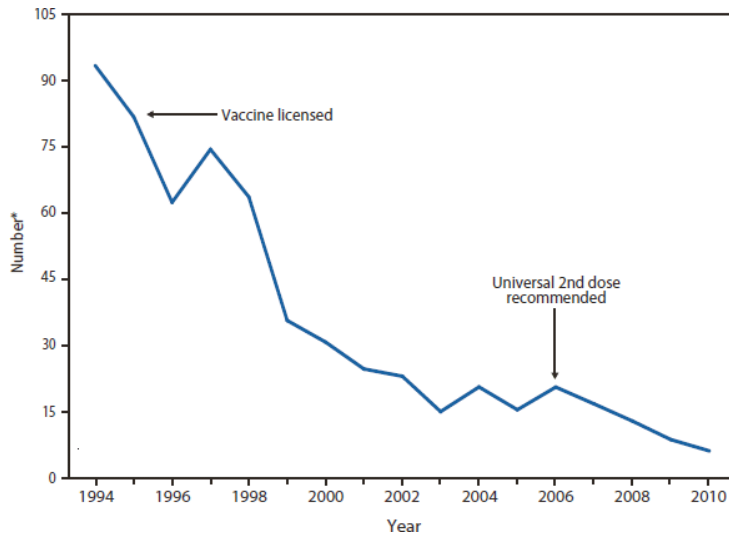


Varicella Vaccine



Number (in thousands*) of reported cases of Chickenpox in IL, MI, TX, WV

Varicella Vaccine Benefits

Protects against Chickenpox, a very contagious infection that results in itchy blisters and sores all over the body. It is caused by *varicella zoster virus (VZV)*. The incidence of Chickenpox went from 4 million cases annually in 1995 to 400,000 cases, ten years later, in 2005.

Prevents long term effects: Varicella vaccine also decreases the risk of Shingles. Varicella vaccine prevents chickenpox in pregnant women, which can cause birth defects.

Saves lives: Chickenpox can be very serious, especially in infants and older children. It can cause skin infections, pneumonia, encephalitis (brain inflammation) and death. The Varicella vaccine prevents 3.5 million cases of chickenpox, 9,000 hospitalizations, and 100 deaths per year.

Concerns

Is the Varicella Vaccine safe?

Yes. Serious side effects are rare, but when they occur they are usually in people with a compromised immune system. Therefore, it is not recommended for seriously ill people, pregnant women, people who are allergic to gelatin or neomycin, people with a compromised immune system and people taking high doses of steroids or receiving cancer treatment. Their bodies are sometimes not able to react to the live attenuated virus properly and the virus is sometimes able to cause an infection in this situation. These people depend on others in their community to be vaccinated.

What side effects are associated?

Mild reactions that can occur with Varicella vaccination include soreness or redness at injection site, irritability, drowsiness and decreased appetite. 5% of people report a fever lasting less than a few days or a rash. Cases of widespread chickenpox rash after vaccination have been reported, but are rare.

How effective is this vaccine?

When the vaccine was first used in 1995, children received one dose, but some people had decreased immunity within 5-8 years after vaccination. Since 2006, two doses are standard and this is 98% effective at preventing chickenpox. Breakthrough disease is a mild chickenpox illness that occurs in some people who have been vaccinated, but severe infection is still avoided.

Can I wait to vaccinate my child?

Severe complication from chickenpox infection is greatest for children less than two years of age and older children, so maximum protection and benefit is achieved when vaccination occurs at 12 months.

Can't I just treat this illness if it occurs?

Treatments for chickenpox only address symptoms, not the virus itself. 1 in 1000 kids with chickenpox will get pneumonia or encephalitis. Infection also makes children more vulnerable to other infections which can gain entry through varicella blisters. And, once you have chickenpox, you are at risk for Shingles later in life.

What is the vaccine made from?

The varicella vaccine is a weakened form of the varicella zoster virus, which is called live, attenuated. The virus was first taken from a child with a natural varicella infection. The virus was then grown in cell cultures, including embryonic human lung cell cultures, guinea pig cell cultures and in human diploid cell cultures (WI-38). After the virus is changed, it is not able to reproduce itself in people enough to cause disease, but still resembles chickenpox virus so that the body learns to defend itself against Varicella.

What chemicals does it contain?

The vaccine does not contain thimerosal preservative (ethyl-mercury) or aluminum.

How is this vaccine related to shingles?

After infection, the chicken pox virus remains asleep in the nerves and the immune system prevents it from causing an illness called Shingles or Zoster. Shingles is a condition of blisters and pain that can occur when the virus awakens later in life. Shingles is rare in people who were vaccinated against chicken pox, and when it does occur, the shingles infection is much less severe.

Do any of these sources have ties to pharmaceutical companies?

The sources used for this handout are the Center for Disease Control (CDC), the World Health Organization (WHO), Children's Hospital of Philadelphia (CHoP) and articles from the most well-regarded medical journals. While some employees at these organizations have ties to pharmaceutical companies, they are upfront about these connections. The WHO reviews studies conducted all around the world, which are less likely to be connected to pharmaceutical companies. The CDC took steps in 2006 to make its vaccine recommendation unit more independent and less subject to bias.

References:

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