

# NASCO SAFETY BULLETIN



NATIONAL AQUATIC SAFETY COMPANY

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Title: **Chlorinated Water Can Cause  
Asthma Attacks**

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Arthur J. Williams, MD, of the Sport Science Institute of South Africa recently presented a paper to the American College of Sports Medicine's annual meeting in Indianapolis about the effect of high levels of swimming pool chlorination on breathing. The study found that 60 percent of the swimmers who participated in the study suffered from airway constriction after swimming only six to eight minutes in a highly chlorinated pool. This condition is known as exercise-induced bronchoconstriction (EIB) or exercise-induced asthma. Dr. Williams recommended that swimmers who have breathing problems use pools where the chlorine levels are kept below 0.5 PPM rather than concentrations as high as 2.0 PPM.

Chet Jacobson, Director of Operations at NASCO and a nationally known expert on the management of aquatic facilities, points out that Dr. Williams' recommendation doesn't address the regulations controlling chlorine levels in many states. Many states require a minimum chlorine level of 1.0 PPM or 2.0 PPM. This is due to the hazards associated with low chlorine levels in regard to properly sanitizing the water. While a private home pool might be able to lower the chlorine levels to less than .5 PPM, a public pool or water facility would be in violation of the law. However, Mr. Jacobson feels that Dr. Williams' research is a very important addition to our knowledge of the effect our aquatic attractions may have on the people who use them.

### **What This Means To The Recreation Industry:**

Guards and water attendants should be trained to recognize if a person is having breathing problems and then to move them away from the chlorinated water as soon as possible. If a guest is having breathing problems or an asthma attack, sitting them down beside the chlorinated pool or water attraction may contribute to their breathing problem. In an indoor pool or water park, this means that the guest has to be moved outside into the fresh air or an interior area where the air quality is not affected by the chlorinated water.

NOTE: The source of the information on Dr. Williams research is WEB MD <http://www.webmd.com/> and Chet Jacobson, Director of Operations for the National Aquatic Safety Company.