Urgent Care Evidence Based Guideline: Constipation

	Infants < 6 months	Infant 6-12 months	12 months and older

Not impacted	• Breastfed infants with normal growth pattern can have infrequent stools, reassurance may be appropriate if stools are soft but infrequent
	• In infants, grunting, straining, and turning red can be normal if subsequent stool is soft
	• 0.5-1 ounce prune juice or pear juice daily as needed to soften stools
		• Sorbitol containing fruit purees if infant has started on solids (pureed prunes)
		• 2-3 ounce prune or pear juice daily
		• Lactulose syrup 1-2 ml/kg/day given 1-2 times per day
		• Milk of Magnesia 1-3 ml/kg/day divided once or twice daily (do NOT use Milk of Magnesia in infants/children with known kidney disease
			• Miralax 0.4-0.8 grams/kg/day (max 17 grams per day) once daily (Sood, Chronic functional constipation and fecal incontinence in infants and children: Treatment., 2021) (Lexidrug, 2025) (Lexidrug, 2025)
			  ○ **Miralax 17 grams = 1 capful = approximately 4 tsp**
			  ○ Ideally drink dose within 30 minutes, may be less effective if consumed over several hours
			  ○ Miralax should be mixed in clear liquid NOT food and ratio kept consistent:
			  ▪ 4 tsp in 8 oz.
			  ▪ 3 tsp in 6 oz.
			  ▪ 2 tsp in 4 oz.
			  ▪ 1 tsp in 2 oz.
			• Alternate: Lactulose syrup 1-2 ml/kg/day given 1-2 times per day

Impacted	• Give half of a solid pediatric glycerin suppository to clean out rectum or rectal stimulation with lubricated rectal thermometer (occasional/rare use of glycerin recommended due to irritation of rectal mucosa, also tolerance can develop)
	• GI recommends **against** use of liquid glycerin suppository in infants < 6 months due to lack of literature regarding safety and efficacy
		• Give solid or liquid glycerin suppository to clean out rectum or rectal stimulation with lubricated rectal thermometer (recommend only occasional/rare use as tolerance can develop)	• For smaller impaction: Miralax 1 gram/kg/day divided BID x 3-6 days
			• For larger impaction: Miralax 1.5 grams/kg/day divided BID x 3 days, then switch to maintenance dose (Lexidrug, 2025) in the non-impacted box above
			  ○ Max 42.5 grams per dose BID (2 ½ capfuls per dose BID)
			  ○ Add stimulant laxative (Senna) on day 3 if no bowel movement
			  ▪ 2-6 years old: 2.5 ml/day or ½ tablet
			  ▪ 6-12 years old: 5 ml/day or 1 tablet
			  ▪ > 12 years old: 10 ml/day or 2 tablets
			  ○ Dosing of Senna based on:
			  ▪ Liquid (8.8 mg/5ml)
			  ▪ Tablet (8.6 mg)
			• Alternate: for significant pain, vomiting, or family desire for enema, then switch to maintenance dose above
			  ○ < 2 years: liquid or solid glycerin suppository
			  ○ 2-4 years: one half (33 ml) Pediatric Fleets enema (29 ml of sodium phosphate)
			  ○ 5-11 years: one (66 ml) Pediatric Fleets enema (59 ml of sodium phosphate)
			  ○ ≥ 12 years: one (133 ml) Adult Fleets enema (118 ml of sodium phosphate)
			• Only one Fleets enema dose per 24-hour period (black box warning)
			• Do NOT use enema if child is dehydrated, will not be as effective and will contribute to increased absorption/abdominal cramping.
			• Do NOT repeat sodium phosphates (Fleet) enema without bowel movement in between doses; increased risk of toxicity and death exists in those patients that received more than 1 dose without a bowel movement in between doses.
			• Do NOT use sodium phosphate (Fleet) enema in patients with severe renal impairment.
			• Advise parents to keep toilet training children in diapers or pulls ups during clean-out, older children need easy access to toilet during this time
			• Any child who continues to have thick pasty fecal soiling of underwear after the initial cleanout is assumed to have had an incomplete cleanout, continues to have fecal impaction, and need a repeat cleanout

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Purpose: To evaluate and initiate treatment of constipation.

Definitions:

Constipation: difficulty passing stools, commonly associated with excessive firmness of stools and a decrease in the frequency of defecation. Functional fecal retention (stool withholding) is the most common cause of childhood constipation and fecal soiling. It consists of repeated attempts to avoid defecation. Persistent delay of urge to stool results in dilation of the rectum, with a fecal mass that results in muscle fatigue and incompetence of the anal sphincter. Non retentive fecal soiling, if not due to anatomic problems, may be a manifestation of an emotional disturbance in a school-aged child. It can also be the result of delayed acquisition of toilet training skills. (Sood, Constipation in infants and children: Evaluation., 2023) (Sood, Recent-onset constipation in infants and children., 2023)

Encopresis: fecal incontinence often due to repeated attempts to delay stooling in a child who is otherwise expected to have achieved bowel control.

Fecal impaction: a large, firm stool ball in the rectum, typically due to longstanding constipation. It is diagnosed as either a hard mass palpated in the abdomen, a hard ball of stool in the rectum on rectal exam, or a large rectal mass of stool on abdominal x-ray (KUB). (Tabbers, 2014)

Etiology:

Constipation is common with peak incidence occurring between 2 and 4 years of age, at the onset of toilet training. (Rasquin, 2006) (Sood, Constipation in infants and children: Evaluation., 2023) (Sood, Recent-onset constipation in infants and children., 2023)

Excessive dairy intake, recent illness, and change in routine are the most often encountered causes of constipation.

- Dysfunctional States
    - Developmental (parent or child)
    - Dietary (introduction of solid foods or cow's milk, dehydration or inadequate fluid intake, excessive cheese or milk intake, low fiber diet, excessive fiber intake with inadequate fluids, milk protein sensitivity, formula intolerance in infants < 6 months old, insufficient breast milk intake in infants < 6 months with slow weight gain, malnutrition)
    - Situational (initiation of toilet training, toilet phobia or refusal, school entry and school bathroom avoidance, febrile or prolonged illness, surgery or bed rest, disruption of child's usual routine, excessive parental interventions (frequent rectal stimulation)
    - Psychogenic (Autism, OCD, ADHD, ODD, mood disorder, depression, anorexia nervosa
    - Constitutional (genetic predisposition, sedentary lifestyle)

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- Altered Anatomy and Physiology
    - Structural (anal stenosis, imperforate anus in neonate, anterior displaced anus, anal fissure, diaper dermatitis, anal dermatitis including perianal strep, acquired inflammatory stricture, abdominal pelvic mass)
    - Motility Disorders (Hirschsprung's disease, pseudo-obstruction, enteric neuromuscular disorders, colonic inertia or slow transit constipation)
    - Abnormal abdominal musculature
    - Abnormal innervations (Myelomeningocele, spinal cord tumor or injury, tethered cord)
    - Hypotonia
    - Connective tissue disorder
- Metabolic or endocrine dysfunction (hypothyroidism, hypercalcemia, Celiac disease, Diabetes insipidus, Diabetes mellitus)
- Drugs, including side effects of medication
- Heavy metal ingestion
- Lead poisoning

Differential Diagnoses

- Normal stooling pattern of infancy, worried parent
- Dyschezia: Presents as infants 0-9 months as straining and crying, typically for about 10 minutes, with passage of soft stool. Thought to be due to young infant's inability to coordinate the voluntary and involuntary body movements necessary to expel stool. Reassure families this will improve as the baby gets older and develops these skills (Sood, Constipation in infants and children: Evaluation., 2023) (Sood, Recent-onset constipation in infants and children., 2023)
- Any of the constipating conditions (see etiology above)
- ***Consider associated urinary problems; there is a significantly increased incidence of UTI in patients with constipation***

Guideline

Subjective Data/History

How does the family define constipation?

- History of stooling
- Age of onset of constipation
- Usual pattern of elimination
- Description of stools, amount, consistency, presence of blood
- Associated symptoms including GERD, straining, abdominal or anal pain, urgency, diarrhea, urinary incontinence, withholding behaviors
- Duration of constipation

- Dietary intake
    - Food intake, emphasis on fiber
    - Fluid intake, emphasis on milk, caffeinated fluids and water
    - Dairy intake, emphasis on cheese (Tabbers, 2014)

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- Social History
  - Changes associated with onset of constipation
  - Toilet training history
- Previous Medical History
  - Febrile, viral illness, injury, or surgery prior to onset of the constipation
  - Previous treatment and its effectiveness

Objective Data/Physical Exam

- If possible, assess growth chart to determine if weight gain over time has been appropriate. Slow weight gain or weight loss suggests organic etiology. In breastfed infants, slow weight gain may be an indication of insufficient breast milk intake.
- In infants and children with a history of constipation since birth, assess location of anus as well as muscle tone and lumbar spine for presence of signs of occult tethered cord
- A fecal mass is commonly found
- Evidence does not support the use of digital rectal examination to diagnosis functionalconstipation. May consider rectal examination to assess (Sood, Constipation in infants and children: Evaluation., 2023) (Sood, Recent-onset constipation in infants and children., 2023) (Tabbers, 2014)
  - Location of anus
  - Amount and consistency of stool
  - Hemoccult of stool

Diagnostic Studies

- **Evidence does not support using an abdominal X-ray to diagnose functional constipation**. (Tabbers, 2014)
- May consider KUB if diagnosis is unclear after physical exam and history

Red Flags (Tabbers, 2014)

- Constipation starting before 1 month of age
- Meconium passed > 48 hours
- Family history of Hirschsprung's disease
- Ribbon stools
- Blood in stools without anal fissures
- Failure to thrive
- Fever
- Bilious vomiting
- Abnormal thyroid gland
- Severe abdominal distention
- Perianal fistula
- Abnormal position of anus
- Absent anal or cremasteric reflex
- Decreased lower extremity strength and tone or reflexes
- Sacral dimple or hair tuft
- Gluteal cleft deviation

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- Extreme fear during anal inspection
- Anal scars

Treatment: See Chart: Treatment of Constipation in Urgent Care

Ultimately need to identify the etiology of the constipation to prevent recurrence.

Education of Patient/Family

- If family is in the process of toilet training and child is having significant stool withholding behavior and fecal impaction, advise family to temporarily discontinue toilet training efforts, place child back in diapers or pull ups full-time until impaction is resolved and withholding behavior improves. Parents should discuss timing of re-initiating toilet training with their child's primary care doctor. (Sood, Chronic functional constipation and fecal incontinence in infants and children: Treatment., 2021)
- Maintenance of normal bowel function
    - Goal is soft, normal caliber, controllable bowel movements approximately once per day.
    - Child, especially with a history of constipation, will need to have normal caliber bowel movements for minimum of two months before weaning off the laxative.
    - There is no evidence that tolerance develops to osmotic or lubricant laxatives.
- Dietary changes to improve stooling and decrease length of laxative therapy
    - Eliminate cheese from diet for 1 month
    - Limit milk to 16 oz/day
    - Encourage fluid intake based on body weight (evidence does not support the use of *extra* fluid intake beyond maintenance in the treatment of functional constipation.) (Tabbers, 2014)

Weight in Kilograms	Weight in Pounds	Fluids per day
4.5 kg	10 pounds	16 ounces (2 cups)
9 kg	20 pounds	30 ounces (3-3/4 cups)
13.6 kg	30 pounds	40 ounces (5 cups)
18.2 kg	40 pounds	48 ounces (6 cups)
22.7 kg	50 pounds	52 ounces (6 ½ cups)
27.3 kg	60 pounds	55 ounces (7 cups)
36.4 kg	80 pounds	60 ounces (7 ½ cups)
45.5 kg	100 pounds	70 ounces (8 ¼ cups)
54.5 kg	120 pounds	75 ounces (9 cups)
63.6 kg	140 pounds	80 ounces (10 cups)
68.2 kg	150 pounds	85 ounces (10 ¼ cups)

- Encourage foods rich in fiber (5 + age in years = total daily needs) Sood-Functional Constipation (2021) says 5-10 + age in years = total daily needs
    - Increase water intake before increasing fiber.
    - Increase fiber slowly to avoid abdominal pain from gas.
    - Evidence does not support the use of fiber supplements in the treatment offunctional constipation.

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  - Per new 2023 randomized controlled trial, could encourage consumption of 2 green kiwifruits daily to improve constipation and abdominal discomfort (Gearry, 2023)
- Evidence does not support the use of pre- or probiotics in the treatment of childhood constipation.
- Uniqueness of every child's bowel habits
- Review toileting techniques for younger, smaller children including comfortable seat, feet on the floor or stool,without fear of falling in or off toilet.
- Reward system for the child's cooperation
- Encourage normal physical activity
- Scheduled toileting 15 minutes after mealtime
- Reassure parents that constipation is generally not life threatening and resolving the problem may take months. (Sood, Chronic functional constipation and fecal incontinence in infants and children: Treatment., 2021)
- Teaching Sheets
  - Ready to use enema #1348
  - Increasing fiber in your child's diet #1471
  - One month stool and laxative calendar included a Bristol stool form scale #2142
  - Potty time #2140

Follow-up

- Recheck by pediatrician within 1-2 weeks – using a diary or log to track and record bowel movements may be helpful (Sood, Chronic functional constipation and fecal incontinence in infants and children: Treatment., 2021)
- May consider referral to CW Constipation Clinic for child with history of constipation.
- If the infant has NOT defecated normally since birth, refer to CW GI for further evaluation.

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Medical Disclaimer

This Clinical Practice Guideline (CPG) is designed to provide a framework for evaluation and treatment. It is not intended to establish a protocol for all patients with this condition, nor is it intended to replace a clinician's judgement. Adherence to this CPG is voluntary. Decisions to adopt recommendations from this CPG must be made by the clinician in light of available resources and the individual circumstances of the patient. Medicine is a dynamic science; as research and clinical experience enhance and inform the practice of medicine, changes in treatment protocols and drug therapies are required. The authors have checked with sources believed to be reliable in their effort to provide information that is complete and generally in accord with standards accepted at the time of publication. However, because of the possibility of human error and changes in medical science, neither the authors nor Children's Hospital and Health System, Inc., nor any other party involved in the preparation of this work warrant that the information contained in this work is in every respect accurate or complete, and they are not responsible for any errors in, omissions from, or results obtained from the use of this information.

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