San Francisco General Hospital
Guidelines for Inpatient Alcohol Detoxification

NOTE: This guideline is an educational tool to aid clinical decision-making, not a standard of care. This guideline should be adapted when clinical judgement indicates.

For patients whose history or presentation suggests significant risk of alcohol withdrawal, the guidelines need to be initiated as soon as possible. Obtain Substance Abuse Consult Service consultation as needed for psychosocial and referral issues; ask for physician consultation for detoxification questions (206-3157, M-F 8:30-5:00).

1. Evaluate if patient is at risk for alcohol withdrawal:
   - recent drinking history including frequency, amount and time of last drink
   - past history of withdrawal or seizures, hallucinosis, or Delirium Tremens
   - past history of needing medications for detoxification
   - concurrent use of benzodiazepines or barbiturates (may increase tolerance and risk of serious withdrawal phenomena, requiring higher benzodiazepine doses and a prolonged detoxification process)
2. General patient management concerns:
   - make sure patient is fully and adequately **hydrated**
   - **correct** Magnesium, Calcium & other **electrolyte imbalances**
   - thiamin 100 mg IM or IV qd x 1-3 days, then PO qd
   - folic acid 1 mg PO qd, multivitamin PO qd
   - if history of seizures, institute routine nursing seizure precautions
   - if withdrawal is severe or very high doses of benzodiazepines are administered, attend to **pulmonary hygiene *and consider constant observation* or *transfer to 4B* or *ICU.***
3. Assessment of Severity of Withdrawal

   The **CIWA-Ar** (**C**linical **I**nstitute **W**ithdrawal **A**ssessment of Alcohol Scale) in conjunction with the Sedation Scale is used to assess severity of withdrawal and degree of sedation. Treatment at SFGH is guided by the Alcohol Withdrawal Physician Orders based on the CIWA-Ar score.

   - **Withdrawal Prophylaxis (CIWA-Ar < 8)**

     Patients with a history suggestive of alcohol withdrawal risk who present with minimal current withdrawal symptoms (CIW A-Ar < 8) are suitable for **Withdrawal Prophylaxis**. The benzodiazepine options include oral chlordiazepoxide or oral, sublingual, intra
     levels: mild, moderate, and severe, based on assessed risk, with corresponding benzodiazepine doses. The protocol calls for **nursing assessment of sedation and withdrawal symptoms (CIWA-Ar) every six hours**. Sedation is assessed 15 minutes after a parenteral dose. The orders allow **for as needed doses ofbenzodiazepine if the CIWA-Ar score increases to > 8**. The benzodiazepine dose is held, if the sedation score> 4.
   - **Treatment of Mild Withdrawal (CIWA-Ar 8-15)**

     Patients who are experiencing mild (CIWA score 8-15) withdrawal symptoms are suitable for this protocol which uses oral chlordiazepoxide or oral, sublingual, or intravenous lorazepam. The orders are divided into **initial** and **ongoing tracks**.

     Initially, **chlordiazepoxide 50 mg or lorazepam 1 or 2 mg is given every hour times two**. Dosing is adjusted as necessary to control symptoms without excessive sedation. **The objective of the initial phase is to determine the appropriate maintenance dose of chlordiazepoxide or lorazepam to give in the ongoing treatment phase**.

     The ongoing phase doses every six hours and as needed doses, if the CIWA-Ar is 8-15. The orders **require nursing assessment of level of sedation and withdrawal symptoms (CIWA-Ar) every four hours and one-hour after each oral dose. Sedation is assessed 15 minutes after each parenteral dose**. Sedation is assessed 15 minutes after each parenteral dose. The benzodiazepine dose is held, if the sedation score> 4.

   - **Treatment of Moderate Withdrawal (CIWA-Ar 16 -25)**

     Initially, for moderate withdrawal (CIW A-Ar score 16 to 25), **chlordiazepoxide 100 mg or lorazepam 3 or 4 mg is given every hour times two**. Dosing is adjusted as necessary to control symptoms without excessive

sedation. **The objective of the initial phase is to determine the appropriate maintenance dose of chlordiazepoxide or lorazepam to give in the ongoing treatment phase**.

The ongoing phase doses every six hours and as needed doses, if the CIW A-Ar > 8. The orders **require nursing assessment of level of sedation and withdrawal symptoms (CIWA-Ar) every four hours and one-hour after each oral dose**. Sedation is assessed 15 minutes after each parenteral dose. The benzodiazepine dose is held, if the sedation score> 4.

- **Treatment of Severe Withdrawal (CIWA-Ar > 25)**

  Patients with severe withdrawal are at risk for the development of DT's (a **potentially fatal** complication). These patients must be transferred to 4B or the ICU. **IV lorazepam is given in boluses of 2 to 4 mg every 15 to 30 minutes for the first six hours until the patient is maintained at a sedation level of three**. The orders require **nursing assessment of sedation, withdrawal symptoms (CIWA-Ar) and vital signs at least every two hours. Continuous bedside respiratory and oxygen saturation monitoring is required**. Sedation is assessed 15 minutes after each IV dose. The benzodiazepine dose is held, if the patient's sedation score is >4. **In limited cases of severe withdrawal requiring frequent lorazepam boluses for at least six hours, continuous IV lorazepam infusion can be considered.**

4. General pharmacological management issues:
   - **Throughout the detoxification process, closely monitor for excessive sedation, and hold doses until sedation clears.**

   Recommended Benzodiazepines:
   - Chlordiazepoxide (Librium) - PO only. Preferred agent for prophylaxis and mild and moderate *WID.* Avoid in elderly and liver disease (decreased albumin, increased INR).

     Usual maximum dose is 600-mg/24 hr.
   - Lorazepam (Ativan) -PO, SL, IV, IM. Preferred for elderly, liver disease, NPO (SL or IV) and severe or rapidly escalating *W/D.* Do not give bolus lorazepam in doses greater than **4 mg**.
   - Do Not mix Benzodiazepines (e.g. Librium ATC with Ativan prn). Select a single agent and titrate as needed. May switch over to another benzodiazepine if indicated, e.g., Librium to Ativan if W/D is severe and escalating, requiring frequent IV dosing.

   For severe agitation, hallucinations or delusions,
   - Consider **haloperidol** 1-2 mg IM, IV, or PO q1h prn (generally not more than 5 mg/day) in addition to Benzodiazepines. Observe for extrapyramidal side effects: acute dystonic reactions, rigidity, and restlessness.

   Once the patient is stabilized for 24 hours:
   - Reduce the total 24-hour dose by 25% per day over next 2-3 days.
   - If IM or IV lorazepam was used to stabilize the patient, consider change to oral chlordiazepoxide as soon as possible.

Reference: Mayo-Smith MF. Pharmacological management of alcohol withdrawal: A Meta based practice guideline. JAMA 1997; 278:144-151.