

## Computer Access and Internet Use Among Urban Youths

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This report presents data on computer access, Internet use, and factors associated with health information seeking on the Internet among a sample of youths aged 15 to 30 years in New York City. Findings from street intercept surveys indicate substantial computer access at home (62%) and frequent (everyday or a few times a week) Internet use (66%). Fifty-five percent of the sample reported seeking health information on the Internet, which was associated with positive beliefs about getting a health checkup and frequent Internet use. (*Am J Public Health.* 2004;94:744–746)

An estimated 54% of urban households use the Internet, with use highest among youths aged 9 to 17 (69%) and 18 to 24 years (65%).<sup>1</sup> Accordingly, there is enormous potential for the Internet as a source of health information and as a component of health promotion pro-

grams. Studies show that up to 60% of adults with Internet access have searched for health or medical information.<sup>2,3</sup> Children and adolescents also report using the Internet as a resource for health information, although not as extensively as adults.<sup>4–6</sup> This report presents data on Internet access and use among a sample of youths in New York City and describes the extent to which they use the Internet for seeking health information.

### METHODS

Measures were developed as part of a larger sexually transmitted disease (STD) prevention study. Street intercept interviews were conducted in Central Harlem and Bedford Stuyvesant, New York City, 2 communities that are comparable regarding demographics such as income and racial composition. Measures relevant to the current analysis include availability of a computer at home, school, or community-based organization; frequency of Internet use; reasons for going online; beliefs about going for a health checkup at least once a year (7-point Likert scale from negative to positive), and knowledge of STDs (7-item scale).

A structured sampling design was used to select locations with high volumes of young adults. Twelve sites were chosen randomly, 6 in each area, from a larger group of identified locations. Surveys were conducted at various times throughout the day, mainly after school, to obtain a cross-section of community members. Data collection occurred at several venues, including housing developments, shopping areas, and near schools. Eligibility was based on zip code residence and age (15–30 years); subway tokens were given as compensation. Trained interviewers collected data in the summer of 2001 in Harlem and in the winter of 2002 in Bedford Stuyvesant. Refusal rates are unavailable owing to the nature of street interviews; however, any passerby was approached to participate, with the exception of individuals clearly not in the specified age range, or if the interviewer was already conducting an interview.

### RESULTS

Fifty-five percent of the sample (n=285) was from Harlem. The sample was 51% fe-

**TABLE 1—Computer Access and Internet Use (%) by Age: Central Harlem and Bedford Stuyvesant, New York City**

	Ages 15–18 (n = 130)	Ages 19–30 (n = 149)	Total (n = 279)
Computer available at home	67	57	62
Computer available at a local community-based organization	77	56	66***
Computer available at school <sup>a</sup>	91	55	77***
Internet use			
Every day	29	24	26
Few times/wk	40	41	40
Few times/mo or less	27	17	22
Never	4	19	12
Reasons for Internet use <sup>b</sup>	(n = 125)	(n = 125)	(n = 250)
E-mail (n = 189)	72	79	76
Chat rooms (n = 143)	66	48	57**
Games (n = 192)	83	72	77*
Music lyrics/sports pages (n = 211)	90	79	85*
Look up information on health issues (n = 136)	51	58	55
Look up information in general (n = 216)	82	91	86*

<sup>a</sup>Only students included in this category. For ages 15 to 18, n = 120; for ages 19 to 30, n = 59; for total sample, n = 181.

<sup>b</sup>Only Internet users included in this category. For ages 15 to 18, n = 125; for ages 19 to 30, n = 125; for total sample, n = 250.

\* $P < .05$ ; \*\* $P < .01$ ; \*\*\* $P < .001$ .

**TABLE 2—Logistic Regression Analysis of Looking Up Health Information on the Internet: Central Harlem and Bedford Stuyvesant, New York City**

	Odds Ratio	95% Confidence Interval
Age	1.05*	0.991, 1.12
Gender	1.54*	0.939, 2.54
Computer access		
Home	1.37	0.811, 2.30
School	0.914	0.475, 1.76
Local CBO	1.56	0.891, 2.73
Internet use <sup>a</sup>		
Every day	1.01	0.584, 1.75
Few times/wk	1.69**	1.02, 2.80
Few times/mo or less	0.634	0.358, 1.12
STD knowledge <sup>b</sup>	1.21*	0.985, 1.48
Health care visit		
in past 12 mo		
For any reason	1.11	0.631, 1.97
For a health checkup	1.06	0.617, 1.83
Beliefs about going for health checkup at least once a year <sup>c</sup>		
"Would be embarrassing."	0.955	0.825, 1.11
"Would be scary."	0.961	0.852, 1.08
"Would show I care about my health."	1.46**	1.06, 2.03

Note. CBO = community-based organization; STD = sexually transmitted disease.

<sup>a</sup>Referent group is respondents who reported never having used Internet.

<sup>b</sup>0 = no correct responses; 7 = all responses correct.

<sup>c</sup>1 = strongly disagree; 7 = strongly agree.

\* $P < .10$ ; \*\* $P < .05$ .

male, with a mean age of 20.3 years; 81% identified themselves as African American and 13% as Hispanic.

### Computer Availability

Table 1 presents computer availability by age, which is stratified according to school enrollment age. Most of the sample reported access to a computer at home (62%), at a local community-based organization (66%), or at school (77%). Younger respondents displayed higher rates of access at community-based organizations and school compared with other ages.

### Internet Use

Two thirds of respondents used the Internet either every day or a few times a week (Table 1). Twelve percent reported never using the Internet; this percentage was much higher among the older (18.9%) than the younger (3.9%) age group.

### Reasons for Internet Use

Fifty-five percent of Internet users reported seeking health information on the Internet, with no gender or age differences (Table 1). Younger respondents were more likely than older respondents to use the Internet for chat

rooms, to play games, and to visit music or sports pages. Older respondents were more likely to look up general information. Other than males being more likely to access music or sports pages, there were no gender differences in reasons for Internet use.

### Looking Up Health Information

Bivariate logistic regression analysis shows that the odds of looking up health information on the Internet was significantly higher among respondents who agreed with the statement, "Going for a health care checkup at least once a year shows that I care about my health," as well as for those reporting Internet use a few times a week (Table 2). Other beliefs about checkups (i.e., that they would be embarrassing or scary) were not associated with seeking health information. High STD knowledge, age, and being female were all marginally significant ( $P < .10$ ).

### DISCUSSION

Findings from these 2 urban communities suggest that computer access and Internet use rates from this study population are comparable to the national estimates.<sup>1,7</sup> The percent-

age of respondents having a home computer is substantial, and even more so among school-age adolescents. In addition, the availability of computers at school and at a community-based organization indicates broad community familiarity with these technologies.

Since study measures were limited to basic information on Internet use, more research on the specific types of health information sought would be useful. Respondents reporting using the Internet a few times a week are more likely than others to look up health information, suggesting that intermittent users may use the Internet specifically for information gathering compared with more frequent users.

The Internet enables adolescents to explore topics like sexual health in a confidential and anonymous manner. Pervasive Internet use makes alternative data collection methods (e.g., online surveys) feasible, and information technologies can be used to enhance youth health promotion programs and media campaigns. ■

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### Contributors

A. Bleakley wrote the text and analyzed the data. C.R. Merzel, N.L. VanDevanter, and P. Messeri contributed to the study design and implementation and reviewed early manuscript drafts.

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### Human Participant Protection

This study was approved by the institutional review boards at Columbia University and the Centers for Disease Control and Prevention.

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