AAP: Fever in 8-60 days old

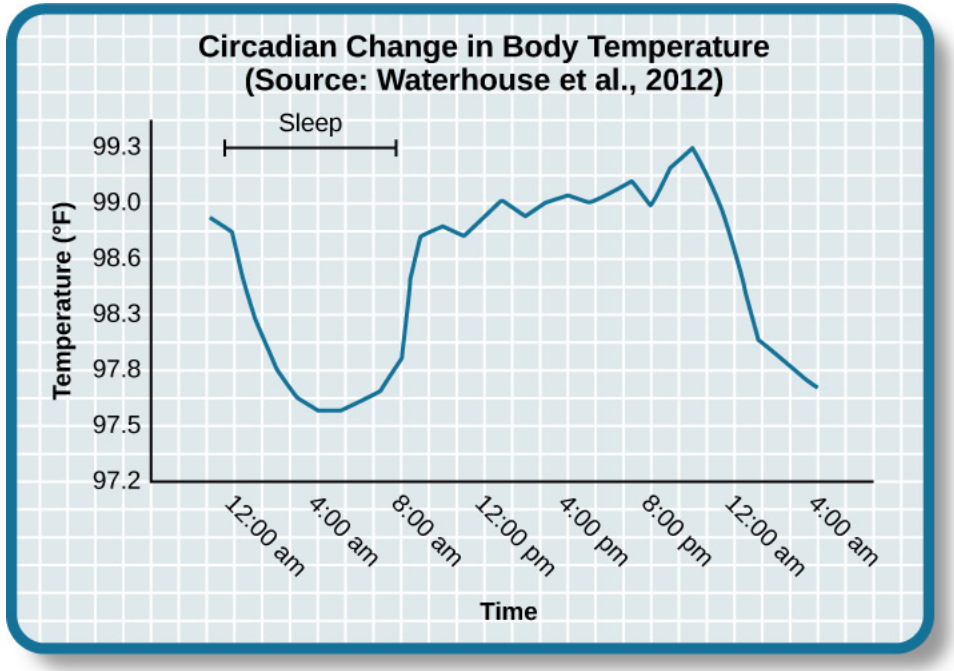
Fever History

Fever work-up guidelines

- Measured temperature and method of measurement
  - Tactile temperature does not correlate accurately with true fever
  - Fever definition: 38.0 C (100.4 F)
  - Many parents call 99-100 F a fever
- Duration
  - If many days, did the child have a temp ≥ 100.4 *every single day*
- Hx/FH of febrile seizures
- Management used at home
  - If antipyretics given at home, what med and what dose? What time last given? (helps interpret temperature seen in clinic now)
  - Parents are often underdosing because they are using an old weight from a prior visit
- Ill contacts: siblings, daycare / preschool

Fever Management

- Antipyretics
  - Acetaminophen / Paracetamol (Tylenol, Genexa) 160mg/5mL (infant & child) in USA, 12-15 mg/kg PO/PR q4-6 hours
  - Ibuprofen (Advil, Motrin) child 100mg/5mL, infant 100mg/2.5mL, 10 mg/kg PO q6 hours
  - Tip: weight of child in kg / 2 = dose in mL of *children's* acetaminophen (round down, for q6 hr dosing) or ibuprofen, Exact Dosing Calculator
  - Aspirin not recommended for children
    - Risk of Reye's syndrome
- Cooling measures
  - Not necessary unless child uncomfortable
  - Tepid wet cloths to forehead, armpits better than placing in bath
    - Drowning risk if not closely observed, febrile seizure



Helpful to explain to parents

- Circadian variation in temperature – body temp is always higher evening / early nighttime
- Chills precede (help the body make) fever, and when fever breaks children will sweat – these findings are normal

Fever Myths from Seattle Childrens

Fever Myths to Dispel
These are all NOT true

- Fever is dangerous
  - Fever will not cause brain damage until it reaches 107-108 F (and not always then)
    - Fevers from infections do not cause brain damage generally
    - Fevers are part of the body's way of fighting infections, and are beneficial
- If fever goes down (+/- antipyretics) but returns, or if it doesn't go all the way to normal with antipyretics, this signifies serious disease
- Fever means antibiotics are needed (use influenza, COVID as examples of viral disease when a febrile illness doesn't benefit from antibiotics)
- Parents should bring their child back for a certain cutoff height of fever
  - How the child appears (be careful because some parents' definition of "lethargic" is slightly less active than usual) is much more important than the fever height
  - That said, a repeat exam may be warranted for fever > 104-106 depending on age of patient and temperature at time of first examination

Helpful Healthline Article

Types of Thermometers

- Digital or mercury thermometer for rectal, oral, axillary
  - Mercury thermometers difficult to read, must be in place 3 minutes
  - Digital thermometers require fresh batteries
- Rectal temperature is the gold standard, fever = 38 C (100.4 F) or higher
- Oral more accurate in ≥3yo, must wait 15 minutes after eat or drink
  - Typically 0.3-0.6 C (0.5-1.0 F) lower than rectal temperature
- Axillary temperature typically 0.3-0.6 C (0.5-1.0 F) lower than oral [so 0.6-1.2 C (1.0-2.0 F) lower than rectal]
  - Wider variability than rectal or oral
- Tympanic thermometers, if accurate, match rectal temperatures
  - Not recommended for < 6 months old due to small ear canals
  - Cerumen may make the measurement inaccurate (and parent won't know cerumen is present)
- Non-contact forehead or temporal thermometers 0.3-0.6 C (0.5-1.0 F) lower than oral
  - Good for screening, but not for accurate measure of fever to guide work-up and management
- Forehead plastic strips are not accurate and should not be recommended

Prolonged Fever

- Discharge instructions should include: return if fever 100.4 F (38 C) or higher every single day for 5 days in a row
- On return, evaluate for:
  - Complication of prior diagnosed viral URI: otitis media, sinusitis, pneumonia
  - Strep pharyngitis (in appropriate age group) that didn't manifest on first visit
  - Consider urinalysis (r/o UTI) and CXR (occult pneumonia)
  - Consider comprehensive respiratory viral panel if available
  - Signs of Kawasaki disease (including Atypical Kawasaki) or MIS-C
  - Signs of lymphadenitis, abscess, meningitis, septic arthritis, osteomyelitis, acute abdomen, malignancy, infectious mononucleosis, cat scratch disease
  - If no new source identified and patient well-appearing, particularly if fever < 102 and child > 3-6 months old, observe for 3 more days for fever resolution
- Fever of unknown origin = fever for 8 days or longer