## Correspondence

## Only one-third of US adults can correctly identify how tuberculosis is spread

Questions on a national health survey of adults in the United States have assessed for the first time public worry and knowledge about tuberculosis (TB). Despite the national resurgence of TB in this decade and the extensive coverage in the popular press, results indicate relatively low levels of knowledge about the transmission of tuberculosis.

The National Health Interview Survey (NHIS), an annual, face-to-face interview survey of a sample of households in the United States,<sup>1</sup> has included an AIDS knowledge and attitudes supplement since 1987, administered annually to 18 000–40 000 respondents aged 18 or older. Response rates for the AIDS supplement have been as high as 83%.<sup>2</sup> In 1994, questions about concern and knowledge about TB were added to this supplement. Analysis provides weighted estimates that are nationally representative and that take into account the complex design of the survey.

Of the total of 19127, 10.2% said they were worried about catching TB (95% confidence interval [CI], 9.7–10.7). In total, 41.3% (95% CI 40.4–42.1) stated they knew how TB was spread; 21.9% (95% CI 32.2–22.7) stated they knew nothing about TB.

Only 33.2% (95% CI 32.2–34.0) answered correctly that TB is spread through breathing the air near an infected person. Although the differences are not large (Table), certain groups had higher levels of knowledge: women, persons with some HIV risk, those with more education, older respondents, those from metropolitan areas, and those above the poverty level. Fewer Hispanics, a group whose rate of TB infection is higher than average,<sup>3</sup> gave the correct response. There was no difference in TB knowledge between those who had received an HIV test from a public program and all other respondents.

Knowledge about TB transmission stands in marked contrast to knowledge about HIV transmission. NHIS data collected from 1987 to 1994 have shown that 94% to 96% of respondents can correctly identify the major routes of infection: through sex, sharing drug injection needles, and from mother to baby.<sup>2</sup> According to NHIS data, more of the persons who had had an HIV test from a public program received counseling than did those who were tested elsewhere.<sup>4</sup> According to our results, persons who received public tests were no more likely than others to have correct knowledge of TB transmission, suggesting that an opportunity for increasing TB aware-

Table	Percentage of respondents giving the correct answer:
TB is sp	read through breathing the air around a person who is
sick wit	th TB

	US adu	lts aged 1	18 and older*	
Category	n	%	95% C.I.	
Total	19127	33.2	(32.3–34.0)	
Male	8 187	32.0	(30.8–33.1)	
Female	10940	34.3	(33.2–35.3)	
Age (years) 18–24 25–44 45–64 65+	2 064 8 312 4 985 3 766	17.2 32.3 40.0 37.4	(15.2–19.2) (31.0–33.7) (38.4–41.6) (35.4–39.4)	
Race/ethnic group White Black Hispanic Other	14 664 2 287 1 509 667	33.1 35.2 29.5 36.9	(32.1–34.1) (32.6–37.7) (27.0–32.0) (33.2–40.5)	
HIV risk category One or more None Unknown	563 18319 245	36.0 33.4 11.8	(31.4–40.6) (32.5–34.3) (7.1–16.5)	
Education Less than high school graduation	3 6 6 3	23.1	(21.5–24.7)	
High school graduation Greater than high school graduation	6 890 8 489	27.2 42.2	(26.0–28.4) (40.8–43.6)	
Metro area Central city Outside central city Non-metro area	6 166 8 431 4 530	36.2 33.5 28.5	(34.5–37.9) (32.4–34.7) (26.6–30.3)	
HIV test From public source† No public source	1 705 17 422	34.5 33.1	(31.8–37.1) (32.1–34.0)	
Poverty level Above poverty level Below poverty level Unknown	15263 2418 1446	34.7 25.4 26.7	(33.7–35.6) (23.3–27.5) (24.3–29.1)	

\*1994 National Health Interview Survey AIDS Knowledge and Attitudes Supplement.

t All differences between categories significant  $\chi^2$  (P < 0.05), except for HIV test from public source versus all other respondents.

CI = confidence interval.

ness and knowledge through HIV counseling and testing is being missed.

Educating persons at high risk for TB is a high priority for TB prevention in the United States.<sup>5</sup> The CDC's Division of TB Elimination has supported a number of prevention efforts, including two education videotapes produced by the New York City Bureau of TB Control and distributed nationwide, publication of the 'Tuberculosis Education Resource Guide' in collaboration with the American Lung Association (available on the Internet in early 1998), and a meeting in 1998 to develop a 5-year strategies plan for TB training and education, sponsored with three National TB Model Centers.

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