

ACIP Votes Against Using Live Attenuated Flu Vaccine for 2016-17 Flu Season

During its June meeting, the Federal Advisory Committee on Immunization Practices (ACIP) voted that live attenuated influenza vaccine (LAIV), otherwise known as the “nasal spray” flu vaccine, should not be used during the upcoming 2016-2017 flu season. The [recommendation for not using LAIV this season](#) is based on data from recent seasons (2013-2016) showing poor or lower than expected vaccine effectiveness (VE) compared to inactivated influenza vaccine (IIV). ACIP’s revised recommendation highlights the importance of ongoing efforts to monitor and evaluate vaccine effectiveness, which can have significant implications on public health policy. The ACIP recommendation must be reviewed and approved by CDC’s director before becoming CDC policy. The final annual recommendations on the prevention and control of influenza will be published in CDC’s Morbidity and Mortality Weekly Report in late summer or early fall.

Annual flu vaccination, with either IIV or recombinant influenza vaccine, continues to be recommended for everyone six months and older. Vaccination is the single best way to prevent influenza, and resulting complications, including hospitalizations and death.

Background

Data from the U.S. Influenza Vaccine Effectiveness Network was presented to the ACIP on the effectiveness of LAIV among children 2 years through 17 years during

the 2015-16 season. Data revealed LAIV’s VE was 3%, meaning it offered no measurable protective benefit. In comparison, IIV’s VE was 63% against any flu virus for the same cohort. Overall VE (for all ages, all flu viruses) for IIV was 49 percent. The two previous flu seasons (2013-14 and 2014-15) also showed poor and/or lower than expected VE for LAIV. The reason for the poorer overall performance of LAIV compared to IIV over the last few flu season is not well understood.

Influenza vaccine supply

LAIV accounts for approximately 8% (14 million doses) of the total projected supply of 171 million – 176 million doses for the 2016-17 season. Based on these projections, it is expected that the supply of IIV for the 2016-17 season should be sufficient to meet any increase in demand resulting from ACIP’s new recommendation.

LAIV (FluMist) will not be available through the Washington State Childhood Vaccine Program for the 2016-17 flu season. The Washington State Department of Health Immunization Program is working with the CDC and the Washington Vaccine Association to assure that there will be an ample supply of flu vaccine for all Washington children. Information will be forthcoming regarding the exact products that will be available.

Healthcare providers who purchase influenza vaccine for their adult patients can find information on which distributors are still accepting pre-booking orders for flu vaccine products [here](#).



From The Literature: Influenza in Infants Born to Women Vaccinated During Pregnancy

Shakib, JH, Korgenski K, Presson AP, et al.
Pediatrics. 2016; 137(6):e20152360

A new large, retrospective study published in *Pediatrics* provides supportive evidence of the protective benefit of maternal influenza immunization during pregnancy. Researchers reviewed more than 245,000 electronic medical records of pregnant women and over 249,000 infant records spanning nine flu seasons from 2005 through 2014.

Key findings:

- Ninety-seven percent of confirmed flu cases in the first six months of life were among infants whose mothers had not been immunized during pregnancy
- There was a 64% reduction of documented health encounters associated with influenza-like illness (ILI) among infants ≤ 6 months whose mothers were vaccinated during pregnancy
- Infants six months and younger whose mothers had a flu vaccine during pregnancy were 70% less likely to have laboratory-confirmed influenza and 81% less likely to be hospitalized with flu-related illness
- Receipt of flu vaccine during pregnancy had no effect on respiratory syncytial virus (RSV) outcomes, providing supportive evidence for flu vaccine's specific benefit to infant health related to influenza
- Only 10% of all women in the study reported influenza immunization during pregnancy, however there was a significant increase in the proportion of women who reported receiving vaccine after the H1N1 pandemic (32.1%), increasing further to 52% during the 2013-14 flu season

Protecting young infants from influenza-related morbidity and mortality through maternal immunization during pregnancy is endorsed by the Centers for Disease Control and Prevention, American Academy of Pediatrics, and

the American Congress of Obstetricians and Gynecologists. A healthcare provider's strong recommendation and provision of the vaccine are critical in a pregnant or postpartum woman's decision to get vaccinated against influenza.¹

CDC's National Immunization Conference 2016

The Centers for Disease Control and Prevention (CDC) will host the 47th National Immunization Conference **September 13-15, 2016**, at the Hilton Hotel in Atlanta, Georgia.

This three-day conference will highlight the following topics:

- **Adult Immunization**
- **Immunization Information Systems**
- **Programmatic Issues**
- **Health and Risk Communications**
- **Epidemiology and Surveillance**
- **Childhood and Adolescent Immunization**

Please note that while there is no registration fee to attend the conference, space is limited. [Click on this link](#) for full details.

Table of Contents

ACIP Votes No LAIV	1
Flu Vaccine During Pregnancy	2
CDC NIC 2016	2
School Immunization Requirements	3
Patient Comfort During Vaccination	4
HPV Vaccine Campaign	5
2016-17 Flu Season	7
New Patient Waiting Resources	7

¹Yuen CY and Tarrant M. Determinants of uptake of influenza vaccination among pregnant women - a systematic review. *Vaccine*. 2014;32(36):4602-13.

School Immunization Requirements for 2016-17: What's New?

The *new* two-dose varicella vaccination requirement for 9th-12th graders this coming school year closes the gap so that *all* children in grades K – 12 must receive the two-dose series OR meet at least one of these conditions:

- evidence of immunity via blood titer OR
- health care provider verification of prior chickenpox disease OR
- an approved exemption

Many schools and medical practices have already notified parents whose children do not meet the new varicella vaccine requirement. Health care providers should be prepared to vaccinate their patients or enter varicella disease history into the Washington Immunization Information System (IIS):

- Search for the patient
- Click on “View/Add” on the left hand menu under “Vaccinations”
- Scroll to the bottom of the screen and click on “Add Chickenpox History” (see Figure 1 below)

- This serves as valid provider verification of chickenpox disease and the student will not be required to get vaccinated or provide evidence of immunity via blood titer.

We appreciate your efforts to share this information with your patients’ families as widely as possible so that there will be ample time for students to complete the two-dose series! A 28-day interval is recommended between doses of varicella vaccine for persons ≥ 13 years; a three-month interval is needed for those younger than age 13 years.

What other vaccine requirements are there for students this fall?

In addition to two doses of varicella vaccine, all students entering kindergarten through 12th grades will be required to show proof of having received three doses of hepatitis B vaccine, five doses of diphtheria, tetanus, and pertussis-containing vaccines plus one dose of Tdap (on or after 11 years of age, grades 6-12), four doses of polio vaccine and two doses of MMR (measles, mumps, and rubella) vaccine.

Information and frequently asked questions about the new chickenpox vaccine requirements are available on [WA State’s Department of Health website](#). All vaccine requirements for the 2016-17 school year can be found [here](#).

Figure 1. IIS Screenshot #1

- Add the history
- IIS will display “Patient or parent report of disease” in the “Contraindication” tab. (see Figure 2 below)

Vaccine Contraindications / Exemptions / Precautions					
Contraindications					
Vaccine	Contraindication	Facility Where Documented	Date Documented	Permanent	Disease Date
Varicella	Patient or parent report of disease			Y	
Exemptions					
Precautions					

Figure 2. IIS Screenshot #2

Evidence Based Strategies to Promote Comfort During Vaccination

Patient safety and comfort during vaccination are paramount to patients, caregivers and providers alike. In addition to careful assessment and screening to determine recommended vaccines, providers should utilize the following evidence-based strategies to ease procedural pain, which is subjective and influenced by many factors, including the patient's age, anxiety level, culture, and previous health care experiences.

Vaccinators should use a soft, calm voice, make direct eye contact, explain why vaccines are needed and be honest in presenting information about what to expect. Avoid telling patients that the injection(s) won't hurt.

Studies have shown that children are less fearful and experience less pain when vaccines are administered while seated versus lying down, though the exact mechanism is unknown. The CDC recommends the caregiver hold their child during vaccination in order to increase the child's comfort. Caregivers may be shown [how to safely hold infants and young children during vaccine administration](#). Older children, adolescents and adults should be seated or lying down during vaccination to reduce risk of syncope. Monitor for dizziness, pallor and weakness after vaccination and be prepared to respond if symptoms occur.

Breastfeeding is a soothing measure during vaccination. Being held, actively nursing, skin-to-skin contact, and the sweet taste of breastmilk are all recognized as calming elements for infants before, during, and after vaccination. Caregivers may offer bottle-fed infants a few drops up to a half a teaspoon of a sweet-tasting liquid such as a sugary solution just prior to vaccination, which is known to have an analgesic effect for infants up to 12 months of age. A [2012 study](#) found that young infants whose caregivers implemented all of the "5 S" comfort measures (swaddling, swinging, shushing, side/stomach position, sucking) with them immediately following vaccination demonstrated decreased pain on a validated pain scale and reduced crying time following routine vaccinations.

Other evidence-based strategies include administering oral vaccines before injectable ones and administering vaccines known to cause stinging or painful sensations, such as HPV, MMR and PCV13, last in order to

mitigate the increasing pain awareness of each additional injection may bring. Other strategies known to decrease injection-related pain include tactile stimulation of the skin near the injection site for persons 4 years and older, distraction techniques such as humor, and topical anesthetics.

Aspiration is unnecessary for safe vaccine administration and there are data showing it increases pain in the vaccine recipient. [One study](#) compared infant pain response between those whose vaccines were administered with slow aspiration, injection, and needle withdrawal to those whose doses were administered without aspiration and with rapid injection and needle withdrawal. Those in the group with slow aspiration, injection and withdrawal were more likely to cry and to cry for longer than those in the group without aspiration and with rapid injection and withdrawal. No adverse events were reported in either group.

There are insufficient data to determine whether two persons administering vaccines simultaneously could reduce or increase anxiety when multiple injections are needed. The CDC has no recommendation for or against this practice.

Immediately following vaccination, monitor the patient for any adverse reactions and be prepared to respond in case of a severe reaction or syncope. Be sure your patient/family has Vaccine Information Statements and instructions for follow-up care, should the need arise.

Resources:

[Vaccine Administration](#) (Pink Book, CDC)

[Be there for your child during shots](#) (CA Department of Health)

[Immunization Techniques](#), a DVD (CA Department of Health)

[Medical management of vaccine reactions in adults and children/teens](#) (IAC)

[WHO position paper on reducing immunization pain](#)

Local HPV Vaccine Campaign Is First To Focus On Gay, Bi Men and Transgender Individuals

In April 2016, a new social marketing campaign to promote human papillomavirus (HPV) vaccination to young men who have sex with men and to transgender individuals (MSM/T) was launched in King, Snohomish, and Pierce counties. The goal of this health promotion effort is to increase HPV vaccine awareness and uptake among 15-26 year old MSM/T, a population at higher risk for certain HPV-related cancers^{1,2} yet with an unacceptably low immunization rate. Although, the Centers for Disease Control and Prevention (CDC) have identified MSM through age 26 as a subpopulation with a specific recommendation for immunization above and beyond the typical recommendation for all males through age 21,^{3,4} this campaign is the first of its kind in the nation to address this disparity. Developed by the cross-agency [We Are 1](#) collaborative with input from the Public Health – Seattle & King County Immunizations Program, the campaign was

funded by the Washington State Department of Health.

The community-tested messaging for the campaign is distinct from existing messaging for HPV vaccine (typically targeted to preteens, teens or their parents) in that it openly embraces the fact that HPV is the most common sexually transmitted infection (STI) in the U.S. and highlights the efficacy of 9vHPV vaccine at preventing the most harmful variants of HPV that can lead to genital

(con'td on next page)

Key Facts About HPV and MSM and Transgender Individuals:

- As a result of HPV exposure, HIV-negative MSM are 17 times more likely to develop anal cancer than the general population. MSM living with HIV are 40 times more likely – and there is evidence that those cancers can develop at an accelerated rate as compared to non-immune compromised individuals.⁵
- The increased risk for anal cancers is not limited to those engaging in anal penetrative sexual activity. HPV is readily transmissible through intimate skin-to-skin contact (for example, genital-to-genital or oral-to-genital contact.)
- HPV-related oral cancers are rising among males. If recent incidence trends continue, the annual number of HPV-positive oropharyngeal cancers is expected to surpass the annual number of cervical cancers by the year 2020.⁶
- HPV exposure is nearly universal for sexually active adults. Most exposures are asymptomatic. Repeated exposures with multiple sexual partners increases risk. While condoms may decrease the exposure of HPV in some cases, the best protection, by far, is immunization with 9vHPV.
- There is no specific recommendation for transgender individuals. However the 9vHPV vaccine has proven very safe and highly effective for all genders through age 26.

YOUR GENITALS

HPV VACCINE

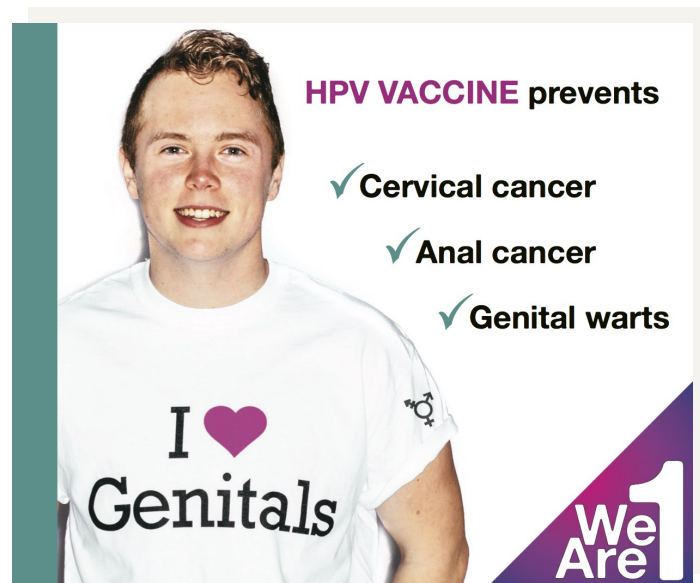
- ✓ **Protects against cancer**
- ✓ **Prevents genital warts**



Get it ▶ **We-Are-1.com**

HPV Campaign, con't.

warts and certain cancers. In development of the campaign, We Are 1's formative research found that younger MSM/T (15 to 19 year olds) were more likely to be motivated by a genital wart prevention message, while older MSM/T (20 to 26 year olds) were more motivated by cancer prevention messaging. Both groups responded favorably to prevention messages that emphasized the multiple benefits of HPV vaccination and an eye-catching gender



neutral “genital” message was positively embraced among a community that increasingly values inclusivity and awareness of transgender identities.

Campaign materials were originally distributed through digital media, including targeted advertising on the web and on mobile apps popular among young MSM. Social media memes, posters in select community settings, and pamphlets help further spread the message, steering the target population to seek out information on HPV vaccine at the campaign's hub, We Are 1's [HPV page](#), available in English and [Spanish](#).

As a result of the We Are 1 HPV vaccine promotion campaign, health care providers and agencies that serve MSM and transgender individuals now have new tools to further promote the health of their patients and clients. To request educational materials, including [posters](#) and pocket-sized pamphlets, contact drew.emery@kincountyy.gov. For more about HPV and

MSM/T, visit [We Are 1](#).

Key Tips for Health Care Providers to Promote HPV Vaccination to MSM and Transgender Individuals:

- **Strongly recommend** routine HPV vaccination for MSM and transgender individuals through age 26. Health care provider recommendation is the most influential factor in vaccine uptake.
- **Educate patients** and dispel misperceptions about vaccine safety and efficacy. HPV vaccine is among the most tested vaccines available with minimal adverse reactions.
- **Conduct a brief sexual history** to determine sexual orientation and other risk factors for HPV. This may highlight other health concerns for MSM/T, for example a recommendation for both hepatitis A and B immunization.⁷

¹Nyitray AG, Carvahlo da Silva RJ, Chang M et al. Incidence, duration, persistence, and factors associated with high-risk anal human papillomavirus persistence among HIV-negative men who have sex with men: a multinational study. Clin Infect Dis. 2016 Jun;62(11):1367-74.

²Meites E, Markowitz LE, Paz-Bailey G, Oster AM, BHBS Study Group. HPV vaccine coverage among men who have sex with men – National HIV Behavioral Surveillance System, United States, 2011. Vaccine. 2014 Nov;32(48):6356-9.

³Centers for Disease Control and Prevention. Recommendations on the use of quadrivalent human papillomavirus vaccine in males – Advisory Committee on Immunization Practices (ACIP), 2011. MMWR. 2011 Dec;60(50):1705-8.

⁴Markowitz LE, Dunne EF, Saraiya M, Chesson HW, Curtis CR, Gee J, et al. Human papillomavirus vaccination. MMWR Recomm Rep. 2014 Aug;63(RR-05):1-30.

⁵Margolies L, Goeren B. [Anal cancer, HIV and gay/bisexual men \[Internet\]](#). GMHC Treatment Issues;2009 Sept [cited 2016 Aug 15]. Available from http://www.gmhc.org/files/editor/file/ti_0909.pdf.

⁶Chaturvedi AK, Engels EA, Pfeiffer RM et al. Human papillomavirus and rising oropharyngeal cancer incidence in the United States. J Clin Oncol. 2011 Nov;29(32):4294-4301.

⁷Centers for Disease Control and Prevention. Use of 9-valent human papillomavirus (HPV) vaccine: updated HPV vaccination recommendations from the Advisory Committee on Immunization Practices (ACIP). MMWR. 2015 Mar;64(11):300-4.

2016-17 VFC Flu Vaccine Update

As mentioned on Page 1, the Advisory Committee on Immunization Practices (ACIP) has **excluded live attenuated influenza vaccine (LAIV) from the 2016-2017 flu season**. The ACIP also removed FluMist from the Childhood Vaccine Program. Data from 2013 - 2016 shows poor or relatively low LAIV efficacy. Annual flu vaccination is still recommended for everyone 6 months and older.

- **We do not yet have a start date** for the shipment of state-supplied flu vaccine.
- The CDC has secured additional childhood flu vaccine to replace the FluMist. **No flu vaccine shortage is anticipated.** However, providers/parents may not receive their first choice of flu vaccine type. See the chart below for this year's offerings.
- Visit <http://www.doh.wa.gov/YouandYourFamily/Immunization/ImmunizationNews> for FAQs and other resources.
- Send **supply questions** to vfcinfo@kingcounty.gov; for **clinical questions**, email vaccineinfo@kingcounty.gov.

New Patient Waiting Resources

Effective 15 Aug 2016, Public Health will no longer provide immediate clinical phone consultation (“patient waiting”) for health care providers. If you have questions about the recommended immunization schedule, contraindications, or other clinical immunization topics, please visit: www.cdc.gov/vaccines or www.immunize.org/askexperts.

- If you do have a patient waiting and would like to consult with a physician, call the Seattle Children's Hospital MEDCON hotline at 206-987-7777 or toll free at 877-985-4637, option #4.
- For non-urgent clinical immunization questions, email us at vaccineinfo@kingcounty.gov and we will respond within 1 business day. As always, continue to call 206-296-4774 and ask for the Vaccine Program when you need help with program enrollment, storage & handling, site visits, and other non-clinical, Vaccine Distribution Program-related topics.

Vaccine Name	Fluzone Quad, PF Pediatric (.25mL)	Fluzone Quad MDV	Fluzone Quad, PF (.5mL)	FluLaval Quad MDV	Fluarix Quad, PF (.5mL)
WAIIS Vaccine Name	Influenza inj. quad PF, 6-35 mos	Influenza inj quad w/preservative 36+ mos	Influenza, inj, quad PF, 36+ mos	Influenza inj quad w/preservative 36+ mos	Influenza, inj, quad PF, 36+ mos
Formulation	0.25mL single dose, pre-filled syringe, preservative free	5mL multi-dose vial, contains preservative	0.5mL single dose, pre-filled syringe, preservative free	5mL multi-dose vial, contains preservative	0.5mL single dose, pre-filled syringe, preservative free
Manufacturer	Sanofi	Sanofi	Sanofi	GSK	GSK
CPT/CVX Codes	90685/161	90688/158	90686/150	90688/158	90686/150
NDC Number (Box)	49281-0516-25	49281-0625-15	49281-0416-50	19515-0903-11	58160-0905-52
Age – Licensure	6-35 mos	6+ mos	36+ mos	36+ mos	36+ mos
State Eligibility	6-35 mos	3 through 18 years	3-18 years	3-18 years	3-18 years
Storage	Store refrigerated, 35°F - 46°F (2°C - 8°C)	Store refrigerated, 35°F - 46°F (2°C - 8°C)	Store refrigerated, 35°F - 46°F (2°C - 8°C)	Store refrigerated, 35°F - 46°F (2°C - 8°C)	Store refrigerated, 35°F - 46°F (2°C - 8°C)

The Quarterly

Public Health

Seattle & King County

Communicable Disease Epidemiology &
Immunization Section, Prevention Division
401 5th Avenue, Suite 1250
Seattle, WA 98104-2333

Public Health Resources:

**Communicable Disease Epidemiology &
Immunization Section:** kingcounty.gov/health/cd

Our monthly **reportable cases table** has moved
online. Visit: kingcounty.gov/communicable

Program-related questions..... (206) 296.4774

Communicable Disease Reporting:

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TB (206) 744.4579

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