Immunization is one of the most important accomplishments in public health that has, over the past 50 years, led to the elimination, containment and control of diseases that were once very common in Canada.\(^1\) Vaccines help your immune system recognize and fight bacteria and viruses that cause diseases.

Every school year, public health nurses offer students in grade 6 the human papillomavirus (HPV) vaccine, meningococcal conjugate quadrivalent (Men-C-ACYW-135) vaccine, and the hepatitis B vaccine.

**What is human papillomavirus (HPV)?**

HPV can infect many parts of the body that in some people can cause genital warts, cervical and genital cancers, as well as certain cancers of the head and neck. HPV can cause cells within the body to change, and can lead to cancer if left untreated. Many cancers that are caused by HPV do not have symptoms until they are quite advanced. **In Manitoba each year:**

- approximately 50 females are diagnosed with cervical cancer, and about 20 die from it
- approximately 15 males are diagnosed with penile cancer
- approximately 23 people are diagnosed with anal cancer
- approximately 1,500 people reportedly get genital warts

For these reasons, it is important for your child to get immunized against HPV before potential exposure in the future.

**What is the HPV vaccine?**

The HPV vaccine provides protection against nine types of HPV. When it is given before exposure to the virus, it is very effective in preventing infection from the most common types of HPV, which cause approximately:

- 90 per cent of all cervical cancers
- 90 per cent of all anal cancers
- 90 per cent of all genital warts
- 60 per cent of all penile cancers
- other genital cancers
- cancers of the head and neck

**What is meningococcal disease?**

Meningococcal disease is caused by several different strains of a bacteria, including A, B, C, Y, and W-135. Anyone can contract meningococcal disease but children younger than five are at greatest risk, followed by people aged 15 to 19 years and those 60 years and up.

Meningococcal disease is a serious illness where 10 per cent of those infected could die and 10 to 20 per cent of those who survive can suffer permanent brain damage, hearing loss, or the loss of their arms or legs.

Symptoms of the disease can develop within two to 10 days of being infected. Signs and symptoms of meningococcal disease may include sudden onset of high fever, a rash, intense headache, nausea, vomiting, light sensitivity, confusion, and a stiff neck.

**What is the Men-C-ACYW-135 vaccine?**

The meningococcal conjugate quadrivalent (Men-C-ACYW-135) vaccine provides protection against meningococcal disease that is caused by the strains A, C, Y and W-135.

When given as part of the recommended childhood immunization schedule, the vaccine is very effective at preventing meningococcal disease.

**What is hepatitis B?**

Hepatitis B is a virus that attacks the liver. The liver is a very important organ that is responsible for carrying out a number of vital functions.

\(^1\) The Public Health Agency of Canada
Signs and symptoms of hepatitis B infection may include fever, stomach pain, tiredness, loss of appetite and jaundice (yellow skin and eyes) that may last for weeks or months. Almost all children who are infected with hepatitis B do not experience any of these signs or symptoms until after the liver is already severely damaged.

Most people who are infected with hepatitis B recover in eight weeks but some can carry the virus for the rest of their lives. The younger a person is when infected with hepatitis B, the more likely it is that they will be infected for life. If the virus does not go away on its own, it can go on to cause cancer and liver failure.

**What is the hepatitis B vaccine?**

The hepatitis B vaccine provides protection against hepatitis B. While there are other types of hepatitis that are caused by viruses such as hepatitis A and hepatitis C, the hepatitis B vaccine will only protect your child against hepatitis B.

When the hepatitis B vaccine is provided as part of Manitoba’s routine childhood immunization schedule, it is over 95 per cent effective in preventing infection for at least 30 years.

**How are HPV, hepatitis B, and meningococcal disease spread?**

Anyone who has direct skin-to-skin contact with an infected person during a sexual encounter can get HPV.

Hepatitis B can spread from cuts or bites, from sharing personal care items (e.g. a toothbrush), from sexual contact and from direct contact with body fluid (e.g. blood) from someone who is infected.

Your child cannot get HPV or hepatitis B from sneezes, coughs or hugs.

Meningococcal disease is spread easily between person-to-person by coughing, sneezing, or sharing food, drink, musical instruments, water bottles, or other things that have been in the mouth of a person with meningococcal disease.

**Who should get the HPV, Men-C-ACYW-135, and hepatitis B vaccines?**

The HPV, Men-C-ACYW-135, and hepatitis B vaccines are offered free-of-charge as part of Manitoba’s routine childhood immunizations to all children in grade 6. The vaccines work best when given before your child comes into contact with the viruses/bacteria.

As HPV and Hep B vaccines require multiple doses over a period of time to ensure sufficient protection against the disease, public health nurses will provide the vaccines through immunization clinics held at your child’s school over a six month period. Your child may receive more than one dose of vaccine at each visit. If your child misses one or more doses at the school clinics, or has an immune-compromising condition, please speak with a health care provider.

**Who should NOT get the HPV vaccine, Men-C-ACYW-135 vaccine, or hepatitis B vaccine?**

If your child has had a severe allergic reaction to a previous dose of any vaccine or any of the contents of the vaccines, you should speak with your child’s health care provider.

For specific details about ingredients in the vaccines, please review the vaccine manufacturer’s product monograph or speak with your health care provider.
There is no need to delay immunization because of a cold or other mild illness. However, if you are concerned, speak with a health care provider.

**Possible side-effects of the vaccines**

It is much safer to get the vaccines than to get HPV, meningococcal or hepatitis B diseases. Health Canada approves vaccines based on a review of quality and safety.

Common reactions with these vaccines include soreness, redness, pain or swelling where the vaccine was given. Some children may have fever, drowsiness, dizziness, or an upset stomach. Acetaminophen (e.g. Tylenol®) can be given for fever or soreness. If you are concerned about your child’s reaction to the vaccine, speak with a health care provider.

Acetylsalicylic acid-ASA (e.g. Aspirin®) should NEVER be given to children because it can cause a severe liver and brain disease called Reye’s Syndrome.

It is important for your child to stay in the clinic for 15 minutes after getting his/her vaccine because there is a rare possibility of a severe allergic reaction. This can include hives, difficulty breathing or swelling of the throat, tongue or lips. Should any severe allergic reaction occur, **911 will be called and your child will be taken to the nearest emergency department or health centre.**

Report any serious or unexpected side-effects to a health care provider.

**Your record of protection**

Make sure your child’s immunization record card is updated after he/she receives his/her immunization. Keep the card in a safe place!

Your child’s immunizations will be recorded in the Manitoba Immunization Registry. This Registry:

- allows health care providers to find out which immunizations your child has had or needs to have
- may be used to produce immunization records, or notify you or your health care provider if a particular immunization has been missed
- allows the province and public health officials to monitor how well vaccines work in preventing disease

If you need information on the immunizations that your child has received, contact your health care provider.

The Personal Health Information Act protects your child’s information. You can have your child’s personal health information hidden from view from health care providers. For additional information, please contact your local public health office or speak with a health care provider.

For a listing of public health offices, please visit: www.manitoba.ca/health/publichealth/offices.html.

**For more information:**

- Talk to your health care provider.
- Call Health Links–Info Santé in Winnipeg at 204-788-8200; toll-free elsewhere in Manitoba 1-888-315-9257.
- Or visit:
  - **Manitoba’s Immunization Program website:** www.manitoba.ca/health/publichealth/cdc/div/index.html
  - **CancerCare Manitoba website:** www.cancercare.mb.ca/
  - **Canadian Cancer Society website:** www.cancer.ca/en/?region=mb

Please visit the Vaccine Factsheets and Resources webpage for the most current version of the factsheets, links to the product monographs of the vaccines used, and frequently asked questions for Manitoba’s School Immunization Program: www.manitoba.ca/health/publichealth/cdc/div/vaccines.html