

This article is part of an ongoing series of health and wellness articles for Ft. Carson Tricare beneficiaries. Dr. Patrin invites you to submit medical topics and health care questions to be addressed in future issues.



Let's Talk About...

Varicella Vaccine (for Chicken Pox)

This week's article is by Ruth Crutchfield, RN, MSN, Certified Pediatric Nurse Practitioner @ Evans US Army Hospital

What childhood illness causes over 3.5 million people a year to become ill, 6,000 hospitalizations, 200,000 medical complications, including about 100 deaths each year? If you guessed Chickenpox, you are right! In the past it was considered normal for children to live through a week of chickenpox before they reached adulthood. Until recently there was no immunization to prevent it. This used to be the case with measles, mumps and rubella (German measles) 40 years ago too. Children today receive immunizations for these three “childhood illnesses” during routine wellness visits to prevent them. Now we can do the same for chicken pox.

In 1971 Dr. Takahashi started work in Japan on developing an immunization for varicella, commonly known as chickenpox. In March of 1995, Varivax, produced by Merck pharmaceuticals was licensed for use in the United States. It has been incorporated into the immunization schedule and will be required by the State of Colorado for children attending licensed child care, preschool, and those beginning school as of January 2000.

In clinical trials of Varivax in children, the ability to fight the viral infection was 95% or greater after a single dose. Adolescents and young adults have immune rates of 75% to 82% after a single dose and 94% after two doses. 70% to 80% of immunized children developed no disease after close household exposure to chickenpox. Compare this protection to near 90% infection in susceptible household contacts not immunized with Varivax.

Symptoms of chickenpox include a generalized itchy rash consisting of small blisters on a red base. They usually begin on the central part of the body and then spread, within 24 hours, to the head, arms and legs. This rash often spreads to the mouth, eyes, and groin. Mild fever and generalized achiness at this point are common. A new crop of blisters occurs each day for 3 days. The pox blisters then begin scabbing over, and generally resolve in about 7 days. They sometimes leave pink marks on the skin where the worst pox blisters were. Most often these pox marks fade with time. Chickenpox is most frequent in late winter and early spring but can occur year around.

Although the majority of children with chickenpox do not have serious complications, a variety of complications can occur, including bacterial skin infections, joint , liver, brain, and kidney damage. Chickenpox is often more severe in adults. The most common complication in adults is pneumonia.

Both the American Academy of Pediatrics (AAP) and Centers for Disease Control (CDC) and Prevention have recommended the universal use of varicella vaccine in susceptible children and adolescents. One dose of vaccine is recommended for all healthy children from 12 months of age until the 13th birthday who have no prior history of chickenpox. Healthy adolescents past their 13th birthday with no history of chickenpox require 2 doses administered 4-8 weeks apart.

Side effects from the Varivax immunization are minimal. Up to 8% of patients develop a vaccine-associated pox rash consisting of 2-5 lesions. 25% may have mild redness or tenderness at the injection site and 10% may have a low fever.

Varivax is now routinely offered at the Evans US Army Hospital Well Baby appointments after 12 months of age. For adolescents 13 years and older, or children with an unclear history of chickenpox, a blood test called a varicella titer can be done to determine the need for immunizing with the vaccine. Call your primary clinic head nurse if you have questions about whether the Varivax vaccine is right for you or your children.