

## Vermont Immunization Program

### HPV9 – What you need to know

The CDC recently recommended 9-valent human papillomavirus (HPV9) vaccine as one of three available HPV vaccines. In addition to HPV 6, 11, 16 and 18, the types contained in the HPV4 vaccine, HPV9 contains HPV 31, 33, 45, 52, and 58. HPV is associated with cervical, vulvar, and vaginal cancer in females, penile cancer in males, and anal cancer and oropharyngeal cancer in both females and males. HPV types 6 and 11, included in HPV4 and HPV9 vaccines cause anogenital warts and most cases of recurrent respiratory papillomatosis.

HPV vaccine is recommended for routine vaccination at age 11 or 12 years old, and vaccination for females aged 13 through 26 years and males aged 13 through 21 years not vaccinated previously. Vaccination is also recommended through age 26 years for men that have sex with men and for immunocompromised persons (including those with HIV infection) if not vaccinated previously.

All three HPV vaccines protect against HPV 16 and 18, types that cause about 66% of cervical cancers and the majority of other HPV-attributable cancers in the United States. The new HPV9 vaccine targets five additional cancer causing types, which account for about 15% of cervical cancers. The additional protection from HPV9 will mostly benefit females because the additional five types in HPV9 account for a higher proportion of HPV-associated cancers in females compared with males and cause cervical pre-cancers.

Six different studies with over 13,000 subjects demonstrated that the vaccine was safe and well-tolerated. Common adverse events were injection site-related pain, swelling, and erythema that were mild to moderate in intensity. Females aged 9 through 26 years had more injection-site adverse events, including swelling (40% in the HPV9 group compared with 29% in the HPV4 group) and erythema (34% in the HPV9 group compared with 26% in the HPV4 group). Rates of injection-site swelling and erythema both increased following each successive dose of HPV9. Males had fewer injection site adverse events.

All HPV vaccines are each administered in a 3-dose schedule at 0, 1-2 months and 6 months. If the vaccine schedule is interrupted, the vaccination series does not need to be restarted. If available, HPV9 may be used to complete a series that was started with HPV4. There is no recommendation for HPV9 in those who have completed the HPV4 series.

For more information see the March 27, 2015 Morbidity and Mortality Weekly Report (*MMWR*): Use of 9-Valent Human Papillomavirus (HPV) Vaccine: Updated HPV Vaccination Recommendations of the Advisory Committee on Immunization Practices

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6411a3.htm>