

Human Papillomavirus (HPV) Vaccination Coverage in the United States

National Immunization Survey-Teen (NIS-Teen), 2006-2011

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Presentation Outline

- ❑ NIS-Teen methodology
- ❑ National and state HPV vaccination estimates for adolescents ages 13-17 years
- ❑ Intent to receive HPV vaccine among the unvaccinated
- ❑ Reasons for non-intent to receive HPV vaccine

National Immunization Survey-Teen

□ NIS-Teen

- Conducted annually since 2006
 - Random-digit-dialing household survey of parents of adolescents 13-17 years
 - Includes landline and starting in 2011, cell-phone sampling frames
 - Provider-reported vaccination history
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- More information on the NIS-Teen available at:
<http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#nisteen>

HPV vaccination estimates among adolescents, NIS-Teen, United States, 2011

Vaccine	% (95% CI)
Girls	
≥1 HPV	53.0±1.7*
≥3 HPV	34.8±1.6*
Series Completion [†]	70.7±2.3
Boys	
≥1 HPV	8.3±1.0*
≥3 HPV	1.3±0.3*
Series Completion [†]	28.1±6.5

* Statistically significant difference from 2010 estimate.

† Among teens who had at least 24 weeks between the first dose and the NIS-Teen interview date.

HPV, Tdap, and MenACWY vaccination estimates among adolescents, 13-17 years, NIS-Teen, United States, 2006-2011



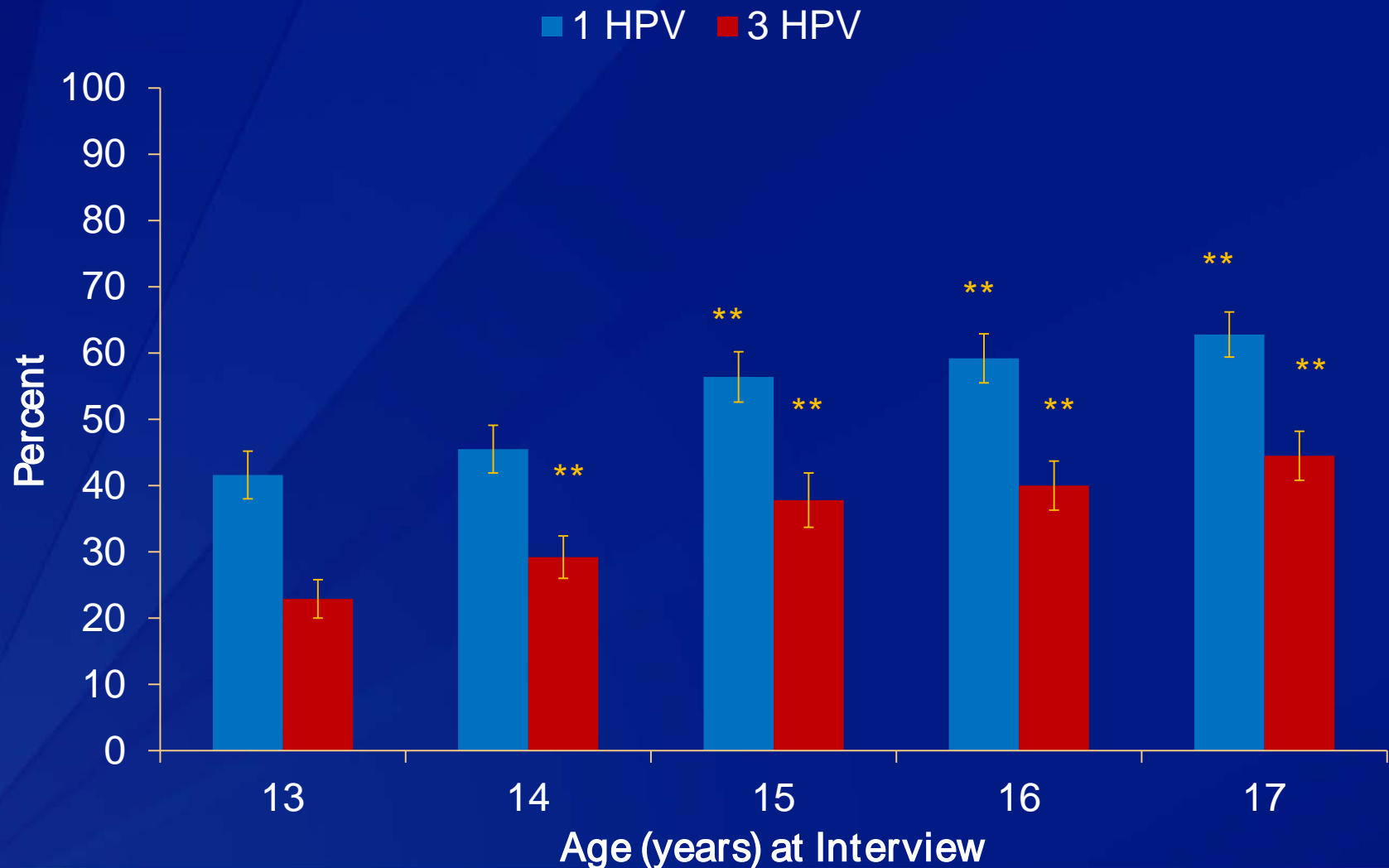
* Tetanus toxoid, diphtheria toxoid, acellular pertussis vaccine since age 10

† Meningococcal conjugate vaccine

§ Among Females

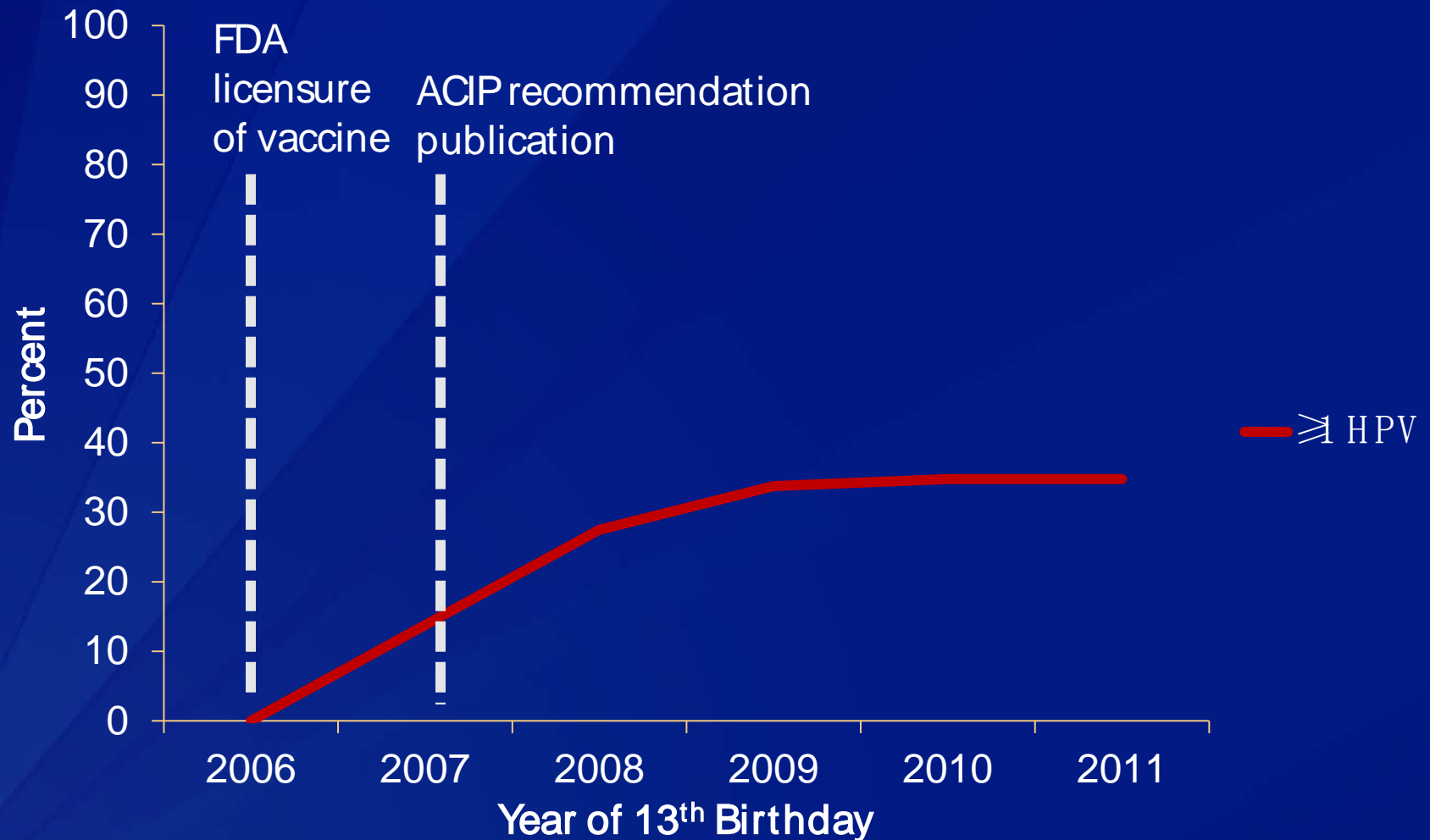
** Among Males

HPV vaccination estimates among adolescent girls by age at interview, NIS-Teen, United States, 2011

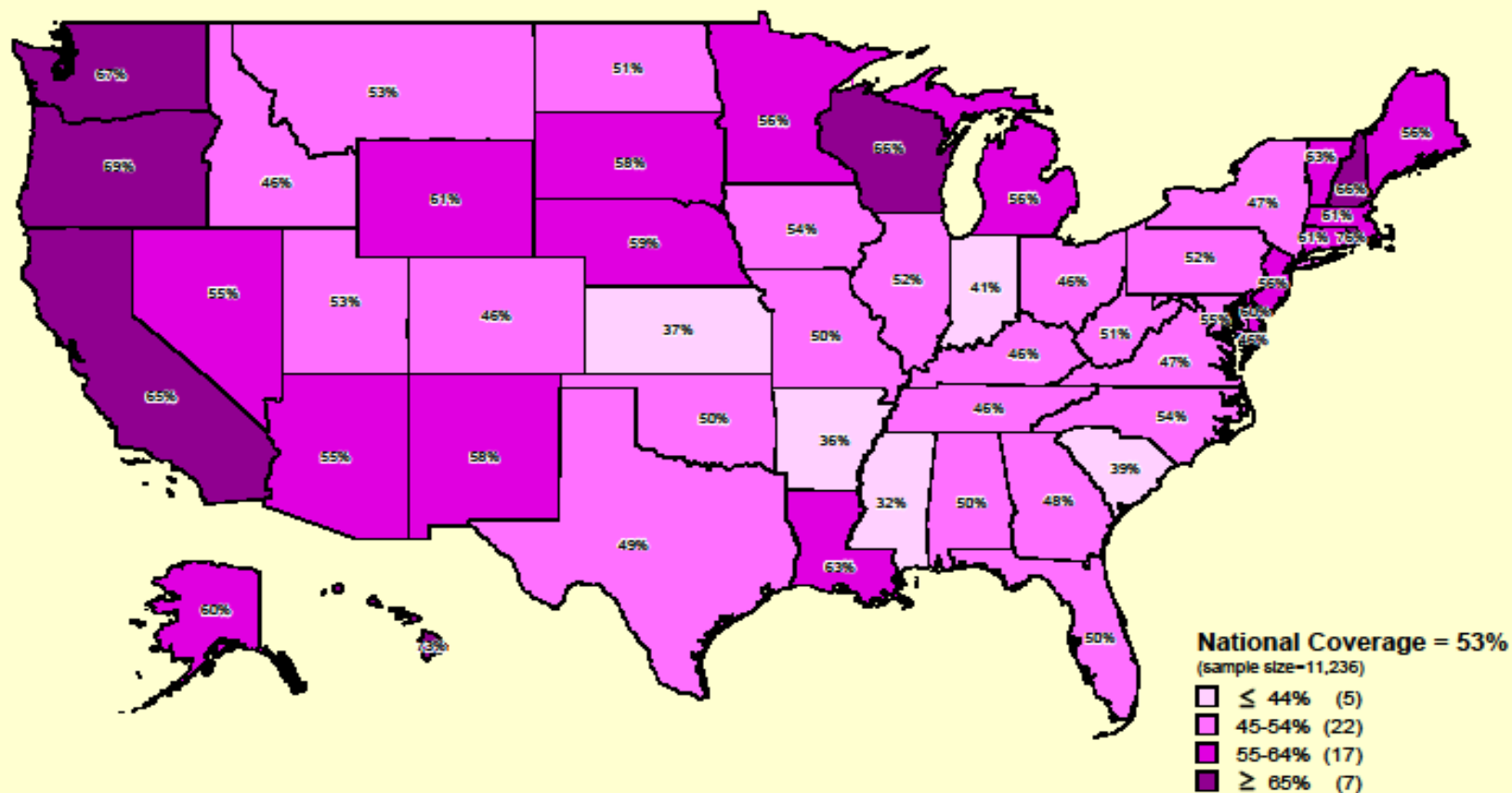


** Significantly different than girls 13 years of age ($p < 0.05$)

Percent of girls, 13-17 years, that received ≥ 1 HPV dose by age 13, NIS-Teen, United States, 2011



Coverage of 1 or More Doses of HPV* Female Adolescents Aged 13-17 Years Old, 2011



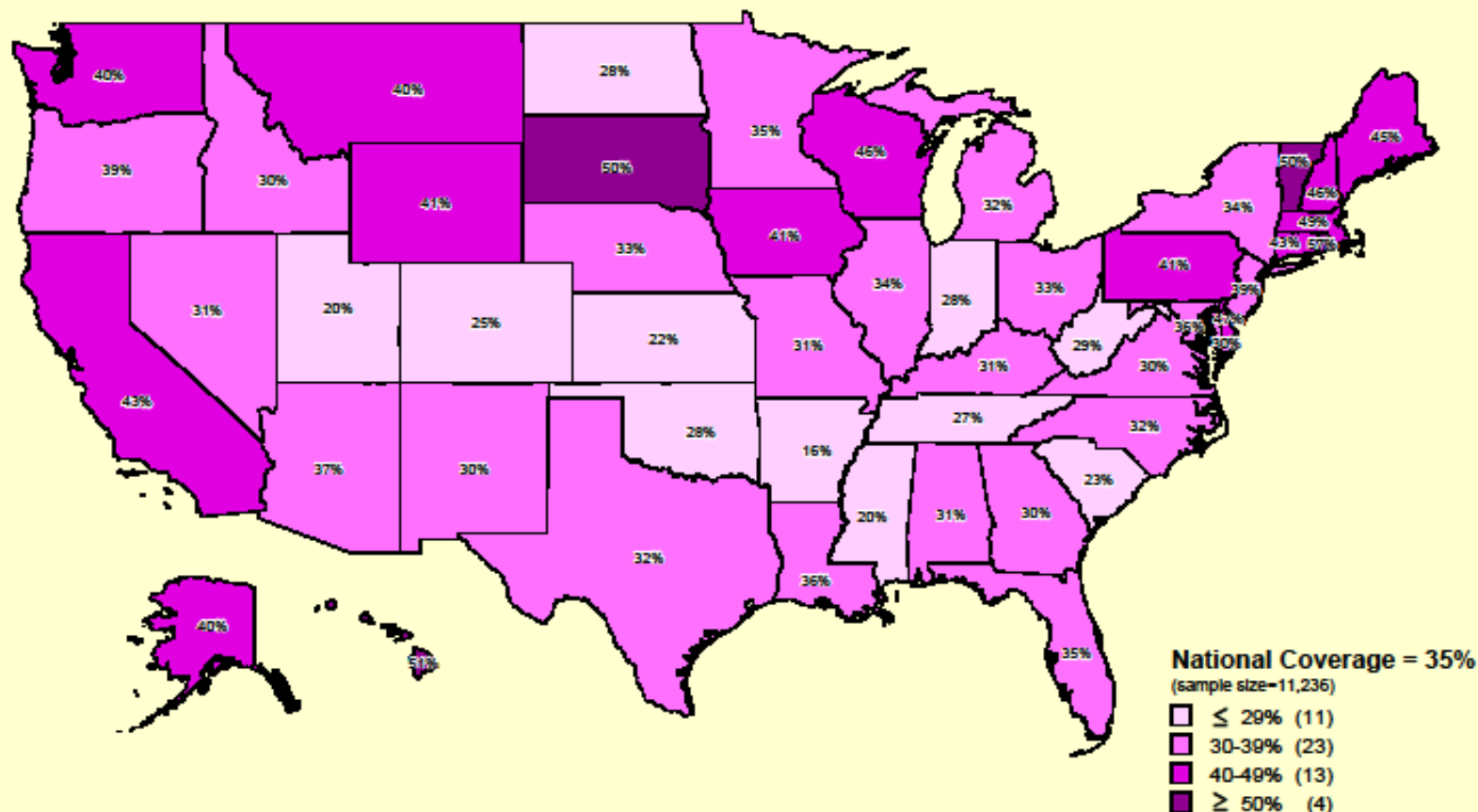
Note 1: *Human Papillomavirus Vaccine, either quadrivalent or bivalent. Percentages reported among females only.

Note 2: Includes female adolescents born between January 1993 and February 1999

Source: National Immunization Survey - Teen (NIS - Teen)



Coverage of 3 or More Doses of HPV* Female Adolescents Aged 13-17 Years, 2011



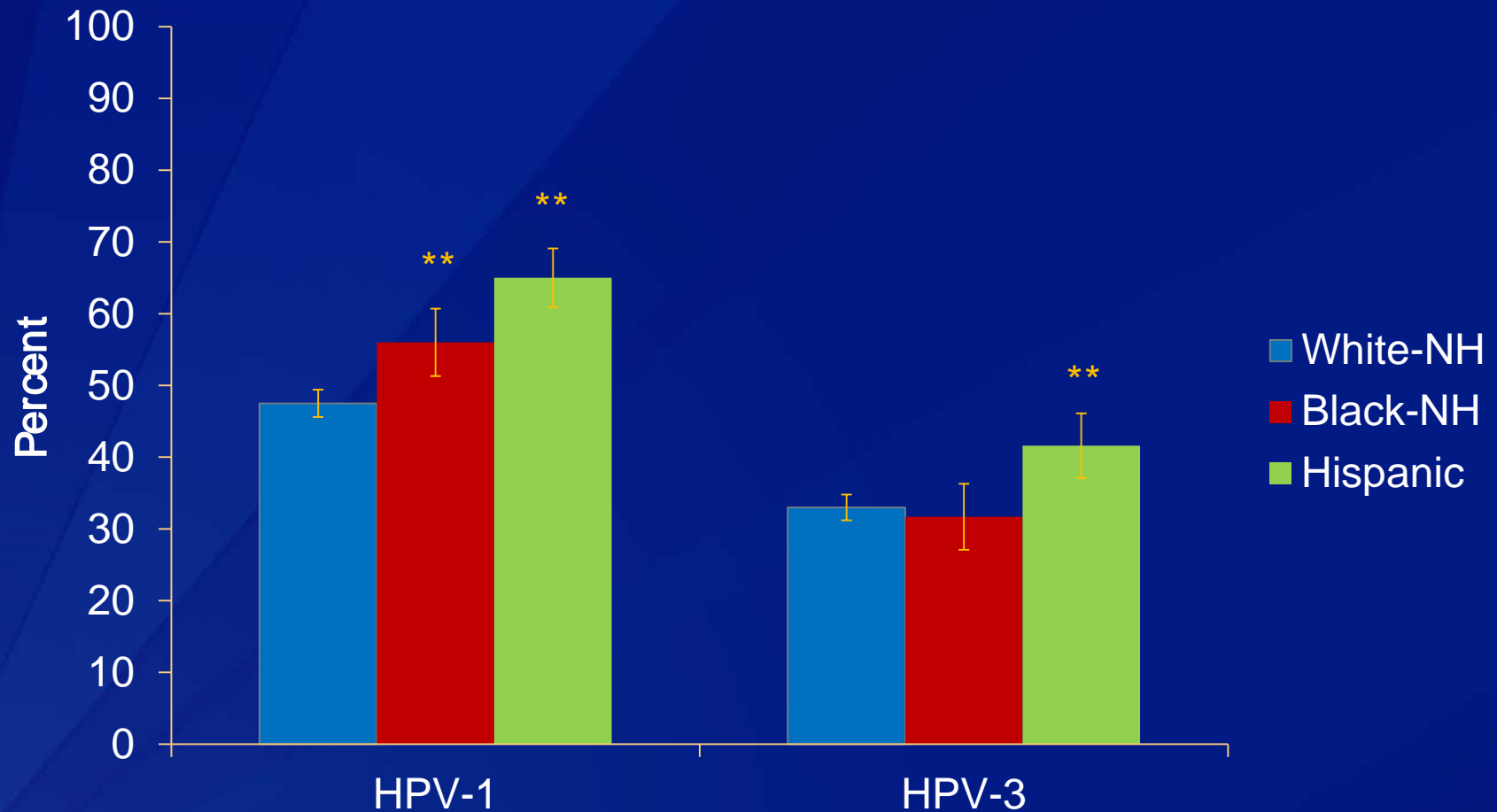
Note 1: *Human Papillomavirus Vaccine, either quadrivalent or bivalent. Percentages reported among females only.

Note 2: Includes female adolescents born between January 1993 and February 1999

Source: National Immunization Survey - Teen (NIS - Teen)

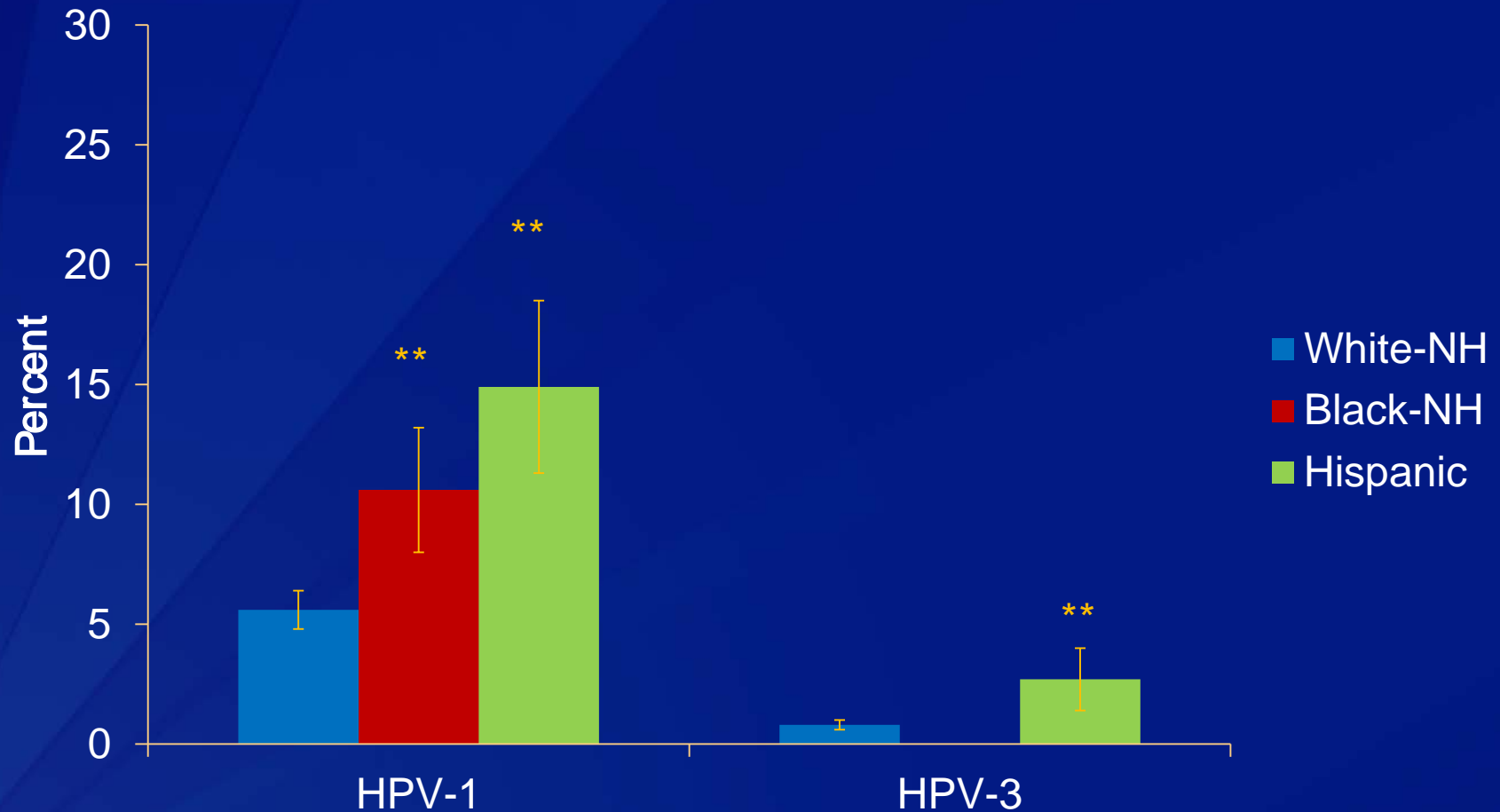


Estimated HPV vaccination coverage among girls, 13-17 years, by race/ethnicity, NIS-Teen, United States, 2011



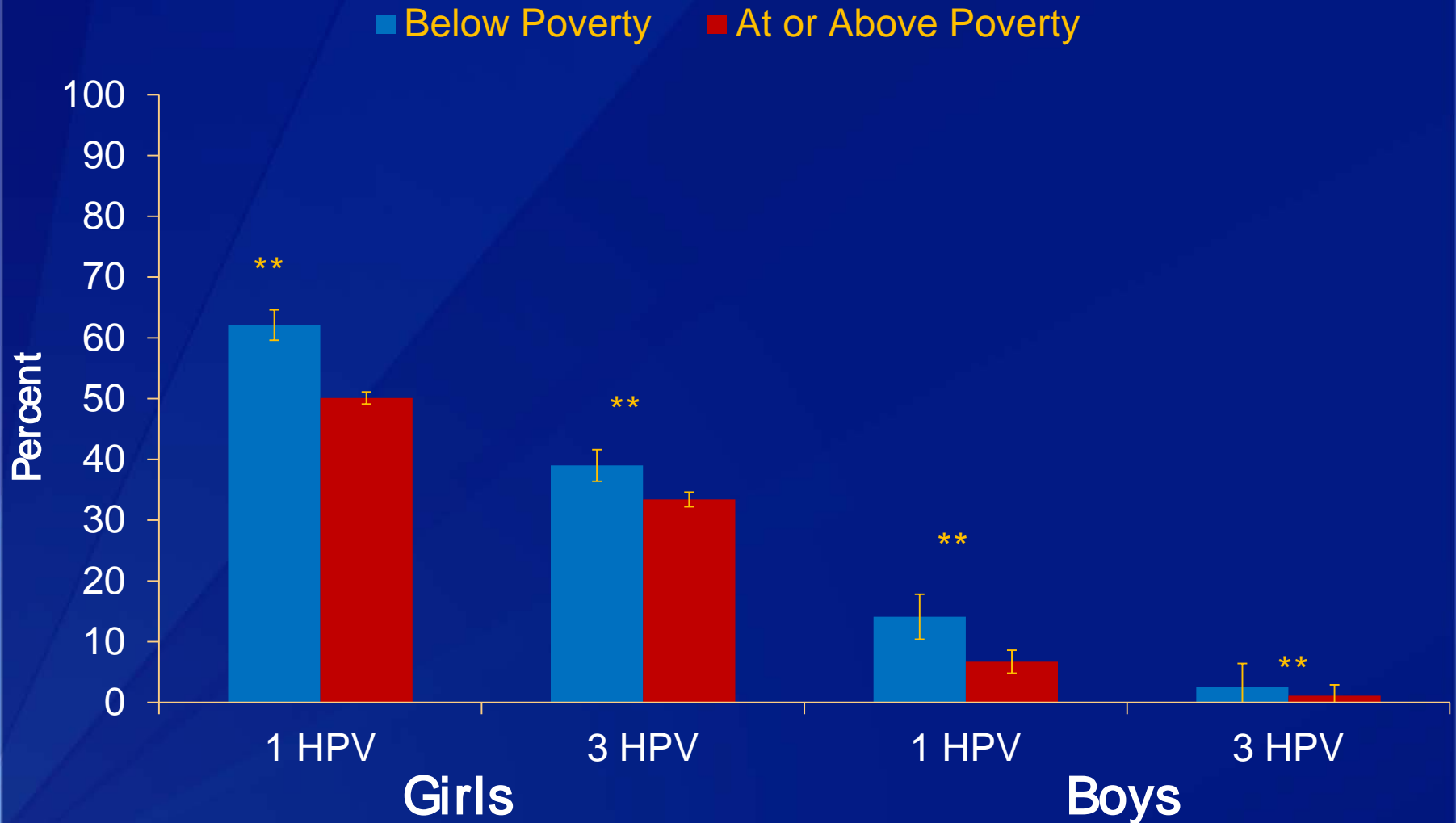
**Significantly different than White-NH ($p<0.05$)

Estimated HPV vaccination coverage among boys, 13-17 years, by race/ethnicity, NIS-Teen, United States, 2011



**Significantly different than White-NH ($p < 0.05$)

Vaccination estimates among adolescents, 13-17 years, by poverty status, NIS-Teen, United States, 2011

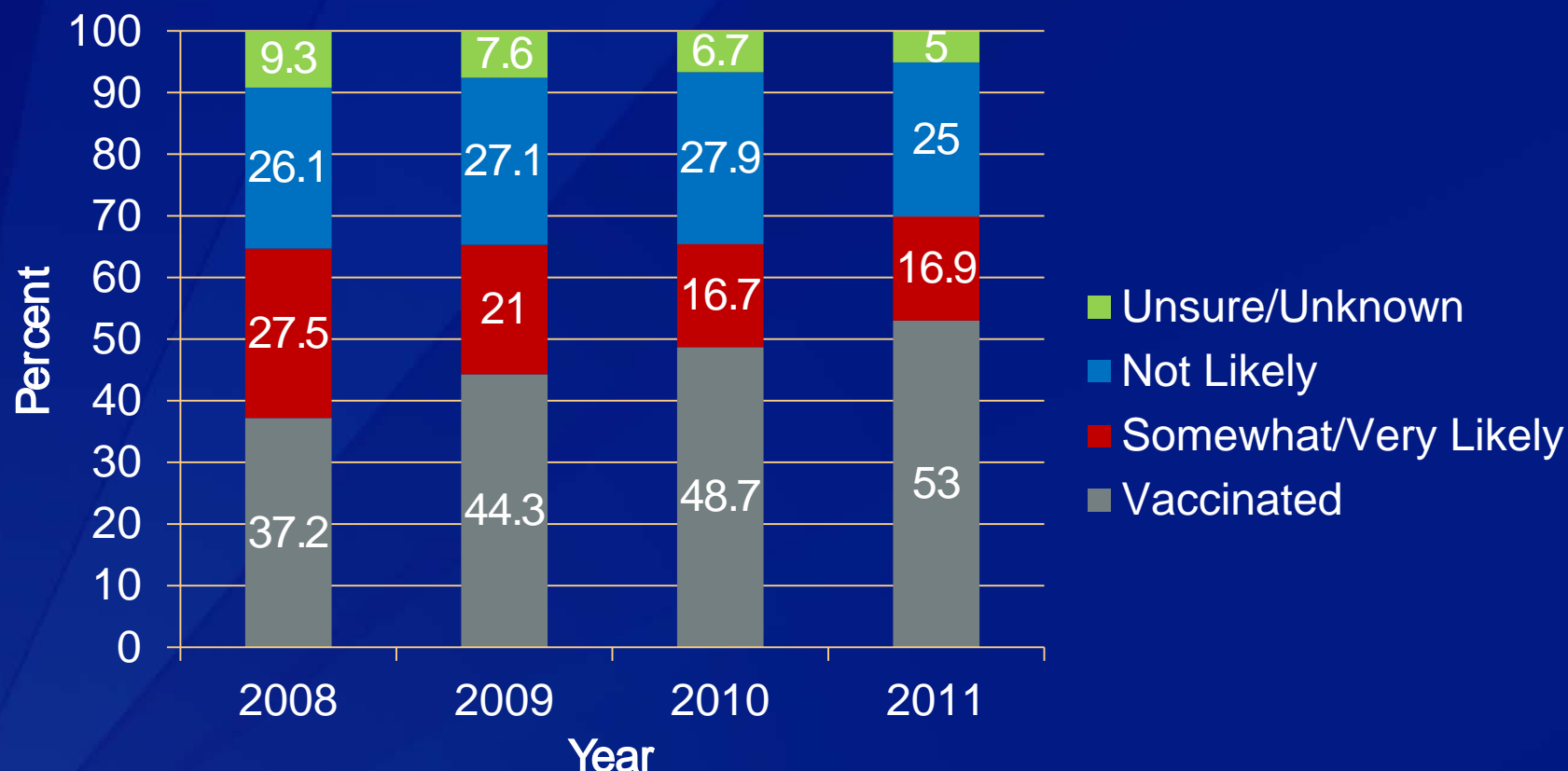


** Significantly different than at or above poverty ($p < 0.05$)

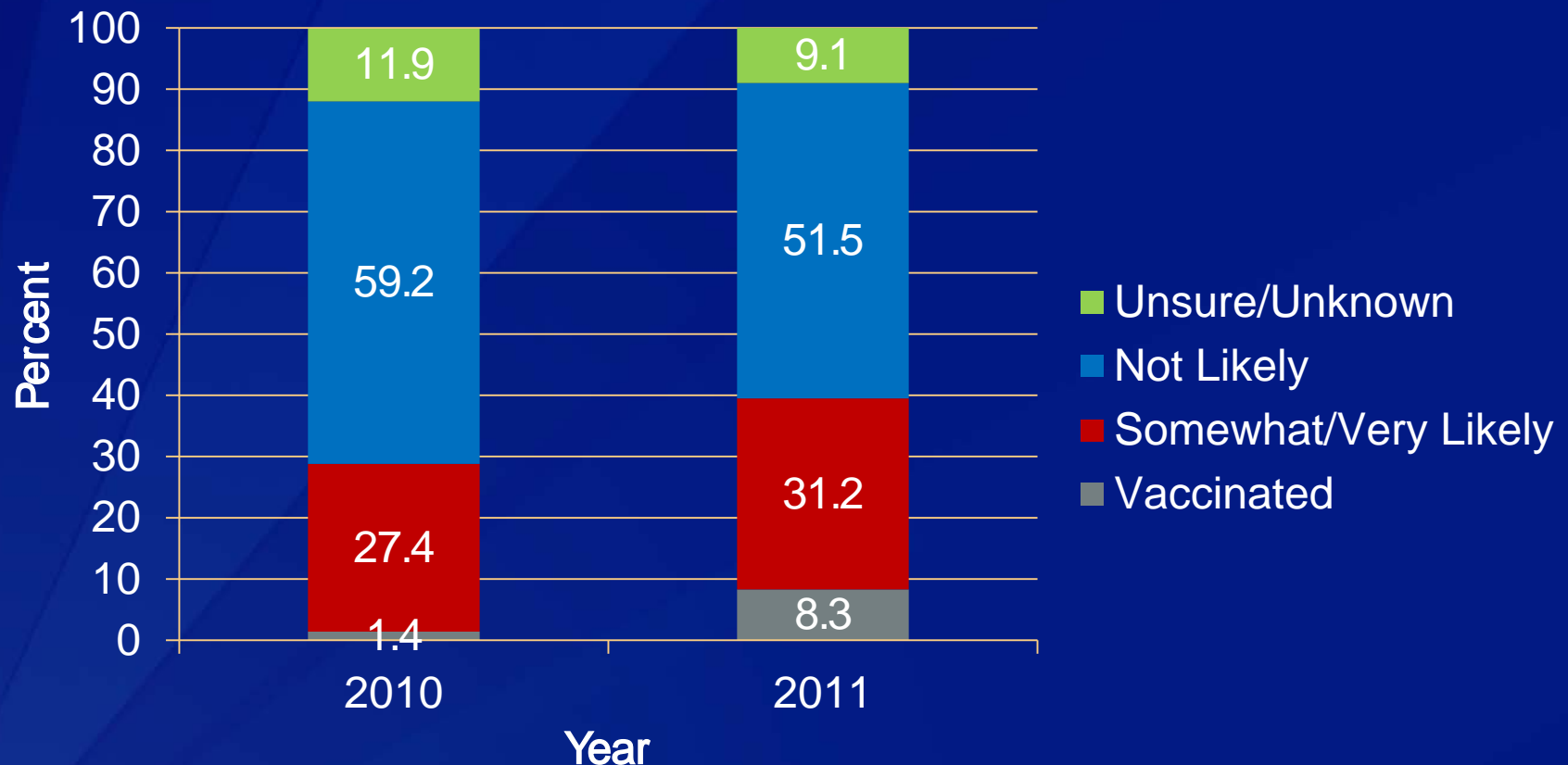
HPV vaccination intentions (in the next 12 months) among parents of unvaccinated adolescents, 13-17 Years, NIS-Teen, United States, 2011

Intent	Parents of Unvaccinated Girls	Parents of Unvaccinated Boys
Somewhat/Very Likely	36.1%	34.0%
Not too likely/Not likely at all	53.3%	56.1%
Unsure	10.6%	9.9%

Vaccination status and HPV vaccination intentions (in the next 12 months) among parents of girls, 13-17 years, NIS-Teen, United States, 2011



Vaccination status and HPV vaccine intentions (in the next 12 months) among parents of boys, 13-17 years, NIS-Teen, United States, 2011



Top 5 reasons* for not vaccinating adolescent, among parents with no intention to vaccinate in the next 12 months, NIS-Teen, United States, 2011

Parents of girls		Parents of boys	
Not needed or necessary	23.2%	Not needed or necessary	25.3%
Not sexually active	19.5%	Not recommended	22.7%
Safety concern/side effects	19.3%	Lack of knowledge	15.1%
Lack of knowledge	15.2%	Not sexually active	13.6%
Not recommended	9.6%	Child is male	10.5%

*Response categories are not mutually exclusive.

Summary – HPV vaccination coverage among girls

- HPV initiation rate is ~50% and increases each year, but still lags behind coverage with other vaccines
 - Receipt of 3 HPV doses is ~35%
- Many girls are not receiving HPV vaccination at the recommended age
- Initiation rates and coverage with 3 HPV doses differs by race/ethnicity and income

Summary – HPV vaccination coverage among boys

- 8% of boys received at least one HPV dose
 - Receipt of 3 HPV doses is ~1%
 - Reflects coverage before routine recommendation
- Initiation rates and coverage with 3 HPV doses differs by race/ethnicity and income

Summary – Intent and reasons for non-HPV vaccination

- Among girls, the percent vaccinated or likely to get vaccinated has not changed much since 2008 and is currently ~70%
- The proportion of parents of boys likely to vaccinate their sons was 31% in 2011
- The most common reasons for not vaccinating girls included “not needed,” “not sexually active,” and “safety concerns”

Recommendations

- Improve provider communication and strength of recommendation for HPV vaccination among girls and boys at the recommended age of 11 or 12 years
- Increase parental awareness of HPV disease risk and HPV vaccine benefits for both girls and boys
- Enhance efforts to increase HPV series completion
- Implement standing vaccination orders and reminder-recall systems to decrease missed vaccination opportunities

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Thank You

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