Date Given: _____

BLUE FISH PEDIATRICS ASTHMA ACTION PLAN (AAP)

GOAL: NO daytime or nighttime asthma symptoms. When asthma symptoms occur, use quick-relief medications as directed in this AAP.

Avoid your child's asthma triggers, especially tobacco smoke (see reverse side), and use the long-term controller medications DAILY as specified by your doctor in this AAP.

DOING WELL (GREEN ZONE)

- NO RAPID BREATHING¹, NO COUGH, NO WHEEZE, NO CHEST TIGHTNESS, or NO SHORTNESS of BREATH and therefore NO need to use quick-relief asthma meds.
- No limitations to usual activities, including full participation in school and sports/exercise.
 Asthma Control Test (ACT) 20 or higher; If using Peak Flow meter, PF is over:

(80% or more of predicted or personal best)

QUICK-RELIEF MEDS: Use AS NEEDED for ASTHMA Symptoms and/or 10 minutes BEFORE EXERCISE (if needed)

Albuterol or Levalbuterol MDI HFA (Ventolin, ProAir, Proventil, Xopenex)4 to 8 puffs (~1 puff per 10lb min of 4 puffs and max of 8 puffs) w/ spacer as often as every 4 hoursAlbuterol or Levalbuterol premixed solution for nebulizer (Albuterol or Xopenex)1 premixed vial in NEBULIZER as often as every 4 hours

LONG-TERM CONTROL MEDS	HOW MUCH	HOW OFTEN	NOTES
Flovent (fluticasone) 44 110 220	2 puffs w/ spacer	2x EVERY DAY*	
QVAR (beclomethasone) 40 80	2 puffs w/ spacer	2x EVERY DAY*	
Pulmicort (budesonide) 0.25 0.5 1	2ml nebulizer treatment	2x EVERY DAY*	
		*rinse mouth after use	
Singulair (Montelukast)	4mg 5mg 10mg	1x EVERY DAY	
Claritin (Loratadine) or Zyrtec (Cetirizine)	2.5mg 5mg 10mg	1x EVERY DAY	
Flonase (Fluticasone) or Nasonex (Mometasone)	1 spray 2 sprays in each nostril	1x EVERY DAY	
*or comparable medication			
OTHER:			

ASTHMA IS GETTING WORSE (YELLOW ZONE) 📛

- DAY: Rapid Breathing¹, cough, wheezing, shortness of breath or chest tightness MORE THAN 2 DAYS/WEEK.
- NIGHT: Rapid Breathing¹, cough, wheezing, shortness of breath or chest tightness MORE THAN ONCE/MONTH 0-11yo; MORE THAN TWICE/MONTH 12yo or older
- Asthma symptoms that require oral steroids MORE THAN ONCE/12 MONTHS
- Asthma symptoms that cause *any limitations* to normal activities.
- Asthma Control Test (ACT) 19 or lower; If using Peak Flow meter, PF: _____ to _____ (50 to 79% of predicted or personal best)
- STEP 1: GIVE QUICK-RELIEF MED listed above every 20 min up to 3x in a row and continue taking your GREEN ZONE MED(S)

STEP 2: If asthma symptoms return to the GREEN ZONE IN 1 hour or less, continue to monitor closely, call office during regular business hours. If asthma symptoms DO NOT return to GREEN ZONE in 1 hr or less: CALL BLUE FISH PEDIATRICS NOW! (713-467-1741)

MEDICAL ALERT (RED ZONE)

- In addition to the YELLOW ZONE symptoms listed above:
- Quick-relief meds are not helping
- CANNOT do any usual activities
- Symptoms are same or getting worse after 24 hours in YELLOW ZONE;

- If using Peak Flow meter, PF less than: _____ (49% or less of predicted or personal best)

STEP 1: GIVE QUICK-RELIEF MED listed above every 20 min up to 3x in a row

STEP 2: CALL BLUE FISH PEDIATRICS at 713-467-1741 (Memorial); 281-855-3700 (Cypress); 281-347-0080 (Katy) NOW!

STEP 3: Go to hospital or call 911 if your child is still in RED ZONE in 15 minutes AND you have not reached your doctor.

GO TO HOSPITAL or CALL 911 NOW if your child has DANGER symptoms such as trouble walking or talking due to shortness of breath OR blue lips & fingernails.

¹ Abnormally high breaths per min by age: <1 yo >60; 2 yo > 50; 3 yo > 40; 4-6 yo >30; 6-12yo >25; >12 yo > 20. Fever can increase breaths per min (bpm) \rightarrow 5 bpm higher (<12 mo) & 3 bpm higher (>12 mo) for every 1 degree fahrenheit above baseline. Always count breaths per minute over at least 1 minute. 1 breath = 1 inhale + 1 exhale

Date Given:

HOW TO CONTROL THINGS THAT MAKE YOUR CHILD'S ASTHMA WORSE

This guide suggests things you can do to avoid asthma triggers.

<u>Circle the triggers that you know make your child's asthma worse and attempt to implement the specific avoidance suggestions listed below.</u>			
ALLERGENS			
DUST MITES			
Many people with asthma are allergic to dust mites. Dust mites are tiny bugs that are found in every home – in mattresses, pillows, upholstered furniture, bedcovers,			
stuffed toys, and other fabric-covered items. CONCENTRATE ON MEASURES THAT AFFECT THE PATIENT'S BEDROOM FIRST.			
THINGS THAT YOU CAN DO: 1. Encase mattress, pillows, and boxspring in allergen-impermeable covers. Finely woven covers for pillows and duvets are preferable.			
2. Wash bedding & stuffed toys weekly in warm water with detergent or use electric dryer on hot setting.			
3. Reduce indoor humidity to less than 50-60%.			
4. Keep patient out of the room during vacuuming.			
4. MORE COSTLY: Remove carpets from the bedroom; Replace old upholstered furniture with leather, vinyl, or wood.			
COCKROACHES			
Many people with asthma are allergic to the dried droppings and remains of cockroaches.			
THINGS THAT YOU CAN DO: 1. Never leave food out, encase all food fully, and do not store garbage or papers inside the home.			
2. Use poison bait (for example, boric acid) or traps to control. Consult professional exterminator for severe infestation.			
3. Fix water leaks.			
4. If a spray is used to kill roaches, keep patient out of the room until the odor goes away.			
ANIMAL DANDER			
Some people are allergic to the flakes of skin or dried saliva from animal fur or feathers.			
THINGS THAT YOU CAN DO: 1. Remove animal from house, or at least, keep animal out of patient's bedroom.			
2. Keep pet in rooms with HEPA filters. Replace filters as recommended by the manufacturer.			
3. Cover air ducts that lead to bedrooms with filters. Replace filters as recommended by the manufacturer.			
4. Use air filters and vacuums with HEPA filters. Replace filters as recommended by the manufacturer.			
INDOOR MOLD			
Some people with asthma are allergic to indoor molds			
THINGS THAT YOU CAN DO: 1. Clean visibly moldy surfaces with a dilute bleach solution. 2. Fin muter leader			
 2. Fix water leaks. 3. Reduce indoor humidity to less than 50-60%. 			
OUTDOOR MOLD & POLLEN			
Some people with asthma are allergic to outdoor molds and/or pollen. Trees in early Spring; Grasses in late Spring; Weeds & Molds in late Summer & Fall.			
THINGS THAT YOU CAN DO DURING PATIENT'S ALLERGY SEASON:			
1. Try to keep your windows closed			
2. Minimize outdoor activity from late morning to early afternoon.			
RESPIRATORY IRRITANTS			
TOBACCO SMOKE			
All asthmatic patients need to avoid tobacco smoke, both direct and indirect.			
THINGS YOU CAN DO: 1. Review CDC smoking cessation resources (www.cdc.gov/tobacco), including 1-800-QUIT-NOW.			
2. Completely banning indoor and in-car tobacco smoking can reduce the effect of second-hand and third-hand smoke.			
SMOKE, STRONG ODORS, and SPRAYS			
Most people with asthma can be triggered by non-tobacco inhaled irritants.			
THINGS YOU CAN DO: 1. Avoid wood smoke from stoves or fireplaces, strong perfumes and odors, chlorine-based cleaning product.			
2. Avoid exertion outdoors on days when levels of air pollution are elevated			
OTHER TIPS			
Cover patient's nose and mouth w/ scarf on cold/windy days.			

SOURCES: www.nhlbi.nih.gov/guidelines/asthma; www.cdc.gov/asthma;; www.uptodate.com.