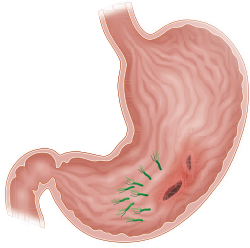




# ACG GUIDELINE

# Highlights



## Treatment of *Helicobacter pylori* Infection

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### Epidemiology

- *H. pylori* prevalence in North America is 30%-40%
- Typically acquired in childhood
- More prevalent among non-White races or ethnicities, those living in crowded or poor sanitary conditions, and early generation immigrants from endemic regions.



### When to Test for *H. pylori*

Benign Conditions	Premalignant and Malignant Conditions
<ul style="list-style-type: none"> <li>• Dyspepsia if &lt;60 years without alarm features (GI bleeding, vomiting, unexplained weight loss, iron deficiency)</li> <li>• Dyspepsia if &lt;50 years with high risk for gastric cancer</li> <li>• Endoscopy with biopsies if dyspepsia and alarm features, NSAID use, family history of gastric cancer, immigration from high incidence region</li> </ul>	<ul style="list-style-type: none"> <li>• Adult household members of <i>H. pylori</i> positive individuals</li> <li>• ITP</li> <li>• Unexplained IDA</li> <li>• Current or prior history of PUD</li> <li>• Chronically taking NSAID or starting daily aspirin therapies</li> </ul>
	<ul style="list-style-type: none"> <li>• High risk gastric premalignant condition               <ul style="list-style-type: none"> <li>- Atrophy, intestinal metaplasia, dysplasia</li> <li>- Autoimmune gastritis</li> <li>- Family history of gastric cancer</li> <li>- Foreign born with immigration from high incidence region</li> <li>- High risk race or ethnicity</li> </ul> </li> <li>• MALT lymphoma</li> <li>• Gastric epithelial polyps</li> </ul> <p>• WHO recognizes <i>H. pylori</i> as a group I (definite) carcinogen</p>

### Treatment for *H. pylori*

Regimens for <i>H. pylori</i> Treatment	Rx Naïve	Rx Experienced (Salvage)	
	Empiric	Empiric	Proven Rx Sensitivity
<b>Optimized bismuth quadruple</b> <ul style="list-style-type: none"> <li>• PPI b.i.d.</li> <li>• Bismuth subcitrate (120-300 mg) or subsalicylate (300 -524 mg) q.i.d.</li> <li>• Tetracycline 500 mg q.i.d.</li> <li>• Metronidazole 500 mg t.i.d. or q.i.d.</li> <li><i>Doxycycline is not a recommended substitute for tetracycline</i></li> </ul>	☑	☑	☑
<b>Rifabutin Triple</b> <ul style="list-style-type: none"> <li>• Rifabutin 50 mg t.i.d. (if dose unavailable, substitute rifabutin 150 mg b.i.d.)</li> <li>• Amoxicillin 1000 mg t.i.d.</li> <li>• Omeprazole 40 mg t.i.d.</li> </ul>	☑	☑	☑
<b>PCAB Dual</b> <ul style="list-style-type: none"> <li>• Vonoprazan 20 mg b.i.d.</li> <li>• Amoxicillin 1000 mg t.i.d.</li> </ul>	☑	⚠	⚠
<b>PCAB Triple</b> <ul style="list-style-type: none"> <li>• Vonoprazan 20 mg b.i.d.</li> <li>• Clarithromycin 500 mg b.i.d.</li> <li>• Amoxicillin 1000 mg b.i.d.</li> </ul>			☑
<b>Levofloxacin Triple</b> <ul style="list-style-type: none"> <li>• PPI b.i.d.</li> <li>• Amoxicillin 1000 mg b.i.d.</li> <li>• Levofloxacin 500 mg b.i.d.</li> </ul>			☑

☑ Recommended    ☑ Suggested    ⚠ May be considered when no other options

### Treatment Pearls

- All patients found to be infected with *H. pylori* should be treated
- Complete test of cure at least four weeks after therapy with either:
  - Urea breath test
  - Fecal antigen test
  - Biopsy-based test
- To avoid false negatives in test of cure – hold PPI x 2 weeks; bismuth and antibiotics x 4 weeks
- Avoid clarithromycin and levofloxacin-containing Rx unless demonstrated susceptibility
- PCN allergy – consider referral for formal PCN allergy testing and/or desensitization



Abx = antibiotic  
b.i.d. = twice a day  
GIM = gastric intestinal metaplasia  
*H. pylori* = *Helicobacter pylori*

ITP = immune thrombocytopenic purpura  
IDA = iron deficiency anemia  
mg = milligrams  
NSAIDs = non-steroidal anti-inflammatory drugs

PCN = penicillin  
PCAB = potassium competitive acid blocker  
PPI = proton pump inhibitor  
PUD = peptic ulcer disease

q.i.d. = four times a day  
Rx = treatment  
t.i.d. = three times a day