Can chicken pox be prevented with a shot?

Since 1995, varicella vaccine has been given to children older than 12 months. The vaccine is 70-85% effective in preventing mild infections and more than 95% effective in preventing moderate or severe disease. People who do develop chicken pox after vaccination, have much milder symptoms and fewer blisters. This leads to a faster recovery and fewer complications. Varicella vaccine is recommended for all children without contradictions at 12-18 months of age. One dose of vaccine is recommended for all children before their 13th birthday. Persons 13 years or older should receive 2 doses of the vaccine separated by at least 4 weeks to achieve full immunity. People with history of having the chicken pox disease are considered immune to the disease. One percent of those receiving the vaccine have developed breakthrough or milder cases of the chicken pox.

Since chicken pox is becoming increasingly rare, this disease has now been added to those diseases that are individually reported when diagnosed.

A person usually has chicken pox only once in their lifetime. However, once in the body, the virus can be dormant and can cause a different type of skin condition later in life called shingles or herpes zoster.
Chicken Pox

What is Chicken Pox?
Chicken Pox is an infectious disease caused by the varicella zoster virus. This virus is a member of the herpes virus family and enters the body through the respiratory tract. The varicella zoster virus spreads through the air when an infected person coughs or sneezes or through contact with the fluid from the chicken pox blisters.

How long is it from when a person is exposed until they get the disease?
The period of time from which a person is exposed to chicken pox until they develop a rash is 14-16 days with a range of 10-21 days.

What are the symptoms?
There may be 1-2 days of fever and feeling tired and sick before the rash onset, but in children, the rash is often the first sign of the disease. The rash usually comes out in “crops” of multiple, small red bumps that look like insect bites. They quickly develop fluid-filled blisters which break open and crust. The rash usually appears first on the trunk and upper body and then spreads to the arms and legs. Blisters can also appear in the mouth, throat, and genital area. Groups of blisters can appear for several days with all stages of the rash being present at the same time.

How long is chicken pox contagious?
The contagious period for chicken pox begins about 2 days before the rash appears and lasts until all of the blisters are crusted and dried, usually about 7 days. Persons with chicken pox should be excluded from school until all the blisters are dried.

Are there complications or persons who are at high risk of having problems by getting the disease?
Complications of chicken pox include bacterial infections of the skin and viral pneumonia. Complications occur more often in persons older than 15 years of age and infants younger than 1 year of age. Others at risk of complications are persons with weak immune systems and pregnant women. These groups should avoid contact with someone with chicken pox and contact their health provider if exposed.

How is chicken pox treated?
Since chicken pox is caused by a virus, antibiotics would not be useful in treating this disease. Treatment of chicken pox involves ways to help reduce the itchiness and lowering the risk of complications.

- Apply wet compresses or provide cool, lukewarm water for a bath every 3-4 hours during the first couple of days. Colloidal oatmeal (e.g., Aveeno) which can be purchased over the counter can be added to the bath to relieve itching. Patting the body dry instead of rubbing can also reduce itching.

- When sores are found in the mouth, avoid eating or drinking highly acidic or salty foods. Soft, cold, or bland foods may be better tolerated.

- Give medications e.g. acetaminophen (Tylenol) to help relieve pain and fever. Never use aspirin to reduce pain or fever in children with chicken pox. Using aspirin in such cases has been linked with a serious disease called Reye’s syndrome which can lead to liver failure and death.

- Clean and trim fingernails and encourage the person not to scratch their skin.