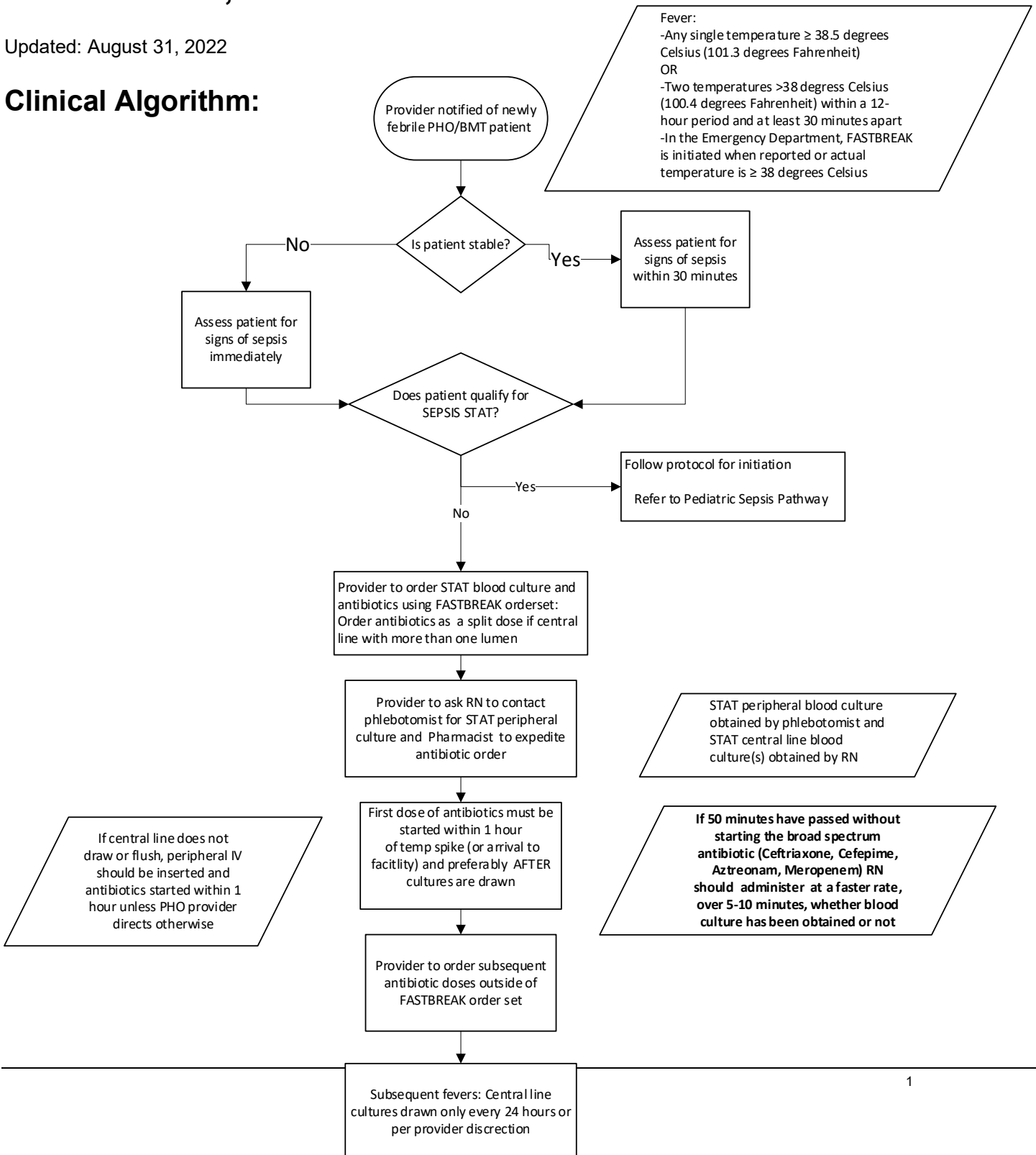


# PEDIATRIC FEVER IN HEMATOLOGY-ONCOLOGY/BMT PATIENTS (FASTBREAK), INPATIENT, OUTPATIENT, AND EMERGENCY DEPARTMENT, PATHWAY

Updated: August 31, 2022

## Clinical Algorithm:



## Clinical Pathway Summary

**CLINICAL PATHWAY NAME:** Pediatric Fever in Hematology-Oncology/BMT Patients (FASTBREAK)

**PATIENT POPULATION AND DIAGNOSIS:** Pediatric Hematology and Oncology (PHO)/ Bone Marrow Transplant (BMT) patients presenting with a fever while in clinic, inpatient setting, or Emergency Department.

**APPLICABLE TO:** HDVCH and Regionals

**BRIEF DESCRIPTION:** To provide guidance for the pediatric hematology and oncology/BMT patient presenting with fever with the goal to administer the appropriate antibiotic within an hour of the initial fever spike.

**OPTIMIZED EPIC ELEMENTS (if applicable):** FASTBREAK order set

**IMPLEMENTATION DATE:** August 2022

**LAST REVISED:** August 2022

## Clinical Pathways Clinical Approach

### TREATMENT AND MANAGEMENT:

- A. RN notifies Provider (Resident to notify Attending Physician off hours) of fever in a Peds Heme-Onc/BMT patient
  - I. Fever is defined as any single temperature > 38.5 degrees Celsius (101.3 degrees Fahrenheit) or two temperatures >38.0 degrees Celsius (100.4 degrees Fahrenheit) within a 12-hour period and at least 30 minutes apart.
  - II. In the Emergency Department, FASTBREAK is initiated when reported or actual temperature is  $\geq$  38 degrees Celsius
  - III. Initiation of the FASTBREAK protocol may be recommended by the provider even without fever parameters having been met in patients at severe risk of sepsis or on steroids. Attending PHO/BMT Physician should make the final decision.
  - IV. For patients at home, parents have been counseled to call with a fever of 101 or greater.
- B. Provider assesses unstable patient within 5 minutes; stable patient within 30 minutes.
  - I. Monitor carefully for signs of sepsis
    - a. If patient qualifies for a SEPSIS STAT, (refer to sepsis pathway) follow standard protocol for initiation and follow up.
- C. Provider orders stat blood culture(s) and antibiotic(s) using the "FASTBREAK" order set.
  - I. Cultures should be drawn STAT from one peripheral site and each lumen of a central line. See [HDVCH blood culture policy](#)
  - II. Order first broad-spectrum antibiotic dose to be split among the total number of lumens if the patient has a multiple lumen central line.
    - a. If ordered, vancomycin dose is not split among lumens.
    - b. Cefepime is often the 1st antibiotic of choice for a PHO patient unless contraindicated
  - III. BMT patients are often already on antibiotics, but another may be added, or changes made in the orders.
  - IV. Notify RN that orders were placed
  - V. RN notifies phlebotomist to draw STAT peripheral culture (to be drawn within  $\frac{1}{2}$  hour of initial fever spike).

- VI. RN notifies Pharmacist as soon as “FASTBREAK” antibiotics have been ordered to expedite order verification, production, and delivery of antibiotic(s).
- D. First dose of antibiotics should be started within an hour of temp spike, preferably within 30-40 minutes, AFTER cultures are drawn.
  - I. First dose of antibiotic is split between all central line lumens.
    - a. In the event where antibiotics are not delivered as “split dose”, do not reorder, but administer as dispensed to ensure antibiotic is infused within the 60-minute timeframe
  - II. Subsequent doses alternated between lumens until bacteria is isolated (if only one lumen) then treat the affected lumen. If infection is systemic and not isolated to one lumen, no need to alternate lumens.
  - III. Give initial dose of antibiotics through CVL, including patients with signs of sepsis, unless family says that child was well at home until they flushed the catheter leading to chills and fever OR RN notes cellulitis over port site OR clinical deterioration at time of CVL access.
  - IV. If central line does not draw OR flush, peripheral IV should be inserted and antibiotics completed within 60 minutes unless PHO provider directs otherwise.
- E. **Following assessment and placement of initial FASTBREAK orders: Provider should place orders for subsequent antibiotic doses outside of the FASTBREAK order set.**
- F. For subsequent fevers: Central cultures only drawn every 24 hours, or at provider discretion.

## Pathway Information

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**CONTRIBUTOR(S):** Kellie Joyce, RN

**EXPERT IMPROVEMENT TEAM (EIT):** *Peds Sepsis*

**CLINICAL PRACTICE COUNCIL (CPC):** Children’s Health

**CPC APPROVAL DATE:** September 15, 2022

**OTHER TEAM(S) IMPACTED:** Pharmacy, lab, nursing

## References

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Pulcini CD, Lentz S, Saladino RA, et al. Emergency management of fever and neutropenia in children with cancer: A review. *Am J Emerg Med*. 2021;50:693-698. doi:10.1016/j.ajem.2021.09.055

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