

Print-And-Go Sheet: Phenol Post-Exposure Guidance



This information sheet identifies immediate first aid actions that should be taken following a phenol exposure.

Seek medical assistance immediately after a phenol exposure, and take this document to the medical staff providing treatment. Be sure also to display your Weill Cornell Medicine employee ID card when visiting the medical provider.

Note: This guidance document provides information that medical personnel can reference but does not give individualized medical care or treatment protocols.

How to Seek Medical Assistance

- **For exposures Monday to Friday, 8:00 am – 4:00 pm:**
 - **WCM Upper East Side Employees:** Go to the Payson House basement Workforce Health and Safety (WHS) Clinic at **1315 York Avenue** or call **212-746-4370**.
 - **Lower Manhattan Employees:** Go to the New York Presbyterian (NYP) Lower Manhattan WHS Clinic at **170 William Street, Rooms G73A and G73B** or call **212-312-5249**.
 - **Students:** Go to Student Health Services (SHS) at **230 E. 69th Street, Suite 2BB** (between 2nd and 3rd Avenue) or call **646-962-6942**.
- **For exposures after business hours:**
 - **WCM Upper East Side Employees and Students:** Go to the NYP Emergency Room at **525 East 68th Street** or call **212-472-2222**.
 - **Lower Manhattan Employees:** Go to the NYP Lower Manhattan Hospital Emergency Room at **170 William Street** or call **212-312-5070**.

Give this sheet to the physician so they understand that you may have been exposed to phenol, and that this is a medical emergency.

You can contact the NYP ER at 212-472-2222 or by dialing 2-2222 from any campus phone.

Hazard Summary

Potential phenol exposure requires immediate attention:

- **Phenol can penetrate the skin rapidly and cause severe burns.** Toxic and even fatal amounts of phenol can be absorbed through relatively small areas of skin. Due to its local anesthetizing properties, skin burns may be painless.
- **Phenol may be fatal if swallowed, inhaled, or absorbed through the skin.**

For more information, please refer to the WCM Laboratory Chemical Hygiene Plan (<https://ehs.weill.cornell.edu/sites/default/files/4.1labchp.pdf>).

Post-Exposure Medical Evaluation & Treatment

1. VERIFY THAT FIRST AID WAS PERFORMED

- **Flush skin, eyes, or mucous membranes thoroughly with large amounts of water for at least 15 minutes.**
- Do not squeeze the area of injury or use chemicals like bleach, as they are not known to be beneficial and may break down the skin's barrier function.
- **Do not wipe down the area, as this could aggravate irritation and cause chemical dispersion.**
- Have the injured individual remove and dispose of all contaminated clothing and shoes.

2. EMERGENCY PROCEDURES AND COUNTERMEASURES

- **Skin contact with phenol usually causes whitening of the skin, with deeper burns developing later if untreated. Flush the skin with large amounts of water for at least 15 minutes or until the affected area turns from white to pink.**



**Weill Cornell
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Environmental Health and Safety

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- Once the skin changes to pink, or after 15 minutes of washing, apply polyethylene glycol to the affected area, ideally during transportation to the emergency room. If polyethylene glycol is not available, flush the affected area with water for at least 30 minutes. EHS has polyethylene glycol on hand, contact EHS if you need to obtain it.
- As little as one gram of phenol can be fatal. In case of ingestion, administer a slurry of activated charcoal at 1 g/kg (the usual adult dose is 60-90 grams).**
- Victims who are conscious and able to swallow should be given 4 to 8 ounces of milk, egg whites, or gelatin solution.**
- If a patient has respiratory symptoms, administer supplemental oxygen by mask.
- If patients have bronchospasm, treat with aerosolized bronchodilators based on the patient's age and general health.

3. PERSONAL PROTECTIVE EQUIPMENT

- All personnel treating individuals exposed to phenol should wear aprons and butyl rubber or neoprene gloves to handle any affected areas.** If this PPE is not available in your work area, please contact EHS.

4. TESTING AND FOLLOW-UP

- Routine laboratories for all exposed patients include CBC, glucose, and electrolyte determinations.
- Additional studies for patients exposed to phenol include ECG monitoring and kidney function tests depending on the initial evaluation.
- Chest radiography and pulse oximetry are also recommended for severe inhalation exposure or if pulmonary aspiration is suspected.
- Urinary phenol levels above 81.5 mg/L or creatinine levels above 250 mg/g suggest overexposure.
- Because pulmonary edema or CNS effects may be delayed, patients who have suspected serious exposure should be observed and reexamined periodically for 18 to 24 hours following exposure.
- Patients who have skin or eye burns should be reexamined in 24 hours.
- Patients with significant phenol intoxication may be at risk and should be monitored for long-term CNS, gastrointestinal, cardiac, and renal damage.

Next Steps for Exposed Individual

- If evaluated at the ER, follow up with your respective campus provider** (WHS or Student Health) the following business day and complete an accident report there.
- Notify your supervisor of the incident.**
- Notify Environmental Health and Safety** so a follow-up investigation can be done to prevent similar incidents from occurring in the future and help keep the campus safe.

Contact Information

- EHS: 646-962-7233, ehs@med.cornell.edu
- NYP-ER: 212-472-2222
- Security: 212-746-0911
- Workforce Health and Safety: 212-746-4370 (NYP-Weill Cornell), 212-312-5249 (NYP Lower Manhattan)
- Student Health Services: 646-962-6942

References

- "Phenol." Office of Environmental Health and Safety, Chemical-Specific Protocols, Princeton University. <https://ehs.princeton.edu/laboratory-research/chemical-safety/chemical-specific-protocols/phenol>.
- "Medical Management Guidelines for Phenol." Agency for Toxic Substances and Disease Registry, CDC. <https://www.atsdr.cdc.gov/MMG/MMG.asp?id=144&tid=27>.