

# ASTHMA PROTOCOL

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# Asthma Protocol

## North Reading Public Schools, North Reading, MA

The North Reading Public Schools recognizes that a clear, concise protocol for asthma management in school can support academic achievement. Asthma is one of the most common chronic childhood illnesses and a major cause of student absences.

This document outlines the comprehensive and collaborative nature of managing a child's asthma within a school setting.

### IDENTIFY AND TRACK STUDENTS WITH ASTHMA

School nurse will:

- At the start of each school year, develop a confidential list of students with asthma
- At the start of each school year, review with appropriate staff the signs/symptoms of an asthma event and how to handle an asthma incident at school
- Review and maintain records for students with asthma

Parents will:

- Inform school nurse of changes in student health status
- Complete *Asthma History Form*
- Complete *North Reading Public Schools Emergency Information form*

Other staff will:

- Assist student experiencing asthma-like symptoms in the following way:
  1. Stop Activity
  2. Stay with child
  3. Call Nurse (or 911 if nurse unavailable)

## **IDENTIFY AND MONITOR STUDENTS WITH POORLY CONTROLLED ASTHMA**

School nurse will:

- Contact parents if a student with asthma is absent greater than five consecutive days
- Contact parents if an otherwise healthy student with asthma requires asthma medication two or more times within a five day period
- Use a peak flow meter when ordered and available

## **OBTAIN AND USE A WRITTEN PLAN FOR EVERY STUDENT WITH ASTHMA**

At the beginning of each school year, the school nurse should ask for an *Asthma Action Plan* (AAP) for all students with asthma (AAP is the preferred medical order form and should be signed by both the doctor and parent). With no results, the nurse should ask once more. All conversations, emails, and notes requesting the AAP should be documented in the student's individual health record. If unable to obtain an AAP then the school nurse will formulate an *Individual Health Care Plan* (HCP) consisting of:

- Medication used
- Possible use of peak flow, including best number and trouble marker
- Asthma triggers
- Activity limits
- Emergency contact information
- Health care provider contact information
- Signs and symptoms of asthmatic event (cough, wheeze and/or shortness of breath)
- How staff should respond to an asthmatic episode

School nurse should have readily available the AAP/HCP for each student with asthma.

## **PLAN FOR MEDICATION ADMINISTRATION**

In order for the nurse to administer medication at school, the following are required:

Parents will:

- Provide medication order (AAP preferred) signed by health care provider
- Provide parental written consent to administer medication as ordered

- If necessary, meet with school nurse to discuss child's condition

School nurse will:

- Administer medication according to physician order
- Store medication in a secure location that is accessible by the school nurse
- Inform parent when medication refill is necessary
- Request parent completion of *Medical Release Form* as needed in order to facilitate open communication between nurse, health care provider and parent

Some students may be allowed to carry medication if the following conditions are met:

- For elementary schools, written permission must be granted by parent and doctor. In addition, school nurse must deem self-carrying and self-administration of medication to be safe
- For middle and high schools, written permission must be granted by parent. In addition, the school nurse must deem self-carrying and self-administration of medication to be safe

### **Promoting Independence in the Student's Self-Management**

As the student grows and develops, responsibility in assessing and making asthma management decisions should progress. School nurses can assist in promoting this independence within the school setting by providing:

- Knowledge and understanding of asthma
- Education on recognition of asthma symptoms and how to avoid asthma triggers
- Planning for student self-care of asthma control
- Evaluation of asthma control as it relates to:
  - absenteeism
  - participation in activities such as physical education class and recess
  - academics

## **Administration of Asthma Medications:**

### **Nebulizer**

#### *Purpose:*

To deliver bronchodilators, mucolytic, or other medications directly into the lungs by means of aerosol instillation, and to provide high humidity to facilitate the removal of pulmonary and bronchial secretions.

#### *Equipment and Supplies:*

Air compressor, connection tubing, medication or saline solution, medication cup, mouthpiece and mask. Follow manufacturer instructions for ultrasonic nebulizers.

#### *Procedure:*

-Determine the need for student to use a nebulizer at school.

- Review student's *Health Care Plan/AAP and Asthma History* form
- Confirm medical order is in place
- Confirm parent consent is obtained
- Observe breathing baseline rate, depth, effort and audible breath sounds
- Assess color, restlessness and level of consciousness
- Auscultate lungs

-Assemble equipment and medication as ordered.

- Use student's own medication cup, mouthpiece or mask
- Place the appropriate amount of medication and saline solution or water in the nebulizer

-Place student in comfortable sitting position near the nebulizer.

-Attach tubing to air compressor and activate. Verify presence of fine mist.

-Instruct student to place mouthpiece in or near mouth as indicated, then to breathe through their mouth with slow deep breaths.

-Observe student for adverse reactions such as wheezing and excessive mucous deposition causing suffocation, rapid heart rate, nausea, and dizziness.

-After each treatment nurse will ensure that all equipment is cleaned, dried, and stored appropriately.

-Disinfect sink and wash hands.

-Record date and time of treatment, medication used, duration of treatment, respiratory rate, lung sounds and effort before and after treatment. Note any secretions expectorated, observation time, when student returned to classroom, and any other notable occurrences

## **Inhaler**

### *Purpose:*

To provide quick relief or to prevent asthma symptoms or episodes by administering asthma medication directly to the lungs.

### *Equipment and Supplies:*

Prescription inhaler medication via metered dose inhaler, and chamber if ordered.

### *Procedure:*

-Determine the need for student to use the inhaler at school.

- Review student's *Health Care Plan/AAP* and *Asthma History* form
- Confirm medical order is in place
- Confirm parent consent is obtained
- Observe baseline breathing rate, depth, effort and audible breath sounds
- Assess color, restlessness and level of consciousness
- Auscultate lungs

-For inhaler with chamber use:

- Shake inhaler well and attach it to the chamber
- Hold the upright inhaler in one hand and the chamber in the other hand
- Breathe out to the end of a normal breath
- Place the spacer in mouth and start to breathe in slowly
- Spray the inhaler at the start of a normal breath (inhaling)
- Breathe in as deeply as possible over 2-3 seconds
- Take the spacer out of the mouth and have student hold their breath for 8-10 seconds
- Wait one minute between puffs

-For inhaler without chamber use:

- Shake inhaler well and hold the upright inhaler in one hand
- Breathe out to the end of a normal breath
- Place the inhaler in mouth and start to breathe in slowly while simultaneously administering the medication

- Breathe in as deeply as possible over 2-3 seconds
- Take the inhaler out of the mouth and have student hold their breath for 8-10 seconds
- Wait one minute between puffs

-Auscultate lungs and observe student for a few minutes to determine if signs and symptoms have improved. If student feels better and signs/symptoms have improved, student may return to class. If not, call parent for dismissal.

-Record date and time of treatment, respiratory rate and effort before and after treatment, description of secretions expectorated, observation time, when student returned to classroom, and any other notable occurrences.

Student may self-administer asthma medication in presence of nurse upon nurse determination of appropriate technique. Student may self-carry and self-administer medication as outlined in "Administration of Asthma Medications" section.

## **Asthma Emergency Protocol**

In the event emergency response measures outlined in a student's *Asthma Action Plan* or *Individual Health Care Plan* are undertaken but not effective, 911 will be called. School staff will remain with the student at all times during a medical emergency or perceived medical emergency. If a student is transported to a hospital, a staff member shall accompany the student until the parent/guardian /emergency contact arrives.

In the event of asthma symptom changes (increased breathing and coughing), student should be accompanied to health office by another student or an adult. **If any doubt, nurse should be contacted.**

During field trips or in the event that the nurse cannot be reached and a student with asthma displays signs/symptoms of asthma, follow below listed steps:

- *Observe* for signs/symptoms of mild/early symptoms such as changes in breathing and coughing
- Place student in seated position
- Encourage student to take longer, fuller breaths
- If student has good response, student may return to class/function when event has passed
- If signs/symptoms progress to wheezing, noisy breathing, whistling in the chest, nasal flaring, retractions, inability to speak or walk, blueness around lips or fingernails, call 911 and parent/guardian
- Stay with student until emergency services arrives

If a student with a known diagnosis of asthma experiences symptoms of an asthma episode and does not have asthma medication at school, the nurse may administer medication via an albuterol inhaler with a disposable mouth piece (see standing order). Any applicable observations, assessments, instructions and documentation listed above under “Inhaler” (page 5 and 6) will apply in this situation. Disposable mouth piece will be discarded and the inhaler will be cleaned with disinfectant after use. Parent will be notified of event and medication administration.

### **Asthma Education**

- Staff will receive yearly asthma education. Education will include staff role in managing asthma.
- Nurse will educate students with asthma as needed in order to promote optimal health.
- Nurse will contact family members of students with asthma if any questions or concerns arise regarding asthma care.

### **Collaboration with Families and Healthcare Providers**

- If necessary, nurse may obtain parental permission (*Medical Release* form) to communicate with healthcare provider regarding student’s asthma condition.
- If a student with asthma experiences more than two asthma episodes within five days when not currently being treated for an asthma episode, the nurse will notify the student’s parent/guardian and document notification in the student’s individual health record.
- Nurse will provide resources if requested by family (medical insurance information, asthma resources, etc.).



# Massachusetts Asthma Action Plan

Name:		Date:
Birth Date:	Doctor/Nurse Name:	Doctor/Nurse Phone #:
Patient Goal:		Parent/Guardian Name & Phone:
Important! Avoid things that make your asthma worse:		

Personal Best Peak Flow: \_\_\_\_\_

The colors of a traffic light will help you use your asthma medicine.



**Green means Go Zone!**  
Use controller medicine.

**Yellow means Caution Zone!**  
Add quick-relief medicine.

**Red means Danger Zone!**  
Get help from a doctor.

## GO – You're Doing Well! ➡ Use these daily controller medicines:

You have all of these:

- Breathing is good
- No cough or wheeze
- Sleep through the night
- Can go to school and play



Peak flow from \_\_\_\_\_  
to \_\_\_\_\_

MEDICINE/ROUTE	HOW MUCH	HOW OFTEN/WHEN

## CAUTION – Slow Down! ➡ Continue with green zone medicine and add:

You have any of these:

- First signs of a cold
- Cough
- Mild wheeze
- Tight Chest
- Coughing, wheezing, or trouble breathing at night



Peak flow from \_\_\_\_\_  
to \_\_\_\_\_

MEDICINE/ROUTE	HOW MUCH	HOW OFTEN/WHEN

CALL YOUR DOCTOR/NURSE: \_\_\_\_\_

## DANGER – Get Help! ➡ Take these medicines and call your doctor now.

Your asthma is getting worse fast:

- Medicine is not helping
- Breathing is hard and fast
- Nose opens wide
- Ribs show
- Can't talk well



Peak flow from \_\_\_\_\_  
to \_\_\_\_\_

MEDICINE/ROUTE	HOW MUCH	HOW OFTEN/WHEN

**GET HELP FROM A DOCTOR NOW! Do not be afraid of causing a fuss. Your doctor will want to see you right away. It's important! If you cannot contact your doctor, go directly to the emergency room and bring this form with you. DO NOT WAIT.**

Make an appointment with your doctor/nurse within two days of an ER visit or hospitalization.

Doctor/NP/PA Signature: \_\_\_\_\_ Date: \_\_\_\_\_

I give permission to the school nurse, my child's doctor/NP/PA or \_\_\_\_\_ to share information about my child's asthma.

Parent/Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**\*\*SEE BACK OF SCHOOL COPY FOR STUDENT MEDICATION ADMINISTRATION AUTHORIZATION\*\***

ADAPTED FROM NIH PUBLICATION (7/20/01)

White Copy: Patient/Parent

Green Copy: Provider

Yellow Copy: School/Other

06/08

AS901

## Asthma History Form



### ASTHMA HISTORY FORM

Student's Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

History Taken by: \_\_\_\_\_ Date: \_\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

Home Phone: (     ) \_\_\_\_\_ Work Phone: (     ) \_\_\_\_\_

Alternate Contact: \_\_\_\_\_ Phone: (     ) \_\_\_\_\_

Primary Health Care Provider: \_\_\_\_\_ Phone: (     ) \_\_\_\_\_

Address: \_\_\_\_\_

When was this student's asthma first diagnosed? \_\_\_\_\_

How many times has this student been seen in the emergency room for asthma in the past year? \_\_\_\_\_

How many times has this student been hospitalized for asthma in the past year? \_\_\_\_\_

Has this student ever been admitted to an intensive care unit for asthma? \_\_\_\_\_  
When? \_\_\_\_\_

How would you rate the severity of this student's asthma?

(not severe) 1    2    3    4    5    6    7    8    9    10 (severe)

How many days would you estimate this student missed last year because of asthma? \_\_\_\_\_

What triggers this student's asthma?

- |   |  |  |                                 |
|---|--|--|---------------------------------|
| <input type="checkbox"/> exercise                 | <input type="checkbox"/> respiratory infection | <input type="checkbox"/> strong odors or fumes | <input type="checkbox"/> stress |
| <input type="checkbox"/> cigarette smoke          | <input type="checkbox"/> wood smoke            | <input type="checkbox"/> pollen                |                                 |
| <input type="checkbox"/> animals (specify): _____ |  |  |                                 |
| <input type="checkbox"/> foods (specify): _____   |  |  |                                 |
| <input type="checkbox"/> carpets                  | <input type="checkbox"/> indoor dust           | <input type="checkbox"/> outdoor dust          |                                 |
| <input type="checkbox"/> chalk dust               | <input type="checkbox"/> temperature changes   | <input type="checkbox"/> molds                 |                                 |
| <input type="checkbox"/> other: _____             |  |  |                                 |

What does this student do at home to relieve asthma symptoms (check all that apply)?

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> breathing exercises            | <input type="checkbox"/> rest/relaxation                  | <input type="checkbox"/> drinks liquids |
| <input type="checkbox"/> takes medications (see below)  | <input type="checkbox"/> uses herbal remedies (see below) |   |
| <input type="checkbox"/> other (please describe): _____ |   |   |

**Asthma History Form (cont.)**

ASTHMA HISTORY FORM			
What medications does this student take for asthma (every day and as needed):			
Medication Name	Amount	Delivery Method (nebulizer, inhaler, etc.)	How Often
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
What herbal remedies, if any, does this student take for asthma? _____			
_____			
Does this student use any of the following aids for managing asthma?			
<input type="checkbox"/> peak flow meter (personal best if known _____)			
<input type="checkbox"/> holding chamber <input type="checkbox"/> spacer <input type="checkbox"/> holding chamber w/mask			
<input type="checkbox"/> other: _____			
Please check special needs related to your child's asthma:			
<input type="checkbox"/> physical education class <input type="checkbox"/> recess <input type="checkbox"/> animals in classroom			
<input type="checkbox"/> avoidance of certain foods <input type="checkbox"/> field trips <input type="checkbox"/> access to water			
<input type="checkbox"/> transportation to and from school <input type="checkbox"/> other			
<input type="checkbox"/> observation of side effects from medications			
If you checked any of the above boxes, please describe needs:			
_____			
_____			
Has this student had asthma education? <input type="checkbox"/> yes <input type="checkbox"/> no			
Would you like information about asthma education for: <input type="checkbox"/> student <input type="checkbox"/> self			
Parent Signature: _____		Date: _____	
Nurse Signature: _____		Date: _____	