



NL Health
Services

CHILD/WOMEN'S HEALTH AND EMERGENCY
Initial Orders Pediatric Oncology Patients
with Suspected Febrile Neutropenia
(2 month and older) (Part I)



PO6310 2568 09 2025

Name:

HCN:

Date of Birth:

Weight: _____

ALLERGIES:

☐ No Known

Inclusion criteria: This order set applies to the management of patients older than 60 days with

1. Fever and neutropenia as the result of a known or suspected malignancy or the use of antineoplastic agents **OR**
2. Hematopoietic stem cell transplant (HSCT) patients who present with fever or evidence of infection within 6 months of their transplant, regardless of the absolute neutrophil count (ANC) **OR** patients who continue to receive immunosuppressant agents after transplant, regardless of their ANC or the length of time post-HSCT.

Contact Pediatric Hematologist/Oncologist on-call at 709-777-6300 to discuss all patients.

DO NOT GIVE ANYTHING RECTALLY, INCLUDING MEDICATION. DO NOT TAKE TEMPERATURES RECTALLY.

Start antibiotics within **1 hour** of discovering fever (even if ANC result is delayed).

Emergency Sepsis Trigger Tool (ch-1715) or Pediatric Oncology Sepsis Screening Tool (ch-2517) (excluding Emergency Department completed? ☐ Yes ☐ No

Investigations for Febrile Neutropenia

- Note to prescriber: physical examination including examination of potentially infected areas (skin, oropharynx, abdomen, lungs, perineum (no digital rectal exam), venous access sites, etc.)
- Obtain STAT complete blood count (CBC) & differential (if not already done)
- Obtain height and weight
- Immediately access the central venous access device (CVAD) regardless of whether anesthetic cream has been applied to port site. If patient does not have a CVAD or unable to access CVAD within 30 minutes, establish a peripheral intravenous line.

Required Investigations within 30 minutes of arrival

- Serum sodium, potassium, Chloride, Urea, Creatinine, Glucose, Lactate
 - Blood cultures (aerobic and anaerobic) from each lumen of CVAD **PRIOR** to the administration of antibiotics (if not already done)
- ☐ If there is no CVAD or unable to access CVAD within 30 minutes, blood cultures may be drawn peripherally (draw one aerobic and one anaerobic sample per peripheral site). Contact prescriber if unable to obtain blood cultures.

As clinically indicated:

- ☐ Capillary Blood Gas ☐ Venous Blood Gas ☐ Bilirubin ☐ Albumin ☐ PTT/INR
- ☐ Type and Screen ☐ LFTs ☐ Point-of-care testing glucose monitoring (POCTGM)

Diagnostic Imaging and other investigations

- ☐ Chest X-ray for patients with signs or symptoms of respiratory illness
- ☐ Urinalysis and culture (if not already done.
- ☐ Nasopharyngeal swab for respiratory viruses (if platelets less than 10, speak to pediatric hematologist/oncologist on call prior to doing swab)
- ☐ If an apparent site of infection is present, swab area: _____

Prescriber's Name: _____ Signature: _____ Date: DD/MONTH/YYYY Time: HH:MM

Nurse's Name: _____ Signature: _____ Date: DD/MONTH/YYYY Time: HH:MM



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CHILD/WOMEN'S HEALTH AND EMERGENCY
Initial Orders Pediatric Oncology Patients
with Suspected Febrile Neutropenia
(2 month and older) (Part II)



Name: _____

HCN: _____

Date of Birth: _____

Weight: _____

ALLERGIES:

☐ No Known

Intravenous fluids

- ☐ If fluid resuscitation is required give 0.9% sodium chloride _____ mL IV (10-20 mL/kg, maximum 1 L)
☐ over _____ minutes **OR** ☐ as fast as possible

OR

- ☐ If fluid resuscitation is not required, start Dextrose _____ % in water + 0.9% sodium chloride at _____ mL/hour
(1.5 x maintenance rate, maximum 150 mL/hour)

Medications

- **Stop all antineoplastic agents until prescriber discusses with pediatric hematologist/oncologist**

- ☐ Acetaminophen _____ mg PO q4h PRN for fever ONLY (Maximum individual dose: 650 mg AND maximum 5 doses in 24 hours). Notify oncologist if temperature persists after 5 doses in 24 hours.
2 – 3 months old: 10 mg/kg/dose greater than 3 months old: 15 mg/kg/dose

Is the patient neutropenic?

- ☐ Yes, absolute neutrophil count (ANC) is less than or equal to $0.5 \times 10^9/L$ OR ANC is expected to fall below $0.5 \times 10^9/L$ in the next 48 hours. Proceed to initial antibiotic orders.
- ☐ No. Prescriber discussed next steps with pediatric hematologist/oncologist on call.

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Nurse's Name: _____ Signature: _____ Date: DD/MONTH/YYYY Time: HH:MM



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CHILD/WOMEN'S HEALTH AND EMERGENCY
Initial Orders Pediatric Oncology Patients
with Suspected Febrile Neutropenia
(2 month and older) (Part III)



PO6310 2568 09 2025

Name: _____

HCN: _____

Date of Birth: _____

Weight: _____

ALLERGIES:

☐ No Known

Guideline: Assessment criteria for sepsis risk from Emergency Sepsis Trigger Tool

Temperature Route	Definition	Age	Bradypnea (respiratory rate in breaths/minute)	Tachypnea (respiratory rate in breaths/minute)
Oral (preferred) or Tympanic	A single temperature greater than or equal to 38.3°C OR two temperatures at least one hour apart greater than or equal to 38°C *	2-3 month	Less than 25	Greater than 60
		3-6 month	Less than 25	Greater than 60
Axilla	A single temperature greater than or equal to 37.8°C OR two temperatures at least one hour apart greater than or equal to 37.5°C *	6-12 month	Less than 20	Greater than 60
		1-4 years	Less than 17	Greater than 50
		4-10 years	Less than 15	Greater than 30
		10 years and over	Less than 10	Greater than 25

Age	Bradycardia (respiratory rate in breaths/minute)	Tachycardia (respiratory rate in breaths/minute)
2-3 month	Less than 95	Greater than 180
3-6 month	Less than 105	Greater than 180
6-12 month	Less than 100	Greater than 160
1-4 years	Less than 75	Greater than 145
4-10 years	Less than 60	Greater than 125
10 years and over	Less than 45	Greater than 105

Age	Hypotension (Systolic blood pressure in mmHG)
Infants 2 - 12 months	Less than 70
Children 1 - 10 years	Less than 70 + (age in years x 2)
Children greater than 10 years	Less than 90

Table 1

1. Is the patient febrile?
2. Is the patient tachycardic?
3. Is the patient bradycardic?
4. Is the patient tachypneic?
5. Is the patient hypotensive?
6. Does the patient have mental status abnormality?
(decreased level of consciousness, irritable,
confused, lethargic, inappropriate crying)
7. Is the patient's oxygenation less than 94% in room air?
8. Does the patient have capillary refill abnormality
(greater than 2 seconds or less than 1 second)?
9. Does the patient have skin abnormality
(cool/mottled, flushed or rash)?

* If yes to fever plus one other criteria, prescriber must urgently assess patient for possible sepsis.*

Physician to determine if patient is clinically stable or unstable and choose antibiotics from page 3. This decision is based on their assessment of the patient, considering criteria met from Table 1 combined with their overall assessment of the patient.

If patient is clinically unstable, prescriber must also consider if additional treatments/protocols for septic shock are required and must immediately contact the Pediatric Hematology Oncologist on call at 709-777-6300

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Nurse's Name: _____ Signature: _____ Date: DD/MONTH/YYYY Time: HH:MM



NL Health
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CHILD/WOMEN'S HEALTH AND EMERGENCY
Initial Orders Pediatric Oncology Patients
with Suspected Febrile Neutropenia
(2 month and older) (Part IV)



Name: _____

HCN: _____

Date of Birth: _____

Weight: _____

ALLERGIES:

☐ No Known

Initial ANTIBIOTIC ORDERS

Start antibiotics within **1 hour** of discovering fever. Rotate administration of antibiotics through all lumens of a central venous access device (CVAD).

☐ **Clinically STABLE patient**

- ☐ Piperacillin-Tazobactam _____ mg piperacillin IV **x 1 dose** (maximum individual dose: 4000 mg piperacillin)
2 months to 6 months: 80 mg piperacillin/kg/dose; Older than 6 months: 100 mg piperacillin/kg/dose

OR

- ☐ **IF significant beta-lactam allergy (ie: anaphylaxis) OR receiving/clearing high dose methotrexate**
give Cefepime _____ mg IV **x 1 dose** (50 mg/kg/dose) (maximum individual dose: 2000 mg)

AND

- ☐ **IF clinical suspicion resistant organism AND/OR suspected central line associated infection ADD**
Vancomycin _____ mg IV **x 1 dose** (15 mg/kg/dose)
maximum individual dose prior to therapeutic drug monitoring: 1000 mg
- ☐ Other: _____

☐ **Clinically UNSTABLE patient**

- If appropriate, prescriber to initiate Pediatric Severe Sepsis and Septic Shock Order Set (ch-1733) and use the antibiotics below.

- ☐ Piperacillin-Tazobactam _____ mg piperacillin IV **x 1 dose** (maximum individual dose: 4000 mg piperacillin)
2 months to 6 months: 80 mg piperacillin/kg/dose; Older than 6 months: 100 mg piperacillin/kg/dose

OR

- ☐ **IF significant beta-lactam allergy (ie: anaphylaxis) OR receiving/clearing high dose methotrexate**
give Cefepime _____ mg IV **x 1 dose** (50 mg/kg/dose) (maximum individual dose: 2000 mg)

AND

- Vancomycin _____ mg IV **x 1 dose** (15 mg/kg/dose)
maximum individual dose prior to therapeutic drug monitoring: 1000 mg
- Tobramycin _____ mg IV **x 1 dose** (maximum dose prior to therapeutic drug monitoring: 400 mg)
2 months to less than 6 years: 10.5 mg/kg/dose 6 years and older: 8 mg/kg/dose

- ☐ Other: _____

See physicians order set **Admission and Daily Orders Pediatric Oncology Febrile Neutropenia** for admission orders and ongoing antibiotics (to be completed by admitting physician or designate)

Prescriber's Name: _____ Signature: _____ Date: DD/MONTH/YYYY Time: HH:MM

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NL Health
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CHILD/WOMEN'S HEALTH AND EMERGENCY
Initial Orders Pediatric Oncology Patients
with Suspected Febrile Neutropenia
(2 month and older) (Part V)



PO6310 2568 09 2025

Name: _____

HCN: _____

Date of Birth: _____

Weight: _____

ALLERGIES: _____

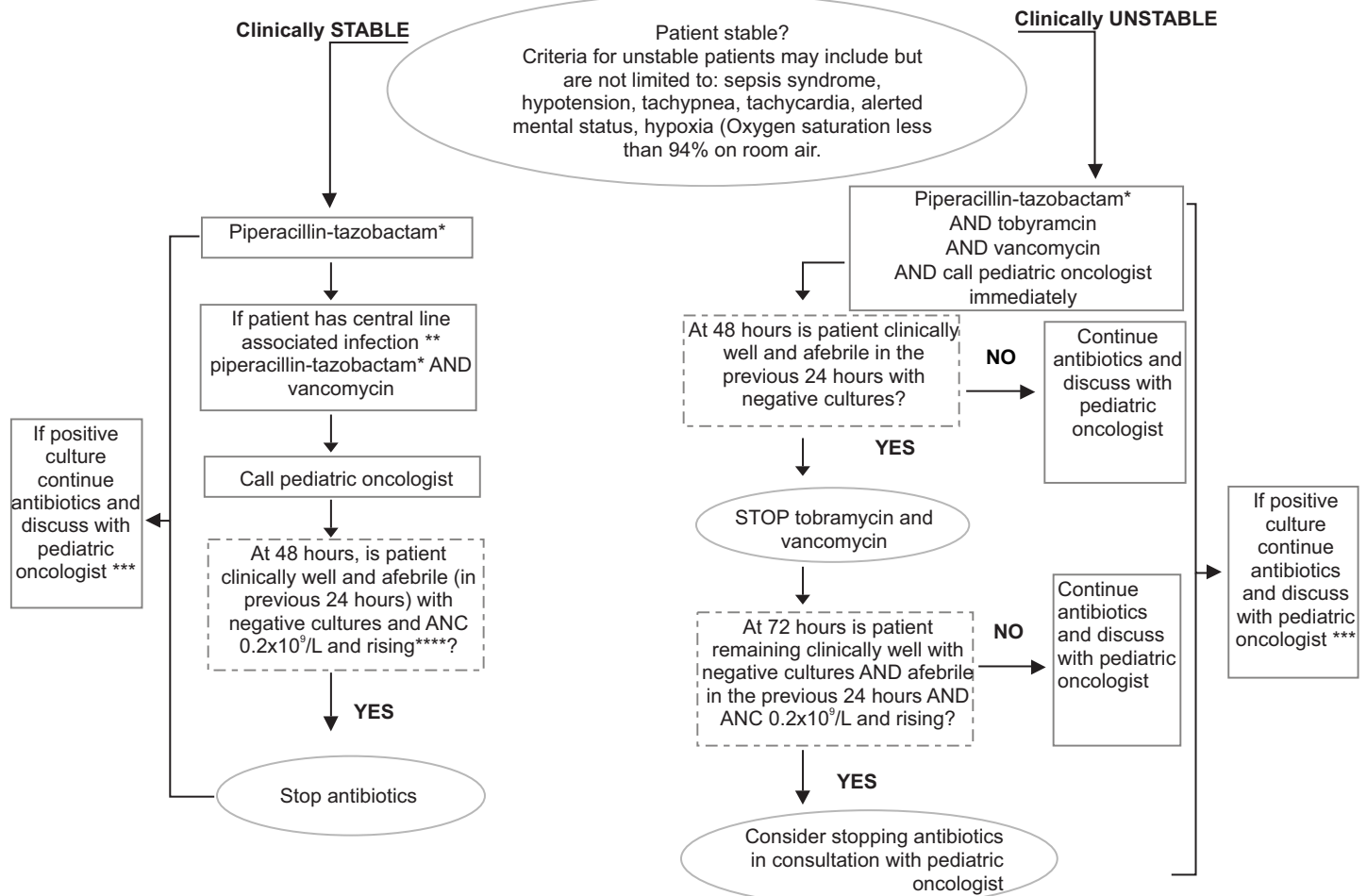
☐ No Known

Febrile Neutropenia Guidelines

- Fever is defined as a single temperature greater than or equal to 38.3°C orally (preferred) or tympanic (37.8°C axilla) **OR** two temperatures greater than or equal to 38°C orally (preferred) or tympanic (37.5°C axilla) at least 1 hour apart **(temperature taken at home by parent must be counted)**
- Neutropenia is defined as ANC less than $0.5 \times 10^9/L$ **OR** expected to fall below $0.5 \times 10^9/L$ in the next 48 hours

Start antibiotics within **1 hour** of discovering a fever

DO NOT GIVE ANYTHING RECTALLY, INCLUDING MEDICATION. DO NOT TAKE TEMPERATURES RECTALLY



* If penicillin ALLERGY or receiving or clearing high dose IV methotrexate, use cefepime instead of piperacillin-tazobactam

** Central line associated infection (CLABSI) may present as fever and/or rigors related to recent access to the CVAD, infection at the catheter exit site or as infection along the subcutaneous course of the catheter

*** Redraw culture from all lumens to ensure negative before discontinuation of antibiotics

**** If all criteria met except no evidence of hematological recovery see APPHON guideline

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