

**SECTION: R-7**

**PROTOCOL TITLE: Sedative Overdose**

**REVISED: January 27, 2010**

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**GENERAL COMMENTS:** This protocol includes alcohol, benzodiazepines, and GHB analog overdoses. It may include other CNS depressants as well. Patient care should be focused on supporting the airway, respiratory function, and preventing/mitigating self harm. Of the sedatives commonly seen, GHB analogs are some of the most unpredictable and difficult to manage.

**BLS SPECIFIC CARE:** *See adult General Toxicological Care Protocol R-1*

- Physical restraints as necessary.
- If pediatric patient, determine patient's color category on length based resuscitation tape (Broselow Tape)
- In addition to obtaining standard medical history attempt to obtain:
  - Name of ingested substance(s)
  - Quantity ingested
  - Time of ingestion
  - Has vomiting occurred?

**ILS SPECIFIC CARE:** *See adult General Toxicological Care Protocol R-1*

**ALS SPECIFIC CARE:** *See adult General Toxicological Care Protocol R-1*

Attempt to identify co-morbid factors and other medical issues, including poly-pharmaceutical involvement, and closed head injury.  
Rule out hypoglycemia and other causes of altered mental status.

- Narcan (naloxone):
  - If concomitant opioid ingestion suspected
    - ♦ Adult:
      - IV/IO: 0.1-2 mg slowly. Repeat as needed every 1-2 minutes to a maximum of 10 mg
      - IM/IN: 2 mg (1 mg in each nare if given IN.) Repeat as needed to a maximum of 10 mg
    - ♦ Pediatric:
      - IV/IO/IM: 0.1 mg/kg to a maximum single dose of 2 mg. Repeat as needed every 1-2 minutes

*Chemical Sedation: For combative patients.*

Administer judiciously to this patient population.

Discontinue or do not administer if:

- Systolic BP < 90 mmHg. (Adult)
- Signs and symptoms of hypoperfusion are present or develop
- Respiratory rate, SpO<sub>2</sub> and/or mental status diminishes
- Contact OLMC to exceed maximum doses

- Valium (diazepam)
  - ♦ Adult: 2-5 mg every 5-10 minutes as needed to maximum of 10 mg
  - ♦ Pediatric:
    - IV/IO: 0.1 mg/kg IV every 5-10 minutes as needed to maximum of 10 mg
- Versed (midazolam) IV/IO/IM/IN
  - ♦ Adult: 0.5-2.5 mg every 5-10 minutes as needed to maximum of 5 mg
  - ♦ Pediatric:
    - IV/IM/IO: 0.05 mg/kg every 5-10 minutes as needed to maximum of 2.5 mg
    - IN: 0.2-0.4 mg/kg to maximum of 5 mg
- Haldol (haloperidol) IV/IM/IO: Adults only.
  - 2.0-5.0 mg every 5 minutes to a maximum of 10 mg
  - May possibly lower seizure threshold
  - Consider co-administration of Benadryl to mitigate possible EPS

*Anti-emetics:*

- Zofran (ondansetron)
  - ♦ Adult: 4 mg IV/IM/IO
  - ♦ Pediatric: 0.1 mg/kg to a maximum of 4 mg
- Benadryl (diphenhydramine)
  - ♦ Adult: 25-50 mg IV/IM/IO
  - ♦ Pediatric: 1-2 mg/kg to a maximum of 25 mg

**PHYSICIAN PEARLS:**

*The Sedative Toxidrome generally consists of:*

- Sedation
- Confusion
- Delirium
- Hallucinations
- Coma
- Paresthesias
- Dysesthesias
- Diplopia
- Blurred vision
- Slurred speech
- Ataxia
- Nystagmus

**GHB (Gamma-Hydroxy Butyrate) and analogs:** Onset of signs and symptoms typically 10-40 min. post ingestion, last approximately 4-8 hours, and are cleared in typically 12-14 hours post ingestion. Signs and symptoms include: bradycardia, seizure like activity, deep sedation/CNS depression with some patients showing rapid & severe mental status changes (including combativeness), nausea and vomiting. Alcohol severely exacerbates signs and symptoms

- Be prepared to forcibly restrain patient, and ensure crew safety due to the sudden return to combativeness that is common with this drug
- Intubation is seldom needed, but if required, restrain and sedate patient to protect airway from trauma and extubation
- Most GHB analog related deaths involve co-ingestion of alcohol. Therefore alcohol consumption should be considered a significant co-morbid factor.

Protocol

**R-7**

**SEDATIVE OVERDOSES**