# H. pylori Urea Breath Test

Patients 18+: Test Code 902147 Patients 3-17: Test Code 906542

Bringing Accuracy, Simplicity, and Convenience to *H. pylori* Detection



The Urea Breath Test (UBT) is recommended by both the American Gastroenterological Association (AGA) and the American College of Gastroenterology (ACG) as a non-invasive test for diagnosis and confirmation of eradication.<sup>1,2</sup>

### A non-invasive, non-radioactive breath test for effective, proactive *H. pylori* management to:

- Accurately detect active *H. pylori* infection using patient breath samples<sup>3,4</sup>
- Determine whether treatment for an *H. pylori* infection has been successful<sup>4</sup>
- Provide cost-effective testing relative to other diagnostic methods<sup>4</sup>

## Urea Breath Test provides the ability to confirm between active and resolved infections when compared to antibody testing<sup>3,4</sup>

- Minimizes false positive results since antibody testing cannot distinguish between current infection and recent exposure to infection<sup>3,4,5</sup>
- Accuracy of blood antibody tests differs based on geography and varying local *H. pylori* strains<sup>5</sup>
- Reduces the number of patients inappropriately treated<sup>3</sup>

### The Urea Breath Test is Accurate and Easy to Use for Diagnosis and Post-Treatment Testing

Urea Breath Test: Increased Predictive Values Over Antibody Testing*				
	Urea Breath Test <sup>3</sup>	Serum IgG Antibody (serology) <sup>3</sup>		
Sensitivity for Active Infection	>94.7%	85%		
Specificity for Active Infection	>95.7%	79%		

\*Data are weighted mean values compiled from multiple published clinical trials Vakil N, Fendrick AM. *Cleve Clin J Med*. 2005;72 Supply 2:S8-S13.



#### Clinical Background of Helicobacter pylori Urea Breath Test

- A baseline breath sample is collected prior to ingesting <sup>13</sup>C-urea (a naturally occurring, non-radioactive carbon isotope) prepared in Pranactin<sup>®</sup> Citric solution
- A second breath sample is then collected after ingestion of <sup>13</sup>C-urea
  - <sup>13</sup>C-urea is degraded by *H. pylori*-associated urease, producing ammonia and <sup>13</sup>CO<sub>2</sub>
  - The  ${}^{13}CO_2$  is absorbed in the blood and then exhaled in a post-dose breath sample
- An increase in the ratio of <sup>13</sup>CO<sub>2</sub> to <sup>12</sup>CO<sub>2</sub> between pre- and post-ingestion samples indicates presence of *H. pylori*-associated urease



Test Name	Test Code	CPT Code	Specimen Requirements
Helicobacter Pylori Urea Breath Test	902147	83013	Human breath from patients 18 years of age and above; Paired breath samples (pre and post) collected in BreathTek™ UBT kit bags which must be submitted together. Follow instructions provided with kit (supply #19846).
Helicobacter Pylori Urea Breath Test 906542 83013 - Pediatric		83013	Human breath from patients 3-17 years of age; Paired breath samples (pre and post) collected in BreathTek™ UBT kit bags which must be submitted together. Follow instructions provided with kit (supply #19846).
			For patients 3-17 years of age: Gender, height, weight, and age, must be provided on the pediatric UHR card included in the BreathTek™ UBT Collection Kit.

The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.

1. Talley NJ; American Gastroenterological Association. American Gastroenterological Association medical position statement: evaluation of dyspepsia. *Gastroenterology*. 2005;129:1753-1755.

- 2. Talley NJ, Vakil N; Practice Parameters Committee of the American College of Gastroenterology. Guidelines for the management of dyspepsia. *Am J Gastroenterol.* 2005;100:2324-2337.
- 3. Vakil N, Fendrick AM. How to test for Helicobacter pylori in 2005. Cleve Clin J Med. 2005;72 Suppl 2:S8-S13.
- 4. Saad R, Chey W D. A clinician's guide to managing Helicobacter pylori infection. Cleve Clin J Med. 2005;72:109-110, 112-113, 117-118.

5. Chey W D. Diagnosis of Helicobacter pylori. Pract Gastroenterol. April 2001;28-41.

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