

# *Aspiration*

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*Self-study course*



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## *Course objectives:*

**At the end of this course you will be able to:**

1. Define the term aspiration
2. List three reasons why older adults are at risk for aspiration
3. Explain why older adults are at greater risk for aspiration if they are fed by caregiver.
4. List at least four warning signs that a resident may be aspirating.
5. List at least a five steps you can take to prevent aspiration

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# *What is aspiration*

Aspiration occurs when either food or fluid enters the airway (lungs). Food or fluid can be aspirated either on its way down to the stomach or on the way up, such as when vomiting. When aspiration occurs, the lungs recognize the food/fluid as a foreign material. Gagging and coughing is the normal response and if the material is coughed out, little or no airway damage occurs. However, if the material can't be dislodged, it can set up a chemical reaction that may lead to pneumonia and even death.

Aspiration can occur anytime, such as during meal times, when eating snacks, swallowing medications or even brushing teeth. Aspiration can also occur between meals and when a person is asleep. We can even aspirate on our own saliva. Aspirating can be very frightening and may lead a person to be reluctant to eat or be fed.

Choking is a blockage of the airway, usually caused by a piece of solid food. The person may be unable to cough, talk or even breathe depending how much of the airway is blocked. Choking should cause an immediate response from caregivers and urgent intervention, such as a call to 911 if the blockage can't be dislodged or a follow up call physician reporting the incident if the blockage is dislodged.

## *Why are older adults at greater risk for aspiration?*

Aspiration occurs in persons of all ages. Eating rapidly or laughing while eating may cause anyone to aspirate, but if a person has a strong cough and gag reflex, the material can be dislodged from the airway easily. However, older adults are at greater risk for aspiration if they:

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- Have uncoordinated swallowing muscles or weakened cough/gag reflexes because of diseases affecting the nerves, such as a stroke or Parkinson's disease.
  - Eat rapidly or carelessly as a result of a dementia process. They may not be able to communicate their wants and needs effectively and eat or be fed when they are distressed, tired or not feeling well.
  - Have a weakened cough and gag reflex because of arthritis, degenerative bone disease (osteoporosis) or muscles weakness affecting the spine, chest and stomach.
  - Have decreased lung capacity and lung disease due to chronic respiratory illnesses, such as emphysema, chronic obstructive lung disease or bronchitis. These diseases make a person more susceptible to pneumonia.
  - Have poor body alignment and are not able to sit upright when eating. Eating in bed always puts a person at high risk for aspiration as food/fluid falls to the back of the throat too quickly. If for some medical reason the person must eat or be fed in bed, the head of the bed should be raised to a 30 degree angle and should remain in that position for 45 minutes after eating.
  - Have poor chewing ability, such as having missing or loose teeth, teeth in poor repair, or poorly fitting crowns, bridges or dentures.
  - Have gastroesophageal reflux disease (heart burn) which causes stomach contents to flow back into the throat (esophagus). This is a serious condition that affects many older adults.
  - Take medications that make them drowsy or have a medical condition that causes fatigue and weakens the gag and swallowing reflexes.
  - Are fed by caregivers, who may not be familiar with feeding the person and may feed them too rapidly or put too much food in their mouth at once making swallowing difficult.

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- Have a feeding tube. Persons with feeding tubes are at high risk for aspiration. Caregivers should always follow instructions from the physician, nurse or feeding specialist on how fast and how much formula to give at one time. The person should be fed in an upright sitting position and remain in an upright for 45 minutes after feeding just as if they were eating orally.

## *Signs and symptoms that aspiration may be occurring*

A choking incident is a significant event and will get caregiver's attention and need immediate intervention. However, many symptoms of aspiration are subtle and may go unrecognized until the person appears ill. The following are signs and symptoms of aspiration:

- Coughing, gagging or choking during meal times and immediately after
- Rapid breathing, fatigue or bubbly respirations during and immediately after meals
- Intermittent elevated temperatures.
- Vomiting small amounts after meals and at night (spitting up).
- Needing to take multiple swallows to clear food from the mouth
- Drooling or having food fall out of the mouth
- Eating or drinking rapidly and stuffing food in the mouth
- Appearing fearful and reluctant to eat

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- Unexplained weight loss or being underweight.

*If you believe a person is having any of the above sign and symptoms, ask their nurse or physician for further instructions.*

## *Steps you can take to prevent aspiration*

There are many steps that can be taken to lessen an older adult's risk of aspiration. Some are simple steps that should be encouraged for everyone, such as eating slowly and chewing food carefully. Other preventions are more specific and may take orders and instructions from a health care provider, such as occupational therapist, physical therapist, nurse, physician or swallowing specialist. The following are ways to prevent or lessen the risk of aspiration:

- Changing food texture to mechanical soft diet or pureed diet and thickening fluids to a honey or pudding consistency. Thin fluids are more easily aspirated than thicker fluids. Cold foods are more easily swallowed than warm foods. Always cut food into bite size pieces (dime size) for residents who have difficulty cutting their own food.
- Sitting upright for meals and in good body alignment.
- Remaining in a sitting position for at least 45 minutes after eating or drinking.
- Elevating the head of bed 30 degrees. This allows gravity to help food stay in the stomach and not flow back into the throat.
- Feeding a person slowly and having written instructions around how he/she eats and how they take their medications so that all caregivers know what to do.
- Offering small food portions or using small eating utensils to discourage the resident from stuffing too much food in their mouth at once.

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- Making sure the resident is fully awake and alert when eating. This is especially important when giving medications.
  - Limiting fluids two hours before bedtime.
  - Giving anti-reflux medications if the person has gastroesophageal reflux disorder (GERD).
  - Never rapidly give liquid medication with a syringe into the back of the mouth.
  - Never leave liquids (glass of juice, or cup of coffee) within reach of residents who are not suppose to have anything by mouth or need special assistance when drinking.

## *What to do if you believe a person has aspirated?*

- Stop feeding/eating
- Keep the person upright and encourage coughing
- Do not feed the person or allow them to restart eating until breathing is back to normal for them

### *Call 911 if:*

- The person's breathing remains labored and distressed
- Their color remains pale, dusky or bluish



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## *Documentation*

- Serious choking incidents should be documented in the resident's record or Incident Report Form
- Aspiration preventions and interventions specific to the resident should be documented in the Resident's Care Plan
- List "*Aspiration Risk*" under the medical concerns portion of the plan.





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