

TYPES OF INHALATION DEVICES FOR ASTHMA MEDICATIONS

Device/Medications	Age	Comments
Metered-Dose Inhaler (MDI) <ul style="list-style-type: none"> ■ Beta2-agonists (SABA) ■ Inhaled corticosteroids ■ Cromolyn Sodium ■ Nedocromil Sodium ■ Anticholinergics ■ Combination medications 	6 months to adult	Use with a spacer/holding chamber with or without mask is recommended to help deliver the medicine to the airways of the lungs instead of the mouth. Older propellant – CFC. CFC inhalers are being phased out by the Food and Drug Administration and many are no longer available. HFA – smaller droplets so less visible and forceful, more effective.
Breath-Actuated MDI <ul style="list-style-type: none"> ■ Beta2-agonists (SABA) 	>5 years	The child may not be able to generate the necessary inspiratory flow. Device does not require the use of spacer/holding chamber.
Dry-Powder Inhaler (DPI) <ul style="list-style-type: none"> ■ Beta2-agonists (LABA) ■ Inhaled corticosteroids ■ Anticholinergics 	>5 years	More rapid inspiration is needed to carry the heavy powder deep into the lungs. DPIs are not used with spacers. It takes greater effort to breathe in a dry powder than using an MDI, especially when a person is sick and having trouble with their asthma.
Nebulizer <ul style="list-style-type: none"> ■ Beta2-agonists (SABA) ■ Anticholinergics ■ Cromolyn Sodium ■ Budesonide 	Children of any age who cannot use an MDI with spacer/holding chamber with or without face mask.	Useful in infants and very young children, and any child with a moderate to severe asthma episode. Blow-by treatment is never acceptable – the medicine will be lost in the surrounding air and never reach the child’s airways. A face mask should be used if the child is unable or unlikely to breathe only through the mouth during the treatment. A mouthpiece can be used for all other people (usually >5 years).

SABA = short acting beta agonist

LABA = long acting beta agonist