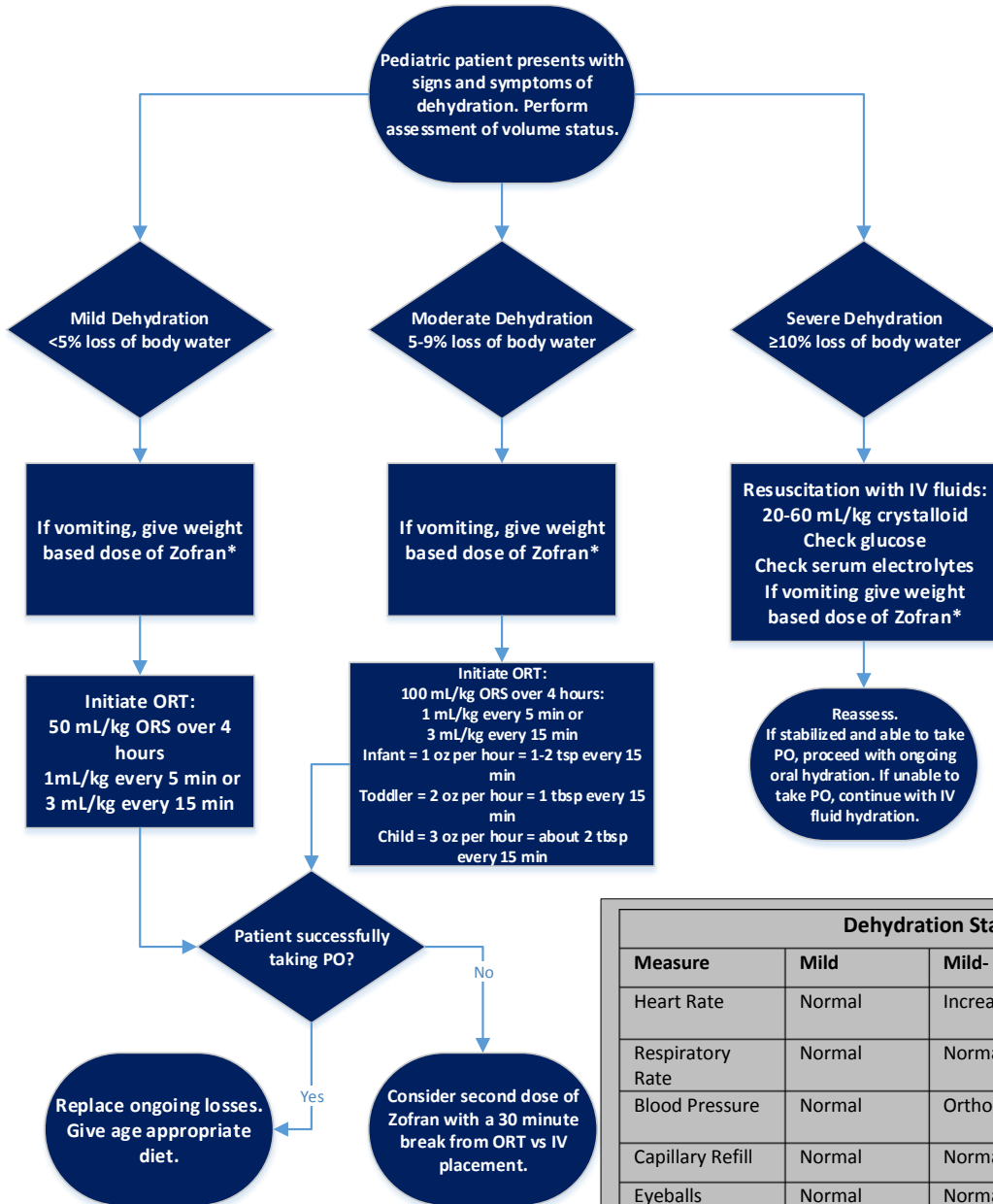




MANAGEMENT OF Pediatric Dehydration

This EPPA Clinical Guideline is intended to guide most, but not all, encounters involving pediatric dehydration and should not replace clinical judgment; deviate from or adapt this guideline to meet the individual patient's needs.



Dehydration Status			
Measure	Mild	Mild- Moderate	Moderate
Heart Rate	Normal	Increased	Greatly Increased
Respiratory Rate	Normal	Normal	Hyperpnea
Blood Pressure	Normal	Orthostatic	Decreased Pulse Pressure
Capillary Refill	Normal	Normal or slow	Slow
Eyeballs	Normal	Normal	Sunken
Mucous Membranes	Normal to Dry	Dry	Dry
Mental Status	Normal	Normal to Irritable	Lethargic
Urine Output	Normal to Decreased	Decreased to None	None



MANAGEMENT OF Pediatric Dehydration

References:

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- Hartling L, Bellemare S, Wiebe N, Russell K, Klassen TP, Craig W. Oral versus intravenous rehydration for treating dehydration due to gastroenteritis in children.
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Oral Rehydration Therapy (ORT)

- Pediatric patients with mild to moderate dehydration should undergo a trial of oral rehydration prior to the use of IV fluids.
- Faster initiation
- No needle stick
- Parents can continue same method at home
- Gives parents confidence in efficacy
- Opportunity for education on how to rehydrate at home
- Studies show increased parental satisfaction
- Reduced repeat acute care visits

Zofran (ondansetron) Works!*

- Decreased vomiting, decreased need for IV fluids, decreased hospital admission
- Zofran (ondansetron) dosing:
 - Use for age >6 months
 - 8-15 kg 2mg ODT or 0.15mg/kg IV
 - 15-30 kg 4 mg ODT or 0.15 mg/kg IV
 - >30 kg 8mg ODT or 0.15 mg/kg IV (max 4mg IV)

Oral Rehydration Solution (ORS) – What to Use?

- Commercial rehydration solution is best
- Avoid exclusive use of high carbohydrate drinks such as juice or soda
- More palatable options include:
 - Half-strength sports drinks approximate sodium and potassium requirements but are higher in sugar
 - Half-strength apple juice (50:50 apple juice: water)
- Avoid diet soda or artificially sweetened beverages
 - Glucose is needed

Other ORT Pearls

- To Replace ongoing losses
 - Give an additional 10 mL/kg per stool
 - Give an additional 4 mL/kg per emesis
- If the child vomits, take a 30 min break
- Continue age appropriate diet during and after rehydration
 - No evidence for specific food restrictions
 - Infant may resume formula or breastmilk whenever tolerated
- No need to restrict dairy products

Pearls for Managing Severe Dehydration

- Given 20 ml/kg crystalloid bolus over 10-15 minutes. Repeat until stabilized. May need up to 60ml/kg in the first hour
 - If difficult IV access consider IO placement
- Check serum glucose
- Check serum electrolytes and replace as needed
 - Bicarb <12 is a marker of more severe metabolic derangement