

Abstract/ by Louis S. Fruia M.Ed.

The Problem: Swimming is the third most popular exercise activity in the U.S., increasing the potential for recreational water illnesses. Since 1983, the CDC has published surveillance summaries entitled Morbidity and Mortality Weekly Reports that focus on public health and a range of risk factors and health conditions. Waterborne-disease outbreaks at recreational aquatic facilities are part of that surveillance. The data shows that Class “C” facilities are the largest health code violators. The situation is so critical that the CDC is suggesting that individuals perform their own tests before entering recreation water venues. The shocking reality is that operators and those that service, lifeguard, instruct, manage and coach which, for our purpose, will be classified as aquatic professionals at Class “A, B and D” facilities lack the skills to be diligent of the danger. The worse case scenario is playing out in the headlines and now in the courtrooms. What makes matters worse? All groups’ to the person deny their part, their role and, responsibility to solve the problem.

Reporting Period: This study reflects outbreaks between 2001 to 2002, surveillance data for public spa and pool inspections in the United States from May to September 2002, and a review of the publications used in the training of aquatic professionals and correspondence with leading aquatic organizations while researching this topic.

Description of the system: A review of curricula used to educate and certify aquatic professionals; did not show that a disease transmission course correlated to RWIs existed. While training in blood borne-disease transmission is critical to many educational groups and is supported by the Occupational Health and Safety Organization (*OSHA*) under Federal law, all are unaware that the same federal law covers a new emerging treat to aquatics, water borne-disease transmission under the “*General Duty Clause*”. In addition, many Health Departments are unable to properly monitor and enforce health and safety codes if they even exist in the state, because of a lack of resources resulting in poor levels of service and difficulties in insuring water quality. One example is among competitive certification programs, US-Diving references RWIs as a hazard in their coach training program, US-Swimming and the American Swimming Coaches Association do not, resulting in those certifying groups graduating candidates’ that lack critical knowledge.

Results: The 2001-2002 MMWR report, identified pathogens in (83.5%) of 65 outbreaks and confirmed that in 30 outbreak cases involving gastroenteritis, 50% involved the chlorine resistant RWI “*Crypto*”, and 60% of all outbreaks occurred in treated facilities. Twenty-seven states were identified as the source affecting 2,536 cases. Five states had averaged more than four outbreaks and during an inspection of 22,131 pools and 5,209 spas; (8.3%) of the pools and (11%) of the spas were recommended for immediate closure. Case studies of these 65 outbreaks showed seven outbreaks infected 405 athletes (16% of those infected) the source was a series of hotel/motel pools and spas where teams had stayed during competition. The outbreak was expanded when these athletes infected more than 150 competitors at a competition because they entered the competitive pool without showering after leaving the hotel/motel spa and pool.

Interpretation: While RWIs may be described, or referenced in some courses certified candidates’ graduate into field lacking knowledge about conditions that impact the cause, method of transmission and their prevention. The lack of governmental standards has

resulted in poor quality and unsafe pools and spas. This lack of knowledge is clearly represented by the CDC data. Aspiring aquatic professionals like lifeguards, swimming instructors, swimming and diving coaches, and those trained to operate and maintain aquatic facilities clearly are not prepared to understand disease transmission because they do not connect the possibility that infection can occur outside of their aquatic venue where they practice, lifeguard or teach and work.

Recommended Action: First: US-Swimming, US-Diving, and American Swimming Coaches Association expand the current certification process to include a training module on water related disease transmission or RWIs for short. **Second:** The educational organizations such as the National Recreation and Park Association, National Swimming Pool Foundation, Association of Pool and Spa Professionals and Red Cross and YMCA must collaborate with the Centers for Disease Controls' Healthy Swimming Program to insure that operators, service technicians' lifeguards, swim instructors, managers receive the training and information they need to understand how and the why people get sick and the maximize the tools necessary to prevent RWI infection for there own protection and those who they service or use their facilities.

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Presentations:

2006 International Pool and Spa Exposition "*Aquatics War with RWIs*"

2006 Southern District American Alliance for Health, Physical Education Recreation and Dance" *Aquatics War with RWIs*"

Association Pool and Spa Professionals: Recreational Water Quality, Service, Education, and Hot-tub Committee and Councils "*Aquatics War with RWIs*"

2006 National Environmental Health Association Conference: "*Developing an RWI Training Module a key to Health and Public Safety*"

Publications:

Contributor: APSP Hot -Tub Service Technician Manual "Recreational Water Illness".

Aquatics International: "*Best Offence*" Nov 2005

American Swimming Coaches Association- Fellows Project: "*Aquatics War with RWIs*"

American Swimming Coaches Association- Newsletter: "*Aquatics War with RWIs*", issue3, 2006