

HEALTH Matters

A MONTHLY RESOURCE TO HELP KEEP YOU INFORMED

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Prevention and Management of Dehydration in Elderly

The incidence of dehydration is probably underestimated quite seriously, because dehydration is often masked by other conditions. Older adults, even those who are healthy, are at higher risk for dehydration for two reasons: **reduced fluid intake and increased fluid loss**, especially during summertime. Altered thirst, changed functional status (even within normal limits), and greater use of **medication** are generally the cause.

Early signs and symptoms of dehydration include headache, fatigue, skin flushing, heat intolerance, dizziness, dry mouth or eyes and dark urine.

Advanced dehydration is characterized by difficulty swallowing, clumsiness, shriveled skin, sunken eyes, visual disturbances, painful urination, numb skin, muscle spasm, and delirium. **The best defense to dehydration is prevention and can include some relatively simple steps:**

- increase fluids at mealtime and fluids provided during medication pass
- consider palatability of fluid and individual resident's preferences
- employ diuretics at the lowest possible dose and only when absolutely necessary and avoid using more than one diuretic (e.g.: hydrochlorothiazide and furosemide)
- ensure that each resident receives appropriate vaccinations (influenza and pneumococcal)
- ensure that environmental factors are assessed to maintain appropriate temperature and humidity.

Pharmacists must consider that **some drugs can cause dehydration** especially those that can decrease free water clearance and cause **hyponatremia**. Drugs that alter **thermoregulation** can also make residents more sensitive to heat. Foods that can induce diuresis like **alcohol and caffeine** can also exacerbate the problem. Whenever bulkforming laxatives are prescribed or stool softeners used, attention to increased hydration can prevent impaction or dehydration.

Drugs that could induce hyponatremia	Drugs that could alter thermoregulation
Carbamazepine	Anticholinergics (e.g. oxybutinin)
Chlorpropamide	Antipsychotics
Haloperidol	Beta blockers (e.g. acebutolol, atenolol, bisoprolol, metoprolol, nadolol, propranolol, timolol)
Phenothiazines (e.g. chlorpromazine)	Carbamazepine
Morphine	Lithium
Thiazides (e.g. chlorthalidone, hydrochlorothiazide, indapamide, metolazone)	Selective Serotonin Reuptake Inhibitors (SSRI) (e.g. escitalopram, citalopram, fluoxetine, paroxetine, sertraline)
Tricyclic antidepressants* (e.g. amitriptyline, clomipramine, desipramine, doxepin, imipramine, nortriptyline, trimipramine)	Tricyclic antidepressants*

Crude evaluation methods of dehydration include evaluating urine color (as dehydration progresses, urine color darkens) and weight (one pound of body weight = 470 ml of water).

For more information: <http://www.hcfa.gov/medicaid/siq/siqhhd.htm>

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