Introduction

Dehydration is a serious health condition and can occur quickly due to illness such as vomiting and diarrhea or occur more slowly due to lack of adequate daily fluid intake. Other risks associated with dehydration include an increased risk of constipation and fecal impaction, infections, pressure sores, pneumonia and repeat hospitalization. Dehydration is the most common reason older adults are hospitalized. In most situations simple interventions can prevent dehydration.

Persons at risk or with a history of dehydration should have written instructions on how to best support them and their unique health care needs. There are many different terms used to describe the written instructions: protocols, alerts or written instructions. Written instructions or protocols should be one or two pages that quickly communicate prevention and interventions for the at-risk person. These are in addition to care plans and service plans. Care plans and service plans must also address the risk but may have more details.

What is dehydration?

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

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; and
- 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.

Who is at risk for dehydration?

Adults lose about ten cups of water each day through body processes including perspiration, respiration and elimination. Not getting enough fluids each day can affect 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.

As people age the sensation of thirst begins to diminish. Research shows people as young as 50 years old have reduced sensation of thirst. Sensation of thirst is an important defense against dehydration. Additionally, disease that causes mental or physical incapacity also reduces the ability to recognize thirst, create an inability to express thirst or may result in the person being unable to access water without assistance.

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 more complications from dehydration in an older person than in a younger person.”

Dehydration in licensed or certified facilities

It is estimated that one out of 10 older adults are hospitalized due to dehydration with an estimated 55–85 percent of all residents living in community-based facilities routinely struggling with dehydration.
Studies have shown that fluid intake typically drops by 50 percent once a resident is admitted to a community-based 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.

People at risk of aspiration/choking should not have fluids in easy reach but must have fluids offered routinely. Residents that cannot access fluids without assistance also need to have fluids offered routinely. Depending on how much they are able or willing to drink at any one time will determine how frequently you must offer liquids throughout the day. However, in most cases offering fluids at a minimum of every two hours is ideal.

**How is dehydration life threatening?**

Dehydration can lead to life threatening conditions including death. Dehydration can cause kidney damage or failure, seizures or low blood volume shock (hypovolemic shock), which causes a dangerous drop in blood pressure. Dehydration in hot conditions can lead to heat injury (heat stroke) and become life threatening quickly.

Dehydration can be prevented in most cases by identifying each resident’s risk and being able to identify early interventions. 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;
- 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 accessing fluids;
- Don’t have a fan or air conditioning during warm weather;

If someone needs assistance or is at risk of aspiration, be sure to list the times you need to offer fluids on the MAR. Do not depend on your memory or when you are thirsty.
- Use heavy bed linens, or heavy or dark-colored clothing in warm weather;
- Have frequent vomiting, diarrhea or fever.

**Signs and symptoms of dehydration**

The following are warning signs that indicate a resident may already 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 that may lack its normal elasticity;
- Muscle cramping;
- Decreased level of alertness;
- Confusion;
- Dizziness; and
- Lethargy (tiredness).

*Report to the resident’s health care practitioner or your facility’s nurse if you see any warning signs of dehydration or suspect that a resident may be suffering from dehydration.*

**How to identify risk from health care records**

You need to understand what to look for when identifying a person’s dehydration risk before developing a care plan, individual service plan (ISP) or protocols.

You probably gathered information before and during the screening and pre-admission process related to a person’s risk for dehydration.
Assess if the person has a documented history of:

- Dehydration;
- Constipation;
- Chronic diarrhea due to disease or medications;
- Diabetes;
- Any type of stoma (a surgical opening in the body such as a trach or feeding tube);
- Urinary tract infections;

Dehydration, in many cases, can increase the risk of a urinary tract infection.

- Inability to access fluids on their own;
- Regular refusal of fluids;
- Kidney damage or failure.

Reducing the risk of dehydration

The human body should never lose more fluid than it is taking in. Most residents need at least six cups of liquids per day 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:
  - If unable to access fluids on their own, the resident should be offered fluids at minimum every two hours, which should be listed on the medication administration record (MAR).
- Use creative ways of presenting fluids to the resident such as flavored waters, puddings, Jell-O, fruit, Popsicles or soup.
- Be sure the resident does not have problems swallowing; then if appropriate, offer sips of liquid between bites of food at meals and snacks.
- Drink fluids with the resident. Eating or drinking with others will often increase a person’s willingness to eat and drink.

Persons with any type of stoma have an increased risk of dehydration.
• Offer flavored carbonated water, lemonade or decaffeinated iced teas; or add lemon or lime slices, flavored ice cubes (cranberry juice, citrus, etc.) to water to improve the flavor (depending on the resident’s dietary restrictions).

• Be sure a resident has easy access to water. If using a pitcher, keep it within easy reach and make sure 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.

• Consider asking the resident’s health care practitioner for a swallowing evaluation if you think the resident may be having difficulty with swallowing.

Avoid:

• 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. If the resident insists on their morning tea or coffee, try adding additional water.

• Sugary drinks;

• Foods high in sodium.

Documentation

Several tools are used to communicate about risks, risk prevention and interventions: care plans, service plans, individual service plans (ISPs) and protocols. Protocols are generally stand-alone documents used as a daily guide for caregivers. Everyone with a protocol should also have the risk identified in the person’s care plan, service plan or ISP.

Fresh foods naturally high in water content can help with maintaining good hydration.

Adding fruit can add flavor without too much added sugar for a refreshing drink.

Offering fruit infused water in the evening can be a fun way to improve hydration.

Care plans, services plans and ISPs are all tools that communicate how to support a person for activities of daily living (ADLs), care needs, social needs and other supports to help the person be as independent as possible. Different settings use different terms, but they all have the same purpose — supporting the resident.
The person’s care plan should document information on the person’s ability to safely access fluids on their own, conditions that increase dehydration risk such as having a stoma or routine drooling; and identify preferred fluids. This information should accompany the person if he or she moves to another setting.

What to do if you believe a person is at risk for dehydration:

- Be proactive and attempt to prevent dehydration by offering plenty of fluids regularly.
- If resident is unable to access fluids on their own or avoids fluids, implement a fluid schedule on the resident’s MAR. At minimum fluids should be offered every two hours.

**Written instructions (protocols)**

Written instructions or protocols have many benefits as individualized communication tools. They include information about a person’s unique health care support needs. Written instructions ensure that all caregivers know what to do, minimize the need for others to guess the person’s needs and are easily shared with other settings.

Protocols (risk documentation) are specific to the person’s experience and should identify:

- The risk(s);
- Prevention strategies;
- Warning signs of the problem;
- What to do when a problem is observed;
- When to call 9-1-1.

Protocols must be routinely reviewed and revised as needed.

Instructions/protocol are specific to the person’s needs and must communicate their unique needs. It is also important to identify what is “normal” and what “is not” so that everyone knows what to watch for, what to record, and what action to take with the information they collect!

Sample written instructions (protocols). There is no one format. Protocols should be easy to read and no more than one page (front and back). It is used as a quick reference and needs to be readily available for quick access.
What to do if you believe an individual is dehydrated

You should report to the resident’s health care practitioner or the facility nurse if a person has any of the following:

- Increased or constant vomiting for more than a day
- Fever over 101F
- Diarrhea for more than two days
- Decreased urine output
- Weakness

Seek immediate medical care if the individual:

- Seems confused
- Is sluggish (lethargic)
- Has not urinated in the last 12 hours

Call 9-1-1 if:

- The individual:
  - Has a fever higher than 103F
  - Is having a seizure
  - Has difficulty breathing
  - Has fainted
  - Is unconscious
- You believe the person is gravely ill or you are concerned about his or her immediate health and safety.
Summary

Hydration is key to good health and can be achieved with simple steps such as offering fluids throughout the day, increasing foods that have high water content and minimizing the intake of sugary drinks and foods high in sodium.

Training credit

You will need to take and pass a test to receive training credit (a certificate) for this course. You can find the test order form here: http://www.oregon.gov/DHS/SENIORS-DISABILITIES/PROVIDERS-PARTNERS/Pages/afh-training.aspx.

Additional Resources

Hydration for Health – Hydration and the elderly
http://www.h4hinitiative.com/everyday-hydration/how-your-needs-change-over-time/hydration-and-elderly