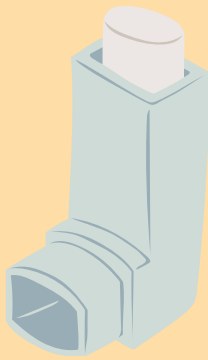


ASTHMA NEWSLETTER

SUMMER
2026



The goal of this newsletter is to provide asthma updates twice a year to our hospital and community partners.

Contents

- **2-4:** GINA 2026 Guideline Updates
- **5:** Breztri
- **6:** Neffy (intranasal epinephrine)
- **7:** High flow nasal cannula
- **8-10:** EPIC Tips & Tricks from Respiratory Therapy
- **11:** Asthma Education at CMH
- **12:** AirSupra
- **13-16:** MO & KS Medicaid Preferred Asthma Products

Updated CMH Asthma Reference Guide

[Asthma Reference Guide - Children's Mercy](#)

GINA 2026 GUIDELINE UPDATES

ASTHMA & ANAPHYLAXIS

- Patient presents with features of asthma & anaphylaxis?
- Added recommendation to give IN/IM epinephrine first, then bronchodilators

ADDITION OF ICS/FORMOTEROL

- ICS/Formoterol has been added as an option for patients with a mild exacerbation in primary care or ED, as an alternative to inhaled SABA
- Provides an opportunity before discharge for patients to receive optimal asthma treatment with an anti-inflammatory reliever (SMART) to reduce further exacerbations.

NEW ASTHMA FLOWCHARTS

- Development of 4 new flowcharts for assessment, treatment, follow up of patients who present for management of an exacerbation or acute asthma
- Reference [p. 180](#), [p. 186](#), [p. 221](#), [p. 226](#) in the 2026 GINA guidelines

INHALER TECHNIQUE

- Shake albuterol inhaler immediately prior to each actuation to avoid administration issues
- Any inhaler formulated as a suspension must be shaken immediately before each actuation

ORAL CORTICOSTEROID STEWARDSHIP (OCS)

- OCS stewardship is a priority to reduce short-term and long-term ADRs.
- Optimize inhaled therapy and biologic therapy to prevent need for OCS.
- Recommend nonpharmacologic therapies during respiratory infection
- Use appropriate dose and duration of OCS when necessary
- Avoid maintenance treatment with OCS, unless last resort
- Monitor cumulative OCS dose over time

GINA 2026 GUIDELINE UPDATES

SABA DOSING

More conservative dosing recommendations than previously,
In response to increasing evidence of overtreatment during acute exacerbations

ASTHMA EXACERBATIONS IN PRIMARY CARE

MILD presentation

All of:

Talks in sentences, can lie down, not agitated
Respiratory rate normal or mildly increased
No (or mild) accessory muscle use
No (or mild) expiratory wheeze
Normal air entry
O₂ saturation (room air) $\geq 94\%$ *
PEF $>70\%$ personal best or predicted
[If <18 years old, PRAM 1–3]

START TREATMENT

Give salbutamol 4 puffs by pMDI + spacer (see below) or budesonide-formoterol 160/4.5 mcg 2 puffs (see below)
Assess response, and if needed, repeat once after 30–60 min

MODERATE presentation

Consider these features:

Talks in phrases, prefers sitting to lying, not agitated
Respiratory rate increased but ≤ 30 /min
Accessory muscle use
Expiratory wheezing
Decreased air entry
O₂ saturation (room air) $\geq 92\%$ *
PEF 50–70% personal best or predicted
[If <18 years old, PRAM 4–7]

START TREATMENT

Give salbutamol 4–6 puffs by pMDI + spacer (or 2.5 mg by nebulizer), up to 3 times if needed, 20–30 min apart
If ipratropium is needed & available, give 4 puffs with salbutamol for up to 3 times
Start oral corticosteroids (see Box 9-5)

ASTHMA EXACERBATIONS IN ACUTE CARE FACILITY

MILD presentation

All of:

Talks in sentence, can lie down
Respiratory rate normal/mildly $\uparrow$
No/mild accessory muscle use
No/mild expiratory wheeze
Normal air entry, or mild basal $\downarrow$
O₂ saturation (room air) $\geq 94\%$ *
PEF or FEV₁ $>70\%$ personal best or predicted
[If <18 years, PRAM 1–3]

START TREATMENT

Salbutamol 4 puffs by pMDI + spacer (see below) or budesonide-formoterol 160/4.5 mcg 2 puffs (see below)
Assess response and, if needed, repeat once after 30–60 min

MODERATE presentation

Consider these features:

Talks in phrases, prefers sitting to lying, not agitated
Respiratory rate increased
Accessory muscle use
Expiratory wheezing
Reduced air entry
O₂ saturation (room air) $\geq 92\%$ *
PEF or FEV₁ 50–70% personal best or predicted
[If <18 years, PRAM 4–7]

START TREATMENT

Give salbutamol 4–6 puffs and ipratropium 4 puffs by pMDI + spacer (see below) OR salbutamol 2.5mg and ipratropium 0.25mg by nebulizer.
If needed, give up to 3 times, 20–30 min apart.
Start systemic corticosteroids (see Box 9-5)

GINA 2026 GUIDELINE UPDATES

ASTHMA BIOLOGIC UPDATES

OMALIZUMAB-IGEC

- First biosimilar anti-IgE to market
- Subcutaneous injection given every 2-4 weeks
- Same indications as Omalizumab
 - Allergic type asthma in patients 6 years and older
 - IgE-Mediated severe food allergy in patients 1 year and older
 - Chronic spontaneous urticaria in patients 12 years and older
 - Chronic rhinosinusitis with nasal polyps in patients 18 years and older



DEPEMOKIMAB

- Brand Name: **Exdensur**
- Mechanism: Long-acting anti-IL5
- Dose: 100mg (1mL) subcutaneous injection given **every 6 months**
- Dosage Form: Prefilled syringe
- Indications:
 - Severe eosinophilic-type asthma in patients 12 years and older
 - Chronic rhinosinusitis with nasal polyps in patients 18 years and older
- **SWIFT-1** and **SWIFT-2** trials
 - 54% reduction in annualized clinically significant exacerbations vs placebo
 - 72% reduction in exacerbations requiring hospitalization or ED visit



BREZTRI

BUDESONIDE/GLYCOPYRROLATE/ FORMOTEROL

- Approved for maintenance treatment of asthma in pediatric patients 12 and older since April 2026
- Single inhaler combining efficacy of corticosteroid/LABA/LAMA
- Dose: **320/18/9.6µg**

KEY TRIAL FINDINGS

- Breztri demonstrated significant improvement in lung function when compared to inhaled ICS/LABA, as well as rapid onset of action (significant improvement from baseline lung function within 5 minutes)
- Key Phase III trials to reference: **KALOS** and **LOGOS**



NEFFY

INHALED EPINEPHRINE

- Gained pediatric FDA-approval in March 2025
- Indicated for hypersensitivity reaction/anaphylaxis in children weighing ≥ 15 kg and adolescents

DOSING

- Dosage forms include 1mg (0.1mL), 2mg (0.1mL) intranasal device
- **≥ 15 kg to < 30 kg:** Neffy 1 mg/0.1 mL spray
- **≥ 30 kg:** Neffy 2 mg/0.1 mL spray

ADMINISTRATION

- Do not prime; each device contains 1 dose
- Administer into one single nostril



HIGH FLOW NASAL CANNULA

- If a patient is unable to tolerate nebulized medications via face mask due to behavioral discomfort with interface, albuterol may be nebulized through HFNC at flows <0.25 L/kg/min (Max 10 L/min, max 40% FiO₂)
- HFNC should NOT be used outside of the PICU for worsening respiratory distress or respiratory failure
- Of note, flows >0.25 L/kg will reduce aerosol deposition of albuterol

- **Epic tickets pending to add this verbiage to the HFNC and continuous albuterol order for quick reference*

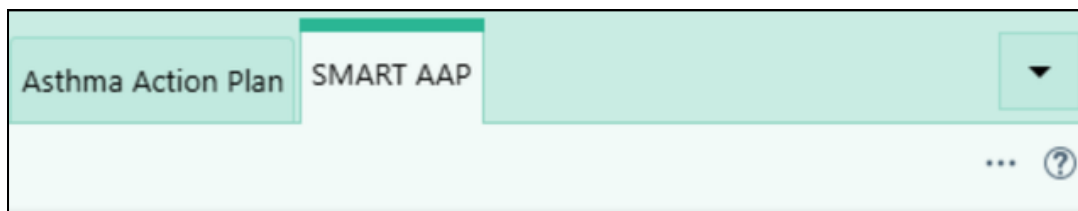


EPIC TIPS & TRICKS

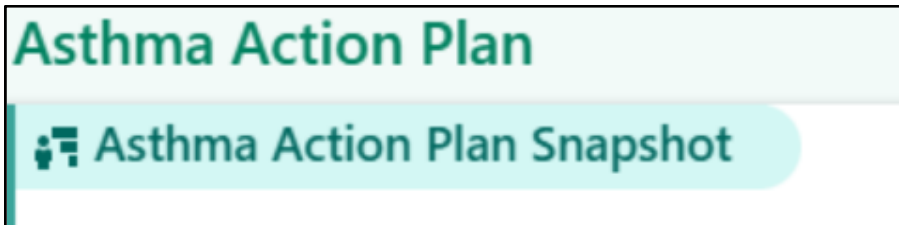
ASTHMA ACTION PLAN

AAP LOCATION

- Regular and SMART AAPs are located in your top Activity Tabs.
- If not visible, open the menu using the down-arrow and select them.
- Use the “pushpin” icon to keep them pinned for each patient.



- AAP Snapshot displays the most recent AAP entered in Epic.
- Only AAPs created after March 1, 2026 appear. Cerner AAPs did not convert.
- Snapshot currently supports regular AAPs only; *ticket for SMART AAP Snapshot is pending.*



- Once an AAP is entered in the current visit, the Snapshot updates automatically.
- To print, right-click → Print from the Snapshot.

EPIC TIPS & TRICKS

ASTHMA ACTION PLAN

Green Zone

- Inhaled Medication = Inhaled Corticosteroid or option "No Daily Medication Needed"
 - Other Medication = allergy medications, nasal sprays, biologics, LAMAs etc.
- Note: Only free text ability in "Other Medication How Long" box and "Green Zone Comments".

The screenshot shows the Epic Asthma Action Plan form. At the top, a yellow warning banner reads: "Warning: this patient's asthma action plan has not been signed!". Below this is the "Asthma Action Plan" title and a "Clear Form" button. The "Asthma severity:" section has tabs for "Intermittent", "mild persistent", "moderate persistent", "severe persistent", and "exercise induced bronchospasm". The "Green Zone" section is highlighted in green and contains the text "No cough, wheeze, or problems breathing". Below this are two rows of medication input fields: "Inhaled Medication", "Inhaled Medication Dose", "Inhaled Medication Frequency", and "Inhaled Medication How Long" for the first row, and "Other Medication", "Other Medication Dose", "Other Medication Frequency", and "Other Medication How Long" for the second row. The "Other Medication How Long" field is a large text area. Below the medication fields is a "Green Zone Comments:" section with a large text area and a toolbar. At the bottom, there are two checkboxes: "Take Quick Reliever as needed for cough, shortness of breath, or wheezing" and "Take Quick Reliever as needed 15-20 minutes before exercise".

Yellow Zone

- Optional Checkbox: "Continue Green Zone Medication"
 - Quick Reliever = Albuterol, Xopenex, Duoneb, Combivent, etc.
 - Other Medication = Inhaled Corticosteroids, Singulair, Spiriva etc.

Red Zone

- Other Medication = oral steroids
- Note: "Other Medication How Long" allows free text
- When finished, select Sign or Mark as Reviewed.

- If you don't see a medication you would like as an option in the drop-down menus, please email asthmacoordinationteam@cmh.edu along with the dosages you'd like available so a ticket can be placed.

EPIC TIPS & TRICKS

SMART ASTHMA ACTION PLAN

Green Zone

- Only options are Symbicort, Breyna, Dulera
 - Other Medications = allergy medications, nasal sprays, biologics, LAMAs etc.

SMART AAP

Warning: this patient's asthma action plan has not been signed!

Asthma Action Plan

Clear Form

Asthma severity: ☐ intermittent ☐ mild persistent ☐ moderate persistent ☐ severe persistent

☐ exercise induced bronchospasm

Green Zone

I do not have asthma symptoms (cough, wheeze, problems breathing).

I can play and sleep without symptoms

My SMART Inhaler is: Ages 4-11: 8 puffs max
Ages 12 and older: 12 puffs max

I will take my SMART Inhaler with my spacer:

Puffs	Frequency	Duration

I can use my SMART Inhaler up to: 8 puffs 12 puffs

Other Medication	Other Medication Dose	Other Medication Frequency	Other Medication How Long

Green Zone Comments:

Yellow Zone

- If changing dosage of SMART inhaler in Yellow, don't forget to select number of puffs, how many times a day and for how long. Otherwise select "Continue Green Zone Medications" checkbox.
- Max Puffs selection from Green Zone auto-fills into Yellow Zone.

Yellow Zone

Getting worse or starting to get a cold

☐ Continue GREEN ZONE medications

Continue SMART Inhaler: 1 puff 2 puffs ☐ 1 time a day ☐ 2 times a day ☐ 3 times a day ☐ 4 times a day

☐ 7 days ☐ 10 days ☐ 14 days

I will take 1-2 puffs of my SMART Inhaler as needed for asthma symptoms (cough, wheeze, or tight chest)

If I use my SMART Inhaler more than my maximum puffs per day I will go to the RED ZONE

Max Puffs 8 puffs 12 puffs

☐ If I do not have my SMART inhaler with me: I can use Albuterol every 4 hours as needed

☐ Contact your asthma provider

Yellow Zone Comments:

Red Zone

- Same as regular AAP red zone

EPIC TIPS & TRICKS

ASTHMA ACTION PLAN

- Signing the AAP does NOT automatically notify RT for teaching.
- Place “Asthma Education by RT” order and select “Asthma Action Plan” so RT knows to educate.

Asthma education by RT

Priority: Routine Routine STAT

Frequency: Once

At: 6/10/2026 Today Tomorrow 1303

Intervention(s) Needed: ☒ Asthma Action Plan ☒ Asthma Education ☐ Inhaler Education ☐ Pulmonary Action Plan
☐ RT to print previous AAP & Re-Educate (ED Only) ☐ Other: Please Specify

Indications for Asthma Education: Initial Annual Re-Education Technique Re-Education Adherence Re-Education New Care Giver
Re-Education Medication Change

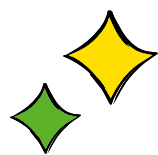
Comments: + Add Comments

Next Required Link Order

- If you update the AAP after signing and placing the RT Education order, contact your RT so families receive the correct plan and education.
- Use “Clear Form” to restart with a blank AAP if needed.

SPANISH ASTHMA ACTION PLANS

- Please contact RT or add a comment in the Asthma Education by RT order to request a Spanish AAP, when applicable.
- Ticket for automatic conversion (as in Cerner) is pending; current workaround requires manual RT conversion.



ASTHMA EDUCATION AT CMH

OVERVIEW

- Offered **Mon–Fri, 11:15–12:15** in the Family Education Room (Ground Floor, between Kreamer Library & Parent Gym).
- Not offered on weekends, evenings, or holidays.
- No in-person class currently at CMH Kansas
 - Bedside RT provides education before discharge and consults Asthma Coordinators as needed.
- No in-person SMART class at this time.
 - Bedside education provided for patients going home with a SMART AAP.
- Taught by an Asthma Program Coordinator: **Maddie Sbravatti** or **Kylie Smith**.

ATTENDANCE

- Maddie or Kylie reviews attendance each morning.
- They communicate with bedside nurse/RT to coordinate with families.
- If only one family is available – class may be cancelled and taught at bedside to conserve transport resources.

OPTIONS

- Asthma class is not mandatory, but highly encouraged.
- Asthma Class and SMART Asthma Class videos are available on med/surg TVs via “Video Content Education.”
- Both videos also available at childrensmercy.org/asthma.

WHATS SO SUPER ABOUT

AirSupra

90mcg Albuterol (SABA) + 80 mcg Budesonide (ICS)

- First and only FDA-approved combination rescue inhaler
- Together, this combination of medications **treats acute asthma symptoms and help prevent severe exacerbations**
- Dose: 2 puffs PRN; Max 12 puffs/day
- ***NOT** a substitute for daily controller medication
- FDA-approved in January 2023 for use in patients **≥ 18 years old**

MANDALA

Airsupra is superior to Albuterol alone in reducing risk of severe asthma exacerbation in patients with moderate-severe asthma



DENALI

Airsupra showed similar onset of bronchodilation compared to Albuterol alone in patients with mild-moderate asthma

*MANDALA, DENALI ARE THE PHASE 3 TRIALS LEADING TO AIRSUPRA'S FDA APPROVAL

Other ICS/SABA options are in ongoing clinical trials



MEDICAID PREFERRED DRUG LIST 2026

Short Acting Beta-2 Agonists (SABA)

PREFERRED

- Albuterol HFA (gen Proventil® HFA)
- Ventolin® HFA

NON-PREFERRED

- Albuterol HFA (gen Proair® HFA)
- Albuterol HFA (gen Proventil® HFA)
- Levalbuterol HFA
- Xopenex HFA®
- ProAir® Digihaler®
- ProAir® RespiClick®

Preferred SMART Therapy

DRUG	STRENGTH	PDL STATUS
Dulera (mometasone/formoterol)	100mcg/5mcg 200mcg/5mcg	Preferred - Open Access
Symbicort (budesonide/formoterol)	80-4.5mcg 160-4.5mcg	Preferred - Open Access

Biologic Agents

PREFERRED

- Fasenra
- Xolair

NON-PREFERRED

- Dupixent
- Nucala
- Tezspire
- Exdensusur





MEDICAID PREFERRED DRUG LIST 2026

Inhaled Corticosteroids

PREFERRED

- | | |
|--|--|
| <ul style="list-style-type: none">• Advair Diskus®• Arnuity® Ellipta®• Asmanex® Twisthaler• Budesonide Respules | <ul style="list-style-type: none">• Dulera® 100mcg/5mcg, 200mcg/5mcg• Flovent HFA• Fluticasone Propionate HFA• Symbicort® |
|--|--|

NON-PREFERRED

- | | |
|--|---|
| <ul style="list-style-type: none">• Advair HFA• AirDuo® Digihaler®• AirDuo® RespiClick®• Airsupra®• Alvesco®• ArmonAir® Digihaler®• Asmanex® HFA*• Beclomethasone HFA• Breo® Ellipta®• Breyna™• Budesonide/Formoterol (gen Symbicort®) | <ul style="list-style-type: none">• Dulera® 50mcg/5mcg• Flovent Diskus®• Fluticasone Propionate Diskus• Fluticasone/Salmeterol (gen Advair Diskus®/HFA®, AirDuo®)• Fluticasone/Vilanterol (gen Breo® Ellipta®)• Pulmicort® Flexhaler• Pulmicort® Respules• QVAR Redihaler®• Wixela Inhub® |
|--|---|





MEDICAID PREFERRED DRUG LIST 2026

Short Acting Beta-2 Agonists (SABA)

PREFERRED

- AccuNeb® (albuterol)
- ProAir HFA® (albuterol)
- Proventil® HFA (albuterol)
- Proventil® (albuterol) Inhalation Solution
- Ventolin HFA® (albuterol)
- Ventolin® (albuterol) Inhalation Solution

NON-PREFERRED

- ProAir® Digihaler™ (albuterol)
- ProAir RespiClick® (albuterol)
- Xopenex® (levalbuterol) Inhalation Solution
- Xopenex HFA® (levalbuterol)

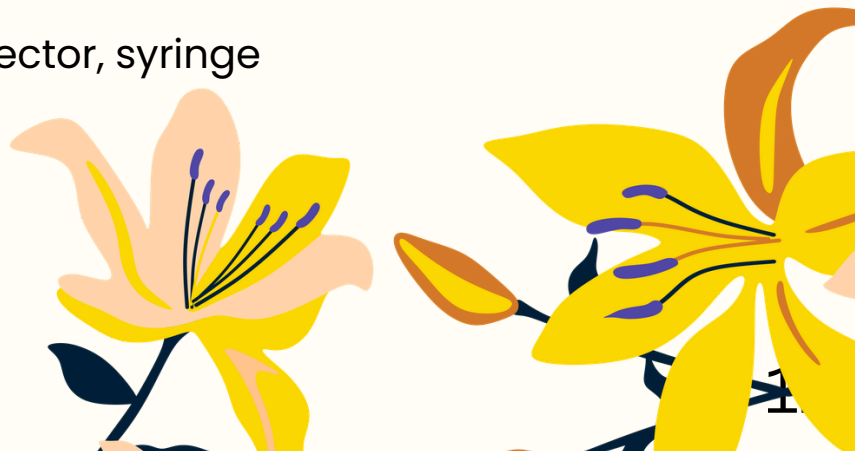
Biologic Agents

PREFERRED

- Dupixent® (dupilumab)
- Fasenra™ (benralizumab)

NON-PREFERRED

- Cinqair® (reslizumab)
- Nucala® (mepolizumab)
- Tezspire® (tezepelumab) autoinjector, syringe
- Xolair® (omalizumab)





MEDICAID PREFERRED DRUG LIST 2026

Long Acting Beta-2 Agonists (LABA)/ICS

PREFERRED

- Advair Diskus® (fluticasone/salmeterol)
- Advair® HFA (fluticasone/salmeterol)
- Breo Ellipta® (fluticasone/vilanterol)
- Dulera® (formoterol/mometasone)
- Symbicort® (budesonide/formoterol)

NON-PREFERRED

- Airduo® Digihaler® (fluticasone/salmeterol)
- Airduo® Respiclick® (fluticasone/salmeterol)

Inhaled Corticosteroids (ICS)

PREFERRED

- | | |
|-------------------------------------|------------------------------------|
| • Arnuity Ellipta® (fluticasone) | • Asmanex® (mometasone) |
| • Flovent® Diskus® (fluticasone) | • Flovent® HFA (fluticasone) |
| • Pulmicort Flexhaler™ (budesonide) | • Pulmicort Respules® (budesonide) |
| • QVAR® (beclomethasone) | • QVAR RediHaler® (beclomethasone) |

NON-PREFERRED

- Aerospan® (flunisolide)
- Alvesco® (ciclesonide)
- ArmonAir® Digihaler® (fluticasone)
- ArmonAir™ RespiClick® (fluticasone)
- Asmanex® HFA (mometasone)

