|  |
| --- |
| **Alcohol** |
| * **Common names**: Booze, liquor, drinks, cocktails, nightcaps, moonshine
* **Trade names:** Ethyl alcohol, beer, gin, rum, vodka, bourbon, whiskey, liqueurs, wine, brandy, sherry, champagne4
* **Other sources can include**: Mouthwash, hand sanitizer, vanilla extract, Chinese cooking wine, cough syrup, perfumes/ colognes/ aftershave, spray odour neutralizers, disinfectants11
 |
| **Characteristics****(Depressant)** | * Alcohol alters the function of several receptors and cellular functions, including GABAA receptors, Kir3/GIRK channels, adenosine reuptake, glycine receptor, NMDA receptor, and 5-HT39
* Effects of alcohol have a close relationship with blood alcohol levels; impaired judgment and impulsivity can occur with levels of 4-6mmol/l (20-30mg/100ml); levels of 17mmol (80mg/100ml) are associated with slurred speech, incoordination, unsteady gait, and inattention. Higher levels can intensify cognitive deficits, aggressiveness, and cause blackouts7
* Elimination is about 10g of alcohol per hour (about 30ml/one oz. of whiskey, or one bottle of beer) 7. Blood alcohol level declines by 3-7mmol/l per hour (approximately 15mg/100ml)5
* Men and Women metabolize alcohol at different rates. 12
* Alcohol metabolism is proportional to body weight (and liver weight)5
 |
| **Presentation during intoxication** | **Common signs and symptoms of intoxication can include4,5**:

|  |  |  |  |
| --- | --- | --- | --- |
| Relaxation | Loss of inhibitions | Slurred speech | Staggering gait |
| Drowsiness | Slurred speech | Flushed skin | Lack of concentration |
| Impaired attention | Slowed reflexes | Double or blurred vision |  |

**Extreme intoxication signs and symptoms may include4:**

|  |  |  |  |
| --- | --- | --- | --- |
| Inability to stand | Vomiting | Stupor | Possible coma |
| Shallow respirations | Cold clammy skin | Weak and/or rapid pulse |  |

 |
| **Monitoring and support during intoxication** | **Goal13,14:** * Prevent severe respiratory depression and aspiration of vomitus

**Monitor9,10,15*** Assess level of disorientation and if possible time of last ingestion and amount consumed
* Monitor for falls risk
* Monitor vitals every 15 minutes initially and less frequently as acute symptoms subside
* Monitor glucose levels due to risk for hypoglycemia and alcohol ketoacidosis

**Supportive Interventions9,10,15:*** Ensure a quiet private space
* Frequently orient client to reality and surroundings
* Promote fluid and food intake as tolerated
* Thiamine / Vitamin B1 may be prescribed to decrease the risk of Wernicke-Korsakoff syndrome
 |
| **Withdrawal presentation**(appears within 6-24 hours after stopping alcohol, are most severe after 36-72 hours and last for 2-10 days)**4** | **Symptoms may include1-5:**

|  |  |  |  |
| --- | --- | --- | --- |
| Increased anxiety | Agitation | Hypertension | Diarrhea |
| Insomnia | Hallucinations | Tachycardia | Seizures\* |
| Increased Irritability | Tremor and Psychomotor Agitation | Nausea and Vomiting | Delirium Tremens\* |

**Delirium Tremens (DTs) Characteristics8 :**

|  |  |  |  |
| --- | --- | --- | --- |
| Gross Tremor | Paranoid Ideation | Hyperthermia | Distractibility |
| Confusion/ Disorientation | Hallucinations | Extreme agitation or restlessness | Autonomic Instability (changes in HR/BP) |

* A medical emergency that can lead to cardiovascular collapse
* Autonomic hyperactivity may develop 48-96 hours after last drink2
 |
| **Monitoring and support during withdrawal** | **Goal**1,2**:*** Short term:
	+ Preserve respiratory and cardiovascular function
	+ Reduce the risk of DTs
* Long term15:
	+ Client will not experience injury

**Assessing for Withdrawal Severity**1,2**:*** Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA-Ar)

**Monitor**1,2**:*** Mental Status (include risk of self-harm and suicide, presence of hallucinations including tactile, agitation, anxiety)
* Physical status (including perspiration, headaches, vital signs, electrolytes)
* Risk for falls
* Hydration/Nutrition
* Sleep patterns

**Supportive interventions*** Encourage fluids and nutrition as tolerated
* Provide a calm and quiet environment
* Administer medications to treat acute symptoms of withdrawal and reduce the risk of DTs

**Medications Suggested Include**1,2**:*** Benzodiazepines(i.e. diazepam, lorazepam, chlordiazepoxide) 🡪 taper dose down as CIWA-Ar score lowers1,2
* For individuals with liver disease, accumulation of longer-acting benzodiazepines (i.e. chlordiazepoxide/Librium) may be problematic – therefore use of more shorter-acting benzodiazepines is recommended15
* Thiamine / Vitamin B1 to decrease the risk of Wernicke-Korsakoff syndrome1,3
* In cases of severe dehydration IV fluids with potassium and magnesium have been provided4
 |
| **Potential Complications** | **May include:*** **Korsakoff Syndrome/Wernicke Encephalopathy** (lack of thiamine/vitamin B1 as a result of alcohol use) 1,3
	+ Wernicke encephalopathy: confusion, loss of muscle coordination
	+ Korsakoff syndrome: memory loss, confabulation, hallucinations
* **Hallucinations**1,2
	+ Visual/auditory/tactile 🡪 12-48 hours after last drink2
* **Seizures**1,2
	+ Can occur 6-36 hours after last drink2
* **Delirium Tremens** **(DTs)** 1,2 (see above)
 |
| **Notable Drug Interactions7**  |

|  |  |
| --- | --- |
| **With Antidepressants7** | **With Opioids 7** |
| * Alcohol may exacerbate the CNS effects (i.e drowsiness, confusion, gait disturbance, dizziness, and impaired motor coordination) of tricyclic antidepressants, and cause impairment in psychomotor performance
* Alcohol may disrupt antidepressant metabolism
* Alcohol and MAOIs increase the risk of a hypertensive crisis due to tyramine content.
 | * Additional CNS effects
* Caution with excessive doses to risk of respiratory depression
* Speeds the release of some opioids into the bloodstream by dissolving the slow-release system
 |
|

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| **With Antipsychotics7** |
| * Alcohol may increase CNS effects of the antipsychotics used and worsen extrapyramidal effects.
 |

 | **With Cannabis 10*** Increased impairment of judgement
* Additive effects
 |
| **With Benzodiazepines7** |  **With Stimulants** |
| * CNS effects of benzodiazepines will be potentiated 🡪 Increased risk of respiratory depression
 | * Additive effects of stimulant
* Increased heart rate

Variable effect on blood pressure |
| **With Mood Stabilizers7** | **With GHB 7** |
| * With Lithium, increased tremors may occur with chronic alcohol use
 | * Synergistic CNS depressant effects can occur, with high doses of GHB causing respiratory depression
 |

 |
| **Psychiatric effects** | * Chronic use of alcohol induces depression and increases the risk of suicide due to alcohol-induced depression, impulsivity and lack of judgment associated with acute intoxication
* Chronic use of alcohol can also induce or exacerbate anxiety disorders and psychosis 6
* Alcohol can induce memory blackouts, nightmares, insomnia, hallucinations, paranoia, intellectual impairment, dementia, and Wernicke-Korsakoff syndrome.7
* Chronic alcohol use by clients with schizophrenia has been associated with more florid symptoms, more re-hospitalizations, poorer long term outcomes, and increased risk of tardive dyskinesia 7
 |

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