

## Gastroenteritis - an overview

Gastroenteritis is an illness triggered by the infection and inflammation of the digestive system. Typical symptoms include abdominal cramps, diarrhoea and vomiting. In many cases, the condition is self-limiting and resolves in a few days.

The main complication of gastroenteritis is dehydration, but this can be prevented if the fluid lost in vomit and diarrhoea is replaced. A person suffering from severe gastroenteritis may need fluids administered intravenously (directly into the bloodstream via a vein). Some of the causes of gastroenteritis include viruses, bacteria, bacterial toxins, parasites, particular chemicals and some drugs.

### Symptoms

The symptoms of gastroenteritis can include:

- Loss of appetite
- Bloating
- Nausea
- Vomiting
- Abdominal cramps
- Abdominal pain
- Diarrhoea
- Bloody stools (in some cases)
- Pus in the stools (in some cases)
- Generally feeling unwell, including lethargy and body aches.

### A range of causes

There are many things that can cause gastroenteritis, including:

- **Viruses** – such as caliciviruses, rotaviruses, astroviruses and adenoviruses.
- **Bacteria** – such as the *Campylobacter* bacterium.
- **Parasites** – such as *Entamoeba histolytica*, *Giardia lamblia* and *Cryptosporidium*.
- **Bacterial toxins** – the bacteria themselves don't cause illness, but their poisonous by-products can contaminate food. Some strains of staphylococcal bacteria produce toxins that can cause gastroenteritis.
- **Chemicals** – lead poisoning, for example, can trigger gastroenteritis.
- **Drugs** – certain drugs, such as antibiotics, can cause gastroenteritis in susceptible people.

### Infectious gastroenteritis

Infectious gastroenteritis is caused by viruses, bacteria or parasites. In each case, infection occurs when the agent is ingested, usually by eating or drinking. Some of the common types of infectious gastroenteritis include:

- **Escherichia coli infection** – this is a common problem for travellers to countries with poor sanitation. Infection is caused by drinking contaminated water or eating contaminated raw fruits and vegetables.
- **Campylobacter infection** – the bacteria are found in animal faeces. Infection is caused by, for example, consuming contaminated food or water, eating undercooked meat (especially chicken), and not washing your hands after handling infected animals.
- **Cryptosporidium infection** – parasites are found in the bowels of humans and animals. Infection is caused by, for example, swimming in a contaminated pool and accidentally swallowing water, or through contact with infected animals. An infected person may spread the parasites to food or surfaces if they don't wash their hands after going to the toilet.

- **Giardiasis** – parasite infection of the bowel. Infection is caused by, for example, drinking contaminated water, handling infected animals or changing the nappy of an infected baby and not washing your hands afterwards.
- **Salmonellosis** – bacteria are found in animal faeces. Infection is caused by eating contaminated food or handling infected animals. An infected person may also spread the bacteria to other people or surfaces by not washing their hands properly.
- **Shigellosis** – bacteria are found in faeces. An infected person may spread the bacteria to food or surfaces if they don't wash their hands after going to the toilet.
- **Viral gastroenteritis** – viruses are found in human faeces. Infection is caused by person-to-person contact such as touching contaminated hands, faeces or vomit, or by drinking contaminated water or food.

### Diagnosis

It is important to establish the cause, as different types of gastroenteritis respond to different treatments. Diagnostic methods may include:

- Medical history
- Physical examination
- Blood tests
- Stool tests.

### Treatment

Treatment depends on the cause but may include:

- Plenty of fluids
- Oral rehydration drinks, available from your chemist
- Admission to hospital and intravenous fluid replacement, in severe cases
- Antibiotics, if bacteria are the cause
- Drugs to kill the parasites, if parasites are the cause
- Avoiding anti-vomiting or anti-diarrhoea drugs unless prescribed or recommended by your doctor, because these medications will keep the infection inside your body.

### Prevention

General suggestions on how to reduce the risk of gastroenteritis include:

- Wash hands thoroughly with soap and water after going to the toilet or changing nappies, after smoking, after using a handkerchief or tissue, or after handling animals.
- Wash your hands thoroughly with soap and water before preparing food or eating.
- Use disposable paper towels to dry your hands rather than cloth towels, since the bacteria can survive for some time on objects.
- Keep cold food cold (below 5°C) and hot food hot (above 60°C) to discourage the growth of bacteria.
- Make sure foods are thoroughly cooked.
- Clean the toilet and bathroom regularly, especially the toilet seat, door handles and taps.
- Clean baby change tables regularly.
- When travelling overseas to countries where sanitation is suspect, only drink bottled water. Don't forget to brush your teeth in bottled water too. Avoid food buffets, uncooked foods or peeled fruits and vegetables, and ice in drinks.

### Where to get help

- Your doctor
- Your local council health department
- Communicable Disease Prevention and Control Unit, Department of Health Victoria Tel. 1300 651 160

### Things to remember

- Gastroenteritis is a short-term illness triggered by the infection and inflammation of the digestive system.
- Symptoms can include abdominal cramps, diarrhoea and vomiting.
- Some of the causes of gastroenteritis include viruses, bacteria, bacterial toxins, parasites, particular chemicals and some drugs.

**This page has been produced in consultation with, and approved by:**

Department of Health - Communicable Disease Prevention and Control Unit

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