Department of Health Government of Nunavut	NURSING POLICY, PROCEDURE AND PROTOCOLS Community Health Nursing		
TITLE:		**SECTION:**	**POLICY NUMBER:**
Febrile Child Policy		Nursing Practice	07-045-00
EFFECTIVE DATE:	**REVIEW DUE:**	**REPLACES NUMBER:**	**NUMBER OF PAGES:**
Nov 2, 2022	Nov 2, 2025	NEW	5
APPLIES TO:			
Community Health Nurses, Nurse Practitioners, Physicians			

1. BACKGROUND:
   1.1. The Department of Health (Health) is committed to improving access to quality health care and ensuring best practice guidelines are followed. Fever of unknown origin in infants and young pediatrics may be attributed to serious bacterial infections (SBI) such as meningitis, urosepsis, pneumonia and septicemia. All efforts must be made to ensure best practice is followed for the investigation and management of potential SBI in order to avoid serious complications.
   1.2. This policy will outline the required procedural steps to follow when a client aged 0 days to 36 months presents to the health centre with a fever of unknown origin. Guidelines for decision making on investigations, when to consult a physician along with the management and plan of care will all be reviewed.

2. POLICY:
   2.1. All Community Health Nurses (CHNs) and Nurse Practitioners (NPs) are expected to follow **Appendix A: Management of Fever of Unknown Cause in Young Children** for all clients less than 36 months presenting to the Community Health Centre (CHC) with a fever of unknown origin.
      2.1.1. All Advanced Care Paramedics and Primary Care Paramedics will use this policy as a guide, but are not able to independently order lab and diagnostic testing as per **Appendix A** without previously consulting an NP or MD.
   2.2. All febrile infants under 90 days old require a consult with the Regional On-Call Physician regardless of whether the infant is perceived well looking; having no risk factors; and having a source of infection.
      2.2.1. All infants under 60 days old with a presentation of fever will be considered for a medivac to the nearest referral centre by the Regional On-Call Physician for a full septic work up and closer monitoring.
      2.2.2. All clients 61 days to 36 months old who are treated as an outpatient will require a mandatory follow up assessment in the CHC within 24 hours.

3. PRINCIPLES:
   3.1. For clients under 36 months with a fever, err on the side of caution, especially when deciding to consult a physician or medevac the client
   3.2. Young pediatric children and infants are at higher risk for serious infections and death from infections.

4. DEFINITIONS:
   4.1. Febrile Infant/Child: An infant or pediatric client with a rectal temperature of 38.0 degrees Celsius or greater.

5. PROTOCOL: CHN AND NP RESPONSIBILITIES
   5.1. All CHNs and NPs will follow *Policy 07-029-00 Clinical Telephone Triage* which states that all infants ages 12 months or younger must be assessed in the CHC as soon as possible or at a minimum within one hour regardless of the day/date or time of day, and/or determined CTAS triage score.
   5.2. All CHNs and NPs will perform a complete history and head to toe physical assessment, including vital signs (RR, HR, BP SPO2, Temp), height and weight.
      5.2.1. Rectal temperatures are the most accurate method and therefore this is the standard when taking a temperature in a pediatric client less than 36-month-old with fever of unknown origin.
   5.3. All CHNs and NPs will assess for risk factors such as incomplete vaccination status, birth history, significant previous medical history and family-social history.
   5.4. All CHNs and NPs will define whether the client is "well" or "unwell". Refer to **Appendix A** on how to differentiate this.
   5.5. All CHNs and NPs will determine the corrected age for premature births. This is done by taking the number of weeks the child was born premature and subtracting this amount from the chronological age.
   5.6. All CHNs and NPs will complete the list of laboratory investigations outlined in **Appendix A**
      5.6.1. Urine C&S must be collected either mid-stream catch or an in/out catheter. U-bags are not an acceptable collection method.
      5.6.2. The CHN must obtain a chest X-Ray order from a physician or nurse practitioner for all pediatric clients less than 6 years old. Refer to Policy 08-019-00 (Nurse-Initiated X-Ray Requests)
   5.7. All CHN and NP will consult the Regional On-Call Physician according to **Appendix A**. The CHN and NP must follow *Policy 06-018-00 Call Record and On-Call Physician Consultation Procedure* when consulting.

6. PROTOCOL: PHYSICIAN RESPONSIBILITIES
   6.1. Respond to CHC consults and review the case with the CHN or NP. The physician must follow the *Policy 06-018-00 Call Record and On-Call Physician Consultation Procedure.*
   6.2. Communicate which investigations the CHN or NP will perform according to **Appendix A**
      6.2.1. If a chest X-Ray is required, but there is no level of urgency, imaging should wait until the client arrives to referral centre in order to ensure a high-quality image.
   6.3. Order antibiotics according to **Appendix A** for the CHN and NP to administer.
   6.4. Establish a management plan based on the client's disposition according to **Appendix A,** which includes but not limited to oxygenation, management of sepsis, hemodynamic stability, decision to Medivac along with a follow-up plan for outpatient treatment.

Practice Point
For "unwell" infants and pediatrics, do not delay antibiotics until a lumbar puncture can be performed. If blood and urine cultures cannot be obtained discuss with the physician before starting antibiotics.

7. GUIDELINES FOR MANAGING OUTPATIENT PEDIATRICS
   7.1. All clients determined to be appropriate for outpatient monitoring will require a mandatory follow up assessment in the CHC within 24 hours.
      7.1.1. Follow-up every 24 hours will continue in the CHC until the source of infection declares

itself and the client is treated appropriately.

7.2. Education and counselling are an essential component to successfully managing outpatient clients and include:

7.2.1. Legal guardians are to be made aware of the signs and symptoms of when to notify the nurse on call.

Table 1: Concerning Signs and Symptoms to Notify the Nurse On-Call

Temp of 39.0 degrees Celsius or greater	Laboured Breathing/faster breathing
Wheezes	Decreased activity/lethargic
Increased frequency of coughing	Pale in appearance
Poor fluid intake	Decreased frequency of diapers/voiding
Vomiting/Diarrhea	Inconsolable crying/irritable
New onset rash	Any parental concerns

7.2.2. Legal guardians are to be informed about strategies to improve fevers for their infant or child.

7.2.2.1. Encourage parents to increase oral fluid intake

7.2.2.2. Acetaminophen 10-15mg/kg PO/PR q4h

7.2.2.3. Ibuprofen 10 mg/kg PO q6h for infants over 6 months of age

7.2.2.4. Dress the infant/child in light clothing

8. Documentation

8.1. The CHN and NP will follow Policy 06-009-01 The SOAP Documentation Guidelines and Policy 06-008-00 The Documentation Standard.

8.2. The CHN, NP and Physician will follow *Policy 06-018-00 Call Record and On-Call Physician Consultation Procedure* and document all consults on the community call form.

9. Related Policies, Protocols and Legislation

Policy 08-019-00 Nurse-Initiated X-Ray Requests

Policy 07-029-00 Clinical Telephone Triage

Policy 06-018-00 Call Record and On-Call Physician Consultation Procedure

Policy 06-008-00 Documentation Standards

Policy 06-008-01 Documentation Standard Guidelines

Policy 06-009-00 Documentation Format

Policy 06-009-01 SOAP Documentation Guidelines

10. References

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11. APPENDIX

Appendix A: MANAGEMENT OF FEVER OF UNKNOWN CAUSE IN YOUNG CHILDREN

Approved By:	Date:
Jennifer Berry, Assistant Deputy Minister – Department of Health	
Approved By:	Date:
Robert McMurdy, a/Chief Nursing Officer	
Approved By:	Date:
Francois de Wet, Medical Chief of Staff on behalf of the Medical Advisory Committee	

APPENDIX A: MANAGEMENT OF FEVER OF UNKNOWN CAUSE IN YOUNG CHILDREN

Appendix A:
Management of Fever of Unknown Cause in Children Aged 0 to 36 Months

Febrile Child ≥ 38 C rectal
All temps are rectal
All urines are in and out catheter if child still in diapers

Deciding at the bedside whether a child is well or unwell is crucial. MD to consider consulting on-call pediatrician

*** Well or Unwell: Things to Ask**
Child unwell if any of the below are noted:
- *Fever > 3 days*
- *Decrease in feeding;*
- *Decrease in urine output (number of diapers)*
- *Lethargy and/or irritability, decreased activity*
- *Vomiting and/or inability to tolerate fluids*
- *Changes in appearance, e.g., labored, faster breathing; decreased muscle tone; change in coloring, etc.*

*** Well or Unwell: Things to Observe**
Child unwell if any of the below are noted:
- *Persistent irritability or lethargy*
- *Poor feeding with signs of dehydration*
- *Poor color/cap refill/skin turgor*
- *Persistent abnormal vitals (especially in context of decreased fever)*
- *Concerning findings on physical exam (i.e., decreased tone, nuchal rigidity, bulging or sunken fontanelles, respiratory distress, rigid abdomen, concerning rash*

Perform complete history & physical head to toe assessment, including vital signs (RR, HR, BP, O2 saturation)
Correct age for prematurity
*Assess for **risk factors** such as incomplete vaccination status, birth history, significant previous medical history*

Age	0-28 days	29 – 60 days		61 – 90 days		91 days – 36 months		
Presentation & Risk Factors	Well or Unwell	Unwell	Well	Unwell	Well		Unwell	Well	
	Risk factors present or absent	Risk factors present or absent	Risk factors present or absent	Risk factors present or absent	With risk factors	No risk factors	Risk factors present or absent	With risk factors	No Risk Factors
Investigations	Sepsis workup • CBC + differential • Blood culture • urine dip + C&S • Bedside glucose • **Consult MD** • *Consider chest x-ray in consultation with MD*	Sepsis workup • CBC + differential • Blood Culture • urine dip + C&S • Bedside glucose • **Consult MD** • *Consider chest x-ray in consultation with MD*	• CBC + differential • C-reactive protein • Blood culture • Urine dip + C&S • **Consult MD**	Sepsis workup • CBC + differential • Blood culture • Urine dip + C&S • **Consult MD** • *Consider chest x-ray in consultation with MD*	• CBC+ differential • Urine dip + C&S • **Consult MD**	• Urine dip + C&S • **Consult MD**	• CBC + differential • Blood culture • Urine dip + C&S • **Consult MD**	**For girls <24 mo. and boys <12 mo.** • Urine dip + C&S **If temp >39** • CBC + differential • Blood culture • Urine dip and culture • **Consult MD**	**For girls <24 mo. and boys <12 mo.** • Urine dip + C&S
Antimicrobial choice	*For unwell children: do not delay antibiotic while waiting for lumbar puncture or chest x-ray. Physician order required for antibiotics. If unable to start IV, advise MD.* *If concerns for HSV clinically (e.g., herpetic lesions, seizure) or with risk factors, add acyclovir to empiric therapy*								
	IV Ampicillin with IV Gentamycin **or** IV Ampicillin with IV Cefotaxime if concerns for meningitis or if positive urine dip.	*Note: If cultures cannot be obtained, discuss with MD before initiating empiric treatment* IV Ceftriaxone Consider adding vancomycin based on severity and concerns for meningitis				*If urine dip positive:* Cephalexin PO	IV Ceftriaxone Add Vancomycin if severe/concerns for meningitis	IV/IM Ceftriaxone	*If urine dip +:* Cephalexin PO
Disposition	**Medevac** Oxygen as needed Consider fluid bolus Blood and urine samples to go out with patient.	**Medevac** Oxygen as needed Consider fluid bolus Blood and urine samples to go out with patient.		**Medevac** Oxygen as needed Consider fluid bolus Blood and urine samples to go out with patient.	**Medevac** Consider fluid bolus Blood and urine samples to go out with patient.	Outpatient treatment with close observation, patient to return to clinic in 24 hours Teaching with parents on symptom management, monitoring, and when to return to clinic. Reconsult if becomes unwell or fever persists >3 days.	**Medevac** Consider fluid bolus Blood and urine samples to go out with patient.	Consult MD for antibiotic treatment and decision to medevac. If treated as outpatient: • Follow-up in 24 hours • Teaching with parents on symptom management, monitoring and when to return to clinic. • Reconsult if becomes unwell or if fever persists >3 days.	Treat as outpatient with close follow-up in 24 hours Teaching with parents on symptom management, monitoring and when to return to clinic. Reconsult if becomes unwell or if fever persists >3 days.