D 1

Information and recommendations for patients

- Patients whose clothing or skin is contaminated with liquid acetic acid can cause secondary contamination of rescue and medical personnel by direct contact or through evaporation of acetic acid. Patients exposed only to acetic acid vapor do not pose a significant risk of secondary contamination.
- Acetic acid is rapidly corrosive to all tissues. Eye contact may cause severe burns and loss of vision.
 Contact with the skin may cause severe burns which may be delayed in onset. Acetic acid vapor is
 irritating to the skin, eyes, nose, throat and respiratory tract, causing irritation, coughing, chest pain
 and dyspnea. Swelling of the throat and accumulation of fluid in the lungs (shortness of breath,
 cyanosis, expectoration, cough) may occur.
- There is no antidote to be administered to counteract the effects of acetic acid. Treatment consists of supportive measures.

1. Substance information

Acetic acid (CH₃-COOH), CAS 64-19-7 Synonyms: ethylic acid, ethanoic acid

At room temperature, acetic acid is a clear, colorless liquid with a sour, vinegar-like odor. Acetic acid is used in the manufacture of acetic anhydride, cellulose acetate, acetylsalicylic acid, and chloroacetic acid. It is also used in the production of plastics, pharmaceuticals, dyes, insecticides, and photographic chemicals; as a food additive, as a natural latex coagulant; and in textile printing. Solutions of lower concentrations maybe used in disinfection applications.

What immediate health effects can result from exposure to acetic acid?

Most exposures to acetic acid occur by direct contact of the skin and the eyes with liquid acetic acid. Contact with the skin and the eyes causes severe burns which may be delayed in onset, with tearing and lacrimation of the eyes, nose irritation, sore throat and coughing. Extended exposure can cause severe breathing difficulty, which may lead to chemical pneumonia and death.

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.

Some persons who have had serious exposures have developed permanent breathing difficulty and a tendency to develop lung infections easily.

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:
 - coughing or wheezing
 - difficulty breathing or shortness of breath
 - increased pain or a discharge from exposed skin or eyes
 - chest pain or tightness

()	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 conditions.
()	Avoid taking the following medications:
	
()	You may continue taking the following medication(s) that your doctor(s) prescribed for you:
	yea
()	Other instructions:
•	gnature of patient Date
Sig	gnature of physician Date

References

Berufsgenossenschaft der chemischen Industrie, Hrsg. Reizende Stoffe/Ätzende Stoffe. Heidelberg: Jedermann-Verlag, 2006. (Merkblätter für gefährliche Arbeitsstoffe; M 004.)

Buttgereit F, Dimmeler S, Neugebauer E, Burmester GR. Wirkungsmechanismen der hochdosierten Glucocorticoidtherapie. Dtsch Med Wschr 1996; 121: 248-252.

Diller WF. Anmerkungen zum Unglück in Bhopal. Dtsch Med Wschr 1985; 110: 1749-1751.

Ellenhorn MJ, Schonwald S, Ordog G, Wasserberger J. Ellenhorn's Medical Toxicology: Diagnosis and Treatment of Human Poisoning. 2nd ed. Baltimore: Williams & Wilkins, 1997: 1083-1086.

Flomenbaum NE, Goldfrank LR, Hoffman RS, Howland MA, Lewin NA, Nelson LS. Toxicologic Emergencies. 8th ed. New York: McGraw-Hill, 1405-1416, 1064-1069, 2006.

National Library of Medicine's Toxnet system, Hazardous Substances Data Bank (HSDB), Acetic acid, HSN#: 40, 2007

National Institute for Occupational Safety and Health (NIOSH), Acetic acid, RTECS#: AF1225000, 2006.

World Health Organization (WHO), Acetic Acid. International Chemical Safety Cards, Geneva, 1997.

Foncerrada G et al, Safety of Nebulized Epinephrine in Smoke Inhalation Injury, J Burn Care Res 2017;38:396–402

Walker PGF et al, Diagnosis and management of inhalation injury: an updated review, Critical Care (2015) 19:351

Olasveengen TM, Semeraro F, et. Al: European Resuscitation Council Guidelines 2021: Basic Life Support. Resuscitation 2021, 161: 98-114



