APRIL 2018 NEWSLETTER

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PROGRAM UPDATES

GOING AND COMING
STAFFING CHANGES AT THE IMMUNIZATION PROGRAM

At the end of March, the Immunization Program bid a fond farewell to Public Health Specialist Nikola Strakova. The providers in her territory and her colleagues at the Immunization Program will miss her energy, intelligence, and humor.

On April 16th, the Program welcomed Ryan Mitofsky to the role of Public Health Specialist. Ryan joins Meghan Knowles and Nazly Guzman in the VFC Site Visitor line up. Site Visitors:

- Conduct all VFC enrollment, compliance and unannounced site visits
- Conduct annual provider training on the VFC program
- Manage all vaccine temperature excursions
- Provide set up, training and technical support for temperature monitoring data loggers
- Assist with annual re-enrollment

ANNUAL VFC/VFA RE-ENROLLMENT
CHANGED TO JANUARY 2019
CURRENT ENROLLMENT EXTENDED SIX MONTHS

Annual re-enrollment for the Vaccines for Children and/or Adults (VFC/VFA) programs has been changed from June to January. The current enrollment period is being extended an additional six months. Re-enrollment will occur during January 2019, with the deadline Feb 1, 2019.

- VFC/VFA practices must re-enroll annually to continue receiving state-supplied vaccine.
- The annual VFC/VFA re-enrollment period will be during January each year.

The re-enrollment process will continue to be conducted online through Survey Gizmo.

The re-enrollment survey will open January 1, 2019 and will only be sent to the vaccine contact at each enrolled practice

2017 IMMUNIZATION PROGRAM ANNUAL REPORT

The 2017 Immunization Annual Report is now available on our website! The 3-page report provides an overview of this year’s findings and initiatives across the lifespan. It also outlines current activities in our priority areas of provider support, vaccine access, and research/evaluation. We encourage you to review the report to learn more about the state of vaccination in Vermont and how we’re working with providers and partners to improve vaccination rates in our population.

Find the report here: http://www.healthvermont.gov/disease-control/immunization/vaccination-coverage
Each April, the immunization program recognizes practices with high immunization coverage. We’re pleased to note that rates are moving upward, and the list of practices is longer.

Healthy People 2020 Child (24-35 months) vaccination targets include 90% for each: DTaP, Polio, MMR, Hib, HepB, VAR & PCV. Healthy People 2020 Teen (13-17 years) vaccination targets include: 80% for each Tdap, HPV, & MCV.

Every Vermont practice with at least twenty patients 24-35 months-old or 13-17 years-old was considered for recognition, using immunization registry data for 2017. In addition to the exemplary practices listed here, there are several more practices that are closing in on the targets. Thank you for your dedication and consistent efforts to protect Vermonters through immunization.

Practices recognized for meeting or exceeding the both the child and teen targets:
- Gifford Pediatrics (Randolph)
- Green Mountain Pediatrics P.C. (Bennington)
- Hagan, Rinehart & Connolly Pediatricians (Burlington)
- Newbury Health Clinic (Newbury)
- Timber Lane Pediatrics (Milton)

Practices recognized for meeting or exceeding the child Immunization targets:
- Brookside Pediatrics (Bennington)
- Collman Pediatrics (Colchester)
- Drs. Peter and Lisa Hogenkamp (Rutland)
- Essex Pediatrics (Essex Junction)
- Green Mountain Family Practice (Northfield)
- Joseph Nasca, MD (Georgia)
- Just So Pediatrics (Brattleboro)
- North Country Pediatrics (Newry)
- Pediatric Medicine (South Burlington)
- Rainbow Pediatrics (Middlebury)
- Richmond Family Medicine (Richmond)
- Richmond Pediatrics & Adolescent Medicine (Richmond)
- St. Johnsbury Pediatrics NVRH (St. Johnsbury)
- Timber Lane Pediatrics (South Burlington)
- Timber Lane Pediatrics North (Burlington)
- UVMHN CVMC Family Medicine (Waterbury)
- UVMHN CVMC Pediatric Primary Care (Barre)
- UVMHN Porter Pediatric Primary Care (Barre)
- UVMMC Family Medicine (Colchester)
- UVMMC Family Medicine (Hinesburg)

The practices listed will receive a framed certificate and a book.

VERMONT'S 2018 CHILDHOOD IMMUNIZATION CHAMPION

Dr. Orton will be named Vermont's 2018 Childhood Immunization Champion during National Infant Immunization Week, April 21-28, 2018. This award honors those who are doing an exemplary job promoting childhood immunizations in their community.

Dr. Orton uses her experience and expertise to support other providers in reaching their immunization goals. She was instrumental in effecting key policy changes at Southern Vermont Medical Center, including routine Hepatitis B vaccination in the first 24 hours after a baby is born. She will receive a certificate and recognition on CDC's website.
SHINGRIX™ AVAILABLE TO ORDER MAY 1, 2018

The new shingles vaccine, Shingrix™ (RZV, previously abbreviated HZ/su) will be available to order through the Vaccines for Adults (VFA) program beginning May 1, 2018. It will be added to providers' VIMS catalogs by nine o'clock that morning.

Shingrix™ is:

- Recommended for immunocompetent adults age 50 and older, in a two dose series at least eight weeks apart
- Recommended for individuals who previously received Zostavax™
- Should be administered at least 8 weeks after Zostavax™

Preferred over Zostavax™

Below is a list of resources compiled to address the needs and questions of providers offering the vaccine.

- Vaccinate Vermont December Shingrix™ coverage - Summary of Recommendations and Immunization Registry Coding information [http://www.healthvermont.gov/disease-control/immunization-providers](http://www.healthvermont.gov/disease-control/immunization-providers)
- Recombinant Zoster (Shingles) Vaccine, RZV Vaccine Information Statement (VIS) [https://www.cdc.gov/vaccines/hcp/vis/vis-statements/shingles-recombinant.html](https://www.cdc.gov/vaccines/hcp/vis/vis-statements/shingles-recombinant.html)

VACCINE ADJUVANT INFORMATION

Adjuvants have been safely used for decades to strengthen the immune response to certain vaccines. Three vaccines approved by the FDA and recommended by the ACIP (aIIV3-FLUAD; RZV-Shingrix; HEPLISAV-B) within the last year each contain a new adjuvant, contributing to enhanced vaccine effectiveness.

Your patients may have questions about the use and safety of adjuvants. CDC presents information that will help you to answer these questions with confidence here: [https://www.cdc.gov/vaccinesafety/concerns/adjuvants.html](https://www.cdc.gov/vaccinesafety/concerns/adjuvants.html)
NEW 2-DOSE HEPATITIS B VACCINE FOR ADULTS

Last November, the Food and Drug Administration approved a new Hepatitis B vaccine, HEPLISAV-B, from Dynavax Technologies Corp. In February, the Advisory Committee on Immunization Practices (ACIP) voted to recommend HEPLISAV-B for adults 18 years and older.

HEPLISAV-B is the first two-dose vaccine against hepatitis B infection, with doses administered one month apart. All other hepatitis B vaccines are available only as three-shot series over six months.

Pre-licensure data indicates that the recombinant, adjuvanted vaccine appears to be as effective as existing vaccines with a similar safety profile. Prelicensure studies only assessed seroprotection; no studies looked at hepatitis B as an outcome. Mild and serious adverse events were generally similar to other hepatitis B vaccines. One study showed an increased risk of serious cardiac events, but evidence did not support a causal relationship.

Post marketing data will be collected to confirm that there is no link.

In 2015, the number of new cases of hepatitis B in the U.S. increased 20%. The opioid epidemic is playing a role, with the largest increase in those 30-39 years. From 2009–2013, the combined incidence of acute HBV infection in three states (Kentucky, Tennessee, and West Virginia) increased 114% and was associated with increasing injection-drug use.*

In 1991, the ACIP recommended universal HepB vaccination of infants and routine vaccination of unimmunized children and adolescents. ACIP recommends vaccination of adults at risk for HepB infection, including universal vaccination of adults in settings in which a high proportion have risk factors for HepB infection, and vaccination of adults requesting protection from HepB without acknowledgment of a specific risk factor. However, less than 30% of all U.S. adults have been fully immunized against hepatitis B. A contributing factor is that many adults don’t complete the three-shot series previously needed to be fully protected from hepatitis B.

If HEPLISAV-B is used to complete a series started with Recombivax HB or Energix B, a three-dose series must be completed. A 2-dose series is only indicated when HEPLISAV-B is used exclusively.

Availability to VFA Providers

When multiple vaccines are FDA approved for one disease, and made available on the Federal contract for purchase, the Immunization Program reviews data on indications, effectiveness, adverse events and cost before offering them to participating practices. VFC/VFA enrolled providers may choose one of those vaccines by completing the annual Vaccine Choice survey in July.

VFA providers interested in using HEPLISAV-B as their primary adult hepatitis B vaccine will need to complete the Vaccine Choice Survey in July and may begin ordering it in October. Katie Martinez will work with practices as they transition from a 3-dose to a 2-dose hepatitis B vaccine. When reporting to the Immunization Registry, it is important to ensure the vaccine administered is correctly recorded.

VIMS PEARLS- RETURN VS. WASTE

This is the first installment of what will be a regular Vaccinate Vermont feature- VIMS Pearls. “VIMS” stands for Vaccine Inventory Management System; it is the Vermont Registry based tool providers use to manage their state-supplied inventory and order vaccines. In each issue, we will identify a common vaccine ordering issue and offer advice or guidance on its resolution.

All spoiled, expired or wasted vaccines must be accounted for and reported to the Immunization Program in VIMS. These doses are documented via an Adjust Request with an Adjustment Type of “Return” or “Waste.

There is frequently confusion about which Adjustment Type to choose and what to do with the non-viable product. Please refer to the information below for clarification.

**Adjust Type - Return**

**Definition** Non-viable, unopened and intact state-purchased vaccine vials and syringes. These should be returned to McKesson for federal excise tax credit.

**Examples**
- Vaccine vials and/or pre-filled syringes that have expired
- Vaccine vials and/or pre-filled syringes that have become non-viable due to exposure to inappropriate temperatures

**Shipping Label?** Yes. UPS will email the Primary Vaccine Contact a UPS Shipping Label within a few hours of approval by the Health Department Immunization Program.

**Adjust Type - Waste**

**Definition** Opened or damaged, unused state purchased vaccine vials. These vaccines may not be returned and should be discarded as medical waste.

**Examples**
- Vaccine vial and/or pre-filled syringes that have been opened or damaged in some way, including:
  - Broken vial/syringe
  - Vaccine drawn up but not administered
  - Opened/punctured multi-dose vials that are expired or spoiled

**Shipping Label?** No. The submission of a Waste Request will not generate a shipping label.

**Disposal** Discard of the product per office’s policy for medical waste disposal.
OFF TO COLLEGE IMMUNIZED

Students attending colleges and universities in Vermont are required to provide documentation of the following vaccinations upon matriculation:

1 dose of Tdap (tetanus, diphtheria and pertussis) vaccine
2 doses of MMR (measles, mumps and rubella) vaccine
3 doses of hepatitis B vaccine
2 doses of chickenpox (varicella) vaccine, or history of disease
1 or 2 doses of quadrivalent meningococcal conjugate vaccine (MenACWY)

Additionally, these vaccines are recommended:

Influenza vaccine, annually
Pneumococcal vaccine(s), for people with certain health conditions
HPV (human papillomavirus) vaccine, for women and men not vaccinated in childhood
Hepatitis A vaccine, for people not vaccinated in childhood

While not routinely recommended, this vaccine merits special consideration:

Meningococcal B vaccine - In the past 20 years, the overall incidence of meningococcal disease has decreased 10-fold, due in part to the effectiveness of the meningococcal conjugate vaccine (MenACWY), recommended by the Centers for Disease Control and Prevention (CDC) since 2005. However, serogroup B is now the primary cause of meningococcal disease and outbreaks in young adults. Although a vaccine specific to serogroup B (MenB) is available, it isn’t routinely recommended or required at this time. Students should review the need for MenB vaccine with their primary care provider. However, in the event of a meningococcal disease outbreak caused by serogroup B, students may be advised to get vaccinated.

Vaccine requirements vary from state to state, and additional recommendations may be made for study abroad programs.

CDC’s easy to read, adult immunization schedule, by age and health condition can be found on their website.

NASAL SPRAY FLU VACCINE (FLUMIST) RECEIVES RECOMMENDATION FOR 2018-19

The CDC's Advisory Committee on Immunization Practices (ACIP) recently voted to recommend the inclusion of live attenuated influenza vaccine (LAIV) nasal spray as one option for flu vaccine in next year’s (2018-19) flu season.

The ACIP had recommended against the use of LAIV for the 2016-17 and 2017-18 (current) flu seasons because the vaccine's H1N1 component wasn’t protecting people against that influenza strain. For the 2018-19 product, the manufacturer of LAIV, MedImmune/AstraZeneca, has replaced the H1N1 component that seemed to be ineffective during previous flu seasons.

The new recommendation does not give preference to LAIV over other flu vaccine options. The ACIP recommended physicians administer any licensed, age-appropriate influenza vaccine, including LAIV, inactivated influenza vaccine (IIV) and recombinant influenza vaccine.

Effectiveness data for the new formulation are not yet available. The product is in use this year outside the U.S. and effectiveness will be reported in the fall of 2018.

The ACIP voted to include this recommendation for the Vaccines for Children program. However, due to contractual requirements, this vote came too late for states to place LAIV orders through CDC for the 2018-19 flu vaccination season.

Only injectable IIV will be available for Vermont VFC practices beginning in September. If the LAIV recommendation remains in place for the
Now that Registry reporting is at such a high rate in Vermont, it is being used to look at many different aspects of immunization. It is one thing to consider whether an individual is up to date for immunizations – important, of course. The Registry can now be used to look at the state of Vermont, by county, and identify specific areas of immunization need. What’s clear is that some parts of Vermont have much better coverage than others.

216,008 flu shots were added to the Registry between August 1, 2017 and March 15, 2018. This includes immunizations to Vermonters in all age groups: children, teens, and adults. The information comes from many sources. Most primary care providers are reporting directly to us through their electronic health record, as are all hospitals except the Veteran’s Administration. 72% of Vermont pharmacies send their data to the Registry, as do the five largest health insurers, although they generally send a monthly file – so their records are a bit slower to arrive in the system.

52% of Vermonters over the age of 65 years have received a flu shot this season according to the Registry. However, in Essex county, only 30% of people in this age range were immunized. Grand Isle, Chittenden, and Addison counties all have immunization rates of over 60% for this age group. There is a range of almost 40 percentage points between the counties with the highest and lowest rates of immunization. See Figure 1.
The Registry shows a similar, although not identical pattern in coverage in children younger than school age. *Figure 2* shows the percent of children 6 months of age through 4 years who received a flu shot this season, broken down by county. The state rate is 55.8% for this age group, but again there are 40 percentage points between the highest performing county (Chittenden) and the lowest (Essex). Clearly, the more rural parts of the state have lower influenza coverage - and the Immunization Program will focus on outreach to these areas to improve protection.

*Figure 2*

While Registry data regarding influenza is informative and clearly demonstrates areas of need, we recognize two areas where we can improve our reporting. Many Vermonters receive flu shots at employee health clinics, and these are not always reported to the Immunization Registry. Also, we have yet to connect the Veteran's Administration Hospital to the Registry, and we recognize they are also an important source of immunizations. We are focusing on getting data from both these sources for next flu season.
HPV PREVENTION AT THE DENTIST?

UVM medical students assess HPV vaccine counseling practices among dentists and dental hygienists to improve HPV vaccine promotion in routine dental practice and increase vaccine coverage and cancer prevention in Vermont.

The human papilloma virus is the primary cause of an increase in new cases of oropharyngeal cancer in the U.S. The steps between oral HPV acquisition and development of HPV-positive oropharyngeal cancer are unknown but HPV vaccination of adolescents is the most promising prevention strategy.

PROJECT GOAL
Assess knowledge and current HPV vaccine counseling practices among dentists and dental hygienists to improve HPV vaccine promotion in routine dental practice and increase vaccine coverage and cancer prevention in Vermont.

METHODS
The research included key Informant Interviews and a provider survey. The survey was designed to assess knowledge, beliefs, practices and barriers regarding HPV vaccination. It was distributed to 392 practicing Vermont dentists and 559 dental hygienists with a response rate of 34%. 266 completed surveys were eligible for analysis.
SURVEY RESULTS

- 90% of dental providers believe it is important to play an active role in general medical care
- Approximately half of the respondents noted they lack the knowledge to recommend the vaccine and/or believe it is not their responsibility
- Dentists more accurately (78%) reported that HPV vaccine does not cause serious side effects than hygienists (63%).
- Over 75% of dental providers responded that they rarely discuss or recommend HPV vaccination to patients/parents

BARriers

- Provider perception of parental concerns/opposition is a primary barrier
- Dentists/hygienists agree that the main barriers to recommending HPV vaccine to adolescents are: not the responsibility of dental provider (27%), lack of confidence in knowledge (19%), time constraints (14%) and parent philosophical/religious opposition (11%)

CONCLUSION

- Targeted provider education regarding HPV vaccine and guidelines for oral health care providers may help to address knowledge gaps and increase confidence in recommending the HPV vaccine.
- Providers may need system supports to incorporate HPV vaccination counseling into practice.
- High interest in HPV dental patient educational materials suggests motivation to incorporate into clinical practice.

Adapted with permission from: Role of the Dental Community in HPV Vaccine Promotion. T. Luke Arnell, M. Lauren Donnelly, Alexis Nadeau, Laura Till MS, Collin York, Pedram Zargari, Meredith Graves PhD, Alan Howard MS, Christine Finley APRN, Wendy Davis MD.