

HOSPITALITYLAWYER.COM PRESENTS
**THE 2011 HOSPITALITY LAW
CONFERENCE**
FOCUSING ON LEGAL, SAFETY & SECURITY SOLUTIONS
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Managing Risk in Pools, Spas, and Workout Facilities

Presenter



- Maria Bella, AFOIT, CPOI, LGI
- One of only four Aquatic Facility Operator Instructor Trainers in the world.
- Served on the Centers for Disease Control Model Aquatic Health Code Technical Committee focused on Risk Management and Safety.
- Contracted by the National Drowning Prevention Alliance to write the curriculum for their national pool technician training program, funded by the Consumer Product Safety Commission.

Swimming leads the way

- Swimming related cases are among the top two producers of significant jury awards or settlements in Sports Injury Litigation.
- Lawsuits related to recreation have risen steadily during the past 30 years and are expected to continue to increase in the future.

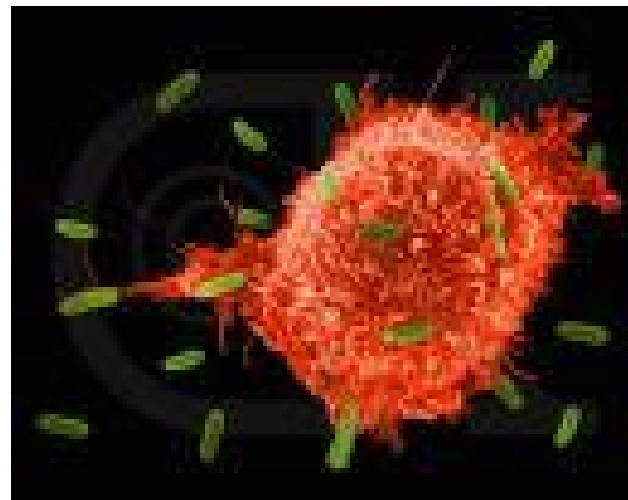
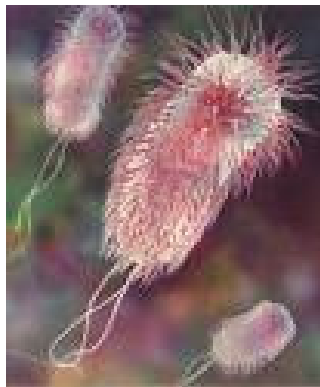
Recreational Water Illness

- CDC found health and safety violations at 21,561 of 22,131 aquatic facilities inspected between May and September of 2002.
- Hotel hot tubs contributed to a significant number of those violations.

Disease transmission

Sanitation ≠ Sterilization

Contact
Ingestion
Inhalation



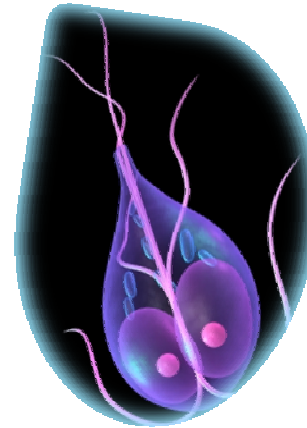
C. hominis 2,307 cases

An outbreak of Cryptosporidium was traced to a water spray park with interactive fountains. Samples in 495 of 572 people tested positive for Cryptosporidium. Typing of 147 isolates identified them as C. hominis, which identified the source as human contamination.

The facility used chlorine and sand filters.

Water samples collected from the site contained C. hominis oocysts.





The investigation showed that an improper circulation design that allowed water to bypass the filtration and chemical treatment system was one cause of this disease outbreak.



Legionella

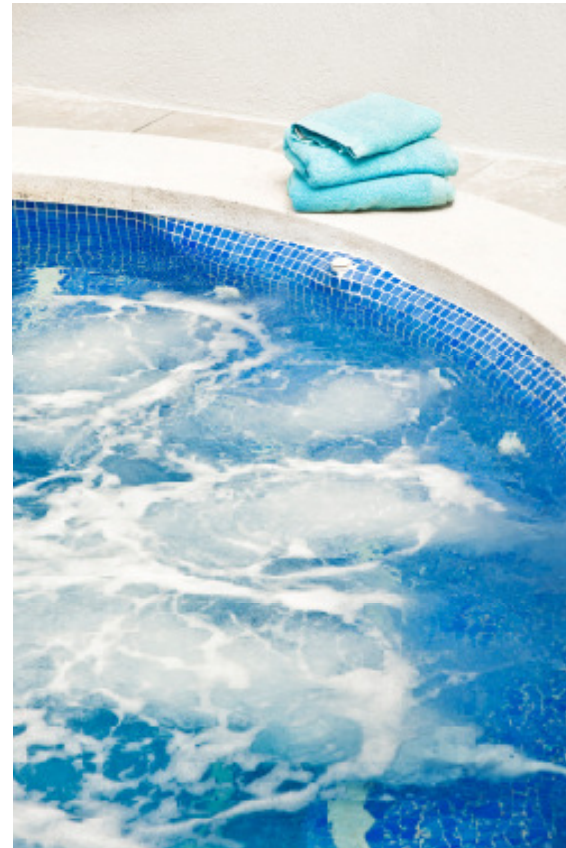


The CDC estimates that there are between 8,000 & 18,000 cases of Legionellosis in the U.S. every year.

A small % comes from recreational water venues.

Legionella

- Legionella become trapped in the bubbles from blowers. When the bubbles break the surface, they burst and release droplets that contain Legionella.



Legionella

- Patrons in the area inhale the droplets into their lungs.
- **Legionella bacteria have NOT been found in aquatic facilities that are properly maintained.**



Disease transmission prevention

- Use an EPA-registered disinfectant/sanitizer
- Follow the label directions and maintain the specified level of disinfection at ALL times
- Maintain the pH between 7.2 and 7.4
- Perform regular oxidation and water replacement

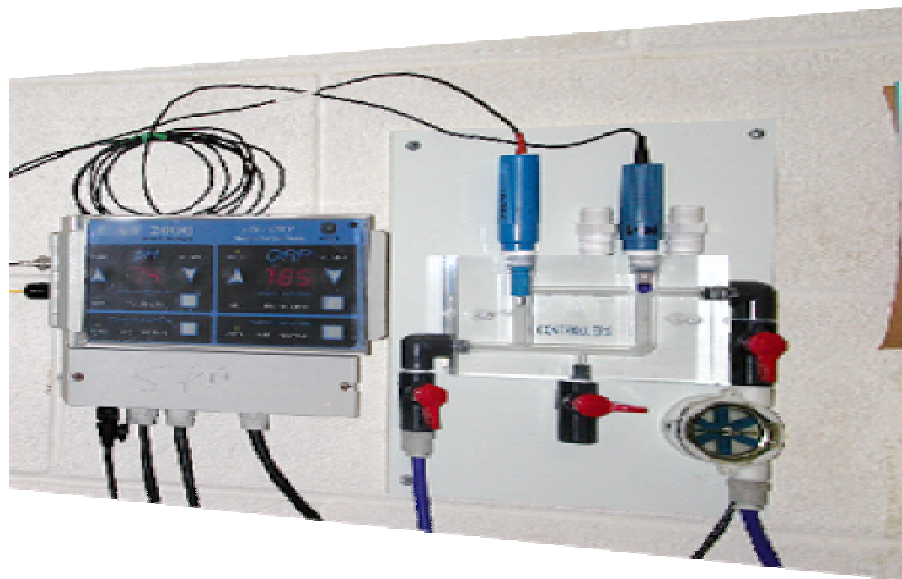
Disease transmission prevention

- Even when a pool or spa is not in use, it is important to maintain a sanitizer residual and to provide circulation to move the sanitizer throughout the system.
- Features that have been out of operation even for a short time should be cleaned, treated, and adequately flushed before use.



Chemical control

- Reduces liability



- Reduces operational costs

American Society of Plumbing Engineers

- Untreated pool water is an environment that encourages the rapid growth of organisms. Continual treatment of this water is necessary to prevent the development of a health hazard.
- Water quality must equal or exceed the standards set by the appropriate authorities.

Chemical Exposure

- The indoor aquatic environment will develop airborne contaminants if proper water treatment and air exchanges are not maintained.
- **The amount of fresh air that must be introduced to prevent health problems is dependant upon design and usage patterns.**

Indoor Air Quality

- An employee's designated position within a facility can result in increased exposure.
- Similarly, individuals pre-disposed to respiratory disease are at higher risk in improperly designed or poorly operated aquatic facilities.



Lifeguard Lung

Hypersensitivity Pneumonitis

Symptoms include lack of appetite, fever, tiredness, night sweats, cough, shortness of breath, tightness of chest and weight loss.

Exposure to respirable aerosol particles

Compared to background levels in air:

- fountains and waterfalls have been shown to cause a 1.4 fold increase in respirable aerosol particles
- the addition of a slide or flume causes a 2.3 fold increase
- the use of multiple spray devices in a facility can result in a 5.2 fold increase in respirable particle levels, and an 8 fold or greater increase in endotoxin levels.

Air Handling

Ventilation system

- Installation
- Sizing
- Location, location, location



Chlorine Gas Exposure

Chlorine and acid are common chemicals used in aquatic facilities. When injected individually into an operating circulation system, these chemicals enter the water in a safe and controlled manner.

Failure of a circulation pump while chemical pumps remain active will result in chlorine and acid coming into contact prior to dispersion. This results in chlorine gas being created and released into the facility when the circulation systems comes back on-line. Staff and patrons in the facility will suffer from breathing difficulties and chemical burns to the respiratory system.



Chemical Exposure Sources



Chemical Handling

Staff who are required to work with chemicals used at aquatic facilities must:

- Be trained in protocol for handling, storage, label identification and emergency response procedures for themselves and co-workers
- Be provided with personal protective equipment (PPE's) appropriate to the types of chemicals used on-site



vs.



vs.



Diving



National Swimming Pool Foundation

Any person who manages, operates, owns, builds, repairs or is responsible for an aquatic venue must abide by all pertinent local, state and federal laws, as well as regulations, codes-of-practice and standards of design and operation.



Clear message



Drowning is the 2nd leading cause of death for children ages 1 to 14



Drowning



Suction Entrapment

Girl disemboweled by pool drain wins \$30.9 million settlement

By Kim Gamel

Associated Press

RALEIGH, N.C. — A girl who was disemboweled when her bottom became pinned to the drain of a kiddie pool will receive a total of \$30.9 million under a settlement announced Tuesday.

Most of Valerie Lakey's small and large intestines were sucked out in the 1993 accident. The girl, now 9, spends at least 11 hours a day being fed intravenously.

On Monday, a state jury awarded the family \$25 million in compensatory damages, the biggest personal-injury verdict in North Carolina history. The jury was to begin deciding whether to award punitive damages when the maker of the drain cover, Sta-Rite Industries of Delavan, Wis., agreed to a

settlement adding \$5.9 million more.

"It was in the best interest of Valerie to get the medical expenses taken care of immediately," said family attorney John Edwards.

Sta-Rite will pay \$25 million, while other parties, including Wake County and Medfield Area Recreation Club, agreed to pay \$5.9 million.

Valerie, then 5, was playing in the recreation club's wading pool in Cary when she became stuck against the drain cover. Her father, David, and three other adults could not dislodge her, and turning off the pump failed to ease the pressure.

The Lakeys argued that Sta-Rite failed to put sufficient warnings on its drain covers.

Sta-Rite contended the cover was installed incorrectly.

Construction & Maintenance



Design in
operational ease
& cost savings

Fitness Equipment

- 3' clearance on all sides OUTSIDE of equipment movement zone
- In-house cleaning staff trained by manufacturer's rep
- Quarterly maintenance performed by equipment vendor.

Risk Management



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