

## **Pediatric Update Key Points**- Dr. Melissa Chan, BCCH

RCH Grand Rounds: May 27, 2020

- Pediatric Resuscitations can be scary, optimize your resources before they happen:
  - o Know where your pediatric equipment is and how to use it (ex neonatal warmer, t-piece resuscitator, Breslow cart)
  - o For IOs most common error is using a needle that is too small, basically only use the “pink” in the newly born, all other kids use the blue needle. When you insert the needle into the skin and hit the bone (before you drill), you should still be able to see a black line outside of the skin
- Studies show up to 1/3 of pediatric medications may be dosed wrong, to help decrease errors consider using:
  - o Cognitive aids such as preprinted order forms, algorithms, apps such as pedistat
  - o Standardized weight based dosing sheets which can be populated prior to patient presenting (ex in a binder) or when epic launches possibly electronically
  - o Try to pick a few standard medications which will be used regularly to help increase familiarity
- For Intubating kids:
  - o Rarely need atropine, no minimum does
  - o At children’s we typically use ketamine and rocuronium for intubation
  - o Consider using cuffed tube rather than an uncuffed tube when intubating kids: decreases need for tube changes, less air leak, decreases aspiration, and allows for better etCO<sub>2</sub>
- There was new surviving sepsis guidelines for kids put out in Feb 2020 (<https://www.sccm.org/SurvivingSepsisCampaign/Guidelines/Pediatric-Patients>).  
Highlights include:
  - o Screening Lactates may not be able to predict outcome, but are useful for trending over treatment
  - o Suggest using balanced/buffered crystalloid rather than 0.9NS for resuscitation
  - o With ICU availability within you healthcare system, administration of up to 40-60 ml/kg bolus over the 1<sup>st</sup> hour
  - o Suggest not using bedside clinical signs in isolation to categorize septic shock in children as “warm” or “cold”
  - o If requiring an inotrope unable to make a recommendation between epi or norepi as first line agent, however recommend either of these agents over dopamine
- Multi Inflammatory Syndrome in Children (MIS-C)
  - o Unique inflammatory syndrome which shares some features of toxic shock syndrome and Kawasaki’s disease thought to be secondary to the SARS CoV2 virus
  - o BC will be using the World Health Organization disease definition
  - o For BC Children’s Algorithm of provisional workup please see: <http://policyandorders.cw.bc.ca/resource->

[gallery/Documents/BC%20Children's%20Hospital/C-05-01-60667%20Multisystem%20Inflammatory%20Syndrome%20In%20Children%20Provisional%20Evaluation%20Guideline.pdf](#)