

## Initiating blood work for the purpose of evaluating diagnosed or suspected alcohol use disorder

Developed in collaboration with an advisory committee consisting of Québec clinicians and experts.

### CLINICAL SITUATION OR TARGET POPULATION

Person 18 years of age or older with diagnosed alcohol use disorder (AUD) in whom alcohol withdrawal or pharmacotherapy for relapse prevention is indicated or being considered.

OR

Person 18 years of age or older being evaluated for suspected AUD, given an AUDIT<sup>1</sup> score equal or above 8, in whom alcohol withdrawal or pharmacotherapy for relapse prevention is indicated or being considered.

### CONTRAINDICATIONS TO THE APPLICATION OF THIS PROTOCOL

The presence, in the person's chart, of the results of all the laboratory tests included in the basic blood work (Table 1) performed within the past month, unless the protocol is applied in an emergency department.

### INSTRUCTIONS

#### 1. HEALTH STATUS ASSESSMENT

► **Before ordering blood work, be sure that you have:**

- Looked for a diagnosis of AUD<sup>2</sup> in the person's chart;
- Assessed and recorded his/her alcohol use, its context and its consequences using the *Alcohol Use Disorders Identification Test (AUDIT)*<sup>1</sup> (see Appendix I) if no diagnosis of AUD is mentioned in the chart;
- Read the results and the date of the previous laboratory tests that this protocol concerns (if applicable);
- Checked for the presence of STBBI risk factors<sup>3</sup>;
- Asked about any previous vaccinations;
- Checked for the presence of alcohol withdrawal symptoms: vomiting, tremors, sweating, anxiety, agitation, perceptual disturbances or disorientation;
- Taken the person's vital signs, including temperature.

► **Ask the person and record information about the following medical conditions or situations (which influence the subsequent management), if they are not already mentioned in the chart:**

- A history of severe or complicated alcohol withdrawal (e.g., seizures or delirium tremens)
- Current or past use of other psychoactive substances (e.g., benzodiazepines, GHB, opioids or psychotropic medications)
- Mental health problems or cognitive impairments
- A history of suicide attempt
- Physical health problems (especially those affecting the hepatic, renal or neurological system)
- Recent traumatic brain injury
- Malnutrition (e.g., the number of meals per day or the type of food)
- Housing insecurity or instability or a situation of vulnerability
- Medications used on a regular basis (e.g., prescription or over-the-counter)

<sup>1</sup> A score of 10 on the *Dépistage/Évaluation du Besoin d'Aide - Alcool / Assessment and Screening of Assistance Needs - Alcohol (DÉBA-Alcool)* instrument could be used in place of a score on the *Alcohol Use Disorders Identification Test (AUDIT)* score.

<sup>2</sup> Also referred to, for example, as alcohol dependence, alcohol misuse, alcoholism, alcohol addiction, substance use disorder (SUD), alcohol abuse or harmful alcohol consumption.

<sup>3</sup> For further information on STBBI risk factors and screening, consult the [Guide québécois de dépistage des ITSS](#).

## 2. LABORATORY TESTS

### Initial blood work

The following tests can be ordered to assess overall health, alcohol-related comorbidities and other conditions that could influence the choice of pharmacotherapy.

Write the appropriate request when ordering the tests listed below (except for those performed within the past month).

*! For an AST measurement, the reasons for the request must be stated. Otherwise, the request might be refused by the laboratory. An AST measurement, regardless of an abnormal ALT value, is indicated for individuals with confirmed or suspected AUD. The AST/ALT ratio calculation is useful for diagnosing alcohol-induced liver damage.*

**Table 1 — Blood tests**

BASIC BLOOD WORK	AS NEEDED, depending on the following specific clinical situations:	
<input type="checkbox"/> CBC	<input type="checkbox"/> $\beta$ -HCG	Women of child-bearing potential
<input type="checkbox"/> INR	<b>STBBI SCREENING</b>	
<input type="checkbox"/> Creatinine	Hepatitis B:	In the presence of risk factors <sup>1</sup>
<input type="checkbox"/> Electrolytes	<input type="checkbox"/> HBsAg	
<input type="checkbox"/> Magnesium	AND	
<input type="checkbox"/> Albumin	<input type="checkbox"/> Anti-HBs	
<input type="checkbox"/> Total bilirubin	Hepatitis C:	
<input type="checkbox"/> ALT	<input type="checkbox"/> Anti-HCV, if no positive serology has been documented	
<input type="checkbox"/> <b>! AST</b>	OR	
<input type="checkbox"/> Alkaline phosphatase	<input type="checkbox"/> HCV RNA screen, if documented positive anti-HCV serology	
<input type="checkbox"/> Glucose	<input type="checkbox"/> HIV	
	<input type="checkbox"/> Syphilis	

**Acronyms and abbreviations:** ALT: alanine aminotransferase; Anti-HBs: antibodies produced against the hepatitis B virus; Anti-HCV: antibodies produced against the hepatitis C virus; AST: aspartate aminotransferase; CBC: complete blood count; HBsAg: hepatitis B surface antigen; HCG: Human chorionic gonadotropin; INR: international normalized ratio; HCV: hepatitis C virus; HIV: human immunodeficiency virus.

<sup>1</sup> For further information on STBBI risk factors and screening, consult the [Guide québécois de dépistage des ITSS](#) and the table entitled [ITSS à rechercher selon les facteurs de risque décelés](#), created by the MSSS, INESSS's [STBBI-Syphilis OUG](#) or the [syphilis serodiagnostic algorithms](#) updated by the INSPQ.

### 3. FOLLOW-UP

- ▶ Discuss the reasons the tests were ordered so that the person (or family member) can understand their clinical importance.
- ▶ Read the results upon receipt and identify individuals whose condition requires a specific follow-up (abnormal test results).
- ▶ Notify the individual if the results indicate the need for further evaluation.
- ▶ Arrange for the next follow-up appointment.

### 4. SITUATIONS REQUIRING SPECIAL ATTENTION, REASSESSMENT OR FURTHER INVESTIGATION

- ▶ Seizures, delirium or an acute confusional state;
- ▶ Abnormal vital signs, including fever;
- ▶ Signs or symptoms of withdrawal;
- ▶ Critical-value laboratory test results;
- ▶ Laboratory test results outside the normal range, although not critical-value.

## REFERENCES

This protocol is based on the latest scientific data and best practice recommendations, which were enhanced with contextual information and the experiential knowledge provided by Québec clinicians and experts. For details on the process used to develop this national medical protocol and to consult the references, see the [report in support of this protocol](#).

## APPENDIX I - ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT)

The *Alcohol Use Disorders Identification Test (AUDIT)* : interview version.

Source : <https://www.who.int/publications/i/item/audit-the-alcohol-use-disorders-identification-test-guidelines-for-use-in-primary-health-care>

Read questions as written. Record answers carefully. Begin the AUDIT by saying “Now I am going to ask you some questions about your use of alcoholic beverages during this past year.”

Explain what is meant by “alcoholic beverages” by using local examples of beer, wine, vodka, etc. Code answers in terms of “standard drinks”. Place the correct answer number in the box at the right.

<p>1/ How often do you have a drink containing alcohol?</p> <p>(0) Never (1) Monthly or less (2) 2 to 4 times a month (3) 2 to 3 times a week (4) 4 or more times a week</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>	<p>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?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>
<p>2/ How many drinks containing alcohol do you have on a typical day when you are drinking?</p> <p>(0) one or two (1) three or four (2) five or six (3) seven to nine (4) ten or more</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>	<p>7/ How often during the last year have you had a feeling of guilt or remorse after drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>
<p>3/ How often do you have six or more drinks on one occasion?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>	<p>8/ How often during the last year have you been unable to remember what happened the night before because you had been drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>
<p>4/ How often during the last year have you found that you were not able to stop drinking once you had started?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>	<p>9/ Have you or someone else been injured as a result of your drinking?</p> <p>(0) No (2) Yes, but not in the last year (4) Yes, during the last year</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>
<p>5/ How often during the last year have you failed to do what was normally expected from you because of drinking?</p> <p>(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>	<p>10/ Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?</p> <p>(0) No (2) Yes, but not in the last year (4) Yes, during the last year</p> <div style="text-align: right; border: 1px solid black; width: 60px; height: 25px; margin-left: auto;"></div>

Score : \_\_\_\_\_ (maximum score = 40)