



## *H. pylori* testing

Now it's easier to test for *H. pylori* in children

Pediatric organizations recommend active *H. pylori* testing to confirm infection and establish a cure following therapy.

—Koletzko S, et al.  
*JPGN*, 2011

### *H. pylori* infection is often acquired in childhood

*H. pylori* is often acquired in the first years of life but not identified until much later.<sup>1,2</sup> It is commonly transmitted from mother to child. Antral gastritis is the most common manifestation in children;<sup>3</sup> symptoms may include indigestion, gas or nausea.

### Undetected *H. pylori* can lead to problems

Left untreated, *H. pylori* can progress into adulthood and may lead to growth delays and, over time, gastric cancer.<sup>4-6</sup>

### NASPGHAN and ESPGHAN recommend active testing

Because serologic testing in children is inaccurate on its own, both the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) and the European Society for Pediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) recommend active testing, such as the Urea Breath Test (UBT) or *H. pylori* stool antigen (HpSA) test, in children over 3 years to confirm *H. pylori* infection and to establish a cure following therapy.<sup>7</sup>

**The Urea Breath Test (UBT) from Sonora Quest Laboratories is FDA-cleared for patients as young as 3 years of age.**

**UBT offers accuracy, simplicity and convenience for noninvasive *H. pylori* detection in the pediatric setting.**

# Guidelines: Active *H. pylori* testing in children with UBT and HpSA

"It is recommended that the initial diagnosis of *H. pylori* infection be based on either positive histopathology + positive rapid urease test or a positive culture ... If the results of histology and rapid urease test are discordant, then a non invasive test (UBT or stool test) should be applied."

"The UBT and a validated ELISA for detection of *H. pylori* antigen in stool are reliable non invasive tests to determine whether *H. pylori* has been eradicated."

*H. pylori* testing may also be considered in children:

- With first-degree relatives with gastric cancer
- With refractory iron-deficiency anemia in which other causes have been ruled out

—Evidence-based guidelines from ESPGHAN and NASPGHAN for *Helicobacter pylori* infection in children, JPGN, 2011

## Avoiding false negative results

Antimicrobials, proton pump inhibitors, or bismuth preparations are known to suppress *H. pylori*. Ingestion of these within two weeks prior to administering the BreathTek™-UBiT™ or HpSA may lead to false negative results.

If patients currently taking PPI's test positive for *H. pylori*, it is considered positive and eradication therapy can be started immediately.<sup>8</sup> If the test is negative, it may be a false negative and results should be confirmed with a second breath test two weeks after discontinuing PPIs.

Histamine 2-receptor antagonists (H<sub>2</sub>RAs) should be stopped 24 to 48 hours before testing because they may reduce urease activity on urea breath tests.

Patients may continue taking antacids prior to testing, since their use does not appear to affect accuracy.

Test Name	Test Code	CPT Code	Specimen Requirements
<i>Helicobacter Pylori</i> Urea Breath Test - Pediatric	906542	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.
<i>Helicobacter pylori</i> Antigen, Enzyme immunoassay (EIA), Stool	19846	87338	Collect 0.5 mL of semisolid stool or 20-mm diameter solid stool and transfer to a properly labeled, sterile, leak-proof container. Do not place in preservative, transport media, or swab.

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.

For further information on usage and warnings regarding the *H. pylori* assay, see the FDA-approved package insert.

### References

1. Rowland M, Daly L, Vaughan M, et al. Age-specific incidence of *Helicobacter pylori*. *Gastroenterology*. 2006;130:65-72.
2. Goodman KJ, O'Rourke K, Day RS, et al. Dynamics of *Helicobacter pylori* infection in a US-Mexico cohort during the first two years of life. *Int J Epidemiol*. 2005;34:1348-55.
3. Sultan M. Pediatric *Helicobacter pylori* infection. Medscape. Available Online at [emedicine.medscape.com/article/929452-overview#a0199](http://emedicine.medscape.com/article/929452-overview#a0199). Accessed May 13, 2014.
4. Pellicano R, Franceschi F, et al. *Helicobacters* and extragastric diseases. *Helicobacter*. 2009;14 Suppl 1:58-68.
5. Suerbaum S, Michetti P. *Helicobacter pylori* infection. *N Engl J Med*. 2002;347:1175-86
6. Atherton JC. The pathogenesis of *Helicobacter pylori*-induced gastro-duodenal diseases. *Annu Rev Pathol*. 2006;1:63-96.
7. Koletzko S, et al. Evidence-based guidelines from ESPGHAN and NASPGHAN for *Helicobacter pylori* infection in children. *JPGN*. 2011;53(2):230-43.
8. Package Insert for BreathTek UBT. Otsuka America Pharmaceutical, Inc; 2016.

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