

Pool Worker Health & Safety

CHEMICAL EXPOSURES

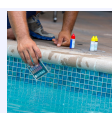
Pool workers face high risks from handling pool chemicals. Each year, **about 4,500 people** visit U.S. emergency rooms due to pool chemical injuries, and **over one-third are children under 18**. NJ Poison Control regularly responds to chemical exposure incidents at pools, with some requiring emergency medical care. **Stay safe: Always handle and store pool chemicals properly. Improper storage, mixing, or use of pool chemicals can cause burns, breathing problems, and other serious injuries.** Here are some examples:

Case #1:



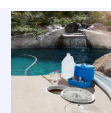
A pool worker opened a container of chlorine tablets and inhaled the fumes. He developed **coughing, shortness of breath, chest pain, and vomiting**. He was taken to the hospital and treated with **albuterol and oxygen**.

Case #2:



A lifeguard manually poured half a cup of a chlorine-based disinfectant into a pool. She began **coughing, wheezing, and experienced chest tightness**. She was later **diagnosed with asthma**, missed several days of work, and now takes asthma medications.

Case #3:



An athletic director used **muriatic acid** to lower the pool's pH. Some of the acid **splashed into her eye**. After attempting to flush it with water, she went to the emergency room, where she was treated for **corrosion of the eye**.

Help prevent incidents like these! Here's how:

- **Wear Personal Protective Equipment (PPE):** Always follow product label instructions. Use gloves, goggles, and a mask as recommended.
- **Work in a Well-Ventilated Area:** Avoid inhaling fumes by ensuring proper airflow when opening or using chemicals.
- **Always Add Chemicals to Water—Never Water to Chemicals:** Reversing this can cause a dangerous reaction.
- **Add Chemicals Separately:** Never mix different types of chlorine or pool shock. Even combining dry granules can trigger a **volatile or explosive reaction**.
- **Read Labels Carefully:** Only add chemicals directly to pool water if the label says it's safe. If it says "**dissolve before adding**," do so in a clean bucket of water first.
- **Open Only One Container at a Time:** Use up the contents of one container completely before opening another to avoid cross-contamination.
- **Add Slowly With the Pump On:** Carefully pour chemicals into the deep end while the circulation pump is running to ensure even distribution.
- **Keep Swimmers Out of the Water:** Always wait until chemicals are fully dispersed and safe levels are confirmed before allowing anyone to swim.



Keep pool chemicals away from young children!

Employers, keep your workers safe!

Train All Staff (including seasonal workers) in Pool Chemical Safety



Ensure staff know emergency response plan procedures.

- Including: spill clean-up, what to do if a worker is exposed to chemicals (including emergency decontamination),
- How to obtain medical treatment, have a phone with updated emergency numbers near the chemical storage area and pump room, and hold emergency response drills with staff.
- Only allow employees trained in safe storage and handling procedures to order, receive, stock, or use pool chemicals.
- Prohibit employees from storing or consuming food or beverages near chemicals.



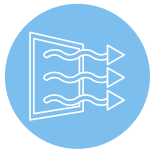
Provide Appropriate Safety Equipment

- Provide all staff with appropriate Personal Protective Equipment (PPE) such as protective eyewear and chemical-resistant gloves.
- Maintain working, easily accessible safety showers, eye wash stations, and other appropriate chemical safety equipment for all staff (and patrons).



Ensure Proper Storage of Chemicals

- Store chemicals in original, manufacturer labeled containers, and label containers that are used to dilute or transfer chemicals to avoid ingestion or improper mixing.
- Store each pool chemical separately, with only identical chemicals stacked above or below each other.
- Prohibit the use of drink containers to hold pool chemicals!



Ensure Adequate Ventilation

- Ensure adequate ventilation in the pool, chemical storage, and pump room areas.
- Follow appropriate procedures during breakpoint chlorination ("shocking" the pool). Maintain maximum fresh (outdoor) air ventilation in indoor pools during and after the addition of shock chemicals. Use fans at the pool surface to help clear out gases that form.



If a chemical exposure occurs and you need immediate assistance, contact:

NJ Poison Center Help Line:
1-800-222-1222.



Additional Resources:

- N.J.A.C. 8:26 New Jersey State Sanitary Code, Chapter 9, Public Recreational Bathing
- Protecting Pool Workers from Chemical Injuries & Illnesses (CADPH)