

Vaccinate Vermont

Vermont Department
of Health

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**Congratulations to
Dr. Joseph Hagan
2014 Vermont
Immunization
Champion**

Pertussis Vaccine Effectiveness Evaluation

The Vermont Department of Health and the Centers for Disease Control and Prevention (CDC) are conducting an evaluation of pertussis vaccine effectiveness. The reported incidence rate of pertussis in Vermont increased from 2.9 to 103 cases per 100,000 population from 2010 to 2012. Part of this increased incidence may be the result of vaccine-associated waning immunity. There also have been genetic changes in the circulating strains of pertussis; however, the contribution of these changes to vaccine effectiveness is unknown. One such change is the recent appearance of pertussis bacteria that no longer produce a protein called pertactin, a component of both pertussis vaccines. In Vermont, greater than 90 percent of the isolates submitted by the Health Department Laboratory for testing to the CDC were classified as pertactin-deficient. To inform future vaccination efforts, an assessment of pertussis vaccine effectiveness against currently circulating pertussis strains is needed. CDC identified Vermont as an ideal place to perform this type of evaluation, due to the Health Department Laboratory's large and representative collection of pertussis specimens from across the state, which confirmed that the pertactin-deficient strain caused the majority

of cases here in 2012. Between March 17 and April 11, small teams totaling more than 30 CDC epidemiologists and over 30 Health Department epidemiologists and nurses conducted an evaluation of pertussis vaccine effectiveness in Vermont. Pertussis cases were identified through Vermont's routinely collected surveillance data from 2011 through 2013. Three controls (patients without pertussis) were randomly identified from the same clinic as the case. Demographic and clinical information, and vaccine history was collected from medical records for cases and controls. For participants with unknown vaccination status (information not available in medical records), parents will be contacted to obtain vaccination history. By comparing vaccination histories of patients with pertussis to those without pertussis, we can see how well the vaccine works and how long it protects. The results will be shared with the Advisory Committee on Immunization Practices (ACIP) and published in peer-reviewed journals.

The Health Department and CDC staff are working with 96 Vermont practices that have agreed to participate. This is a good example of the close cooperation between health care facilities and the Department, and the willingness of clinical professionals to step forward to protect the health of all Vermonters.

NEW: Required Training/Education regarding the Vaccines for Children (VFC) program and Vaccine Storage and Handling



Beginning July 2014, vaccine coordinators and back-up coordinators at all VFC-enrolled practices will be required to complete the “You Call the Shots” VFC Storage and Handling modules (VFA only practices - Storage and Handling module, only).

“You Call the Shots” is an interactive, web-based, self-study program developed by CDC that consists of a series of modules that cover all aspects of immunizations. Information is presented in a clear, concise format, with interactive questions to keep you engaged. Each module, worth one CEU, is free and takes an hour or less to complete. “You Call the Shots” can be accessed through: www2a.cdc.gov/TCEOnline/logn.asp.

When each module is completed, follow the directions provided to obtain a CEU and print out a certificate. The Immunization Program asks that you keep certificates on file.



Example from “You Call the Shots –Storage and Handling module

By completion of this module - Vaccine Storage and Handling - the learner will be able to:

1. Define and explain cold chain management.
2. Identify the components of routine and emergency plans for vaccine storage and handling.
3. Explain the roles of the primary and alternate coordinators and other staff in the storage and handling of vaccines.
4. Describe proper storage equipment use and monitoring.
5. Explain correct vaccine and diluent storage and handling for routinely recommended vaccines.
6. Identify correct vaccine storage, handling, and disposal of routinely recommended vaccines.
7. Identify actions that should be taken if vaccines have not been stored properly.
8. Locate resources relevant to current immunization practice.

How do parents make vaccine decisions?

Emily Brunson, a medical anthropologist from Texas State University, examined the decision making process among a small group of parents with children 18 months or younger. She found that parents assess vaccinations in different ways, and tend to fall into three groups:

- **Accepting** parents trust social norms of vaccination
- **Relying** parents trust others (friends, family, health care providers) for information and advice, and don't tend to be critical of the information or advice

- **Searching** parents critically assess published sources of information and are not concerned with social norms

The way parents assess vaccine information should be considered when designing an intervention to increase vaccine acceptance. Reinforce pro-vaccination social norms to support accepting and relying parents. Guide searching parents toward written studies in reputable medical journals.

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Ready, Set, Site Visit!



Once your site visit is scheduled, The Immunization Program will send a letter requesting that:

- The vaccine manager and backup staff be available for the visit, which usually takes about two hours.
- You will prepare for the site visit by dedicating both staff time and a workspace.
- You will collect all items and information requested in advance of the visit.
- The office staff are able to demonstrate proper storage and handling of vaccine.

This year, a laptop with internet connection will be used to document the site visit and any necessary follow-up. At the end of the visit, the provider will be given a follow-up plan (if needed). If your practice has several vaccine storage units, new provider staff or compliance issues, then additional time may be needed.

Update on Data Loggers

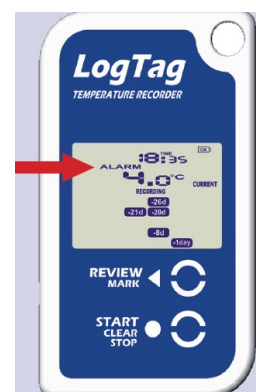
We are beginning the second year of using the Data Logger continuous temperature monitoring system. Recommended for 2013, and soon to be required by CDC, this type of thermometer and recording system has been placed in almost every refrigerator and freezer in VFC/VFA-enrolled practices in Vermont. In order to guarantee vaccine viability, you are able to download and see reports of what has been happening in your storage units, 24/7.

Along with the more accurate temperature monitoring comes information that was previously unknown, such as: temperature spikes and length of time out of range, if the freezer runs through its usual defrost cycle, or if the refrigerator temperature went out of range while the inventory was being done. Most importantly, it gives a good picture of the quality of storage units.

It's been a busy year for practices reporting ALARMS and out of range temperatures to the Immunization Program central office. The diligence, time and effort that provider offices have invested in this process is greatly appreciated. There seems to be no single problem that has occurred statewide. Please call and send your download any time you see an out-of-range temperature.

Recently, we have heard that some Data Loggers need battery replacement. Please be aware of the battery alert on the (first) Report tab, as well as on the monitor itself. All practices will receive replacement batteries by mail in May 2014.

When you send a download attachment (the .LTD file, not the red PDF file) to immunizationprogram@state.vt.us please include your pin #, the name and phone number of the contact person sending the information and a brief mention of why you are sending it.



Immunization Registry and HL7 Messaging

There are now 37 medical providers, including one hospital, sending Immunization data to the IMR via HL7 message. This is “real time” data – most records load IMMEDIATELY, and a few that require more name matching are loaded within one business day.

When a practice sends data via HL7, it means the immunization information they enter into their electronic medical record gets sent to the Vermont Immunization Registry. These practices do not have to enter anything into the Registry – it happens automatically.

Of course, just because a practice sends data to the Registry does not mean there is no reason to log in anymore. It is still a great resource for finding immunization history for a new patient, assessing vaccine coverage, or checking the forecaster to be sure you are not giving that third dose of HepB too soon!

Why have some practices gone live while others have not? It all depends on the electronic medical record vendor, and whether their product is able to send a message that meets the standards for data exchange. Six vendors have been able to send successfully: Athenahealth, eMds, EPIC (PRISM), Greenway, Medent, and PCC.

All HL7 immunization data flows through Vermont Information Technology Leaders (VITL), Vermont’s Health Information Exchange. If your medical practice is interested in sending immunization data by HL7 message, it is important to contact them via their website myvitl.net to get into the queue.

If you have questions about Meaningful Use, please check the VDH resource page: healthvermont.gov/hc/meaningful_use.aspx.

New Version of IMR Released

In late March, the IMR application development team released a new version of the Registry. Most of the changes are behind the scenes, but you may notice some changes:

- The IMR is now accessible through a second browser, Mozilla Firefox. This enables Mac users to directly access the system.
- Improvements to report generation speed and capacity. Even large practices can now run reports without timing out.
- Vaccine coverage reports now take varicella history into account.
- Improvements to Vaccine Information Statement recording.
- Pop-up warning when users try to record an immunization that might be a duplicate (example, recording both Dtap and Dtap-HepB-IPV on same date).
- Practices that use the IMR but are not primary care practices will see a change in the patient level reports they can use.



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healthvermont.gov/hc/imm/index.aspx