

## **Characteristics of Adolescent HIV Testing in Emergency Care Settings: A Systematic Review**

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**Introduction:** The CDC recommends routine HIV testing for adolescents ages 18-25 years in the emergency department (ED). Routine ED testing will reduce infection rates because many in the ED population practice high risk behaviors and awareness of diagnosis is associated with reduction in high risk behaviors. In addition, many who routinely use the ED do not have regular primary care follow up and so have few opportunities to otherwise receive HIV testing.

**Objective:** To perform a systematic review of the literature and meta-analysis of published data on the acceptance of routine HIV screening in the ED, for individuals ages 13-25 years to gauge total acceptance rates for younger patients.

**Methods:** The reviewers searched the scholarly literature indexed in MEDLINE (PubMed), Cochrane, Embase and CINAHL using a set of keywords related to routine adolescent HIV screening within an ED in the United States. A total of 12 articles are included in the review. Data were analyzed using MedCalc software for meta-analysis; summary statistics and the forest plot were created for a random effects model.

**Results:** Overall, this meta-analysis included data from 38,781 patients, ages 13-25 years. The data suggest that most adolescent patients would be amenable to HIV testing in the ED, with a mean acceptance rate of 72.6% (95% CI 56.4-86.2%). Of the 12 articles discussed, all revealed >40% acceptance rates for HIV testing in an emergency setting. Nine articles found acceptance rates of 65% or more and four studies found acceptance rates of 80% or more.

**Conclusions:** Evidence indicates that adolescents presenting to the ED are likely to accept routine HIV testing. In accordance with CDC recommendations, routine screening of adolescents in the emergency department setting appears to be feasible and successful while providing a long-term benefit to public health resource allocation and expenses.