



Risk Factors for UTI

- Constipation
- Bubble baths
- Poor hygiene
- Uncircumcised boy

High Concern for UTI

- Fever >102
- No source
- Fever >48 hours
- History of UTI

May use [UTI Risk Calculator](#) to help risk-stratify.

Signs and Symptoms of UTI

- Fever
- Dysuria
- Hematuria
- Vomiting
- Abdominal pain
- New daytime or nighttime wetting
- Increased frequency of voiding
- Malodorous urine

Differential Dx for Dysuria

- Vulvovaginitis
- Candida infection
- Bowel-bladder dysfunction
- Poor hygiene
- Sexual abuse (consider collecting dirty urine for GC/CT; see [Suspected Pediatric Sexual Abuse Procedure Guideline](#) for more information)
- Age-appropriate self-exploration
- UTI

Resistance

- Empiric drug choice is based on local resistance patterns (see [YKHC Antibiogram](#)) and consultation with ID specialist.
- If urine culture grows an Extended-Spectrum Beta-Lactamase (ESBL) producing organism, please obtain a pediatrics consult and add ESBL to Problem List.

Indications for VCUg

- Recurrent UTI.
- Major anomaly on ultrasound. Consult pediatric urologist and consider obtaining VCUg in Anchorage.

Note: study available in Bethel 1-2 times per year when radiologist in-house.

Child less than 5 years of age with concern for UTI

Obtain catheterized or true clean catch urine sample for urinalysis (UA) AND culture.

UA positive for leukocyte esterase and/or nitrites and/or microscopy >5 WBC/HPF.

Ensure urine culture is sent.

Patient appearing toxic or not tolerating PO?

Empiric antibiotic treatment:
ceftriaxone
50 mg/kg/day
IV/IM

Consider empiric treatment with cephalexin 20 mg/kg/dose Q8h x7-10 days. Max dose 1000 mg. Note: consider 10 day course if <6 mo. May defer empiric treatment and await culture sensitivities.

Urine Culture Results

- Definite UTI: urine culture with single species $\geq 50,000$ CFU/mL in a catheterized sample or $\geq 100,000$ CFU/mL in a clean catch sample.
- Possible UTI: urine culture with single species $\geq 10,000$ CFU/mL in a catheterized sample or $\geq 50,000$ CFU/mL in a clean catch sample. Clinical correlation recommended.

No UTI. Stop antibiotics.

Once clinically improved and sensitivities established, switch to oral antibiotics

Begin empiric treatment and narrow coverage per sensitivities.

If first UTI and ≤ 24 months, perform renal ultrasound at first opportunity to evaluate anatomy.

Renal abnormality identified.

- If mild pelviectasis identified, repeat ultrasound in 3 months.
- If any other anomaly identified, consult pediatrics.

Symptomatic Care

- If dysuria, irritation, etc. recommend A+D ointment and instruct family to do soaks/baths with warm water and no soap.
- May consider baking soda $\frac{1}{4}$ cup per tub.

Village Management

- DO NOT treat any child empirically in the village without sending clean catch urine sample for culture.
- Consider symptomatic care (see box) for possible vulvovaginitis.
- If patient has dysuria, increased frequency, new-onset enuresis, and/or abnormal clean catch urinalysis, consider further evaluation in Bethel.

DO NOT...

- Treat any child for UTI empirically without culture pending.
- Routinely collect urine via bag.
- Routinely perform a test of cure.
- Routinely start UTI prophylaxis.
- Perform suprapubic taps.
- Routinely obtain bloodwork for uncomplicated UTI.
- Add UTI to Problem List until confirmed by culture.

NOTE: For infants <90 days with fever, see the [Fever in Infants 0-90 Days Guideline](#).

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 12/7/21.
Click [here](#) to see the supplemental resources for this guideline.
If comments about this guideline, please contact Jennifer_Hampton@ykhc.org.