

**DIVISION OF DEVELOPMENTAL DISABILITIES SERVICES
COMMUNITY SERVICES/ ADULT SPECIAL POPULATIONS**

Aspiration/ Choking Protocol #6

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Approved by: Warren K. Ellis **Date:** 5/17/10

I. Objective

To effectively identify individuals who are at risk for choking/aspiration; and to provide staff with appropriate interventions to manage safe eating practices.

II. Standards

- A. An Annual Aspiration/Choking Risk Assessment shall be completed by the assigned nurse to coincide with the individual's yearly ELP. (Exhibit A)
- B. Individuals coming into residential services will be assessed at the time of the admission.
- C. Re-assessment shall be completed if there is a change in health status or any risk factor is identified.
- D. Individuals identified at high risk, who do not have existing interventions established, immediate action must be taken to ensure their safety is maintained.
- E. The regional nursing supervisor or agency nursing director must be immediately notified for individuals newly assessed at moderate or high risk. The regional nurse supervisor or agency nursing director must also notify DDDS nurse administrator of these assessment findings.
- F. The outcome of the assessment shall be discussed with appropriate team members and an appropriate plan developed during the annual ELP meeting.
- G. An Individual assessed at moderate to high risk must have the risk addressed under the "Significant Medical Condition" section of the ELP Nursing Assessment, the needed Safety Supports, interventions and education outlined for staff to follow. The outcome of the Aspiration/ Choking Assessment shall also be documented.
- H. Modified diet and or liquid consistency must also be provided for the individual when outside their normal residential or day program setting.

III. Recommended Assessments and Follow-up Based on Results of the Assessment

- A. Minimal Risk (Score 1-3)
 - No action warranted
- B. Moderate Risk (Score 4-6)
 - Referral to health care practitioner for evaluation with request for swallow study.
 - Request for speech therapy consultation to determine if dietary modification and/or the use of adaptive feeding equipment is required.
 - Team assessment of environmental or behavioral issues related to eating and aspiration/ choking risk.
 - During evaluation period, request for additional staff observation during mealtimes.
 - The above are to be completed if interventions are not already in place or are not sufficiently addressing support needs.

C. Severe Risk (Score 7 & Above)

- All of the above plus.
- Immediately stop all oral intake until swallowing can be evaluated.

IV. Staff Education and Training

- A. Aspiration/Choking risk training will be offered by DDDS Training and Professional Development to all newly hired staff.
- B. If an individual, following the completion of the Aspiration/Choking Risk Assessment, is identified as a moderate or severe, the nurse must provide education and training to the Residential, Shared Living and Day Program staff..
- C. Attached five exhibits
(B) For additional education purposes.

V. Individuals Requiring Conscious Sedation

- A. Individual must have appropriate preparation prior to procedure (i.e. nothing by mouth at least 8 hours before; medications dependant on instructions from practitioner).
- B. Following the procedure monitor the individual in the practitioner's office until alert and responsive to voice and touch. Individual should be able to remain in an upright position without assistance before transporting home.
- C. Two staff must be available to transport the individual home from procedure when conscious sedation is used, one staff to drive and one staff to monitor the individual for potential changes in consciousness or ability to breathe.
- D. At home following the procedure individual should be allowed to rest , but monitored one on one (in eyesight) at all times until individual is alert, responsive and back to baseline. Once the individual is back to baseline they should be monitored for changes every 15 minutes for the next eight hours.
- E. Ensure the individual can remain upright and back to baseline before offering medications, fluids, or food.
- F. Slowly introduce food and drinks, starting with sips of clear liquids (i.e. water)
- G. Should the individual vomit; hold food and drinks for 2 hours then slowly introduce liquids (i.e. sips of water).
- H. If no further vomiting, progress to ordered diet.
- I. If individual's condition declines (i.e. becomes lethargic, difficult to arouse or demonstrates symptoms of respiratory distress; 911 should be initiated).

VI. References:

Central State Hospital. (n.d.). Retrieved February 12, 2010, from

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New Mexico Developmental Disabilities Supports Division. (2008, June 17). Instructions for use of the standard health care plan for aspiration risk management – New Mexico DD waiver. Retrieved February 12, 2010, from

http://www.nmhealth.org/ddsd/ClinicalSvcsBur/Initiatives/documents/asp_risk_mgmnt_plan_instruct.pdf

Oregon Department of Human Services. (2007, September 22). Developmental disabilities nursing manual – aspiration. Retrieved February 12, 2010, from http://www.oregon.gov/DHS/spd/provtools/dd/nursing_manual/aspiration.shtml

State of New Jersey, Department of Human Services, Division of Developmental Disabilities. (2009, July 15). Health and safety alert choking. Retrieved February 12, 2010, from http://www.state.nj.us/humanservices/ddd/documents/Documents%20for%20Web/Health_SafetyAlert_choking_071509.pdf



ASPIRATION/CHOKING RISK ASSESSMENT

ASSESSMENT CATEGORIES	SCALE	DATE	DATE	DATE	DATE
DEVELOPMENTAL DISABILITY AND DIAGNOSIS					
Mild Mental Retardation	0				
Moderate Mental Retardation	1				
Severe Mental Retardation	1				
Profound Mental Retardation	2				
MEDICAL DIAGNOSIS					
Cerebral Palsy	1				
History of Gastric Reflux	1				
Previous episodes of aspiration/aspiration pneumonia	3				
Tongue thrust	1				
CVA	2				
Degenerative Neurologic Disease	2				
Parkinson's/Huntington's Diseases	2				
Other Movement Disorders	1				
Seizure Disorder	1				
Dementia	1				
PICA	2				
Sleep Apnea	1				
Other Concern	1				
PHYSICAL CONDITIONS					
Difficulty chewing	1				
Absence of chewing	2				
Edentulous	1				
Difficulty swallowing	1				
Gagging or choking on food and/or liquids	1				
Positive (abnormal) swallowing study	1				
Barium swallow positive for aspiration	2				
Other Condition	1				
EATING HABITS					
Feeds self independently	0				
Needs assistance to eat	1				
Feeds self too fast (picks mouth with food)	1				
Totally dependent for eating	2				
Any modified consistency and/or liquids	3				
Other Concern	1				
SEATING POSITION					
Sits at table in regular chair	0				
Wheelchair:					
Upright	1				
Semi-recline	2				
Poor Positioning	2				
Other Concern	1				
MEDICATIONS					
Any medication that causes sedation	1				
Any psychotropic medication	1				
Other Concern	1				
SCORE					
TOTAL SCORE:					

RISK SCORE (1-3) minimal RISK SCORE (4-6) moderate RISK SCORE (7 and above) severe

SIGNATURE:

DATE:

SIGNATURE:

DATE:

Medications That Increase Aspiration Risk

Benzodiazepines	Neuroleptics	Anticonvulsants	Corticosteroids	Lipid-lowering drugs	Anticholinergics	Potassium
Antineoplastics	Antidepressants	Anxiolytics	Calcium channel blockers	Antiparkinson agents	Antihistamines	Anticonvulsants
Antibiotics	Iron preparation	Quinidine	Nonsteroidal Anti-inflammatory drugs	Diuretics	Narcotics	Muscle relaxants

Common Choking Hazards

Popcorn	Potato Chips	Fruit seeds	Hotdogs & Sausages	Hard Candies	Raw Carrots
Potato Salad	Grapes	Raisins	Peanuts & nuts	Chunks of meat	Apple chunks
Coins	Balloons	Jewelry	Toys with small parts	Small balls & marbles	Arts & Crafts




Aspiration/ Choking Prevention

Feed small amounts w/ recommended consistency & Texture (no more than 1/2 Teaspoon)	Remain upright for 30 minutes
Avoid excessive sedation	Take at least 20 minutes for meal time
Provide oral care	Proper positioning
Make sure they have swallowed the first bite before presenting another	Maintain a pleasant eating atmosphere



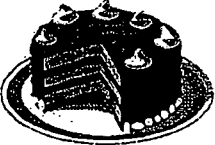

Risk Factors for Aspiration/ Choking

Food remaining on the tongue after swallowing	Poorly fitted, damaged denture or edentulous
Pocket of food on side of mouth	Neglected oral care
Excessive drooling	Use of medications that may affect swallowing- See Exhibit B
Coughing or choking while eating or drinking	Onset of illness which may affect physical ability
Gargling- sounding voice after eating or drinking, throat clearing	Unplanned weight loss
Rumination	PICA Behavior
Inability to maintain posture	Changes in voice
Past and present eating habits (shoveling/ Rapid Ingestion, Food Stealing)	Nasal regurgitation
Any history of aspiration pneumonia	Nasal discharge during meals
Poor appetite which may stem from fear of choking	Frequent urinary tract infections




MECHANICAL SOFT DIET

Food Group	Foods Allowed ☺ ☺ ☺ ☺	Foods To Avoid ☹ ☹
<p>Meat, Fish, Poultry, Eggs, Cheese and Meat Alternates</p> 	<p>Mechanically ground meat, fish and poultry; soft casseroles containing mechanically ground meats (such as: beef stroganoff, beef and macaroni casserole, lasagna, spaghetti with meat sauce); macaroni and cheese; sloppy joes; soft tacos with ground meat; burritos with ground meat; soft tuna or egg salad; chicken, turkey or ham salad made with mechanically ground meats; mechanically ground luncheon meats mixed with mayonnaise; scrambled eggs; sliced or chopped hard cooked egg; most cheeses including American and cheddar; grilled cheese sandwiches cut into ½ inch size pieces</p>	<p>Peanut butter; meats unless they are mechanically ground and moist; chili; chunky tuna or egg salad containing raw vegetables</p>
<p>Breads, Cereal and Starches</p> 	<p>Breads and soft rolls including muffins and croissants cut into ½ inch size pieces; dry cereals that soften in milk (such as: flake cereals); cooked cereal; whipped potatoes; scalloped potatoes and other soft potatoes; sweet potatoes; stuffing; noodles; rice; pancakes, waffles, and French toast softened with margarine and syrup; baked beans; French fries & hush puppies (cut into ½ inch size pieces)</p>	<p>Dry cereals (such as: granola) that do not soften in milk; bagels or hard crust breads (such as: Kaiser rolls); breads and cereals with nuts; soft pretzels</p>
<p>Fruits and Juices</p> 	<p>Canned and soft fruit (such as: plums) hand cut into ½ inch size pieces; diced canned fruit (such as: peaches and pears) mechanically chopped into ¼ inch size pieces; orange or grapefruit sections without membrane; crushed pineapple; banana; watermelon; jellied cranberry sauce</p>	<p>Hard raw fruits unless mechanically chopped into ¼ inch size pieces; grapes; cherries</p>



MECHANICAL SOFT DIET

Food Group	Foods Allowed ☺ ☺ ☺ ☺	Foods To Avoid ☹ ☹
<p>Vegetables</p> 	<p>Well-cooked vegetables hand-cut into ½ inch size pieces; raw salads and raw vegetables mechanically chopped into ¼ inch size pieces</p>	<p>Whole kidney beans; brussel sprouts; raw vegetables and raw salads (unless mechanically chopped)</p>
<p>Soups</p> 	<p>All soups except soups with large chunks of meat.</p>	
<p>Desserts</p> 	<p>Ice cream (with toppings smaller than ½ inch in size); fruit ice; sherbet; Oreo cookie shakes and ice creams; pudding; custard; custard-type or cream pie filling (no crust except graham cracker crust); Jell-O; yogurt; moist cakes with icings (no candy decorations); cupcakes and snack cakes; soft fruit or fig bars; soft doughnuts; soft marshmallow cream cookies or cakes; chocolate candy bars; peppermint patties; chocolates with cream filling; soft fudge</p>	<p>Those with nuts or candy bar pieces (such as: candy bar blizzards); chewy candy (such as: caramels, taffy, toffee, licorice); granola bars; hard candies; chewing gum; chewy marshmallow candy; jelly beans; gummy bears; gumdrops</p>
<p>Miscellaneous</p> 	<p>Margarine; plain gravies; cream cheese; cheese spreads; mayonnaise; sugar; salt; herbs; spices; jelly; preserves; condiments; relish; puffed cheese curls; cheese balls; potato chips; dips for chips and vegetables</p>	<p>Fried snacks (such as: corn and nacho chips); popcorn; marshmallow fluff; marshmallows</p>

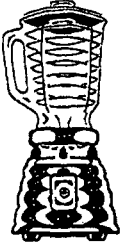

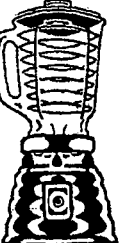

TOTAL GROUND DIET

Food Group	Foods Allowed ☺ ☺ ☺ ☺	Foods To Avoid ☹ ☹
<p>Meat, Fish, Poultry, Eggs, Cheese and Meat Alternates</p> 	<p>Moist mechanically ground meat, fish, or poultry; mechanically chopped casseroles (such as: macaroni and cheese, lasagna, spaghetti with meat sauce, ravioli, manicotti); soft tuna salad without celery pieces; egg salad; regular scrambled eggs; cottage cheese; cheese sauce; shredded cheese</p>	<p>Meats unless they are ground and moist; hard-cooked egg unless combined in other dishes; peanut butter; all others.</p>
<p>Breads, Cereals and Starches</p> 	<p>Cooked cereal; whipped potatoes; sweet potato fluff; mechanically chopped stuffing; soft noodles mechanically chopped into small pieces; pancakes, waffles, French toast or plain muffins softened in thickened milk. Muffins with lumpy ingredients should be pureed. Flake cereal (without raisins or nuts) or krispies must be prepared as follow:</p> <p>Add 1 & 1/2 juice glasses (6 oz) of milk to 3/4 cup cereal; stir the cereal and let stand for 15 minutes until milk is completely absorbed.</p>	<p>Dry breadcrumbs or any other dry cereal except flakes or krispies; whole breads including rolls, bagels, biscuits and croissants; crackers unless softened in thickened liquids.</p>
<p>Fruits</p> 	<p>Hand-mashed banana; mechanically chopped canned peaches, pears, apricots and fruit cocktail; crushed pineapple; applesauce; jellied cranberry sauce. Dried fruit must be cooked and then pureed.</p>	<p>Canned, fresh or frozen fruit unless mechanically chopped; dry fruit unless cooked and then pureed.</p>

TOTAL GROUND DIET

Food Group	Foods Allowed ☺ ☺ ☺ ☺	Foods To Avoid ☹ ☹
<p>Vegetables</p> <p>Soups</p>  <p>Desserts</p> <p>Miscellaneous</p> 	<p>Mechanically chopped canned and cooked vegetables (except corn, which must be pureed). Pureed raw vegetables and salads.</p> <p>Tomato soup; broth or bouillon</p> <p>Pureed Jell-O; soft-serve ice cream; fruit ice; sherbet; frozen yogurt; milkshakes; puddings except rice pudding which must be pureed; custard; custard pie filling; cheesecake filling; mousse; plain and fruit flavored yogurt; cakes or cookies softened with thickened milk. Cakes, cookies or muffins containing textured ingredients must be pureed. Whipped toppings; chocolate syrup; caramel syrup; *popsicle; *fudgesicle</p> <p>Butter; margarine; plain gravy (no chunks); mayonnaise; sugar; salt; herbs; spices; jelly; syrup; condiments; grated cheese; pickle relish; cheese sauce</p> <p>*Use appropriate caution and supervision when food items contain a stick.</p> <p>*Individuals on thickened liquid diets may not have popsicles and fudgesicles.</p>	<p>Whole corn unless pureed; raw vegetables and salads unless pureed; all cooked vegetables unless mechanically chopped.</p> <p>All soups unless mechanically chopped.</p> <p>All desserts or toppings with nuts, seeds, raisins, coconut, candy bar pieces or any chunks. Regular cake and cupcakes unless softened with thickened milk. Cookies and crackers unless softened with thickened liquids; no candies or pie crusts. Cakes, cookies, pies, brownies and cupcakes with lumpy ingredients must be pureed.</p> <p>All others including bacon bits, pickles, preserves, salsa.</p>

PUREED DIET

Food Group	Foods Allowed ☺ ☺ ☺ ☺	Foods To Avoid ☹ ☹
Meat, Fish, Poultry, Cheese and Eggs 	Pureed poultry; pureed meat; pureed fish; pureed cottage cheese; pureed eggs	All other meats and fried or hard cooked egg.
Breads, Cereals and Starches 	Whipped or mashed potatoes; pureed sweet potatoes; pureed rice and pastas; cooked cereals (except oatmeal which needs to be pureed)	Breads and crackers; all dry cereals; oatmeal except if pureed; dry bread crumbs; all other potatoes, pastas and rice
Fruits and Juices	Pureed fruits; applesauce	All non-pureed fruits.
Vegetables 	Pureed vegetables; tomato juice (thickened if needed)	All others
Soups	Tomato soup; broth and all pureed soups (thickened if needed)	All non-pureed soups (except tomato soup and broth)
Desserts 	Pureed Jell-O; plain pudding, custard or custard pie fillings; plain yogurt or yogurt with pureed fruits; pureed desserts; pureed cake and cookies; chocolate syrup; caramel syrup	All others; rice pudding and tapioca pudding must be pureed.
Miscellaneous	Butter; margarine; plain gravy (no lumps); sugar; mayonnaise; salt; herbs; spices (such as garlic or onion powder); jelly; mustard; ketchup	All others including grated cheese; tartar sauce; relish; jam; preserves; chunky salad dressings; chopped or minced garlic or onion

Mechanical Soft Diet – This diet consists of soft foods that are easy to chew. With the exception of meats which should be served mechanically ground and raw fruits and vegetables which should be served mechanically chopped, other foods should be hand chopped into ½ inch size (or smaller) to aid chewing.

Actual ½ Inch Size



Total Ground Diet – This diet consists of food for individuals who are unable to chew food. All foods will be mechanically chopped or mechanically ground into one-quarter inch size pieces; corn, raw vegetables, salads, rice and textured muffins will be served pureed as specified by menu). The menu modification sheets will list the appropriate substitute at each meal for bread and rolls (e.g. an extra 4 oz of the starch or an extra 2 oz of the casserole). Cakes, cookies, pancakes, French toast and waffles will be moistened in thickened milk (by the Dietary Department). Textured cakes and cookies will be pureed.

Actual ¼ Inch Size



Pureed Diet – This diet consists of food for individuals who are unable to chew food. All foods are blenderized to a smooth, moist consistency. The menu modification sheets will list the appropriate substitute at each meal for bread and rolls (e.g. an extra 4 oz of the starch or an extra 2 oz of the casserole).

The following list of foods contains acceptable choices for individuals on Mechanical Soft, Total Ground and Pureed Diets. Exceptions can be made on an individual basis with the approval of the Speech Language Pathologist. A speech referral needs to be sent to Therapy Services and an evaluation by the Speech Language Pathologist needs to be done. If she finds that an individual may have snacks outside his/her diet consistency, then the exceptions will be added to his/her Mealtime Guide sheet. Only the Speech Language Pathologist is allowed to make exceptions to an individual's diet consistency.

LIQUID CONSISTENCIES

The texture of the liquid an individual receives is recommended by an Occupational Therapist or Speech Pathologist and is ordered by a Doctor.

The texture of food should not be thinner than the prescribed liquid consistency.

- ❖ **Thin:** Includes all liquids, Jell-O, sherbet, Italian ice, and ice cream. This consistency is considered non-restrictive. Nothing is added .
- ❖ **Nectar:** Apricot or tomato juice consistency; some liquids will require a thickening agent to reach this consistency.
- ❖ **Honey:** Liquids can still be poured, but are very slow. Liquids will require a thickening agent to be added to achieve this consistency.
- ❖ **Pudding:** Liquids are spoonable, but, when spoon is placed upright, it will not stay upright.



Remember that all thickening agents whether commercial (Thick-It, Thick and Easy) or non- commercial food items (instant potatoes, baby fruits, baby cereal etc.) add extra calories to the foods or liquids they are added to. If the individual is on a reducing diet, these calories must be considered. The dietitian must be advised if a thickening agent is to be used.