cole, S. F., Eisner, A., Gregory, M., & Ristuccia, J. (2013). Helping traumatized children learn: Vol. 2. Creating and advocating for trauma-sensitive schools. Massachusetts Advocates for Children. Questions on p. 32.
- <sup>51</sup> NCTSN, Schools Committee, 2017.
- <sup>52</sup> NCTSN, Schools Committee, 2017.

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### **Related Publications**

Cottingham, B., Gallagher, A., Gee, K., Myung, J., Gong, A., Kimner, H., Witte, J., & Hough, H. (2020, July). Supporting Learning in the COVID-19
Context: Research to Guide Distance and Blended Instruction. Policy Analysis for California Education.

Kimner, H. (2020, July). <u>Community Schools:</u>
<u>A COVID-19 Recovery Strategy.</u> Policy Analysis for California Education.

Kanopka, K., Claro, S., Loeb, S., West, M., & Fricke, H. (2020, July). What Do Changes in Social-Emotional Learning Tell Us About Changes in Academic and Behavioral Outcomes? Policy Analysis for California Education.

Stahmer, A., Oliver, K., & Schetter, P. (2020, February). Improving Education for California Students Via Professional Development. Policy Analysis for California Education.



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