



PARENTS PACK

MONTHLY UPDATES ABOUT
VACCINES ACROSS THE LIFESPAN

FEATURE ARTICLE — WHAT'S IN VACCINES AND WHY?

October 2024

We eat highly processed meats and desserts. We take unregulated vitamins and supplements. We get tattoos and piercings. But none of the ingredients in these products come under the scrutiny that those in vaccines do.

On one hand, it is fair to be skeptical of anything we put in our bodies, including vaccines, and often the vaccines being checked for ingredients are those given to our infants and children rather than ourselves. On the other hand, vaccines are one of the most regulated products we use — after all, they are medical products being given to healthy people to prevent a potential bad outcome at some future point in time.

Because of the review process that vaccines undergo on the path to approval, we know what is in each vaccine. So, this month, we wanted to highlight some of the resources that the Vaccine Education Center (VEC) has available to help answer questions people have about vaccine ingredients — including one brand new resource!

Before we dive into the ingredients, however, we would be remiss if we did not point out that the well is deep when it comes to disinformation about vaccine ingredients. Disinformation is inaccurate information that is knowingly spread — often to create fear and distrust. Most people don't take chemistry classes or even think much about the chemical names of ingredients, so long lists of vaccine ingredients with chemical-sounding names shared on social media are an easy way to sow doubt and concern — especially on a black background with a harsh font, no context, and maybe a few syringes for good measure! With this in mind, we are also sharing some of our resources related to evaluating information because with a place to look for accurate information and tools to assess the quality of randomly offered information, we hope that our readers will feel more in control when it comes to information about vaccine ingredients.

VEC resources related to vaccine ingredients

The VEC website has a section dedicated to vaccine ingredients. A good starting place is the “Types of Vaccine Ingredients” page, which describes the five different categories of vaccine ingredients: antigens, adjuvants, stabilizers, preservatives and manufacturing by-products.

From the main page in the vaccine ingredients section, readers can also click on specific ingredients to find out more about why the ingredient is used in some vaccines, which vaccines it is in, and in some cases, the quantities of the ingredient present in different vaccines. Some examples of ingredients featured on this page include aluminum, antibiotics, egg products, fetal cells, gelatin and more. In some cases, we offer videos and Q&A sheets about specific ingredients, such as aluminum, thimerosal, and DNA and fetal cells. In these instances, the additional resources are shared on the relevant ingredient page.

Our newest resource is our “Ingredients by Vaccine” section, where we offer tables that list the individual vaccines against a pathogen by brand name along with the ingredients in the vaccine sorted by category (antigens, adjuvants, stabilizers, preservatives and manufacturing by-products). Currently, this section covers routinely recommended vaccines, and in the future, we will add combination vaccines as well as less commonly used vaccines, such as travel vaccines.

VEC resources related to evaluating information

The VEC's Parents PACK website has a section dedicated to “Evaluating information.” On the section landing page, readers will find five tips for navigating today's information environment (toward the bottom of the page) as well as descriptions of the different components of this website section, including:

- **Why Scientific Info Is Different**, which includes articles about how scientific discovery works and how to evaluate scientific claims as well as our popular three-part series, “No. This Study Does Not Prove What You Think It Does.”
- **Science Tells a Story**, which includes articles about how science tells a story written by multiple authors, how to evaluate media reports, and how to evaluate social media posts.
- **Resources for Evaluating Information**, which includes links to a variety of tools from the VEC and other sources, including places for fact-checking information, evaluating media bias, assessing the validity of images and more.

We hope you will find the information and tools provided to be helpful in sorting out information generally and related to vaccine ingredients more specifically.

For links to resources in the Feature Article, please visit bit.ly/Oct2024FA.

TRIVIA CORNER

What disease was the focus of research during WWII because of the number of soldiers it killed during WWI?

- A. Polio
- B. Influenza
- C. Measles
- D. Chickenpox

continued >

DR. HANDY'S CORNER: WHY ARE CERTAIN VACCINES MANDATED FOR SCHOOL?

Watch as Dr. Handy discusses the history of vaccine mandates and the role they play in keeping children healthy today.

bit.ly/VaxSchool



NEWS & NOTES

More than 200 children died from influenza last year

People tend to think that “the flu” isn’t that bad, but each year, influenza infections are associated with thousands to tens of thousands of deaths. Most often, these deaths occur in the elderly, but during the 2023-2024 influenza season, more than 200 children younger than 18 years of age died from influenza:

- About half of these children did **not** have underlying health conditions that would increase their risk for severe influenza.
- More than one-third of the childhood deaths occurred in those younger than 5 years of age.
- Children between 5 and 11 years of age accounted for the highest proportion of childhood deaths (more than 4 in 10 childhood deaths).
- Among those for whom vaccination status was known, most of the deaths (about 8 in 10) occurred in children who were not completely vaccinated.

Hear Dr. Offit discuss the pediatric deaths from influenza in the October 2024 “Vaccines and Infectious Diseases in the News” video.

Like this new monthly video update from Dr. Offit? Bookmark the VEC website homepage, vaccine.chop.edu.

To see the data on pediatric deaths associated with the 2023-2024 influenza season, check this page of the Centers for Disease Control and Prevention (CDC) website. The page also shows pediatric deaths from prior influenza seasons, which were much lower during the pandemic compared with seasons before or since.

To see overall child mortality data globally (not just from influenza), check this page on the Our World in Data website.

RSV prevention: New Q&A sheets to help with common questions

The VEC recently released two new Q&A sheets related to prevention of RSV:

- “Protecting Babies from RSV: What You Should Know” describes the options for protecting infants during their first RSV season, including when maternal vaccination may be offered prior to delivery or by administration of nirsevimab, a monoclonal antibody product. The sheet also describes which infants may be recommended to get nirsevimab during their second RSV season due to conditions that increase their risk for severe disease.
- “RSV & Adults: What You Should Know” describes which adults are recommended to get the RSV vaccine, how the vaccine is made and how it works, and other common questions related to this vaccine.

Both sheets will be made available in Spanish in the coming weeks. Watch for the links to be added to this page of our website or check out some of our other Q&A sheets.

For links to resources, please visit bit.ly/Oct2024NN.



TRIVIA ANSWER

The correct answer is B. During WWI, the U.S. Military lost more soldiers to Spanish Influenza than those killed by the enemy. Therefore, research into influenza vaccines and treatment was a major military focus between the end of WWI and WWII.

Go to vaccine.chop.edu/trivia to play Just the Vax, the Vaccine Education Center’s trivia game, where you can find this question and others like it.

