Asthma Action Plans

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- This activity receives no commercial support

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Asthma Action Plan

1. What is a written asthma action plan?
2. Who needs this plan?
3. Where is this plan kept?
4. What do we need to tell our families and children about this plan?
5. How is this plan documented?

Action plan for MART with ICS-formoterol

A Practical Guide to Implementing SMART in Asthma Management

Helen K. Reddel, MB, BS, PhD[a,*], Eric D. Bateman, MB, ChB, MD[b,*], Michael Schatz, MD, MS[c], Jerry A. Krishnan, MD, PhD[d], and Michelle M. Cloutier, MD[e] *Sydney, Australia; Cape Town, South Africa; Chicago, Ill; and Farmington, Conn*

Reddel et al, JACI in Practice 2022; 10: S31-s38

This article includes a writable action plan template
That can be modified for other combination ICS-formoterol inhalers, and for as-needed-only ICS-formoterol

For additional action plans with ICS-formoterol reliever, see National Asthma Council Australia Action plan library
www.nationalasthma.org.au/health-professionals/asthma-action-plans

My Asthma Action Plan

For Single Inhaler Maintenance and Reliever Therapy (SMART)
with budesonide/formoterol

Name: _____ Action plan provided by: _____

Date: _____ Doctor: _____

Usual best PEF: _____ L/min *(if used)* Doctor's phone: _____

Normal mode

My SMART Asthma Treatment is:

☐ budesonide/formoterol 160/4.5 (12 years or older)

☐ budesonide/formoterol 80/4.5 (4-11 years)

My Regular Treatment Every Day:

(Write in or circle the number of doses prescribed for this patient)

Take [1, 2] inhalation(s) in the morning

and [0, 1, 2] inhalation(s) in the evening, every day

Reliever

Use 1 inhalation of budesonide/formoterol whenever needed for relief of my asthma symptoms

I should always carry my budesonide/formoterol inhaler

My asthma is stable if:

- I can take part in normal physical activity without asthma symptoms

AND

- I do not wake up at night or in the morning because of asthma

Other Instructions

_____

_____

Asthma Flare-up

If over a Period of 2-3 Days:

- My asthma symptoms are getting worse **OR NOT** improving

OR

- I am using more than 6 budesonide/formoterol reliever inhalations a day (if aged 12 years or older) or more than 4 inhalations a day (if aged 4-11 years)

I should:

☒ Continue to use my regular everyday treatment **PLUS** 1 inhalation budesonide/formoterol whenever needed to relieve symptoms

☐ Start a course of prednisolone

☐ Contact my doctor

Course of Prednisolone Tablets:

Take _____mg prednisolone tablets

per day for _____days **OR**

_____

_____

If I need more than **12 budesonide/formoterol inhalations (total)** in any day (or more than 8 inhalations for children 4-11 years), I **MUST** see my doctor or go to the hospital the same day.

Asthma Emergency

Signs of an Asthma Emergency:

- Symptoms getting worse quickly
- Extreme difficulty breathing or speaking
- Little or no improvement from my budesonide/formoterol reliever inhalations

If I have any of the above danger signs, I should dial _____ for an ambulance and say I am having a severe asthma attack.

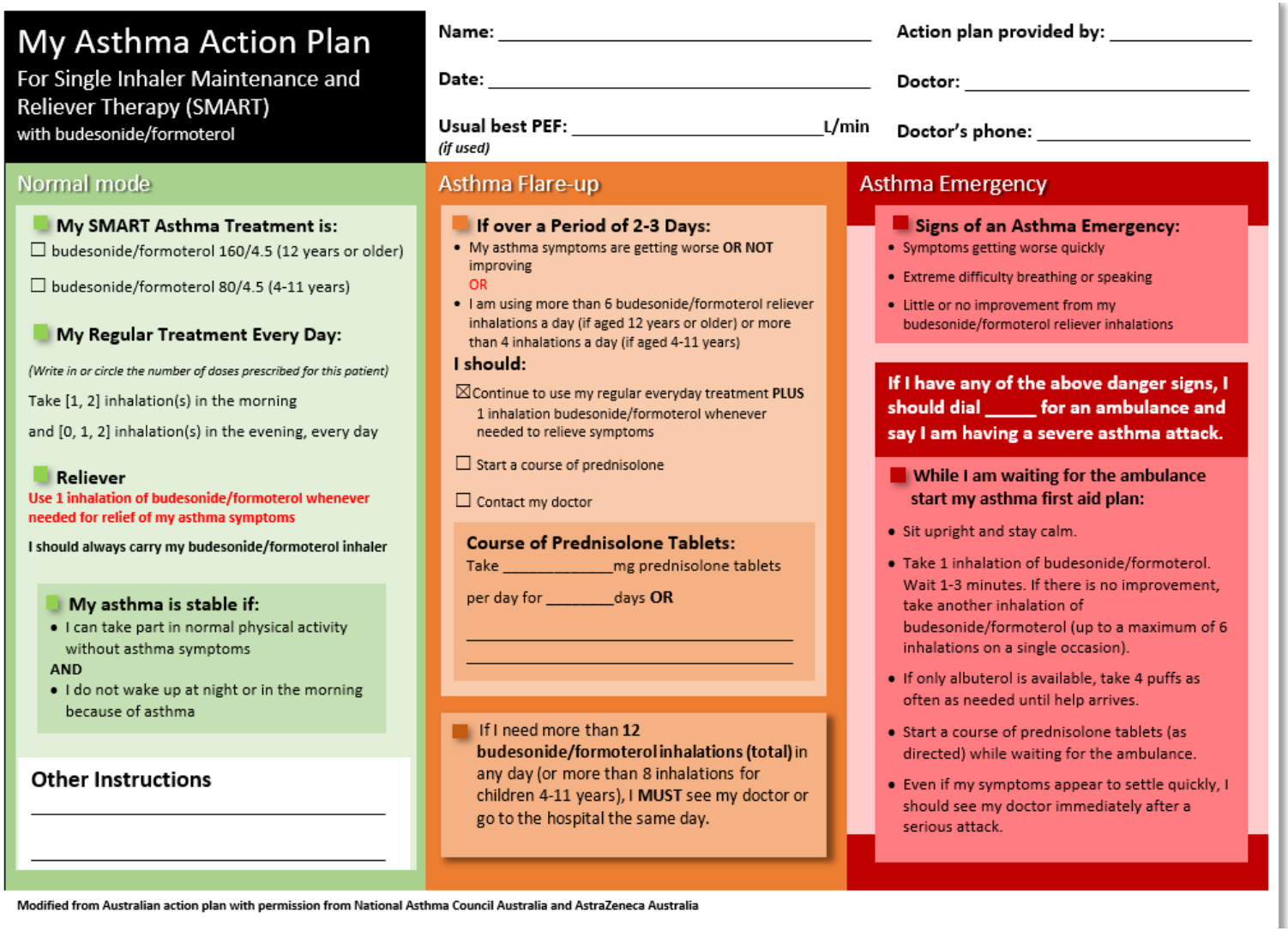
While I am waiting for the ambulance start my asthma first aid plan:

- Sit upright and stay calm.
- Take 1 inhalation of budesonide/formoterol. Wait 1-3 minutes. If there is no improvement, take another inhalation of budesonide/formoterol (up to a maximum of 6 inhalations on a single occasion).
- If only albuterol is available, take 4 puffs as often as needed until help arrives.
- Start a course of prednisolone tablets (as directed) while waiting for the ambulance.
- Even if my symptoms appear to settle quickly, I should see my doctor immediately after a serious attack.

Modified from Australian action plan with permission from National Asthma Council Australia and AstraZeneca Australia

Supplement to Reddel et al, JACI in Practice 2022; 10: S31-s38

This template can be modified for other ICS-formoterol combinations or for as-needed-only ICS-formoterol.
The action plan on which it is based has been widely used in Australia and other countries since 2007.



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Modified from Australian action plan with permission from National Asthma Council Australia and AstraZeneca Australia

Asthma Action Plan

AMERICAN LUNG ASSOCIATION®

General Information:

- Name _____
- Emergency contact _____ Phone numbers _____
- Physician/Health Care Provider _____ Phone numbers _____
- Physician Signature _____ Date _____

Severity Classification

- ❍ Mild Intermittent ❍ Moderate Persistent
- ❍ Mild Persistent ❍ Severe Persistent

Triggers

- ❍ Colds ❍ Smoke ❍ Weather
- ❍ Exercise ❍ Dust ❍ Air pollution
- ❍ Animals ❍ Food
- ❍ Other _____

Exercise

1. Pre-medication (how much and when) _____
2. Exercise modifications _____

Green Zone: Doing Well

Peak Flow Meter Personal Best =

Symptoms

- Breathing is good
- No cough or wheeze
- Can work and play
- Sleeps all night

Peak Flow Meter

More than 80% of personal best or _____

Control Medications

Medicine	How Much to Take	When To Take It

Yellow Zone: Getting Worse

Contact Physician if using quick relief more than 2 times per week.

Symptoms

- Some problems breathing
- Cough, wheeze or chest tight
- Problems working or playing
- Wake at night

Peak Flow Meter

Between 50% to 80% of personal best or

_____ to _____

Continue control medicines and add:

Medicine	How Much to Take	When To Take It

IF your symptoms (and peak flow, if used) return to Green Zone after 1 hour of the quick relief treatment, THEN

- ❍ Take quick-relief medication every 4 hours for 1 to 2 days
- ❍ Change your long-term control medicines by _____
- ❍ Contact your physician for follow-up care

IF your symptoms (and peak flow, if used) DO NOT return to the GREEN ZONE after 1 hour of the quick relief treatment, THEN

- ❍ Take quick-relief treatment again
- ❍ Change your long-term control medicines by _____
- ❍ Call your physician/health care provider within _____ hours of modifying your medication routine

Red Zone: Medical Alert

Ambulance/Emergency Phone Number:

Symptoms

- Lots of problems breathing
- Cannot work or play
- Getting worse instead of better
- Medicine is not helping

Peak Flow Meter

Between 0% to 50% of personal best or

_____ to _____

Continue control medicines and add:

Medicine	How Much to Take	When To Take It

Go to the hospital or call for an ambulance if

- ❍ Still in the Red Zone after 15 minutes
- ❍ If you have not been able to reach your physician/health care provider for help
- ❍ _____

Call an ambulance immediately if the following danger signs are present

- ❍ Trouble walking/talking due to shortness of breath
- ❍ Lips or fingernails are blue

Contact the American Lung Association at 1.800.LUNGUSA (1.800.586.4872) or www.LUNGUSA.ORG for more information about asthma management and the *Breathe Well, Live Well* Program.

250742 5/07

	**Green Zone: 80-100% of personal best**	**Go** Proceed with normal activities and medications
	**Yellow Zone: 50-79% of personal best**	**Caution** Step up medications as prescribed and reduce activities, as indicated
	**Red Zone: Less than 50% of personal best**	**Stop** Implement emergency care plan. Restrict activities

Zones and Actions

Peak Flow Monitoring

- ✓ Student exhales, then takes deep breath in
- ✓ Seals lips around mouthpiece and exhales rapidly
- ✓ Value measured is the peak flow (PEF).
- ✓ Repeat & record the highest value

Poll Question #1

Yes or No

Do you use a peak flow meter?

Early Warning Symptoms
Yellow Zone on Asthma Action Plan

- Fatigue
- Crankiness
- Problems feeding or grunting during feeding (infants)
- Difficulty concentrating
- Cough
- Mild wheeze
- Hoarseness

Symptoms
Yellow Zone on Asthma Action Plan

Intermittent cough	Wheeze	Shortness of breath
Chest tightness	Child states that she/he feels “funny” or unwell	Drop in peak flow values

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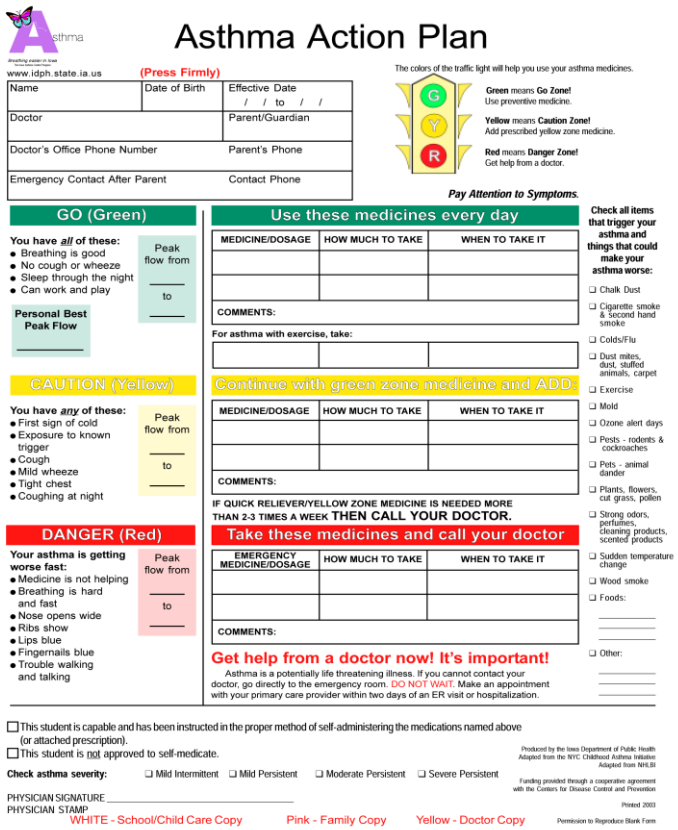
Managing an Asthma Episode

- **Activate Asthma Action Plan**
- Stop physical activity
- Remove child from trigger(s
- Help child into an upright position
- Give rescue medication
- Allow medication to work



Asthma Action Plan

www.idph.state.ia.us (Press Firmly)

Name	Date of Birth	Effective Date / / to / /
Doctor		Parent/Guardian
Doctor's Office Phone Number		Parent's Phone
Emergency Contact After Parent		Contact Phone

The colors of the traffic light will help you use your asthma medicines.

Green means Go Zone! Use preventive medicine.

Yellow means Caution Zone! Add prescribed yellow zone medicine.

Red means Danger Zone! Get help from a doctor.

Pay Attention to Symptoms.

GO (Green)

You have *all* of these:
- Breathing is good
- No cough or wheeze
- Sleep through the night
- Can work and play

Peak flow from ____ to ____

Personal Best Peak Flow ____

Use these medicines every day

MEDICINE/DOSAGE	HOW MUCH TO TAKE	WHEN TO TAKE IT

COMMENTS:

For asthma with exercise, take:

CAUTION (Yellow)

You have *any* of these:
- First sign of cold
- Exposure to known trigger
- Cough
- Mild wheeze
- Tight chest
- Coughing at night

Peak flow from ____ to ____

Continue with green zone medicine and ADD:

MEDICINE/DOSAGE	HOW MUCH TO TAKE	WHEN TO TAKE IT

COMMENTS:

IF QUICK RELIEVER/YELLOW ZONE MEDICINE IS NEEDED MORE THAN 2-3 TIMES A WEEK **THEN CALL YOUR DOCTOR.**

DANGER (Red)

Your asthma is getting worse fast:
- Medicine is not helping
- Breathing is hard and fast
- Nose opens wide
- Ribs show
- Lips blue
- Fingernails blue
- Trouble walking and talking

Peak flow from ____ to ____

Take these medicines and call your doctor

EMERGENCY MEDICINE/DOSAGE	HOW MUCH TO TAKE	WHEN TO TAKE IT

COMMENTS:

Get help from a doctor now! It's important!

Asthma is a potentially life threatening illness. If you cannot contact your doctor, go directly to the emergency room. DO NOT WAIT. Make an appointment with your primary care provider within two days of an ER visit or hospitalization.

Check all items that trigger your asthma and things that could make your asthma worse:
- ❑ Chalk Dust
- ❑ Cigarette smoke & Second hand smoke
- ❑ Colds/Flu
- ❑ Dust mites, dust, stuffed animals, carpet
- ❑ Exercise
- ❑ Mold
- ❑ Ozone alert days
- ❑ Pests - rodents & cockroaches
- ❑ Pets - animal dander
- ❑ Plants, flowers, cut grass, pollen
- ❑ Strong odors, perfumes, cleaning products, scented products
- ❑ Sudden temperature change
- ❑ Wood smoke
- ❑ Foods: _____
- ❑ Other: _____

❑ This student is capable and has been instructed in the proper method of self-administering the medications named above (or attached prescription).

❑ This student is not approved to self-medicate.

Check asthma severity: ❑ Mild Intermittent ❑ Mild Persistent ❑ Moderate Persistent ❑ Severe Persistent

PHYSICIAN SIGNATURE _____

PHYSICIAN STAMP

Produced by the Iowa Department of Public Health
Adapted from the NYC Childhood Asthma Initiative
Adapted from NHLBI

Funding provided through a cooperative agreement with the Centers for Disease Control and Prevention

Printed 2003

WHITE - School/Child Care Copy Pink - Family Copy Yellow - Doctor Copy

Permission to Reproduce Blank Form

Poll Question #2

WHO NEEDS TO COMPLETE AND SIGN THE ASTHMA ACTION PLAN?

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Ages years and older

Asthma Action Plan

Children's of Alabama Pulmonary Clinic • (205) 638.9583

Doctor: _____

Children's of Alabama

UAB MEDICINE

Please bring all Medicines and Spacer to Clinic Visit.

Green Zone
Child is well.

Child has all of these:

- Breathing is good
- No cough or wheeze
- Can play or exercise

If your child has symptoms with exercise, use _____ medicine with spacer ____ puffs 15 minutes before play.

Yellow Zone
Child is not well.

quick-relief medicine.

Child has any of these:

- Cough
- Wheezing
- Chest is tight or hurts
- Short of breath
- Symptoms disturb sleep

Take quick-relief dose _____2 puffs every 4 hours as needed.

If child

Ages years and older

Asthma Action Plan

Children's of Alabama Pulmonary Clinic • (205) 638.9583

Doctor: _____

Children's of Alabama

UAB MEDICINE

Please bring all Medicines and Spacer to Clinic Visit.

Green Zone
Child is well.

Take these controller medicines every day, sick or well.

Child has all of these:
- Breathing is good
- No cough or wheeze
- Can play or exercise

1. _____
2. _____
3. _____
4. _____

If your child has symptoms with exercise, use _____ medicine with spacer ____ puffs 15 minutes before play.

Yellow Zone
Child is not well.

Continue controller medicines and add quick-relief dose.

Child has any of these:
- Cough
- Wheezing
- Chest is tight or hurts
- Short of breath
- Symptoms disturb sleep

Take quick-relief dose _____ 2 puffs every 6 hours as needed.

If child

Ages years and older

Asthma Action Plan

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Doctor: _____

Children's of Alabama

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Please bring all Medicines and Spacer to Clinic Visit.

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Child has any of these:
- Cough
- Wheezing
- Chest is tight or hurts
- Short of breath
- Symptoms disturb sleep

Take quick-relief dose _____ 2 puffs every 6 hours as needed.

If child

Red Zone
Child has severe symptoms.

Give right away!

Child has any of these:
- Struggling to breathe
- Rib or neck muscles pulling
- Nostrils flare open
- Can't walk or talk well

Take 1 vial albuterol nebulizer treatment or 6 puffs albuterol inhaler every 20 minutes for 1hour.If child is better, call the doctor for further care instructions.

If child is worsening or not better after 3rd treatment, go to the closest emergency room or call 911.

Ages years and older

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Doctor: _____

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