

June 2025



Choking Risk Among Individuals with IDD

Choking occurs when a foreign object gets stuck in the airway blocking the flow of oxygen to the brain. The obstruction can be partial or complete depending on the size and shape of the object (e.g., food, toy, etc.)(1).

Choking can happen to anyone. Choking is an emergency situation. Brain damage can start to occur within 4 to 6 minutes when an individual cannot breathe, leading to death if nothing is done to clear the airway (1).

The swallowing process involves coordination between the brain, the nervous system and muscular movements in the head and neck (neurological/neuromuscular) (3).

Over 26 muscles and 30 nerves are involved in the normal swallowing process. The slightest decline in brain, nerve, or muscle function can result in swallowing difficulty and increase the risk of choking (3).

Individuals with any type of central nervous system/brain disorder (neurodevelopmental disorder) are at higher risk for choking.

Some central nervous system/brain disorders include:

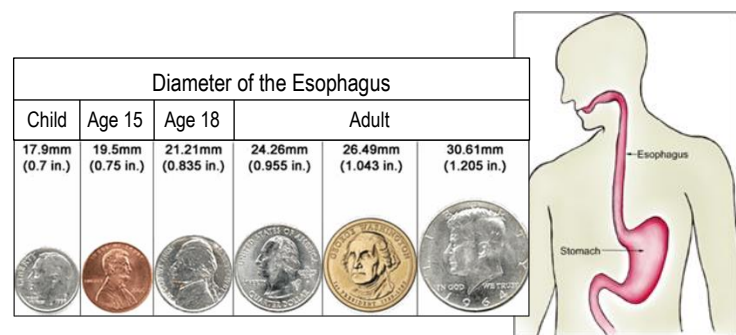
- Intellectual Disorders
- Autism Spectrum Disorder
- Attention-Deficit/Hyperactivity Disorder
- Learning Disorders
- Motor and Tic Disorders
- Other Disorders (congenital syndromes such as Down syndrome, Prader Willi, etc.)(4).

Other factors and health conditions which increase choking risk are:

- Missing or loose teeth.
- Structural abnormalities of the mouth or throat.
- Difficulty moving tongue up, down, right, left.
- Muscle weakness in the face, mouth, or neck.
- Cleft lip/palate or high-arched palate.
- Pica (obsessive eating or mouthing of non-food items).
- High-risk choking behaviors (obsessive eating or food stuffing).
- Psychotropic medications, pain medications and muscle relaxants.
- Medications which cause dry mouth and muscle weakness (1).

Esophagus Size and Choking Risk

- The esophagus is the muscular tube food and liquids passes through from the throat to the stomach when eating and drinking.
- The size and diameter of the esophagus changes as an individual grows.
- Certain foods, if not chewed well, can completely or partially block the esophagus causing an individual to choke (3).



Foods which Increase Choking Risk

- Peanut butter/nut butter (creamy or chunky) on bread.
- Hotdogs.
- Popcorn.
- Bananas.
- Nuts.
- Whole fruits.
- Hard candy.
- Thick chewy bread, white bread, bagels, pizza, etc.
- Dry meats (ground beef served without sauce, gravy).
- Dry, crumbly foods (cornbread or rice served without butter, jelly, sauce, etc.)
- Foods with 2 or more textures (a thin liquid and a solid component) Example: Crunchy cereal and thin milk (2).
- Sausage links.
- Marshmallows
- Hard boiled eggs.
- Chicken on the bone.
- Whole raw vegetables.



Please direct questions or concerns regarding the "Health Trends" newsletter to the Office of Integrated Health Supports Network at communitynursing@dbhds.virginia.gov

Reference

1. Manduchi, B., Walshe, M., Burke, E., Carroll, R., McCallion, P., & McCarron, M. (2021). Prevalence and risk factors of choking in older adults with intellectual disability: Results from a national cross-sectional study. *Journal Of Intellectual & Developmental Disability*, 46(2), 126–137.
2. Munoz-Núñez, M., Laguna, L., & T'arrega, A. (2023, January). What is the food like that people choke on? A study on food bolus physical properties under different in vitro oral capacities. *Food Research International*, 165(112474), 1–10.
3. Viswanatha, B. & Gest, T. R. (2015, July). Esophagus Anatomy. *Medscape*, 1–6.
4. Weiss, K. and Lachlan, K., (2020, September). CHD4 Neurodevelopmental Disorder. *U.S. National Library of Medicine (NIH)*.



ABA Snippets ...

Above and Beyond

Last February's ABA snippet, "Instilling a Positive Working Relationship", discussed the importance of building rapport with fellow employees as the foundation for providing meaningful feedback to improve performance. By building work relationships shaped by positive reinforcement, a phenomenon called discretionary effort may emerge, which is defined as employees going above and beyond the minimal job requirements (1). When employees work under conditions of positive reinforcement compared to punishment, a culture of "want-to" versus "have-to" behaviors surface in response to staff investing in the leader and/or organization's mission (2).

Discretionary effort rarely exists in work environments where a "do it or else" mentality is the go-to. Employees will complete tasks in this type of negatively reinforced work environment, but only to avoid the displeasure and punishing consequences from their supervisor (1). When using this approach, a supervisor will have little success when positive reinforcement is used infrequently. As the late Aubrey Daniels said, "In a negatively reinforced environment, you cannot turn positive reinforcement on and off like a faucet" (1, p. 136).

Leaders who understand the importance of using positive reinforcement to build working relationships will observe more discretionary effort from their employees and better results (1). When providing positive reinforcement in the form of positive feedback, remember to make it sincere, be specific about the behaviors observed, tell the individual how their behavior impacted you, do not use the occasion as an opportunity to prompt or instruct, and individualize praise based on staff preferences (1, 2). By using positive reinforcement effectively, you may observe behavior that is above and beyond your expectations.

Stay tuned for extensions on this topic in future ABA snippets.

You may contact DBHDS about these efforts via the following:
john.tolson@dbhds.virginia.gov

References:

1. Daniels, A.C., & Daniels, J.D. (2007). Measure of a leader: The legendary leadership formula for producing exceptional performers and outstanding results. McGraw Hill.
2. Rodriguez, M., Sundberg, D., & Biagi, S. (2016). OBM applied! A practical guide to implementing organizational behavior management: Vol. 3. Making a positive difference. ABA Technologies, Inc.



CardinalCare
Virginia's Medicaid Program

Cardinal Care Correspondence

Resource Highlights

As a Medicaid member, you can get help finding the right health care or community resources by calling the Member Services number on the back of your ID card.

You can call 24 hours a day, seven days a week to talk to an on-call nurse or other licensed health professional.

Virginia Medicaid ID Card



Health Plan Medicaid ID Cards



Summer is Around the Corner!

It's almost time for summer break. There are many summer programs that provide field trips, daily play, health meals, and more. Embrace a summer full of fun and engaging activities for all ages. Some examples are:

- Local YMCA
- Local Parks and Recreation Departments.
- Church and places of worship
- The Salvation Army
- Library programs

Hurricane Preparedness Week

Hurricane season starts in Virginia on June 1. Prepare early for hurricanes and severe weather this year.

1. Make an evacuation plan.
2. Build a kit with emergency food, water, and other supplies to last at least 72 hours.
3. Prepare and protect your home.
4. Know your evacuation zone.
5. Stay informed through the Virginia Department of Emergency Management.

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