

Aspiration

The Causes and Complications you can Help Manage

Care Provider Bulletin

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Who is at Higher Risk of Aspiration?

Persons who:

- Experience swallowing difficulties (dysphagia/poor swallowing muscle coordination or sensation)
- Are unable to chew properly
- Eat quickly
- Have experienced a stroke
- Have medical conditions such as severe dental problems, Parkinson's disease, muscular dystrophies, acid reflux, seizure disorder, Pica, Prader Willi Syndrome or cerebral palsy
- Have a history of choking or aspiration pneumonia
- Use feeding tubes
- Drink large amounts of alcohol (they may become numb to the choking sensation)

What is aspiration?

- Aspiration happens when food, liquid, or other material enters a person's airway and eventually the lungs by accident. It can happen as a person swallows, or food can come back up from the stomach.
- Aspiration can lead to serious health issues such as pneumonia and chronic lung scarring.
- Aspiration pneumonia is known as a 'silent killer' and it can become deadly without many symptoms. People prone to aspiration have reduced cough reflexes, so they may not notice themselves choking or induce a cough when they aspirate.
- Choking is a significant concern for someone with swallowing issues. It is the fourth leading cause of death by unintentional injury. Learning about prevention can help save a life.

General symptoms

Symptoms may occur after the person eats, but can also occur over time. Some people show no signs of aspiration.

- Feeling that food is stuck in the throat or coming back into the mouth
- Pain or trouble when swallowing
- Fever after eating
- Coughing or choking while eating or drinking
- Chronic chest congestion
- Wheezing, or wet cough
- Shortness of breath
- Fatigue while eating
- Chest pain
- Extra "clearing" attempts
- Aversion to eating because of the choking sensations
- Look of panic, coughing, gasping, inability to vocalize, turning pale
- Waking up coughing, choking, or gasping
- Drop in blood oxygen saturations while eating

If someone is choking or not breathing, take immediate action. Call 911 and follow the operator's instructions.

Prevention

- Follow doctor's orders for diet, supervision, and eating plan
- Maintain good dental care by brushing and flossing regularly, and seeing a dentist
- Take medications as prescribed
- Do not smoke
- Avoid food and drink before lying down – stay upright at least 30 minutes after eating
- Slow down when eating, and avoid talking while eating
- For individuals who have had a swallow study (especially if they have a neural-muscular disorder), they should have a new study periodically to see if anything has changed
- Do not leave someone alone during mealtime if they are in the high-risk

How is Aspiration Diagnosed?

- Listening for decreased air-flow, rapid heart rate, and crackling sounds in lungs
- Chest x-rays
- Sputum culture
- Bloodwork
- Bronchoscopy
- CT scan
- Modified barium swallow test
- Endoscopy

Treatment

- Swallow study
- Medication
- Diet changes (i.e. thickened or no liquids)
- Texture changes such as ground or pureed food
- Eating plan:
 - Position changes while eating
 - Not eating while lying down
 - Supervised eating
 - No distractions during meals
 - Using straws
 - Stimulating foods such as carbonating drinks or adding spices
 - Slow person down when eating – encourage small bites
 - Provide smaller, more frequent meals for those with acid reflux
- Aspiration pneumonia can cause breathing problems that may require supplemental oxygen, steroids, or a breathing machine. Severe aspiration pneumonia may require hospitalization. Antibiotics may be prescribed.
- Depending on the cause and severity of the aspiration, a feeding tube may be required.

How to Respond to a Choking Victim

- If someone is choking or not breathing, take immediate action. Call 911 and start CPR or Heimlich maneuver.
- If the person is coughing forcefully, encourage them to continue coughing to clear the object.
- If the person cannot cough, speak, or breathe, their airway may be completely blocked. Call 911 and take necessary action.
- If the person is gasping or choking, attempt the Heimlich maneuver.
- If the person has no pulse, begin CPR.
- Document any aspiration or choking events and inform the person's doctor. Document what was happening before the event, what symptoms appeared, and for how long.



Sources & Resources

- [Aspiration from Dysphagia](#), Cedars-Sinai
- [Choking Care Provider Bulletin](#), Developmental Disabilities Administration
- [Choking: First Aid](#), Mayo Clinic
- [Dysphagia: How to Help a Loved One Eat and Drink Safely](#), AgingCare
- [What is CPR](#), American Heart Association

Seek help right away for someone who may have aspirated or choked. Even if they have stabilized, report it to their doctor. They may not be 100% clear, were injured by the food or hurt during the applied first aid. Aspiration pneumonia can develop days later.