

Child Health BC Provincial Pediatric Asthma Management Guideline Factsheet

Background

Pediatric asthma is the most common chronic disease affecting children, and it's a leading cause of missed school days and hospital visits. As there is no known cure for asthma, the focus is on helping children and families control their asthma and improve their overall quality of life, as well as supporting healthcare providers with a coordinated approach and resources developed at a provincial level.

The Child Health BC Provincial Asthma Guideline: Initial Management for Urgent/Emergent Care Settings was first released in 2018. Child Health BC (CHBC) has collaborated with our provincial partners across BC to expand the revised 2024 guideline to include ongoing management.

CHBC Provincial Pediatric Asthma Guideline: Initial and Ongoing Management of Pediatric Asthma Exacerbations & Accompanying Resources

The CHBC Provincial Pediatric Asthma Guideline is based on best practice standards and incorporates expertise from pediatric clinicians across British Columbia.

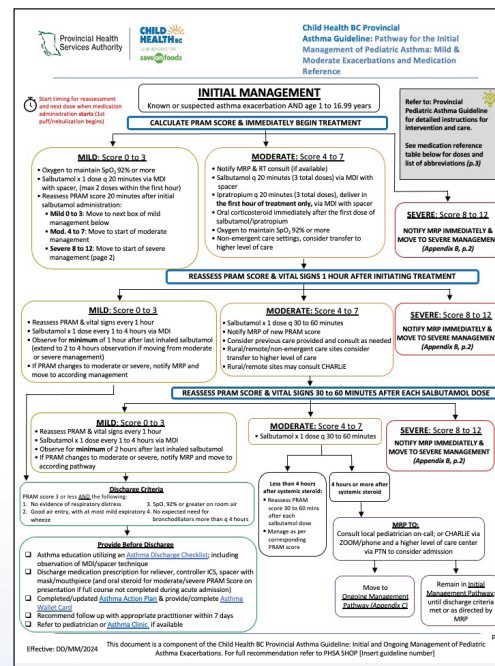
Clinical care recommendations from Translating Emergency Knowledge for Kids (TREKK), the Canadian Thoracic Society and the BC Ministry of Health Guidelines and Protocol Advisory Committee (GPAC) asthma guidelines were used as the foundation for building this guideline.

Additional patient/caregiver/chosen support resources in the guideline are:

- Asthma Action Plans translated into 9 languages
- Asthma Wallet Card
- Patient and Family/Caregiver Handout: Asthma-What you Should Know
- Educational video translated into 5 languages: Childhood Asthma: A Guide for Families and Caregivers
- Asthma resources to assist patient/caregiver/chosen supports with their asthma management such as asthma diaries and dose tracking sheets

Included in the guideline is:

- Pediatric Respiratory Assessment Measure (PRAM) scoring table
- Clinical care algorithms outlining both **initial** and **ongoing** asthma management recommendations
- Oxygen and respiratory support considerations
- Medication administration considerations
- Recommended discharge medications
- Asthma Education Checklist



THIS SIDE IS FOR HEALTHCARE PROFESSIONAL USE ONLY

PRAM ¹ Scoring Table (For Healthcare Professionals)	Oxygen Saturation (For Healthcare Professionals)	Supplemental Breathing (For Healthcare Professionals)	Supplemental Breathing (For Healthcare Professionals)	Air Entry (For Healthcare Professionals)	Wheezing (For Healthcare Professionals)
Oxygen Saturation: Greater than or equal to 95% (100%)	0	0	0	0	0
90-94%	1	1	1	1	1
Less than 90%	2	2	2	2	2
Supplemental Breathing: Absent	0	0	0	0	0
Present	1	1	1	1	1
Scale: Absent	0	0	0	0	0
Muscle: Present	1	1	1	1	1
Condition: Absent	0	0	0	0	0
Present	1	1	1	1	1
Air Entry: Normal	0	0	0	0	0
Decreased or absent	1	1	1	1	1
Decreased or absent	2	2	2	2	2
Decreased or absent	3	3	3	3	3
Decreased or absent	4	4	4	4	4
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Decreased or absent	98	98	98	98	98
Decreased or absent	99	99	99	99	99
Decreased or absent	100	100	100	100	100

On Discharge, Don't Forget My... Asthma Action Plan

My Current Asthma Action Plan

Asthma Action Plan - Zones

Patient Information

Name: _____

Date of birth: _____

Emergency contact: _____

Potential asthma trigger(s): _____

Date of most recent urgent care/emergency department visit for asthma: _____

Previous intensive care unit admission due to asthma: ☐

Previous intubation due to asthma: ☐

Date last prescription filled for: _____

Reliever: _____

Controller: _____

PROVIDER EDUCATION

- Asthma UBC CPD Course
- RIPPL: Resources for Interdisciplinary Practice and Learning - Asthma Collection
- Childhood Asthma: A Guide for Families and Caregivers (Video)

KNOWLEDGE TRANSLATION MATERIAL

- CHBC Provincial Pediatric Asthma Guideline Podcast Style Webinar with BC Children's team members Dr. Claire Seaton, Dr. Simi Khangura & Alyssa Hawley (RRT)
- PRAM Scoring Table & PRAM Lanyard
- Pediatric Asthma SIM Scenarios for Mild/Moderate Exacerbation, Severe Exacerbation and Ongoing Management
- Pediatric Asthma Guideline Huddle Facilitator Guide

Pediatric Respiratory Assessment Measure (PRAM*)				
CRITERIA	DESCRIPTION	SCORE	NOTES	
SpO2	greater than/equal to > 95%	0	Turn off supplemental O ₂ when measuring PRAM. If SpO ₂ < 92% turn O ₂ back on immediately	
	92 - 94%	1		
	< 92%	2		
Suprasternal Retractions	Absent	0	Visual assessment - "Tracheal tug"	
	Present	2		
Scalene Retractions	Absent	0	Assessment by palpation only	
	Present	2		
Air Entry	Normal	0	The most severely affected lung determines rating	
	↓ at base	1		
	↓ at apex and base	2		
	Minimal or absent	3		
Wheezing	Absent	0	At least 2 zones must	
	Expiratory only	1		
	Inspiratory +/- Expiratory	2		
	Audible w/o stethoscope or silent chest	3		
PRAM Score	0 - 3	4 - 7	8 - 12	Regardless of their PRAM score level of consciousness, apneatic respiratory effort and/or unable to have impending respiratory
Severity	Mild	Moderate	Severe	

Medications for Acute Asthma Management



This document is a component of the Child Health BC Provincial Asthma Guideline October 2024. Adapted with permission from Interior Health.

FREQUENTLY ASKED QUESTIONS

For more details on pediatric asthma management, resources and support available including guidelines and education refer to the **CHBC Provincial Pediatric Asthma Guideline Frequently Asked Questions (FAQ) Guide**.

Pediatric Asthma Education Checklist

Please review education topics and resources with patient/caregiver. Check boxes can be initiated when teaching is complete. To utilize a phone interpreter, call Provincial Language Services at 604-297-8400 (1-877-BC TALKS 1228-2557). Provide link/QR code to educational video - [Childhood Asthma: A Guide for Families and Caregivers](#) (available in [Simple Chinese](#), [Traditional Chinese](#), [Punjabi](#) and [Spanish](#))

A Airways: Review the basics of asthma

- ☐ Airway inflammation (swelling), increased mucus, tight airway muscles (can be intermittent/variable in nature)
- ☐ Chronic inflammation can result in difficulty moving air through the lungs and persistent symptoms

S Symptoms: Review symptoms and asthma control

- ☐ Good asthma control (Green Zone of Asthma Action Plan): improved quality of life, no emergency/urgent care visits and rescue medication used no more than 2 times per week, not missing school or activities due to asthma
- ☐ Worsening control (Yellow Zone of Asthma Action Plan): coughing, wheezing, having a hard time breathing, nighttime coughing
- ☐ Signs to watch for: trouble breathing, breathing faster, nasal flaring, indrawing, cannot take a breath, inability to speak in full sentences

T Technique & Triggers: Review triggers. Assess technique and demonstrate optimal technique

- ☐ Review asthma triggers: colds, environmental exposure (e.g. cannabis, cigarettes, allergies).
- ☐ Circle triggers on the patient's Asthma Action Plan
- ☐ Trigger avoidance can reduce the amount of medication needed to control the patient's asthma and can reduce asthma symptoms
- ☐ Assess MDI/spacer technique: patient/caregiver to demonstrate
- ☐ Ensure correct device, correct dosage and dose counting (do they know how many doses are available, and when it is empty?)
- ☐ Recommend annual flu vaccine

H Help: Discuss when and where to go for help

911/emergency:

- ☐ Needing rescue medications more than every four hours (e.g. salbutamol maximum 4 puffs q4h)
- ☐ Having difficulty breathing even after taking rescue medication
- ☐ Review Red Zone of Asthma Action Plan

Local health care practitioner:

- ☐ Needing rescue medication every 4 hours or symptoms not improving after 24 hours

M Medications: Review asthma medications; what they are for and when to use them

- ☐ Reliever/Rescue (often a blue inhaler): quick, temporary relief of airway constriction; should be needed less than twice per week
- ☐ Preventer/Controller: Use every day to control airway swelling and inflammation
- ☐ Review recommendation for length of trial/treatment (do not discontinue preventer until reviewed with primary care provider, asthma specialist or pediatrician)
- ☐ Discharge Plan: Medications, prescription and follow up instructions. Review potential barriers to filling prescriptions (financial or transportation). Refer to pediatrician or Asthma Clinic, if available.
- ☐ Complete Special Authority request for medication if required

A Asthma Action Plan and Asthma Wallet Card

- ☐ Fillable Asthma Action Plans for ages 1-5, 6-11 and 12-17 years are available in multiple languages and can be filled out and provided to families on discharge: [www.bccardiac.ca](#)
- ☐ Ensure review of asthma control, asthma action plan and adherence at least every 6 months
- ☐ Initiate or update CHBC Asthma Wallet Card

Effective: 05/31/2018 Reviewed: 09/30/2021 Revised: 09/17/2024
This document is a component of the CHBC Provincial Pediatric Asthma Guidelines. For full recommendation refer to PHSA SHCP (draft guideline number).

HOW TO ACCESS RESOURCES

The CHBC Provincial Pediatric Asthma Guideline is available to download from the **Child Health BC Asthma Care Across Community Settings** web page.

This resource supports the Child Health BC Provincial Pediatric Asthma Management Guideline (2024)
Questions and/or feedback can be sent to CHBCEducation@phsa.ca