

Guideline for Hospital Admission

Ministry of Public Health - Lebanon

Diarrhea and vomiting caused by gastroenteritis diagnosis, assessment and management in children younger than 5 years

This guideline has been adapted from the National Collaborating Centre for Women’s and Children’s Health Commissioned by the National Institute for Health and Clinical Excellence, April 2009.

Recommendation on clinical detection of dehydration and assessment of severity

During remote or face-to-face assessment ask whether the child:

- Appears unwell
- Has altered responsiveness, for example is irritable or lethargic
- Has decreased urine output
- Has pale or mottled skin
- Has cold extremities.

Symptoms and signs of clinical dehydration and shock (Use table below)

Interpret symptoms and signs taking risk factors for dehydration into account. Within the category of ‘clinical dehydration’ there is a spectrum of severity indicated by increasingly numerous and more pronounced symptoms and signs. For clinical shock, one or more of the symptoms and/or signs listed would be expected to be present. Dashes (–) indicate that these clinical features do not specifically indicate shock. Symptoms and signs with red flags may help to identify children at increased risk of progression to shock. If in doubt, manage as if there are symptoms and/or signs with red flags.

Increasing severity of dehydration →			
	No clinically detectable dehydration	Clinical dehydration	Clinical shock
Symptoms (remote and face-to-face assessments)	Appears well	■ Appears to be unwell or deteriorating	–
	Alert and responsive	■ Altered responsiveness (for example, irritable, lethargic)	Decreased level of consciousness
	Normal urine output	Decreased urine output	–
	Skin colour unchanged	Skin colour unchanged	Pale or mottled skin
	Warm extremities	Warm extremities	Cold extremities
Signs (face-to-face assessments)	Alert and responsive	■ Altered responsiveness (for example, irritable, lethargic)	Decreased level of consciousness
	Skin colour unchanged	Skin colour unchanged	Pale or mottled skin
	Warm extremities	Warm extremities	Cold extremities
	Eyes not sunken	■ Sunken eyes	–
	Moist mucous membranes (except after a drink)	Dry mucous membranes (except for ‘mouth breather’)	–
	Normal heart rate	■ Tachycardia	Tachycardia
	Normal breathing pattern	■ Tachypnoea	Tachypnoea
	Normal peripheral pulses	Normal peripheral pulses	Weak peripheral pulses
	Normal capillary refill time	Normal capillary refill time	Prolonged capillary refill time
	Normal skin turgor	■ Reduced skin turgor	–
	Normal blood pressure	Normal blood pressure	Hypotension (decompensated shock)

Recognize that the following are at increased risk of dehydration:

- Children younger than 1 year, particularly those younger than 6 months
- Infants who were of low birth weight
- Children who have passed more than five diarrhoeal stools in the previous 24 hours
- Children who have vomited more than twice in the previous 24 hours
- Children who have not been offered or have not been able to tolerate supplementary fluids before presentation
- Infants who have stopped breastfeeding during the illness
- Children with signs of malnutrition.

It is recommended to admit patient for Gastroenteritis to hospital if clinical signs and symptoms are suggestive with possible clinical dehydration or clinical shock.

It is not recommended to admit patient for Gastroenteritis to hospital if none of the clinical signs or symptoms are suggestive of clinical dehydration or clinical shock.

In addition to the child's clinical condition, the following factors should be considered when deciding whether to admit a child with diarrhea and vomiting due to gastroenteritis to hospital:

- Social and family circumstances
- Other illnesses that affect the child or other family members
- Parental anxiety and instinct (based on their knowledge of their child)
- Contacts with other people who have serious infectious diseases
- Recent travel abroad to tropical/subtropical areas, or areas with a high risk of endemic infectious disease
- When the parent or carer's concern for their child's current illness has caused them to seek healthcare advice repeatedly
- Where the family has experienced a previous serious illness or death due to diarrhea/vomiting illness which has increased their anxiety levels
- When a diarrhea/vomiting has no obvious cause, but the child remains ill longer than expected for a self-limiting illness.

Checklist:

Increasing severity of dehydration →			
	No clinically detectable dehydration	Clinical dehydration	Clinical shock
Symptoms (remote and face-to-face assessments)	<input type="checkbox"/> Appears well	<input type="checkbox"/> Appears to be unwell or deteriorating	-
	<input type="checkbox"/> Alert and responsive	<input type="checkbox"/> Altered responsiveness (for example, irritable, lethargic)	<input type="checkbox"/> Decreased level of consciousness
	<input type="checkbox"/> Normal urine output	<input type="checkbox"/> Decreased urine output	-
	<input type="checkbox"/> Skin colour unchanged	<input type="checkbox"/> Skin colour unchanged	<input type="checkbox"/> Pale or mottled skin
	<input type="checkbox"/> Warm extremities	<input type="checkbox"/> Warm extremities	<input type="checkbox"/> Cold extremities
Signs (face-to-face assessments)	<input type="checkbox"/> Alert and responsive	<input type="checkbox"/> Altered responsiveness (for example, irritable, lethargic)	<input type="checkbox"/> Decreased level of consciousness
	<input type="checkbox"/> Skin colour unchanged	<input type="checkbox"/> Skin colour unchanged	<input type="checkbox"/> Pale or mottled skin
	<input type="checkbox"/> Warm extremities	<input type="checkbox"/> Warm extremities	<input type="checkbox"/> Cold extremities
	<input type="checkbox"/> Eyes not sunken	<input type="checkbox"/> Sunken eyes	-
	<input type="checkbox"/> Moist mucous membranes (except after a drink)	<input type="checkbox"/> Dry mucous membranes (except for 'mouth breather')	-
	<input type="checkbox"/> Normal heart rate	<input type="checkbox"/> Tachycardia	<input type="checkbox"/> Tachycardia
	<input type="checkbox"/> Normal breathing pattern	<input type="checkbox"/> Tachypnoea	<input type="checkbox"/> Tachypnoea
	<input type="checkbox"/> Normal peripheral pulses	<input type="checkbox"/> Normal peripheral pulses	<input type="checkbox"/> Weak peripheral pulses
	<input type="checkbox"/> Normal capillary refill time	<input type="checkbox"/> Normal capillary refill time	<input type="checkbox"/> Prolonged capillary refill time
	<input type="checkbox"/> Normal skin turgor	<input type="checkbox"/> Reduced skin turgor	-
	<input type="checkbox"/> Normal blood pressure	<input type="checkbox"/> Normal blood pressure	<input type="checkbox"/> Hypotension (decompensated shock)