

Medical Alert

Choking and Aspiration

Definitions

- <u>Choking</u> is when the trachea (breathing tube) is blocked or partially blocked. It can quickly lead to death.
- <u>Aspiration</u> is when someone inhales food, water, medications, or other objects/substances into their lungs.
- <u>Dysphagia</u> means difficulty swallowing.
- A <u>swallow study</u> evaluates the ability of a person to swallow food and liquids.
- <u>IDD</u> stands for intellectual and/or developmental disability.

Scope

Since July 2019, the Office of Ombudsman for Mental Health and Developmental Disabilities (OMHDD) has received 111 reports of choking related to food. Back blows and abdominal thrusts (Heimlich maneuver) were performed in most instances. The majority of people who choked had a history of choking and/or aspiration, and many had specific dietary orders to help them eat safely. Several people died when staff stepped away for a brief moment to help another person or to grab something. Many others died due to eating food that was not prepared according to the ordered consistency (like pureed or cut-up).

Did you know?

- 18% of all choking incidents reported to OMHDD since 2019 involved peanut butter. Not all reported cases included the
 food that caused the choking event. Of all cases where it was known what the food was, over 30% involved peanut butter.
- 62% of choking incidents reported to OMHDD involved people with a diagnosis of developmental disabilities, 8% involved people with a substance use disorder, and 26% involved people with a diagnosed mental illness.
- Two out of three choking events reported to OMHDD involved men, and the average age at the time of choking was 59
 years of age, with a range of 26 to 82.
- Pneumonitis, or inflammation of lung tissue caused by irritants, often results from choking events or dysphagia, and it is the second leading cause of death among people with IDD¹.
- The third leading cause of death among people with IDD is choking, and people with IDD are 32 times more likely than people without IDD to die from choking and/or pneumonitis¹.

Foods that pose a high risk for choking³

- Peanut butter, as well as other nut butters, especially when combined with dry foods like crackers or bread
- Tough foods, like meats and pineapple
- Sausages, including hot dogs
- Firm vegetables and fruits

- Hard or dry, crumbly foods like crackers or cornbread
- Mixed-texture foods, like cereal with milk
- Any foods that are not recommended as part of an ordered consistency

Risk factors

- Dysphagia (difficulty swallowing)
- Eating fast, not chewing well, being distracted
- Eating large bites or food-stuffing
- Eating or taking medications while not sitting or standing upright
- Loose, missing, or decaying teeth
- Substance use
- Pica (eating inedible objects)
- Neurological disorders like seizures and cerebral palsy
- Diagnosis of IDD

Possible signs of choking

- Inability to speak
- Inability to breathe
- Lips turning blue, gray or pale face
- High-pitched or no noise
- Intense coughing
- Drooling

Possible signs of chronic aspiration

- Chronic coughing, both during meals and between meals
- Wet/gurgly sounding voice
- Chronic wheezing
- Intermittent fever or elevated temperature
- Intermittent shortness of breath

- History of choking, aspiration, or pneumonia
- GERD (reflux)
- Food-seeking behaviors such as sneaking food
- Some developmental syndromes, including Down syndrome and Prader-Willi syndrome
- Structural differences like a high palate
- Taking certain medications, including antipsychotics, benzodiazepines, antiepileptics, antihistamines, diuretics, narcotics, muscle relaxers, and anticholinergics²
- Grabbing throat
- Look of fear or panic
- Redness in the face
- Rushing away from the dining area during or immediately after the meal
- Frequent bouts of pneumonia
- Recent hospitalization(s) for pneumonia
- Unexplained tiredness (fatigue)
- Chronic chest congestion
- Coughing and wheezing at night

Recommendations from the Medical Review Subcommittee

- 1. Call 911 when someone is choking. You do not need permission!
- 2. Start back blows and abdominal thrusts (following established guidelines) immediately when someone is not able to cough, breathe, or speak. If they are able to cough, encourage them to keep coughing and do not administer back blows and abdominal thrusts.
- 3. Anytime a choking episode requires intervention (i.e. back blows, abdominal thrusts, and/or CPR), the person should be seen by a healthcare provider to rule out aspiration, even if they appear to be fine.
- 4. Follow each person's individualized care plan and/or mealtime approach and reinforce safe eating habits (like taking small bites and eating slowly).
- 5. Follow "family style" eating practices when appropriate and encourage staff to remain at the table or nearby during mealtimes and 30 minutes after.
- 6. Allow plenty of time for meals and encourage people to stay upright and nearby for at least 30 minutes following a meal.

- 7. Consider cultural differences for both staff and individuals when working with foods a person may not be familiar with eating or preparing.
- 8. Post pictures of ordered food consistencies and sizes so all staff can easily understand the orders.
- 9. Choking interventions are part of standard first aid, and all staff should be trained on them. Use current recommended choking protocols developed by the <u>Red Cross</u> or similar organizations. These protocols <u>do not</u> currently include anti-choking devices, and the FDA advises against the use of these devices⁴.
- 10. Anyone who shows signs and/or symptoms of chronic aspiration should see their primary care provider as soon as possible. Work with the primary care provider to get a swallow study ordered.
- 11. People who have provider orders for any kind of dysphagia diet, including liquidized, pureed, minced & moist, and soft & bite-sized, should avoid eating nut butters, consistent with recommendations from the <u>International Dysphagia Diet Standardization (IDDSI)</u>.
- 12. Develop person-centered mealtime protocols and incorporate client-specific considerations (e.g. modified diet orders, expectations for level of supervision, and best practices for interventions) related to choking risks in facility and individual care plans.
- 13. Provide regular, in-person, hands-on training opportunities for all staff, including upon hire, and include each client's specific mealtime protocols and diet-related considerations.
- 14. Check side effects of all medications ordered to evaluate for impact on swallowing. Pay close attention to medications that can cause xerostomia (dry mouth).

Resources

- Adult/Child Choking Interventions: <u>Adult & Child Choking: Symptoms and First Aid | Red Cross</u>
 (https://www.redcross.org/take-a-class/resources/learn-first-aid/adult-child-choking)
- FDA Recommendation on Use of Anti-Choking Devices: FDA Encourages the Public to Follow Established Choking
 Rescue Protocols: FDA Safety Communication | FDA (https://www.fda.gov/medical-devices/safety-communications/fda-encourages-public-follow-established-choking-rescue-protocols-fda-safety-communication)
- IDDSI Patient Handouts: <u>Patient Handouts Resources IDDSI</u> (https://www.iddsi.org/resources/patient-handouts)
- IDDSI Poster: <u>IDDSI Food & Drinks Classification and Testing Poster</u>
- Food & Drinks Classification and Testing Poster: (https://www.iddsi.org/images/Publications-Resources/Poster/posterenglishinternational7august2024-press.pdf)

Footnotes

- Landes S. D., Stevens J. D., & Turk M. A. (2021) Cause of death in adults with intellectual disability in the United States. *Journal of Intellectual Disability Research*, 65(1): 47-59. https://doi.org/10.1111/jir.12790
- 2. Balzer, K. M. (2000). Drug-induced dysphagia. *International Journal of MS Care*, 2(1), 40-50. https://doi.org/10.7224/1537-2073-2.1.40
- International Dysphagia Diet Standardization (2019). Complete IDDSI framework detailed definitions.
 https://www.iddsi.org/images/Publications-Resources/DetailedDefnTestMethods/English/V2DetailedDefnEnglish31july2019.pdf
- 4. Food and Drug Administration (2024, April 22). FDA encourages the public to follow established choking rescue protocols: FDA safety communication. https://www.fda.gov/medical-devices/safety-communications/fda-encourages-public-follow-established-choking-rescue-protocols-fda-safety-communication