Use in conjunction with Infants and Children Management of Acute Gastroenteritis Clinical Practice Guideline Fourth Edition GL2014_024

History and examination results in provisional diagnosis of gastroenteritis.
Clinical assessment of degree of dehydration (see Table on page 9). If no sign of dehydration continue frequent small volumes of oral fluids increasing volume and reducing frequency as fluids are tolerated.

Mild Dehydration
Offer frequent, small volumes ORS (achieving about 0.5mL/kg every 5 minutes).

Tolerating oral fluids and clinical/family status satisfactory.
- Educate family & provide Fact Sheet.
- Discharge home.
- Advise about planned medical follow-up and need for earlier review.

Not tolerating oral fluids.
- Continue to encourage oral fluids.
- Admit to hospital if dehydration progressing and oral intake is inadequate.
- Consider nasogastric rehydration or intravenous rehydration.
- Consider the need for UEC.

Moderate Dehydration - Child not shocked

4 options
1 “Aggressive” and diligent oral rehydration.
2 Rapid NG rehydration: Ensure the naso-gastric tube is inserted in the stomach, eg aspirating fluid and testing acid by pH tape. Commence Gastrolyte® via an enteral infusion pump eg. Kangaroo® at 10mL/kg/hr for 4 hours.
3 Rapid IV rehydration: Take UEC, check BGL. Commence 10mL/kg/hr for 4 hours using 0.9% sodium chloride + 5% glucose (no potassium chloride)
4 Standard IV rehydration: Take UEC, check BGL. Commence 0.9% sodium chloride + 5% glucose +/- 20mmols/L potassium chloride

If contemplating IV rehydration and there is difficulty gaining vascular access commence oral/nasogastric rehydration.

Severe Dehydration – Child shocked (Reassess frequently)

Requires admission to hospital for prompt management and constant supervision

- Give oxygen until signs of shock are reversed.
- Gain vascular access urgently.
- If IV difficult, use the intraosseous route.
- Take UEC BGL (if possible) but do not delay in giving bolus of 20mL/kg 0.9% sodium chloride or Hartmann’s stat.
- Reassess for signs of shock.
- Repeat bolus if necessary until signs of shock are reversed.
- Reassess hydration status & commence 0.9% sodium chloride + 5% glucose +/- 20mmols/L potassium chloride over 24 hours.
- Reassess fluid balance frequently.
- Monitor continuously and clinically reassess frequently.

It is expected that the clinical status of an infant or child who is receiving rehydration therapy for gastroenteritis should gradually improve. Reassess clinically and consider UEC within 6-8 hours.

IMPROVING
Comence/continue oral intake

Or if:
- Deteriorating clinical status
- Worrying signs/symptoms (see page 5)
Seek urgent medical advice/review. Further consultation may be necessary. As per Local Hospital CERS policy.

NOT IMPROVING
### Table 1: No single symptom or clinical sign reliably predicts the degree of dehydration

<table>
<thead>
<tr>
<th>Description of Dehydration</th>
<th>Dehydration (% of Body Weight)</th>
<th>Signs and Symptoms</th>
<th>Replacement Fluid Route</th>
<th>Replacement Fluid Type</th>
</tr>
</thead>
</table>
| **No Clinical Signs of Dehydration** | | Reduced urine output, Thirst, No physical signs | Oral | In order of preference:  
  - Frequent breastfeeds where appropriate/possible  
  - Oral Rehydration Solution (see page 10)  
  - 1/5 strength clear fluids i.e.: 4 parts water and 1 part juice/lemonade (if ORS refused) |
| **Mild** | 3% | Reduced urine output, Thirst, Dry mucous membranes, Mild Tachycardia | Oral | In order of preference:  
  - Frequent breastfeeds where possible/appropriate may be supplemented with an ORS  
  - Oral Rehydration Solution (see page 10) |
| | | | Nasogastric | Oral Rehydration Solution e.g. Gastrolyte® (see pages 10 - 12) |
| | | | Intravenous  
  - Rapid | 0.9% sodium chloride + 5% glucose (no potassium chloride) |
| | | | Intravenous  
  - Standard | 0.9% sodium chloride + 5% glucose +/- 20mmols/L potassium chloride |
| **Moderate** | 5% | Dry mucous membranes, Tachycardia, Abnormal respiratory pattern, Lethargy, Reduced skin turgor, Sunken eyes | Nasogastric | Oral Rehydration Solution e.g. Gastrolyte® (see pages 10 -12) |
| | | | Intravenous  
  - Rapid | 0.9% sodium chloride + 5% glucose (no potassium chloride) |
| | | | Intravenous  
  - Standard | 0.9% sodium chloride + 5% glucose +/-20mmols/L potassium chloride |
| **Severe** | 10% | Above signs, Poor Perfusion - Mottled, cool limbs/Slow capillary refill/Altered consciousness, Shock - thready peripheral pulses with marked tachycardia and other signs of poor perfusion stated above | Intravenous or intraosseous  
  20mL/kg stat and reassess fluid needs | For resuscitation use either:  
  - 0.9% sodium chloride OR Hartmann’s solution  
  - Reassess the child after each bolus.  
  - Ongoing fluid replacement should be:  
  - 0.9% sodium chloride + 5% glucose +/-20mmols/L potassium chloride |