Screening Tests

Ten different screening tests. Below is a chart with characteristics of each for easy comparison. Some tests are alcohol specific others cover alcohol and other drugs. Some are designed for self-administration and others for use in clinical interviews. Some are intended for special populations. One has been validated in diverse populations. Each test is accompanied by instructions for scoring, basic references and a link to a current bibliography. A copy of each test is available in pdf format for duplication to use in clinical settings.

<table>
<thead>
<tr>
<th>TEST</th>
<th>Sensitivity*</th>
<th>Specificity*</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% true cases</td>
<td>% all cases</td>
<td></td>
</tr>
<tr>
<td><strong>CAGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All items positive</td>
<td>100</td>
<td>37</td>
<td>4 questions</td>
</tr>
<tr>
<td>3 items positive</td>
<td>99</td>
<td>66</td>
<td>Clinical interview</td>
</tr>
<tr>
<td>2 items positive</td>
<td>89</td>
<td>81</td>
<td>To detect alcoholism</td>
</tr>
<tr>
<td>1 item positive</td>
<td>80</td>
<td>98</td>
<td>No cutoff point to differentiate dependence and abuse</td>
</tr>
<tr>
<td><strong>Trauma Scale</strong></td>
<td>81</td>
<td>68</td>
<td>5 questions</td>
</tr>
<tr>
<td>Score of 5 or more</td>
<td>95</td>
<td>98</td>
<td>Clinical interview</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To detect alcohol problems, not alcoholism</td>
</tr>
<tr>
<td><strong>MAST</strong></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Score of 5 or more</td>
<td>95</td>
<td>98</td>
<td></td>
</tr>
</tbody>
</table>
• Self-administered or interview
• To detect alcoholism

**AUDIT**

| Score of 12   | 97 | 28 |
| Score of 8   | 90 | 61 |
| Score of 2   | 25 | 97 |

Score of 12
Score of 8
Score of 2

• 10 questions
• Self-administered or interview
• To assess harmful use
• Developed by WHO
• Cross-cultural validity

**DAST**

| Score of 6 or more | 96 | 79 |

Score of 6 or more

• 28 questions
• Self-administered or interview
• To detect drug problems
• Adapted from MAST

**TWEAK**

| Score of 2 [high risk] | 73 | 64 |
| Score of 1 [moderate risk] | 70 | 66 |

Score of 2 [high risk]
Score of 1 [moderate risk]

• 5 questions
• Clinical interview
• Pregnant women; women
• To detect high risk use
• Adapted
**T-ACE**
Score of 2 or more  
86 67  
- 4 questions  
- Clinical interview  
- Designed for pregnant women; women  
- To identify high risk use  
- Adapted from CAGE

**CRAFFT**
Score of 2 or more  
94 76  
- 6 questions  
- Clinical interview  
- Designed for adolescents  
- To identify high risk use

* For the general population. Values for specific sub-populations can differ. For example, tests differ in the efficacy with specific populations -- be it adolescents, or the elderly, or women, those with psychiatric illness, or members of specific ethnic/cultural groups.

Adapted from Kinney J. Medical consequences of alcohol use. IN: Alcohol Use, Abuse and Dependence. Timonium MD: Milner-Fenwick, 1989.
1. Have you ever felt you should Cut own on your drinking?

2. Have people Annoyed you by criticizing your drinking?

3. Have you ever felt bad or Guilty about your drinking?

4. Have you had an Eye opener first thing in the morning to steady nerves or get rid of a hangover?

Scoring: One point for each positive answer.
Score of 1-3 should create a high index of suspicion and warrants further evaluation.

<table>
<thead>
<tr>
<th>Score</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80% are alcohol dependent</td>
</tr>
<tr>
<td>2</td>
<td>89% are alcohol dependent</td>
</tr>
<tr>
<td>3</td>
<td>99% are alcohol dependent</td>
</tr>
<tr>
<td>4</td>
<td>100% are alcohol dependent</td>
</tr>
</tbody>
</table>

Trauma Index

Scoring
Bibliography
Client/Chart Copy

“Since your 18th birthday:
Have you had any fractures or dislocations to our bones or joints?
Have you been injured in a road traffic accident?
Have you injured your head?
Have you been injured in an assault or fight (excluding injuries during sports)?
Have you been injured after drinking?”

Scoring: Two or more positive answers indicate probable alcohol problem.


Bibliography on Trauma Scale
**MAST:**

(Michigan Alcoholism Screening Test)

**Scoring**

**Bibliography**

**Client/Chart Copy**

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yes  no

2  1. Do you feel you are a normal drinker?

2  2. Have you ever awakened the morning after some drinking the night before and found that you could not remember part of the evening before?

1  3. Does your wife, husband or parents ever worry or complain about your drinking?

2  * 4. Can you stop drinking without a struggle after one or two drinks?

1  5. Do you ever feel bad about your drinking?

2  * 6. Do friends or relatives think you are a normal drinker?

1  7. Do you ever try to limit your drinking to certain times of the day or to certain places?

2  * 8. Are you always able to stop drinking when you want to?

5  9. Have you ever attended a meeting of Alcoholics Anonymous AA?

1  10. Have you gotten into fights when drinking?

2  11. Has drinking ever created problems with you and your wife, husband?

2  12. Has your wife, husband or other family member ever gone to anyone for help about your drinking?

2  13. Have you ever lost friends or girlfriends/boyfriends because of your drinking?
14. Have you ever gotten into trouble at work because of drinking?
15. Have you ever lost a job because of drinking?
16. Have you ever neglected your obligations, your family, or your work for 2 or more days in a row because you were drinking?
17. Do you ever drink before noon?
18. Have you ever been told you have liver trouble? Cirrhosis?
19. Have you ever had delirium tremens DTs, severe shaking, after heavy drinking?
20. Have you ever gone to anyone for help about your drinking?
21. Have you ever been in a hospital because of your drinking?
22. Have you ever been a patient in a psychiatric hospital or on a psychiatric ward of a general hospital where drinking was part of the problem?
23. Have you ever been seen at a psychiatric or mental health clinic, or gone to a doctor, social worker, or clergyman for help with an emotional problem in which drinking has played a part?
24. Have you ever been arrested, even for a few hours, because of drunk behavior?
25. Have you ever been arrested for drunk driving or driving after drinking?

Scoring:  
<=3 points, nonalcoholic;  
4 points, suggestive of alcoholism;  
5 or more, indicates alcoholism


Bibliography on MAST
1. How often do you have a drink containing alcohol?
   (Never, 0) (Monthly or less, 1) (Two to four times a month, 2)
   (Two to three times a week, 3) (Four or more times a week 4)

2. How many drinks containing alcohol do you have on a typical day when you are drinking?
   (1 or 2 drinks, 0) (3 or 4 drinks, 1) (5 or 6 drinks, 2)
   (7 to 9 drinks, 3) (10 or more, 4)

3. How often do you have six or more drinks on one occasion?
   (Never, 0) (Monthly or less, 1) (Two to four times a month, 2)
   (Two to three times a week, 3) (Four or more times a week 4)

4. How often during the last year have you found that you were not able to stop drinking once you had started?
   (Never, 0) (Monthly or less, 1) (Two to four times a month, 2)
   (Two to three times a week, 3) (Four or more times a week 4)

5. How often during the last year have you failed to do what was normally expected from you because of drinking?
   (Never, 0) (Monthly or less, 1) (Two to four times a month, 2)
   (Two to three times a week, 3) (Four or more times a week 4)

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
7. How often during the last year have you had a feeling of guilt or remorse after drinking?
   (Never, 0) (Monthly or less, 1) (Two to four times a month, 2)
   (Two to three times a week, 3) (Four or more times a week, 4)

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
   (Never, 0) (Monthly or less, 1) (Two to four times a month, 2)
   (Two to three times a week, 3) (Four or more times a week, 4)

9. Have you or someone else been injured as a result of your drinking?
   (No, 0) (Yes, but not in the last year, 2) (Yes, during the last year, 4)

10. Has a relative or friend, or a doctor or other health worker been concerned about your drinking, or suggested you cut down?
    (No, 0) (Yes, but not in the last year, 2) (Yes, during the last year, 4)

__________

**Scoring** The number for each response is the number of points. Answers for each question range from 0 to 4.

There is no set cut-off point indicating harmful use. A score of 2 or more indicates some level of harmful use.

The particular score that warrants a further evaluation, depends in part on the situation, e.g. a score of 3 for someone scheduled for surgery would clearly warrant further evaluation, although this might not be as critical for the healthy individual who is seen during a routine annual physical. However, patient education/harm reduction efforts are indicated for anyone who scores over a 1.
Sensitivity and Specificity

<table>
<thead>
<tr>
<th>Score</th>
<th>% those with score who have alcohol abuse/dependence</th>
<th>% all alcoholics with this score</th>
<th>% all alcoholics with lower score</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>97%</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>8</td>
<td>90%</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>2</td>
<td>25%</td>
<td>97%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Bibliography

DAST: Drug Abuse Screening Test

Scoring

Bibliography

Client/Chart Copy

1. Have you used drugs other than those required for medical reasons?
2. Have you abused prescription drugs?  
   yes  no
3. Do you abuse more than one drug at a time?  
   yes  no
4. Can you get through the week without using drugs (other than those required for medical reasons)?  
   yes  no
5. Are you always able to stop using drugs when you want to?  
   yes  no
6. Do you abuse drugs on a continuous basis?  
   yes  no
7. Do you try to limit your drug use to certain situations?  
   yes  no
8. Have you had "blackouts" or "flashbacks" as a result of drug use?  
   yes  no
9. Do you ever feel bad about your drug abuse?  
   yes  no
10. Does your spouse (or parents) ever complain about your involvement with drugs?  
    yes  no
11. Do your friends or relatives kw or suspect you abuse drugs?  
    yes  no
12. Has drug abuse ever created problems between you and your spouse?  
    yes  no
13. Has any family member ever sought help for problems related to your drug use?  
    yes  no
14. Have you ever lost friends because of your use of drugs?  
    yes  no
15. Have you ever neglected your family or missed work because of your use of drugs?  
    yes  no
16. Have you ever been in trouble at work because of drug abuse?  
    yes  no
17. Have you ever lost a job because of drug abuse?  
    yes  no
18. Have you gotten into fights when under the influence of drugs?  
    yes  no
19. Have you ever been arrested because of unusual behavior while under the influence of drugs?  
20. Have you ever been arrested for driving while under the influence of drugs?  
21. Have you engaged in illegal activities to obtain drugs?  
22. Have you ever been arrested for possession of illegal drugs?  
23. Have you ever experienced withdrawal symptoms as a result of heavy drug intake?  
24. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, or bleeding)?  
25. Have you ever gone to anyone for help for a drug problem?  
26. Have you ever been in hospital for medical problems related to your drug use?  
27. Have you ever been involved in a treatment program specifically related to drug use?  
28. Have you been treated as an outpatient for problems related to drug abuse?  

Scoring: Each item in bold = 1 point  

6 or more = substance use problem (abuse or dependence)


**TWEAK**

Scoring  
Bibliography  
Client/Chart Copy

1.A How many drinks does it take before you begin to feel the first effects of alcohol?  
(3 or more drinks = 2 points)

*or*

1.B How many drinks does it take before the alcohol makes you fall asleep or pass out. If you never pass out, what is the largest number of drinks that
1. Does it take more than it used to for you to get high? [Tolerance] (yes, 2 points)

2. Have you become Angry or Annoyed when others express concern about your use? (yes, 1 point)

Scoring: Three or more points is considered positive for alcoholism/heavy drinking.

Reference: Chan AWK; Pristach EA; Welte JW; Russell M. Use of the TWEAK test in screening for alcoholism/heavy drinking in three populations. Alcoholism: Clinical and Experimental Research 17(6): 1188-1192, 1993. (30 refs.)

T-ACE

Scoring
Bibliography
Client/Chart Copy
3. Have you tried to Cut down or quit? (yes, 1 point)
4. Have you had an Eye opener? (yes, 1 point)

Scoring: Two points or more indicates high-risk alcohol use.

T-ACE is a modification of the CAGE screening test and was designed for use in obstetric settings to identify at-risk drinkers.


**CRAFFT**

The CRAFFT is intended specifically for adolescents. It draws upon adult screening instruments, covers alcohol and other drugs, and calls upon situations that are suited to adolescents From: Knight JR; Sherritt L; Shrier LA//Harris SK//Chang G. Validity of the CRAFFT substance abuse screening test among adolescent clinic patients. *Archives of Pediatrics & Adolescent* 156(6) 607-614, 2002. The instrument can be viewed by visiting the link below.