

HPV Vaccine Awareness, Use, and Attitudes



In a Diverse Parent Population

Findings from the 2007
Los Angeles County Health Survey

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Learning Objectives

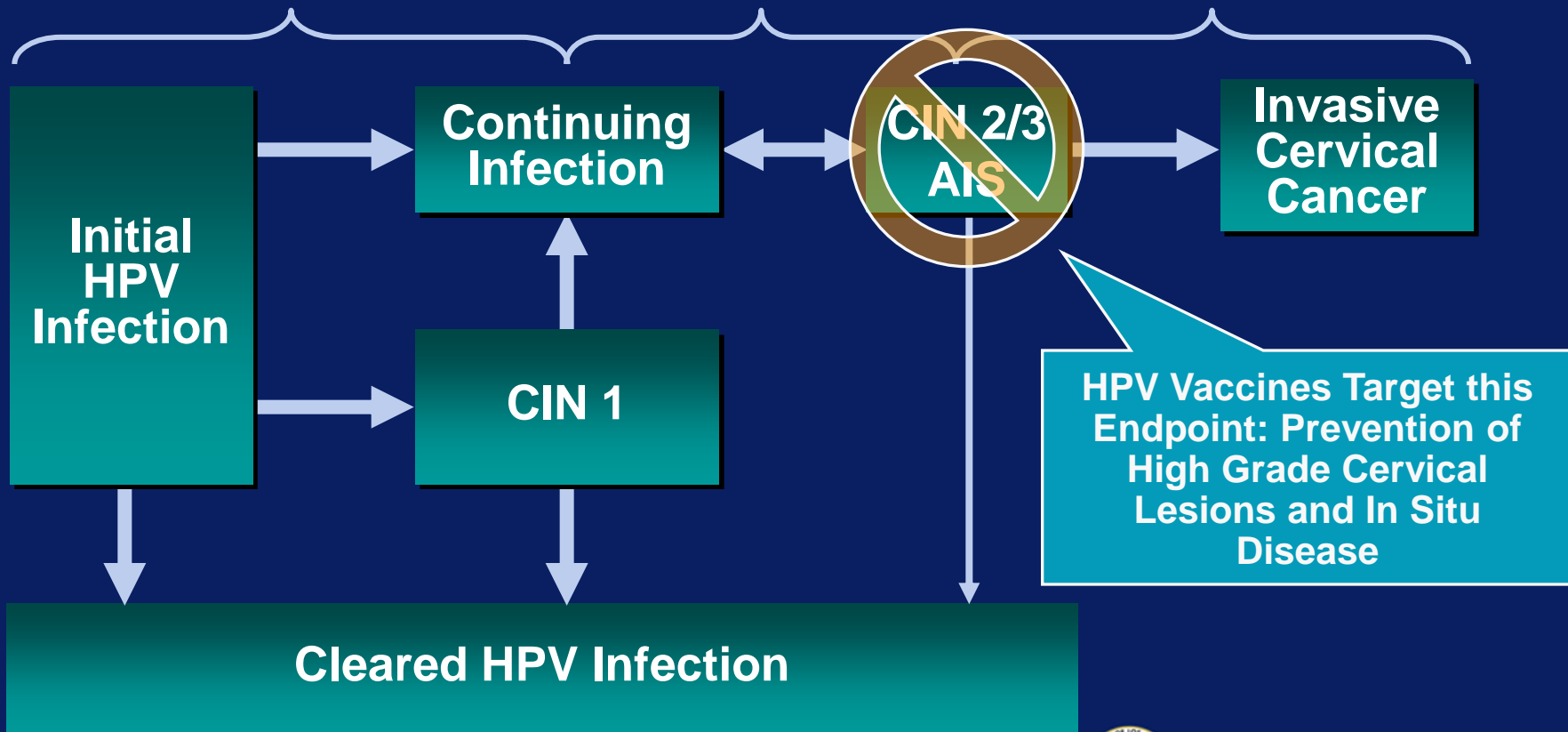


- Describe the ACIP recommendations for HPV vaccination in children and teen girls
- Describe uptake of the HPV vaccine among minors in Los Angeles County, CA
- Understand parents' concerns about HPV vaccination



Natural History of HPV Infection and Potential Progression to Cervical Cancer

0 – 1 Year 0 – 5 Years 1 – 20 Years

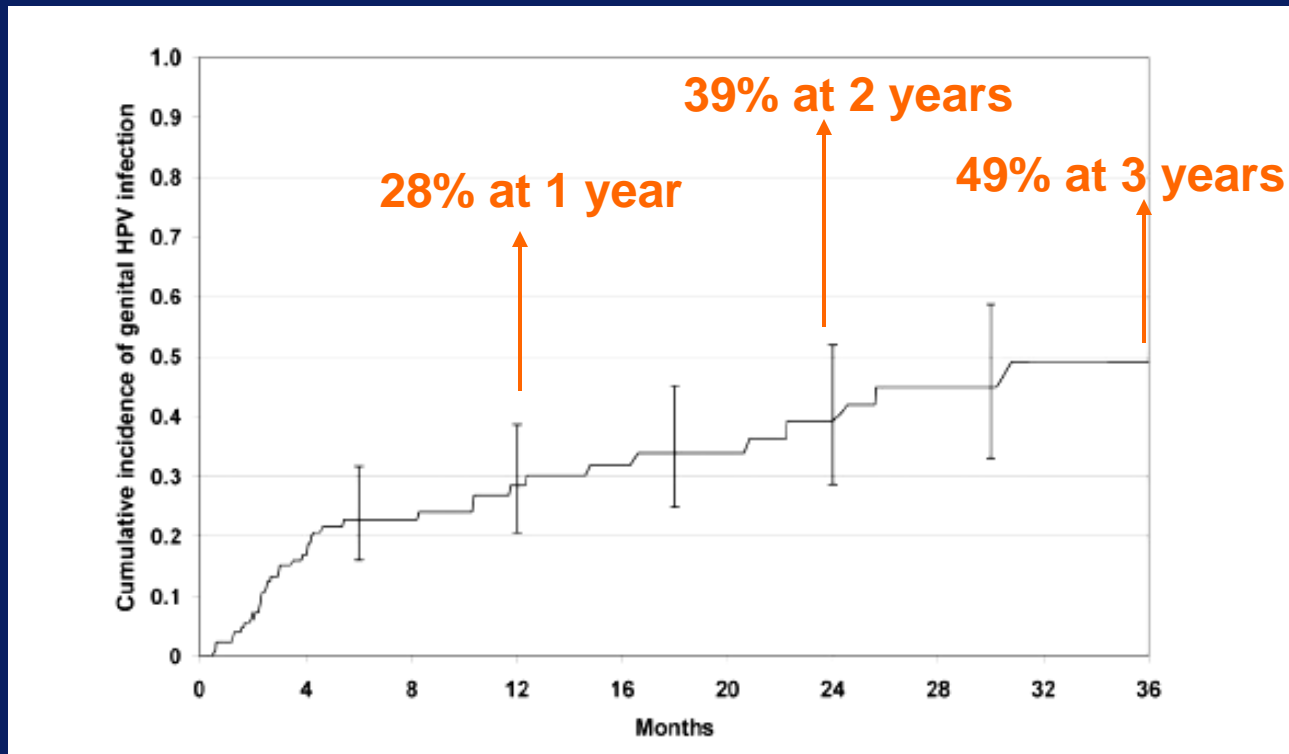


HPV as Sexually Transmitted Infection

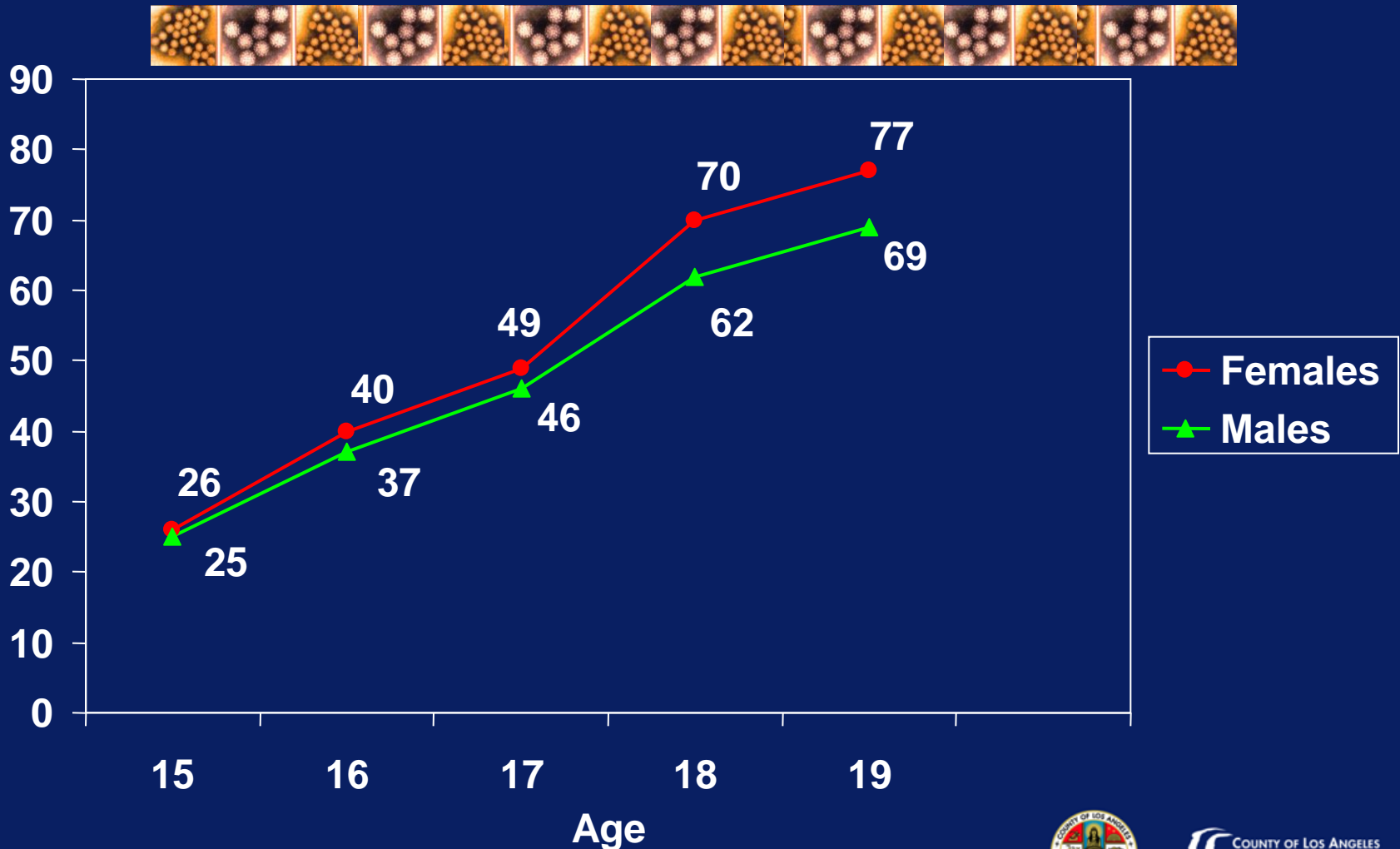


- The most common sexually transmitted infection in the U.S.— estimated 20 million new infections/year
- Sexually active individuals 15–24 years of age most at risk
 - ~ 74% of new HPV infections occur in this age group
 - In studies of women <25 years of age, prevalence ranges from 28% to 46%
- *Infection common soon after sexual debut*

HPV Infection Rate After 1st Intercourse: Young Women with 1 Male Partner



Percent of Youth who Have Had Vaginal Sex, by Gender and Age: NSFG 2002



Timing of HPV Vaccination



- Must be given before sexual debut for maximum efficacy
- 38% of males and 27% of females in the U.S. have sexual intercourse by the 9th grade (*2007 Youth Behavior Risk Survey, CDC*)
- Median age of coitarche in U.S. girls is 15 (*Kaiser Family Foundation*)
- Vaccine produces stronger immune response in females ages 10-14 compared to 15-25 year olds



Challenges to HPV Vaccine Implementation: Parental Acceptance



- Lack of awareness about HPV
- Misunderstandings about HPV
- Feelings that HPV is a different type of infection/disease than other vaccine-preventable illnesses
- Concerns about/denial of childrens' potential sexual behaviors
- Physician recommendation of vaccine important to acceptance



HPV Vaccine Side Effects



- Most common: pain at injection site (84% vs. 49% injected with placebo)
- 25% swelling, erythema at injection site
- Fever, headache, dizziness, nausea
- Syncope → observe patient 15 minutes after vacc.
- As of June 08, VAERS received reports of 9,749 potential adverse events following HPV vaccination
 - 6% considered serious, compared to 10-15% for other vaccines
 - No proven causality



ACIP Recommendations for HPV Vaccine



- In June 2006, ACIP recommended that the prophylactic HPV vaccine be routinely given to girls 11-12 years old
- Allows for vaccination of girls beginning at 9 years old, at the discretion of the physician
- “Catch-up” vaccination of girls and women 13-26 years old



Federal Coverage for HPV Vaccine: Vaccines for Children Program



- Provides vaccines for eligible children < 19 years old
 - Medicaid eligible
 - Uninsured
 - Underinsured (health insurance doesn't pay for vaccines) and receives care in Federally Qualified Health Clinic (FQHC) or Rural Health Clinic (RHC)
 - American Indian/Alaska Native



Methods:

Awareness and Use of HPV Vaccine



- 2007 Los Angeles County Health Survey
- Periodic, population-based, random digit dial computer-assisted telephone survey in 6 languages
- 5,728 parents of children 0-17 interviewed (43% in language other than English)
- Descriptive analyses
- Logistic regression analyses
 - Parental age, race/ethnicity, education, income, marital status, language, birthplace; Child's gender, age, insurance, difficulty accessing care, regular source of care



HPV Vaccine Questions



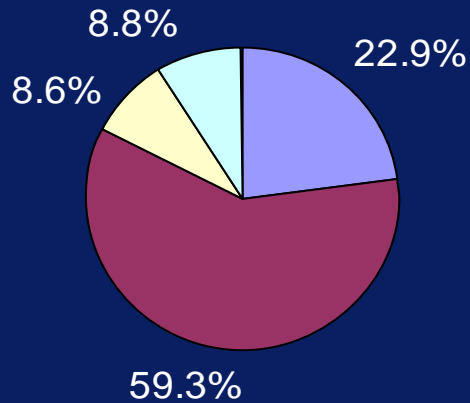
- Brief description of cervical cancer vaccine
- Before today, had you heard of...?
- Where did you hear about the vaccine?
- For parents of girl 9-17, has daughter received any shots?
- If not, how likely is it that you will vaccinate her?
- If not likely, why not?



Study Population: Parent Characteristics

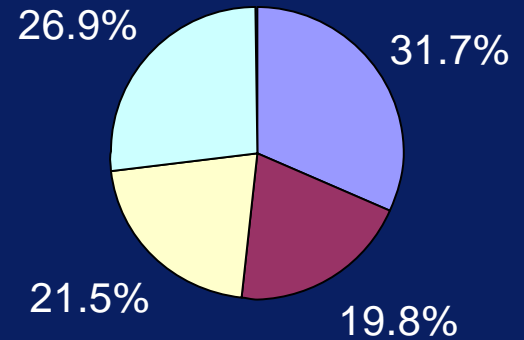


Race/ Ethnicity



■ White ■ Latino ■ Black ■ API

Education



■ Less than high school ■ High school
■ Some college or trade school ■ College/Grad degree



Results: Awareness of HPV Vaccine



	Percent	Adjusted OR (95% CL)
<u>Parent Race-Ethnicity</u>		
White	88.0%	1.0 (ref)
Latino	62.2%	0.56 (0.41, 0.76)
African American	76.6%	0.49 (0.32, 0.75)
Asian/ Pacific Islander	57.2%	0.34 (0.23, 0.52)
<u>Education</u>		
College or post graduate degree	81.6%	1.0 (ref)
Some college or trade school	78.4%	0.95 (0.72, 1.26)
High school	66.1%	0.72 (0.54, 0.97)
Less than high school	54.6%	0.53 (0.39, 0.72)
		P trend<0.0001

Adjusted for parental age, race/ethnicity, education, income, marital status, language, birthplace; child's gender, age, insurance, difficulty accessing care, regular source of care



Awareness of HPV Vaccine

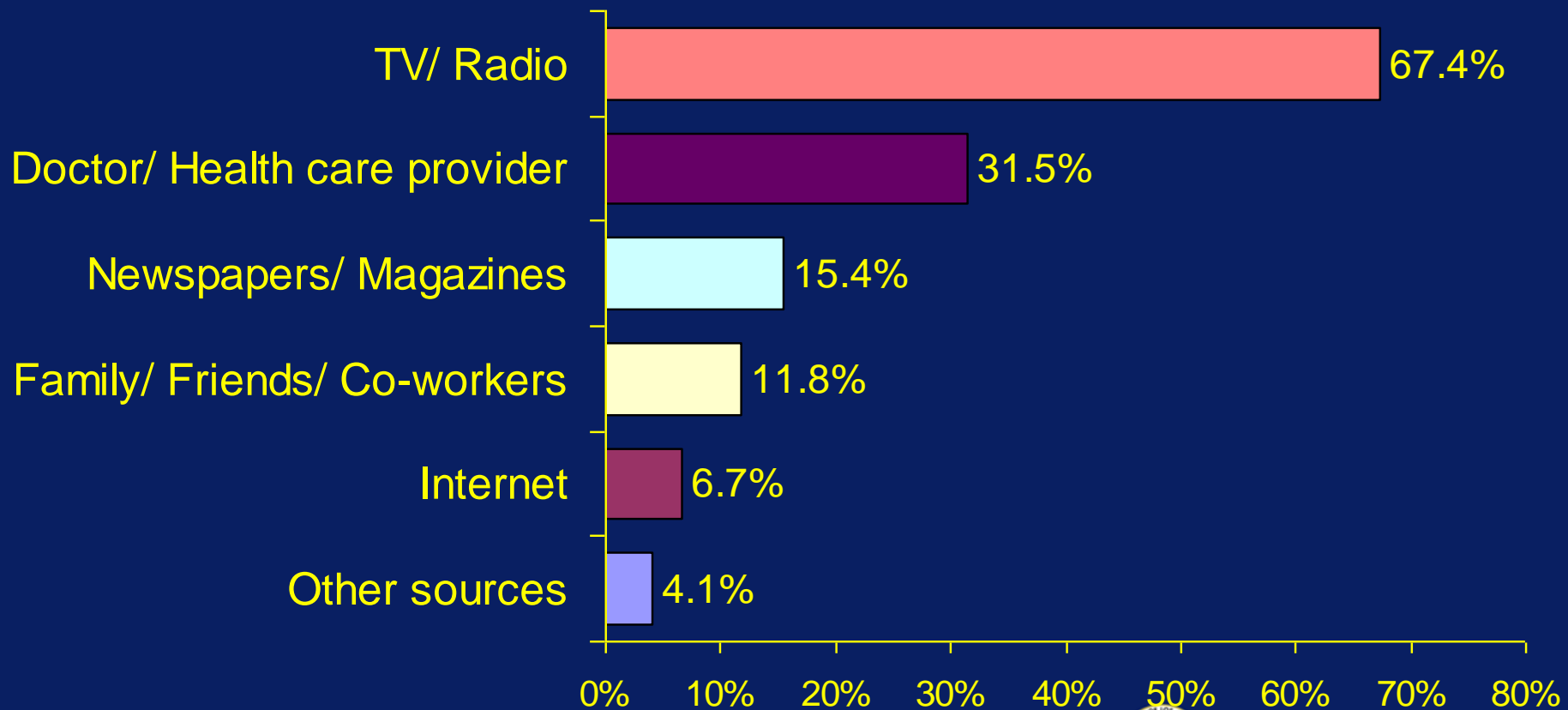


<u>Child Age Group</u>	Percent	Adjusted OR (95% CL)
0-8 yrs	67.0%	1.0 (ref)
9-10 yrs	67.7%	1.04 (0.80, 1.34)
11-12 yrs	71.2%	1.28 (1.00, 1.65)
13-14 yrs	70.7%	1.21 (0.92, 1.59)
15-17 yrs	72.6%	1.31 (1.02, 1.68)
		P trend=0.013
<u>Child Insurance</u>		
Private	81.1%	1.0 (ref)
No insurance	56.4%	0.70 (0.49, 0.98)
Medi-Cal	58.4%	0.75 (0.58, 0.96)
Healthy Families/ Healthy Kids	62.6%	0.90 (0.69, 1.19)

Adjusted for parental age, race/ethnicity, education, income, marital status, language, birthplace; child's gender, age, insurance, difficulty accessing care, regular source of care



Where Did LA Parents Hear About HPV Vaccine?



Uptake of HPV Vaccine among Girls in LA County



- As of 2007, 22.7% of girls 11-17 had received at least one HPV vaccination
 - 32.6% of white girls
 - 20.3% of Latinas
 - 23.1% of Asian/Pacific Islander girls
 - 15.9% of African American girls
- 18.8% of girls 9-17 had received a shot
- 67.6% of parents whose 9-17 year old daughters had not received any shots said they were likely to have their daughters vaccinated against HPV



Uptake of HPV Vaccine among Girls 9-17 Years Old



	Percent	Adjusted OR (95% CL)
<u>Parent Race-Ethnicity</u>		
White	24.6%	1.0 (ref)
Latino	16.7%	1.16 (0.67, 2.00)
African American	13.0%*	0.40 (0.18, 0.88)
Asian/ Pacific Islander	19.0%	1.25 (0.60, 2.59)
<u>Education</u>		
College or post graduate degree	27.7%	1.0 (ref)
Some college or trade school	16.2%	0.54 (0.35, 0.85)
High school	14.2%	0.54 (0.29, 1.01)
Less than high school	16.4%	0.67 (0.34, 1.34)
		P trend=0.26

* Unstable estimate

Adjusted for parental age, race/ethnicity, education, income, marital status, language, birthplace; child's gender, age, insurance, difficulty accessing care, regular source of care



Uptake of HPV Vaccine among Girls 9-17 Years Old



<u>Child Age Group</u>	Percent	Adjusted OR (95% CL)
9-10 yrs	4.5%*	1.0 (ref)
11-12 yrs	17.7%	5.86 (2.78, 12.4)
13-14 yrs	23.8%	10.0 (4.83, 20.7)
15-17 yrs	25.1%	10.2 (5.01, 20.7)
		P trend<0.0001
<u>Child Insurance</u>		
Private	24.3%	1.0 (ref)
Medi-Cal	14.1%	0.68 (0.36, 1.30)
Healthy Families/ Healthy Kids	15.7%	0.90 (0.46, 1.74)
No insurance	7.3%*	0.31 (0.11, 0.89)

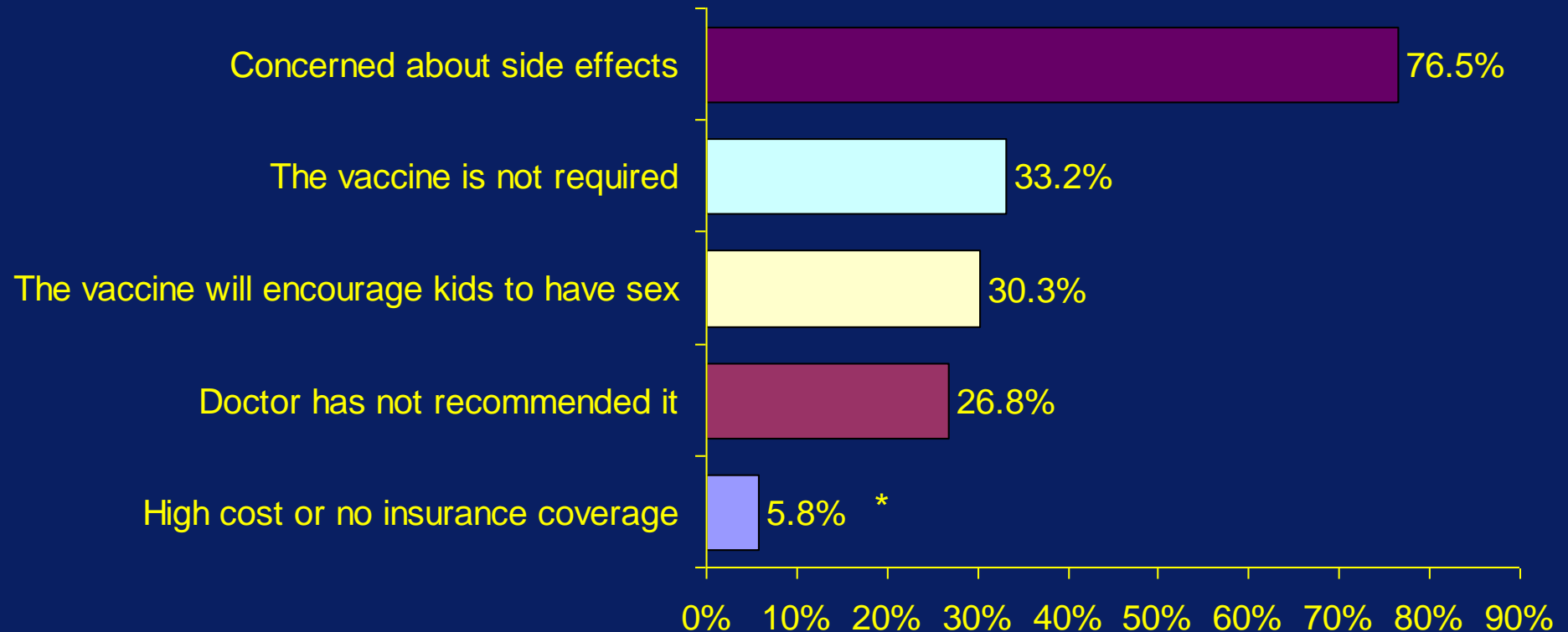
* Unstable estimates

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Reasons Parents Cite for Not Vaccinating their Daughters against HPV

(among those who do not intend to vaccinate)



22.7% of parents do not know if cost or insurance coverage would be an issue.

* Unstable estimates



HPV Vaccination in LA Girls: Conclusions



- Disparities in vaccine awareness among parents: Latino, African American, Asian/PI; parents with less education; parents whose kids lack insurance
 - *Only 31% heard about vaccine from doctor*
 - *Culturally sensitive, multilingual educational efforts needed*
 - *Increase community awareness/understanding*



HPV Vaccination in LA Girls: Conclusions



- Fewer disparities in vaccination rates in adjusted analyses
- Uninsured children remain vulnerable
- African American girls significantly less likely to be vaccinated
 - *Access issues? African American parents cite same level of intention to vaccinate as other parental groups*
 - *Legacy of mistrust/fear?*

