Medical Conditions Package

Asthma Protocol

Revised September 2018
Contents

Rationale for an Asthma Protocol ...........................................................................................................3
What Is Asthma? ......................................................................................................................................3
Duty of Care ...........................................................................................................................................4
Activity and Students with Asthma ........................................................................................................6
Identifying and Managing Triggers for Physical Activity .................................................................7
Indicators that Asthma is Not in Control ..............................................................................................7
Instructions for Managing Asthma Attacks .........................................................................................8
Field Trips and Students with Asthma (Day Trips, Overnight Trips, Extensive Trips, Exchange Programs)......................................................................................................................8
School Board Responsibilities ..............................................................................................................9

The Asthma Protocol has been amended to comply with Policy/Program Memorandum No. 161 Supporting Children and Students with Prevalent Medical Conditions (Anaphylaxis, Asthma, Diabetes and/or Epilepsy) in schools, the following Asthma Protocol addresses the components outlined in PPM 161. [www.edu.gov.on.ca/extra/eng/ppm/ppm161.pdf](http://www.edu.gov.on.ca/extra/eng/ppm/ppm161.pdf)
Rationale for an Asthma Protocol
Uncontrolled asthma may limit children’s learning opportunities and can cause many nights of interrupted sleep, several days of limited activity, and disruptions in normal activities of life. All of these factors influence how children behave and learn at school.

What Is Asthma?

Asthma is a chronic inflammatory disease of the airways in the lungs. Inflammation in the airways makes the lungs more sensitive to things/substances in our environment termed “asthma triggers”.

When people with asthma are exposed to their triggers three things may happen that narrow the airways:
- contraction (squeezing) of the airway muscles
- more airway inflammation, and extra mucus production
- narrowing of the airways can cause difficulty breathing, coughing and wheezing (whistle sound)

Sudden narrowing of the airways produce what is often called an “attack of asthma” or an asthma flare-up.

Symptoms
- Constant coughing
- Trouble breathing
- Chest tightness (like a tight band around the chest)
- Wheezing (whistling sound in chest)
- Student may also be restless, irritable and/or tired.

These symptoms can be reversed with medication and by reducing exposure to environmental triggers. Not every person will experience all of the symptoms listed. Often a cough may be the only symptom experienced.

What is an Asthma Trigger?
An asthma trigger is anything in the environment that causes or provokes asthma symptoms (cough, wheeze, difficulty breathing). Common triggers include viral infections (common colds); allergies animals, house dust mites, dust, pollen, and moulds); fumes (paints, indelible markers, perfumes, cleaning products and glue); extremes of temperature (cold or hot and humid); exercise; and crying or laughing. Most children with asthma have more than one trigger. However, the triggers and the degree of asthma symptoms differ for each person with asthma.

Asthma Medication
In general, asthma medications work in one of two ways to control asthma. They work either by controlling or preventing the inflammation and mucous production, or by relieving the muscle tightness around the airways.
- **Controller Medication** (e.g. Flovent, Advair, Qvar, Pulmicort, Alvesco, Zehale, etc.)
  - Used daily, before and after school at home, to prevent asthma attacks.
  - Decreases and prevents swelling of the airways
  - Can take days to weeks of daily use to work effectively
  - Various colours (orange, purple, brown, red)

- **Reliever Medication** (e.g. Ventolin/Salbutamol, Bricanyl, etc.)
  - Used to relieve symptoms of asthma. Also called the ‘rescue’ inhaler (usually blue in colour)
  - Needs to be quickly accessible at all times
  - Provides relief quickly, within minutes
  - Relaxes the muscles of the airways
  - Taken only when needed

**Anaphylaxis and Asthma**

People with asthma who are also diagnosed with anaphylaxis are more susceptible to severe breathing problems when experiencing an anaphylactic reaction. It is extremely important for asthmatic students to keep their asthma well controlled. In cases where an anaphylactic reaction is suspected, but there is uncertainty whether or not the person is experiencing an asthma attack, epinephrine should be used first. Epinephrine can be used to treat life-threatening asthma attacks as well as anaphylactic reactions. Asthmatics who are at risk of anaphylaxis should carry their asthma medications (e.g. puffers/inhalers) with their epinephrine auto-injector (e.g. EpiPen®).

**What Is Exercise Induced Asthma (EIA)?**

When students participate in physical activity, it is common to switch from breathing through the nose to mouth breathing and to breathe at a much faster rate. This can cause cooling and drying of the sensitive airways. This cooling and drying effect causes the airways to narrow resulting in asthma symptoms. EIA may present itself during, or after, physical activity. It is more common when activities are done in cold environments, during high pollen or pollution count days, or when the student has an underlying cold/chest infection. Most cases of EIA can be treated by taking medication as prescribed by a health care professional. A doctor should be consulted if reliever medication is needed before and/or after exercise. For more information about EIA visit [www.lung.ca/asthma/exercise](http://www.lung.ca/asthma/exercise)

**Duty of Care**

*Ryan’s Law (Ensuring Asthma Friendly Schools), 2015*

[https://www.ontario.ca/laws/statute/15r03](https://www.ontario.ca/laws/statute/15r03)

Ryan’s Law requires every school board, in Ontario, to establish and maintain an asthma policy, which must include, among other things, strategies to reduce risk of exposure to asthma triggers, a communication plan for the dissemination of information on asthma, regular training on recognizing asthma symptoms and managing asthma exacerbations. A Plan of Care for each pupil who has asthma is to be developed, and maintained, through regular consultation with the parent/guardian and student.

**Education Act 265 (1): Duties of Principals**

j) care of pupils and property – to give assiduous attention to the health and comfort the pupils

**Education Act, Regulations: Reg. 298, S20: Duties Of Teachers**

g) ensure that all reasonable safety procedures are carried out in courses and activities for which the teacher is responsible
Common Law Duties Owed by Teachers:
To assist or allow a student to seek medical attention as a ‘careful parent’ would. The board’s liability policy provides coverage for employees acting within the scope of their duties with the board. Thus, all school staff who administer first aid to a student who is suffering from an asthma attack within the school or during a school activity, are covered.

Communication of Information on Asthma
The Board Public Webpage (www.hcdsb.org) offers resources that include information about asthma that can be shared with all parents/guardians, students, employees, volunteers, coaches and other persons who have direct contact with a student with asthma. School administrators are asked to consider including these links in School Newsletters, on the school website or in other pertinent areas, (www.hcdsb.org → Parents tab → Safe, Healthy and Inclusive Schools → Medical Conditions → Asthma) or in a letter home to all parents/guardians at the beginning of the school year.

This information is intended to assist people in understanding how to reduce exposure to asthma triggers, recognize when asthma is worsening and how to manage asthma symptoms exacerbations.

The school principal/designate shall work with staff and families to help ensure that an asthma friendly school environment exists that is safe and supportive for all students. The Ontario Physical and Health Education Association (Ophea) Manual – Creating Asthma Friendly Schools is a useful resource.

Identification
Have a process in place where children with an asthma condition are identified to the school system by parents/guardians and requested to supply information on the asthma condition.

- **Students, new to the school, during registration**
  (e.g. Question on registration form: *specifically asking whether or not their child has asthma*)
  Asthma Student Plan of Care provided to parents/guardians for further information regarding asthma triggers, etc.

- **Students presently registered at school (e.g. Verification form)**
  At the beginning of each school year, the school principal/designate shall have a process in place of requesting parent/guardian/adult student to identify if there is a new diagnosis of asthma (throughout the school year)
  - Ensure student's medical condition(s) are entered into the Board’s student database system.

Development of the Asthma Student Plan of Care
The parent/guardian in consultation with the principal shall create, review and update the student plan of care during the last week of August, or on the date as requested by the school administrator.

The plan shall be reviewed by the principal/designate in consultation with the parent/guardian/adult student, following the HCDSB Asthma Protocol, on an annual basis or when there is a change in the child’s condition or changes to the prescribed medication. Where appropriate, the classroom teacher is to be part of the information sharing process

The child’s asthma triggers are to be identified and avoidance strategies are to be developed and implemented.

Location of Inhaler Medication
- Parent/guardian permission for student to carry their reliever inhaler is located on the Asthma Student Plan of Care
• For students that require assistance with their inhaler(s) (i.e. identified on the Asthma Student Plan of Care) inform and train appropriate staff. Training can be done by parents/guardians of student, or request that parents contact the child’s health care provider for a reference to CCAC.
• Students up to 16 years of age who have parental permission and who are capable of doing so, are to carry their reliever inhaler at all times (e.g. to and from school, when moving classroom locations, breaks – recess and noon time, all field trips, evacuation procedures and lockdowns)
• Students in Kindergarten: the classroom teacher is responsible for housing the reliever inhaler and developing a process for having it accessible for the student at all times
• Where age, pupil capacity (intellectual/physical), activity, or location prevents safe carrying; the reliever inhaler must be located in proximity to the student for ready access e.g. physical activities (indoor/outdoor)
• Where outdoor seasonal triggers are not present, or do not affect the student’s asthma, the reliever inhaler, under parental permission as stated on the Asthma Student Plan of Care, does not have to carried outside and can remain in the student’s classroom
• Where student has a second or spare reliever inhaler at the school, ensure it is stored under proper conditions, as per the manufacturer’s requirements, and inform teachers/staff who have direct contact with the student of its location and identify its location on the Asthma Student Plan of Care.

Activity and Students with Asthma
Medication Prior To Activity:
The Asthma Student Plan of Care must indicate if the student is to take the reliever medication prior to physical activity. Have student use reliever as per doctor’s directions.

Asthma Symptoms Prior To Activity:
If the student is already experiencing asthma symptoms such as, coughing or difficulty breathing, they should NOT participate in physical activity as this can lead to a severe asthma attack. A reliever /rescue inhaler should be used to relieve the symptoms.

Warm Up And Cool Downs:
A good warm up and cool down before and after physical activity may assist in preventing the development of asthma symptoms:
• before vigorous physical activity, begin the activity with a progressive warm up. The purpose is to warm both the body and the airways in preparation for the activity (e.g. begin by light walking and progress gradually to a jog);
• the intensity of the activity should start at a low level and gradually increase to develop exercise tolerance;
• end the activity with a cool down period. The purpose is to gradually bring the heart rate down slowly to a resting rate and reduce the chance of asthma symptoms occurring after the exercise.

Asthma Symptoms Occurring After Physical Activity Begins:
If symptoms occur after physical activity begins, have the student stop the activity. A reliever inhaler may be needed to fully relieve symptoms. Once the student is fully recovered, s/he may resume normal school activity, including physical activity.

A Fully Recovered Student:
• will breathe at a normal rate
• will not be wheezing/coughing
• will be able to carry on a conversation without any breaks
Identifying and Managing Triggers for Physical Activity

Outdoor Triggers:
- **Cold Air**
  Some students with asthma may require something to cover their mouth and nose (e.g. a scarf or neck warmer). This can help to add warmth and moisture to cold dry air and potentially reduce the chance of asthma symptoms occurring.
  - Choose well ventilated indoor sites on days with extreme temperatures.

- **Air Quality, Smog**
  - Air quality and smog alerts can be accessed by checking local weather forecasts.
    [www.airqualityontario.com](http://www.airqualityontario.com) provides up to date information on daily air quality forecasts.
  - Choose well-ventilated indoor sites on days when the air quality is poor.

- **Pollen, Trees, Leaves**
  - Pollen count reports can be found on local weather channels
    [https://www.theweathernetwork.com/ca](https://www.theweathernetwork.com/ca)
  - If possible, try to avoid playing on freshly cut grass
  - Participate in physical activity outdoors after 10 a.m. when pollen counts are lower

Indoor Triggers (Classroom, Gymnasiums, and Multipurpose Rooms)
When activities take place indoors take precautions to minimize or eliminate the following triggers that may cause asthma symptoms: strong smells from markers, paints, cleaning products and perfumes; chalk, dust, and animals.
- If carpet is used, use a throw rug so that it can easily be washed
- Report any mould concerns to your principal
- Remove any animals from classroom
- Ensure a no-perfume policy is in place in your work environment
- Choose scent-free products when possible – i.e. unscented markers, art supplies, etc.
- Use dry-erase boards with scent-free markers more often
- Keep windows closed during high pollen count days

Indicators that Asthma is Not in Control
- **Communication To Parent/Guardians Of Students with asthma**
  - **Elementary School Students**
    If Elementary school staff observe either one or both of the following indicators that the child’s asthma is not in control school staff are to inform parent/guardians.
    **Indicators that asthma is not in control:**
    - Reliever medication had to be taken for a second time (twice) in a 4-hour period
    - Reliever medication had to be used more than 4 times in a week
  - **Secondary School Students**
    Due to the nature of secondary school programs, the same teacher is not with the student during the whole day to observe indicators. It is the student’s responsibility to inform parents of when their reliever inhaler is used. When/if a teacher does observe the indicators the teacher will remind the student to inform their parent/guardian.
### Instructions for Managing Asthma Attacks

<table>
<thead>
<tr>
<th>Milder Symptoms:</th>
<th>Asthma Emergency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>If any of the following symptoms occur:</td>
<td>If any of the symptoms occur:</td>
</tr>
<tr>
<td>• Constant coughing</td>
<td>• Breathing is difficult and fast</td>
</tr>
<tr>
<td>• Trouble breathing</td>
<td>• Cannot speak more than 5 words between breaths</td>
</tr>
<tr>
<td>• Chest tightness (like a tight band around the chest)</td>
<td>• Lips or nail beds are blue or gray</td>
</tr>
<tr>
<td>• Wheezing (whistling in chest)</td>
<td>• Skin on neck or chest sucked in with each breath</td>
</tr>
<tr>
<td></td>
<td>• Requests a doctor or ambulance or asks to go to the hospital.</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td>• You have any doubt about the student’s condition.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Action:</th>
<th>Action:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Immediately have the student use/administer reliever inhaler as directed by medical doctor (refer to medication label).</td>
<td><strong>Step 1:</strong> Call 911 for an ambulance. Follow 911 communication protocol with emergency responders.</td>
</tr>
<tr>
<td>• If there is an identifiable trigger, remove the student from the trigger.</td>
<td><strong>Step 2:</strong> Immediately use reliever inhaler Continue to use reliever inhaler every 5-15 minutes until medical help arrives. While waiting for medical help to arrive:</td>
</tr>
<tr>
<td>• Have the student in an upright position e.g. sit up with arms resting on a table.</td>
<td>• Have the person sit up with arms resting on a table (do not have person lie down unless it is a life threatening allergic event)</td>
</tr>
<tr>
<td>• Advise the student to breathe slowly and deeply.</td>
<td>• Stay calm, reassure the person and stay by their side.</td>
</tr>
<tr>
<td>• Do NOT have student breathe into a bag or lie down</td>
<td>• Contact parents/caregivers, as soon as possible.</td>
</tr>
<tr>
<td>• If student fully recovers, participation in activities may resume.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** School administrators should consider simulating an asthma emergency, with all staff, similar to a fire drill, to review and check to see that all elements of the school's emergency protocol are in place and everyone knows their role.

### Field Trips and Students with Asthma (Day Trips, Overnight Trips, Extensive Trips, Exchange Programs)

- **Process in place to identify students with asthma** participating on the trip along with their asthma triggers and required medication.

- **In order to participate** on a field trip a student diagnosed with asthma must carry their reliever inhaler at all times or during physical activities have the inhaler immediately accessible.

- **Trip site and activities are to be checked to identify potential allergens.** Prior to the trip organizers should review the activities and location for potential asthma triggers. Common triggers to think about include exposure to animals, mould, strong smells, extremes of heat and cold and strenuous activity.

- **Communicate with the child’s parents /guardians** during the initial planning stages of the trip informing them of the destination, mode of travel and activities students are to participate in. This will
allow parent/guardian to potentially identify or anticipate problems and provide input accordingly. By knowing the trip activities, expectations and accommodations parents will be able to provide an informed decision as to their child’s participation.

- For overnight, extensive or exchange programs parents are to be informed that they must:
  - Provide adequate supply of medications (controller and reliever) and additional required equipment. They may want to include back up (or second) inhalers, in the case of loss.
  - Provide detailed instructions regarding the use of the medications that include the dose and time of day or indications for the use of medication.

- Tour operator and/or activity provider needs to be informed by the trip supervisor of the number and identity of students with asthma, their triggers and possibility of special accommodations. The tour operator/or activity provider must guarantee they can accommodate the student’s requirements for safe participation.

- An emergency action plan for an asthma attack on the trip must be prepared by the trip supervisor and communicated to all staff and volunteers on the trip.

- Student forms on the trip – copies of the student's Asthma Student Plan of Care are to be taken on the trip. The student’s chaperone/staff member should have a copy in addition to the trip organizer.

- Grouping of student(s): students with asthma are to be assigned to a group with a staff member who is knowledgeable about managing an asthma attack.

- Buddy system: In situations where the teacher/supervisor is providing ‘in the area supervision’ teacher is to assign a knowledgeable ‘buddy’ to the student. The student and buddy are to be informed of warning signs of trouble and that if they exist, the buddy is to contact the teacher/supervisor/chaperone. If the student with asthma is carrying his/her reliever inhaler and has symptoms of an attack, the reliever inhaler should be used.

- Ensure a means of communication (e.g. cell phone and/or other mode of communication) is to be taken on the trip in case of an emergency. Check ahead of visit what types of communication the visiting site presently has available.

- Trip supervisor is to meet students with asthma and provide the following information:
  - Students agree to tell trip supervisor:
    - What triggers their asthma
    - If they anticipate having trouble with their asthma on the trip
    - When their asthma is bothering them
    - If they have used their inhaler more than twice in a four-hour period
    - Inhalers must be labelled with the student’s name
    - Inform trip supervisor/teacher supervisor when you use your inhaler more than twice in a 4-hour period.
    - Stress to students that if they have an asthma attack, do not (never) go off alone or remove yourself to a secluded area, like the washroom. Tell a supervising teacher, volunteer or classmate that you are having trouble breathing and need help. In order to help you, people need to know where you are and that you need help.

**School Board Responsibilities**

- Provide information, instruction and training to its school administrators and staff on how to identify, manage and accommodate students diagnosed with asthma resources: HCDSB Asthma Protocol, Parent Guardian Package and Custodian Checklist
• Provide standardized school registration forms that specifically ask whether, or not, the student has asthma or uses asthma inhalers and identifies triggers.
• Provide information to school sites on how to identify and reduce common asthma triggers.
• Provide asthma information to the following Board personnel that do not have access to school in-services:
  • Occasional Teachers
• Where possible, facilitate the use of asthma friendly school supplies and products:
  • scent free markers, cleaning products, dust free chalk;
  • building inspections and maintenance on a regular basis;
  • cleaning at times that will reduce the possibility of exposing students/staff to fumes, dust, mould, and other irritants.
• Review the Asthma Protocol on a yearly basis with a full review as per Board cycle
• Indoor Air Quality of school, portable, port-a-packs: (reference HCDSB Procedure VI-79)
• Where indoor air quality in the school, portable or port-a-pack becomes a concern or is questioned by school staff, students, parent/guardians refer concern/inquiry to the HCDSB Health and Safety Officer.
• Facility Management Services will provide its custodians with information and in service on implementation of avoidance strategies (Indoor Air Quality)
  • HCDSB Custodian Asthma Avoidance Strategies for Classrooms and Common School Areas