

## Introduction

Ophea's Asthma e-Learning module was developed to provide education on asthma and its management. This module also includes strategies and resources to support the safety and well-being of students with asthma and create asthma friendly schools and communities. This e-Learning module is intended for all school staff, including educators, administrators, and support staff.

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## Navigating the Module

This e-Learning module includes four sections.

1. Overview of Asthma
2. Managing Severe to Life-threatening Asthma Emergencies
3. Understanding the Requirements of Ryan's Law and Policy/Program Memorandum (PPM) 161
4. Additional Resources

This module takes approximately 1.5 to 2 hours to complete.

**Note:** This module was designed to complete at your own pace. Select "Continue Course Later" (in the menu) to leave at any time. Your progress will be saved.

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## Learning Objectives

By the end of this e-Learning module, participants will increase their awareness and understanding of the following:

- their roles and responsibilities related to supporting a student with asthma in schools
- what asthma is, including the definition, signs and symptoms, triggers, and seriousness of asthma
- how to recognize and respond to worsening asthma, including mild to moderate episodes and severe to life-threatening asthma emergencies
- the importance of asthma prevention, control, and how to successfully respond to and manage severe to life-threatening asthma emergencies
- the requirements from Ryan's Law and PPM 161, as well as the roles and responsibilities of school staff (e.g., educators, administrators, and support staff)
- strategies and resources to support creating asthma friendly schools and community environments

### Assessment of Learning

Throughout this e-Learning module, participants will engage in a variety of learning tasks. These include:

- **Pause and Reflect questions:** intended to support your personal reflection and connections to your professional practice as you work through the e-Learning module
- **Knowledge Check questions:** that connect the learning in each section to the Learning Objectives for the module. These questions do not have to be completed before moving on to the next section.

To successfully complete the e-Learning module and receive a Certificate of Completion, participants are required to respond to all Knowledge Check questions correctly.

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## Additional Information

This module is based on the policy direction from Ryan's Law and Policy/Program Memorandum (PPM) 161: Supporting Children and Students with Prevalent Medical Conditions (Anaphylaxis, Asthma, Diabetes, and/or Epilepsy). It was developed in partnership with the Lung Health Foundation (formerly known as the Ontario Lung Association).

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This e-Learning module is provided for general information purposes only. For further information, individuals are advised to seek the advice of a physician or other health care professionals.

Funding for this e-Learning module was provided by the Government of Ontario. The views expressed in this e-Learning module are those of Ophea and do not necessarily reflect the views of the Government of Ontario.



## What is Asthma?

"Asthma is one of the most common childhood chronic diseases" (Sick Kids, 2017).

Asthma is a chronic lung disease that affects the airways (breathing tubes) by narrowing them, making it hard to breathe. It affects one in four children in Ontario (Sick Kids, 2019). Since children and youth spend a majority of their time in schools, it is important to create asthma friendly schools and communities to help successfully manage asthma.

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### Reference

SickKids. (2017). Asthma Prevalence Crude Rates. Retrieved from [https://lab.research.sickkids.ca/oasis/wp-content/uploads/sites/6/2019/06/asthma\\_prevrt\\_2017.pdf](https://lab.research.sickkids.ca/oasis/wp-content/uploads/sites/6/2019/06/asthma_prevrt_2017.pdf)

SickKids. (2019). Ontario Asthma Surveillance Information System (OASIS) Asthma Infographic. Retrieved from <media/c84e9a6d-120a-4df3-8505-e0dd1d169288.png>

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## Why School Staff Need to Know About Asthma

Asthma is a leading cause of hospitalizations and emergency care visits for children. It is also a leading cause of school absenteeism for children and youth in Ontario (Asthma Canada, 2019; Canadian Institute for Health Information, 2018).

Asthma is a chronic disease that makes breathing difficult. Since asthma symptoms come and go, asthma is often dismissed as not very serious or impactful.

Every year in Ontario, 90–100 people die from asthma (Sick Kids, 2019).

Even children and youth with mild asthma can die from the disease; it is not just severe asthma that causes death. Asthma can be managed through the proper use of medications and environmental control strategies (Asthma Canada, 2019).

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### References

Asthma Canada. (2019). A Snapshot of Asthma in Canada: 2019 Annual Asthma Survey Report. Retrieved from <https://asthma.ca/wp-content/uploads/2019/09/A-Snapshot-of-Asthma-in-Canada-2019-Annual-Asthma-Survey-Report-1.pdf>

Canadian Institute for Health Information. (2018). Asthma Hospitalizations Among Children and Youth in Canada: Trends and Inequalities. <https://www.cihi.ca/sites/default/files/document/asthma-hospitalization-children-2018-chartbook-en-web.pdf>

SickKids. (2019). Ontario Asthma Surveillance Information System (OASIS) Asthma Infographic. Retrieved from <media/c84e9a6d-120a-4df3-8505-e0dd1d169288.png>

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## Common Asthma Triggers Found in Schools

Students with asthma have airways that are more sensitive. An asthma trigger is anything that irritates and narrows the airways.

Each student with asthma has their own set of triggers and will not always respond to their triggers in the same way after an exposure. Students might not know all of their triggers and often discover new ones over time. It is important for school staff to know which students have asthma (and their personal triggers), so steps can be taken to support successful asthma management and prevent severe to life-threatening asthma emergencies.

Asthma triggers commonly found in and around schools include:

- **Allergens:** mould, pet dander, dust mites, or pollen
- **Irritants:** odours from cleaning supplies, art materials (e.g., paints and markers), strong scents, poor air quality due to inadequate ventilation, poor circulation, air pollution, and smoke or second-hand smoke (from tobacco or cannabis/vaping)
- **Physical Activity:** activities such as physical education class, recess, or sports
- **Viruses and Infections:** colds, flu, respiratory infections and other illnesses that are common among school-age children and youth

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## Managing and Eliminating Triggers

Some triggers, like physical activity, need to be managed rather than avoided. Others—such as pests, strong smells, pets, and mould—should be eliminated wherever possible. It is important for school staff to be aware of triggers in the school environment that may affect students with asthma. School staff should try to manage, reduce, or eliminate asthma triggers.

The two most common triggers for students with asthma are physical activity and infections. The benefits of physical activity are great for all students, including those with asthma. Typically, asthma symptoms can be prevented with proper management strategies that include warm-ups and use of asthma medications. Exposure to infections (e.g., viruses and bacteria) can be reduced through proper handwashing and following other hygiene practices. Fewer infections mean students don't miss school and are able to participate fully in school activities.

For additional information, consult the [Asthma Triggers video \(2:17\)](#), which summarizes asthma triggers.



When students with asthma are exposed to their asthma triggers, their airways narrow. This can be a result of:

- the lining inside the airways becomes swollen, irritated, and puffy
- excess mucus being produced and building up to block the airways
- muscles that wrap around the outside of the airways contract, squeezing or narrowing the airways

## Asthma - Inflamed Bronchial Tube

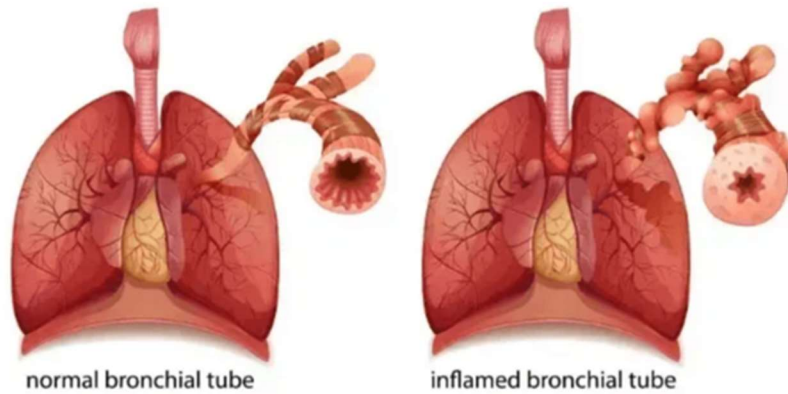


Figure 1: Normal bronchial tube vs. inflamed bronchial tube. [Image from Asthma Canada.](#)

It is important for educators and school staff to understand the impacts of underlying airway inflammation. Students with uncontrolled asthma are more likely to react to triggers, have severe to life-threatening asthma emergencies, and have difficulty with physical activity. The more inflammation there is in the airway, the more likely the airways are to respond/react to triggers, with physical activity being a main trigger. If the student has underlying airway inflammation, then the airways are more likely to narrow with physical activity, which causes the student to experience asthma symptoms.

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## Asthma Signs and Symptoms

When students experience airway narrowing, it can cause:

- difficulty breathing
- persistent coughing
- mild wheezing
- chest tightness
- feeling restless or very tired

The [Understanding Asthma video \(4:33\)](#) summarizes what you have learned so far.



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## Asthma Medications

Asthma medications don't cure asthma but help control it by preventing and relieving asthma symptoms. The two main types of asthma medications are controllers and relievers. Both are important and play different roles in managing asthma.

The [Managing Asthma video \(4:28\)](#) summarizes the different types of asthma medications.



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## Understanding Controller Medications

### School Use:

- typically not used at school
- the exception is students with asthma that are at least 12 years of age who may use a combination controller inhaler of budesonide/formoterol (Symbicort) when they experience asthma symptoms to help alleviate symptoms

### Home Use:

- typically taken daily

### Indication:

- typically taken on a daily basis (such as morning and night) and therefore not usually needed at school or at before-/after-school programs
- used to reduce and prevent airway inflammation and the production of mucus and to maintain open airways
- for some students over 12 years of age, they may use Symbicort, a combination inhaler, when they experience asthma symptoms
- not used in emergency situations

### Types:

- inhaled corticosteroids: most effective anti-inflammatory medication for reducing and preventing inflammation in the airways; inflammation is the major driver for mild to moderate episodes and severe to life-threatening asthma emergencies
- combination inhalers: an inhaler that contains two types of medications (a corticosteroid and a long-acting bronchodilator); a bronchodilator relaxes the airway smooth muscle, thus opening the airway; this combination inhaler addresses all pathologies of asthma (airway inflammation, airway reactivity/sensitivity, contraction of airway smooth muscle)

### Inhalational Devices:

- come in two different types of inhalers: Metered Dose Inhaler (MDI) and Dry Powder Inhaler (DPI)



**Metered-Dose Inhaler.**



**Turbuhaler® inhaler.**



**Diskus® inhaler.**

## Understanding Reliever Medications (Fast-acting bronchodilators)

### School Use:

- used at school to treat/reverse asthma symptoms
- used at school 10–15 minutes prior to physical activity to prevent symptoms
- must always be quickly accessible in case asthma symptoms are experienced or an asthma emergency occurs
- helps restore normal breathing within 10–15 minutes and last for about four to six hours

### Home Use:

- used at home in the same way as school

### Indication:

- works quickly to relax airway smooth muscles, thus opening the airways to provide quick relief from asthma symptoms
- frequency of its use is a good indicator of asthma control; using it more than two times per week indicates that asthma is not well-controlled and parent(s)/guardian(s) should be notified
- students with well-controlled asthma should be able to do physical activity without difficulty; however, some students may be advised to use the reliever inhaler 10–15 minutes before vigorous physical activity to prevent asthma symptoms

### Types:

- known as fast-acting or quick relief because it helps restore normal breathing within 10–15 minutes
- under a class of medications called a bronchodilator, meaning it opens the airways
- fast-acting or quick relief inhaler lasts about 4–6 hours (compared to long-acting bronchodilators that last 12–24 hours)
- often come in blue inhalers

### Inhalational Devices:

- come in two different types of inhalers: Metered Dose Inhalers (MDI) and Dry Powder Inhalers (DPI)
- spacers, a valved holding chamber (VHC), are often used with MDIs, making it easier to use and providing a more effective delivery of medication to the airways



**Metered-Dose Inhaler.**



**Turbuhaler® inhaler.**



## Using Asthma Medications

A severe to life-threatening asthma emergency can occur at any time. It is extremely important for students with asthma to have quick and easy access to their reliever inhaler (which is usually blue). It is also important that the inhaler is used properly to deliver the maximum dose of medication.

As you will learn in Section 3 of this e-Learning module, "Understanding the Requirements of Ryan's Law," [Ryan's Law \(Ensuring Asthma Friendly Schools\), 2015](#) requires that every school must permit a student to self-carry asthma medication/inhaler if the student has parent(s)/guardian(s) permission. If students are 16 years of age or older, they are not required to have the permission of their parent(s)/guardian(s) to carry their asthma inhalers/medications.

Inhalers are difficult to use and not intuitive.

- **Dry Powder Inhalers (DPIs)** require the student to be able to generate a sufficient forceful inhalation/inspiration to aerosolize the medication and deliver it to the airways. For this reason, their use is reserved for students approximately 6 years of age or older.
- **Metered Dose Inhalers (MDIs)** are the most difficult to use. Most people use them incorrectly, reducing the delivery of medication to the airways. To simplify the technique, a valved holding chamber (spacer) is used with an MDI. A spacer is a tube that holds the cloud of medication so that the student has time to take a slow, deep breath permitting medicine to reach the airways of the lungs. Spacer use is recommended with MDIs for all ages, infants to adults, because more of the medication is delivered to the lungs. Regardless of age, if a student has difficulty using an MDI accurately, a spacer should be added. For a variety of reasons, many students do not use a spacer with their MDI; they use the MDI on its own. Only MDIs are used with a spacer. Dry Powder Inhalers (DPIs) are not used with a spacer.

Due to the required skills involved to accurately use inhalational devices, students may need assistance from an adult to administer the medication. The ability of the student to self-administer inhalers is an important topic to be discussed with the student and their parent(s)/guardian(s) when reviewing the Plan of Care. If assistance is needed, then strategies to accommodate should be discussed. Generally, students in Grades 1–2 (approximately 7 years of age) or older are considered to have the cognitive and motor skills necessary to learn and follow instructions to successfully administer their asthma inhaler. Students at this age and stage of development also have the ability to understand when their medication is needed. However, it is also common for students the same age to be at different cognitive and physical stages of development.



## Example of Inhaler Use: MDIs with Spacers



*Figure 7: MDI with spacer.*

Steps to administer a reliever MDI plus spacer with mouthpiece:

1. Remove the cap of the spacer.
2. Remove the cap of the puffer. Shake the puffer five or six times.
3. Insert the puffer in the hole at the back of the spacer.
4. Sit up with your back straight or stand up.
5. Blow all your breath out until your lungs are empty.
6. Seal your lips around the spacer mouthpiece.
7. Press down once on the puffer's canister—this will spray medication into the spacer.
8. Slowly breathe in from the spacer until you can't take in any more.
9. Hold your breath for 5–10 seconds.
10. Take the spacer mouthpiece out of your mouth and breathe out normally.
11. If you need a second puff, wait one minute and repeat these steps.
12. Rinse your mouth out with water and spit the water out (don't swallow it). Rinsing your mouth can cut down on some side effects, like a white coating on your tongue (a yeast infection called thrush) or a sore throat.

Notes:

- Rinsing the mouth is required after administration of an inhaler containing controller (maintenance) medication. It is not required after administration of reliever (rescue) medication.
- Tidal breathing (regularly breathing in and out) is acceptable to use via a spacer if necessary.
- Review the [Lung Health Foundation's videos](#) for visual depictions on how to properly use all types of inhaler medications.

## Physical Activity and Asthma

Physical activity is an important part of healthy, active living for everyone, including students with asthma. When asthma is well-controlled, it should not prevent a student from participating in physical activity.

Exercise-induced asthma symptoms may occur during or following cessation of physical activity.

Review the [Exercise and Asthma video \(3:54\)](#) to learn about strategies to help students with asthma participate in physical activity to the best of their ability before moving to the next page.



## Knowledge Check

You have a new student coming to your class. The office staff and student's family shared with you that the student has asthma. What can you do to create a supportive and safe school environment for this student?

Select all answers that apply.

- 
- ☐ Depending on the age of the student, meet with them and their parent(s)/guardian(s) to discuss strategies for managing and controlling asthma and to review the Asthma Plan of Action.
  - ☐ Identify and review this student's asthma triggers to develop strategies to manage, reduce, or eliminate exposure.
  - ☐ Bring in a class pet hamster instead of a rabbit.
  - ☐ Ensure easy access to the quick relief inhaler for prevention of exercise-induced asthma symptoms and to relieve (reverse) asthma symptoms.
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## Knowledge Check

Your class is about to participate in a running-based physical activity in the gymnasium. You know that there is a student with asthma, so to ensure the student's safety and participation, you:

Select all answers that apply.

- 
- ☐ Provide a gradual warm-up and cool down.
  - ☐ Ask the student with asthma to be a scorekeeper in the game, as it is safer that they do not participate in the physical activity.
  - ☐ Ensure that the student's asthma reliever medication is easily accessible throughout the physical activity.
  - ☐ Offer the student the use of their reliever inhaler 10–15 minutes prior to physical activity.
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## Managing Asthma Severe to Life-threatening Asthma Emergencies

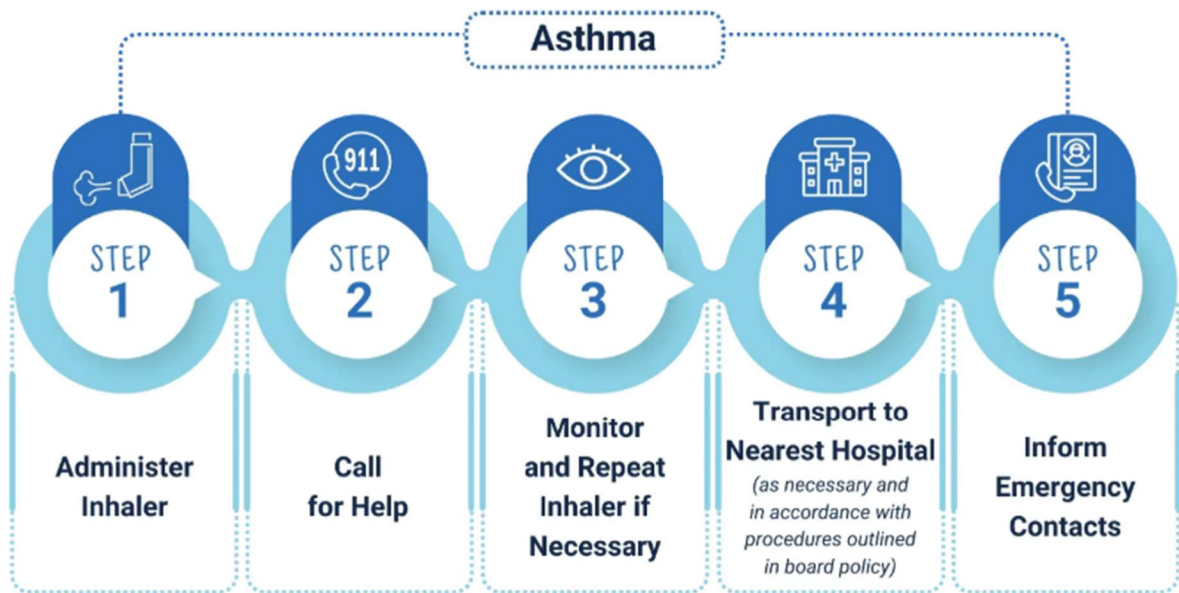
When a student experiences asthma symptoms (difficulty breathing, coughing, wheezing), a reliever inhaler is used to help restore normal breathing within 10–15 minutes and last for about four to six hours. However, there are times when asthma symptoms persist or worsen despite the use of a reliever inhaler and can progress to a severe to life-threatening asthma emergency. A student is having a severe to life-threatening asthma emergency if there is incomplete relief or no improvement of symptoms within 10 minutes of taking their reliever inhaler. This is an emergency situation.

Review the [Signs of Worsening Asthma video \(3:33\)](#) on identifying and responding to worsening asthma, including mild to moderate episodes and severe to life-threatening asthma emergencies before continuing.





## If a Student Has an Asthma Severe to Life-threatening Asthma Emergency



### Step 1: Administer Inhale

### Step 2: Call for Help

### Step 3: Monitor and Repeat Inhaler if Necessary

### Step 4: Transport to Nearest Hospital

### Step 5: Inform Emergency Contacts

- Administer reliever (rescue) medication with spacer (if provided) immediately.
- Position the student comfortably, sitting upright with their arms resting on a table.
- Do not have the student lie down, unless they are also having a severe anaphylactic reaction.



**Step 1: Administer Inhale**

**Step 2: Call for Help**

**Step 3: Monitor and Repeat  
Inhaler if Necessary**

**Step 4: Transport to  
Nearest Hospital**

**Step 5: Inform Emergency  
Contacts**

- Call 911 or Local Emergency Services immediately after administering inhaler.

**Step 1: Administer Inhale**

**Step 2: Call for Help**

**Step 3: Monitor and Repeat  
Inhaler if Necessary**

**Step 4: Transport to  
Nearest Hospital**

**Step 5: Inform Emergency  
Contacts**

- Stay with the student, offering reassurance and monitor their symptoms until help arrives.
- Continue administering reliever (rescue) inhaler every 5–15 minutes, if the student's symptoms are not improving.

Step 1: Administer Inhale

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Step 2: Call for Help

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Step 3: Monitor and Repeat  
Inhaler if Necessary

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Step 4: Transport to  
Nearest Hospital

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Step 5: Inform Emergency  
Contacts

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- If necessary, and in accordance with school board policy, transport the student to the nearest hospital, ideally by ambulance.
- Bring any inhalers to the hospital for reference and potential further use.

Step 1: Administer Inhale

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Step 2: Call for Help

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Step 3: Monitor and Repeat  
Inhaler if Necessary

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Step 4: Transport to  
Nearest Hospital

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Step 5: Inform Emergency  
Contacts

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- Contact the student's parent(s)/guardian(s) to update them on the situation, noting that the reliever (rescue) inhaler was administered and that emergency services have been called.

## Legal Protections

School staff and volunteers are provided legal protections when voluntarily responding to medical emergencies involving students. Laws such as the [Good Samaritan Act](#), Sabrina's Law and Ryan's Law, help create a supportive framework, ensuring that actions taken in good faith to assist students in emergencies are protected. These protections promote confidence in responding to medical incidents and medical emergencies, contributing to a safer and more inclusive environment for students with prevalent medical conditions.

## Asthma Control is Key

When asthma is well-controlled, students will have infrequent symptoms. There will be minimal, if any, disruption to participating in usual daily activities, including physical activity. However, more than 50% of individuals do not have good control of their asthma (FitzGerald et al, 2006; Yang et al, 2021).

The level of asthma control is related to the level of inflammation in the airways. When the airways are inflamed, they are more irritable and twitchier and will react (airways will narrow) to triggers with less exposure. In other words, the poorer the asthma control, the more the airways are inflamed and narrow in response to asthma trigger exposure, causing asthma severe to life-threatening asthma emergencies.

### When Is Asthma Under Good Control?

A student that has good control of their asthma:

- uses a reliever inhaler (which is usually blue) less than 2 doses per week
- experiences daytime symptoms (e.g., coughing, wheezing, chest tightness, difficulty breathing) less than two times a week
- sleeps through the night without waking up due to asthma
- fully participates in physical activity and school activities without difficulty

### When Is Asthma Poorly Controlled?

A student that has poor control of their asthma:

- experiences daytime symptoms two times a week or more
- uses reliever (rescue) inhaler two times a week or more
- has frequent school absences due to asthma
- wakes up during the night due to asthma 1 or more times per week
- is unable to participate in physical activities without experiencing asthma symptoms

If school staff identifies or suspects that a student has poorly controlled asthma, it is important to notify the student's parent(s)/guardian(s) and explain how it impacts the student's school life. If appropriate for the student, also speak with them to find out how often they experience asthma symptoms. Ask how often they use their inhaler and if they wake up at night because of their asthma. When poorly controlled asthma is identified or suspected, the student and/or parent(s)/guardian(s) should follow up with their physician or other health care professionals.

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## References

FitzGerald, J. M., Boulet, L-P., McIvor, R. A., Zimmerman, S., & Chapman, K. R. (2006). Asthma control in Canada remains suboptimal: The Reality of Asthma Control (TRAC) study. *Canadian Respiratory Journal: Journal of the Canadian Thoracic Society*, 13(5), 253-259.

Yang CL, Hicks EA, Mitchell P, Reisman J, Podgers D, Hayward KM, Waite M, Ramsey C. (2021). Canadian Thoracic Society 2021 Guideline update: Diagnosis and management of asthma in preschoolers, children and adults. *Canadian Journal of Respiratory, Critical Care and Sleep Medicine*, 5(6);348-361, doi:10.1080/24745332.2021.1945887

## Knowledge Check

You notice a student in your class starts coughing, wheezing, and holding their chest, suggesting a severe to life-threatening asthma emergency while you are outside working on a project. How should you respond?

Select all answers that apply.

- 
- ☐ Encourage the student to get a drink of water.
  - ☐ Stop the student from continuing in the class activity.
  - ☐ Have the student use their reliever inhaler to relieve asthma symptoms.
  - ☐ Allow the student to resume the class activity if the symptoms completely resolve after using the reliever inhaler.

## Knowledge Check

Select the correct response to the following question.

What are indications that a student's asthma is under good control?

- 
- ☐ Experiences wheezing and/or difficulty breathing or coughing more than three times per week.
  - ☐ Uses the reliever medication (usually a blue inhaler) no more than two times per week.
  - ☐ Does not participate fully in physical activity or misses school activities due to asthma symptoms.



## Pause and Reflect

Reflect on the information shared in this e-Learning module so far and record your thoughts by completing the following prompts:

- One fact about asthma I learned was ...
- One question I still have about asthma is ...
- One step I will take to find out the answer to my question is ...

## What Is Ryan's Law and Policy/Program Memorandum (PPM) 161?

[Ryan's Law](#) is Ontario legislation that came into effect in May 2015. The law requires all school boards in the province to develop and maintain asthma policies and procedures that help protect students with asthma.

The legislation is named after Ryan Gibbons, a child from southwestern Ontario who died in October 2012 after having an asthma emergency at school. With assistance and guidance from the Lung Health Foundation (formerly known as the Ontario Lung Association), Ryan's mother, Sandra, launched a campaign to make schools safe for students with asthma. She enlisted the support of Jeff Yurek, her member of provincial parliament (MPP), who tabled the private member's bill that would eventually become Ryan's Law (The Lung Health Foundation).

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### Reference

The Lung Health Foundation. (n.d.). Ryan's Law [Web Page]. Retrieved from: <https://lunghealth.ca/lung-disease/ryans-law/>

## **How Ryan's Law and PPM 161 Keep Students with Asthma Safe at School**

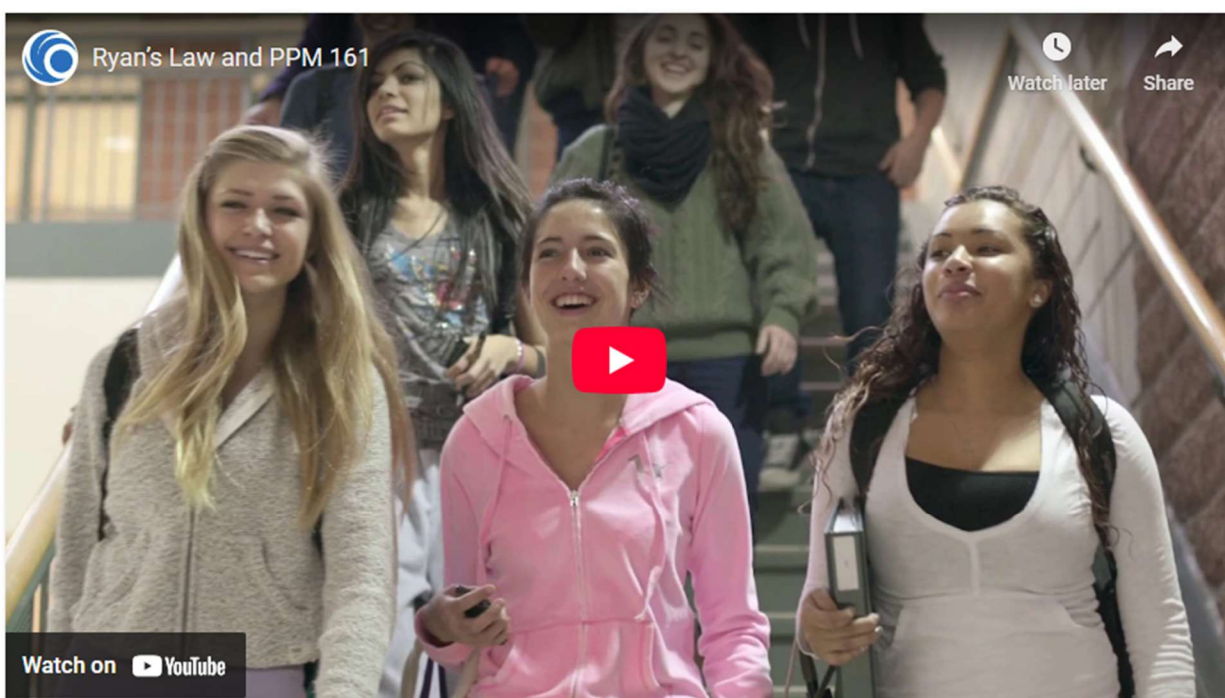
Ryan's Law and PPM 161 require every school board in the province to develop an asthma policy. Schools are also required to have a completed individualized [Plan of Care \(sample\)](#) for every student with asthma and to allow students to carry their inhalers, if developmentally appropriate. A Plan of Care is a form that contains individualized information about a student with a prevalent medical condition, such as asthma. School board policies and procedures must include a Plan of Care form. (Please note: the permission of parent(s)/guardian(s) is required to carry inhalers for those under 16 years of age.)

## Understanding the Requirements of Schools and Your Role

All school staff, including educators, administrators, and support staff, must be familiar with the asthma policy developed by their school board. They must be prepared to implement procedures that help to protect students with asthma.

[Policy/Program Memorandum \(PPM\) 161: Supporting Children and Students with Prevalent Medical Conditions \(Anaphylaxis, Asthma, Diabetes, and/or Epilepsy\) in Schools](#) provides direction on the components to support students with prevalent medical conditions, including asthma, in schools. This includes roles and responsibilities for school staff.

Review the [Ryan's Law and PPM 161 video \(6:54\)](#) for more information on the schools roles and responsibilities



Participants should check their school board policy to find each area and the requirements specific to their role.

## **Ryan's Law and Policy/Program Memorandum (PPM) 161 support the Creation of Asthma Friendly Schools**

Creating asthma friendly schools allows students with asthma to:

- maximize their potential for growth, development, and achievement
- experience positive educational, social, and health benefits
- develop lifelong skills for controlling their asthma

Schools that create asthma friendly school communities can expect the following positive results:

- reduced student absenteeism
- reduced educational disparities related to asthma
- appropriate management of asthma severe to life-threatening asthma emergencies
- full student participation in physical activities, learning, and social engagement

## **Student's Plan of Care**

A student's Plan of Care provides guidance on managing asthma, including knowing what triggers to avoid and how to manage student exposure to them. It also includes how to identify and respond to worsening asthma.

The Plan of Care includes:

- the student's emergency contacts
- the student's asthma triggers
- where the student's asthma medications are kept and when their use may be required
- a signed parent(s)/guardian(s) consent for the student to carry and use their asthma inhaler/medication (if student is under 16 years of age)
- the signature of the school principal to indicate the plan was reviewed

Ideally, parent(s)/guardian(s), the student's health care provider, and the student with asthma (if appropriate) work together to complete the Plan of Care. The signature of the health care provider is optional. Parent(s)/guardian(s) should give the completed Plan of Care to the school principal and inform the school when revisions to the plan are necessary. School principals and appropriate school staff should review the completed Plan of Care with parent(s)/guardian(s) and student (if appropriate). With parental permission, the principal or their designate should provide the Plan of Care to school staff and others who have direct interactions with students with prevalent medical conditions, as appropriate.

For example, have a classroom folder containing the Plan of Care of students with prevalent medical conditions that can be easily reviewed by school board/school staff working in the classroom. It is important to keep in mind that this is personal information so it should not be visible to fellow students or visitors/volunteers.



## Goals for Creating an Asthma Friendly School

In order to support Ryan's Law and PPM 161 and create asthma friendly schools, all members of the school community (e.g., educators, principals, school support staff, students/parents/guardians) need to be involved. The following are seven steps to support the school community in understanding and managing asthma:

- Establish an annual process, ideally during school registration, to identify students with asthma and/or students who use asthma inhalers.
- For students with asthma and/or use a reliever inhaler, ensure that they have a completed Plan of Care.
- Support students by providing quick and easy access to asthma medication throughout the school day and during school-sponsored activities.
- Provide annual training to all school staff regarding how to identify and manage worsening asthma, including mild to moderate episodes and severe to life-threatening asthma emergencies, and how to identify and manage, reduce, or eliminate common asthma triggers within the school environment.
- Facilitate full participation of students with asthma in all activities, including physical activity and play.
- Provide asthma education or educational opportunities about asthma to school staff, parent(s)/guardian(s), students, and volunteers.
- Create an asthma friendly school by collaborating with others in the school community (e.g., health care providers, public health, government and community organizations).

## Knowledge Check

You are outside supervising students during recess. You have reason to believe that a student is experiencing an asthma emergency. You don't have parent(s)/guardian(s) permission to administer asthma medication.

What do you do? Select all answers that apply.

- 
- ☐ Go ahead and administer the reliever inhaler to the student to treat their symptoms and asthma attack.
  - ☐ Call 911.
  - ☐ Since a completed Plan of Care is missing, ask the student to sit down and take deep breaths.



## Knowledge Check

It's the start of the school year, and you are aware of at least one student in your class who has asthma.

Which of the following actions should you ensure are in place at the beginning of the school year? Select all that apply.

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- ☐ Check that all students with asthma have a current, completed Plan of Care on file.
- ☐ Store all asthma inhalers in a locked cabinet in the school office for staff to access when needed.
- ☐ Take annual training on how to recognize asthma symptoms and respond to asthma emergencies.
- ☐ Allow students to carry their reliever inhalers if their Plan of Care includes written permission from parent(s)/guardian(s).
- ☐ Only require physical education teachers to receive asthma training, since they supervise physical activity.

## Knowledge Check

You are planning a field trip for your class. You are aware of a student with asthma who uses an inhaler. When you reviewed the student's Plan of Care, you noticed that some of the student's triggers may be present on the trip and that the parent(s)/guardian(s) permission section to self-carry the inhaler was incomplete and missing the parent(s)/guardian(s) signature.

What do you do? Select all answers that apply.

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- ☐ Inform the school principal who is required to call the student's parent(s)/guardian(s) and explain that the self-carry section of the Plan of Care is incomplete and needs to be signed prior to the field trip.
- ☐ Identify any potential asthma triggers that may be at the location of the field trip, as well as potential strategies, to minimize exposure to the triggers.
- ☐ Have the student not attend the trip as it could be too dangerous.

## Ophea's Asthma Education Resources

The following free asthma resources are available from Ophea's [Creating Asthma Friendly Environments resource](#)

- [Ryan's Law and PPM 161 video](#)
- [Understanding Asthma video](#)
- [Exercise and Asthma video](#)
- [Managing Asthma video](#)
- [Signs of Worsening Symptoms video](#)
- [The Basics of Asthma, Allergies, and Anaphylaxis fact sheet](#)

### Tip Sheets for Management of Asthma at Schools

- [School Boards](#)
- [Administrators](#)
- [Teachers](#)
- [Parent\(s\)/Guardian\(s\)](#)
- [Students](#)

To support the implementation of PPM 161: Supporting Children and Students with Prevalent Medical Conditions (Anaphylaxis, Asthma, Diabetes, and/or Epilepsy) in Schools, Ophea developed multiple resources:

- [Parent/Guardian Fact Sheet: Keeping Students with Anaphylaxis, Asthma, Diabetes, and/or Epilepsy Safe: Information for Parents and Guardians](#)
- [Parent/Guardian Video: Keeping Students with Anaphylaxis, Asthma, Diabetes, and/or Epilepsy Safe](#)
- [Plan of Care \(Sample completed for student with asthma\)](#)

## Additional Resources

### Asthma Canada

[Asthma.ca](http://Asthma.ca) provides education and support services, such as the Asthma & Allergy HelpLine (call 1-866-787-4050 or email [info@asthma.ca](mailto:info@asthma.ca)) and an [Asthma Self-Check](#). You can also review asthma research through their National Research Program.

### The Lung Health Foundation

- [Lung Health Foundation Asthma Toolkit](#)
- Lung Health Line: 1-888-344-LUNG (5864) or email [patientsupport@lunghealth.ca](mailto:patientsupport@lunghealth.ca)
- [Lunghealth.ca](http://Lunghealth.ca) has an asthma resource library available to support your work. You can also review videos on how to properly use various [inhaler devices](#).

### Ontario Ministry of Education

The [Ontario Ministry of Education](#), working with education partners and several health-based organizations, including the Lung Health Foundation, Asthma Canada, Food Allergy Canada, Epilepsy Ontario, the Canadian Paediatric Society, Diabetes Canada, Ophea, and the Ontario Education Services Corporation, has developed tools and resources to support the implementation of Policy/Program Memorandum (PPM) 161.

### Ontario Ministry of the Environment – Air Quality Ontario

[AirqualityOntario.com](http://AirqualityOntario.com) provides air quality alerts, air quality forecasts, and suggestions to reduce pollution for Ontarians. You can learn the current air quality level for your community and determine whether outdoor activities need to be altered to meet the needs of students with asthma.

### Policy/Program Memorandum (PPM) 161: Supporting Children and Students with Prevalent Medical Conditions (Anaphylaxis, Asthma, Diabetes, and/or Epilepsy) in Schools

[PPM 161](#) provides direction on the components to support students with prevalent medical conditions in schools, including roles and responsibilities for school staff.

### Lung Health Foundation – Ryan's Law

[Lung Health Foundation – Ryan's Law](#) outlines [Ryan's Law](#) and what it means for parent(s)/guardian(s), educators, and school boards. It provides Frequently Asked Questions to aid in creating an asthma-friendly school.

### The Weather Network

[TheWeatherNetwork.ca](http://TheWeatherNetwork.ca) provides current observations and forecasts for hundreds of cities in Canada, as well as weather warnings and seasonal reports. School staff can learn the weather in their community and determine if changes to planned activities are needed.

### The "What to do in the event of an Asthma Attack!" Poster

The ["What to do in the event of an Asthma Attack!" poster](#) illustrates the actions to take when a student experiences a severe to life-threatening asthma emergency. It differentiates when to treat onsite and when to call for emergency services. Take time to review the steps in the poster.



# What to do in the event of an Asthma Attack!

## Take Action

If ANY of the following occur:

- continuous coughing
- trouble breathing
- chest tightness
- wheezing (whistling sound in chest)

Person may also be restless, irritable and/or very tired.



CONTINUE WITH THE EMERGENCY STEPS BELOW!

## Emergency

If ANY of the following occur:

- breathing is difficult and fast
- cannot speak in full sentences
- lips or nail beds are blue or gray
- skin on neck or chest sucked in with each breath

Person may also be anxious, restless and/or very tired.



lunghealth.ca

## Pause and Reflect: Next Steps

You have completed the e-Learning module. Take time to reflect by completing the following prompts:

- How familiar are you with your roles and responsibilities related to supporting a student with asthma in your school?
- Identify an area(s) of focus for your continued learning related to creating an asthma friendly school environment and/or supporting students in your school with asthma.
- What resources can you explore to support your learning?

## Wrap-up

Thank you for taking the time to complete Ophea's Implementing Ryan's Law and PPM 161: Ensuring Asthma Friendly Schools 2025/26 e-Learning Module.

### Accessing Your Certificate

To access your certificate, follow these steps:

1. Select "General" in the navigation menu above the module you just completed.
2. Select "Certificate"

You will be able to download a PDF of your certificate on this page. Note that you need to have all learning activities complete and correct to access your certificate.

## Next Steps

Don't forget to sign up for [Ophea's e-Connection](#) and follow Ophea at @OpheaCanada on [X](#), [Facebook](#), and [Instagram](#) for more stories and up-to-date information about all things Health and Physical Education!

If you have any questions, please feel free to connect with Ophea by emailing [professionallearning@ophea.org](mailto:professionallearning@ophea.org).