Methanol (CH₃OH)

Information and recommendations for patients

- Exposed or intoxicated patients do not pose a significant risk of secondary contamination.
- Ingestion of 10-15 ml methanol can cause severe systemic toxic effects, in particular irreversible blindness and central nervous system depression. Dosage of approximately 1 ml methanol/kg body weight may result in death.
- Methanol is slightly irritating when it comes in contact with the eyes, skin, and upper respiratory tract causing redness and lacrimation of the eyes, coughing and defatting and inflammation of the skin.
- Inhalation exposure to a concentration above 1000 ppm and prolonged or extensive skin contact may result in significant systemic toxicity.
- Methanol intoxication can be treated by the administration of ethanol. If conscious after ingestion of methanol, the adult patient should immediately drink alcoholic beverages, e.g. 150 ml of whiskey/brandy.

Substance information	Methanol (CH ₃ OH), CAS 67-56-1 Synonyms: carbinol, methyl alcohol, wood alcohol, wood spirit Methanol is, at room temperature, a clear, colorless, volatile and flammable liquid (boiling point 65°C, 116°F, respectively). Its mild alcohol odor can be perceived at a threshold concentration of 5 to 100 ppm. Methanol is widely used as a solvent, as an antifreeze fluid, as a fuel and as an intermediate in the manufacture of formaldehyde, acetic acid and methyl esters.
What immediate health effects can result from exposure to methanol?	Short-lasting skin or eye contact or inhalation of a methanol concentration less than 1000 ppm usually results in slight irritation only. Extended exposure or ingestion of methanol can cause nausea, vomiting, abdominal pain, and inebriation as in ethanol intoxication, but to a lesser degree. An asymptomatic latent period of 8 to 36 hours usually follows before more serious symptoms develop: headache, dizziness, vomiting, severe abdominal pain, visual disturbances which may result in blindness, periodic breathing, and coma with respiratory failure eventually leading to death. Methanol intoxication can be treated by inhibiting the formation of toxic metabolites via the administration of 4-methylpyrazole or ethanol.
Are any future health effects likely to occur?	A single small exposure from which a person recovers quickly is not likely to cause delayed or long-term effects. Immediately treated intoxication usually does not result in permanent damage. However, if visual impairment or blindness have developed, they probably will persist. Some individuals who have had serious exposures have developed permanent dysfunction of the central nervous system.

Follow-up instructions

Keep this page and take it with you to your next appointment. Follow only the instructions checked below.

- () Call your doctor or the Emergency Department if you develop any unusual signs or symptoms within the next 24 hours, especially:
 - visual disturbances: dim vision, flashing lights, grey mist sensation
 - abdominal pain
 - increased pain from eyes or skin
 - headache, dizziness, vomiting
- () No follow-up appointment is necessary unless you develop any of the symptoms listed above.
- () Call for an appointment with Dr. _____ in the practice of _____ When you call for your appointment, please say that you were treated in the Emergency Department at _____ Hospital by _____ and were advised to be seen again in _____ days.
- () Return to the Emergency Department/_____ Clinic on (date) _____ at _____ am/pm for a follow-up examination.
- () Do not perform vigorous physical activities for 1 to 2 days.
- () You may resume everyday activities including driving and operating machinery.
- () Do not return to work for _____ days.
- () You may return to work on a limited basis. See instructions below.
- () Avoid exposure to cigarette smoke for 72 hours; smoke may worsen the condition of your lungs.
- () Avoid drinking alcoholic beverages; alcohol may worsen your clinical condition.
- () Avoid taking the following medications: _____
- () You may continue taking the following medication(s) that your doctor(s) prescribed for you:
- () Other instructions: _____

Signature of patient	D	ate
Signature of physician	D	ate

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