

Diarrhoea and/or Vomiting (Gastroenteritis) Pathway

Clinical Assessment / Management Tool for Children with suspected Gastroenteritis



Management - Acute Setting

Triage

Assessment including PAWS Score
Blood Glucose
Start fluid challenge
Foreign travel – consider isolation
Risk factors for dehydration – see figure 3

Symptoms/signs suggest an immediately life threatening (high risk) illness?

Inform **most senior ED clinician**
Move to Resus
Bleep Paeds to attend
Consider 2222

Consider alternative diagnoses if:

- Vomiting alone
- Fever (>38) • Shortness of breath • Meningism
- Altered consciousness • Recent head Injury
- Recent Burn
- Severe localised abdominal pain • Abdominal distension or Rebound tenderness • Blood in stool
- Green vomit
- Hyperglycaemia

Discuss with most senior PEM/ED doctor

History/examination suggestive of gastroenteritis?
Assess dehydration risk.

Yes

NO

Clinical Finding	Green – Low Risk	Amber – Intermediate risk	Red- high risk
Age	>1 year	>3 months <1 year	<3 months
Behaviour	Responds normally to social cues Content / smiles Stays awake / awakens quickly Strong normal crying / not crying Appears well	Decreased activity Irritable/unsmiling with parents Lethargic Appears unwell	No response to social cues Unable to rouse or if roused does not stay awake Weak, high pitched or continuous cry Appears ill to a healthcare professional
Skin	Normal skin colour Warm extremities Normal turgor	Normal skin colour Warm extremities Reduced	Pale / mottled / blue Cold extremities
Hydration	CRT < 2 secs Moist mucous membranes Fontanelle normal	CRT 2-3 secs Dry mucous membranes Sunken fontanelle	CRT> 3 secs
Urine output	Normal urine output	Reduced urine output / no urine output for 12hrs	No urine output for >24 hours
Respiratory	Normal breathing pattern and rate	Normal breathing pattern and rate	Abnormal breathing / tachypnoea
Heart Rate	Heart rate normal Peripheral pulses normal	Tachycardia with normal peripheral pulses	Tachycardia with weak peripheral pulses
Eyes	Not sunken	Sunken Eyes	
Other		History consistent with Figure 3	

Fig 1 Management when clinical shock suspected

- Check blood glucose and blood gas
- Give **10-20 ml/kg** 0.9% Sodium Chloride IV / IO
- Reassess
- Second Bolus **10-20 ml/kg** 0.9% NaCl IV/IO
- Reassess
- Consider contacting **EMBRACE** at 40ml/kg while preparing more fluid

Fig 2 Management of Clinical Dehydration > 6months old

- Fluid trial – Dilute apple juice/ORS 5ml every 5 mins
- Consider Ondansetron 0.1mg/kg PO/sublingual (max 4mg) if continued vomiting in context of suspected gastroenteritis
- If fluids not tolerated or hydration not improved within 2 hours of arrival to ED please refer to paediatric team
- If fluids tolerated and hydration improves proceed to green action with consideration

Fig 3 Children at increased risk of dehydration are those:

- Have not taken or have not been able to tolerate fluids before presentation
- Have vomited three times or more in the last 24 hours
- Has had six or more episodes of loose stool in the past 24 hours
- History of faltering growth
- Additional parent/carer support required

For all patients, continue monitoring following PEWS Chart recommendation

Green Action	Amber Action	Red Action
• Provide Written and Verbal advice and double check parents happy with plan • Continue breast and / or bottle feeding/ fluid intake, little and often	• Begin management of clinical dehydration [Fig 2] • If < 6months talk to Paediatrics on call • Advice from Lead ED / Paediatrician should be sought and a clear management plan agreed with parents.	SEE ABOVE

Normal paediatric values (PAWS):

	Respiratory Rate at rest: [b/min]	Heart Rate [bpm]
< 1 year	35 - 54	116 - 155
1-2 years	27 - 44	106 - 135
> 2-3 years	23 - 34	91 - 125
4 - 7 years	20-25	81-110
8 – 16 years	15-20	66-100