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For patients

# Fecal Incontinence

Fecal incontinence is the inability to control the passage of stool from the body. It may accompany constipation or diarrhea. It typically occurs in older adults or children.

Your doctor may assess your condition with a physical exam. Because fecal incontinence may be due to a variety of conditions, your doctor may order tests to evaluate potential problems. These tests check the colon, rectum, anal muscles, and pelvic floor muscles. Treatment depends on the underlying cause of your condition. It may include diet modifications, medication, physical therapy, surgery, or other means to help restore proper function.

## What is fecal incontinence?

Fecal incontinence is the inability to control the passage of stool from the body. It may accompany constipation or diarrhea. It typically occurs in older adults and children.

A normal bowel movement occurs when the rectum, anus, pelvic muscles, and nervous system work together simultaneously. Fecal incontinence may occur because of:

- **Muscle or nerve damage.** Sensory nerve damage to the rectum or sphincter muscles can cause loss of control over bowel movements. This type of damage may occur during childbirth, constant straining during bowel movements, spinal cord injury or stroke. Some diseases, such as diabetes mellitus (http://www.radiologyinfo.org) and multiple sclerosis (http://www.radiologyinfo.org) , can also affect the nerves that control bowel movements.

- **Damage to the rectum.** The rectum can become stiff due to chronic inflammation. This causes stool to move quickly through the rectum. This type of damage may be due to colitis, radiation treatment (http://www.radiologyinfo.org) , or surgical procedures involving the rectum and anus.

- **Chronic (ongoing) constipation.** Chronic constipation and hard stools can cause muscles of the rectum to stretch and weaken over time. This may cause the muscles that surround your anus (called the anal sphincter) to remain open which can result in stool leaking out.

- **Diarrhea.** Loose stools can worsen fecal incontinence.


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- **Other conditions.** Fecal incontinence can also result from a condition called rectal prolapse. This is where the rectum slides out of place, sometimes protruding out of the body. In women, fecal incontinence can also result from a condition called a rectocele. This is where the rectum bulges towards the woman's vagina (due to thinning or tearing of the tissue that normally separates the rectum and vagina).

In children, there are two types of fecal incontinence:

- **True fecal incontinence.** This is a congenital (http://www.radiologyinfo.org) condition in which normal bowel structures do not develop properly. Children with true fecal incontinence are physically unable to control their bowel movements. They may experience loose stools or constipation. Spinal problems, spina bifida, or an anorectal malformation may cause this condition. An anorectal malformation is a congenital defect in which the anal opening, the rectum, and/or the nerves that tell the body to defecate do not develop properly.

  Hirschsprung disease may also cause true fecal incontinence. This is a congenital disease in which nerve cells are missing from the muscles in the rectum or colon. This results in problems with passing stool.

- **Encopresis or "pseudo-incontinence."** Developmental or emotional issues may also cause an inability to control bowel movements. It occurs in children who resist having bowel movements. This causes stools to collect in the colon and rectum. When stools become hard, the rectal muscles may weaken, and liquid feces may leak around the hard stools and out of the body. The term encopresis means involuntary spilling of stool outside of the body due to fecal incontinence.

## How is fecal incontinence diagnosed and evaluated?

Your doctor will first assess your condition with a physical exam. Tell your doctor about your diet and any medications you are taking, including antacids, laxatives, and herbal supplements. Your doctor will also perform:

- **A digital rectal exam.** Your doctor inserts a gloved and lubricated finger into the rectum. This exam evaluates the strength of the anal muscles and checks for any abnormalities.

More tests may be ordered, including:

- **Blood tests.**
- **Stool culture:** A laboratory examines a small sample of fecal material for signs of infection.
- **Abdominal x-ray (https://www.radiologyinfo.org/en/info/abdominrad) .** Your doctor may use x-ray to confirm the presence of impacted hard stool.


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- **Anal manometry.** This test assesses pressures in the anal canal and rectum and the strength of the anal muscles.
- **Endoanal ultrasound (https://www.radiologyinfo.org/en/info/genus) .** This test inserts an ultrasound probe into the anus and rectum to produce images. This test helps evaluate for tears in the anal muscles.
- **Barium enema (https://www.radiologyinfo.org/en/info/lowergi) .** This fluoroscopy (http://www.radiologyinfo.org) exam fills the colon and rectum with a liquid contrast material (http://www.radiologyinfo.org) . This allows your doctor to view how the colon and rectum look and operate in real time.
- **Proctosigmoidoscopy.** Your doctor inserts a thin, lighted instrument called a sigmoidoscope (http://www.radiologyinfo.org) into the colon. The doctor will examine the rectum and lower colon for inflammation, tumors, or scar tissue that may be causing your condition.
- **Colonoscopy.** This test uses a thin, lighted instrument called a colonoscope (http://www.radiologyinfo.org) to examine the rectum and the entire colon. The test helps your doctor find areas of inflammation, bleeding, ulcers, tumors, and polyps (http://www.radiologyinfo.org) .
- **Electromyography (EMG).** This test uses a needle electrode (http://www.radiologyinfo.org) to assess the health of the anal sphincter, pelvic floor muscles, and nerve cells that control them. The doctor inserts the electrode directly into the muscle to record the amount of electrical activity.
- **Magnetic resonance imaging (MRI) defecography (https://www.radiologyinfo.org/en/info/defecography-mri) .** MRI produces detailed images and information about how the pelvic floor and rectum look and operate during a bowel movement. During this exam, the doctor images the various stages of defecation (i.e. at rest, straining, squeezing, defecation). This allows the radiologist to check how well your pelvic muscles work during a bowel movement. It also helps evaluate the anatomy and function of the pelvic floor muscles.
- **Defecography.** During this test, you will have your rectum filled with a semi-solid paste similar in consistency to soft stool. Your radiologist may also insert contrast into the vagina (if applicable). You will sit on a specially designed toilet while x-ray images are obtained. Your radiologist will image the defecation process at rest, during straining, during squeezing, and when you attempt to have a bowel movement. This helps the radiologist doctor evaluate what happens when you attempt to have a bowel movement.
- **Balloon capacity test.** During this test, your doctor will place a lubricated balloon-tipped catheter into the rectum. The balloon slowly fills with warm water as the doctor measures and records volume and pressure. This test assesses the function of the rectum and its ability to expand and contract.
- **Balloon evacuation study.** During this test, your doctor will place a lubricated balloon-tipped catheter into the rectum and fill it with water. The doctor asks you to push the balloon out of the rectum. This helps assess your ability to have a bowel movement.

## How is fecal incontinence treated?

Treatment depends on the underlying cause and may include:

- Dietary modifications and enemas.
- Medications, including anti-diarrheal drugs when diarrhea occurs with fecal incontinence, and laxatives for constipation-related incontinence.
- Bowel retraining and pelvic floor exercises to strengthen and increase control over the anal and pelvic floor muscles.
- Biofeedback to help you learn to squeeze your anal sphincter muscles and improve rectal sensation.
- Sacral nerve stimulation implants a device inside your body to stimulate the nerves to prevent fecal incontinence.
- Surgery to:
    - repair damage to pelvic floor and anal sphincter muscles.
    - correct rectal prolapse and remove a rectocele.
    - repair an anorectal malformation.
- Other treatment options include:


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- Strengthen the anal sphincter through a muscle transplant.
- Create an artificial bowel sphincter.
- Perform a colostomy and divert stool to an external bag for collection.
- Build up and strengthen the anal sphincter muscles through gel injections.

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