

Autism Spectrum Disorder and Water Safety

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Objectives

Participants will...

- Define Autism Spectrum Disorder
- Recognize the increased risk of unintentional death due to drowning
- Describe ways to support and facilitate swim instruction and water safety with children with ASD
- Learn strategies to implement with children with ASD in swim lessons, programs, and camps.

Prevalence

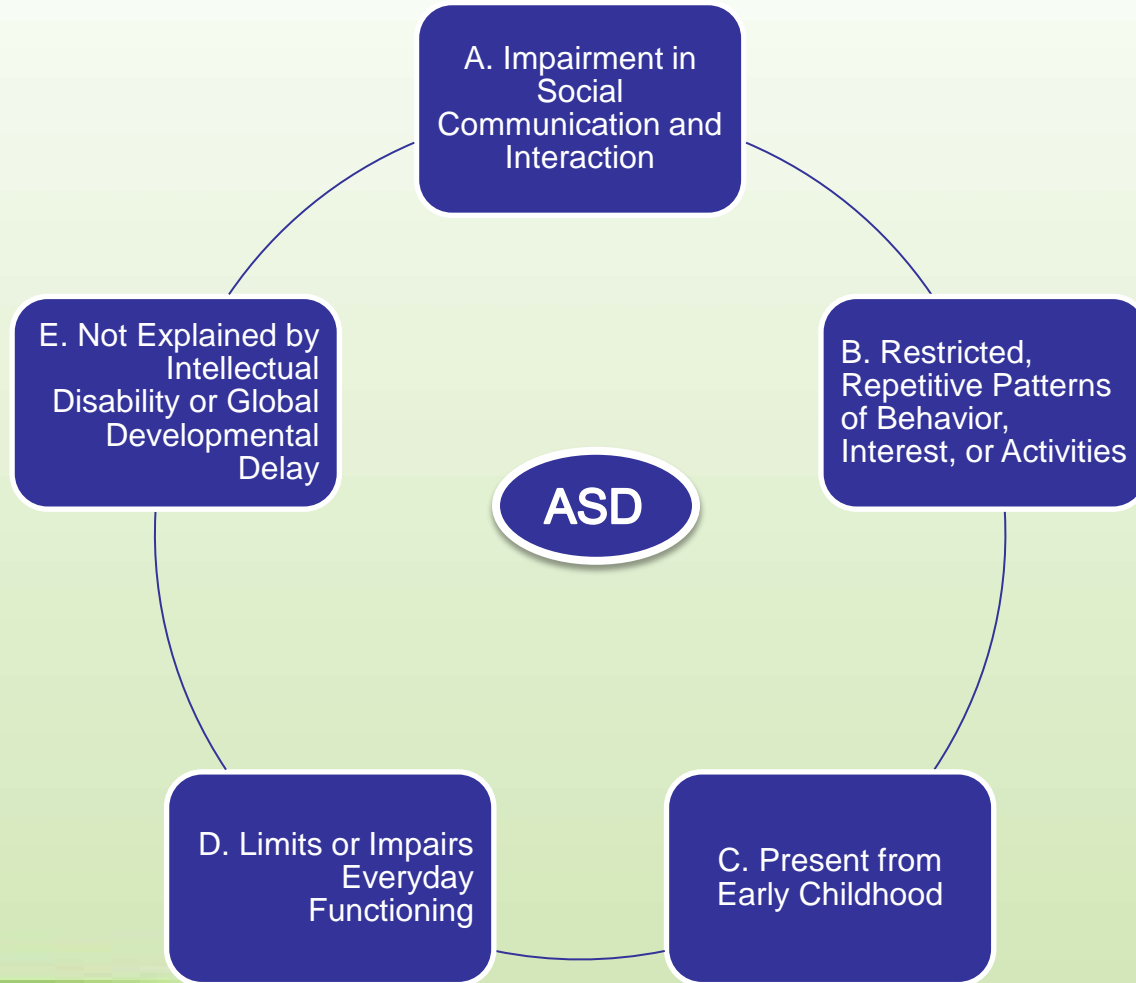
- CDC estimates that 1 in 68 children has been identified with an ASD.
- ASDs are almost 5 times more common among boys (1 in 42) than among girls (1 in 189)
- ASD occurs in all racial, ethnic, and socioeconomic groups

*Prevalence of Autism Spectrum Disorders — Autism and Developmental Disabilities Monitoring Network, 14 Sites, United States, 2008

*Surveillance Summaries, March 30, 2012 / 61(SS03);1-19

*This data comes from the Autism and Developmental Disabilities Monitoring (ADDM) Network, which estimated the number of 8-year-old children with ASDs living in 14 communities

Features of Autism Spectrum Disorder



Drowning Statistics

- 2nd leading cause of unintentional injury death for children ages 1 - 14 years, and the 5th leading cause for people of all ages
- Leading cause of injury death for young children ages 1 to 4, and three children die every day as a result of drowning
- For every person who dies from drowning, another four persons receive care in the emergency department for nonfatal drowning

ASD and Drowning

- From 2009-2011, accidental drowning accounted for 91% total U.S. deaths reported in children with ASD under the age of 14 as a result of wandering and elopement
- Individuals with ASD are drawn to water
- Risk of drowning persists into teens, unlike typically developing peers

Elopement

- Defined as when an individual with a development disability walks or runs away, wanders, escapes, or otherwise leaves a safe environment unsupervised or unnoticed. Elopement is a dangerous and sometimes deadly situation
- 48% of children with an ASD attempt to elope from a safe environment

Why do they elope?

- Enjoys exploring (54%)
- Heads for a favorite place (36%)
- Escapes demands/anxieties (33%)
- Pursues special topic (31%)
- Escapes sensory discomfort (27%)

IAN survey results from parents of children who eloped

Drowning

- Can occur in less than 20 seconds
- Can occur in less than 2 inches of water
- Dry Drowning

Signs of Drowning

- Unable to make noise and call for help
- Upright in water with no evidence of kicking
- Unable to bring arms above water to wave for help
- Head forward with mouth at water level or head back with mouth open
- Glassy, unfocused, or closed eyes
- Hair covering eyes or forehead

Minimize Risk

- Identify and be mindful of bodies of water
- Keep pool free of enticing objects
- Teach water safety, and self-rescue skills
- Provide rules and directions
- Provide water safety barriers
- Use life jackets

Water Safety and ASD

- Close and constant supervision
- Cut out distractions
- Clarify communication and sensory needs with caregiver
- Adequate adult supervision
- CPR Certification

Creating a Safe and Comfortable Environment

- Person First Language
- Interacting with individuals with ASD
 - Talk about them when they are NOT present
 - Don't ask them, tell them
 - WAIT for a response
 - One person talking at a time
- Special Interest
- Having a “quiet” space

Sensory Considerations

- Visual
- Auditory
- Tactile (touch, pressure, temperature, pain)
- Proprioception
- Gustatory system
- Olfactory system
- Vestibular system

Visual Strategies

- Rules
- Task analyses
- Schedule
- Visual timer
- First/Then

Rules

Pool Rules

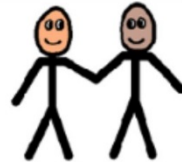
1

Have an adult with you



2

Swim with a friend



3

Always walk when near the pool



4

feet first in the pool











5

Stay away from drains



Task Analysis

My Swim Schedule

- 1 go to bathroom 
- 2 wait for an adult 
- 3 blow bubbles 
- 4 front float 
- 5 kick 
- 6 back float 
- 7 swim 
- 8 Let's go home 

Schedule

Daily Schedule



check in



put away
backpack



arts & crafts



outside play



lunch time



bathroom



swimming



board game



music



Let's go home

Timer



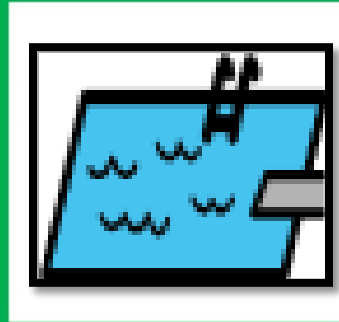
First/Then



First



Then



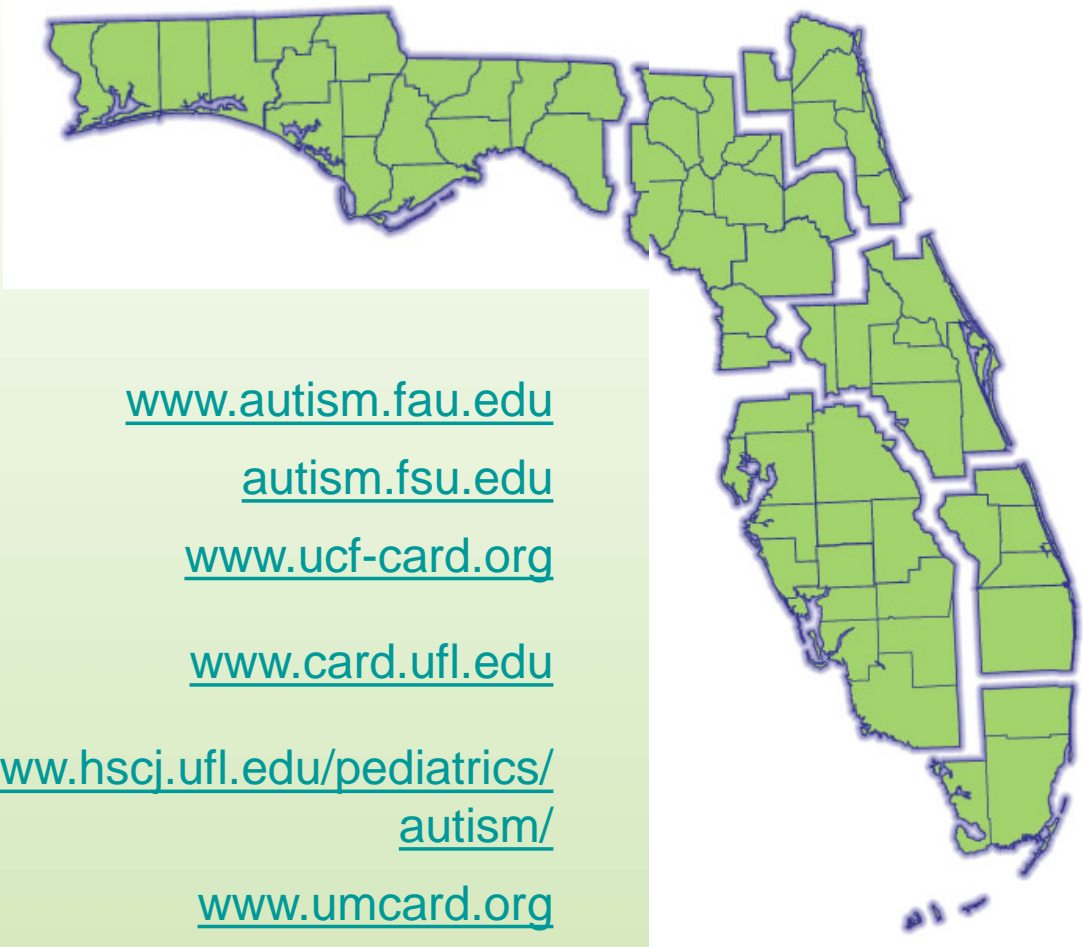
Resources

- www.ndpa.org –National Drowning Prevention Alliance
- <http://www.cdc.gov/healthywater/swimming/protection/index.html> - Center for Disease Control and water safety
- <http://www.watersafetyandsurvival.org/> Abby Grace's Hope
- www.danmarinofoundation.org – Dan Marino Swim Central
Adaptive Aquatics Certification
- <http://www.waterprooffl.com/>
- <http://www.poolsafely.gov/>



Center for Autism and
Related Disabilities

*Florida's First Choice
for Autism Support*



Florida Atlantic University

www.autism.fau.edu

Florida State University

autism.fsu.edu

University of Central Florida

www.ucf-card.org

University of Florida at
Gainesville

www.card.ufl.edu

University of Florida at
Jacksonville

[www.hscj.ufl.edu/pediatrics/
autism/](http://www.hscj.ufl.edu/pediatrics/autism/)

University of Miami

www.umcard.org

University of South Florida

card-usf.fmhi.usf.edu



<http://card-usf.fmhi.usf.edu/>

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