

## Assessment of resident with dehydration

**Goals of assessment include** to assess hydration status and determine severity of dehydration, identify the cause of dehydration and to identify complications of dehydration.

### Assess hydration status and determine severity of dehydration or volume depletion:

No single clinical or laboratory feature reliably predicts dehydration in older adults.

Assessment for dehydration or volume depletion may include<sup>1,2</sup> :

Domain	Finding	Mild	Moderate	Severe
History	Fluid losses (diarrhoea, vomiting, diuresis)	+	++	+++
	Reduced overall intake <sup>3</sup>	+	++	+++
	Postural presyncope or dizziness	+	++	+++
	New onset fatigue	+	++	+++
	Functional decline	+	++	+++
	Worsening confusion or altered level of consciousness	Alert	Confused	Altered level of consciousness
	Weight loss	<5%	5-9%	>=10%
Examination <sup>5</sup>	Tachycardia <sup>4</sup>	+	++	+++
	Hypotension	-	-	+++
	Drop in systolic blood pressure on standing of >=20 mmHg	+	++	+++
	Tachypnoea (respiratory rate >20 breaths per minute)	-	+	++
	Dry tongue	+	++	+++
	Dry oral mucous membranes	+	++	+++
	Longitudinal furrowing of the tongue	-	+	++
	Non-fluent speech	-	+	++
	Reduced axillary (armpit) sweating	+/-	+	+++
	Sternal skin turgor reduced	+	++	+++
	Sunken eyes	-	-	+++
	Extremity weakness	-	+	+++
Investigations	Plasma bicarbonate	Normal	Reduced	Markedly reduced
	Plasma osmolality	> 300 mOsm/kg (measured osmolality) or > 295 mOsm/kg (calculated osmolality) - note may be normal in volume depletion due to loss of fluid and electrolytes		

1 Adapted from eTG Gastrointestinal Guidelines: Assessing adults for dehydration. 2016. Melbourne: Therapeutic Guidelines Limited.

2 History and examination findings in older persons with dehydration are variable and should be interpreted in the context of the individual person. These findings have poor sensitivity and specificity – however published data identifies that clinicians are consistent at identifying the same people as dehydrated even though they may use slightly different combinations of these parameters.

3 Unless there is a clinical contraindication, older women should be offered at least 1.6L and older men at least 2.0L of drinks each day (in air-conditioned environments). People obtain free water from oxidation and fluid from food which can contribute ~ 500-800mL of additional water daily.

4 Tachycardia may be blunted by beta-blockers and calcium channel blockers.

5 Daily weight measures may assist in assessing hydration status if recent baseline weight is known.