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National Institutes of Health / National Library of Medicine



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URL of this page: <https://medlineplus.gov/gastroenteritis.html>

## Gastroenteritis

**Also called:** Stomach flu

### What is gastroenteritis?

Gastroenteritis is an inflammation of the lining of the stomach and intestines. The main symptoms include vomiting [<https://medlineplus.gov/nauseaandvomiting.html>] and diarrhea [<https://medlineplus.gov/diarrhea.html>] . It is usually not serious in healthy people, but it can sometimes lead to dehydration [<https://medlineplus.gov/dehydration.html>] or cause severe symptoms.

### What causes gastroenteritis?

There can be many different causes of gastroenteritis:

- Viruses [<https://medlineplus.gov/viralinfections.html>]
- Bacteria [<https://medlineplus.gov/bacterialinfections.html>]
- Parasites [<https://medlineplus.gov/parasiticdiseases.html>]
- Chemicals
- Reactions to certain medicines [<https://medlineplus.gov/drugreactions.html>] and food

Viral gastroenteritis is the most common type. It can be caused by many different viruses, including noroviruses [<https://medlineplus.gov/norovirusinfections.html>] and rotaviruses [<https://medlineplus.gov/rotavirusinfections.html>] . Some people call viral gastroenteritis the "stomach flu." But this name is not medically correct. It is not caused by flu [<https://medlineplus.gov/flu.html>] viruses. The flu is a respiratory infection that affects your nose, throat and lungs.

When gastroenteritis is caused by consuming foods or drinks contaminated with viruses, bacteria, parasites, or chemicals, this is called food poisoning [<https://medlineplus.gov/foodborneillness.html>] .

The viruses, bacteria, and parasites that cause gastroenteritis can also spread from person to person. You could be infected when you touch something that has the germs on it and then touch your eyes, mouth, or nose.

### What are the symptoms of gastroenteritis?

The symptoms of gastroenteritis include:

- Diarrhea
- Pain [<https://medlineplus.gov/abdominalpain.html>] or cramping in your abdomen (belly)
- Nausea
- Vomiting
- Sometimes fever [<https://medlineplus.gov/fever.html>]

Gastroenteritis is usually not serious. But it can sometimes cause lead to dehydration or cause severe symptoms. Certain people are at higher risk for these problems. They include:

- Pregnant women
- Older adults
- People with weakened immune systems or other serious health conditions
- Infants
- Babies who were born prematurely [<https://medlineplus.gov/prematurebabies.html>] or have other health conditions

If you or a family member are at higher risk and have symptoms of gastroenteritis, contact a health care provider right away. Even if you are not at high risk, it is possible to become dehydrated or have more serious symptoms. There are some warning signs to watch for. It's important to contact a provider right away if you or your child have any of them:

- For **adults**, they include:
  - Change in mental state, such as irritability or lack of energy
  - Diarrhea lasting more than 2 days
  - High fever
  - Vomiting often
  - Six or more loose stools in a day
  - Severe pain in the abdomen (belly) or rectum
  - Stools that are black and tarry or contain blood or pus
  - Symptoms of dehydration, such as thirst, dry mouth [<https://medlineplus.gov/drymouth.html>] , headache, dark-colored urine, and urinating less than normal
- For **infants and children**, they include:
  - Change in the child's mental state, such as irritability or lack of energy
  - Diarrhea lasting more than a day
  - Any fever in infants
  - High fever in older children
  - Frequent loose stools
  - Vomiting often
  - Severe pain in the abdomen (belly) or rectum
  - Signs or symptoms of dehydration, such as thirst, dry mouth, urinating less than usual or no wet diapers for 3 hours or more, and no tears when crying
  - Stools that are black and tarry or contain blood or pus

## How is gastroenteritis diagnosed?

To find out if you have gastroenteritis, your provider:

- Will do a physical exam
- Will ask about your symptoms

- May do tests of your stool

## What are the treatments for gastroenteritis?

Usually, people with gastroenteritis get better on their own, with rest and plenty of fluids and electrolytes [<https://medlineplus.gov/fluidandelectrolytebalance.html>] . Your provider may suggest that you take a probiotic. Studies suggest that some probiotics may help shorten a case of diarrhea.


People with more severe symptoms may need medicines to control nausea or vomiting. Providers may also give other medicines for certain types of gastroenteritis, such as antibiotics [<https://medlineplus.gov/antibiotics.html>] for some bacterial types and antiparasitic medicines for some parasitic types.

## Can gastroenteritis be prevented?


Gastroenteritis cannot always be prevented. But proper hand washing [<https://medlineplus.gov/germsandhygiene.html>] , cleaning surfaces [<https://medlineplus.gov/cleaningdisinfectingandsanitizing.html>] that may be infected with germs, and safe food preparation [<https://medlineplus.gov/foodsafety.html>] may help prevent some of the infections that can cause gastroenteritis. There are vaccines for infants to protect against rotavirus infections.

*NIH: National Institute of Diabetes and Digestive and Kidney Diseases*

## Start Here

- Viral Gastroenteritis ("Stomach Flu") [<https://www.niddk.nih.gov/health-information/digestive-diseases/viral-gastroenteritis>]  (National Institute of Diabetes and Digestive and Kidney Diseases)  
Also in Spanish [<https://www.niddk.nih.gov/health-information/informacion-de-la-salud/enfermedades-digestivas/gastroenteritis-viral>]
- Viral Gastroenteritis (Stomach Flu) [<https://www.mayoclinic.org/diseases-conditions/viral-gastroenteritis/symptoms-causes/syc-20378847?p=1>] (Mayo Foundation for Medical Education and Research)  
Also in Spanish [<https://www.mayoclinic.org/es/diseases-conditions/viral-gastroenteritis/symptoms-causes/syc-20378847?p=1>]

## Diagnosis and Tests

- Bacteria Culture Test [<https://medlineplus.gov/lab-tests/bacteria-culture-test/>]  (National Library of Medicine)  
Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-cultivo-de-bacterias/>]
- Stool Tests (For Parents) [<https://kidshealth.org/en/parents/labtest8.html>] (Nemours Foundation)  
Also in Spanish [<https://kidshealth.org/es/parents/labtest8.html>]

## Prevention and Risk Factors

- Hand Washing: Do's and Don'ts [<https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/hand-washing/art-20046253?p=1>] (Mayo Foundation for Medical Education and Research)  
Also in Spanish [<https://www.mayoclinic.org/es/healthy-lifestyle/adult-health/in-depth/hand-washing/art-20046253?p=1>]

## Treatments and Therapies

- Gastroenteritis: First Aid [<https://www.mayoclinic.org/first-aid/first-aid-gastroenteritis/basics/art-20056595?p=1>] (Mayo Foundation for Medical Education and Research)  
Also in Spanish [<https://www.mayoclinic.org/es/first-aid/first-aid-gastroenteritis/basics/art-20056595?p=1>]

## Related Issues

- Stomach Flu: How Long Am I Contagious? [<https://www.mayoclinic.org/diseases-conditions/viral-gastroenteritis/expert-answers/stomach-flu/faq-20057899?p=1>]

(Mayo Foundation for Medical Education and Research)

Also in Spanish [<https://www.mayoclinic.org/es/diseases-conditions/viral-gastroenteritis/expert-answers/stomach-flu/faq-20057899?p=1>]



## Specifics

- About Adenovirus [<https://www.cdc.gov/adenovirus/about/>] (Centers for Disease Control and Prevention)
- About Food Safety [<https://www.cdc.gov/food-safety/about/>] (Centers for Disease Control and Prevention)

## Test Your Knowledge

- Test Your Knowledge About Diarrhea in Kids [[https://medlineplus.gov/ency/quiz/000121\\_48.htm](https://medlineplus.gov/ency/quiz/000121_48.htm)]  
(Medical Encyclopedia)  
Also in Spanish [[https://medlineplus.gov/spanish/ency/quiz/000121\\_103.htm](https://medlineplus.gov/spanish/ency/quiz/000121_103.htm)]

## Clinical Trials

- ClinicalTrials.gov: Gastroenteritis [<https://clinicaltrials.gov/search?cond=%22Gastroenteritis%22&aggFilters=status:not%20rec>]  (National Institutes of Health)
- ClinicalTrials.gov: Norovirus [<https://clinicaltrials.gov/search?cond=%22Norovirus%22&aggFilters=status:not%20rec>]  (National Institutes of Health)

## Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

- Article: Molecular Characterization and Epidemiology of Human Noroviruses in the Sverdlovsk Region,... [<https://www.ncbi.nlm.nih.gov/pubmed/41012671>]
- Article: Global Research Trends on Major Pathogenic Enteric Viruses (1990-2024): A Bibliometric... [<https://www.ncbi.nlm.nih.gov/pubmed/41011838>]
- Article: Two decades of GSK rotavirus vaccine (RV1): a global analysis to... [<https://www.ncbi.nlm.nih.gov/pubmed/40977598>]
- Gastroenteritis -- see more articles [<https://pubmed.ncbi.nlm.nih.gov/?term=%22Gastroenteritis%22%5Bmajr%3Anoexp%5D+AND+humans%5Bmh%5D+AND+english%5Bla%5D+AND+%22last+1+Year%22+%5Bedat%5D+NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bsb%5D+>]

## Find an Expert

- National Institute of Diabetes and Digestive and Kidney Diseases [<https://www.niddk.nih.gov>] 

## Children

- Adenovirus [<https://kidshealth.org/en/parents/adenovirus.html>] (Nemours Foundation)  
Also in Spanish [<https://kidshealth.org/es/parents/adenovirus.html>]
- Collecting a Stool Sample for Testing (For Parents) [<https://kidshealth.org/en/parents/stool-tests-done.html>]  
(Nemours Foundation)  
Also in Spanish [<https://kidshealth.org/es/parents/stool-tests-done.html>]
- Diarrhea (For Parents) [<https://kidshealth.org/en/parents/diarrhea.html>] (Nemours Foundation)  
Also in Spanish [<https://kidshealth.org/es/parents/diarrhea.html>]
- Gastroenteritis (Stomach Flu) (For Parents) [<https://kidshealth.org/en/parents/gastroenteritis.html>]  
(Nemours Foundation)

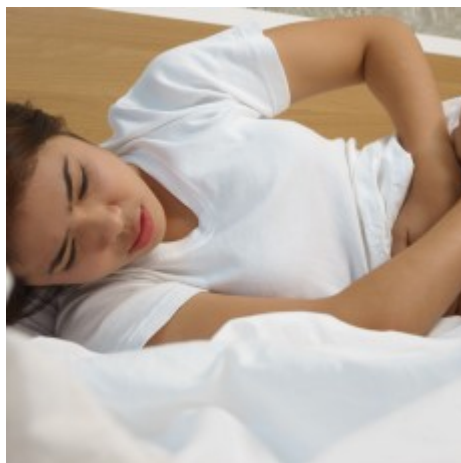
- Vomiting (For Parents) [<https://kidshealth.org/en/parents/vomit.html>] (Nemours Foundation)  
Also in Spanish [<https://kidshealth.org/es/parents/vomit.html>]

## Teenagers

- Dehydration (For Teens) [<https://kidshealth.org/en/teens/dehydration.html>] (Nemours Foundation)  
Also in Spanish [<https://kidshealth.org/es/teens/dehydration.html>]
- Diarrhea [<https://kidshealth.org/en/teens/diarrhea.html>] (Nemours Foundation)  
Also in Spanish [<https://kidshealth.org/es/teens/diarrhea.html>]

## Patient Handouts

- Bacterial gastroenteritis [<https://medlineplus.gov/ency/article/000254.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000254.htm>]
- Bland diet [<https://medlineplus.gov/ency/patientinstructions/000068.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/patientinstructions/000068.htm>]
- CMV - gastroenteritis/colitis [<https://medlineplus.gov/ency/article/000667.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000667.htm>]
- Enteritis [<https://medlineplus.gov/ency/article/001149.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/001149.htm>]
- Stool Gram stain [<https://medlineplus.gov/ency/article/003757.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/003757.htm>]
- Viral gastroenteritis (stomach flu) [<https://medlineplus.gov/ency/article/000252.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000252.htm>]
- When you have diarrhea [<https://medlineplus.gov/ency/patientinstructions/000121.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/patientinstructions/000121.htm>]
- When you have nausea and vomiting [<https://medlineplus.gov/ency/patientinstructions/000122.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/patientinstructions/000122.htm>]



## MEDICAL ENCYCLOPEDIA

Bacterial gastroenteritis [<https://medlineplus.gov/ency/article/000254.htm>]

Bland diet [<https://medlineplus.gov/ency/patientinstructions/000068.htm>]

CMV - gastroenteritis/colitis [<https://medlineplus.gov/ency/article/000667.htm>]

D-xylose absorption [<https://medlineplus.gov/ency/article/003606.htm>]

Enteritis [<https://medlineplus.gov/ency/article/001149.htm>]

Fecal culture [<https://medlineplus.gov/ency/article/003758.htm>]

Lipase test [<https://medlineplus.gov/ency/article/003465.htm>]

Norovirus - hospital [<https://medlineplus.gov/ency/patientinstructions/000475.htm>]

Rectal culture [<https://medlineplus.gov/ency/article/003759.htm>]

Small intestine aspirate and culture [<https://medlineplus.gov/ency/article/003731.htm>]

Stool Gram stain [<https://medlineplus.gov/ency/article/003757.htm>]

Viral gastroenteritis (stomach flu) [<https://medlineplus.gov/ency/article/000252.htm>]

When you have diarrhea [<https://medlineplus.gov/ency/patientinstructions/000121.htm>]

When you have nausea and vomiting [<https://medlineplus.gov/ency/patientinstructions/000122.htm>]

## Related Health Topics

Diarrhea [<https://medlineplus.gov/diarrhea.html>]

Foodborne Illness [<https://medlineplus.gov/foodborneillness.html>]

Nausea and Vomiting [<https://medlineplus.gov/nauseaandvomiting.html>]

Norovirus Infections [<https://medlineplus.gov/norovirusinfections.html>]

Rotavirus Infections [<https://medlineplus.gov/rotavirusinfections.html>]

Small Intestine Disorders [<https://medlineplus.gov/smallintestinedisorders.html>]

Traveler's Health [<https://medlineplus.gov/travelershealth.html>]

## National Institutes of Health

The primary NIH organization for research on *Gastroenteritis* is the National Institute of Diabetes and Digestive and Kidney Diseases [<https://www.niddk.nih.gov>]

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