

# Vaccinate Vermont

Vermont Department of Health

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## Internet Truths and Urban Legends\*

Many parents are exposed to conflicting information about vaccines and are seeking answers. The following article has been reprinted as it offers excellent resources for parents who want to research vaccine questions.

If you want to find out about something, all you need to do is “Google” it, right? Indeed, we have become so used to having information at our fingertips that we have come to use the popular search engine’s name as a verb. But, the reality is that “googling” it may or may not actually provide you with quality information. For some, search results are used simply to confirm what they already believe — right or wrong. However, the goal should be to seek accurate information, particularly if you are seeking information that could affect your family’s health and well-being.

Since many decisions we make for our families today include some component of scientific understanding, it is particularly important for scientists to effectively communicate with the public on the internet. And, indeed, some scientists have stepped up to do just that! Taking time out of the lab, or leaving the lab behind altogether, some science communicators regularly write blogs explaining a variety of science-based issues:

[Scientific American cross-check](#) — This blog offers critical views of science in the news.

[Skeptical Raptor](#) — This blogger regularly takes on pseudoscience and science-denialism. Portions of the website are dedicated to debunking science myths and logical fallacies.

[Science-Based Medicine](#) — This collection of doctors and writers covers medical treatments, research and healthcare with a science-first mentality.

[ScienceBlogs.com](#) — This website is a digest of many different science blogs addressing developments in various areas of science and technology as well as current events.

Remember, “your science” and “my science” doesn’t exist. Science is not opinion-based, so when you are looking for information to make decisions for your family, use information based on facts, starting with bloggers like these.

\*from Children’s Hospital of Philadelphia Vaccine Education Center [Parent’s Pack Newsletter](#) 12/6/16

### INSIDE THE ISSUE

Internet Truths and Legends .....	1
Perinatal HepB .....	2
Update: Vaccine Ordering .....	2

Scheduling Pediatric HepA & B .....	3
Scheduling and the Iz Registry .....	3
Iz Document Translations .....	4
AFIX Successes .....	4

## Preventing Perinatal Hepatitis B Infections

Hepatitis B virus (HBV) is transmitted through percutaneous (skin puncture) or mucosal exposure to blood or body fluids, and is highly infectious. It can be transmitted even when there isn't visible blood, and remains viable on surfaces for up to seven days. It is estimated that over 850,000 people living in the U.S. are infected with HBV. Individuals 30-39 years of age have the highest incidence of acute infection. Prevention of transmission of HBV from mothers to infants is essential to reduce the spread of HBV. Over 80% of infants infected with HBV become chronic carriers, yet only 1%-12% of those infected as an older child or adult develop chronic infection<sup>1</sup>.

Hepatitis B (HepB) vaccination is the key to prevention. Up to 95% of perinatal infections can be prevented when the HepB vaccine is given within 12 hours of birth<sup>2</sup>. Since 2005, the CDC has recommended that all children receive a birth dose of HepB vaccine<sup>3</sup>. The National Immunization Survey reports that only 49.4% of Vermont infants received the recommended birth dose of HepB vaccine in 2015. This is the lowest state rate, and is well below the national average of 72.4%. Specific recommendations are in place for those infants born to a HBsAg positive woman. The Perinatal Hepatitis B Program takes the following steps to protect infants in Vermont:

- identify the hepatitis B status of pregnant women and communicate this information to the birthing hospital,
- ensure prophylaxis and access to hepatitis B immune globulin (HBIG) and HepB vaccine at birth for all infants born to hepatitis B surface antigen (HBsAg) positive mothers,
- ensure infants complete the HepB vaccine series,
- confirm protection through post-vaccination serology.

Over the next year, the Immunization Program will strive to increase collaboration with birthing hospitals and pediatric health care providers to develop systems that ensure perinatal hepatitis B transmission is prevented. The Perinatal Hepatitis B Coordinator will visit all birthing hospitals to ensure they have policies and systems in place to comply with these recommendations.

The [Prevention of Perinatal Hepatitis B Transmission](#) algorithm provides clear guidance and information on reporting suspected and confirmed cases to the Health Department. A notable update in the [guidance](#) is the shortened interval for post-vaccination serologic testing of infants born to HBsAg positive mothers.

1. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5416a1.htm>

2. Stevens CE, Taylor PE, Tong MJ, et al. Yeast-recombinant hepatitis B vaccine: efficacy with hepatitis B immune globulin in prevention of perinatal hepatitis B virus transmission. *JAMA* 1987;257:2612-6.

3. CDC. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP). Part 1: Immunization of infants, children, and adolescents. *MMWR* 2005;54(No. RR-16):1-32.

## UPDATE: Vaccine Management and Ordering in the Immunization Registry

Development of the Vermont Vaccine Inventory Management System (VIMS) is underway. Providers enrolled in the Vaccines for Children/Adults (VFC/VFA) programs will utilize VIMS to manage their inventory and place vaccine orders. This will replace the provider interaction with the CDC system VTrckS. The VIMS project meets a need expressed by providers, and moves Vermont closer to the national standard of using the Immunization Registry for all vaccine management processes. All VFC and VFA enrolled providers will transition to VIMS later in 2017. Please stay tuned.

## Common Vaccine Scheduling Errors- Pediatric Hepatitis A and B

Did you know that the third dose of Hepatitis B vaccine should not be administered until a child is at least 6 months of age—even if the interval between second dose and the third is more than 8 weeks? Did you know that the second dose of Hepatitis A vaccine should not be administered until 6 months after the first? If that is news to you, you are not alone. Timing of the last dose in the Hepatitis A and Hepatitis B vaccine series leads to invalid dosing in many practices.

Hepatitis B is especially complicated if a practice uses the combination vaccine Pediarix (Dtap-HepB-IPV). If a patient receives a birth dose of Hepatitis B vaccine, and then Dtap-HepB-IPV at two and four months of age, the HepB in the second combination shot does not meet the requirement for the third dose. The third dose of Dtap-HepB-IPV will complete the series, but only if the child is 24 weeks of age or older when they get it.

Here are the detailed spacing requirements for Hepatitis B vaccine administration:

- minimum interval between dose 1 and 2 is 4 weeks
- minimum interval between dose 2 and 3 is 8 weeks
- minimum interval between dose 1 and 3 is 16 weeks
- minimum age for the final dose is 24 weeks

Hepatitis A vaccine is a 2-dose series that should be started at 12 months of age. The second dose should be given six months following the first dose, no sooner.

### Vaccine Schedules and the Registry

The Vermont Immunization Registry (IMR) includes several features that highlight doses administered outside of the recommended schedule. It's easier to adhere to the rules when patients are following the recommended schedule, but when parents choose to delay vaccines, it can become challenging to determine exactly when to give that next dose.

The Vermont Immunization Registry can help assess immunization schedule adherence.

- For a quick assessment of how your practice is doing at administering vaccine within the Advisory Committee on Immunization Practices (ACIP) guidelines, use the invalid doses report in the IMR.
- To find the recommended date for a vaccine series, use the Forecaster. The minimum interval, which the Forecaster also provides, gives guidance around whether it is acceptable to administer a vaccine ahead of the recommended date.

If you have vaccine schedule questions, email the Immunization Program at [AHS.VDHImmunizationProgram@vermont.gov](mailto:AHS.VDHImmunizationProgram@vermont.gov), or call (802) 863-7638. For more information about using the Invalid Doses Report or other Immunization Registry reports, contact the Immunization Registry at [IMR@vermont.gov](mailto:IMR@vermont.gov) or (888) 688-4667.

## Immunization Documents Translated into 7 Languages

Arabic ♦ Kirundi ♦ Somali ♦ Burmese ♦ Nepali ♦ Spanish ♦ French

To ensure that non-English speaking parents and guardians can fully understand Vermont's immunization requirements for child care and school, the Immunization Program has translated key documents into seven languages. These languages were prioritized by the Agency of Human Services based on population size and linguistic needs.

The documents that have been translated and are available on the Health Department website include:

- A Parent's Guide to Immunizations Required for Child Care
- Letter to Parents for K Enrollment
- Letter to Parents for 7<sup>th</sup> Grade Enrollment
- Information about Becoming Compliant with Vermont's Child Care and School Immunization Rule
- Notice of Missing Immunizations and Provisional Admittance

The materials appear alongside their English versions on the Immunization Program's website: <http://healthvermont.gov/hc/imm/index.aspx>

## Assessment, Feedback, Incentive and Exchange (AFIX) Recognizing Success

The Vermont Immunization Program recognizes primary care practices that achieve high immunization rates for children and teens. Coverage rates are calculated annually by the Immunization Registry at the end of each calendar year. These rates are compared to the national Healthy People 2020 targets [http://healthvermont.gov/hv2020/dashboard/imm\\_infectious.aspx](http://healthvermont.gov/hv2020/dashboard/imm_infectious.aspx).

As part of the Program's quality improvement initiative, the AFIX coordinator notifies all practices that successfully meet the national goals. During National Infant Immunization Week, each of these practices receive a certificate and a copy of *Epidemiology and Prevention of Vaccine Preventable Diseases*. District Offices celebrate practices locally on their Facebook pages and through messages in local newspapers.

In April 2016, five practices were recognized for high vaccine coverage:

- Brookside Pediatrics/Bennington
- Green Mountain Pediatrics/Bennington
- Hagan, Rinehart & Connolly/Burlington
- Newbury Health Clinic/Newbury
- UVMHC Pediatric Primary Care/Barre

In 2017, the Immunization Program looks forward to recognizing these practices and many others for their achievements in the past year!



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