

Dehydration

The Fatal Four

There are four major health issues that impact individuals with intellectual and developmental disabilities at a greater rate and with more severity than those in the general population.

It is important for all direct care and support staff, including DSPs and QIDPs, to familiarize themselves with these conditions as, unaddressed, they may worsen quality of life and even cause preventable death in persons residing in communal I/DD homes.

The Fatal Four conditions are: **aspiration, constipation, dehydration and seizures.**

Dehydration

Water is an essential life-sustaining element we take for granted, not truly valuing its commodity until it is in short supply. Just check any wilderness survival guide and you will find acquiring potable water prioritized above even food or shelter. This is because water is vital for many life functions, from temperature control to forming the base of the blood that pumps through our veins, down to the cellular level where adequate hydration is required for conducting cellular respiration, energy production, waste removal, and maintaining the ever-important fluid-electrolyte balance that drives our physiologic functions.

Dehydration occurs when the body loses more fluid than it replaces. Without timely correction, this fluid insufficiency can lead to serious complications.

Complications

- Temperature imbalance → Heat injuries
- Kidney stones
- Urinary tract infections
- Kidney injury
- Seizures
- Low blood volume → Shock

To prevent dehydration and risk of these complications

Review these reminders on **WHO** is at greatest risk for dehydration, **WHAT** the signs of dehydration are, and **HOW** to respond if dehydration is suspected!

Risk Factors

The following factors indicate WHO is at greater risk for dehydration:

- **Inadequate fluid intake** for any reason including
 - Requiring assistance to access fluid
 - Requiring assistance to drink
 - frequent refusal to eat or drink
- **Diabetes** causes additional water to be excreted as the body accommodates high blood sugar by expelling excess sugar in the urine
- **Illness** that acutely increases fluid demands
- **Vomiting or diarrhea** that increases fluid loss
- **Overactive sweating** that increases fluid loss
- **Advanced age** that lowers the ability to maintain homeostasis, including fluid retention
- **Certain medications** that increase fluid loss through increased urination (i.e., diuretics, some blood pressure medications, etc.)

Dehydration

Dehydration Signs/Symptoms

Support Professionals should be familiar with WHAT signs are a warning for dehydration in the I/DD individual:

- Subjective sensations
 - Headache
 - Lethargy
 - Thirst
 - Weakness
 - If resident is unable to vocalize complaints, look for atypical presentations (i.e., agitation)
- Dry mouth
- Decreased skin turgor
 - Poor skin elasticity due to dehydration causes slow rebound to normal state when skin on back of hand is pulled and held up for several seconds
- Muscle cramps
- Constipation
- Dizziness
- Disorientation
- Rapid heartbeat or breathing
- Decreased urine output or dark, concentrated urine

Interventions

Support Professionals should be familiar with HOW to respond to individuals at risk for dehydration with these interventions:

- **Encourage hydration** by promoting 8-10 glasses of fluid every day. Guide resident to healthy, low sugar fluid options. Plain water is ideal.
- **Establish hydration routines** that encourage residents to regularly consume fluids with certain tasks so that adequate hydration becomes a habit.
- **Determine what drinks are best** for each individual resident based upon their preferences (to increase their likelihood of staying hydrated) and other conditions. A pharmacist may be ideal for leading this intervention.
 - **For example**, if a resident has high blood sugar, is taking a statin and is on a low-sodium diet for heart disease, a pharmacist might direct him/her away from sugary beverages, grapefruit juice, and sports drinks that are high in electrolytes.
- **Limit sodium intake** as it increases the risk of dehydration by increasing the fluid demands on the body.
- **Accommodate swallowing difficulties** associated with thin liquids by offering thicker beverage options such as smoothies or normal beverages with a thickening agent added. Note, a qualified medical provider may be required for directing this intervention, to protect against another one of the Fatal Four conditions – aspiration.