



Yukon-Kuskokwim HEALTH CORPORATION

Clinical Guideline

Fever $\geq 100.4^{\circ}\text{F}$ in Infants 0-90 Days

Infant 0-90 days with recorded or reported rectal temperature $\geq 100.4^{\circ}\text{F}$.

Sick-appearing

- Evaluate patient in Bethel ED.
- Perform immediate work-up:
 - CBC with manual differential
 - Procalcitonin
 - Blood culture
 - U/A, urine culture
 - CXR
 - LP if stable
 - RSV/flu/COVID swabs

Admit or medevac, as appropriate.
Give antibiotics. (See box.)

Well-appearing

0-28 days

29-60 days

61-90 days

- Evaluate patient in Bethel ED.
- Perform work-up:
 - CBC with manual differential
 - Procalcitonin
 - Blood culture
 - U/A, urine culture
 - Consider CXR, RSV/flu/COVID swabs

Meets all Low Risk
Criteria (see box)?

No

Yes

- Perform LP.
- Give antibiotics. (See box.)
- Consider admission.

Evidence of UTI,
AOM, or PNA?

Yes

No

- Consider LP based on clinical status, age, etc. LP not mandatory in well-appearing infants.
- Admission or daily follow-up until blood culture negative at least 36 hours.
- If UTI, treat with ceftriaxone (see box).
- If AOM or PNA, use clinical judgment to decide on antibiotic treatment. If treating, give ceftriaxone per box.

If concerned for bacterial meningitis:

- If suspicion for bacterial meningitis, consult pediatrics and strongly consider medevac.
- If transferring patient, send any extra CSF on ice with patient.

HSV Work-up

- CSF HSV PCR
- CSF Multiplex PCR
- Blood HSV PCR
- CMP
- Nasopharyngeal, conjunctival, and anal swabs and vesicle fluid for HSV PCR.

Village Management

- If well-appearing and meets criteria for evaluation in Bethel, send on next commercial flight. If travel to Bethel will be delayed, infant must have recheck with health aide within 12 hours and be followed at least daily until seen in Bethel.
- If infant is not well-appearing, consult peds to discuss treatment options.
- If giving ceftriaxone IM in the village, DO NOT say "ceftriaxone per CHAM." Give the health aide the exact dose.

Any temp >102.2
OR
Temp >100.4 x48 hours
OR
Does not meet all Low Risk
History & Exam Criteria?

Yes

No

- Evaluate patient in Bethel.
- Perform work-up:
 - U/A, urine culture
 - Consider bloodwork and LP based on history, exam, and risk factors.

- Daily rechecks in village, outpatient clinic, or ED until improving.
- Low threshold to bring to Bethel ED if any concerns.

- LP and antibiotics unnecessary unless clinical status changes.
- Daily follow-up until blood culture negative at least 36 hours.

Acetaminophen

- Acetaminophen should NOT be given prior to vaccines, as there is some evidence it blunts the immune response.
- Acetaminophen should NOT be given around-the-clock in this age group.
- Acetaminophen MAY be given after a fever has been documented and the infant evaluated by a health aide or provider **EXCEPT in babies 61-90 days old who are being managed in the village as this may blunt the fever curve. If a child in the village is already scheduled to come to Bethel for further evaluation, appropriate dosing of acetaminophen may be given.**

Antibiotic Treatment

- 0-7 days: please consult a pediatrician, pharmacist, or Neofax.
- 8-28 days:
 - If well-appearing and low suspicion for meningitis: ampicillin 50 mg/kg IV Q8h AND gentamicin 4 mg/kg IV Q24h.
 - If well-appearing and any suspicion for meningitis: ampicillin 75 mg/kg IV Q6h AND cefepime 50 mg/kg IV Q12h.
 - If ill-appearing and/or positive CSF Gram stain: please consult a pediatrician and/or a pharmacist.
- 29-90 days: ceftriaxone 50 mg/kg IV/IM Q24h OR if worried about meningitis 100 mg/kg IV once then 50 mg/kg IV Q12h.
- Continue IV/IM antibiotics until cultures are negative at least 36 hours and patient is clinically stable or until specific organism and sensitivities are available to direct therapy.
- Dose #2 of ceftriaxone may be given 12-24 hours after dose #1.
- If known HSV exposure, seizures, or severe illness: acyclovir 20 mg/kg IV Q8h with IVF, perform HSV work-up (see box), and consult pediatrics.

Low Risk Criteria

History & Exam

- Well-appearing (soothable, feeding well, etc.)
- No significant prior hospitalization.
- Gestational age >37 weeks.
- No antibiotics in the past 7 days.
- No evidence of invasive bacterial infection like cellulitis or osteomyelitis.

Lab

- Absolute neutrophil count (ANC) <4000
- Procalcitonin <0.5

CSF

- Consider Multiplex PCR if any suspicion for meningitis.
- See Harriet Lane (not the results in RAVEN) for normal results by day of life.
- Do not use correction formulas for traumatic LPs.

Special Circumstances

1. Immunizations within 24 hours of single fever <102.2 and meets all history & exam low-risk criteria: no work-up necessary but must follow-up in village or Bethel within 12-24 hours. If fevers recur, rise above 102.2 , or infant is not well-appearing, perform evaluation as above.
2. Pre-treatment with antibiotics but otherwise meeting low-risk criteria: infant must be observed a full 48 hours off antibiotics.
3. Unsuccessful LP: treat if appropriate and consider a repeat LP in 12-24 hours and determine treatment course based on cell counts. If repeat LP not performed or unsuccessful, either treat for 10-14 days with meningitic dosing of IV antibiotics or stop antibiotics at 48 hours and observe infant for an additional 48 hours off antibiotics. Consider admission.

This guideline is designed for the general use of most patients but may need to be adapted to meet the special needs of a specific patient as determined by the medical practitioner.
Approved by MSEC 7/6/21. Click [here](#) to see the supplemental resources for this guideline.
If comments about this guideline, please contact Leslie_Herrmann@ykhc.org.