Prince Edward Island
CANADA
Health and Wellness

Health PEI

Fact Sheet:
Varicella (Chickenpox) Vaccine

1. What is Varicella and what are the complications of this disease?

Varicella is a common and highly infectious disease which causes an irritating blister-like rash. The rash or fluid filled lesions break out in stages on all areas of the body including the scalp and mucous membranes of the mouth and throat. Following initial varicella illness, the varicella virus becomes inactive and establishes itself in the body's nerve endings, allowing it to reactivate later in life as shingles.

Varicella illness is caused by a virus which is spread by contact with nose and throat secretions such as coughing and sneezing or by direct contact with fluid from an infected skin lesion.

The complications of varicella infection include viral infections in the heart, lungs, joints, brain and blood, as well as secondary bacterial infection such as invasive group A streptococcal infection. A serious complication is the development of Reye's Syndrome, a brain disease which can occur when a child who has varicella is given a medication containing salicylates (acetylsalicylic acid, ASA). Varicella in pregnancy can result in birth defects in the baby and if a woman develops varicella just before or after delivery, the newborn is at increased risk of developing severe varicella disease.

2. What are the contents of the Varicella vaccine?

The vaccine contains live but weakened particles from Varicella virus from which the body develops protection. Traces of non-medicinal ingredients that keep the vaccine stable, sterile and help it to be more effective are also present.

All vaccine contents are licensed for use by the Biologics and Genetics Therapies Directorate within Health Canada. A complete listing of contents is included in the product insert which is available from the public health nurse.

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

The most serious but rare side effect is a severe allergic reaction (anaphylaxis) which can be life-threatening and which usually occurs within 15 to 20 minutes of receiving the vaccine. Procedures are in place for the nurse to quickly respond to anaphylaxis by administering adrenaline.

The most common reactions to this vaccine are generally mild, brief and tend to be delayed. These include pain, swelling and/or redness at the injection site, irritability and fever. A chickenpox-like rash may appear 5 to 26 days after immunization. Children who get this rash can continue to participate in daily activities as long as the rash is covered by clothing.

It is not necessary to give acetaminophen after immunization. If discomfort or fever does occur acetaminophen can relieve these symptoms. **Salicylates** (acetylsalicylic acid, ASA) **should not be given to a**

person who has received Varicella vaccine for 6 weeks after immunization because of an association between wild type varicella, salicylate therapy and Reye's Syndrome.

- **Please remain in the waiting room for 15 minutes after immunization.**
- **See a doctor or seek medical attention if any serious side effect occurs.**
- **Report any serious reaction to the public health nurse.**

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

· The vaccine should not be given to anyone who has had an anaphylactic (severe or life threatening) reaction to a previous dose of Varicella vaccine or to any component of the vaccine including neomycin. Those who have had a reaction to eggs (including an anaphylactic reaction) can be immunized with Varicella vaccine.

Pregnant women should not receive this vaccine. Women who are contemplating pregnancy and who receive this vaccine should wait at least four weeks before becoming pregnant.

Persons presenting with significant acute fever and illness should return later for their vaccine.

Precautions: Assessment of a person's health status is required by the Chief Public Health Office in the following situations:

· Persons with impaired immune function should not normally receive live vaccines without consultation from their attending physician and possibly an immunologist.

Persons on chronic salicylate therapy may be able to receive this vaccine pending consultation with their attending physician.

Passive immunization with human immune globulin or receipt of most blood products can interfere with the immune response to live vaccines. The administration of vaccine may have to be delayed for a period of time, usually between three to 11 months.

Post partum women who receive Rh Immune Globulin and who are non-immune to varicella should generally wait 3 months before receiving varicella vaccine, based on risk assessment.

5. What are the alternatives to not receiving the Varicella vaccine?

The chance of acquiring chickenpox is very high in the non-immunized person. Varicella is mainly a disease of childhood developing in 50% of children by the age of 5 years and 90% by the age of 12 years. Risk of severe varicella infection increases with age. However, because most infections occur in children up to 12 years of age in unvaccinated communities, the majority of severe cases occur in this age group.

The disease is more serious for persons with decreased immunity (including cancer, leukemia or lymphoma or an inherited disease of immunity), on high doses of steroids, or in pregnant women 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 a person with chickenpox disease may be able to receive the vaccine up to five days after being exposed, and thus decrease the chance of acquiring the disease.

The Varicella vaccine is very safe and the recommended schedule results in over 98% protection from the disease.