

**ACUTE MANAGEMENT OF YOUNG CHILDREN AND INFANTS
WITH GASTROENTERITIS**

<i>This PCP relates to</i> NSW Health PD	<i>NSW PD2005_238: Children and Infants with Gastroenteritis in Hospitals - Managing</i>
PCP number	<i>NSW PD2005_238: PCP 5 Acute management of young children and infants with gastroenteritis</i>
Sites where PCP applies	Bulahdelah Community Hospital - Emergency Department (ED)
Target audience	Clinicians in ED where infants and children present with vomiting and diarrhoea
Description	Provides evidence based practice guidelines for the treatment of infants and children with gastroenteritis
Subject	Management of gastroenteritis in children
Keywords	Management, gastroenteritis, children, infants
Replaces existing PCP	
Document number and/or name of superseded document/s	
Document number and/ or name of superseded document/s	Hunter Area Emergency Services Policy 2/05 Acute Management of Young Children and Infants with Gastroenteritis
Related Legislation (including OHS legislation), Australian Standards, NSW Health Policy or Circular, other HNEH Documents, Professional Guidelines, Codes of Practice or Ethics: NSW Health Paediatric Clinical Practice Guidelines	
Portfolio Executive Director responsible for Policy and PCP	Nigel Lyons
Policy Contact Details	Person Sandra Babekuhl, Policy Officer - Guidelines, Standards and Protocols (Paediatrics) NCHN, Ph: 0400 328696 <i>Alternate Contact:</i> Rhonda Winskill, CNC Paediatrics NCHN/HNE Health, Ph: 49392354
Contact Details	Children, Young People and Families Clinical Network, phone 02 4939 2469
Summary	
<ul style="list-style-type: none"> This PCP is a clinical pathway in the assessment of the severity and management of gastroenteritis in infants and children. It advises that the treatment of children and infants with moderate and severe dehydration must be discussed with a paediatrician. Transfer to a level 5-6 paediatric unit must be considered for all presentations with severe dehydration PCP includes: Trial oral fluids form and fact sheet on gastroenteritis for parents 	
Distribution:	General Manager, DON, Paediatrician, NUM ED, ED Physician, Director of Medical Services CYP&FCN Stream Leaders
Date PCP authorised:	May 2007
PCP authorised by:	Professor Trish Davidson Clinical Leader CYP&FCN
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PCP Review Due Date:	May 2009
TRIM Number:	Pending

Hunter New England Area Health Service

Bulahdelah Community Hospital

PAEDIATRIC GASTROENTERITIS MANAGEMENT

Surname _____ Sex _____

Given Names _____

DOB _____ MRN _____

AFFIX PT LABEL HERE

INITIAL ASSESSMENT:

Symptoms	MILD	MODERATE	SEVERE
Thirst	<input type="checkbox"/> Increased	<input type="checkbox"/> Marked – may be too lethargic to drink	<input type="checkbox"/> Marked – may be too lethargic to drink
Urine Output	<input type="checkbox"/> Reduced	<input type="checkbox"/> Markedly reduced or absent	<input type="checkbox"/> Markedly reduced or Absent
Mucous membranes	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry	<input type="checkbox"/> Dry
Heart Rate	<input type="checkbox"/> Mild tachycardia	<input type="checkbox"/> Tachycardia	<input type="checkbox"/> Tachycardia, Shock
Skin	<input type="checkbox"/> Normal	<input type="checkbox"/> Reduced turgor	<input type="checkbox"/> Reduced turgor, Poor perfusion, mottling
Eyes	<input type="checkbox"/> Normal	<input type="checkbox"/> Sunken	<input type="checkbox"/> Sunken

Severity Score	<input type="checkbox"/> Mild	<input type="checkbox"/> Moderate	<input type="checkbox"/> Severe
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NOTE: Consider alternative diagnosis if diarrhoea absent or minimal

MANAGEMENT

*(See paediatric fluid regime over page)

TREATMENT	MILD	MODERATE	SEVERE
Fluids	<p>Oral 1ml/kg every 10min of ORT eg Gastrolyte</p> <p>If not tolerating gastrolyte – 1 part apple juice to 4 parts water *Oral rehydration should be attempted for at least 1-2 hours. *Small vomits do not imply failure but persistent profuse vomiting or worsening dehydration does. *If not tolerating oral consider nasogastric rehydration (NG) NG Feeds use ORT</p>	<p>Oral if tolerated * If oral not tolerated: Consider slow NG rehydration: * For slow NG rehydration refer to calculation over page.</p> <p>* Rapid NG rehydration is only to be attempted in level 4 or above paediatric facilities-and only after discussion with the Paediatrician</p> <p>* Slow NG rehydration should be attempted prior to considering cannulation</p> <p>Pathology not required (unless pt commenced on IV therapy)</p>	<p>CONTACT SENIOR MEDICAL OFFICER IMMEDIATELY</p> <p>IV / Intraosseous resuscitation with initial 0.9% Sodium Chloride 20 mL/kg over 10-20min. Rpt bolus 10-20 mL/kg until signs of shock reversed then:</p> <p>Consult with Paediatrician regarding ongoing fluid management.</p> <p>Consider NETS retrieval</p>
Blood + Urine Tests	Blood sugar level (dextrostix), U/A-specific gravity	Blood sugar level (dextrostix), U/A specific gravity. Only if commencing IV therapy: formal BSL, UEC, +/- FBC Blood Culture and CRP if T>38.5°C	Blood sugar level (dextrostix), U/A specific gravity. Formal BSL, UEC, FBC, Blood Cultures and CRP if T > 38.5°C
Weight	Document @ Triage	Daily weight	Daily weight
Observations	Hourly	30-60min	Continuous
Senior MO	If not tolerating oral fluids	To be notified promptly	Notify immediately
Disposition	Parent Fact Sheet Discharge if tolerating oral fluids R/V advice-GP or return to ED if condition deteriorates	If commenced NG or IV therapy transfer to a higher level facility. Any child on fluid replacement therapy must be reviewed either by the MO on call within six (6) hours of commencing treatment. Formal review must include physical + mental state, repeat electrolytes if IV therapy insitu and reassessment of fluid regime. Onset of new symptoms eg drowsiness, headache, abdo pain demand urgent review Parent fact sheet	Transfer to a higher level facility or NETS retrieval. Continue with monitoring Any child on fluid replacement therapy must be reviewed either by the MO on call six (6) hours of commencing treatment. Formal review must include physical + mental state, repeat electrolytes if IV therapy insitu and reassessment of fluid regime. Onset of new symptoms eg drowsiness, headache, abdo pain demand urgent review Parent fact sheet

- Antidiarrhoeal medication is **CONTRAINDICATED** in paediatric gastro enteritis
- In cases of severe vomiting consider a one off dose of Ondansetron 0.2mg/kg

DOCTOR: _____ SIGNED: _____ DATE: _____

Hunter New England Area Health Service

Bulahdelah Community Hospital

PAEDIATRIC FLUID MANAGEMENT

Surname _____ Sex _____

Given Names _____

DOB _____ MRN _____

AFFIX PT LABEL HERE

Child's weight _____ kgs

HOURLY FLUID REGIME (NG, IV, IO)

Note: For TKVO fluids use maintenance calculation only

1. Maintenance requirements

First 0-10 kg	4mLs/kg/hr	kgs X 4 mLs/hr =	mLs/hr	1. Total = _____ mLs/h
Next 11-20 kg	2mLs/kg/hr	+ kgs X 2 mLs/hr =	mLs/hr	
Next >20kg	1mL/kg/hr	+ kgs X 1 mLs/hr =	mLs/hr	

2. Replacement fluids – If dehydrated

Child's weight (in kg/s) _____ x 2 =	2. Total = _____ mLs/h
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3. Total replacement required

Add 1 & 2 together	3. Total 1 + 2 = _____ mLs/h
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Recommended fluids

<u>Oral</u>	Gastrolyte, hydralyte, diluted apple juice (1:4): Continue breastfeeding – small frequent feeds
<u>Nasogastric</u>	Use oral rehydration fluid- gastrolyte preferred
<u>Intravenous</u>	<u>Maintenance and Replacement fluids</u> 0.9% Sodium chloride + 2.5% Glucose OR 0.45% Sodium chloride+ 2.5% Glucose *Note- Preference is for 0.9% Sodium chloride + 2.5% Glucose
<u>Resuscitation</u>	0.9% Sodium chloride 20 mL/kg bolus repeat as necessary

- **KCL added only after serum K+ known and the child has passed urine (give 3 mmol/kg/day)**
Hyper/Hyponatraemia (Na>150 or <132mmol/L) Hyper/Hypokalaemia (K>5.5 or <3.3mmol/L) – Discuss with Consultant
- **Tolerating oral or nasogastric fluid** is defined as the majority of fluid staying down. Small vomits **do not** = failure, but persistent profuse vomiting does.
- **Oral rehydration** should be attempted for at least 1-2 hrs before considering other methods, unless there is rapid clinical deterioration.
- **Medications:** Anti-diarrhoeal medication is **CONTRAINDICATED** in children, however a one off dose of Ondansetron 0.2mg/kg may be considered in cases of severe vomiting

Please circle

Oral/nasogastric/IV therapy commenced at: _____ Infusion rate _____ mLs/h

Medical review required at _____