| Instrument | Delirium Triage Screen<br>NOTE: This card is populated with information from the instrument's original validation study only. |
|---|---|
| Acronym | DTS |
| Primary use | Delirium Screening |
| Area assessed (Number of questions) | Altered level of consciousness and inattention<br>2 items |
| Description | The Delirium Triage Screen (DTS) was created to rapidly rule out delirium and increase delirium screening efficiency. The DTS was designed to be part of nursing triage assessment in the emergency department, but it can be performed on inpatient wards as well (outside of the intensive care unit). |
| Versions | 1 |
| Scoring information | Altered level of consciousness is scored "yes" or "no." If yes, DTS score is positive and should be confirmed with a specific delirium assessment. If no, inattention is assessed using the "LUNCH" backwards spelling test. Inattention is scored as having 0-1 errors (DTS negative) or >1 error (DTS positive). |
| Cognitive testing | 2 brief items |
| Estimated time to rate | <1 minute |
| Require trained rater | Yes, clinician or lay rater |
| Administer to | Patient |
| Special Resources Required | The Richmond Agitation Sedation Scale (RASS); a positive screen requires follow up with a more specific delirium assessment; instrument developers recommend the Brief Confusion Assessment Method (bCAM). |
| How to obtain | Additional information available: http://eddelirium.org/wp-content/uploads/2016/05/DTS-Training-Manual-Version-1.0-09-01-2015.pdf |
| Licensing Fee* | None |
| Languages available | English |
| Highest COSMIN** rating | In progress |
| Test Performance Characteristics | **Han 2013; Reference standard = psychiatrist assessment using DSM-IV-TR**<br>•Sensitivity (DTS alone 0.98 [95% CI 0.90-1.00]; DTS + bCAM 0.84 [95% CI 0.72-0.92])<br>•Specificity (DTS alone 0.55 [95% CI 0.50-0.60]; DTS + bCAM 0.96 [95% CI 0.93-0.97])<br>•Positive likelihood ratio (DTS alone 2.17 [95% CI 1.92-2.45]; DTS + bCAM 19.94 [95% CI 11.97-33.19])<br>•Negative predictive value (DTS alone 0.04 [95% CI 0.01-0.25]; DTS + bCAM 0.17 [95% CI 0.09-0.32])<br>•Interrater reliability (K=0.79 [95% CI 0.73-0.85]) |

* Fees and licensing information is effective as of 2018, but is subject to change over time

** COSMIN is used to rate a study's evaluation of a survey or test's measurement properties. COSMIN does NOT rate the instrument itself, but helps readers understand if they can have confidence in the results of studies evaluating measurement properties of surveys and tests. For example, a rigorous study evaluating a test with poor measurement properties will receive a "good" COSMIN rating, while a poorly-conducted study evaluating a test with good measurement properties will receive a "poor" COSMIN rating. Small sample size can impact all COSMIN ratings. You must consider both the COSMIN rating and the results of studies provided when forming your opinion about that test. *COSMIN ratings shown are based solely on the instrument's original validation study.*

**Reference:**

Han JH, Wilson A, Vasilevskis EE, Shintani A, Schnelle J, Dittus RS, et al (2013). Diagnosing Delirium in Older Emergency Department Patients: Validity and Reliability of the Delirium Triage Screen and Brief Confusion Assessment Method. *Ann Emerg Med*, 62(5):457-465. doi:10.116/j.annemergmed.2013.05.003

**Reviews:**

De, J., Wand, A.P.F. (2015). Delirium Screening: A Systematic Review of Delirium Screening Tools in Hospitalized Patients. *The Gerontologist*, 55(6):1079-1099. doi:10.1093/geront/gnv100