

SELECTING SCREENING TOOLS FOR MENTAL HEALTH SCREENING AND REFERRAL IN PEDIATRIC TRAUMA PATIENTS

Created by: Center for Pediatric Traumatic Stress

How does our team know what screening tools to use to meet the ACS guidelines for pediatric trauma patients?

We believe that the following items are key:

Essential:

1. Screening tool performance has been evaluated with injured children in a medical setting
2. Evidence that screening tool detects concurrent psychological distress and/or predicts persistent, ongoing distress
3. Tool is feasible for use in ED or inpatient setting, ie, time to administer, ease of scoring
4. Evidence-based scoring guidelines are provided - with meaning of positive screen described so that healthcare team can take appropriate action (e.g. monitor, assess further, refer for MH services)

Desirable:

5. Multiple studies provide evidence for prediction of concurrent or future / ongoing psychological distress
6. Evidence for prediction of broader spectrum of distress - e.g. PTS*, depression, anxiety, behavioral difficulties, impact on functioning
7. Demonstrated feasibility and utility based on real world use in multiple settings
8. Tool has been evaluated in, and has evidence for good performance with, injured patients similar to those you see in your setting (e.g., age, culture, language, injury types and severity)

See next page for quick summary of current status of several current screening tools.

Cite as: Center for Pediatric Traumatic Stress (2023). Selecting screening tools for mental health screening and referral in pediatric trauma patients. <https://www.healthcaretoolbox.org/screening-after-pediatric-injury>

Summary of current screening tools for mental health sequelae of pediatric injury

	ASC-Kids ¹⁻³	CTSQ ^{4,5}	CSDC- short form ⁶	PsySTART ^{7,8}	STEPP ⁹⁻¹³	PDI-C ^{14,15}
 Screener content	early child PTS* symptoms	early child PTS symptoms	early child PTS symptoms	variety of risk factors including staff observation of child responses	variety of child risk factors including HR*	early child PTS symptoms including peritraumatic dissociation
 Language(s)	Eng, Span	Eng	Eng	Eng	Eng	Eng; Fr
 # of items	3- or 6- item screener	10 items	4 items	9 items	12 items	13 items
 Child ages	8 - 17	6 - 16	5 - 17	7 - 17	8 - 17	8 - 15
 Source of information	child	child	parent	staff, med record	child, parent, med record	child
 Who can administer	any staff	any staff	any staff	any staff	any staff	any staff
 Time to administer	1 -2 min	2 - 3 min	1 -2 min	2 min	5 - 6 min	5-8 min
 ESSENTIAL	 ASC-Kids	 CTSQ	 CSDC	 PsySTART	 STEPP	 PDI-C
 1. Tool performance has been evaluated with injured children in a medical setting	Yes	Yes	Yes	Not yet	Yes	Yes
 2. Evidence that tool detects concurrent psychological distress and/or predicts persistent, ongoing distress	Yes	Yes	Yes	Yes – for concurrent PTSD & depression post-disaster	Initial positive findings not replicated	Yes
 3. Tool appears feasible for use in ED or inpatient setting	Yes	Yes	Yes	Yes	Yes	Yes
 4. Evidence-based scoring guidelines available	Yes	Yes	Yes	Yes – for post-disaster screening	Initial findings not replicated	Yes
 DESIRABLE	 ASC-Kids	 CTSQ	 CSDC	 PsySTART	 STEPP	 PDI-C
 5. Multiple studies provide evidence for screener performance	Yes	Yes	Yes	No	No	Yes
 6. Evidence for prediction of broader spectrum of distress	--	--	--	Yes	No	Developing for pediatric population
 7. Demonstrated feasibility and utility	Developing	Developing	Developing	Developing	Feasible	Developing
 8. Evidence for good performance with <u>injured patients similar to those you see in your setting</u> (e.g., age, culture, language, injury types and severity)	Evaluate for your setting	Evaluate for your setting	Evaluate for your setting	Evaluate for your setting	Evaluate for your setting	Evaluate for your setting

*PTS= post-traumatic stress; **HR= heart rate

Find more information at <https://www.healthcaretoolbox.org/screening-after-pediatric-injury>

References

1. Kassam-Adams N. The Acute Stress Checklist for Children (ASC-Kids): Development of a child self-report measure. *Journal of Traumatic Stress*. 2006;19(1):129-139.
2. Kassam-Adams N, Gold J, Montañó Z, et al. Development and psychometric evaluation of child acute stress measures in Spanish and English. *Journal of Traumatic Stress*. 2013;26(1):19-27.
3. Kassam-Adams N, Marsac M. Brief practical screeners in English and Spanish for acute posttraumatic stress symptoms in children. *Journal of Traumatic Stress*. 2016;29(6):483-490.
4. Kenardy J, Spence SH, Macleod A. Screening for posttraumatic stress disorder in children after accidental injury. *Pediatrics*. 2006;118:1002-1009.
5. Olsson KA, Kenardy JA, De Young AC, Spence SH. Predicting children's post-traumatic stress symptoms following hospitalization for accidental injury: Combining the Child Trauma Screening Questionnaire and heart rate. *Journal of Anxiety Disorders*. 2008; Advance Access published online on March 2, 2008
6. Enlow M, Kassam-Adams N, Saxe G. The Child Stress Disorders Checklist-Short Form: A four-item scale of traumatic stress symptoms in children. *General Hospital Psychiatry*. 2010;32(3):321-327.
7. Thienkrua W, Cardozo BL, Chakkraband MS, et al. Symptoms of posttraumatic stress disorder and depression among children in tsunami-affected areas in southern Thailand. *Jama*. 2006;296(5):549-559.
8. Jackson JE, Do-Nguyen A, Ewbank C, Anderson C, Newton C, Schreiber M. Feasibility of PTSD risk identification in pediatric trauma patients using PsySTART: A pilot study. *Journal of pediatric surgery*. 2021;56(12):2348-2353.
9. Kassam-Adams N, Marsac M, García-España J, Winston F. Evaluating predictive screening for children's post-injury mental health: New data and a replication. *European Journal of Psychotraumatology*. 2015;6:29313.
10. Nixon R, Ellis A, Nehmy T, Ball S. Screening and predicting posttraumatic stress and depression in children following single-incident trauma. *Journal of Clinical Child & Adolescent Psychology*. 2010;39(4):588-596.
11. Ward-Begnoche W, Aitken M, Liggin R, et al. Emergency department screening for risk for posttraumatic stress disorder among injured children. *Injury Prev*. 2006;12:323-326.
12. Winston F, Kassam-Adams N, Garcia-Espana F, Ittenbach R, Cnaan A. Screening for risk of persistent posttraumatic stress in injured children and their parents. *Journal of the American Medical Association*. 2003;290(5):643-649.
13. Buchanan L, Bushroe K, Malthaner L, et al. Test accuracy of the screening tool for early predictors of post-traumatic stress disorder for post-injury mental health in a managed-medicare population. *The Journal of pediatrics*. 2019;210:127-133.
14. Bui, E., Brunet, A., Olliac, B., Very, E., Allenou, C., Raynaud, J., . . . Birmes, P. (2011). Validation of the Peritraumatic Dissociative Experiences Questionnaire and Peritraumatic Distress Inventory in school-aged Victims of Road Traffic Accidents. *European Psychiatry*, 26(2), 108-111. doi:10.1016/j.eurpsy.2010.09.007
15. Ennis, N., Anton, M., Bravoco, O., Ridings, L., Hunt, J., deRoon-Cassini, T. A., Davidson, T., & Ruggiero, K. (2021). Prediction of posttraumatic stress and depression one-month post-injury: A comparison of two screening instruments. *Health Psychology*, 40(10), 702–705. <https://doi.org/10.1037/hea0001114>