

**D1**

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**Case-Control Study on the Association and Location of Drowning-Related Deaths Among Children with Autism**

Autism spectrum disorder (ASD) is a neurodevelopmental condition characterized by social and communication deficits affecting one in 36 children diagnosed by the age of eight years. This is an increase from the year 2000, when the new autism diagnosis prevalence was one in 150 children (1). Evidence suggests that there is excess mortality due to unintentional injury including drowning that disproportionately impacts autistic children. Drowning is the leading cause of death from unintentional injury among children aged one to four years and the second leading cause among children five to fourteen years of age (2).

This study aims to use a case-control study to determine if drowning is significantly associated with autism using the National Vital Statistics System from 2010 to 2020. The study will also determine if the rates of excess deaths vary by type of water source (e.g., bath, swimming pool, natural body of water, etc.).

This research hypothesizes that, consistent with previous studies, injury mortality due to drowning is increased in individuals with an autism diagnosis. This work will expand the literature by assessing whether these findings are consistent across various water sources to aid in tailoring appropriate interventions to ameliorate drowning risk in this population.