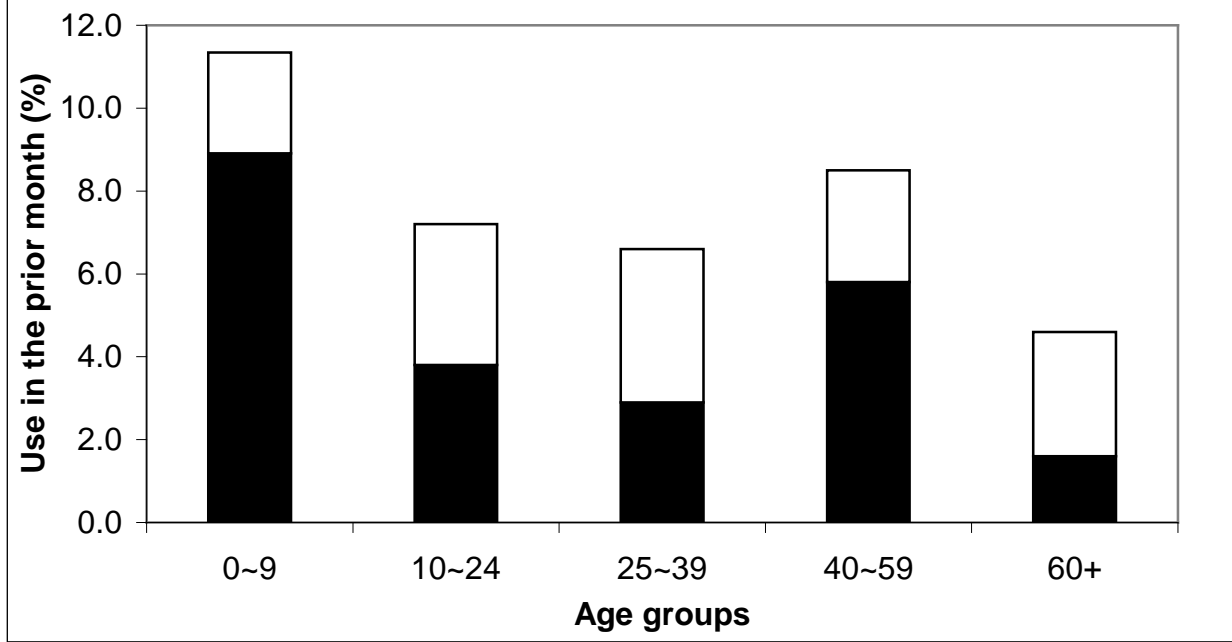


Supplemental Fig 1. Age-specific *H. pylori* prevalence in NHANES III Phase I (1988-1991) and NHANES 1999-2000, by age and year of birth. Data are shown as the NHANES III (●) and NHANES 1999-2000 (■). **Year of birth is shown at the midpoint of decadal birth categories.

Prevalence for participants ≤ 19 years of age was not available in NHANES III. For consistency, we did not consider the *H. pylori* *cagA* IgG ELISA testing results in NHANES III and participants with an immune status ratio 0.91-1.09 in NHANES 1999-2000.



Supplemental Fig 2. Use of antibiotics in prior month, as reported by 9,965 subjects, NHANES 1999-2000. Data are shown as all use of antibiotics (total columns) and use of β -lactam antibiotics (■). All penicillins and cephalosporins were considered β -lactam antibiotics.

Supplemental Table 1. Association of *H. pylori* status with asthma and allergic rhinitis, with additional control for socioeconomic status indicators †

Age group/Outcome	All	Age 3 – 19	Age 3 – 13	Age 14 – 19
	OR (95% CI) for outcome associated with <i>H. pylori</i> positivity *	OR (95% CI) for outcome associated with <i>H. pylori</i> positivity *	OR (95% CI) for outcome associated with <i>H. pylori</i> positivity *	OR (95% CI) for outcome associated with <i>H. pylori</i> positivity *
Total				
Asthma				
Never				
Ever	0.89 (0.66-1.18)	0.71 (0.43-1.17)	0.46 (0.26-0.84)	0.92 (0.67-1.25)
Ever, age at onset < 5†		0.52 (0.31-0.86)		
Ever, age at onset ≥ 5†		0.95 (0.47-1.93)		
Current or attack last year	0.69 (0.43-1.11)	0.82 (0.44-1.50)	0.41 (0.21-0.80)	1.10 (0.54-2.24)
Allergic rhinitis in prior year				
No				
Yes		0.59 (0.35-1.03)	0.32 (0.16-0.62)	0.93 (0.47-1.84)
Dermatitis, eczema, rash in prior year				
No				
Yes	0.74 (0.55-0.99)			

* ORs were adjusted for race-ethnicity, country of birth, age, sex, BMI, smoking status (for participants > 12 years old), educational attainment (for participants > 12 years old), antibiotic use in the prior month, corticosteroid use in the prior month, household income, medical insurance status, home ownership (rent, own, or other arrangement), and housing characteristics (trailer, single house attached to other houses, single unattached house, apartment). The reference group was *H. pylori*-negative persons.

† Cut-point was determined based on median onset age. Information on age at onset was missing for 6 participants who had ever had asthma.

‡ Allergic rhinitis in prior year, current status of asthma, and age at onset of asthma were ascertained only for participants ≤ 19 years of age. Stratified analysis was based on the median age (13 years) among participants ≤ 19 years.

Supplemental Table 2. Association of *H. pylori* status with asthma and allergic rhinitis, with additional control for Herpes Simplex I and Toxoplasma serum antibody status †

Age group/Outcome	<i>H. pylori</i>		OR (95% CI) for outcome associated with <i>H. pylori</i> positivity *	OR (95% CI) for outcome associated with <i>H. pylori</i> positivity †
	-	+		
Age 14-49	2332	1264		
Asthma				
Never had asthma	1997	1129		
Ever had asthma	335	135	0.87 (0.60-1.27)	0.90 (0.61-1.31)
Had an asthma episode in prior year	110	45	0.75 (0.42-1.36)	0.79 (0.43-1.46)
Dermatitis, eczema, rash in prior year				
No	2059	1165		
Yes	271	97	0.56 (0.37-0.84)	0.55 (0.36-0.83)
Wheezing in prior year				
No	1998	1140		
Yes	333	121	0.65 (0.45-0.94)	0.65 (0.44-0.95)
Age 6-49	3507	1551		
Asthma				
Never had asthma	2982	1380		
Ever had asthma	525	171	0.83 (0.59-1.16)	0.83 (0.59-1.17)
Had an asthma episode in prior year	178	58	0.71 (0.42-1.21)	0.71 (0.41-1.22)
Dermatitis, eczema, rash in prior year				
No	3180	1431		
Yes	892	118	0.56 (0.38-0.82)	0.57 (0.39-0.83)
Wheezing in prior year				
No	3038	1401		
Yes	462	146	0.63 (0.45-0.89)	0.63 (0.44-0.89)
Age 6-13	1148	266		
Asthma				
Never had asthma	962	233		
Ever had asthma	186	33	0.49 (0.30-0.80)	0.46 (0.27-0.81)
Current asthma	119	22	0.41 (0.24-0.69)	0.36 (0.20-0.65)
Allergic rhinitis in prior year				
No	1012	248		

Yes	126	18	0.31 (0.17-0.57)	0.31 (0.16-0.59)
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* ORs were adjusted for race-ethnicity, country of birth, age, sex, BMI, smoking status (for participants > 12 years old), and educational attainment (for participants > 12 years old). The reference group was *H. pylori*-negative persons.

† ORs were additionally adjusted for Herpes I and Toxoplasma serum antibody status in participants 14-49 years old and Toxoplasma serum antibody status in participants 6-13 years old and 6-49 years old. Data on Herpes I only were available for participants 14-49 years of age. Data on Toxoplasma serum antibody status only were available for participants 6-49 years of age.

‡ Allergic rhinitis in prior year and current status of asthma were ascertained only for participants ≤ 19 years of age.