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Fact Sheet

Varicella (Chickenpox) Vaccine – *Varilrix*

1. *What is chickenpox (varicella disease)?*

Chickenpox is a very contagious disease caused by a virus. 90% of children have this infection by the time they are 12 years of age. This disease causes an aggravating, itchy rash which appears in crops of small red areas that look like pimples, then develop into small blisters or vesicles. Chickenpox results in some loss of time from routine activities for both children and their parents. Recurrences of varicella-like rash occur in four to 13% of those previously infected.

About one in 20 children with chickenpox develops complications such as a bacterial infection in the skin/blood or chickenpox infection in the heart, joints, lungs (pneumonia) or brain (meningitis). It is estimated that chickenpox increases the risk of severe invasive group A streptococcal infection among previously healthy children by 40 to 60 fold. Each year in Canada some children die of chickenpox.

A more serious complication is the development of Reye's Syndrome, a brain disease which can occur when a child who has chickenpox is given a medication containing **salicylates** (the most common being **Aspirin**).

Chickenpox in pregnancy can result in birth defects in the baby. If a woman develops chickenpox a few days before or after delivery, the newborn is at increased risk of developing severe chickenpox disease. Adults who get chickenpox tend to be much sicker than children.

Later in life, a previously infected person may have shingles as the virus remains in the nerve endings for many years and can reactivate. Shingles is a very painful condition.

2. *What are the contents of the vaccine and its effectiveness?*

The vaccine contains live, attenuated chickenpox virus. All additional vaccine components, including amino acids, human albumin, lactose, neomycin sulfate, polyalcohols and water are licensed for use in Canada by the Bureau of Biologics within Health Canada.

In children 12 months to 12 years, over 98% will test immune to chickenpox when measured six weeks after immunization. Among those 13 years and older, 100% were found to be immune after the second dose of the vaccine.

There is a chance of getting the shingles after receiving the vaccine, but this occurs one-fifth as often as shingles in a non-immunized person who gets the chickenpox disease from virus in the community.

3. What are the possible reactions from the vaccine and how are they managed?

Within two days of receiving the vaccine, 11 to 20% of those immunized may experience local pain, redness, or swelling where the vaccine is given. Within 42 days of receiving the vaccine, 10 to 20% of children will show a temperature of 39°C (102°F) orally. It is not necessary to give acetaminophen such as Tempra or Tylenol with this immunization; but if your child is experiencing discomfort or fever, acetaminophen can relieve these symptoms.

Between 1% and 2% of those immunized will get a chickenpox-like rash either where the vaccine was given or on other parts of the body. Children can continue to participate in daily activities (go to school or day care) as long as the rash can be covered with clothing. The risk of transmission of a mild form of the disease to others is minimal.

As with all vaccines, the most serious but rare side effect is a severe allergic reaction (anaphylaxis) which can be life threatening and occurs within 15 to 20 minutes of receiving the vaccine. Procedures are in place to quickly respond to anaphylaxis. Public health nurses are trained to treat the condition by giving adrenaline and closely monitoring the situation. Thus, **you are asked to remain in the waiting room for at least 15 minutes after immunization.**

Precaution: medications containing salicylates (ASA and Aspirin) should not be taken by adults or children for six weeks after receiving this vaccine because of the risk of Reye's Syndrome (serious brain disease). Salicylates are not recommended for treating fever in children.

See a doctor for any serious reaction and report the reaction to the public health nurse.

4. What are the situations in which chickenpox vaccine should not be given?

The vaccine should not be given as follows:

- a) persons who have had an anaphylactic (severe or life threatening) reaction to any of the contents of this vaccine;
- b) anyone with an acute illness and fever, or with active untreated tuberculosis;
- c) those taking salicylates (Aspirin) daily or who will be taking salicylates within six weeks after immunization;
- d) those who are pregnant;
- e) persons who have received immune globulin or blood transfusion within the past three months should delay receipt of the vaccine due to likelihood of vaccine failure;
- f) those with a history of chickenpox disease or children under 12 months of age;
- g) in high-risk persons this vaccine should not be given at the same time as other live attenuated vaccine;
- h) those with decreased immunity due to any disease or cancer need to consult their physician to determine if the timing of vaccine administration is appropriate.

5. What are the risks if the vaccine is not received?

The chance of acquiring chickenpox is very high in the non-immunized person. The disease can be more serious to persons with decreased immunity due to any disease or cancer (such as leukemia or lymphoma), high doses of steroids, or an inherited disease of immunity; or in the pregnant woman without immunity. In these cases, it is recommended that persons avoid exposure in times of known outbreaks. If exposure occurs, persons should see their doctor.

Note: A person who is non immune to chickenpox and is exposed to chickenpox disease may be able to be given the vaccine up to five days after being exposed.