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The Pool Safety & Sanitation
Newsletter of the Alexandria
Health Department

The Lifeline



People moving around recreational water facilities are often distracted by the varied and numerous activities occurring within them. As a pool operator, you need to maintain constant vigilance over hazardous conditions that increase the risk of slips, trips, and falls to everyone—patrons, workers, and visitors—at your facility. You also must take active measures to eliminate or at least reduce exposure to hazardous conditions until they can be eliminated.

According to the US Occupational Safety & Health Administration (OSHA):

Slips, trips, and falls constitute the majority of general industry accidents. They cause 15% of all accidental deaths, and are second only to motor vehicles as a cause of fatalities.[†]

To help prevent slips, routinely check for areas where liquids have been spilled or water is pooling on walking surfaces. Pay particular attention inside bathhouses or other locations with tiled walking surfaces. Shampoos, soaps, and lotions spilled on wet tile floors create especially treacherous conditions.

Keep the perimeter of your pool clear of unnecessary obstacles. Minimize the risk of someone tripping and falling into a body of water by maintaining at least five feet of clearance between the pool edge and objects such as chairs, tables, and landscaping planters. Store hoses neatly away from the pool perimeter and all walking areas, not left draped across a deck and into a pool, even if that pool needs to be filled frequently. Mind where you place your rescue tube and gear.

Do not leave your water chemistry test kit or its components where someone could bump into or trip over them. Reagent bottles become dangerous rollers if accidentally stepped on, so keep them away from walking surfaces. Be sure that all poles used for cleaning, as well as the body hook, are stored safely away.

Keep doorways, exits, stairways, and walkways free of all obstacles.

If you cannot eliminate a hazardous condition, keep others away from it and post a warning sign to alert others of its presence, then immediately notify your supervisor or property manager about the condition so it *can* be eliminated.

[†]Walking/Working Surfaces, US Occupational Safety & Health Administration (OSHA). Accessed June 12, 2012 at <http://www.osha.gov/SLTC/walkingworkingsurfaces/index.html>.

Notes on Using Cyanuric Acid

Did you know that half the chlorine in your pool water can be destroyed by the sun's UV light in less than one hour? Cyanuric acid, sometimes called stabilizer, can help free chlorine residual levels remain three to ten times longer. Alexandria prohibits the use of cyanuric acid in indoor pools and limits the use in outdoor pools to no more than 50 parts per million.

Cyanuric acid has no disinfection property, can lead to an increased risk of algae, and has been shown to increase the amount of time it takes to kill cryptosporidium—a common cause of recreational water illness. In this way, cyanuric acid is a double-edged sword: It can help keep the disinfectant in the water at appropriate levels for longer periods of times, but it can also reduce disinfection and oxidation potential at elevated levels. It is also important to note that cyanuric acid does not function as a stabilizer for bromine, and **if you use cyanuric acid to stabilize your chlorine you will need to keep the free chlorine at least 2.0 ppm instead of the normal minimum of 1.0.**

There is not an effective chemical to lower the cyanuric acid level, so adding the stabilizer slowly over the course of several days is an appropriate way to not add too much. If you find that your pool is over 50 ppm you must partially or totally drain the water and replace with fresh potable water. For optimum chlorine protection and a decreased risk of lengthened inactivation times of common bacteria and viruses that cause recreational water illnesses, try and maintain your pool between 30 and 50 parts per million.

"So remember, take care of your test kit and it will last longer and save money."

Proper Care of the Water Test Kit

Your pool water test kit requires care and attention to keep it in the best condition possible. If the test kit is not cared for properly, it will deteriorate or stain and then a new kit must be purchased. After performing the tests required for your pool or spa, rinse the comparator with clean water. About once a week clean the inside of the comparator test cell with a small brush to dislodge any debris or color that may be left behind by the reagents. The kit should be stored in a cool, dry location; never store the kit or the reagents in a chemical storage room. Once the comparator is cracked or stained it must be replaced as the staining may interfere with your test results. The reagents also have a shelf life that you must consider. The reagents in dark or amber bottles will be the ones that deteriorate first. The DPD reagents (R-0871 for the titrating test, and R-0002 for the regular 5 drop test) are supposed to come out of the bottle clear. When the reagent goes bad, the color of the reagent will be pink when it comes out of the bottle—do not assume that just because you have recently purchased your reagents that there are no problems with them. We have had pool operators using "new" reagents that were bad and it will give you an incorrect reading. For the titrating test, the jar of powder should be white and should be replaced if it turns gray or black. So remember, take care of your test kit and it will last longer and save money.