HPV Vaccine Coverage among Men who Have Sex with Men — United States, 2011

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Objectives

• Quadrivalent HPV vaccine prevents genital warts and anal cancer precursors in lesions in men
  - 2006: Licensed and routinely recommended for U.S. females
  - 2009: Licensed for U.S. males
  - 2011: Routinely recommended for U.S. males in late 2011

• MSM through age 26 should be vaccinated. Health care settings offer opportunities to increase HPV vaccine coverage in this population.

Methods

• Data source
  - 2011 National HIV Behavioral Surveillance System (NHBS)

• Inclusion criteria
  - Age ≥18
  - Ever had a male sex partner
  - MSM through age 26

• MSM in the target age range for HPV vaccine
  - There were 3221 MSM age 18–26:
    - 2011 NHBS estimated 8.9% of U.S. boys age 13–17 received ≥1 dose, but no data on HPV vaccine among MSM
  - We assessed baseline HPV vaccine uptake among U.S. MSM through age 26 in 2011 (before the national recommendation for males)

Background

• Men who have sex with men (MSM) are at high risk for infection and disease associated with human papillomavirus (HPV)
  - HPV infection: 9.3% of HIV+ MSM and 64.4% of HIV- MSM
  - Anal cancer incidence per 100,000 person-years is 1.37 among MSM, 6.4 among other HIV+ men, and 2 among other HIV- men
  - Genital warts: 8% of MSM in STD clinics

Limitations

• Vaccination status not clinically confirmed
  - Self-reported vaccination status subject to recall bias

Conclusions

• There are few national data on HPV vaccine coverage among MSM.

Results

• All participating MSM
  - A total of 3221 MSM participated in NHBS in 2011
  - 2.3% (73/3221) reported receiving ≥1 dose of HPV vaccine, and most (9.9%, 17/182) were in the recommended target age range
  - The proportion of men reporting a positive HPV test increased with age, and HPV infection was common among older vaccinated men:
    - 71.4% (23/32) of vaccinated men age ≥40
    - 38.3% (11/29) of vaccinated men age 31–40
  - 18.6% (59/32) of vaccinated men age 30–39

• Missed opportunities?
  - Among MSM age 18–26 in the target age range for HPV vaccine who reported being unvaccinated
    - 4.9% (157/3221) reported receiving ≥1 dose of HPV vaccine

• Multivariate logistic regression
  - Stepwise backwards elimination model
  - Adjusted odds ratios (ORs)

• In bivariate analysis, HPV vaccine uptake was significantly higher (p < 0.05) among MSM age 18–26 who:
  - reported having a positive HPV test (23/32, 14.4%)
  - had diagnosed genital warts (11/107, 10.3%)
  - had gonorrhea, chlamydia, or syphilis in past 12 months (51/330, 15.5%)
  - tested for an STD in past 12 months (139/224, 6.3%)
  - tested for HIV in past 12 months (130/224, 5.8%)
  - had any health insurance (105/190, 5.5%)

• Grew in 2011 NIS-Teen estimated 8.3% of U.S. boys age 13–17 received ≥1 dose, but no data on MSM or older males

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