

## Overview

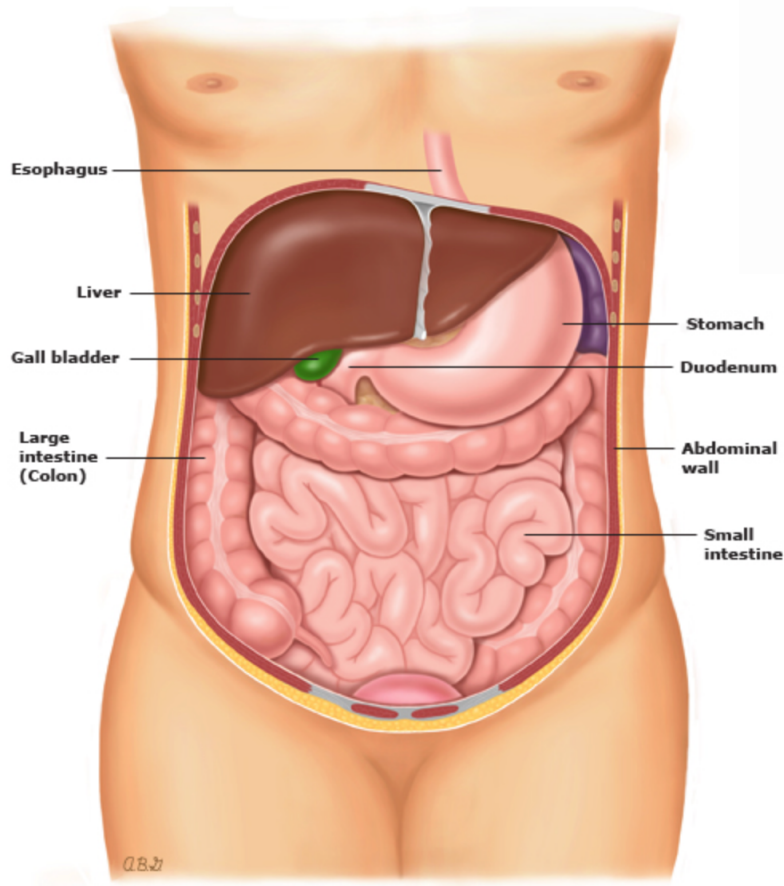
*Helicobacter pylori*, also known as *H. pylori*, is a bacterium that is commonly found in the stomach. It is present in approximately one-half of the world's population.

The vast majority of people infected with *H. pylori* has no symptoms and will never develop problems. However, *H. pylori* is capable of causing a number of digestive problems, including ulcers and, much less commonly, stomach cancer. It is not clear why some people with *H. pylori* get these conditions and others do not.

## Risk factors

*H. pylori* is probably spread by consuming food or water contaminated with fecal matter. *H. pylori* causes changes to the stomach and duodenum (the first part of the small intestine). The bacteria infect the protective tissue that lines the stomach.

### Organs inside the abdomen (belly)



This leads to the release of certain enzymes and toxins and activation of the immune system. Together, these factors may directly or indirectly injure the cells of the stomach or duodenum. This causes chronic inflammation in the walls of the stomach (gastritis) or duodenum (duodenitis).

As a result of these changes, the stomach and duodenum are more vulnerable to damage from digestive juices, such as stomach acid.

## Symptoms

Most individuals with chronic gastritis or duodenitis have no symptoms. However, some people develop more serious problems, including stomach or duodenal ulcers.

Ulcers can cause a variety of symptoms or no symptoms at all, with the most common ulcer symptoms including:

- Pain or discomfort (usually in the upper abdomen)
- Bloating
- Feeling full after eating a small amount of food
- Lack of appetite
- Nausea or vomiting
- Dark or tar-colored stools
- Ulcers that bleed can cause a low blood count and fatigue

## Diagnosis

There are several ways to diagnose *H. pylori*. The most commonly used tests include the following:

**Breath tests** — Breath tests (known as urea breath tests) require that you drink a specialized solution containing a substance that is broken down by the *H. pylori* bacterium. The breakdown products can be detected in your breath.

**Stool tests** — Tests are available that detect *H. pylori* proteins in stool.

**Blood tests** — Blood tests can detect specific antibodies (proteins) that the body's immune system develops in response to the *H. pylori* bacterium. However, concerns over its accuracy have limited its use.

## Treatment

**Medications** — No single drug cures *H. pylori* infection. Most treatment regimens involve taking several medications for 14 days.

**Side effects** — Up to 50 percent of patients have side effects while taking *H. pylori* treatment. Side effects are usually mild, and fewer than 10 percent of patients stop treatment because of side effects. For those who do experience side effects, it may be possible to make adjustments in the dose or timing of medication.