

# Validated Screening Tools to Address Youth Tobacco Use and Dependency

The AAP recommends utilizing an evidence-based tool to screen for tobacco use and determine a patient's tobacco dependency. This resource provides information for pediatricians on validated screening tools for both tobacco use and tobacco dependency.

## Tips for Tobacco Screening

- Consider a self-administered screening questionnaire (paper or electronic)
  - They can save time during the clinical visit, especially when completed ahead of time .
  - Self-administered screening may be more effective in promoting adolescent disclosure.
- Create a more specific screener by finding out what tobacco products are most common in your community and asking about these products specifically
  - To do this, try asking your patients about the products they see at school.
- Incorporate tobacco questions into routine screening for other health behaviors
  - To save time and increase adherence, consider incorporating into existing measures (eg, S2BI, CRAFFT).
- Structure the environment to support confidentiality and encourage accurate disclosure
- Harness the electronic health record (EHR) system to support confidential and efficient screening:
  - Customize the EHR system to include standard tobacco screening questions at all health supervision visits.

## Tobacco Screening Tools

1. **CRAFFT 2.1+N**
  - a. **Origin:** Updated from the CRAFFT, a validated substance use screening tool, the CRAFFT 2.1+N includes the Hooked on Nicotine checklist (HONC) to address nicotine and tobacco use.
  - b. **Scoring:** If the patient provided an answer >"o" for the nicotine question, ask all 10 Hooked on Nicotine Checklist (HONC) questions.
  - c. **Link**
    - i. <https://craftt.org/get-the-craftt/>
2. **S2BI**
  - a. **Origin:** Developed at Boston Children's Hospital with support from NIDA, it is a substance use screening tool that informs brief interventions with teens and their families
  - b. **Scoring:** The S2BI algorithm moves patients into an intervention category.
  - c. **Link**
    - i. <https://www.drugabuse.gov/ast/s2bi/#/>

## Factors to Consider in Tobacco Dependency Screening

- Data on nicotine dependence in e-cigarette users is limited
- Data on adolescent cigarette smokers indicate that youth are uniquely vulnerable to nicotine addiction, and may become dependent more quickly than adult users
- E-cigarettes can deliver higher levels of nicotine than cigarettes, which may impact the trajectory of nicotine dependence
- Addiction/dependence is characterized by loss of autonomy: compulsive drug craving, seeking, and use that persists even in the face of negative consequences.
- When assessing a teen's readiness to quit, it may be helpful to show the teen that they are addicted to nicotine.

- Pediatricians can consider using a practice tool to assess an adolescent's level of dependence on nicotine.

## Validated Dependency Screening Tools

### 1. Hooked on Nicotine (HONC)

- Origin:**
  - i. Originally developed and validated for cigarette use and recently adapted for e-cigarette use
- Scoring:**
  - i. Tally the number of 'yes' responses, from 0-10
  - ii. Any score greater than zero indicates the user has lost some degree of autonomy over their e-cigarette use, and nicotine addiction has begun
- Link**
  - i. <https://cancercontrol.cancer.gov/hrp/tcrb/guide-measures/honc.html>
  - ii. [https://www.umassmed.edu/globalassets/attocpenn/the\\_hooked\\_on\\_nicotine\\_checklist.pdf](https://www.umassmed.edu/globalassets/attocpenn/the_hooked_on_nicotine_checklist.pdf)

### 2. E-cigarette Dependence Scale

- Origin:**
  - i. Modified from the *PROMIS Item Bank v1.0- Smoking: Nicotine Dependence for All Smokers* and adapted for adolescent e-cigarette use
- Scoring:**
  - i. Take the mean of all item scores
  - ii. Higher score indicates more dependence on nicotine
- Link**
  - i. [https://downloads.aap.org/RCE/FDS\\_Adolescent\\_Version\\_4\\_items.pdf](https://downloads.aap.org/RCE/FDS_Adolescent_Version_4_items.pdf)

### 3. Modified Fagerstrom Tolerance Questionnaire

- Origin:**
  - i. This modified version of the FTQ (Fagerstrom, 1978) assesses the level of nicotine dependence among adolescents. The instrument uses a 5-point Likert scale for all seven items, except for one item on smoking during the first two hours of the day. The original FTQ item, assessing nicotine content in the respondent's "usual" brand of cigarettes, was excluded from this adolescent version
- Scoring:**
  - i. A total score is obtained by summing raw scores, as outlined by scoring codes, for each item. Scoring codes were designed to make the scores of every individual item comparable with those of the original FTQ.
  - ii. Cut-offs, indicating level of dependence, for the total score are as follows:
    1. 0-2 = no dependence
    2. 3-5 = moderate dependence
    3. 6-9 = substantial dependence
- Link**
  - i. [Modified Fagerstrom Tolerance Questionnaire.](#)