

Handling Pool Chemicals Safely

According to the Centers for Disease Control and Prevention (CDC), there are more than 4,000 visits to U.S. emergency rooms each year because of preventable accidents caused by the mishandling of pool chemicals. The CDC also says the three most common swimming pool chemical injuries are respiratory problems, eye injuries and skin injuries.

The Redwoods Group works with more than 400 youth-serving organizations nationwide, including many with pools. In 2015, Redwoods responded to pool chemical-related incidents such as:

Chlorine in eyes

This resulted from individuals not wearing Personal Protective Equipment (PPE), such as goggles or full clear face masks, while removing air bubbles from the tubing of chlorine pumps and feeders. After exposure, individuals did not use the designated eye wash station to flush eyes for the required 15 minutes.

Chlorine clouds

Redwoods received five reported claims in 2015 alone, all of them resulting from opening a container of chlorine or when adding the chemical to a large drum/chlorine system in a small enclosed area. Fresh air typically helps the individual recover quickly, but emergency transport is sometimes needed if the individual is not able to quickly recover breathing ability and/or if chemicals reached the eyes and were not immediately flushed in the eye wash station for the required 15 minutes.

In these particular cases, the individuals fortunately recovered and did not suffer long-term health consequences. However, this is not always the case—and it goes without saying that handling chemicals is a major responsibility. We want you to be safe and we also want you to keep everyone in our facility safe. This 10 Minute Team Talk serves as a refresher and reminder about how to stay safe while working with these sometimes dangerous chemicals.

Team Talks are intended to provide ready-to-use content for facilitated safety discussions on key topics. Whether you use this copy as an exact script, or as a set of talking points for creating your own talk, is up to you. We hope it provides a useful starting point for discussion. As always, we would love to hear feedback on how your talk goes, and what more we can do to support you in creating a true culture of safety.

The Redwoods Group

It's important to be sure that you:

NOTES

USE PPE | Keep all of your PPE in good condition, clean and stored in a convenient location, and follow instructions to ensure proper usage.

READ LABELS | Read the labels on containers and know what they mean.

UNDERSTAND SDS: WHERE & WHAT | Know the location of the Safety Data Sheets (SDS) at our facility.
Read and become very familiar with the SDS.

STORE CHEMICALS SAFELY | Store the chemicals properly in a cool, dry area with adequate ventilation.
Store chlorines and bromines separate from acids. Store all fuels in a separate location from pool chemicals.

While the majority of injuries reported are related to pool chemicals such as chlorine and muriatic acid, other pool chemicals can also result in eye, lung and skin exposure that requires medical treatment. Additionally, exposure can result in eczema-type symptoms, and may require the person to wear gloves any time they handle pool chemicals in the future. Even simple tasks like taking out the trash can result in exposure if chemicals were disposed of improperly.

Of course, you should always be sure to only use the chemical for its intended purpose.

The SDS also outlines the correct PPE—like gloves, an apron, goggles, face shield or respirator—to be used when handling the chemical. If a respirator is needed, please follow protocols for fit, testing and cleaning.

When you open any dry or pelletized product, please open very carefully and be sure you are properly protected by goggles and respirator if required by SDS. Remember that moisture may have unintentionally been introduced into either the container or the hopper on the equipment so that opening will release a chlorine cloud.

When dispensing any dry product, utilize goggles and a particulate mask to prevent air currents from blowing the material into your eyes or lungs.

For your own personal safety and the safety of those around you, please be sure to have the appropriate emergency eyewash and shower in the immediate area.

Let's take a quick true or false quiz to review.

True or False

Chemicals should be stored in a closed area.

FALSE – Chemicals should be stored in a cool, dry and well-ventilated area.

You don't need to wear goggles or protective gear if you've been working with chemicals for more than five years.

FALSE – You should always wear protective gear!

It's okay to store acids and chlorine on the same pallet.

FALSE – You should provide proper separation between chlorine and acids when storing.

You should read and understand the labels on the containers.

TRUE

SDS stands for Swimming Delivery System.

FALSE – SDS stands for Safety Data Sheets

Let's take some time for discussion or questions

- Can someone tell me where we keep our SDS?
- What should you do if you can't find the SDS?