

# Alcohol Poisoning CheatSheet

	<b>Ethyl alcohol (Ethanol)</b>	<b>Isopropyl alcohol (Isopropanol)</b>	<b>Methyl alcohol (methanol)</b>	<b>Ethylene Glycol</b>
Found in:	Beverage, Cough and cold medications, Mouthwash	"Rubbing" alcohol, Mouthwash, Solvents	Paint thinner, Sterno, Photocopier fluid, Windshield-washing fluids, Shellacs	Automobile antifreeze
Intoxication?	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
Key Clinical feature?	CNS depression	Acetone => <b>fruity breath</b> & CNS depression	<b>Visual Disturbance</b>	<b>Renal failure</b> <ul style="list-style-type: none"> <li>BUN/ CR</li> <li>Calcium Oxalate crystals in the urine</li> </ul> <b>Hypocalcemia</b>
Metabolized by ADH to:	Acetaldehyde => acetate => acetyl Co A	Acetone	Formaldehyde => formic <b>acid</b>	Glycoaldehyde => Oxalic <b>acid</b> (oxalate)
Metabolic acidosis?	Usually No*	No	Yes	Yes
Increased anion gap?	Usually No*	No	Yes	Yes
Osmolar gap?	Yes	Yes	Yes	Yes
	Supportive	Toxicity and treatment resemble that of ethanol	<b>Fomepizole</b> Dialysis	<b>Fomepizole</b> Dialysis

\*Metabolic acidosis with an increased gap may occur due to production of lactic acid or hypoglycemia(ketones)

All are commonly used as an ethanol substitute.

All are initially metabolized by alcohol dehydrogenase (ADH).

Blood levels of each alcohol - is the most specific test!

- Alcohol and Isopropyl alcohol look similar **except fruity breath!**
- Isopropyl alcohol can be distinguished from Methanol and ethylene glycol because of the **absence of anion gap metabolic acidosis!**
- **Fluorescence of the urine** under Wood's lamp suggests ethylene glycol because of fluorescein, a component of antifreeze.