



Helicobacter pylori Infection

Helicobacter pylori (H. pylori) is a **common bacterial infection** that affects the stomach. About half of population worldwide have it, and it is usually contracted in childhood. Most people never have symptoms, but it can cause problems for some.

Symptoms:

Many people with H. pylori have no symptoms. When symptoms do occur, they may include:

- Pain or discomfort in the upper belly (dyspepsia)
- Nausea or vomiting
- Feeling full quickly when eating
- Loss of appetite
- Bloating
- In more serious cases, black or bloody stools, vomiting blood, or unexplained weight loss

H. pylori can cause **peptic ulcers** (sores in the stomach or upper intestine), chronic gastritis (inflammation of the stomach lining), and increases the risk of stomach cancer.

Prevalence:

H. pylori infects about half of the world's population. It is more common in developing countries and among people with lower socioeconomic status.

Diagnosis:

Doctors may test for H. pylori if you have symptoms like stomach pain, ulcers, or unexplained anemia. Testing is also recommended for people with a history of ulcers, certain stomach cancers, or long-term use of medications like aspirin or NSAIDs.

Tests include:

- **Noninvasive tests:** Stool antigen test or urea breath test (these are easy and do not require a procedure)

- **Invasive tests:** Endoscopy with biopsy (used if you have alarm symptoms or are older)

It's important to stop taking acid-reducing medications (like proton pump inhibitors) before testing, as they can affect results.

Treatment:

If you have *H. pylori*, treatment is recommended to prevent ulcers and other complications. Treatment usually includes:

- A **proton pump inhibitor (PPI)** to reduce stomach acid
- Two or more **antibiotics** to kill the bacteria
- Sometimes **bismuth** (a medication that helps protect the stomach lining)

The most common first treatment is **bismuth quadruple therapy** (PPI, bismuth, and two antibiotics), especially in areas where resistance to certain antibiotics is high. Your doctor will choose the best medicines based on your allergies and local resistance patterns.

After treatment, it's important to check that the infection is gone, usually with a stool antigen test or breath test about 4 weeks after finishing treatment.

What to expect:

Most people are cured with one round of treatment, but sometimes a second treatment is needed. Getting rid of *H. pylori* can help prevent ulcers and lower your risk of stomach cancer.

If you have questions or new symptoms, talk to your healthcare provider.

References

1. [Updates to the Diagnosis and Clinical Management of Helicobacter Pylori Infections.](#) Shakir SM, Shakir FA, Couturier MR. Clinical Chemistry. 2023;69(8):869-880. doi:10.1093/clinchem/hvad081.
2. [Helicobacter Pylori and Gastric Disease.](#) Gisbert JP. Medicina Clinica. 2025;165(1):106974. doi:10.1016/j.medcli.2025.106974.
3. [Epidemiology, Clinical Impacts and Current Clinical Management of Helicobacter Pylori Infection.](#) Mitchell H, Katelaris P. The Medical Journal of Australia. 2016;204(10):376-80. doi:10.5694/mja16.00104.
4. [Helicobacter pylori Infection.](#) Crowe SE. The New England Journal of Medicine. 2019;380(12):1158-1165. doi:10.1056/NEJMcp1710945.

5. [Peptic Ulcer Disease and H. Pylori Infection: Common Questions and Answers.](#)
McConaghay JR, Decker A, Nair S. American Family Physician. 2023;107(2):165-172.
6. [ACG Clinical Guideline: Treatment of Helicobacter Pylori Infection.](#) Chey WD, Howden CW, Moss SF, et al. The American Journal of Gastroenterology. 2024;119(9):1730-1753. doi:10.14309/ajg.0000000000002968.
7. [Guide to Utilization of the Microbiology Laboratory for Diagnosis of Infectious Diseases: 2024 Update by the Infectious Diseases Society of America \(IDSA\) and the American Society for Microbiology \(ASM\).](#) Miller JM, Binnicker MJ, Campbell S, et al. Clinical Infectious Diseases : An Official Publication of the Infectious Diseases Society of America. 2024;:ciae104. doi:10.1093/cid/ciae104.
8. [Helicobacter Pylori: A Review of Current Diagnostic and Management Strategies.](#)
Guevara B, Cogdill AG. Digestive Diseases and Sciences. 2020;65(7):1917-1931. doi:10.1007/s10620-020-06193-7.
9. [Management of Helicobacter Pylori Infection: The Maastricht VI/Florence Consensus Report.](#) Malfertheiner P, Megraud F, Rokkas T, et al. Gut. 2022;:gutjnl-2022-327745. doi:10.1136/gutjnl-2022-327745.