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Swimming Lessons Do Not Increase Drowning Risk in Young Children *Study Allays Concern that Lessons Could Increase Risk by Reducing Parental Vigilance*

Providing very young children with swimming lessons appears to have a protective effect against drowning and does not increase children's risk of drowning, reported researchers at the National Institutes of Health.

The researchers state that the findings should ease concerns among health professionals that giving swimming lessons to children from ages 1 to 4 years might indirectly increase drowning risk by making parents and caregivers less vigilant when children are near bodies of water.

"Swimming lessons are appropriate for consideration as part of a comprehensive drowning prevention strategy," said Duane Alexander, M.D., director of the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD), the NIH Institute at which the study was conducted. "Because even the best swimmers can drown, swimming lessons are only one component of a comprehensive drowning prevention strategy that should include pool fencing, adult supervision, and training in cardiopulmonary resuscitation."

The findings appear in the March Archives of Pediatrics and Adolescent Medicine. The study's first author was Ruth A. Brenner, M.D., M.P.H., at the NICHD's Division of Epidemiology, Statistics and Prevention Research when the study was conducted. Other authors of the study were Gitanjali Saluja Taneja, Denise L. Haynie, Ann C. Trumble, and Mark A. Klebanoff, also of the Division of Epidemiology, Statistics and Prevention Research; Ron M. Klinger, Westat Inc, and Cong Qian, Allied Technology Group, Inc.

To conduct the study, the researchers analyzed medical examiner and coroner records and interviewed families of children who drowned. The children ranged from 1 to 19 years of age. The researchers compared characteristics of each child who drowned to another child of the same sex and age who did not drown, and who lived in the same geographic area. The study analysis was confined to locations having relatively large numbers of drowning deaths and in which investigations of drowning were routinely conducted. Information on drowning deaths was obtained from the states of Maryland and North Carolina, 14 districts in Florida, three counties in California, one county in Texas, and one county in New York.

Of the 61 1-4 year olds who drowned, 2 (3 percent) had received swimming lessons. In contrast, 35 of 134 the children who did not drown (26 percent) had taken swimming lessons. Dr. Brenner said that the statistical methods she and her coauthors used to interpret the data suggest that swimming lessons provided some protection against drowning. It was not possible to calculate the exact extent of that protective effect.

"From our calculations, we are confident that swimming lessons do not increase drowning risk in this age group and likely have a protective effect," Dr. Brenner said.

In the 5- to 19- year- old group, 27 children and youth had drowned, of which 7 had taken swimming lessons (27 percent). Of the controls, 42 of 79 had swimming lessons (53 percent). The findings suggested that swimming lessons were protective in this age group as well, but the differences between the two groups were not statistically significant.

Dr. Brenner noted that swimming lessons alone are not enough to protect a child from drowning.

"In our study, many of the children who drowned, particularly in the older age group, were relatively skilled swimmers," she and her coauthors wrote in the article.

The researchers added that 48 percent of drowning victims aged 5 to 19 years could swim 50 feet or more and 58 percent could swim continuously for at least a minute.

"Parents and caregivers who choose to enroll their children in swimming lessons should be cautioned that this alone will not prevent drowning and that even the most proficient swimmers can drown," the study authors wrote.

The authors concluded that their findings indicate that swimming lessons could appropriately be considered for inclusion as part of a

complete prevention program, along with fencing for pools, appropriate adult supervision, and training in cardiopulmonary resuscitation for parents and caregivers.

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The NICHD sponsors research on development, before and after birth; maternal, child, and family health; reproductive biology and population issues; and medical rehabilitation. For more information, visit the Institute's Web site at <http://www.nichd.nih.gov/>.

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