

## THE IMPORTANCE OF SWIMMER HYGIENE

By the PHTA Recreational Water Quality Committee

MOST SWIMMERS ARE aware
of the work of pool operators in maintaining high quality water, but many fail to realize the role they play in keeping pool water safe and healthy. Swimmers can help maintain high quality pool water and reduce the spread of waterborne diseases by practicing good "swimmer hygiene." For example, it is important that swimmers shower before entering the pool, avoid urinating and defecating in the pool and stay out of the pool while sick with diarrhea.

The Water Quality \& Health Council first probed the topic of swimmer hygiene in a public survey in 2009, addressing formerly taboo subjects such as "peeing" and "pooping" in the pool. Following a public campaign in the summer of 2009 , the WQHC published its survey results in 2011. Among other findings, the survey revealed that $47 \%$ of Americans admit to unhygienic behaviors in public pools, including $17 \%$ admitting to urinating in the pool and $35 \%$ admitting to foregoing a preswim shower.

A 2012 public survey published by the WQHC found that $68 \%$ of Americans do not always shower before entering the swimming pool and $44 \%$ view a pre-swim shower as unnecessary.

## RED EYES AND SWIMMER'S EAR

Pool water chemistry is affected by bather inputs, such as urine, perspiration, fecal material, body oils and cosmetics. Nitrogen containing substances, such as urine and perspiration, combine with free chlorine in the water to produce irritant chloramines. Bathers often mistakenly attribute the effects of chloramines (e.g., red, irritated eyes and itchy skin) to "too much" chlorine in the water, where bathers assume the level of chlorine in the pool was too high.

The fact is poor swimmer hygiene is a contributing factor to the concentration of chloramine. Impurities brought into the water by swimmers can deplete free chlorine levels, endangering swimmers' health by exposing them to waterborne pathogens.

For example, swimmer's ear is an infection of the ear canal that can develop when bacteria-contaminated pool water enters and remains in the ear canal, providing conditions conducive to bacteria growing and infecting the skin. CDC reported in 2011 that swimmer's ear infections accounted for 2.4 million doctor visits and nearly $\$ 500$ million in annual healthcare costs between 2003-2007.

And, while a common urban myth holds that pools contain a dye that
reddens the water around people who urinate, the real indicator of urine in the water is the red eyes of swimmers.
(It should be noted that most common waterborne pathogens, including the bacteria that cause swimmer's ear, are destroyed when using an EPA-registered sanitizer and free chlorine levels are maintained between 1 and 4 ppm .)

## ENCOURAGING GOOD SWIMMER HYGIENE

Health department codes promote good swimmer hygiene by encouraging a pre-swim shower and ensuring clean, sanitary, accessible shower and restroom facilities (including diaperchanging stations) supplied with toilet paper and soap or hand sanitizer. A 2012 Dutch study found a 6o-second shower eliminates the majority of contaminants on the human body. Additionally, frequent bathroom breaks for children and adults can help reduce urinating and defecating in the pool.

The WQHC recommends swimmer hygiene education be included in all organized swim lessons and school health classes. Pool staff can help raise the level of awareness among swimmers of the importance of good hygiene by displaying educational posters, such as those available from the CDC.

