

# 0-4 Years

>3 episodes of wheeze in a lifetime OR  
>2 episodes of wheezing in 12 months

Symptoms between episodes of exacerbation (Exercise intolerance 2x/week,  
nighttime symptoms 2x/month)  
OR  
High Severity (any ICU hospitalization for exacerbation)

No

Yes

## Intermittent

With URI symptoms: 10 days of High Dose  
ICS+SABA PRN.  
\*See dosages below

## Persistent

Daily Low Dose ICS+ SABA PRN \*\*

ALTERNATIVE: LTRA+SABA PRN

Reassess every 1-6 months

## Continue Current Therapy

Reassess in 3-6 months

Well Controlled

Complete  
Asthma Control  
Assessment

Not  
Well  
Controlled

Consider trial off daily medication  
if well controlled >3 months

## AED

Check **A**dherence  
Check **E**nvironmental triggers  
Check **D**evice technique  
**If still not well controlled, refer to be seen  
by specialist within 1-2 months.  
Consider Medium Dose ICS (see separate  
med tables) and CXR.**

### Asthma Control Assessment: Well Controlled

Daytime Symptoms	≤ 2 days/week
Nighttime Symptoms	≤ 2x/month
Limitation of Activities	None
SABA use for symptoms	≤ 2 days/week
Asthma Control Test (ACT)	Score ≥ 20
Prednisone courses	≤ 2 in last 12 months
Spirometry	FEV1 > 80% predicted normal FEV1/FVC ratio for age

### Medication Dosages

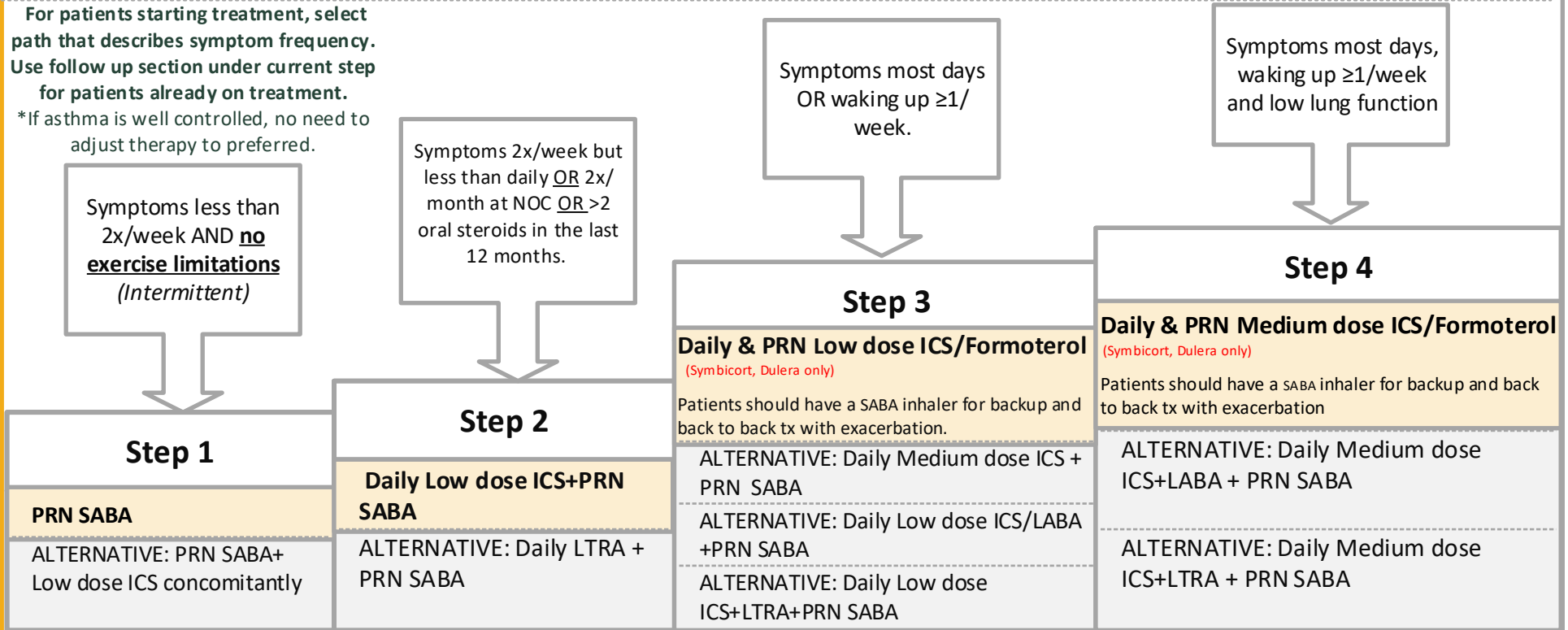
ICS Drug name	*Intermittent High Dose (total/day)	**Low Dose (total mcg / day)
Nebulized budesonide (For example: Pulmicort)	1 mg (0.5 mg BID)	250 mcg (0.25mg/2 ml QD)
Fluticasone HFA (For example: Flovent)	660 mcg (Flovent 110, 3 puffs BID, for 10 days)	88 mcg (Flovent 44 mcg, 2 puffs daily)
Mometasone (For example: Asmanex)	N/A	100 mcg (Asmanex HFA 50 mcg, 2 puffs daily)

# 5-11 Years

## Starting Treatment

For patients starting treatment, select path that describes symptom frequency. Use follow up section under current step for patients already on treatment.

\*If asthma is well controlled, no need to adjust therapy to preferred.



Patients starting treatment or with a change should follow up in 1-6 months.

## Follow Up

> 3 months controlled	< 3 months controlled
Consider stepping down treatment	Continue current treatment
Follow up in 3-12 months	

Well Controlled

Complete Asthma Control Assessment

Not Well Controlled

**AED**  
Check Adherence  
Check Environmental triggers  
Check Device technique

AED Needs Education

AED Good

Asthma Control Assessment: Well Controlled	
Daytime Symptoms	≤ 2 days/week
Nighttime Symptoms	≤ 2x/month
Limitation of Activities	None
SABA use for symptoms	≤ 2 days/week
Asthma Control Test(ACT) Score	≥ 20
Prednisone courses	≤ 2 in last 12 months
Spirometry	FEV1>80% predicted normal FEV1/FVC ratio for age

**Medication Dosages**  
See Medication Tables for low/medium/high dosing.

Provide additional education on treatment plan, device technique, provide adherence strategies and reduce exposure to triggers. Follow up in 1-6 months

Move to next treatment Step. \*\*If moving to Step 3 or 4, consider referral to specialist

Well Controlled

Complete Asthma Control Assessment

Not Well Controlled

> 3 months controlled	< 3 months controlled
Consider stepping down treatment	Continue current treatment
Follow up in 3-6 months	

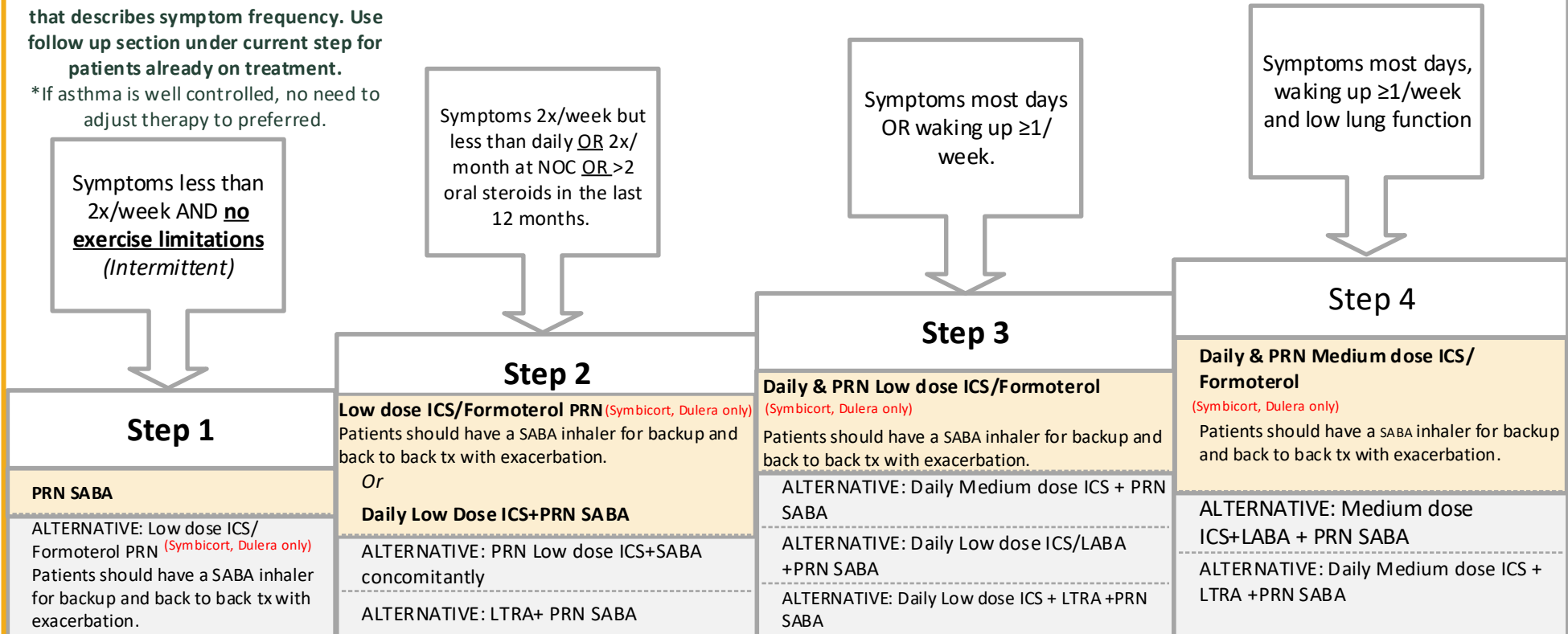
Referral to Specialist

# ≥12 Years

For patients starting treatment, select path that describes symptom frequency. Use follow up section under current step for patients already on treatment.

\*If asthma is well controlled, no need to adjust therapy to preferred.

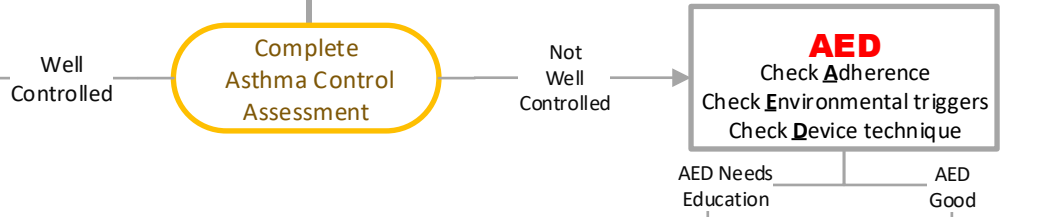
Starting Treatment



Patients starting treatment or with a change should follow up in 1-6 months.

Follow up

> 3 months controlled	< 3 months controlled
Consider stepping down treatment	Continue current treatment
Follow up in 3-12 months	

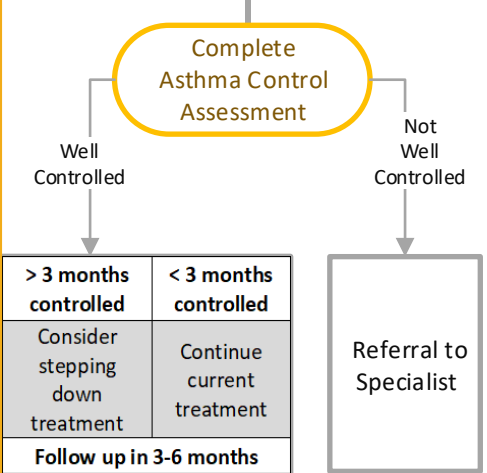


Asthma Control Assessment: Well Controlled	
Daytime Symptoms	≤ 2 days/week
Nighttime Symptoms	≤ 2x/month
Limitation of Activities	None
SABA use for symptoms	≤ 2 days/week
Asthma Control Test(ACT)	Score ≥ 20
Prednisone courses	≤ 2 in last 12 months
Spirometry	FEV1>80% predicted normal FEV1/FVC ratio for age

**Medication Dosages**  
See Medication Tables for low/medium/high dosing.

AED Needs Education: Provide additional education on treatment plan, device technique, provide adherence strategies and reduce exposure to triggers. Follow up in 1-6 months

AED Good: Move to next treatment Step. \*\*If moving to Step 3 or 4, consider referral to specialist



> 3 months controlled	< 3 months controlled
Consider stepping down treatment	Continue current treatment
Follow up in 3-6 months	

# Pediatric Care Network (PCN): Asthma Medication Tables

Doses below are based on the ICS component but are translatable to ICS/LABA formulations

## 0-4 Years

ICS Drug name	LOW DOSE: Total mcg/day (Example sig)
<b>Nebulized budesonide</b> (Pulmicort)	Total: 250 mcg ( <b>Pulmicort</b> 0.25mg-2ml daily)
<b>Fluticasone HFA</b> (Flovent)	Total: 88 mcg ( <b>Flovent</b> 44mcg-2p daily)
<b>Mometasone</b> (Asmanex)	Total: 100 mcg ( <b>Asmanex</b> 50 mcg- 2p daily)

## 5-11 Years

ICS Drug Name (Available dosing)	LOW DOSE Total mcg/day	MEDIUM DOSE Total mcg/day	HIGH DOSE total mcg/day
	Example sig	Example sig	Example sig
<b>Beclomethasone HFA</b> QVAR (40mcg/80mcg)	Total: 50-100 mcg	Total: >100-200 mcg	Total: >200 mcg
	<b>QVAR</b> 40mcg-2p daily	<b>QVAR</b> 40mcg-2p BID	<b>QVAR</b> 80 mcg 2p BID
<b>Budesonide nebulers</b> Pulmicort nebulers (0.25/2ml, 0.5mg/2ml)	Total: 250-500 mcg	Total: >500-1000 mcg	Total: >1000 mcg
	<b>Pulmicort Nebules</b> 0.25mg/2ml daily or 0.25mg/2ml BID	<b>Pulmicort Nebules</b> 0.25mg/2ml BID	<b>Pulmicort Nebules</b> 0.5mg/2ml BID
<b>Budesonide/formoterol HFA</b> Symbicort* (80mcg/160mcg)	Total: 80-160 mcg	Total: 320-640 mcg	Total: >640 mcg
	<b>Symbicort HFA</b> 80mcg 2p BID	<b>Symbicort HFA</b> 160mcg 2p daily or BID	<b>Symbicort HFA</b> 160mcg 2p BID
<b>Ciclesonide</b> Alvesco (80mcg/160mcg)	Total: 80 mcg	Total: >80-160 mcg	Total: >160 mcg
		<b>Alvesco</b> 80 mcg 2 puffs QD or BID	<b>Alvesco</b> 160 mcg 2 p Qd or BID
<b>Fluticasone propionate HFA</b>  Flovent HFA (44mcg/110mcg/220mcg)  Advair HFA-fluticasone/salmeterol (45mcg/115mcg/230mcg)	Total: 88-180 mcg	Total: 180-220 mcg	Total: >220 mcg
	<b>Flovent</b> 44mcg 2p daily or 2p BID	<b>Flovent</b> 44mcg 2p BID	<b>Flovent</b> 110mcg 2p BID
			<b>Flovent</b> 220 mcg 2p BID
			<b>Advair</b> 115mcg 2p BID
	<b>Advair</b> 45mcg 2p daily or 2p BID	<b>Advair</b> 45mcg 2p BID	<b>Advair</b> 230 mcg 2p BID
<b>Mometasone furoate</b> Asmanex-50mcg/100mcg/200mcg Dulera (mometasone/formoterol)* 50mcg/100mcg)	Total: 100 mcg	Total: 100 mcg	Total: >200 mcg
	Asmanex 50mcg 2p daily	Asmanex 50mcg 2p BID	Asmanex 100mcg 2p BID
	Dulera 50mcg 2p daily	Dulera 50mcg 2p BID	Dulera 100 mcg 2p BID

\*If using SMART therapy, must use a FORMOTEROL containing combination (**Symbicort** or **Dulera** only). p=puffs

Max puffs in 24 hours for ICS/Formoterol combination medications: **8 puffs**

## 12 Years and Older

ICS Drug name (Available dosing)	LOW DOSE Total mcg/day	MEDIUM DOSE Total mcg/day	HIGH DOSE Total mcg/day
	Example sig	Example sig	Example sig
<b>Beclomethasone HFA</b> QVAR (40mcg/80mcg)	Total: 100-200 mcg	Total: >200-400 mcg	Total: >1000 mcg
	<b>QVAR</b> 40mcg 2pBID	<b>QVAR</b> 80mcg 2p BID	> <b>QVAR</b> 80mcg 2p BID
<b>Budesonide DPI</b> Pulmicort flexhaler (90mcg/180mcg)	Total: 200-400 mcg	Total: >400-800 mcg	Total: >800 mcg
	<b>Pulmicort flexhaler</b> 90mcg 2inh daily or 2inh BID	<b>Pulmicort flexhaler</b> 90mcg 2inh BID	<b>Pulmicort flexhaler</b> 180mcg 2inh BID
<b>Budesonide/formoterol HFA</b> Symbicort (80mcg/160mcg)	Total: 80-160 mcg	Total: 320-640 mcg	Total: >640 mcg
	<b>Symbicort HFA</b> 80mcg 2p daily or BID	<b>Symbicort HFA</b> 80mcg 2p BID <b>Symbicort HFA</b> 160 mcg 2 p QD or BID	<b>Symbicort</b> 160mcg 2p BID
<b>Ciclesonide</b> (Alvesco (80mcg/160mcg)	Total: 80-160 mcg	Total: >160-320 mcg	Total: >320 mcg
	<b>Alvesco</b> 80mcg 2p daily	<b>Alvesco</b> 80mcg 2p BID	<b>Alvesco</b> 160mcg 2p BID
<b>Fluticasone furoate DPI</b> Breo (fluticasone/vilanterol) (100mcg/200mcg) Arnuity (50mcg/100mcg/200mcg)	100 mcg	100 mcg	200 mcg
	<b>Breo</b> 100mcg 1inh daily <b>Arnuity</b> 100mcg 1inh daily	<b>Breo</b> 100mcg 1inh daily <b>Arnuity</b> 100mcg 1inh daily	<b>Breo</b> 200mcg 1inh daily <b>Arnuity</b> 200mcg 1inh daily
<b>Fluticasone propionate DPI</b> Flovent Diskus (50 mcg/100mcg/250 mcg) Advair Diskus (fluticasone/salmeterol)100mcg/250mcg/500mcg)	Total: 100-250 mcg	Total: >250-500 mcg	Total: >500 mcg
	<b>Flovent Diskus</b> 50 mcg 1 or 2 inh BID	<b>Flovent Diskus</b> 100mcg 1 inh BID	<b>Flovent Diskus</b> 250 mcg 1 inh BID
<b>Fluticasone propionate HFA</b> Flovent (44mcg/110mcg/220mcg) Advair HFA (fluticasone/salmeterol) (45mcg/115mcg/230mcg)	Total: 100-250 mcg	Total: >250-500 mcg	Total: >500 mcg
	<b>Flovent HFA</b> 44mcg 2puffs BID	<b>Flovent HFA</b> 110mcg 2puffs daily or BID	<b>Flovent HFA</b> 220mcg 2puffs BID
	<b>Advair HFA</b> 45mcg 2puffs BID	<b>Advair HFA</b> 115mcg 2puffs daily or BID	<b>Advair HFA</b> 230mcg 2puffs BID
<b>Mometasone furoate</b> Asmanex (50mcg/100mcg/200mcg) Dulera (mometasone/formoterol) (50mcg/100mcg/200 mcg)	Total: 100-200 mcg	Total: >200-400 mcg	Total: >400 mcg
	<b>Asmanex</b> 100mcg 2puff daily	<b>Asmanex</b> 100mcg 2puffs BID	<b>Asmanex</b> 200mcg 2puffs BID
	<b>Dulera</b> 50mcg 2puffs daily or BID	<b>Dulera</b> 50mcg or 100mcg 2puffs BID	<b>Dulera</b> 200mcg 2puffs BID

If using SMART therapy, must use a FORMOTEROL containing combination (Symbicort or Dulera only). p=puffs

Max puffs in 24 hours for ICS/Formoterol combination medications: **12 puffs**

## REFERENCES

1. *GINA-Main-Report-2022-FINAL-22-07-01-WMS*. (n.d.).
2. Expert Panel Working Group, N. (n.d.). *2020 FOCUSED UPDATES TO THE Asthma Management Guidelines Asthma Management Guidelines A Report from the National Asthma Education and Prevention Program Coordinating Committee Expert Panel Working Group 2020 FOCUSED UPDATES TO THE Asthma Management Guidelines*.
3. Israel, E. (2020). Implementing the guidelines: What do you do when the rubber hits the road? *Journal of Allergy and Clinical Immunology*, 146(6), 1271–1274.  
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Pharmacy & Therapeutics Committee – 5/4/2023

## LAST REVISION: MARCH 2023

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