



## Medical Direction and Practices Board 2023 Dexamethasone Update - White Paper

**Background:** Due to its anti-inflammatory properties, Dexamethasone continues to be a mainstay of treatment for pediatric patients presenting with asthma and croup. The efficacy of this medication to acutely treat and prevent progression of croup is well documented and the provision of steroids in the prehospital environment for patients with asthma has been proven to decrease overall admissions as well as ICU admissions.

**Current practice:** For pediatric patients with acute asthma exacerbations and acute presentations of croup, current EMS protocols recommend a one-time dose of Dexamethasone 0.6 mg/kg PO/IV/IM/IO up to a MAX dose of 10 mg (see Blue 8 and Pink 2).

**Practice Update:** Based on current best practice recommendations (1), the 2023 EMS protocol update will **increase** the MAX dose of Dexamethasone to 16 mg for the above indications, using the same weight-based calculation. The goal of this change is to avoid under treatment of airway and laryngeal edema, and to prevent rebound respiratory distress.

### Reference:

1. Sheno RP, Timm N; Committee on Drugs; Committee on Pediatric Emergency Medicine. Drugs used to treat pediatric emergencies. Pediatrics. 2020;145(1):e20193450. [PubMed 31871244<<https://urldefense.com/v3/https://www.uptodate.com/contents/dexamethasone-systemic-pediatric-drug-information/abstract-text/31871244/pubmed> ;!!LQXXzXo!2mLrHHoxXebiY34IEpy0fonUA3DFFxo9Y3n3snbtZH7SF4XwFJtQD5khvXkr0d3IH72IXM4snghcA3FPsfaJw10JztSOuHw\$>]