

Site Applicability

The British Columbia Pediatric Early Warning System (BC PEWS) assessment and documentation guidelines are applicable to all areas where BC PEWS has been implemented. This practice applies to all nurses providing urgent/emergent care to pediatric patients in areas designated by the health authority.

Practice Level/Competencies

Conducting physical assessments, vital sign measurements and PEWS scoring are foundational level competencies of registered nurses (RN), registered psychiatric nurses (RPN); and licensed practical nurses (LPN) with a combination of further pediatric education and experience. In areas where various levels of care providers (LPN, Care Aide, Student Nurses, Employed Student Nurses) are assigned to patients, care of a deteriorating patient will be assumed by the RN. [1-3]

Children should have equitable access to healthcare; however, they are often an underserved population. Interactions with and assessments of children and their families should always be approached from a strengths-based perspective, with a trauma informed lens and with a cultural safety and humility perspective. Always offer choice to the child and family wherever possible to balance power and establish safety and trust. Nurses should ensure they have completed the cultural humility and safety education required and/or recommended by their health authority; understand implicit bias and intersectionality; and have self-reflected on their personal values, assumptions and belief structures. [4, 5]

Guideline Purpose

The purpose of this document is to provide clear, standardized instructions for use of the Pediatric Emergency Nursing Assessment Record (P-ENAR) and the Pediatric Emergency Nursing Assessment – Treatment Record (Treatment Record). For information on documentation and assessment standards, please refer to the British Columbia College of Nurses and Midwives (BCCN&M) standards of practice and/or guidelines in your health authority/agency.

The P-ENAR is to be used for higher acuity patients (i.e., CTAS level 1-3 patients). For lower acuity patients, or those requiring a more focused assessment (i.e., CTAS level 4-5 patients), use the Treatment Record as per your health authority/agency guidance. The P-ENAR and Treatment Record were created to be used in collaboration with BC PEWS, to support the early recognition, mitigation, notification, and response to the pediatric patient identified to be at risk of deterioration. The calculation of a PEWS score at triage on all pediatric patients establishes a baseline and can support the assignment of a CTAS score. The age-appropriate BC PEWS ED Vital Sign Record is to accompany the P-ENAR and/or Treatment Record for documentation and trending of vital signs and PEWS scoring. The Provincial Trauma Nursing Assessment Record (TNAR) is to be used for CTAS level 1-3 major trauma patients. The age-appropriate BC PEWS ED Vital Sign Record is to accompany the TNAR for documentation and trending of vital signs and PEWS scoring.

Note: A CTAS 1 patient requiring EMERGENT or RESUSITATION level of care will not have a PEWS score completed at triage. If the child responds positively to treatment, applying PEWS can be considered at any point. In the event that cardiopulmonary resuscitation is needed, documentation is to occur on Health Authority Resuscitation record.

Definitions

British Columbia Pediatric Early Warning System (BC PEWS) Score: Relevant patient assessment findings for cardiovascular, respiratory, behavioural parameters as well as persistent vomiting following surgery and use of bronchodilators every 20 minutes are collected, documented, and summated into a validated tool to produce a score. The score can be used to identify patient physical deterioration at a single point in time or through trend monitoring, to optimize chances for early intervention. [6]

Cultural Humility: acknowledging oneself as a learner when it comes to understanding another's experience and optimal care. Recognizing the power imbalances inherent in health care for Indigenous Peoples and the primacy of western medical knowledge, PHSA staff and health care providers practice cultural humility by respecting and supporting Indigenous wise practices. [7]

Cultural Safety: an outcome based on respectful engagement that recognizes and strives to address power imbalances inherent in the health care system. It results in an environment free of racism and discrimination, where people feel safe when receiving health care. [7]

Intersectionality: this definition has been inspired by Kimberlé Crenshaw's work "Inequities are never the result of single, distinct factors. Rather, they are the outcome of intersections of different social locations, power relations and experiences". [8]

Implicit bias: refers to the unconscious assumptions, beliefs, attitudes, and stereotypes that human brains have about different groups. These learned mental short-cuts affect how we perceive and respond to people. [9]

Pediatric Patient: in emergency departments (EDs) and health authority-funded health centres: children up to their 17th birthday (16 years + 364 days). [6]

Trauma-Informed Practice: the principles of safety, choice, collaboration, trustworthiness, and empowerment are embedded in the way we work and that create a healthy environment for patients and all staff. A trauma-informed organization realizes and recognizes the impact of trauma and responds in ways that mitigate re-traumatization and create safe environments to work, learn, and receive care. [7]

Abbreviations

Use only abbreviations that are included in the legend on the document and do not use any abbreviations or symbols that are on the "DO NOT USE" list (e.g., @, <,>) from Institute of Safe Medication Practice (ISMP)-Canada.

Abbreviations used in this document:

ABBREVIATIONS							
ABG	Arterial Blood Gas	FiO ₂	Fraction of Inspired Oxygen	mm	Millimetre	PEWS	Pediatric Early Warning System
ADR	Adverse Drug Reaction	h	Hour	mmol/L	Millimole per litre	POCT	Point Of Care Testing
BP	Blood Pressure	HR	Heart Rate	MRP	Most Responsible Practitioner	PRAM	Pediatric Respiratory Assessment Measure
BVM	Bag Valve Mask	IDC	Independent Double Check	#	Number	PTN	Patient Transfer Network
CEDIS	Canadian Emergency Department Information System	kg	Kilogram	N/A	Not Applicable	R	Right
cm	Centimeter	L	Left	NG	Nasogastric	Resp	Respiration
CPR	Cardiopulmonary Resuscitation	LBM	Last Bowel Movement	NKDA	No Known Drug Allergies	RN	Registered Nurse
C-Spine	Cervical Spine	LMP	Last Menstrual Period	NPO	Nothing Per Mouth	RT	Respiratory Therapist
CTAS	Canadian Triage and Acuity Scale	LPM	Litre per minute	O ₂ Sat	Oxygen Saturation	S1S2	First heart sound, Second heart sound
ECG	Electrocardiogram	MCFD	Ministry of Children and Family Development	OG	Orogastric	SpO ₂	Saturation of Peripheral Oxygen
ED	Emergency Department	mL	Milliliter	PERRLA	Pupils Equal, Round and React to Light and Accomodation	Temp	Temperature

TRIAGE

NOTE: *The triage documentation is identical on both the P-ENAR and Treatment Record.*

1. **PATIENT LABEL:** Addressograph or place label in top right corner of each page.
2. **NAME/PRONOUN USED: RECORD** name used and pronoun (e.g., she/her, he/him, them/they). Many gender diverse patients use names and pronouns that are different from the legal name and gender marker on their ID or BC Services Card. It can be distressing when referred to by a name or pronoun that is no longer used. [10]
3. **ELECTRONIC TRIAGE: INDICATE** using ✓ symbol in the box provided if using electronic triage and follow the electronic triage guidelines in your health authority/agency.
4. **CTAS LEVEL: RECORD** the assigned CTAS level in the box provided. CTAS level is determined based on the critical first look, the subjective and objective assessment, and the application of relevant modifiers. [11]
5. **LOCATION IN DEPARTMENT: RECORD** stretcher or care location in the department in the space provided, if not indicated on the addressograph or patient label.
6. **ARRIVAL STATUS TO ED:**
 - a) **Date: RECORD** date ensuring month, day and year are included (e.g., SEP. 12, 2023) spelling out the month using first 3 letters.
 - b) **Time: RECORD** the actual time of the triage assessment. Use 24-hour clock format (e.g., 0030 h).
 - c) **Accompanied by: INDICATE** using ✓ symbol in the box provided who accompanied the child to hospital. If other **RECORD** in space provided.
 - d) **Presented to hospital by: RECORD** in the box provided how the child presented to hospital. Patient placement and safety needs to be considered if the child is brought in under Section 28 or Form 21.
 - e) **Transferred from: INDICATE** using ✓ symbol in the box provided where the child was transferred from if applicable. If transferred by other (e.g., UPCC, detox, residential program) **RECORD** in space provided.
7. **WEIGHT/HEIGHT: RECORD** weight in kilograms/grams and height in centimeters in the space provided. Estimated weight/height using a Broselow™ tape may be used in emergent situations or times when

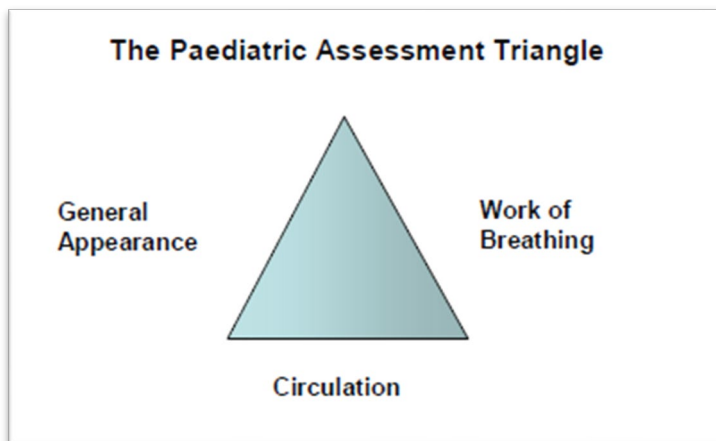
weighing/measuring is not feasible (e.g., child on a spine board). Follow estimated weight guidelines as per your health authority/agency. [12]

8. AGE: RECORD age in days, months, or years in the space provided.

9. PATIENT'S PRESENTING/CEDIS COMPLAINT: RECORD the reason/complaint for which the child has sought emergency care in the space provided. When there are multiple complaints, or conflicting complaints noted, the complaint that will result in the highest appropriate CTAS score is the one to be used. [11]

10. PEDIATRIC ASSESSMENT TRIANGLE: Complete the critical first look using the pediatric assessment triangle (general appearance, work of breathing and circulation). **INDICATE** using ✓ symbol in the box provided if there are any concerns identified. Document any concerns identified on the comment line.

At any stage of triage if critical illness is suspected, the triage process must be aborted, and the child escorted to a care area for immediate care. [11]



- a) **General appearance:** How is the child responding to you and the environment? This can quickly be assessed using the TICLS mnemonic: **T**one, **I**nteractiveness, **C**onsolability, **L**ook/gaze/stare, and **S**peech/cry. [13]
- b) **Work of breathing:** Look for visual signs of increased work of breathing (e.g., retractions, nasal flaring), and preferred position or posture (e.g., sniffing position, tripod position). Listen for adventitious sounds such as stridor, grunting, snoring, apnea or gasping. [11, 13]
- c) **Circulation:** Look at the skin and mucus membranes for abnormal colour (pallor, mottling, and cyanosis) and any uncontrolled external hemorrhage.
- d) **Disability: INDICATE** using ✓ symbol in the box provided the child's level of consciousness using the AVPU Pediatric Response Scale: [13]
 - i) **Alert:** the child is awake, active, and appropriately responsive to caregivers and external stimuli based on the child's age and/or developmental level
 - ii) **Verbal:** the child responds only to voice

- iii) **Pain/Pressure:** the child responds only to a painful/pressure stimulus, such as a sternal rub or pinching the trapezius
- iv) **Unresponsive:** the child does not respond to any stimulus

11. INFECTION CONTROL SCREEN: INDICATE using ✓ symbol in the box provided if the child has any symptoms suggestive of an infectious process and follow infection control point of care risk assessment guidelines [14] as per your health authority/agency. **RECORD** any precautions initiated at triage (e.g., contact, droplet, airborne precautions).

Point of Care Risk Assessment



Risk	Protection
<ul style="list-style-type: none"> • Contact with patient or environment expected 	<ul style="list-style-type: none"> • Hand hygiene
<ul style="list-style-type: none"> • Splash or spray of blood or body fluids/secretions anticipated 	<ul style="list-style-type: none"> • Mask and eye protection • Put on gown if soiling of clothing is likely
<ul style="list-style-type: none"> • Contact with mucous membranes • Non-intact skin, blood, body fluids, secretions, excretions or soiled or likely soiled item/surface anticipated 	<ul style="list-style-type: none"> • Perform hand hygiene, then don gloves • Perform hand hygiene after PPE removal and before leaving patient environment

	Contact	Contact Plus	Droplet	Droplet + Contact	Airborne	Airborne+ Contact
Organism-based precautions (examples only; not complete list)	CPO, MRSA, VRE, lice, scabies	<i>C. difficile</i>	<i>N. meningitidis</i> , mumps, pertussis	Influenza, invasive group A <i>Streptococcus</i>	Tuberculosis (TB), measles	Varicella (chickenpox, disseminated herpes zoster)
Syndromic precautions	Draining wound, diarrhea, infestation	Diarrhea and/or vomiting	Stiff neck + fever + headache	Malaise + acute cough + fever, toxic shock	Fever + weight loss + cough + high risk for TB	Disseminated rash + fever
Private room	Preferred. For suspect & confirmed CPO: yes	Preferred	Preferred. If in multi-bed room, draw curtain.	Preferred. If in multi-bed room, draw curtain.	Yes	Yes
Negative pressure room	No	No	No	No	Yes	Yes
Staff PPE	Gown + gloves	Gown + gloves	Procedure mask and eye protection	Procedure mask + eye protection + gown + gloves	N95 respirator	N95 respirator + gown + gloves
Visitor PPE	Gown + gloves if direct care	Gown + gloves	Procedure mask and eye protection	Procedure mask + eye protection (+gown +gloves if direct care)	Offer N95 respirator to visitor	N95 respirator (+gown +gloves if direct care)
Parents of pediatric patients	Clean hands before entering and on leaving room. Do not go into common areas such as patient kitchens, playrooms, school rooms, patient lounges.					
Patient wears a procedure mask during transport	No	No	Yes	Yes	Yes	Yes

JUN.2016 | Adapted from VCH/PHC

12. VIOLENCE SCREEN: INDICATE using ✓ symbol in the box provided if the child has a history of violence or is showing any signs of physical or verbal aggression. **RECORD** any safety measures (e.g., violence alert) implemented at triage and follow violence screening/alert guidelines as per your health authority/agency. **INDICATE** using ✓ symbol in the box provided if violence screen is not applicable (e.g., infant, small child).

13. HISTORY PERTINENT TO PRESENTING/CEDIS COMPLAINT: RECORD the subjective assessment findings, their account of why they are seeking emergency care (using the child's/caregiver's own words in quotes whenever possible). **RECORD** the symptoms they are experiencing, the events surrounding illness/injury, and the caregiver's impression. [11]

14. GLUCOSE POINT OF CARE TESTING (POCT): RECORD result in mmol/L in the space provided if pertinent to the child's presenting complaint (e.g., decreased LOC, seizure, nausea/vomiting, signs of dehydration etc.).

15. PAIN: RECORD the child's pain score using a developmentally validated tool as per your health authority/agency (e.g., Numeric, FACES, FLACC). Select the appropriate tool according to age, type of pain, medical condition, cognitive understanding, and development.

16. VITAL SIGNS and PEWS SCORE: RECORD vital signs (Resp, O₂ Sat, supplemental O₂, HR, BP, Temp) and PEWS score in spaces provided for quick reference, and to obtain a full picture of the child's presentation. Vital Signs, PEWS Score and Situational Awareness Factors are to be documented and graphed on the age-appropriate BC PEWS ED Pediatric Vital Signs Record as per the British Columbia Pediatric Early Warning System (BC PEWS) Instructions for Using the Emergency Department Vital Sign Record. A PEWS score is to be calculated with each set of vital signs.

17. SEPSIS SCREENING: Each pediatric patient should be screened for sepsis at triage and/or primary assessment and considered with each set of vital signs. **RECORD** using ✓ symbol in the box provided to indicate if a sepsis screen was negative or positive using the BC PEWS sepsis indicators and the sepsis screening tool identified by your health authority/agency (if applicable). If the sepsis screen is positive, **RECORD** escalation (e.g., physician notified) as per your health authority/agency guidelines in the space provided.

NOTE: *Sepsis is a life-threatening condition. As per BC PEWS and [Provincial Sepsis Guidelines](#), all children should be screened if:*

- a) *The patient's heart rate is in the critical PEWS score of 3 or*
- b) *The PEWS score increases by 2*
- c) *The patient's temperature is above 38 °C or less than 36 °C*

18. PAST MEDICAL HISTORY: RECORD any past medical history pertinent to the presenting/CEDIS complaint in the space provided. For infants less than 6 months, **RECORD** birth history including birth weight and number of weeks gestation at time of birth in the space provided. **INDICATE** using ✓ symbol in the box provided if child is previously healthy.

19. ALLERGIES: INDICATE using ✓ symbol in the box provided if child has any history of food, drug allergies or an Adverse Drug Reaction (ADR). **RECORD** all allergies and the response (e.g., anaphylactic, rash) in the space provided or follow allergy/ADR documentation as per your health authority/agency. **INDICATE** using ✓ symbol in the box provided if an allergy band is applied.

20. MEDICATION: INDICATE using ✓ symbol in the box provided if the child is taking any medication. **INDICATE** using ✓ symbol in the box provided if a PharmaNet is needed/requested/obtained as per your health authority/agency guidelines. **RECORD** medications not included on PharmaNet in the space provided, including over the counter medications, samples, vitamins, herbal, and any other medications that the child may have accessed. **RECORD** any medications recently taken, including medication amount (e.g., in mg or puffs) and time of last dose.

21. IMMUNIZATIONS: INDICATE using ✓ symbol in the box provided the status of the child's immunizations. Document any concerns identified on the comment line.

22. LAST MEAL: INDICATE using ✓ symbol in the box provided the last time the child consumed liquids or solids. **RECORD** time in space provided. **INDICATE** using ✓ symbol in the box provided if child has been instructed to keep NPO.

23. INTERVENTIONS: INDICATE using ✓ symbol in the box provided if any interventions have been initiated at triage. For nurse initiated activities follow your health authority/agency guidelines. **RECORD** pre-hospital treatments in the space labeled other.

24. FALLS: INDICATE using ✓ symbol in the box provided if universal fall precautions has been considered for the child and precautions have been initiated as per health authority/agency guideline.

25. TRIAGE RN SIGNATURE: RECORD full signature in space provided.

26. WAITING AREA REASSESSMENT: RECORD re-assessments as per CTAS standards and your health authority/agency guidelines.

NOTE: *CTAS nursing reassessment standards prior to being assessed by a physician [11]:*

- *CTAS Level I Continuous nursing care*
- *CTAS Level II Every 15 minutes*
- *CTAS Level III Every 30 minutes*
- *CTAS Level IV Every 60 minutes*
- *CTAS Level V Every 120 minutes*

ASSESSMENT

The content below outlines the more detailed instructions for a nursing assessment following the P-ENAR documentation for higher acuity patients. Lower acuity patients are assessed using the Treatment Record.

Changes in the patient's condition, vital signs, PEWS scores and/or situational awareness will be communicated, escalated, and documented as per BC PEWS escalation aid, clinical judgement, and health authority/agency standards.

PRIMARY ASSESSMENT

NOTE: When using the Treatment Record, findings in Airway, Breathing, Circulation or Disability outside of the patient's normal parameters, would indicate a higher level of acuity and should prompt the nurse to switch to the P-ENAR documentation.

1. AIRWAY

Airway Assessment: **INDICATE** using ✓ symbol in the box provided the patency of the airway.

- a) **Clear & maintains own:** indicates the airway is open and unobstructed for normal breathing and requires no intervention to maintain. [13]
- b) **Unable to maintain :** indicates the airway is obstructed and cannot be maintained without simple (e.g., head tilt-chin lift) and/or advanced interventions (e.g., intubation).

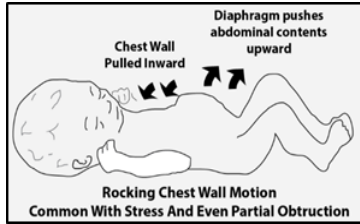
Airway Intervention: **INDICATE** using ✓ symbol in the box provided any airway interventions that are required, including the size when an oral, nasal, or advanced airway is utilized. **RECORD** in the comments section to clarify any airway findings or interventions (e.g., bleeding, secretions, drooling, oral swelling, missing teeth, burns). Use the ✓ symbol in the **None** box provided if interventions were not required.

2. BREATHING

Breathing Assessment:

- a) **Work of Breathing:** **INDICATE** using ✓ symbol in the box provided the child's work of breathing.
 - i) **Respirations even/unlaboured:** breathing accomplished with minimal work, resulting in quiet breathing with unlaboured inspiration and passive expiration. [13]
 - ii) **Nasal flaring:** dilation of the nostrils with each inhalation. The nostrils open more widely to maximize airflow. Nasal flaring is most commonly observed in infants and younger children and is usually a sign of respiratory distress. [13]
 - iii) **Tracheal tug:** an abnormal downward movement of the trachea accompanied by in-drawing toward the thoracic cavity during inspiration. [15]
 - iv) **Head bobbing:** is caused by the use of neck muscles to assist breathing. The child lifts the chin, extends the neck during inspiration, and allows the chin to fall forward during expiration. [13]
 - v) **Tripod:** child sits straight up with arms extended wide in front on knees or other surface. This is an attempt to utilize chest and neck muscles to assist with breathing. [12]
 - vi) **Indrawing:** inward movement of the chest wall/tissues/sternum during inspiration. [13] Identify location of indrawing in space provided.

- vii) **Abdominal breathing:** the chest wall draws inward, and the diaphragm pushes the abdomen upward (in a see-saw motion). [16]



- viii) **Chest symmetrical/Non symmetrical:** INDICATE using ✓ symbol in the box provided if chest movement is symmetrical or non-symmetrical. Look for equal (left & right) rise and fall of the chest with inspiration and expiration.
- b) **Air Entry:** INDICATE the auscultated breath sound findings using the key and lung field diagram provided.
- c) **Adventitious Sounds:** INDICATE airway sounds using ✓ symbol in the box provided if any audible sounds are heard/identified.
- i) **Snoring:** may be common during sleep in children. It also can be a sign of airway obstruction, soft tissue swelling, or decreased level of consciousness may cause airway obstruction and snoring. [12,13]
 - ii) **Stridor:** is a coarse, usually higher pitched breathing sound, typically heard on inspiration. It may also be heard during both inspiration and expiration. [13]
 - iii) **Wheezing:** is a high-pitched or low-pitched whistling sound heard most often during expiration. May be audible with or without a stethoscope. [13]
 - iv) **Gurgling:** a bubbling sound heard during inspiration or expiration. It results from upper airway obstruction due to airway secretions, vomit, or blood. [12, 13]
 - v) **Grunting:** is a short, low-pitched sound heard during expiration. [13]
 - vi) **Crackles:** are sharp crackling inspiratory sounds. Crackles can be dry (more often heard with atelectasis or interstitial lung disease); or moist (an indication of accumulation of alveolar fluid). [13]
- d) **Cough:** If a cough is present, INDICATE using ✓ symbol in the box provided if cough is productive or non productive. RECORD description of the cough in the comments section (e.g., weak or barky sounding cough).

Breathing Interventions: INDICATE using ✓ symbol in the box provided if any breathing interventions are required. Use the ✓ symbol in the **None** box provided if interventions were not required.

3. CIRCULATION

Circulation Assessment:

- a) **Pulses:** INDICATE using ✓ symbol in the box provided the strength of both the central and peripheral pulses.
 - i) **Central pulses:** (e.g., femoral, brachial (in infants), carotid (in older children)). [13]
 - ii) **Peripheral pulses:** (e.g., radial, dorsalis pedis, posterior tibial). [13]
- b) **Capillary Refill time:** RECORD central and peripheral capillary refill time in seconds by pressing lightly on a peripheral site such as a nail bed, dorsum of the hand or foot or a central site such as the forehead or sternum. INDICATE using ✓ symbol in the box provided if a central or peripheral site was used.

NOTE: Refer to BC PEWS Age-Appropriate Vital Sign Record for interpretation of capillary refill times. Flash capillary refill (less than 1 second) is a sign of warm septic shock [12]

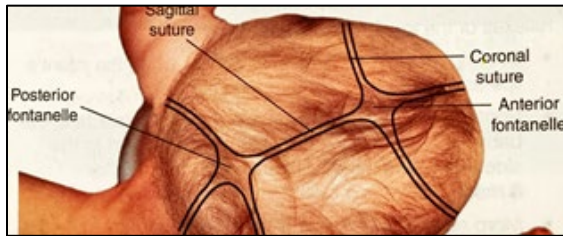
- Where fingers are used, *ELEVATE* the hand to the level of the heart
 - *APPLY* pressure sufficient to blanch site
 - *MAINTAIN* pressure for five seconds, then *RELEASE* quickly
 - *COUNT* in seconds how long it takes for skin to return to its normal colour.
- c) **Skin temperature: INDICATE** skin temperature using ✓ symbol in the appropriate box. Skin temperature should be consistent over the trunk and extremities.
- d) **Skin Colour: INDICATE** skin colour using ✓ symbol in the appropriate box.
- i) **Normal** - typical skin colour for the child (confirm with parent/caregiver)
 - ii) **Pale** - lack of typical colour in the skin or mucous membranes
 - iii) **Flushed** - redness of the skin
 - iv) **Cyanotic** - bluish discolouration/tone throughout skin
 - v) **Mottled** - irregular or patchy discolouration of the skin
 - vi) **Jaundice** - yellow discoloration of the skin. Commonly seen in the sclera of the eyes, fingernails, soles, palms, and oral mucosa

Skin Colour Terminology

Skin Colour Description	Appearance in Dark Skin	Appearance in Light Skin
<p>Normal</p> <ul style="list-style-type: none"> Determine the typical skin colour for the patient Family/Caregivers can assist you with determining the patient's norm Skin should be warm and well perfused 	<ul style="list-style-type: none"> May appear various hues of black, brown, yellow, olive green and bluish tones 	<ul style="list-style-type: none"> May appear milky white, rose, to a deep hue of pink
<p>Pallor/pale/paleness</p> <ul style="list-style-type: none"> A lack of typical colour in the skin or mucous membranes 	<ul style="list-style-type: none"> May appear ashen gray colour in black skin May appear yellowish brown colour in brown skin Best detected in nail beds and mucous membranes 	<ul style="list-style-type: none"> May appear loss of rosy glow in skin, especially face
Tip: even if the child's norm is pale the mucous membranes should be pink		
<p>Cyanosis</p> <ul style="list-style-type: none"> Bluish discoloration/ tone throughout skin 	<ul style="list-style-type: none"> May appear deep blue/black, or dusky colour Lips and tongue may appear ashen gray 	<ul style="list-style-type: none"> May appear bluish tinge, visible in nail beds, earlobes, lips, oral membranes, soles of feet and palms of hand
<p>Mottling</p> <ul style="list-style-type: none"> Irregular or patchy discoloration of the skin 	<ul style="list-style-type: none"> May be difficult to assess, check lighter areas like the palms of hands, soles of feet and the roof of the mouth 	<ul style="list-style-type: none"> Irregular skin areas are pink, whereas others may appear pale, or cyanotic May appear as: net-like pattern, violet web under the skin, or reddish stains
<p>Erythema</p> <ul style="list-style-type: none"> Redness Variable, irregular macular patches (changes in skin colour) that appear as little spots or blemishes in the skin 	<ul style="list-style-type: none"> May be difficult to assess; rely on palpation for warmth or edema Often seen as deep red or violet 	<ul style="list-style-type: none"> Diffusely red, dusky red or violet Redness easily seen anywhere on body
<p>Petechiae</p> <ul style="list-style-type: none"> Tiny dots Small, distinct, pinpoint hemorrhages ≤2mm in size Will not blanch with pressure 	<ul style="list-style-type: none"> Usually invisible except in oral mucosa, conjunctiva of eyelids, and conjunctiva covering eyeball 	<ul style="list-style-type: none"> Purplish pinpoint most easily seen on buttocks, abdomen, and inner surfaces of arms or legs
<p>Echymosis</p> <ul style="list-style-type: none"> Large, diffuse areas, usually black and blue 	<ul style="list-style-type: none"> Very difficult to see unless in mouth or conjunctiva 	<ul style="list-style-type: none"> Purplish to yellow-green areas; may be seen anywhere on skin
<p>Jaundice</p> <ul style="list-style-type: none"> Yellow discoloration of the skin 	<ul style="list-style-type: none"> Most reliably assessed in sclerae, hard palate, palms, and soles 	<ul style="list-style-type: none"> Commonly seen in the sclerae of the eyes, skin fingernails, soles, palms, and oral mucosa

Adapted from: Carpenito-Moyet, L.J. (2008, pp.494-495); Emergency Nursing Association (2018, pp. 41-42); Hockenberry, Wilson, & Rodgers (2019, p.110); Perry, Hockenberry, Lowdewilk/Wilson, Keen-Lindsay, & Sams (2017, p. 914); Samson, R.A. (2017, pp. 34-35, 55-57, and 63).

- e) **Fontanels: ASSESS** the anterior and posterior fontanels in an infant for fullness, bulging or depression. Fontanels should be palpated while the child is in upright position and calm. Both fontanels are soft and bulge when the infant is crying or straining. A sunken fontanel may be a sign that the infant is dehydrated, and a bulging fontanel may be a sign of increased intracranial pressure. [17] The anterior fontanel closes by approximately 18 months, and the posterior fontanel closes by approximately 8 weeks of age. [12]



- f) **Mucous Membranes: INDICATE** hydration status of mucous membranes using ✓ symbol in the appropriate box.

Circulation Interventions: INDICATE using ✓ symbol in the box provided any circulation interventions that are required. Use the ✓ symbol in the **None** box provided if interventions were not required.

4. DISABILITY/NEUROLOGICAL STATUS

Assessment and Interventions: INDICATE using ✓ symbol in the boxes provided your neurological assessment findings and if any interventions are required. **RECORD** in the comments section to clarify any neurological findings. Note any seizure activity (e.g., duration, type) or extremity weakness/deficits (e.g., floppy – limp body, arms, or legs, unable to support head [11]). **DOCUMENT** further in nursing documentation notes and calculate the Glasgow Coma Scale Score and spinal assessment in the neurological section of PEWS Vital Sign Record. Use the ✓ symbol in the **None** box provided if interventions were not required.

5. EXPOSURE

Exposure Assessment: INDICATE using ✓ symbol in the box provided if the child's clothes were removed. Undress the child as necessary to perform a focused physical assessment. Remove clothing one area at a time to carefully observe the child's face and head, trunk (front and back), extremities and skin. [13] Maintain cervical spine precautions when turning any child with a suspected neck or spine injury.

Look for evidence of trauma (e.g., burns, bleeding) or unusual markings that suggest non-accidental trauma (e.g., bruises in different stages of healing, injuries that do not correlate with the child's history) and **RECORD** in the musculoskeletal section using the diagram. **NOTE: Additional guidance can be found in the musculoskeletal section of this document.**

Exposure Interventions: INDICATE using ✓ symbol in the box provided if any active re-warming interventions were initiated and describe the intervention(s) used in the space provided e.g., warm blankets, warming gowns or warm fluids were applied to keep the child comfortable and warm. Use the ✓ symbol in the **None** box provided if interventions were not required.

SECONDARY/FOCUSED ASSESSMENT

NOTE: For the focused assessment categories in the Treatment Record where appropriate, **INDICATE** using ✓ symbol in the N/A box if a section is not applicable to the child and their presentation.

1. MUSCULOSKELETAL: DOCUMENT and measure on the figure diagram the location of the abnormality or injury using the legend provided. **INDICATE** using ✓ symbol in the box provided if there are any concerns for non-accidental trauma and that MRP is aware. **INDICATE** using ✓ symbol in the box provided that a call was made to MCFD 1-800-663-9122 as per **Duty to Report**. Refer to [The B.C. Handbook for Action on Child Abuse and Neglect](#) for more information.

Duty to Report Suspected Child Abuse and Neglect:

In BC anyone who has reason to believe that a child or youth under 19 has been or is likely to be abused or neglected and that the parent is unwilling or unable to protect the child or youth, must report the suspected abuse or neglect to the Ministry of Children and Family Development (MCFD) promptly. **Phone 1.800. 663.9122** at any time of the day or night.

This duty to report supersedes an individual's right to privacy and is permitted without consent of the person under Section 33.1(1) (c) of the Freedom of Information and Protection of Privacy Act (FOIPPA).

If the child is in immediate danger call 9-1-1

RECORD in the comments section to elaborate on any injury interventions needed (e.g., ice, wound cleaning, dressing) and any risks identified. Use the ✓ symbol in the **None** box provided if interventions were not required.

Possible Concerns for Non-Accidental Trauma (NAT)

History of Present Injury:

- Delay in seeking medical attention
- No history or inconsistent history
- Changing history
- Unwitnessed injury
- Domestic violence in home
- Referred to the ED for suspected child abuse
- Child or youth discloses any type of pressure applied to neck

Exam Findings:

- Any injury to an infant who is not yet mobile
- Injuries to a toddler or older child for which there is no explanation and/or the explanation does not fit with the injuries
- Burns (e.g., on hands, feet, genitalia)
- Any fractures in a non-ambulating infant
- Rib fractures (especially posterior in infants)
- Metaphyseal corner fractures
- An undiagnosed healing fracture

- Genital bruising, bleeding, discharge, or injury when there is no clear history/explanation (e.g., straddle, zipper injury)
- TEN-4-FACESp [18] Bruising Rule: bruising which may be concerning for signs of maltreatment in children younger than 4 years of age; and if present strongly consider evaluating for child maltreatment and/or consulting with an expert in child maltreatment:
 - Regions
 - Bruising to torso, ears and neck
 - Frenulum
 - Angle of jaw
 - Cheeks (the fleshy part)
 - Eyelids
 - Subconjunctivae
 - Infants
 - Bruising on infants 4 months of age and younger
 - Patterns
 - Patterns of bruising (objects) e.g., hand print, belt

Summary of features associated with Child Abuse identified during the initial trauma evaluation

Historical factors


- Children who present with a change in behavior, + skeletal injuries, subdural hemorrhage with suspicious history
- injury inconsistent with history
- delay in seeking care

Bruising

- TEN-4 bruising (Bruising in children <4 years on trunk, ears, neck) 97% sensitive, 84% specific for child abuse
- "When you don't bruise, you don't bruise."

Burns

- Up to 25% children admitted to burn centers have been abused
- Most intentional burn injury is from scalds to buttocks, perineum, bilateral lower limbs, feet, unilateral limbs, multiple contact burns, or clearly demarcated edges
- Any burn in age < 5



Intracranial Injury

- PEDIBIRN clinical prediction rule, 96% sensitive, 43% specific for AHT 1+ feature in child <3 years
- PredAHT clinical prediction rule, 72% sensitive, 86% specific for AHT 3+ features in child < 3 years

Oral Injury

- Frenulum injury + non-ambulating child concerning for child abuse
- Lip injury is extremely common in accidental trauma and does not justify a child abuse workup

Abdominal Injury

- Hollow viscus injury, particularly duodenal injury, in children <4 year., combined hollow viscus + solid organ injury
- intra-abdominal injury may be found without bruising but in the presence of elevated LFTs

Skeletal Injury

- Fracture patterns inconsistent with degree of mobility and child age
- Skeletal survey to screen for occult fractures is indicated for any child <2 years with suspected abuse

Escobar, M. A., Flynn-O'Brien, K. T., et al... (2017). The association of nonaccidental trauma with historical factors, examination findings, and diagnostic testing during the initial trauma evaluation. *Journal of Acute Care Surgery*, 82(6), pp. 1147-1157

2. CARDIOVASCULAR: INDICATE using ✓ symbol in the boxes provided your cardiovascular assessment findings and if any interventions are required. Use the ✓ symbol in the **None** box provided if interventions were not required. **INDICATE** if the child is placed on 3 lead cardiorespiratory monitoring (including heart rate/rhythm, respiratory rate and SPO₂) and affix initial monitor rhythm strip below. **RECORD** lead interpretation including impression of rhythm, rate, PR interval, QRS interval and QT interval.

3. GASTROINTESTINAL: INDICATE using ✓ symbol in the boxes provided your abdominal assessment findings and if any interventions are required. **RECORD** last bowel movement and describe any changes in stool. **RECORD** any changes in intake, weight, and eating patterns in the comments section if applicable. Use the ✓ symbol in the **None** box provided if interventions were not required.

4. GENITOURINARY: INDICATE using ✓ symbol in the boxes provided your genitourinary assessment findings and if any interventions are required. Use the ✓ symbol in the **None** box provided if interventions were not required. **RECORD** in the comments section to clarify volume and frequency in output/diapers compared to child's norm, and any additional findings (e.g., urine colour, clarity, and odour).

NOTE: *To collect a diaper weight in infants and young children, weigh an unused diaper of the same size and brand, then weigh child's soiled diaper. The difference in weight is the output: 1 gram of increase in weight = 1 ml of urine.*
[12]

5. REPRODUCTION: INDICATE using ✓ symbol in the boxes provided your assessment findings and if any interventions are required. Use the ✓ symbol in the **None** box provided if interventions were not required. **RECORD** last menstrual period if applicable. **RECORD** normal or abnormal bleeding and amount (e.g., pads/tampons/menstrual cup per hour). If pregnant, **INDICATE** the number of weeks pregnant, Gravida (number of pregnancies), Para (number of >20 week births), and number of abortions (therapeutic and spontaneous). **RECORD** any pain or discharge further in the comments section. **INDICATE** using ✓ symbol in the N/A box if reproduction section not applicable to the child and their presentation.

6. MENTAL HEALTH & SUBSTANCE USE

Mental Health & Substance Use Assessment:

- INDICATE** using ✓ symbol in the box provided if the child has been brought to hospital by police under Section 28 or Form 21.
- INDICATE** using ✓ symbol in the boxes provided the child's overall mental status/behaviour (e.g., appropriate for age, confused, angry, agitated or withdrawn).
- INDICATE** using ✓ symbol in the boxes provided if any risks are identified using an appropriate validated tool as per your health authority/agency standards related to mental health/suicide risk/self-harm screening. **RECORD** in the plan section the child/youth's stated plan for harm. Risk of self-deterioration examples include e.g., the child is declining to eat/drink, take necessary/prescribed medications, neglect of hygiene.

NOTE: *For additional information re: suicide risk assessment access the [COMPASS Toolkit: Suicide Risk Assessment](#)*

- Guided by an appropriate validated tool as per your health authority/agency standards related to substance use screening, **RECORD** if any substances (e.g., alcohol, drugs, and tobacco) are used and type.

RECORD quantity, frequency and time last used in the spaces provided. This will be important to consider whether the child/youth may begin experiencing withdrawal symptoms such as irritability, cravings, nausea, and cramping.

NOTE: For additional information re: youth substance use access the [COMPASS Toolkit: Youth Substance Use/Concurrent Disorders](#) as well as the [Provincial Child and Youth Substance Intoxication and Withdrawal Guideline for Acute Care Settings](#)

Interventions: Use the ✓ symbol in the **None** box provided if interventions were not required.

- a) **INDICATE** using ✓ symbol in the box provided if the child is certified/admitted involuntarily under the mental health act. This is key information to consider for safety and care planning.

NOTE: Refer to [Healthy Minds Learning: BC Mental Health Act Toolkit](#) for more information, pathways, links to forms and their applicability as well as additional resources.

- b) **INDICATE** using ✓ symbol in the boxes provided if any other team members and/or community services have been contacted to be involved in the child's care. Referrals to other team members and/or community services should be done in a trauma informed way. Referrals should not be made without prior consultation with the child and their family (as appropriate). When discussing referrals with the child and family it is important to use plain language and to describe provider roles and how that individual or service can support the child's care. Indigenous children and their families should be offered the opportunity to connect with the Indigenous Patient Liaison (or similar role) if it is available in the health authority/agency. This connection should be offered prior to referral to other individuals and services.
- c) **INDICATE** using ✓ symbol in the box provided and identify which validated screening tool was used based on risk identified during assessment.
- d) **INDICATE** using ✓ symbol in the box provided if the child has a history of violence or is showing any signs of physical or verbal aggression. **RECORD** any safety measures implemented in the comments section and follow violence screening/alert guidelines as per your health authority/agency.
- e) In consultation with the child and family, **DOCUMENT** the child's safety plan as per health authority/agency guidelines. **DOCUMENT** the child's risk mitigation plan in the comment section or in the nurses notes.

FLUID BALANCE/MEDICATION/ DISCHARGE

1. FLUID BALANCE

Intake:

- a) **RECORD** the time in the left hand column.
- b) **RECORD** all parental, enteral, and oral intake. **DESCRIBE** each type of intake on a separate line including any additives.
- c) **RECORD** the amount of solution/blood initiated in mL.
- d) **RECORD** amount of solution/blood infused in mL; as well as the amount of oral intake in mL.
- e) **CALCULATE** the total volume of intake in the last row of the Intake table; **RECORD** the total amounts in the last boxes in the corresponding column(s). If it is anticipated that the child will be staying in the emergency for an extended period of time, or receiving multiple solutions, efforts should be made to

switch to health authority/agency fluid balance documentation to obtain 12 hour shift totals at standardized times.

Output:

- a) **RECORD** all types of output including urine, stool, blood loss, emesis, and drainage. Measure volume as per health authority/agency. **DESCRIBE** each type of output on a separate line and document the amount in mL.
- b) **CALCULATE** the total amount of output; **RECORD** this amount in the bottom row of the Output table in the last column. If it is anticipated that the child will be staying in the emergency for an extended period of time, efforts should be made to switch to health authority/agency fluid balance documentation to obtain 12-hour shift totals at standardized times.

2. MEDICATION: RECORD the time, generic name of medication, dose, route and initial. Include both nurses' initials for all independent double check (IDC) medications as per your health authority/agency guidelines. **RECORD** each medication on a separate line.

3. DISCHARGE: INDICATE date, time of discharge and type of disposition (e.g., left before being seen, left against medical advice, home, admitted to hospital, transfer to another facility), complete any additional documentation as per your specific health authority/agency guidelines. **INDICATE** using ✓ symbol in the box provided who accompanied the child upon discharge (e.g., self, family member/caregiver, legal guardian, police). **INDICATE** using ✓ symbol in the box provided if discharge instructions and written plans were provided. **RECORD** in the comments section if child/family/caregiver understands the discharge instructions/plan and if any information pamphlets have been provided.

The child and family are active participants in their discharge. Ensure you explore the child/family's understanding of the child's condition and respond to any questions or concerns they may have. All referrals and follow-up should be documented and communicated verbally with the child and family. They should be provided with guidance on how to connect and ask additional questions they may think of after discharge.

NOTE: If the patient has left against medical advice or left before being seen, follow your health authority/agency guidelines and documentation processes.

4. SIGNATURE: RECORD date (mm/dd/yyyy), full name, signature, initials, and designation in space provided.

Related Documents

1. [BC PEWS ED Pediatric Emergency Nursing Assessment Record](#)
2. [BC PEWS ED Pediatric Emergency Nursing Assessment Record - Treatment](#)
3. BC PEWS ED Vital Sign Record
 - 3.1. [BC PEWS ED Vital Sign Record: 0-3 Months](#)
 - 3.2. [BC PEWS ED Vital Sign Record: 4-11 Months](#)
 - 3.3. [BC PEWS ED Vital Sign Record: 1-3 Years](#)
 - 3.4. [BC PEWS ED Vital Sign Record: 4-6 Years](#)
 - 3.5. [BC PEWS ED Vital Sign Record: 7-11 Years](#)
 - 3.6. [BC PEWS ED Vital Sign Record: 12+ Years](#)
4. [BC PEWS Clinical Decision Support Tool](#)
5. [BC PEWS Vital Sign Assessment and Documentation Guidelines](#)
6. [BC PEWS ED Instructions for Using the Vital Sign Record](#)
7. [BC PEWS Escalation Aid for Inpatient and Emergency Setting](#)

Document Creation / Review

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Disclaimer

Child Health BC develops evidence-based clinical support documents that include recommendations for the care of children and youth across British Columbia. These documents are intended to give an understanding of a clinical problem and outline one or more preferred approaches to the investigation and management of the problem. These documents are for guidance only and not intended as a substitute for the advice or professional judgment of a health care professional, nor are they intended to be the only approach to the management of a clinical problem. Healthcare professionals should continue to use their own judgment and take into consideration context, resources, and other relevant factors. Neither Provincial Health Services Authority nor Child Health BC assume any responsibility or liability from reliance on or use of the documents.

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