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All feedback and suggestions are welcome. Please forward to: Clinical.Guidelines@ambulance.qld.gov.au

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**Clinical Practice Guidelines:**

**Toxicology and toxinology/Gamma-hydroxybutyrate**

<table>
<thead>
<tr>
<th>Policy code</th>
<th>CPG_TO_GH_0215</th>
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<tbody>
<tr>
<td>Date</td>
<td>January, 2020</td>
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<tr>
<td>Purpose</td>
<td>To ensure a consistent approach to the management of gamma-hydroxybutyrate poisoning.</td>
</tr>
<tr>
<td>Scope</td>
<td>Applies to Queensland Ambulance Service (QAS) clinical staff.</td>
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<tr>
<td>Health care setting</td>
<td>Pre-hospital assessment and treatment.</td>
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<tr>
<td>Population</td>
<td>Applies to all ages unless stated otherwise.</td>
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<td>Source of funding</td>
<td>Internal – 100%</td>
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<tr>
<td>Author</td>
<td>Clinical Quality &amp; Patient Safety Unit, QAS</td>
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Gamma-hydroxybutyrate (GHB) and its precursors gamma-butyrolactone (GBL) and 1,4-butanediol are recreational drugs ingested as liquids. Common street names of GHB include Fantasy, Grievous Bodily Harm (GBH) and Liquid E. [1]

Clinical features
The duration of toxic effects is short, with complete recovery expected within 4–8 hours. [1]

- Euphoria
- Drowsiness
- Myoclonus
- Agitation/Actue behavioural disturbance
- Coma
- Bradycardia
- Hypothermia
- Respiratory depression

In toxic doses there is typically a rapid onset of coma. The patient is often rousable with stimulus only to return to unconsciousness once undisturbed.

Risk assessment
- In overdose, GHB can be lethal secondary to respiratory compromise.
- Ingestion of the GHB precursor GBL can cause life-threatening acidosis. [2]

Additional information
- Myoclonic jerking movements are common and may be confused with seizure. [3]
- Coma longer than six hours duration suggests an alternate diagnosis or sedating co-ingestant. [3]
- Full recovery is expected when good supportive care is provided.

Transport to hospital
Pre-notify as appropriate

Consider:
- Oxygen
- IPPV
- IV access
- IV fluid
- Antiemetic

Ongoing imminent risk of harm?
Y
- Verbal de-escalation
- QPS assistance
- Physical restraint
- EEA

Manage as per:
CPG: Sedation – Acute behavioural disturbance

Note: Clinicians are only to perform procedures for which they have received specific training and authorisation by the QAS.