



Helicobacter pylori (H. pylori) infection

A common stomach infection: who should be tested, treatment, and confirming it has gone

PE-GIC-34

Version 1.0 · Last reviewed October 2026 · Next review October 2028

H. pylori is a common bacterial infection of the stomach. Most people never have symptoms, but it can cause ulcers and, over many years, raises the risk of stomach cancer. It is diagnosed with a breath, stool or biopsy test and treated with a combination of medicines, usually for 14 days. A further test afterwards is always needed to confirm that it has gone.

What is it?

Helicobacter pylori is a bacterium that lives in the lining of the stomach. It is usually picked up in childhood and stays for life unless treated. It is very common worldwide, including in the Gulf region.

Most people with H. pylori have no symptoms, but it always causes long-term inflammation of the stomach lining (gastritis), which can lead to problems over time.

Why does it matter?

- Stomach and duodenal ulcers: H. pylori is one of the two main causes, and clearing it usually stops ulcers coming back
- Stomach cancer: long-term infection is the most important risk factor. Clearing the infection lowers this risk, especially if done early
- A rare type of stomach lymphoma (MALT lymphoma), which often responds to H. pylori treatment alone
- Indigestion in some people, and unexplained iron-deficiency anaemia

Who should be tested?

Testing is advised when finding the infection would change your care, for example:

- A current or previous stomach or duodenal ulcer
- Ongoing indigestion, especially in younger people without warning symptoms
- Before starting long-term anti-inflammatory painkillers (NSAIDs), or if you take long-term aspirin (especially if you have had an ulcer before)
- Unexplained iron-deficiency anaemia, or a low platelet count (immune thrombocytopenia)
- A parent, brother, sister or child who has had stomach cancer
- Precancerous changes in the stomach lining (atrophic gastritis or intestinal metaplasia), or Lynch syndrome

If *H. pylori* is found, it should be treated, even if you have no symptoms.

Tests

- Urea breath test: you drink a solution and breathe into a tube or bag
- Stool antigen test: a small stool sample checked in the laboratory
- Biopsies taken during a gastroscopy, if one is needed anyway
- Blood antibody tests are not recommended, because they can stay positive long after the infection has gone

Some medicines can give a falsely negative result. Unless your doctor advises otherwise, stop proton pump inhibitors (such as omeprazole or esomeprazole) or vonoprazan for 2 weeks, and antibiotics and bismuth for 4 weeks, before a breath or stool test. Simple antacids can be used for symptoms meanwhile.

Treatment

Treatment combines an acid-reducing medicine with one or more antibiotics, sometimes with bismuth, usually for 14 days. American (2024) and European (Maastricht VI) guidelines base the choice on local antibiotic resistance:

- Bismuth quadruple therapy (an acid-reducing medicine, bismuth, tetracycline and metronidazole) is the preferred first choice for most people where it is available in your country, especially where resistance to clarithromycin is common or unknown

- Other combinations, for example with amoxicillin, rifabutin, or a newer acid blocker (vonoprazan) where available, are used in particular situations or if treatment fails
- Clarithromycin-based 'triple therapy' is now used only when tests show the bacteria are sensitive to it, or where resistance is known to be low
- Tell your doctor about any penicillin allergy and previous antibiotic courses, as these affect the choice

Resistance to clarithromycin and metronidazole is a growing problem, including in the Gulf region and Oman, so the right choice, the full course and a test of cure all matter.

Taking your treatment

- Take every dose for the full course. Missed doses are a common reason for failure
- A metallic taste, nausea and loose stools are common, usually mild, and settle after the course
- Bismuth turns the stools, and sometimes the tongue, black. This is expected and harmless
- Avoid alcohol completely; with metronidazole it can cause severe sickness
- Take tetracycline with water, not milk, and 2 to 3 hours apart from antacids, iron or calcium
- If you are pregnant or breastfeeding, tell your doctor: some of these medicines are not suitable, and treatment can usually wait until after pregnancy

Confirming the infection has gone

Treatment does not always work, so a test to confirm cure is always recommended. A breath or stool test is done at least 4 weeks after finishing the antibiotics, and at least 2 weeks after stopping any proton pump inhibitor or vonoprazan.

If the infection persists, a different combination is used. After two failed courses, a gastroscopy may be arranged to test the bacteria for antibiotic sensitivity.

Get urgent medical care if you have

- Vomiting blood or material that looks like coffee grounds
- Black, tarry stools with feeling faint, or black stools continuing after treatment ends
- Sudden, severe abdominal pain
- Difficulty swallowing, repeated vomiting, or weight loss without trying
- Severe or bloody diarrhoea during or after the antibiotics
- Swelling of the face or lips, a widespread rash, or difficulty breathing

Common questions

Should my family be tested for H. pylori?

Family members do not usually need testing just because you have H. pylori. Testing is advised for first-degree relatives (parents, brothers, sisters and children) of people with stomach cancer. Anyone in the family with indigestion or other stomach symptoms should see their doctor, who will decide whether a test is needed.

I have no symptoms. Do I still need treatment?

Yes, in most cases, because treatment lowers the risk of ulcers and stomach cancer.

Can H. pylori come back?

Reinfection after successful treatment is uncommon in adults, although it is more likely where the infection is common. A positive test months later more often means the first treatment did not fully clear it.

Do honey, black seed or probiotics treat H. pylori?

No. Some kill the bacteria in the laboratory only, and evidence for probiotics is too weak to recommend them routinely. None replaces antibiotics.

This leaflet is general information and does not replace advice from your own doctor. Version 1.0, October 2026. Next review October 2028.
