

# Substance Use Education for Physical Therapists

(SCREENING, BRIEF INTERVENTION AND REFERRAL TO TREATMENT)

## University of Pittsburgh



Copyright 2016, 2015, and 2013, University of Pittsburgh. All Rights Reserved.

This project is supported by funds from the Division of Nursing (DN), Bureau of Health Professions (BHP), Health Resources and Services Administration (HRSA), Department of Health and Human Services (DHHS) under Grant D09HP25025. The information or contents and conclusions are those of the authors and should not be construed as the official position or policy of, nor should any official endorsement be inferred by, the DN, BHP, HRSA, DHHS, or the U.S. Government.

(4/2016)

## What's “low-risk” drinking?



National Institute on Alcohol Abuse and Alcoholism. (2013). Rethinking Drinking: Alcohol and your health (NIH Publication No. 10-3770) [www.rethinkingdrinking.niaaa.nih.gov](http://www.rethinkingdrinking.niaaa.nih.gov)

## What's “low-risk” drinking?

“Low risk” is not “no risk.” Even within these limits, drinkers can have problems if they drink too quickly, have health problems, or are older (**both men and women over 65 are generally advised to have no more than 3 drinks on any day and 7 per week**). Based on your health and how alcohol affects you, you may need to drink less or not at all. It's safest to avoid alcohol altogether if you are

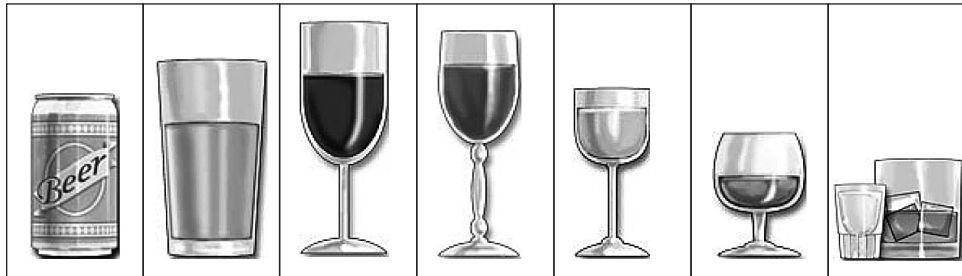
- taking **medications** that interact with alcohol
- managing a **medical condition** that can be made worse by drinking
- **underage**
- planning to **drive** a vehicle or operate machinery
- **pregnant** or trying to become pregnant

National Institute on Alcohol Abuse and Alcoholism. (2013). Rethinking Drinking: Alcohol and your health (NIH Publication No. 10-3770)  
[www.rethinkingdrinking.niaaa.nih.gov](http://www.rethinkingdrinking.niaaa.nih.gov)

# What's a Standard Drink?

*Although the drinks below are different sizes, each contains approximately the same amount of alcohol and counts as a single standard drink*

12 fl oz of **regular beer** = 8-9 fl oz of **malt liquor** = 5 fl oz of **table wine** = 3-4 oz of **fortified wine** (sherry, port etc.) = 2-3 oz of **cordial, liqueur, or aperitif** = 1.5 oz of **brandy** (1 jigger or shot) = 1.5 fl oz shot of **80-proof spirits** ("hard liquor")



about  
5% alcohol

about  
7% alcohol

about  
12% alcohol

about  
17% alcohol

about  
24% alcohol

about  
40% alcohol

about  
40% alcohol

National Institute on Alcohol Abuse and Alcoholism. (2013). Rethinking Drinking: Alcohol and your health (NIH Publication No. 10-3770) [www.rethinkingdrinking.niaaa.nih.gov](http://www.rethinkingdrinking.niaaa.nih.gov)

# EFFECTS OF HIGH-RISK DRINKING

Aggressive, irrational behaviour.  
Arguments. Violence.  
Depression. Nervousness.

Alcohol dependence.  
Memory loss.

Cancer of throat and mouth .

Premature aging.

Frequent colds. Reduced  
resistance to infection.  
Increased risk of pneumonia.

Weakness of heart muscle.  
Heart failure. Anemia.  
Impaired blood clotting.  
Breast cancer.

Liver damage.

Vitamin deficiency. Bleeding.  
Severe inflammation  
of the stomach. Vomiting.  
Diarrhea. Malnutrition.

Trembling hands.  
Tingling fingers.  
Numbness. Painful nerves.

Inflammation of the pancreas.

Ulcer.

Impaired sensation  
leading to falls.

In men:  
Impaired sexual performance.

In women:  
Alcohol use during pregnancy  
can cause a child to have lifelong  
physical or mental problems.

Numb, tingling toes.  
Painful nerves.

*High-risk drinking may lead to social, legal, medical, domestic, job and financial problems.  
It may also cut your lifespan and lead to accidents and death from drunken driving.*

Adapted from: Babor, T.F., Higgins-Biddle, J.C., Saunders, J.B., Marisieta G, Monteiro, M.G. (2001).  
The alcohol use disorders identification test guidelines for use in primary care. (2nd ed.). World Health  
Organization, Department of Mental Health and Substance Dependence.

## **Alcohol Pre-Screen:**

**How many times in the past year have you had X or more drinks in a day?**

*(X equals 5 for men and 4 for women). Reporting 1 or more occurrences of this is considered a positive result and should trigger more in-depth screening and possibly a brief intervention.*

National Institute on Alcohol Abuse and Alcoholism. (2007). *Helping Patients Who Drink Too Much: A Clinician's Guide* (NIH Publication No. 07-3769)

## **Drug Pre-Screen:**

**How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?**

*A score of 1 or more is considered a positive result and should trigger more in-depth screening and possibly a brief intervention.*

National Institute on Drug Abuse. (2011). *Screening for Drug Use in General Medical Settings: Quick Reference Guide* (NIH Publication No. 11-7384)

## **Tobacco Pre-Screen:**

**Do you currently smoke or use any form of tobacco?**

*Yes = a positive screen and should trigger more in-depth screening and possibly a brief intervention.*

Fiore MC, Bailey WC, Cohen SJ, et. al. *Treating Tobacco Use and Dependence. Quick Reference Guide for Clinicians*. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. October 2000

### 3 QUESTION AUDIT

The AUDIT-C is scored on a scale of 0-12 (scores of 0 reflect no alcohol use). In men, a score of 4 or more is considered positive; in women, a score of 3 or more is considered positive. Generally, the higher the AUDIT-C score, the more likely it is that the patient's drinking is affecting his/her health and safety. However, if the score is derived primarily for question 1, the patient is not necessarily at risk.

**1. How often do you have a drink containing alcohol?**

Never	0
Monthly or less	1
2 - 4 times a month	2
2 - 3 times a week	3
4 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 five or more drinks on one occasion?**

Never	0
Less than monthly	1
Monthly	2
Weekly	3
Daily or almost daily	4

Babor, T.F., Higgins-Biddle, J.C., Saunders, J.B., Maristela G. Monteiro, M.G. (2001). The alcohol use disorders identification test guidelines for use in primary care. (2nd ed.). World Health Organization, Department of Mental Health and Substance Dependence.

To reflect standard drink sizes in the United States, the number of drinks in question 3 was changed from 6 to 5. A free AUDIT manual with guidelines for use in primary care is available online at [www.who.org](http://www.who.org). Excerpted from NIH Publication No. 11-7805 | [www.niaaa.nih.gov/YouthGuide](http://www.niaaa.nih.gov/YouthGuide)

## FULL AUDIT: SELF-REPORT VERSION (FOLLOWING TWO PAGES)

*PATIENT: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential, so please be honest.*

Questions	0	1	2	3	4
<b>1.</b> How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
<b>2.</b> How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
<b>3.</b> How often do you have five or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
<b>4.</b> How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
<b>5.</b> How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily



Questions	0	1	2	3	4
<b>6.</b> How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
<b>7.</b> How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
<b>8.</b> How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
<b>9.</b> Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year
<b>10.</b> Has a relative, friend, doctor, or other healthcare worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year
<b>TOTAL</b>					

Babor, T.F., Higgins-Biddle, J.C., Saunders, J.B., Maristela G. Monteiro, M.G. (2001). The alcohol use disorders identification test guidelines for use in primary care. (2nd ed.). World Health Organization, Department of Mental Health and Substance Dependence.

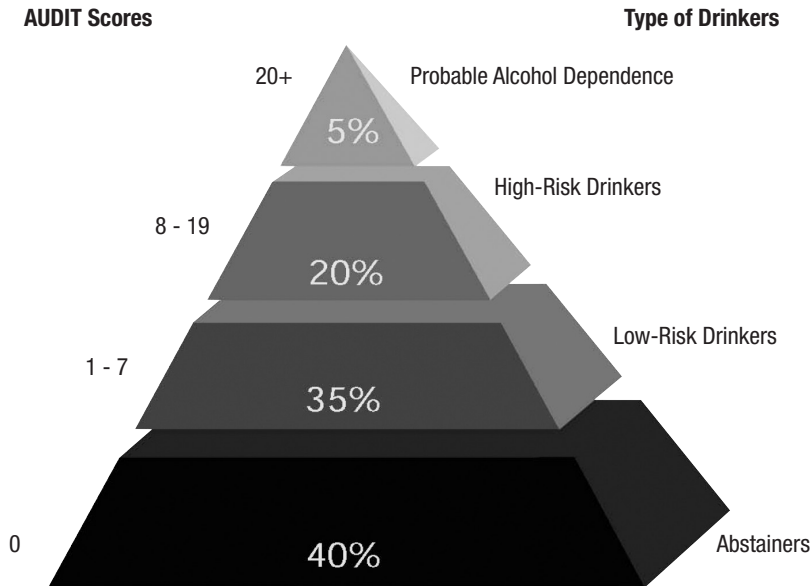
To reflect standard drink sizes in the United States, the number of drinks in question 3 was changed from 6 to 5. A free AUDIT manual with guidelines for use in primary care is available online at [www.who.org](http://www.who.org). Excerpted from NIH Publication No. 11–7805 | [www.niaaa.nih.gov/YouthGuide](http://www.niaaa.nih.gov/YouthGuide)

## AUDIT SCORING

Score	Suggested Action
0-7	Alcohol Education
8-15	Simple Advice
16-19	Simple Advice plus Brief Counseling and Continued Monitoring
20-40	Referral to Specialist for Diagnostic Evaluation and Treatment

Babor, T.F., Higgins-Biddle, J.C., Saunders, J.B., Maristela G. Monteiro, M.G. (2001). The alcohol use disorders identification test guidelines for use in primary care. (2nd ed.). World Health Organization, Department of Mental Health and Substance Dependence.

## THE DRINKERS PYRAMID



Babor, T.F., Higgins-Biddle, J.C., Saunders, J.B., Marisela G, Monteiro, M.G. (2001). The alcohol use disorders identification test guidelines for use in primary care. (2nd ed.). World Health Organization, Department of Mental Health and Substance Dependence.

## DRUG ABUSE SCREENING TEST- DAST-10

These Questions Refer to the Past 12 Months

1. Have you used drugs other than those required for medical reasons?  Yes  No
2. Do you abuse more than one drug at a time?  Yes  No
3. Are you unable to stop using drugs when you want to?  Yes  No
4. Have you ever had blackouts or flashbacks as a result of drug use?  Yes  No
5. Do you ever feel bad or guilty about your drug use?  Yes  No
6. Does your spouse (or parents) ever complain about your involvement with drugs?  Yes  No
7. Have you neglected your family because of your use of drugs?  Yes  No
8. Have you engaged in illegal activities in order to obtain drugs?  Yes  No
9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?  Yes  No
10. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding)?  Yes  No

**TOTAL:**

\_\_\_\_\_

Washington State Department of Social and Health Services. (2014). Washington State Screening, Brief Intervention and Referral to Treatment Primary Care Integration, Screening and GPRA Training Manual. Seattle, WA: Author.

## DAST SCORING

DAST-10 Interpretation (Each “Yes” response = 1)

SCORE	DEGREE OF PROBLEMS RELATED TO DRUG ABUSE	SUGGESTED ACTION
0	No Problems Reported	Encouragement & education
1-2	Low Level	Risky Behavior- Feedback & Advice
3-5	Moderate Level	Harmful Behavior- Feedback & Counseling; Possible referral for specialized assessment
6-8	Substantial Level	Intensive Assessment and referral
9-10	Severe Level	Intensive Assessment and referral

Gavin D.R., Ross H.E., Skinner H.A. (1989). Diagnostic validity of the drug abuse screening test in the assessment of dsm-iii drug disorders. *British Journal of Addiction* 84(3), 301-307.

## CAGE-Adapted to Include Drugs (CAGE-AID)

1. Have you ever felt you should **CUT** down on your drinking or drug use?  
Drinking: YES \_\_\_\_\_ NO \_\_\_\_\_  
Drug Use: YES \_\_\_\_\_ NO \_\_\_\_\_
2. Have people **ANNOYED** you by criticizing your drinking or drug use?  
Drinking: YES \_\_\_\_\_ NO \_\_\_\_\_  
Drug Use: YES \_\_\_\_\_ NO \_\_\_\_\_
3. Have you ever felt bad or **GUILTY** about your drinking or drug use?  
Drinking: YES \_\_\_\_\_ NO \_\_\_\_\_  
Drug Use: YES \_\_\_\_\_ NO \_\_\_\_\_
4. Have you ever had an **EYE OPENER** (a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover)?  
Drinking: YES \_\_\_\_\_ NO \_\_\_\_\_  
Drug Use: YES \_\_\_\_\_ NO \_\_\_\_\_

**Scoring: Regard one or more “yes” responses to the CAGE-AID as a positive screen.**

Brown, R.L., & Rounds, L.A. (1995). Conjoint screening questionnaires for alcohol and drug abuse. *Wisconsin Medical Journal* 94:135-140

## TACE

TACE was designed for use in obstetric settings to identify women who are at-risk drinkers.

**Tolerance:** “How many drinks does it take to make you feel high?”

(More than 2 drinks = 2 points)

**Annoyed:** “Have people annoyed you by criticizing your drinking?”

(Positive response = 1 point)

**Cut down:** “Have you ever felt that you ought to cut down on your drinking?”

(Positive response = 1 point)

**Eye opener:** “Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover?”

(Positive response = 1 point)

*Any score of 2 total points or higher on the TACE survey indicates a positive screen for at-risk drinking.*

Sokol, R.J., Martier, S.S., Ager, J.W. (1989). The T-ACE questions: Practical prenatal detection of risk-drinking. *American Journal of Obstetrics and Gynecology* 160(4), 863-870.

## Fagerstrom Test for Nicotine Dependence \*

Is smoking “just a habit” or are you addicted? Take this test and find out your level of dependence on nicotine.

1. How soon after you wake up do you smoke your first cigarette?

- After 60 minutes (0)
- 31-60 minutes (1)
- 6-30 minutes (2)
- Within 5 minutes (3)

2. Do you find it difficult to refrain from smoking in places where it is forbidden?

- No (0)
- Yes (1)

3. Which cigarette would you hate most to give up?

- The first in the morning (1)
- Any other (0)

4. How many cigarettes per day do you smoke?

- 10 or less (0)
- 11-20 (1)
- 21-30 (2)
- 31 or more (3)

5. Do you smoke more frequently during the first hours after awakening than during the rest of the day?

- No (0)
- Yes (1)

6. Do you smoke even if you are so ill that you are in bed most of the day?

- No (0)
- Yes (1)



Your score was:\_\_\_\_\_. Your level of dependence on nicotine is:

**0-2:** very low dependence

**3-4:** low dependence

**5:** Medium dependence

**6-7:** high dependence

**8-10:** very high dependence

**Scores under 5:** Your level of nicotine dependence is still low. You should act now before your level of dependence increases.

**Score of 5:** Your level of nicotine dependence is moderate. If you don't quit soon, your level of dependence on nicotine will increase until you may be seriously addicted. Act now to end your dependence on nicotine.

**Score over 7:** Your level of dependence is high. You aren't in control of your smoking – it is in control of you! When you make the decision to quit, you may want to talk with your doctor about nicotine replacement therapy or other medications to help you break your addiction.

REFERENCES FOR PAGES 19-20: \* Heatherton, T.F., Kozlowski, L.T., Frecker, R.C., Fagerstrom, K.O. (1991). The fagerstrom test for nicotine dependence: A revision of the fagerstrom tolerance questionnaire. *British Journal of Addictions*, 86, 1119-27.

# The CRAFFT Screening Interview

**Begin: “I’m going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential.”**

## **Part A**

**During the PAST 12 MONTHS, did you:**

	<b>No</b>	<b>Yes</b>
<b>1. Drink</b> any <u>alcohol</u> (more than a few sips)? (Do not count a few sips of alcohol taken during family or religious events)	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Smoke</b> any <u>marijuana or hashish</u> ?	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. Use <u>anything else</u></b> to get high? (“anything else” includes illegal drugs, synthetic marijuana, over-the-counter and prescription drugs, or things that people sniff or “huff”)	<input type="checkbox"/>	<input type="checkbox"/>

**For clinic use only: Did the patient answer “yes” to any questions in Part A?**

No



**Ask CAR question only, then stop**

Yes



**Ask all 6 CRAFFT questions**

© John R. Knight, MD, Boston Children’s Hospital, 2015. All rights reserved. Reproduced with permission. For more information, contact [ceasar@childrens.harvard.edu](mailto:ceasar@childrens.harvard.edu)

---

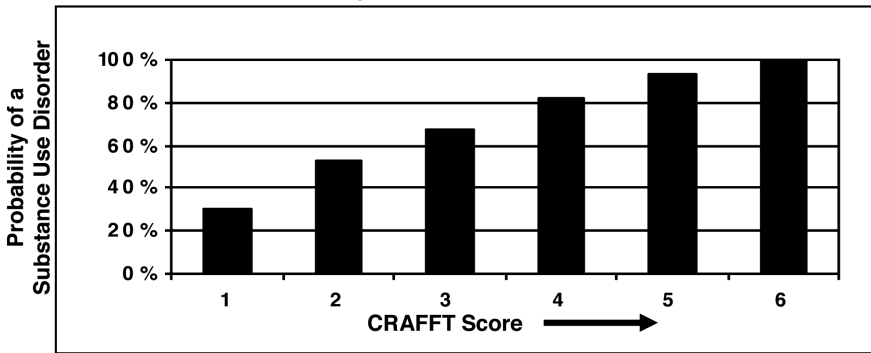
## **Part B**

- |   | <b>No</b>                | <b>Yes</b>               |
|---|--------------------------|--------------------------|
| 1. Have you ever ridden in a <b>CAR</b> driven by someone (including yourself) who was “high” or had been using alcohol or drugs? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Do you ever use alcohol or drugs to <b>RELAX</b> , feel better about yourself, or fit in?                                      | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Do you ever use alcohol or drugs while you are by yourself, or <b>ALONE</b> ?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do you ever <b>FORGET</b> things you did while using alcohol or drugs?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Do your <b>FAMILY</b> or <b>FRIENDS</b> ever tell you that you should cut down on your drinking or drug use?                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Have you ever gotten into <b>TROUBLE</b> while you were using alcohol or drugs?  | <input type="checkbox"/> | <input type="checkbox"/> |

\*Two or more **YES** answers on the CRAFFT suggest a serious problem and need for further assessment.

# 1. Show your patient his/her score on the graph

## Probability of a Substance Use Disorder



© John R. Knight, MD, Boston Children's Hospital, 2015. All rights reserved. Reproduced with permission. For more information, contact [ceasar@childrens.harvard.edu](mailto:ceasar@childrens.harvard.edu)

## 2. Talking Points for Clinician Counseling

### No Use

- Not using drugs and alcohol is a smart decision for your health. You should be proud of yourself. If that ever changes, I hope you trust me enough that we can talk about it.

### Any Use

- My recommendation as your doctor is not to use drugs or alcohol *at all*.

### CRAFFT score $\geq 2$

- I am quite concerned about you. Let's plan a follow-up meeting in about a month.

## 3. Counseling Points for All

- Alcohol and drugs can affect brain development, which continues into your mid-20s.
- Early alcohol and drug use greatly increases your risk for developing addiction, major depression, anxiety disorders, and psychotic thinking.
- Alcohol can hurt and scar your liver; marijuana can hurt your lungs
- Alcohol and drugs can cause car crashes. Marijuana impairs driving just as much as alcohol does, and its effects last longer.

## 4. Give each patient the Contact for Life <http://www.sadd.org/contract.htm#cfl>

© John R. Knight, MD, Boston Children's Hospital, 2015. All rights reserved. Reproduced with permission. For more information, contact [ceasar@childrens.harvard.edu](mailto:ceasar@childrens.harvard.edu)

## Stages of Change

1. Relevant to changing a wide range of health-related behaviors
2. Predictable sequence of stages (attitudes, intentions, behaviors)
3. Non-linear pattern of progress typical

### **BASICALLY, THE MODEL DESCRIBES 5 STAGES OF CHANGE:**

1. Precontemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance

Prochaska, J.O., & DiClemente, C.C. (1982). Transtheoretical therapy toward a more integrative model of change. *Psychotherapy: Theory, Research and Practice*, 19(3), 276-287.

## Job of Brief Interventions:

- **Raise the Subject:** “If it’s okay with you, let’s take a minute to talk about the screening questions you answered today.”
- **Provide Feedback:** “I can tell you that drinking (drug use) at this level can be harmful to your health and possibly responsible for the health problem you came in for today (and/or may interact in a harmful way with your medication).”
- **Enhance Motivation:** “On a scale of 0-10, how ready are you to cut back your use?”
  - If >0: “Why that number and not a \_ (lower number)
  - If 0: “Have you ever done anything while drinking (using drugs) that you later regretted?”
- **Negotiate Plan:** “What steps can you take to cut back your use?”

“How would your drinking (drug use) have to impact your life in order for you to start thinking about quitting or cutting back?”

Oregon Health and Science University, 2012 <http://www.sbirtoregon.org/resources/Readiness%20ruler%20-%20English.pdf>

# Components of Brief Interventions: The FRAMES Model

**F**eedback

**R**esponsibility

**A**dvice

**M**enu of options

**E**mpathy

**S**elf efficacy

Rollnick S., & Miller, W.R. (1995). What is motivational interviewing? *Behavioral and Cognitive Psychotherapy*, 23, 325-334.



# **FLO: The 3 Tasks of a Brief Intervention**

**F**eedback

**L**isten and Understand

**O**ptions Explored

Dunn, C.W., Huber, A., Estee, S., Krupski, A., O'Neill, S., Malmer, D., & Ries, R. (2010). *Screening, brief intervention, and referral to treatment for substance abuse: A training manual for acute medical settings*. Olympia, WA: Department of Social and Health Services, Division of Behavioral Health and Recovery

## READINESS RULER

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

ROLLNICK, S., HEATHER, N., GOLD, R. and HALL, W. (1992), Development of a short 'readiness to change' questionnaire for use in brief, opportunistic interventions among excessive drinkers. *British Journal of Addiction*, 87: 743–754. doi: 10.1111/j.1360-0443.1992.tb02720.x

## List Your Local Resources Here:

Institute for Research, Education and Training in Addictions

Ireta

The logo for Ireta features a stylized flame or leaf-like symbol positioned to the right of the word "Ireta". The symbol is black and has a pointed, teardrop-like shape with a small notch at the top.