

Chickenpox

also known as varicella

“Everyone said don’t worry—natural immunity is better”: A True Story

Zoe was 13 months old when her mom, Amy, first noticed the blister on her cheek. “I never imagined that within a few short days, my baby would be in the hospital fighting for her life.”

At first, Amy did not think the blister was anything to worry about. But by the next day, there were blisters on her trunk, scalp, and face. Amy took Zoe to the pediatrician who said that Zoe had chickenpox. For her age—13 months—Zoe was up to date on all her vaccinations, but had not yet received the chickenpox vaccine. Her doctor, who followed the recommended schedule for giving the chickenpox vaccine during age 12 through 15 months, had set Zoe to get the vaccine at her 15-month check-up.

“We have no idea where Zoe was exposed to chickenpox,” Amy says. “It was summertime and we were everywhere, doing lots of activities where there were a lot of kids.”

At first, other than being a little itchy, Zoe seemed fine and was acting like her normal, happy self. “Everyone told me not to worry—she’d be fine. Some told me we were lucky that Zoe caught chickenpox, because they thought natural immunity is better than getting the vaccine,” Amy recalls. “So, I didn’t worry.”

Within a few days of noticing that first blister, Amy thought a few of the blisters looked infected. Worried, Amy called the pediatrician, who gave her instructions to continue treating Zoe at home with medicine to reduce her fever and relieve her itching. “Although she had a slight fever, Zoe was still pretty playful. I gave her some Tylenol and an oatmeal bath and put her to bed,” Amy says. “But the next morning, I had a hard time waking her up. More blisters were infected and huge chunks of her skin on her back and belly were literally falling off,” Amy recalls. She took Zoe to the pediatrician, who immediately rushed her to the hospital. “Within 4 hours of getting Zoe out of bed and to the doctor, the area of affected skin had doubled. It was the scariest thing I had ever seen.”


“When we first arrived at the hospital, Zoe’s fever had reached 104 degrees and she barely had energy to move.” At the hospital, doctors determined that Zoe’s chickenpox blisters were infected with the *Staphylococcus aureus* (staph) bacteria. The hospital doctors immediately started her on antibiotics. It took 12 hours of antibiotics before Zoe began to get better. Plus, Zoe was so uncomfortable that she was given morphine to control her pain.

Zoe spent a week in isolation at the hospital. Doctors limited Zoe’s contact with the family to prevent the infection from spreading.

Thankfully the treatment during her hospital stay worked. Six days later, Zoe was able to go home—but she was bandaged from head to toe to protect her healing skin.

To ensure Zoe was not exposed to anything that could cause another infection, she had to stay home from child care until all of the chickenpox blisters healed. In total, Amy missed more than 2 weeks of work due to Zoe’s illness.

Fortunately, Zoe made a full recovery. But a year later, Zoe still has a few scars—on her face, back and above her knee—that serve as a constant reminder of her life-threatening experience with chickenpox.

“It never occurred to me just how serious chickenpox could be,” Amy says. “Zoe was very lucky, because she could have very easily died from her infection—but thank goodness we still have our precious girl. Other children are not so lucky. I encourage all parents to get their kids vaccinated for chickenpox.” 

While staph infections of the skin are common in infants and young children, they usually are mild. However, chickenpox blisters can provide a place for staph bacteria to enter the skin, and a serious infection can develop quickly. It’s common for chickenpox blisters to be close together and when the staph infection penetrates the skin, the skin around the infected area simply dies and falls off.

Chickenpox Symptoms

Chickenpox is a common childhood illness caused by the varicella zoster virus. In an unvaccinated child, the first symptom of chickenpox is usually an itchy, uncomfortable rash. The rash usually appears on the head first, and then spreads to the rest of the body. As many as 250 to 500 blisters and bumps may appear on the skin. Chickenpox also can

cause tiredness, headache, and a fever that lasts several days. If the blister becomes infected, lifelong scarring can result.

Chickenpox is very contagious and spreads easily from infected people. It can spread from either a cough or a sneeze. It can also spread by contact with virus particles that come from the blisters on the skin, either by touching them or by breathing in these virus particles. ▶

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Because it is so easy to catch chickenpox, there were about 4 million cases in the United States a year before a vaccine was available. Almost every person in this country used to get chickenpox at some point in their lives.

Chickenpox Can Be Serious

While chickenpox is usually mild, it can be serious. Serious complications include infected blisters, pneumonia, bleeding disorders, and swelling of the brain (encephalitis). Some of these complications can result in death. Chickenpox can be particularly serious for children younger than 1 year old.

“You may recall having chickenpox when you were young, and not really being very sick,” says Dr. Jane Seward, of the Centers for Disease Control and Prevention (CDC). “However, chickenpox can be very serious. I talked with the parent of a 5-year-old child who died after getting chickenpox. One day, this family had a healthy child attending kindergarten, and within a few days, the child had died of a serious complication of chickenpox.” According to Dr. Seward, “The chickenpox vaccine had just come out at the time and was not widely available.”

Before the chickenpox vaccine was widely used, approximately 11,000 people were hospitalized and about 50 children and 50 adults died every year from chickenpox. Most people who died from chickenpox were completely healthy before they got the disease, with no known conditions that put them at higher risk for a severe case of chickenpox.

Thanks to vaccination, serious cases and deaths from chickenpox have declined dramatically. Since the United States started using the vaccine in 1995, the number of hospitalizations and deaths from chickenpox has gone down more than 90%.

Benefits of Chickenpox Vaccine

Getting the chickenpox vaccine as recommended—

- Prevents serious cases of chickenpox.
- Prevents hospitalizations and death from chickenpox.
- Protects very young children and adults, for whom this disease can be particularly serious.
- Prevents discomfort and missed days from school and work.
- Prevents chickenpox pneumonia.

Risks of Chickenpox Vaccine

- Mild side effects include soreness where the shot was given, fever and mild rash, which can occur in up to 1 out of every 25 vaccinated children.
- It is possible for the vaccinated person with a rash to infect other members of the household, but this is extremely rare.
- Seizure (jerking or staring) caused by fever is very rare.

The Chickenpox Vaccine Prevents Serious Disease and Complications

“The most important thing to remember is that we cannot predict which child will get a serious case or have complications from the chickenpox,” explains Dr. Stephanie Bialek at the CDC. “The chickenpox vaccine is very safe and nearly 100% effective in preventing serious cases of chickenpox. Therefore, we recommend that all children get vaccinated.”

Some children get chickenpox even after they are vaccinated, but it’s usually milder. Children who get chickenpox after vaccination typically have a mild rash with fewer than 50 spots or bumps. In fact, chickenpox after vaccination is so mild that sometimes it’s not recognized as chickenpox, because the rash looks more like insect bites than blisters. Children who get chickenpox after vaccination rarely have a high fever or complications and they recover quickly.

“When the chickenpox vaccine was developed, experts knew that some kids would develop chickenpox after receiving the vaccine. That’s OK, because the vaccine does what we need it to do—it prevents serious illness and death,” explains Dr. Meg Fisher of the American Academy of Pediatrics. “Getting the vaccine is far safer than catching chickenpox.”

Chickenpox Vaccine: Two Doses Needed for Maximum Protection

Two doses of the chickenpox vaccine are recommended: The first dose is recommended at age 12 through 15 months old and the second at age 4 through 6 years. “Although there is much less chickenpox disease in the United States today,” says Dr. Seward, “chickenpox is still out there and children can become infected very easily if exposed. It is important that children receive two doses of the vaccine for maximum protection against chickenpox.”

“We most often see outbreaks of chickenpox in school-aged kids, so getting the second dose at age 4 through 6 years will protect kids from chickenpox before they are most likely to catch it,” says Dr. Fisher.

The second dose helps protect children from chickenpox into adulthood as well. This is important because chickenpox can cause severe disease in adults. ■

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The Centers for Disease Control and Prevention, the American Academy of Family Physicians, and the American Academy of Pediatrics strongly recommend vaccines.

800-CDC-INFO (800-232-4636) <http://www.cdc.gov/vaccines>