

Child Health BC Provincial Pediatric Early Warning System (BC PEWS) Factsheet

Background

The British Columbia Pediatric Early Warning System (BC PEWS) uses a standardized framework and language to identify potential deterioration in a child; mitigate that risk; and escalate care as needed in the hospital setting. Child Health BC (CHBC), in collaboration with provincial partners, implemented BC PEWS in 2013. As part of routine updates, the revised documents reflect best practices, new evidence, user feedback, and a strong commitment to gender inclusivity, eliminating Indigenous-specific racism, and promoting a strengths-based approach.

The CHBC Provincial BC PEWS Guideline for inpatient and emergency (ED) settings has been revised and is now available on PHSA SHOP. Updated inpatient flowsheets can be ordered through Royal Printers, and the revised instructions for their use are on the CHBC website.

BC PEWS Inpatient Flowsheet

- The inpatient flowsheet has been revised and enhanced; it aligns with the recent revision to the ED flowsheets and with assessment frameworks such as PAT, PALS, ABCDE, and PEARS.
- Scoring cues added: "max score of 3" and "max score of 13" for clarity and accuracy when calculating PEWS scores.
- Modified Intake and Output section for ease of documentation.
- The maintenance fluids line has been corrected to mL/hr.
- The urine output reference changed to 1.0-2.0 mL/kg/hr to reflect best practice.
- Braden QD replaces Braden Q to identify pressure injury risk in pediatric patients. *New appendix added with Braden QD table*
- The Mental Health section has been renamed and enhanced to include an expanded list of risk assessments such as suicide, and substance intoxication/withdrawal, and safety planning.

BC PEWS Guideline

- This document combines the BC PEWS Clinical Decision Support Tool, BC PEWS Vital Sign, Assessment & Documentation Guidelines, and the BC PEWS FAQ.
- The current BC PEWS scoring/escalation process does not change.
- Detailed assessment procedures have been removed to encourage use of the most up to date resources (e.g., Health Authority-approved clinical skills resources such as Elsevier).

Brighton Pediatric Early Warning Score				
	0	1	2	3
Behaviour	Playing Appropriate	Sleeping	Irritable	Lethargic &/OR Confused &/OR Reduced response to pain
Respiratory	Within normal parameters No recession or tracheal tug	10 above normal parameters. Using accessory muscles, &/OR 30+ % FiO2 or 4+ liters/min	>20 above normal parameters recession/retractions, tracheal tug &/OR 40+ % FiO2 or 6+liters/min	5 below normal parameters with sternal recession/retractions, tracheal tug or grunting &/OR 50% FiO2 or 8+liters/min
Cardiovascular	Pink &/OR capillary refill 1-2 seconds	Pale &/OR capillary refill 3 seconds	Grey &/OR capillary refill 1.4 seconds Tachycardia of 20 above normal rate.	Grey and mottled or capillary refill 5 seconds or above OR Tachycardia of 30 above normal rate or bradycardia
Q 20 minutes bronchodilators &/OR persistent vomiting following surgery (2 points each)				
TOTAL PEWS SCORE				

Instructions for using the BC PEWS Inpatient Flowsheet

- Provides detailed information on how to document the daily assessment on the flowsheet, including practical examples and links to additional resources.
- Although this is not a completely new document, the previous version did not include the assessment guidance for pages 4-5, which has now been added.
- Definitions have been expanded to provide greater clarity.

Formal Learning

- [Pediatric Foundations Online Module](#)
- [Children and Youth At Risk Of Clinical Deterioration \(PEWS\)](#)
- [BC PEWS ED for Nurses](#)
- [BC PEWS For Physicians Working In Inpatient And Emergency/Urgent Care Settings](#)
- [BC PEWS Refresher Course](#)

Situational Awareness

There are five factors that would prompt the identification of a pediatric patient as being at increased risk:

- Patient / Family / Caregiver Concern**
A concern voiced about a change in the patient's status or condition. For example:
 - A concern that has the potential to impact immediate patient safety
 - Family states the patient is worsening or not behaving as they normally would
- "Watcher" Patient**
A patient that you identify as requiring increased observations. For example:
 - Unexpected responses to treatments
 - "Certified" patient
 - Child different from "normal"
 - Over/under hydration
 - Aggressive patient
 - "Gut" feeling
- Communication Breakdown**
Describes clinical situations when there is lack of clarity about:
 - Treatment
 - Plans/Responsibilities
 - Conversation outcomes
 - Language barriers
- Unusual Therapy**
Includes staff unfamiliar with ward or department, therapy or process. For example:
 - Fluid source or break coverage
 - High-risk infusion
 - How medication or protocol for patient or nurse
- Pediatric Early Warning System Score 2 or Higher**
Relevant patient assessment findings are summarized into a score that can be used to identify patient physical deterioration early, as to optimize chances for intervention. These include:
 - Cardiovascular, respiratory and behavioural data
 - Persistent vomiting following surgery
 - Use of bronchodilators
A score of 2 or higher should trigger increased awareness.

Each of the factors is equally important as an indicator of risk and this "system" encourages having assessment of both subjective and objective risk. (Child Health BC Provincial Pediatric Early Warning System) (PEWS) is a tool used to identify patient physical deterioration early, as to optimize chances for intervention. These include: Cardiovascular, respiratory and behavioural data; Persistent vomiting following surgery; Use of bronchodilators. A score of 2 or higher should trigger increased awareness.

Provider Tools

- [BC PEWS Lanyard Card](#)
- [BC PEWS Pediatric Vital Signs Lanyard Card](#)
- [BC PEWS Pediatric Vital Signs 8x11 Poster](#)
- [BC PEWS Escalation Aid for Inpatient and Emergency Settings](#)
- [BC PEWS Situational Awareness Poster](#)
- [RIPPL: Resources for Interdisciplinary Pediatric Practice and Learning](#)

Braden QD

				Score
Intensity and duration of pressure				
Mobility The ability to independently change and control body position.	0. No limitation: Makes major and frequent changes in body or extremity position independently.	1. Limited: Makes slight and infrequent changes in body or extremity position independently OR unable to reposition self independently (includes infers too young to roll over).	2. Completely immobile: Does not make even slight changes in body or extremity position.	
Sensory Perception The ability to respond diminished meaningfully, in developmentally appropriate way to pressure-related discomfort.	0. No impairment: Responsive and has no sensory deficits that limit ability to feel or communicate discomfort.	1. Limited: Cannot always communicate pressure-related discomfort OR has some sensory deficits that limit ability to feel pressure-related discomfort.	2. Completely limited: Unresponsive due to diminished level of consciousness or sedation OR sensory deficits that limit ability to feel pressure-related discomfort over most of body surface.	
Tolerance of the skin and supporting structure				
Friction and Shear Friction occurs when skin moves against support surfaces. Shear occurs when skin and adjacent bony surface slide across one another.	0. No problems: Has sufficient strength to completely lift self up during a move. Maintains good body position in bed/chair at all times. Able to completely lift patient during a position change.	1. Potential problem: Requires some assistance in moving. Occasionally slides down in bed/chair, requiring repositioning. During repositioning, skin often slides against surface.	2. Problem: Requires full assistance in moving. Frequently slides down and requires repositioning. Complete lifting without skin sliding against surface is impossible OR squinting, contractures, itching, or agitation leads to almost constant friction.	
Nutrition Usual diet for age—assess pattern over the most recent 3 consecutive days.	0. Adequate: Diet for age providing adequate calories and protein to support metabolism and growth.	1. Limited: Diet for age providing inadequate calories OR inadequate protein to support metabolism and growth OR receiving supplemental nutrition any part of the day.	2. Poor: Diet for age providing inadequate calories and protein to support metabolism and growth.	
Tissue Perfusion and Oxygenation	0. Adequate: Normotensive for age, with oxygen saturation >95%, and normal hemoglobin, and capillary refill <2 seconds.	1. Potential problem: Nonnormotensive for age, with oxygen saturation >95%, OR hemoglobin <10 g/L OR capillary refill >2 seconds.	2. Compromised: Hypotensive for age OR hemodynamically unstable with position changes.	
Medical Devices				
Number of medical devices		Score 1 point for each medical device* up to 8 score 8 points maximum		
				0-1 2 3 considered at risk

BC PEWS Escalation Aid for Inpatient and Emergency Department Settings

		0 - 1	2	3 * For a score of "3" in any one category consider higher escalation	4 &/or score increases by 2 after interventions	5 - 13 or score of "3" in one category
PEDIATRIC EARLY WARNING SYSTEM SCORE	Notify		• Consider reviewing patient with a more experienced healthcare provider	• As per PEWS Score 2	• As per PEWS Score 2 AND notify most responsible physician (MRP) or physician delegate • Based on rate of deterioration, consider pediatrician consult	• MRP to assess patient immediately (if pediatrician if available) • If MRP unable to attend, call for STAT physician review • Appropriate senior review
	Plan				• MRP or delegate communicate a plan of care to mitigate contributing factors of deterioration • Communicate plan of care to the patient and/or family	• As per PEWS Score 4
	Assessment		• Continue assessment, monitoring and documentation as per orders & routine protocols	• As per PEWS Score 1	• Increase frequency of assessments & documentation as per plan from consultation with more experienced healthcare provider	• As per PEWS Score 4
	Resources			• Escalate if further consultation required or if resources do not allow for safe monitoring and care	• Reassess adequacy of resources and make changes as needed: • RN to patient ratio • Location ensure appropriate level of skill, equipment, medication and resources available • Consider internal or external consult or transfer to higher level of care	• As per PEWS Score 4
SITUATIONAL AWARENESS		If patient is assessed with one or more of the following situational awareness factors:				
		<input type="checkbox"/> Parent concern <input type="checkbox"/> Watcher patient <input type="checkbox"/> Unusual therapy <input type="checkbox"/> Breakdown in communication				
		Follow PEWS Score 2 actions				

How to Access Resources

Provincial BC Pediatric Early Warning

System resources are available to download from the [Child Health BC Pediatric Early Warning System](#) web page.

This resource supports the Child Health BC Provincial Pediatric Early Warning System Guideline (2025)

Questions and/or feedback can be sent to CHBCEducation@phsa.ca