



CWHS

Data Points

RESULTS FROM THE CALIFORNIA WOMEN'S HEALTH SURVEY

Approximately 20 million people in the United States are infected with human papillomavirus (HPV) and another 6.2 million people become newly infected each year.¹⁻² HPV is a significant cause of cervical cancer and an HPV vaccine has been recently approved for females ages 9-26.¹ An estimated 11,070 U.S. women will be diagnosed with cervical cancer in 2008.¹ Although HPV is acknowledged to be the most prevalent sexually transmitted infection (STI) in this country, earlier research found that less than a third of the general population has heard of HPV and awareness is low among young women in particular.³

In 2007, respondents of the California Women's Health Survey were asked if the following statements were true or false: (1) "Some strains (types) of the human papillomavirus (HPV) cause cervical cancer; and (2) The human papillomavirus (HPV) is sexually transmitted." Women were also asked if they had ever had a Pap test, heard about HPV, had a doctor talk with them about HPV and cervical cancer, and their condom use. Comparisons between groups were evaluated using Chi square analyses. Responses were weighted in these analyses by age and race/ethnicity to reflect the 2000 California adult female population. Analyses were limited to women ages 18-49 (see Figure 1).

HPV Causes Cervical Cancer

- A higher proportion of White women correctly reported that HPV causes cervical cancer (95.7 percent) compared with Hispanic (93.3 percent), African American/Black (93.2 percent),

and Asian/Other women (80.9 percent; $p < .0001$).

- A higher proportion of women ages 30-39 reported that HPV causes cervical cancer (94.9 percent) compared with women ages 40-49 (93.4 percent) and ages 18-29 (90.0 percent; $p < .05$).
- A higher proportion of women with income above 200 percent of the federal poverty level (FPL) reported that HPV causes cervical cancer (95.5 percent) compared with women with incomes below that level (88.7 percent; $p < .0001$).
- Women who had heard about the HPV vaccine (95.6 percent; $p < .0001$) and reported that their doctor talked to them about HPV and cervical cancer (96.6 percent; $p < .01$) were more likely to be correct about HPV causing cancer compared with those who had not heard about the vaccine (84.2 percent) or had not discussed the relationship between HPV and cervical cancer with their doctor (90.9 percent).
- Sample size was too small for results to be reliable concerning differences for women's knowledge of HPV causing cancer by history of Pap test or frequency of condom use.

HPV is Sexually Transmitted

- A higher proportion of White women correctly reported that HPV is sexually transmitted (90.0 percent) compared with Hispanic (85.8 percent), African American/Black (81.1 percent), and Asian/Other women (77.5 percent; $p <$

Human Papillomavirus Knowledge Among California Women, 2007

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Public Health Message:

These findings demonstrate that young, minority, and low-income women had lower levels of knowledge about the association of HPV with cervical cancer and sexual transmission of HPV. Also, those women who did not have a doctor discuss HPV had less knowledge about the association between HPV and cervical cancer. Educational materials on HPV and HPV vaccination could be effectively targeted toward these specific populations to improve awareness.

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Asian/Other women (77.5 percent; $p < .01$).

- A higher proportion of women, ages 30-39 reported that HPV is sexually transmitted (89.9 percent) compared with women ages 40-49 (88.3 percent) and ages 18-29 (81.5 percent; $p < .001$).
- A higher proportion of women with incomes above 200 percent of the FPL reported that HPV is sexually transmitted (88.2 percent) compared

with women with incomes at or below 200 percent of the FPL (83.1 percent; $p < .05$).

- There were no significant differences found for women's correct knowledge that HPV is sexually transmitted based on ever having a Pap test, hearing about the HPV vaccine, frequency of condom use, or having a doctor talk with them about the relationship between HPV and STIs.

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Figure 1

HPV Knowledge of women 18-49, by Demographics and Sexual behaviors

Variables	HPV causes cervical cancer (%True)		HPV is sexually transmitted (%True)	
<u>Demographic Variables</u>				
• Race/Ethnicity		p < .0001		p < .0028
○ White	95.7		90.0	
○ African-American/Black	93.2		81.1	
○ Hispanic	93.3		85.8	
○ Asian/Other	80.9		77.5	
• Age Groups by Decade		p < .0238		p < .0004
○ 18-29 yrs old	90.0		81.5	
○ 30-39 yrs old	94.9		89.9	
○ 40-49 yrs old	93.4		88.3	
• Federal Poverty Level (FPL)		p < .0001		p < .0181
○ Women 200 percent at/below the FPL	88.7		83.1	
○ Women 200 percent above the FPL	95.5		88.2	
• Ever had a Pap Test		*		p < .0872
○ Yes	93.2		87.0	
○ No	*		78.7	
• Heard about HPV Vaccine		p < .0001		p < .2841
○ Yes	95.6		86.9	
○ No	84.2		84.3	
• How often use condoms in last 12 months		*		p < .3043
○ Always	93.8		83.9	
○ More than ½ the time	87.5		93.3	
○ ½ the time	*		85.3	
○ Less than ½ the time*	99.8		91.9	
○ Never	91.9		86.7	
○ No male partner	95.4		87.6	
• Health care provider ever talked about HPV & cervical cancer		p < .0040		p < .1026
○ Yes	96.6		89.1	
○ No	90.9		84.9	

*Sample size is too small for results to be reliable
Source: California Women's Health Survey, 2007

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- 1 Centers for Disease Control. Fact Sheet, Genital HPV. <http://www.cdc.gov/std/HPV/STDFact-HPV.htm>. Published November 2009. Accessed December 2009.
- 2 Montano DE, Kasprzyk D, Carlin L, Freeman C. (2005). HPV Provider Survey: knowledge, attitudes, and practices about genital HPV infection and related conditions. <http://www.cdc.gov/std/HPV/HPVProviderSurveyExecSum.pdf>. Published June 2005. Accessed December 2008.
- 3 Anhang R, Goodman A, Goldie S. HPV communication: Review of existing research and recommendations for patient education. *CA Cancer J Clin.* 2004; 54; 248-259.

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