Choking Prevention for individuals with Developmental Disabilities

A provider’s perspective
Part 3 - Webinar Series

Ohio Department of Developmental Disabilities
Purpose of training

• Learn how different providers promote safe eating and different supports for those they serve.

• Provide resources for training to aid in your efforts in choking prevention.

• To celebrate the wonderful work that is being done by all of you to prevent choking incidents in Ohio!

• Review share data about incidents of choking in our service system.
Today’s Presenters

Teresa Jones, Corporate Incident Investigator

Robin Malin, Health Care Services Supervisor
Teresa Jones, Incident Investigator

Columbus Center for Human Services, Inc. (CCHS) is an experienced and trusted provider of comprehensive support services for adults with developmental disabilities. The mission of CCHS is to prioritize health, welfare, personal goals and to promote positive community roles for individuals with developmental disabilities.
Pattern Trends Analysis

• Identified a pattern trend for choking two years in a row

- Educate Staff on Choking Prevention
- Involve the team to brainstorm ways to prevent choking
Choking Prevention Training

- Training in Orientation on Diet modifications
- Hands on Training for all staff to prepare food textures
- Health & Safety Alerts issued to all staff
- Caretracker messages about choking/aspiration safety
- Speech Pathologist at site to evaluate individuals and visit individuals in the hospital to ensure correct diet texture
- Annual MUI Training that also includes choking prevention. This includes clarification of a back blow vs. a pat on the back to assist individual who is coughing/food dislodged
Brainstorm for Prevention

- Eliminated all of the different diets and condensed into only four types (Regular, Chopped, Ground, and Pureed)
- OT & PT created placemats (with all their information) for individuals
- Kept inside the pantry door until use
- Color Coded for easy detection of diet texture
- Includes special instructions for staff to prevent choking
- Includes everything at a glance that staff need to know during meals
Color Coded Placements

Top Left Corner includes how the individual participates in Family Style Dining
Middle shows the adaptive equipment, how to set the place for the individual
Got rid of all diet textures except for Four:
1. Chopped
2. Pureed Texture
3. Ground
4. Regular

Color coded placemat that indicates the texture of diet:
Red = Chopped
Yellow = Pureed Texture
Orange = Ground
Blue = Regular

Placemat includes at the bottom in the following order:
a. Diet Texture
b. Special instructions,
c. Caloric Diet,
d. Guidelines or restrictions, and
e. Feeding strategies to prevent choking
(cue to slow down, verbal prompts to take smaller bites, chew thoroughly, etc).
1800 cal. CHOPPED, cue for the following: slow down, take smaller bites, chew more thoroughly
Served By Staff

Standard utensils

Independence tumbler with spouted lid

Napkin

Divided plate

**PUREED TEXTURE, HONEY THICK LIQUIDS**, Regular calorie, no gastric stimulants, 1 can ensure Plus midafternoon when home, **FED BY STAFF**, give small bites, alternate bites/sips, maintain upright posture during meal & for 30 minutes following meal.
Regular Cal. **GROUND**, add sugar & margarine to foods, offer 2 Ensure puddings if 50% or less of a meal is consumed, 1 Ensure pudding midmorning, afternoon, & with evening snack, **cue to slow down & to set utensils down when stuffing mouth, must have supervision when in the kitchen.**
Regular fork with white handle

Regular bowled teaspoon with white handle

Hi-lo plate

Dycem mat

Napkin

Lidded cup with straw in handle (color may vary)

Standard knife

Regular calorie, ADA, Allow ample time to eat
What if there is a change in Diet?

- Team Meeting is held
- OT makes the change on the placemat
- Caretracker message to staff that diet order has changed
Robin Malin, Health Care Services Supervisor

Revolutionizing Lives.....where people live, learn, connect, play and worship.

1. Coshocton County
   • Echoing Hills Residential Center
   • Camp Echoing Hills
   • Community Connections of Coshocton Co.

2. Athens County
   • Echoing Meadows Residential Center
   • Community Connections of Athens Co.

3. Montgomery County
   • Echoing Woods Residential Center
   • Echoing Valley Residential Center
   • Community Connections of Montgomery Co.
   • echoingU - Dayton

4. Stark/Summit County
   • Echoing Ridge Residential Center
   • Community Connections of Stark Co.
   • echoingU - Canton
   • Markley Waiver Home
   • Assisted Housing Apartments

5. Lorain County
   • Echoing Lake Group Homes (7)
Choking in Individuals with IDD

Choking is a greater concern with individual with Developmental Disabilities. Monitor during meal times by trained staff is essential to ensure the health and safety of the individual. Always use preventative measures, to alleviate emergency measures. Know the individual you are supporting.
Preventatives
Monitoring Meal Times

1. Monitor Meal Times
A. Eating too fast
B. Not chewing food properly
   a) toothache
   b) increase saliva
   c) muscle control
   d) side effects from medication
   e) head position improperly
   f) assistant in eating, giving too much food at a time
Preventatives
Monitoring Meal Times

C. Coughing during and after meals-can indicate that individual is aspirating

a) Recommend a bedside swallow evaluation by speech therapist. This is completed during meal time.
D. Not following diet consistency or preparation: Pureed, Mechanical Soft, Chopped, Ground, Honey thick liquids, Nectar thick liquids, Thin liquids, etc.
Preventatives
Monitoring Meal Times

E. Proper positioning for proper digestion
Choking

1. Encourage individual to cough until weakens
2. When unable to cough give 5 back blows then 5 abdominal thrust. Continue until object is expelled.
3. If becomes unconscious lay on flat surface and give 30 chest compressions followed by 2 breaths
4. If object is expelled and there is no difficulty in breathing, individual is to be sent to ER for chest x-ray to ensure no object or liquids are in the lungs.
5. **IF AT ANY TIME THE INDIVIDUAL HAS DIFFICULTY IN BREATHING 911 SHOULD BE CALLED.**
6. For choking follow Red Cross or American Heart Instructions on choking of a conscious and unconscious person.
Medication Administration

1. Following IST for administration of medication to ensure medication is absorbed correctly and individual does not choke on medication. IST must be completed on all certified med passers before able to pass medication in that home.
   a) Crush medication as directed
   b) Dissolve medication as directed
   c) Administer medication in pudding
   d) Administer all medication via G-Tube as directed.
Quick Action

If at any time there is a change in eating habits or noted change in swallowing, quick action is essential for the health and welfare of the individual.
Silent Aspiration

Silent Aspiration occurs in people that have swallowing problems known as dysphasia. Aspiration is when food, liquids, or stomach contents are swallowed poorly and go into the lungs by mistake. Usually normal healthy people will turn red and begin to cough as an attempt to get the food or liquid out of the lung. However when people get weak and swallowing worsen then aspiration can happen silently which means there will be no signs showing that this has occurred. In other words you will not see any coughing or turning red. Aspiration is dangerous because the food, liquid, and stomach contents enter into the lung which is very irritating and can develop into aspiration pneumonia.
Silent Aspiration

This is very hard to treat with multiple antibiotics. This is common in the individuals with developmental disabilities as Cerebral Palsy. Individuals that are at risk of aspiration pneumonia should be monitored for increase coughing, SOB, lethargy, fever, lung congestion. In silent aspiration coughing may occur 15 to 30 minutes after meal is finished. Individuals cannot always express that they are not feeling well and have difficulty swallowing. It is up to staff to know the individuals that they support and recognize when they are acting abnormal and report to nursing or chain of commands.
Good News

Your hard work is paying off
2015 Choking Data

• There has been a huge reduction (approximately 70%) of choking deaths compared to this time last year.

• There have been 5 choking related deaths year to date in 2015.

• Abdominal Thrusts and Back blows have been initiated over 250 times.

• Lets strive for 0 choking deaths.
2015 Choking Data

In this 9 month period:

• The five individuals that passed away were males.
• Choking incidents occurred in a variety of settings.
• The average age of the person that choked was 43.6 years old.
• The majority of the items that were choked on included some kind of doughy substance that could form a bolus and increase likelihood of choking.
What we know…

- Choking occurs in all settings;
- Happens to people of all ages;
- Individuals with developmental disabilities are at greater risk;
- We need to be diligent **AT ALL TIMES** to prevent choking incidents and
- On going communication between team members is critical for prevention.
Increased Risks

- Seizures (can occur while eating)
- Decreased or absent protective airway reflexes as occurs in cerebral palsy
- Poor or underdeveloped oral motor skills that do not permit adequate chewing or swallowing
- Gastroesophogeal reflux disorder (GERD), which may cause aspiration of refluxed stomach contents
- Inability to swallow certain fluid consistencies and/or food textures
- Medication side effects that decrease or relax voluntary muscles, causing delayed swallowing or suppression of the protective gag and cough reflexes
- Limited mobility, that may leave individuals unable to properly position themselves for adequate swallowing
What to do when someone chokes

It is important to remember the steps to take when someone chokes. **Always follow your First Aid training.**

If the individual’s airway is blocked, call 911 immediately and perform the Abdominal Thrust (formerly known as Heimlich Maneuver). This has been extremely successful in dislodging food in the airway. Persons interested in training should contact their local American Red Cross or local health care agencies.

Even if the Abdominal Thrust is successful, immediately notify a health care professional. It is advisable to have the individual physically checked by a health care professional following an episode such as this.

If the person is in a wheelchair or has physical characteristics making it difficult to do Abdominal Thrusts it is possible that the person may pass out. **The person should be moved to a flat, hard surface to assure greatest success.** Be ready to initiate quick chest compressions to help unblock the airway.
Consult with specialist

Sometimes the best thing we can do to address swallowing/choking concerns is make others aware. Get help right away. Write an incident report. Never be afraid to advocate.

- Consult with Nursing staff
- Physician
- Talk with a Speech Pathologist
- See if tests are warranted
Resources
Common Choking Hazards
Take Extra Precaution when eating/serving these foods
Other Choking Hazards

Items that when combined can form a bolus that may block the trachea:
• Waffles and syrup
• Bread and honey
• Peanut butter, (especially with soft white bread or by the spoonful)

Round, slippery and firm foods
• Whole grapes, whole cherry tomatoes, cherries and whole olives
• Hard candies, round candies, suckers
• Chunks of cheese
• Nuts

Hard to chew items
• Tough Meats
• Raw Vegetables (broccoli, brussel sprouts and carrots)
• Popcorn and chips

This does not mean people cannot eat and enjoy these items, however, extra care and preparation may be needed. Examples: Grapes may need cut in half or hot dogs cut length-wise.
Important terms to know

• **Dysphagia** is the difficulty swallowing or difficulty moving food and liquid from the mouth to the stomach for proper nutrition and hydration.

• **Aspiration** is the medical term for inhaling food or liquid into the lungs. Aspiration may occur without anyone knowing, if the amount of food or liquid is small (Silent Aspiration). The first sign of aspiration may be trouble breathing, or signs of pneumonia.
Important terms to know

- **Coughing** is the expelling of air from the lungs suddenly with a harsh noise. This is done many times to protect the lungs and rid the airways of food and liquid. It is a sign that something is not functioning properly while swallowing.

- **Choking** is the inability to breathe because the trachea is blocked, constricted, or swollen shut.

- **NPO**-means nothing by mouth. No food, liquid, or medications.
Common Terms

• A certified **Speech-Language Pathologist** is a swallowing specialist who can evaluate the Oral and Pharyngeal phases of swallow to determine safest swallow strategies.

• **Occupational Therapist**- treat injured, ill, or individuals with disabilities through the therapeutic use of everyday activities. They help these patients develop, recover, and improve the skills needed for daily living and working.
Common Terms

- **Active Supervision** - Staff need to provide active supervision during all meals: looking at residents face, engaging in conversation, reinforcing safe swallow strategies (small bites, small sips, slow rate) to reduce risk of aspiration and choking.

- **Bolus** - Food, liquid, or other material placed in the mouth for ingestion.
Common Terms-Diet Textures

• **The Whole Diet**- Food is presented as commonly served.

• **1” Pieces Cut to Size**- Food is served as prepared and cut by staff into 1-inch pieces.

• **½” Pieces Cut to Size**- Food is served as prepared and cut by staff into ½-inch pieces.

• **¼” Pieces Cut to Size**- Food is served as prepared and cut by staff into ¼-inch pieces.
Common Terms-Diet Textures

• **Puree**- All foods are moistened and processed until smooth (no lumps) to an applesauce or pudding like consistency.

• **Ground**- Food is put through a food processor until moist, cohesive and no larger than a grain of rice. Ground food must always be moist.
Common Terms

- **Mechanical soft diets** are prescribed for individuals who have difficulty chewing and swallowing food. It features soft chopped, blended or ground food. Mechanically changed food makes it easier to chew and swallow. Fruit and vegetables need to be cooked until soft then chopped or pureed in a blender or food processor. Meats should be cooked until soft then chopped or ground into smaller pieces. Serving meat with sauce or gravy makes it much easier for the individual to eat and swallow safely.
Common Term- Liquid Consistencies

• **Regular liquids** are thin with the consistency of water. People who have difficulty swallowing thin liquids often must drink thickened liquids. Drinking thickened liquids can help prevent choking and stop fluid from entering the lungs.

The 3 common consistencies of thickened liquids are nectar-thick, honey-thick, and pudding-thick.

• **Nectar-thick liquids** are easily pourable and are comparable to apricot nectar or thicker cream soups.

• **Honey-thick liquids** are slightly thicker, are less pourable, and drizzle from a cup or bowl.

• **Pudding-thick liquids** hold their own shape. They are not pourable and are usually eaten with a spoon.
The Basics of Swallowing

Three Stages of Swallowing:

1. Oral
2. Pharyngeal
3. Esophageal

Choking can occur due to impairment in ANY of the 3 stages.
Let’s Reduce Choking Incidents

The Ohio Department of Developmental Disabilities (DODD) and our partners in the field of disability services are committed to reducing the number of choking incidents in Ohio. We believe that through increased awareness, fast action, communication, and diligence we can minimize choking risks and save lives.

Individuals with developmental disabilities are at high risk for dysphagia (difficulty swallowing) which can lead to choking and aspiration. Choking is a major cause of medical emergency Major Unusual Incidents (MUIs) and, unfortunately, some deaths of Ohioans with DD, but it often can be prevented.

In this article we provide specific information so that, together, we can identify risk factors, signs of choking, foods commonly connected to choking incidents, and actions to be taken during an emergency.

When you breathe air through your nose or mouth, it goes down a tube -- the trachea -- sometimes called the wind pipe, and then into your lungs. Choking is when food or something else gets into your wind pipe and gets stuck, and the air you need cannot get to your lungs.

Aspiration is when you inhale food into your lungs. People with developmental disabilities share a number of common charac-

These characteristics include:
- Decreased or absent protective airway reflexes as occurs with cerebral palsy and some other developmental disabilities.
- Poor or underdeveloped oral motor skills that do not permit adequate chewing or swallowing.
- Gastroesophageal reflux disorder (GERD), which may cause aspiration of refluxed stomach contents.
- Epileptic seizures
- Physical characteristics or wheelchair use which can make proper/safe positioning dif-

[Well-Informed for safe & healthy living]

http://dodd.ohio.gov/healthandsafety/Pages/Well-Informed-Newsletter.aspx
Health and Welfare Alerts

The purpose of this Alert is to provide critical information to caregivers on choking prevention. People with developmental disabilities are at a high risk for choking. Those providing care can help reduce these risks, provide timely care, and potentially save a life. This Alert will provide some signs that may indicate a person is choking and what you can do to help.

In 2013, seven Ohioans with developmental disabilities passed away due to choking related accidents. Unfortunately, there have been more choking related deaths in 2014. We believe prevention is the key to saving lives. While seven people lost their lives, many more were saved by the fast action of others. In over 370 of the cases in 2013, a caregiver (family member, staff member or friend) successfully intervened by performing abdominal thrusts or back blows and saved that person’s life. We want to provide some information to you about choking and what to do in the event of a choking emergency.

Who is in danger of Choking? Anyone can choke, but choking is more likely for someone who:

- Has cerebral palsy or a seizure disorder;
- Has few or no teeth, or wears dentures;
- Has trouble chewing or swallowing;
- Does not sit up while eating;
- Someone who is prescribed medications such as muscle relaxants, anticonvulsants or psychotropics, which may delay swallowing or suppress protective gag and cough reflexes or;
- Has Gastroparesis (Slow stomach)."
Different Diet Textures

• *It is important to note* that there are many different diet textures utilized across the state.

• Always prepare food and liquids as prescribed by the physician.

• The diet textures listed in this presentation are just some of the examples that are utilized.
STOP!
Choking Hazards

If the food you prepare does not meet the individual’s Dining Plan, it must **NOT** be served.

- **Ground**
  - Size of a grain of rice

- **Pureed**
  - Smooth with no lumps

We help people with developmental disabilities live richer lives

Wash your hands before preparing meals!
Whole Food
1” Food

Courtesy of New York State of Opportunity Office for People with Developmental Disabilities.
½ “ Food

Courtesy of New York State of Opportunity Office for People with Developmental Disabilities.
¼ “Food

Courtesy of New York State of Opportunity Office for People with Developmental Disabilities.
Ground Diet

Courtesy of New York State of Opportunity Office for People with Developmental Disabilities.
Pureed Food

Courtesy of New York State of Opportunity Office for People with Developmental Disabilities.
References

• Groher, Michael; Crary, Michael. Dysphagia, Clinical Management in Adults and Children, Mosby, Elsevier, 2010

• Jones, Harrison; Rosenbek, John. Dysphagia in Rare Conditions, Clinical Dysphagia Series. Plural Publishing, Inc. 2010

THANK YOU!

Connie McLaughlin, Regional Manager Supervisor
(614)752-0092
Connie.McLaughlin@dodd.ohio.gov

Abuse/Neglect Hotline
1-866-313-6733