

Public Watchdogs

As patrons become more aware of water and air quality issues, they are increasingly challenging operators and operational standards. And the CDC couldn't be happier. | by Michael J. Beach

The 2007 swim season has nearly closed and the following question arises: What important issues are public health officials focusing on for the future? *Cryptosporidium's* chlorine resistance has resulted in its emergence as the leading cause of diarrheal illness outbreaks in U.S. swimming pools, transforming how we think about future RWI prevention activities — and what role patrons can play.

Recurring problems with chlorine-sensitive germs also force us to reflect on existing prevention activities. For the decade 1995 to 2004, 28 percent to 38 percent of diarrheal illness outbreaks were caused by germs such as *giardia*, *shigella*, *toxigenic E. coli* and *norovirus*, which are reasonably sensitive to chlorine disinfection. Spa-associated outbreaks primarily result from infection with chlorine-sensitive bacteria such as *pseudomonas* or *Legionella*.

Clearly, these outbreaks are

preventable under current standards, underscoring the need for improved operation. Furthermore, in a 2002 survey, 8.3 percent of 22,000 pool inspections and 11 percent of 4,500 spa inspections resulted in immediate pool or spa closure to protect public health.

What can be done to improve this poor level of operation and prevent future outbreaks? With infrequent pool inspections and high employee turnover rates at many aquatics facilities, what mechanisms are available to improve operation, ensure needed operator training, and protect the public? How can we drive the message home to operators that water quality and health are critically intertwined?

Mandated operator certification is one side of the coin. The other side is creating an aware, informed and activist swimmer or parent population that could raise the bar of oper-

ation. These informed and activist swimmers, by virtue of daily attendance, would increase daily operator-patron interactions concerning water quality and other potential RWI prevention measures. Basic human nature suggests that the prospect of these daily interactions with patrons would stimulate increased operator vigilance.

Why create an aware, informed and activist public? The 20th century saw improvements in water quality due to new disinfection methods and technology, and pool operation codes that outlined the best practices for assuring swimmers' health and safety.

However, these 20th century changes were done behind the scenes without the involvement or understanding of the general public. One result of this is uninformed consumers with:

- Little perception of the risk or behaviors associated with the spread of RWIs

- Unrealistic water quality expectations (such as believing pool water is essentially sterile)

- A belief that chlorination works instantly and on all microbes

- No knowledge of their role in RWI prevention.

The 21st century's RWI prevention plan requires that we engage swimmers and create a cadre of informed consumers who understand the health ramifications of public bathing, appropriate hygiene measures and the operational parameters needed for reducing risk. After all, who, besides the operator and staff, is at the pool every open hour of every day? Swimmers and parents.

How will these activist swimmers promote change? As illustrated in the 2006 comic strip "Rose is Rose," the activist swimmer will be:

- Observant — can they see the main drain in the deep end?



NOT SO FUNNY? This popular comic strip demonstrates the activist attitude an increasing number of parents have regarding water quality and other aquatics issues.

■ Proactive — teach themselves about RWIs, pass that information to others, let the pool management know that action is needed, check the water for adequate chlorine and pH levels using available tools such as test strips

■ Inquisitive — asking if the operator or staff has specialized training or is certified, how often water quality is measured and how the facility performed on the last inspection.

The Centers for Disease Control's 2006 decision to recommend that consumers check chlorine and pH levels (for example, use test strips) has caused some angst for the aquatics community. For high-performing operators, swimmer activism presents an opportunity to sell safety and RWI prevention by continuing to set an example of excellence. For low performers, it can be a wake-up call about their critical role in prevention and the needs of their patrons.

The benefits of having a core group of swimmers (or parents) who are engaged and savvy about basic pool operation and water quality requirements are at least twofold. First, it would send a strong signal to aquatics personnel and other swimmers

that optimal operation and water quality are a critical, 24/7 activity. Second, it could lead to improved swimmer behaviors that are vitally needed to reduce the incidence of people swimming while ill with diarrhea;

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this is also essential for reducing the ongoing *crypto* problem.

Consumer activism is nothing new and will be a natural outcome as swimmers become increasingly knowledgeable about RWIs and prevention issues. Evidence of this expanding awareness has been visi-

ble recently in popular culture through numerous comic strips and videos illuminating water quality and fecal contamination issues, and highlighting the communal bathing nature of public swimming. The industry has already jumped into the market with new test strip products that are targeted, along with sunglasses and sunscreen, directly to swimmers.

Clearly, change is coming. The challenge is to ensure that public health and the aquatics sector partner to create clear and understandable messages that will inform and support future consumer activism and increase the potential for improved nationwide operation, increased safety and reduced risk for RWI outbreaks. ■

Conference Connection



Michael J. Beach will present a seminar about recreational water illnesses, especially in relation to indoor facilities, at the 2007 Waterpark Resorts Leadership & Development Conference Nov. 26-27 in Orlando, Fla. For more information or to register, go to www.wrldconference.com.