
Dehydration



Self-study course

Course Objectives

By the end of this course you will be able to:

- 1) Define dehydration
- 2) Understand why older adults are more prone to dehydration than younger people
- 3) Understand why residents of care facilities may be at even greater risk for dehydration than other older adults
- 4) List at least four steps you can take to help residents get enough liquid to drink
- 5) List three warning signs of dehydration

Why do we need water?

A person can survive only a few days without water. Every cell, tissue and organ needs water to function properly. Water is necessary to:

- Carry nutrients and oxygen to cells
- Flush waste products out of the body
- Keep the skin moist
- Help regulate body temperature and blood pressure
- Cushion our joints



By the time you feel thirsty, you have probably already lost two or more cups, or one or two percent of your total body water. Nearly one-third of all Americans are chronically under-hydrated.

What is dehydration?

Dehydration is the rapid loss of **three percent** or more of body water.

Why are older adults at greater risk?

Adults lose about ten cups of water each day through body processes including perspiration, respiration and elimination. Not getting enough fluids each day can take a tremendous toll on every aspect of bodily functions, including possible changes in memory, vision, kidney and heart function.

Older adults often don't drink enough fluids and are prone to dehydration, especially during the summer months. In fact, dehydration is the most common fluid and electrolyte disturbance in the elderly. Diseases that cause mental or physical incapacity also reduce the ability to recognize thirst, create an inability to express thirst or may decrease access to water. Dehydration can result in serious physical complications and can cause death.

The total amount of water in the body decreases with age. Approximately 80 percent of a child's weight is water. However, for an adult age 61 to 74 years, this drops to approximately 43 percent for a woman and 50 percent for a man. Therefore, even small decreases of fluid intake can cause proportionately more dehydration in an older person than in a younger person.

As people age, the ability of the kidneys to concentrate/produce urine is compromised. Even when water intake is reduced, urine output is not significantly reduced. This increases the risk of dehydration.

Thirst also decreases as a person ages, causing the loss of an important defense against dehydration.

Dehydration in care facility residents

Approximately one million seniors are diagnosed and hospitalized with dehydration in the United States every year, and an estimated 33 percent of all nursing facility residents have this problem. Studies have shown that fluid intake typically drops by 50 percent once a resident is admitted to a care facility.

Two factors affect fluid intake when a person is admitted to a care facility: lack of independent and easy access to fluids and the fear of incontinence. These factors also increase the risk of constipation and fecal impaction, infections, pressure sores, pneumonia and repeat hospitalization. Once an older adult is hospitalized with dehydration, she or he is twice as likely to be hospitalized again with a dehydration diagnosis.

What happens when a person becomes dehydrated?

Percentage (%) Body Water Loss	Progressive Effects
0 -1 percent	Thirst
2 -5 percent	Dry mouth and fatigue
6 percent	Increased body temperature and dizziness
7 percent	Lack of sweating and collapse
8 percent	Increased weakness
10 percent	Muscle spasms, swollen tongue, delirium
11 percent	Kidney failure

Who is at risk for dehydration?

Persons might be at risk for dehydration if they:

- Drink less than six cups of liquids per day
- Need help drinking from a cup or glass
- Have trouble swallowing liquids
- Use diuretic medications or laxatives
- Have difficulty swallowing or have mouth pain or recent dental work
- Are unable to ask for something to drink when thirsty because of speech or communication problems
- Are constantly moving or pacing
- Refuse food or fluid on a regular basis
- Need help to get something to drink
- Don't have a fan or air conditioning
- Use heavy bed linens, or heavy or dark-colored clothing in warm weather
- Are having frequent vomiting, diarrhea or fever

Preventing dehydration

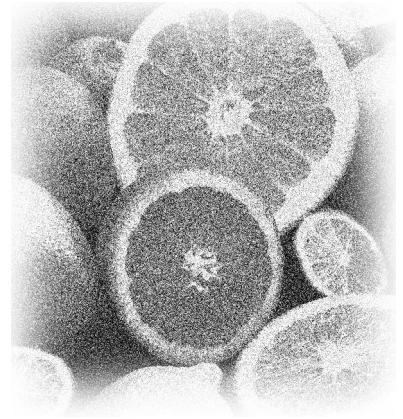
The human body should never lose more fluid than it is taking in. Most residents need at least six cups per day of liquids to stay hydrated. Below are some steps you can take to help residents get enough to drink

- Encourage residents to drink many times throughout the day: offer two to four ounces of water or liquids frequently; for example, every time you enter a resident's room.
- Use creative ways of presenting acceptable fluids to the resident such as puddings, jello, fruit, popsicles, soups, etc.
- Be sure the resident does not have problems swallowing; then if appropriate, offer sips of liquid between bites of food at meals and snacks.

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Preventing dehydration — continued

- Drink fluids with the resident. Eating or drinking with others will often increase a person's willingness to eat and drink.
- Avoid the use of caffeinated beverages such as coffee, tea, and sodas, because they may contribute to dehydration. Caffeinated or alcoholic beverages aren't water substitutes. They act as diuretics and cause a person to lose more water through increased urination.
- In place of sodas, try offering flavored, carbonated water; lemonade or decaffeinated iced teas; or add lemon or lime slices, flavored icecubes (cranberry juice, citrus, etc.) to water to improve the flavor (depending on the resident's dietary restrictions).
- Be sure a resident has a pitcher and cup within easy reach and that the pitcher is light enough that the resident can lift it.
- Develop methods for the resident to access fluids independently. Offer the appropriate assistance if the resident cannot drink without help.
- Consider using a large handled cup, a cup with a secured lid and drinking spout or special straw, if appropriate.
- Offer ice chips (unless the resident has a swallowing problem).
- Monitor and record the resident's physical response to decreased fluids or replacement of fluids.
- Consider asking the physician for a swallowing evaluation if you think the resident may be having difficulty with swallowing.



Warning signs of dehydration

The following are warning signs that show a resident may be dehydrated:

- Dry mouth, sticky mucous membranes in the mouth
- Cracked or dry lips
- Sunken eyes
- Dark urine
- Decreased urine output
- Constipation
- Increased body temperature
- Wrinkled skin which may lack its normal elasticity
- Muscle cramping
- Decreased level of alertness
- Confusion
- Dizziness
- Lethargy (tiredness)

Remember

Report to your nurse or physician if you see any warning signs of dehydration or suspect that a resident may be suffering from dehydration.

This brochure is available in
alternate formats.
Call 1-800-282-8096 V/TTY

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