

Form Title      **Alcohol Intoxication Withdrawal, Adult ED/UCC Order Set**

Form Number   **20745Bond**

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## Alcohol Intoxication Withdrawal, Adult ED/UCC Order Set

Select orders by replacing a (✓) in the associated box

Last Name <i>(Legal)</i>		First Name <i>(Legal)</i>	
Preferred Name <input type="checkbox"/> Last <input type="checkbox"/> First		DOB <i>(dd-Mon-yyyy)</i>	
PHN	ULI <input type="checkbox"/> Same as PHN	MRN	
Administrative Gender <input type="checkbox"/> Male <input type="checkbox"/> Female		<input type="checkbox"/> Non-binary/Prefer not to disclose (X) <input type="checkbox"/> Unknown	

### Goals of Care

*Conversations leading to the ordering of a Goals of Care Designation (GCD) should take place as early as possible in a patient's course of care. The Goals of Care Designation is created, or the previous GCD is affirmed or changed resulting from this conversation with the patient or, where appropriate, the Alternate Decision-Maker. Complete the Goals of Care Designation (GCD) Order Set within your electronic system, or if using paper process, complete the Provincial Goals of Care Designation (GCD) paper form (<http://www.albertahealthservices.ca/frm-103547.pdf>)*

### Intravenous Fluid Orders

- Intravenous Cannula - Insert
- Saline lock IV, flush with 2 to 5 mL NaCl 0.9% every 12 hours

#### IV Bolus

- NaCl 0.9% \_\_\_\_\_ mL over \_\_\_\_\_ hour(s)
- lactated ringers \_\_\_\_\_ mL over \_\_\_\_\_ hour(s)

#### IV Maintenance

- NaCl 0.9% infusion \_\_\_\_\_ mL/hour, reassess after \_\_\_\_\_ hours
- lactated ringers infusion \_\_\_\_\_ mL/hour, reassess after \_\_\_\_\_ hours

### Laboratory Investigations

*The anion gap (AG) can be calculated as,  $Na^+ - (Cl^- + HCO_3^-)$  with a normal range of 4 to 12 mmol/L. An elevated gap in this population should lead clinicians to consider alcoholic ketoacidosis. The osmol gap (OG) is calculated as the difference between measured serum osmolality and calculated osmolality.  $Calculated\ osmolality = 2 \times Na^+ + glucose + urea + [ETOH \times 1.25]$  (all measured in mmol/L). A normal gap is generally less than 10 mOsm/kg. Both ketones and lactate will contribute to an osmolar gap. An unexplained gap of greater than 10 mOsm/kg could suggest a toxic alcohol co-ingestion.*

### Hematology

- Complete Blood Count (CBC)
- PT INR

### Chemistry

- |   |  |
|---|--|
| <input type="checkbox"/> Electrolytes (Na, K, Cl, CO <sub>2</sub> ) | <input type="checkbox"/> Glucose         |
| <input type="checkbox"/> Creatinine                                 | <input type="checkbox"/> Urea            |
| <input type="checkbox"/> ALT  | <input type="checkbox"/> Bilirubin Total |
| <input type="checkbox"/> GGT  | <input type="checkbox"/> Lipase          |
| <input type="checkbox"/> Calcium                                    | <input type="checkbox"/> Magnesium       |
| <input type="checkbox"/> Phosphorus                                 | <input type="checkbox"/> Albumin         |

### Blood Gases

- Blood Gas Venous
- Blood Gas Arterial

### Therapeutic Drug Monitoring and Toxicology

- |  |  |
|--|--|
| <input type="checkbox"/> Ethanol       | <input type="checkbox"/> Methanol        |
| <input type="checkbox"/> Acetaminophen | <input type="checkbox"/> Isopropanol     |
| <input type="checkbox"/> Salicylate    | <input type="checkbox"/> Ethylene Glycol |
| <input type="checkbox"/> Osmolality    |  |

Prescriber Signature	Date <i>(dd-Mon-yyyy)</i>	Time <i>(hh:mm)</i>
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<b>Laboratory Investigations (continued)</b>		
<input type="checkbox"/> Urinalysis Random <input type="checkbox"/> Pregnancy Test, Urine		
<b>Other Labs</b> (based on presentation needs of the patient)		
<input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____		
<b>Diagnostic Imaging</b>		
<input type="checkbox"/> Chest X-Ray 2 projections (posterior-anterior & lateral) <input type="checkbox"/> Chest X-Ray 1 projection: Portable (posterior-anterior) <input type="checkbox"/> CT Head (non-enhanced)		
<b>Other Investigations</b>		
<input type="checkbox"/> Electrocardiogram - 12 Lead (ECG)		
<b>Medications</b>		
Thiamine (recommended for chronically malnourished alcoholics to prevent Wernicke's)		
<input type="checkbox"/> Vitamin B1 (thiamine) _____ mg IV every 24 hours (recommended dosage 300 mg)		
<b>OR</b>		
<input type="checkbox"/> Vitamin B1 (thiamine) _____ mg PO every 24 hours (may give orally once patient tolerating regular diet, recommended dosage 300 mg)		
<b>For Wernicke's encephalopathy (oculomotor dysfunction, ataxia, encephalopathy):</b>		
<input type="checkbox"/> Vitamin B1 (thiamine) 300 mg IV every 8 hours x 3 days <b>AND THEN</b> 300 mg IV/PO every 8 hours x 5 days		
<b>Other Vitamins</b>		
<input type="checkbox"/> folic acid 1 mg PO daily for 5 days and then reassess		
<b>OR</b>		
<input type="checkbox"/> folic acid 1 mg IV daily if NPO for 5 days and then reassess		
<input type="checkbox"/> vitamins multiple with minerals 2 tabs PO every 24 hours		
<b>OR</b>		
<input type="checkbox"/> vitamins multiple 10 mL in a 1 liter bag of IV solution once (only for those with signs of obvious malnutrition)		
<b>Electrolyte Replacement</b>		
<input type="checkbox"/> magnesium sulphate 2 g IV once (consider if hypomagnesic/hypokalemic or cardiac dysrhythmia, or neuromuscular irritability)		
<input type="checkbox"/> potassium chloride 10 mmol in 100 mL sterile water x ____ doses, each bag to be infused over 1 hour		
<input type="checkbox"/> potassium chloride SR tabs 40 mmol PO once (each tab is 1500 mg = 20 mmol; 2 tablets = 40 mmol)		
<b>OR</b>		
<input type="checkbox"/> potassium chloride liquid 40 mmol PO once (each mL is 100 mg = 1.33 mmol; 30 mL = 40 mmol)		
<b>Other Medications</b>		
<input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____		
Prescriber Signature	Date (dd-Mon-yyyy)	Time (hh:mm)

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### Medications (continued)

#### Benzodiazepines

Recommend an hourly symptom-based regimen, using the Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar) score or the short scale of withdrawal severity (SHOT) to assess medication initiation/continuation. The recommended goal is to achieve light somnolence OR to achieve minimal to moderate sedation.

LORazepam is the drug of choice for the elderly, or patients with COPD or severe liver disease.

ChlordiazepOXIDE should not be used for elderly patients or those with hepatic impairment.

**\*See scoring tool on side B of this page\***

- Clinical Institute Withdrawal Assessment for Alcohol: to be completed with administration of benzodiazepines and reassess at a minimum of every 1 hour. Notify physician when CIWA-Ar score is 10 or less for 3 consecutive assessments to reassess monitoring/disposition planning.

#### Following initial assessment (loading dose recommendations):

##### If initial CIWA-Ar Score greater than 19 – Severe agitation - (choose ONE)

- diazepam 20 mg IV/PO once  
 diazepam 10 mg IV/PO once

##### AND THEN

- diazepam \_\_\_\_\_ mg IV/PO every 15 minutes PRN to achieve a CIWA-Ar less than 19;  
 reassess CIWA-Ar 1 hour following administration of first dose  
 LORazepam 4 mg IV/SL/PO once  
 LORazepam 2 mg IV/SL/PO once

##### AND THEN

- LORazepam \_\_ mg IV/SL/PO every 15 minutes PRN to achieve a CIWA-Ar less than 19;  
 reassess CIWA-Ar 1 hour following administration of first dose

##### If initial CIWA-Ar Score 10 to 19 – Moderate agitation - (choose ONE)

- diazepam 10 mg IV/PO once  
 diazepam 5 mg IV/PO once  
 LORazepam 4 mg IV/SL/PO once  
 LORazepam 2 mg IV/SL/PO once

#### For subsequent medication dosing, adjust based on hourly CIWA-Ar scores:

##### If CIWA-Ar Score greater than 19 – Severe agitation - (choose ONE)

- diazepam 20 mg IV/PO every 1 hour PRN for CIWA-Ar score greater than 19  
 diazepam 10 mg IV/PO every 1 hour PRN for CIWA-Ar score greater than 19  
 LORazepam 4 mg IV/SL/PO every 1 hour PRN for CIWA-Ar score greater than 19  
 LORazepam 2 mg IV/SL/PO every 1 hour PRN for CIWA-Ar score greater than 19

##### If CIWA-Ar Score 10 to 19 – Moderate agitation - (choose ONE)

- diazepam 10 mg IV/PO every 1 hour PRN for CIWA-Ar score 10 to 19  
 diazepam 5 mg IV/PO every 1 hour PRN for CIWA-Ar score 10 to 19  
 LORazepam 2 mg IV/SL/PO every 1 hour PRN for CIWA-Ar score 10 to 19  
 LORazepam 1 mg IV/SL/PO every 1 hour PRN for CIWA-Ar score 10 to 19

##### If CIWA-Ar Score 0 – 9 for 4 consecutive hours may switch to PRN orders - (choose ONE)

- diazepam 5 to 10 mg PO every 6 hours PRN to control residual symptoms  
 LORazepam 2 to 4 mg PO every 6 hours PRN to control residual symptoms  
 chlordiazepOXIDE 25 to 50 mg PO every 6 hours PRN to control residual symptoms

Prescriber Signature

Date (dd-Mon-yyyy)

Time (hh:mm)

### Alcohol Withdrawal Assessment Scoring Guidelines (CIWA-Ar)<sup>1</sup>

Rate on scale as indicated by numbers in each section

<p><b>Nausea/Vomiting</b>            0 – None            1 – Mild nausea and vomiting            2            3            4 – Intermittent nausea            5            6            7 – Constant nausea and frequent heaves and vomiting</p>	<p><b>Tremors</b> Patient to extend arms &amp; spread fingers            0 – No Tremor            1 – Not visible but can be felt fingertip to fingertip            2            3            4 – Moderate with arms extended            5            6            7 – Severe, even with arms not extended</p>
<p><b>Anxiety</b>            0 – No anxiety, patient at ease            1 – Mild anxious            2            3            4 – Moderately anxious or guarded, so inferred anxiety            5            6            7 – Equivalent to acute panic states seen in severe delirium or acute schizophrenic reactions</p>	<p><b>Agitation</b>            0 – Normal Activity            1 – Somewhat normal activity            2            3            4 – Moderately fidgety and restless            5            6            7 – Paces back and forth or constantly thrashes about</p>
<p><b>Paroxysmal Sweats</b>            0 – No sweats            1 – Barely perceptible sweating, palms moist            2            3            4 – Beads of sweat obvious on forehead            5            6            7 – Drenching sweats</p>	<p><b>Orientation and Clouding of Sensorium</b>            Ask: What day is this? Where are you? Who am I?            Rate on scale 0 – 4            0 – Orientated            1 – Cannot do serial additions or is uncertain about the date            2 – Disorientated to date by no more than 2 calendar days            3 – Disorientated to date by more than 2 calendar days            4 – Disorientated to place/and or person</p>
<p><b>Tactile disturbances</b> Ask: Have you experienced any itching, pins &amp; needles, burning or numbness, or a feeling of bugs crawling on or under your skin?            0 – None            1 – Very Mild itching, pins &amp; needles, burning or numbness            2 – Mild itching, pins &amp; needles, burning or numbness            3 – Moderate itching, pins &amp; needles, burning or numbness            4 – Moderate hallucinations            5 – Severe hallucinations            6 – Extremely severe hallucinations            7 – Continuous hallucinations</p>	<p><b>Auditory Disturbances</b> Ask: Are you more aware of sounds around you? Are they harsh? Do they startle you? Do you hear anything that disturbs you or that you know isn't there?            0 – None Present            1 – Very middle harshness or ability to startle            2 – Mild harshness or ability to startle            3 – Moderate harshness or ability to startle            4 – Moderate hallucinations            5 – Severe hallucinations            6 – Extremely severe hallucinations            7 – Continuous hallucinations</p>
<p><b>Visual disturbances</b> Ask: Does the light appear to be too bright? Is its color different than normal? Does it hurt your eyes? Are you seeing anything that disturbs your or that you know isn't there?            0 – Not Present            1 – Very mild sensitivity            2 – Mild sensitivity            3 – Moderate sensitivity            4 – Moderate hallucinations            5 – Severe hallucinations            6 – Extremely severe hallucinations            7 – Continuous hallucinations</p>	<p><b>Headache</b> Ask: Does your head feel different than usual? Does it feel like there is a band around your head? (<i>Do not rate dizziness or light headedness</i>)            0 – Not Present            1 – Very mild            2 – Mild            3 – Moderate            4 – Moderate severe            5 – Severe            6 – Very severe            7 – Extremely severe</p>

Adapted from Sullivan JT, Sykora K, Schneiderman J, Naranjo CA, Sellers. Assessment of alcohol withdrawal: the revised Clinical Institute Withdrawal Assessment for Alcohol scale (CIWA-Ar). Br Journal of Addict. 84(11):1353-1357.

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<b>Medications (continued)</b>		
<b>For hallucinations not controlled by adequate doses of benzodiazepines</b>		
<input type="checkbox"/> haloperidol _____ mg IM/PO/IV every _____ hour(s) PRN <b>AND</b> <i>(if required to prevent or manage a dystonic reaction to haloperidol)</i> <input type="checkbox"/> benzotropine 1 mg IM/IV once <b>OR</b> <input type="checkbox"/> benzotropine 2 mg IM/IV once <input type="checkbox"/> diphenhydrAMINE 25 mg IM/IV once <b>OR</b> <input type="checkbox"/> diphenhydrAMINE 50 mg IM/IV once		
<b>Other medications as required</b>		
<input type="checkbox"/> metocloproamide 5 to 10 mg IV/PO once and then metocloproamide 5 to 10 mg IV/PO every 4 hours PRN <b>OR</b> <input type="checkbox"/> ondansetron 4 mg IV once and then ondansetron 4 mg IV every 8 hours PRN <b>OR</b> <input type="checkbox"/> ondansetron 4 to 8 mg PO once and then ondansetron 4 to 8 mg PO every 8 hours PRN <input type="checkbox"/> lidocaine viscous 2% / antacid liquid 30 mL PO once ( <i>5 mL lidocaine viscous and 25 mL antacid liquid</i> ) <input type="checkbox"/> _____		
<b>Patient Care</b>		
<b>Monitoring</b>		
<input type="checkbox"/> Vital Signs (respiratory rate, pulse, blood pressure, temperature, oxygen saturation) <ul style="list-style-type: none"> <li><input type="checkbox"/> as per Provincial Assessment and Reassessment of Patients Guideline</li> <li><input type="checkbox"/> every _____ hour(s) <input type="checkbox"/> manual <input type="checkbox"/> automatic</li> <li><input type="checkbox"/> every _____ minutes <input type="checkbox"/> manual <input type="checkbox"/> automatic</li> </ul> <input type="checkbox"/> Glasgow Coma Scale (GCS), pupillary size and reaction to light with reassessments <ul style="list-style-type: none"> <li><input type="checkbox"/> as per local standards</li> <li><input type="checkbox"/> every _____ hour(s)</li> <li><input type="checkbox"/> every _____ minutes</li> <li><input type="checkbox"/> Notify physician if patient's GCS decreases by two or more points</li> </ul> <input type="checkbox"/> Measure and record Intake and Output every _____ hour(s)		
<b>Respiratory Care</b>		
<input type="checkbox"/> O2 Therapy @ _____ LPM via _____ to maintain O2 sat greater than or equal to 90% <input type="checkbox"/> Notify physician if O2 flow required to be increased by greater than 2 L to maintain the same level of oxygenation or if there is a progressive increase in the work of breathing		
<b>Activity</b>		
<input type="checkbox"/> Bedrest <i>(recommended)</i> <input type="checkbox"/> Activity as Tolerated <input type="checkbox"/> Other Activity: _____		
<b>Safety and Precautions</b>		
<input type="checkbox"/> Soft physical restraints <input type="checkbox"/> Remove hand sanitizer from room		
<b>Diet/Nutrition</b>		
<input type="checkbox"/> NPO <input type="checkbox"/> NPO: May Take Meds <input type="checkbox"/> Regular Diet <input type="checkbox"/> Other Diet: _____		
Prescriber Signature	Date <i>(dd-Mon-yyyy)</i>	Time <i>(hh:mm)</i>