



COLUMBIA UNIVERSITY
ENVIRONMENTAL HEALTH AND SAFETY
Post Exposure **PRINT & GO** Sheet

Formaldehyde post-exposure guidance

Created: 8/10/2016

Revised: / /

<http://ehs.columbia.edu/FormaldehydePrintAndGo.pdf>

What are print and go sheets?

Following an occupational exposure to the agent identified above, this information sheet identifies the immediate “first aid” actions that should be taken. A medical evaluation should be sought immediately following the exposure. The guidance sheet provides information that medical personnel can reference but does not provide individualized medical care or treatment. This sheet should be printed and taken to the medical provider. Also, display your Columbia University ID card while visiting the medical provider.

Agent: Formaldehyde; this includes all formaldehyde derivatives including but not limited to:

- 37% Formaldehyde
- 10% Buffered Formalin (typically 1-5% formaldehyde buffered in 1-5% methanol)
- Paraformaldehyde (crystalline)
- Paraformaldehyde solution (usually 4-10% w/v)

Routes of Exposure: Inhalation, ingestion, absorption (eyes), dermal contact

Immediate actions to be taken in the event of an exposure:

- Inhalation – Remove to fresh air. Remove source of exposure if possible. Seek medical attention if acute symptoms persist.
- Ingestion – SDS typically advises to avoid inducing vomiting; rinse mouth with water and seek immediate medical attention.
- Absorption (eyes) – Rinse eyes cautiously with water at nearest eyewash station for ten to fifteen minutes. Seek medical attention
- Dermal contact – Remove contaminated clothing and rinse affected area at deluge hose or safety shower. If skin irritation or rash occurs, seek medical attention.

Post-exposure Medical Surveillance:

If exposure occurs Mon. to Fri., 8:00 am - 4:00 pm: Employees from CUMC, Morningside and Manhattanville campuses go to the Workforce Health and Safety (WHS) clinic located at Harkness Pavilion 1 South 176 Fort Washington Ave (212-305-7590). CUMC students go to Student Health Services at 60 Haven Avenue (212-305-3400). Morningside students go to Columbia Health in the John Jay Building (212-854-7426). For after-hours exposure, go to the New York Presbyterian Hospital or Mount Sinai St. Luke's Hospital (212-523-3335) Emergency Room (ER). Give this sheet to the physician so they understand that you may have just been exposed to formaldehyde, and this is a medical emergency.

Information to be conveyed to Medical Provider – In all cases, a copy of the safety data sheet for the material used should be provided. Indicated the rough volume/weight of exposure. If air measurements were taken, provide average concentration to medical provider.

Countermeasures/tests available to Physician – Physician should consult Agency for Toxic Substances and Disease Registry (ATSDR) for Formaldehyde - <http://www.atsdr.cdc.gov/mmg/mmg.asp?id=216&tid=39>.

- There is no antidote for formaldehyde. Treat patients who have metabolic acidosis with sodium bicarbonate (adult dose = 1 ampule; pediatric dose = 1 Eq/kg). Further correction of acidosis should be guided by ABG measurements. Hemodialysis is effective in removing formic acid (formate) and methanol and in correcting severe metabolic acidosis.
- Administer supplemental oxygen by mask to patients who have respiratory complaints. Treat patients who have bronchospasm with aerosolized bronchodilators.
- Treat chemical burns as thermal burns.
- Consider gastric lavage and endoscopy to evaluate the extent of corrosive injury to the gastrointestinal tract for ingestions.



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Follow-Up Medical Surveillance – Consult ATSDR Guidelines. EH&S should conduct full accident investigation and provide follow up exposure monitoring as required and necessary in laboratory.

Documentation and Reporting – All exposure incidents must be documented and warrant an accident investigation. Any loss of limb, eye, or admittance into hospital requires a notification to OSHA within 24 hours of incident.

Additional Resources

- Columbia University Formaldehyde Exposure Control Plan - <http://www.ehs.columbia.edu/FormaldehydeExposureControlPlan.pdf>
- *Safety Data Sheets* are manufacturer specific and can be printed from ChemWatch - <https://jr.chemwatch.net/chemwatch.web/home>
- NIOSH Guide Reference - <https://www.cdc.gov/niosh/npg/npgd0293.html>

Contact information:

Environmental Health & Safety (EH&S) - Ask for an Occupational Safety Specialist. Mon. - Fri: 9 am - 5 pm. Medical Center - (212) 305-6780

Public Safety can contact an EH&S Occupational Safety Specialist after business hours. Medical Center - (212) 305-7979. Morningside - (212) 854-5555