

Encopresis

DSM-5-TR 307.7 | ICD-10-CM F98.1

Repeated soiling at or beyond age 4, usually overflow around retained stool rather than deliberate behavior.

PREVALENCE

~1-4% of school-age children

TYPICAL ONSET

Ages 4-8; must be 4+ to dx

SEX RATIO

~3-6:1 male:female

SUBTYPE

80-95% with constipation

CLINICAL PICTURE

- Chronic withholding produces a megarectum, blunted rectal sensation, and leakage of liquid stool around an impacted mass that parents report as diarrhea.
- Withholding is visible as stiffening, leg crossing, rising on toes, or hiding in a corner, and families often misread this posturing as straining to pass stool.
- The history usually includes infrequent, very large, painful stools that block the toilet, along with abdominal pain, poor appetite, and irritability.
- Children generally cannot smell their own soiling and do not feel the stool pass, so accusations of deliberate concealment are almost always mistaken.
- Nonretentive soiling, roughly 5-20% of cases, occurs with normal bowel habit and no impaction and carries more behavioral and emotional comorbidity.
- Families arrive exhausted and angry after months of assuming intent, so reframing soiling as involuntary overflow is the first therapeutic act.

DIAGNOSTIC CRITERIA AT A GLANCE

- Feces are repeatedly passed into inappropriate places such as clothing or the floor, whether the passage is involuntary or intentional.
- At least one such event per month must occur for a minimum of 3 months for the diagnosis to be made.
- Chronological age must be at least 4 years, or the equivalent developmental level, which excludes normal variation in toilet training.
- The soiling is not attributable to a substance such as laxatives or to another medical condition, except through a mechanism involving constipation.
- Specify with constipation and overflow incontinence or without, since the two subtypes require substantially different treatment plans.

NEUROBIOLOGY & PHYSIOLOGY

- Retained stool distends the rectum, reduces compliance, and blunts the sensory signal that normally generates the urge to defecate, sustaining the cycle.
- The initiating event is usually a single painful hard stool, an anal fissure, a febrile illness, coercive toilet training, or avoidance of school toilets.
- Megarectum persists long after the original pain is forgotten, which is why treatment must continue for months beyond the last soiling episode.
- Abdominal radiography is not required for diagnosis and adds radiation without changing management in the great majority of cases.
- Rectal distension also reduces functional bladder capacity, which explains why comorbid daytime wetting and enuresis are so frequent in these children.
- Red flags for organic disease include failure to pass meconium, onset in the newborn period, an empty rectal vault, ribbon stools, and failure to thrive.

PSYCHOLOGICAL MECHANISMS

- Avoidance learning drives the disorder: one painful stool teaches withholding, withholding hardens the next stool, and each cycle strengthens the avoidance.
- Toilet phobia and refusal to use school bathrooms are common and specific, and neither responds to laxatives without a graded exposure plan.
- Shame, secrecy, and hiding soiled underwear are near universal consequences of soiling and are not evidence of oppositional intent.
- Punishment and forced toilet sitting increase withholding and predict dropout, so removing coercion is a precondition for any bowel program to work.
- Nonretentive soiling more often involves oppositional dynamics, developmental delay, or major stressors, and warrants careful psychosocial assessment.

DIFFERENTIAL & COMORBIDITY

- Functional constipation with overflow incontinence is the same clinical entity under a medical name, and framing it that way helps families accept treatment.
- Hirschsprung disease, spinal dysraphism, anorectal malformation, hypothyroidism, celiac disease, and cow's milk protein allergy must be excluded on history and exam.
- Nonretentive fecal incontinence is separated by a normal bowel habit, absence of impaction, and failure to respond to laxative therapy.
- Comorbid enuresis occurs in up to a third of cases, and ADHD, anxiety, oppositional defiant disorder, and developmental delay are all overrepresented.
- Sexual abuse is not a common cause of encopresis but should be assessed when other indicators are present, without assuming it from soiling alone.

Treatment EVIDENCE-BASED MANAGEMENT

PHARMACOLOGIC

- Disimpaction comes first, using **polyethylene glycol 1-1.5 g/kg/day** orally for 3-6 days, with enemas reserved for failure of the oral route.
- Maintenance **PEG 3350 at 0.4-1 g/kg/day** is then titrated to one soft stool daily and continued for many months after soiling stops.
- Premature discontinuation is the single most common cause of relapse, so taper only after several months of consistent, painless, daily stooling.
- Lactulose is an acceptable alternative, and stimulant laxatives such as senna or bisacodyl serve as rescue agents for missed days.
- Avoid repeated enemas as the primary strategy, particularly in children with trauma histories or established toilet phobia.

PSYCHOTHERAPY

- Scheduled toilet sitting for 5-10 minutes after meals once or twice daily exploits the gastrocolic reflex and requires foot support for proper posture.
- Reward the sitting and the routine rather than the production of stool, since only the behavior is within the child's actual control.
- Behavioral therapy combined with laxatives** outperforms either component alone, and adherence rather than drug choice drives the outcome.
- Parent education reframing soiling as involuntary overflow removes blame, and by itself improves adherence and reduces family conflict.
- Graded exposure treats toilet phobia and school bathroom avoidance, which otherwise silently defeat an adequate medical regimen.

ADJUNCT & SUPPORTIVE

- Use a stool diary with the Bristol stool scale to track consistency, frequency, soiling episodes, and medication doses between visits.
- Dietary fiber and fluid help but do not substitute for osmotic laxative therapy in a child with established retention and megarectum.
- Schedule follow-up every 2-4 weeks initially, since adherence fades quickly and early titration determines whether the program succeeds.
- Refer to pediatric gastroenterology for red flags, failed maximal medical therapy, or suspicion of an anatomic or neurologic cause.
- Arrange a school plan for unrestricted bathroom access, spare clothing, and privacy, and treat comorbid ADHD to support adherence.

- ☆ **CLINICAL PEARLS**
- The diarrhea is overflow around an impaction. Treat the constipation, not the loose stool.
 - Stopping PEG too early is the usual reason it comes back; plan for months, not weeks.
 - Reward sitting on the toilet, not stooling. Only one of those is under the child's control.

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NOTE

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