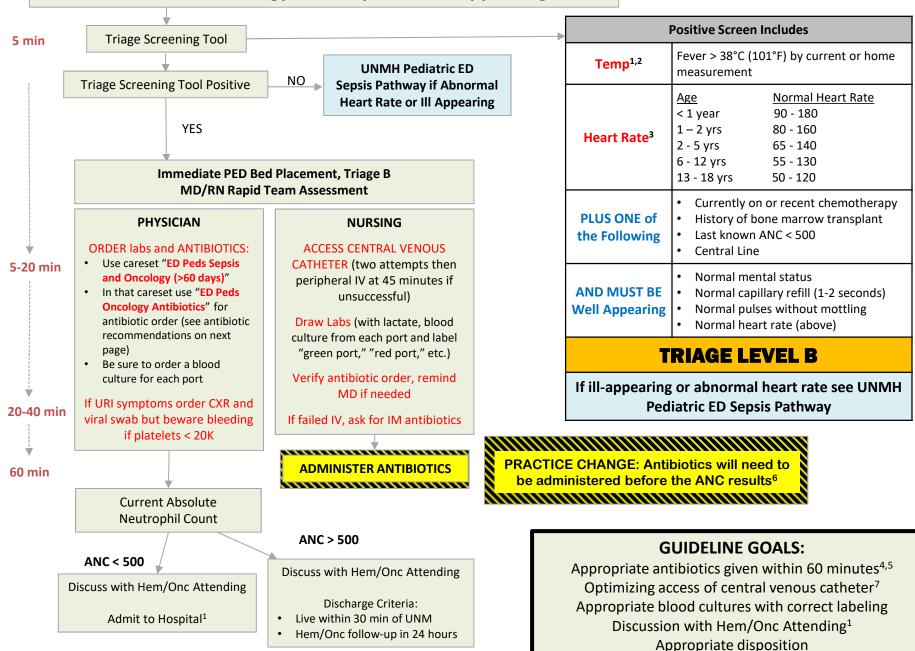
UNMH Fever and Oncology Pathway in a Well Appearing Child



ANTIBIOTIC RECOMMENADATIONS⁸

Use "ED Peds Oncology Antibiotics"

Suspect Neutropenia if:

Oncology attending suspects neutropenia on pre-arrival call **OR**ANC < 500 within the last week

Neutropenia Unlikely or Unsure ²	Ceftriaxone
Suspected Neutropenia ^{1,2,8}	Cefepime
Anaphylactic penicillin allergy (Neutropenia unlikely and Suspected Neutropenia) ^{2,8}	Aztreonam
Septic Oncology Patient (+/- Neutropenia) ¹ <u>Use UNMH Pediatric ED Sepsis Pathway</u>	Cefepime and Vancomycin

If Ceftriaxone is given and ANC results < 500 then give appropriate dose of Cefepime

Recommended Labs ^{1,8}: STAT CBC/Diff, CRP, UA/Culture
Blood culture for EACH PORT
If URI symptoms consider: CXR, viral swab but beware bleeding for platelets < 20K

Common Antibiotic Dosing:

Cefepime

<10kg: 50mg/kg q8h 10-12kg: 550 mg q8h 13-15kg: 700 mg q8h 16-18kg: 850 mg q8h 19-22kg: 1000 mg q8h 23-27kg: 1250 mg q8h 28-32kg: 1500 mg q8h 33-37kg: 1750 mg q8h >37kg: 2000 mg q8h

Ceftriaxone

<10kg: 50 mg/kg q24h 10-12kg: 550 mg q24h 13-15kg: 700 mg q24h 16-18kg: 850 mg q24h 19-22kg: 1000 mg q24h 23-27kg: 1250 mg q24h 28-32kg: 1500 mg q24h 33-37kg: 1750 mg q24h >37kg: 2000 mg q24h

Aztreonam

<14kg: 30 mg/kg q8h 14-16kg: 400 mg q8h 17-19kg: 500 mg q8h 20-23kg: 600 mg q8h 24-26kg: 700 mg q8h 27-29kg: 800 mg q8h 30-33kg: 900 mg q8h 34-36kg: 1000 mg q8h 37-39kg: 1100 mg q8h 40-43kg: 1200 mg q8h 44-46kg: 1300 mg q8h 47-49kg: 1400 mg q8h 50-53kg: 1500 mg q8h 54-56kg: 1600 mg q8h 57-59kg: 1700 mg q8h 60-63kg: 1800mg q8h 64-66kg: 1900 mg q8h >67kg: 2000mg q8h

Vancomycin

<13kg: 15mg/kg q6h 13-14kg: 200mg q6h 15-18kg: 250mg q6h 19-21kg: 300mg q6h 22-24kg: 350mg q6h 25-27kg: 400mg q6h 28-30kg: 450mg q6h 31-35kg: 550mg q6h 36-37kg: 550mg q6h 38-45kg: 625mg q8h 46-53kg: 750mg q8h 54-62kg: 875mg q8h 54-62kg: 875mg q8h 574kg: 1000mg q8h >74kg: 1250mg q8h

Other Antibiotic Dosing		
Antibiotic	First Dose IV	Maximum
Meropenem	20 mg/kg	1 gram
Clindamycin	10 mg/kg	600 mg
Ertapenem	15 mg/kg	1 gram

- 1. Meckler G, Lindemulder S. Fever and neutropenia in pediatric patients with cancer. Emerg Med Clin North Am. 2009;27(3):525-544
- 2. Ku B, Bailey C, Balamuth F. Neutropenia in the Febrile Child. Pediatric Emergency Care: May 2016; 329 (5): 329–334.
- 3. Bonafide CP, Brady PW, Keren R, Conway PH, Marsolo K, Daymont C. Development of Heart and Respiratory Rate Percentile Curves for Hospitalized Children. Pediatrics. Volume 131, Number 4, April 2013.
- 4. Fletcher, M., Hodgkiss, H., Zhang, S., Browning, R., Hadden, C., Hoffman, T., Winick, N. and McCavit, T. L. (2013), Prompt administration of antibiotics is associated with improved outcomes in febrile neutropenia in children with cancer. Pediatr Blood Cancer, 60: 1299–1306. doi:10.1002/pbc.24485
- 5. McCavit TL, Winick N. Time-to-Antibiotic Administration as a Quality of Care Measure in Children with Febrile Neutropenia: A Survey of Pediatric Oncology Centers. *Pediatric blood & cancer*. 2012;58(2):303-305. doi:10.1002/pbc.23148.
- 6. Lamble A, Nguyen T, Lindemulder, T, Spiro, D Malempati S, Nolt D, Stork L. A Clinical Pathway to Reduce Time to Antibiotic Administration in Pediatric Cancer Patients With Fever and Potential Neutropenia. Journal of Clinical Pathways. 2015;1(2):33–42
- 7. Volpe D, Harrison S, Damian F, Rachh P, Kahlon P, Morrissey L, Mack J, Akenroye A, Stack A. Improving Timeliness of Antibiotic Delivery for Patients With Fever and Suspected Neutropenia in a Pediatric Emergency Department. Pediatrics Jul 2012, 130 (1) e201-e210;
- 8. Freifeld A, Bow E, Sepkowitz K, Boeckh M, Ito J, Mullen C, Raad I, Rolston K, Young J, Wingard J. Clinical Practice Guideline for the Use of Antimicrobial Agents in Neutropenic Patients with Cancer: 2010 Update by the Infectious Diseases Society of America. Clinical Infectious Diseases. 2011; 52, (4): 56-93