

HEPATITIS B VACCINE INFORMATION

(ENGERIX-B VACCINE, RECOMBIVAX HB® VACCINE)

What is Hepatitis B and how is it spread?

Hepatitis B is an infection of the liver caused by the hepatitis B virus. A person with acute hepatitis B infection can become a chronic or lifelong carrier and remain infectious. Chronic infection may lead to serious liver disease, liver cancer or death. Symptoms of Hepatitis B infection include fatigue, fever, loss of appetite, and jaundice (yellow skin and eyes). The virus is found in the blood and body fluids of an infected person and can be spread through sexual contact, sharing toothbrushes or needles with an infected person and through other exposures to these fluids. An infected pregnant person can pass the virus to an unborn child.

How can Hepatitis B be prevented?

- Vaccination is the best way to prevent hepatitis B infection. Risk may also be lowered by avoiding contact with other people's blood and body fluids.

How effective is the Hepatitis B vaccine?

- Hepatitis B vaccine works very well. Hepatitis B vaccine is 95% to 100% effective in preventing chronic infection for at least 30 years following immunization.

What are the side effects of this vaccine?

- The hepatitis B vaccine is safe and well-tolerated. Reactions are usually mild and short-lived and include headache, fatigue, and injection site reactions such as pain, redness and swelling. These side effects mean your immune system is responding to the vaccine and building up protection. Apply ice to the site and/or take a non-aspirin pain reliever to help minimize pain and/or swelling. Serious reactions are rare.
- Students are observed for a minimum of 15 minutes after their vaccination to ensure there are no immediate side effects. Anyone who experiences serious health effects after they leave the clinic should consult their doctor and notify York Region Public Health

More about the Hepatitis B vaccine

- In Ontario, students in grades 7-12 are offered the vaccine at no cost. This vaccine is strongly recommended for students. The Hepatitis B vaccine series requires two doses recommended no earlier than 6 months apart if the vaccine is received between ages 11-15. A third dose is needed for students vaccinated at age 16 or older.
- If you are unsure if your child was previously vaccinated with Hepatitis B vaccine, your child should receive the dose(s) offered at the earliest opportunity.
- Get protection early, be vaccinated at the earliest opportunity. If your child misses being vaccinated in school, they can still receive Hepatitis B vaccine at a York Region Public Health community clinic. Visit york.ca/immunization for clinic information

Who should NOT get this vaccine at school and should consult their health care provider?

- Those who have had a severe reaction to a vaccine (e.g., anaphylaxis)
- Those who have an illness or take any medication that weakens the immune system
- Those with previous severe allergic reaction to previous Hepatitis B vaccine or, or any of its specific components or container (e.g including aluminum, latex, yeast, or Thimerosal)
- Vaccination should be postponed in persons with moderate or severe acute illness. Persons with minor acute illness may be vaccinated if not under isolation for COVID-19.

HUMAN PAPILLOMAVIRUS (HPV) VACCINE INFORMATION

(HPV-9 VACCINE -GARDASIL9® VACCINE)

What is HPV and how does it spread?

- HPV is a very contagious virus that commonly infect males and females. It has more than 100 strains, including about 40 strains that affect the anogenital area. 8 out of 10 Canadians become infected with HPV during their lives. Teens and young adults have high rates of HPV infection.
- HPV can cause cancers of the anus, rectum, throat, oral cavity, cervix, vagina, vulva, and penis, as well as genital warts. Females who develop HPV cancer or precancer may require treatment that could limit their ability to have children.
- Although most HPV infections would go away on their own within two years, infections that do not resolve can cause cancer or warts. Many people with HPV do not have any symptoms and can spread the virus without knowing it.
- HPV infections are transmitted by intimate skin to skin contact (through oral, vaginal, or anal sex) and can be transmitted to an infant exposed to the virus in the mother's genital tract. Almost every unvaccinated person who is sexually active will get HPV at some time in their life.

How can HPV be prevented?

- Getting immunized is a safe and effective way to protect against HPV infection. The HPV-9 vaccine protects against nine diseases-causing strains of the virus: strains 6, 11 (can cause genital warts) and types 16, 18, 31, 33, 45, 52, 58 (can cause cancer). Vaccinating at a younger age is better as the HPV vaccine works best when given before exposure to the virus.
- The risk of HPV infection may be reduced by practicing safer sex for those who are sexually active. However, condoms do not fully protect against getting HPV.

How effective is the HPV-9 vaccine?

- The HPV-9 vaccine works very well. Immunization against the strains contained in the HPV9 vaccine can prevent about 90% of high-risk cervical precancers, 87% of cervical cancers, 84% of anogenital cancers, and 90% of genital warts. The HPV-9 vaccine prevents cancers in both males and females.

What are the side effects of this vaccine?

- The HPV vaccine is safe and generally well-tolerated. The most common side effects are redness, pain and swelling at the injection site that are mild and short-lived. These side effects mean your immune system is responding to the vaccine and building up protection. Apply ice to the site and/or take a non-aspirin pain reliever to help minimize pain and/or swelling. Serious reactions are rare.
- Students are observed for a minimum of 15 minutes after their vaccination to ensure there are no immediate side effects. Anyone who experiences serious health effects after they leave the clinic should consult their doctor and notify York Region Public Health

More about the HPV-9 (Gardasil 9®) vaccine

- Ontario students in grades 7-12 are offered the HPV-9 (Gardasil 9®) vaccine at no cost. In addition, as part of Ontario's student immunization catch up, males and females who graduated high school in 2022, as well as females that graduated in 2021 & 2020 are also able to receive HPV vaccine for free up until August 31, 2023. After that date these groups of graduated students would need to purchase

the HPV9 vaccine for vaccination at their health care provider's office. This vaccine is strongly recommended for students.

- Gardasil 9® is a two dose series if your child receives their first dose before the age of 15. Three doses of the vaccine are needed if your child is 15 years or older at the time of their first dose.
- Get protection early, be vaccinated at the earliest opportunity. If your child misses being vaccinated in school, they can still receive HPV9 vaccine at a York Region Public Health community clinic. Visit york.ca/immunization for clinic information.

Who should NOT get this vaccine at school and should consult their health care provider?

- Those who have had a severe reaction to a vaccine (e.g., anaphylaxis)
- Those who have an illness or take any medication that weakens the immune system
- Those with previous severe allergic reaction to previous HPV vaccine or any of its specific components or container (e.g. yeast, aluminum, sodium chloride, L-histidine, polysorbate 80, sodium borate)
- Pregnant individuals should wait until after pregnancy to start or complete the vaccine
- Individuals younger than 9 years of age or older than 45 years of age
- Vaccination should be postponed in persons with moderate or severe acute illness. Persons with minor acute illness may be vaccinated if not under isolation for COVID-19.

MENINGOCOCCAL QUADRIVALENT VACCINE INFORMATION

(MENACTRA®, MENVEO® OR NIMENRIX® MEN-C-ACYW₁₃₅ VACCINE)

What is meningococcal disease and how does it spread?

- Meningococcal disease is caused by the bacteria *Neisseria Meningitidis*. It can lead to inflammation of the tissue around the brain and spinal cord (meningitis) or infection of the bloodstream. Symptoms can include sudden onset of fever, severe headache, stiff neck, nausea, vomiting and sometimes a rash.
- Serious illness can develop quickly in a matter of hours, and 10 percent can die from the disease. Up to 1 in 5 survivors have long-term disabilities such as limb loss, brain damage, and/or deafness.
- Meningococcal disease is not very common in Canada, but teens may be at increased risk.
- The bacteria can spread from person to person through direct contact with secretions from the nose and throat of an infected individual, from kissing, or using items that have been in contact with an infected person's mouth, such as: water bottles, straws, cigarettes, e-cigarettes, food, utensils, musical instruments, toothbrushes, or lipstick.

How can Meningococcal disease be prevented?

- Vaccination is the best protection against meningococcal disease. Meningococcal vaccines are safe and effective.

How effective is the Meningococcal ACYW₁₃₅ vaccine?

- The quadrivalent meningococcal vaccine (MenC ACYW₁₃₅) vaccine works very well. Effectiveness within four years of vaccination in adolescence is 80% to 85%. It protects against four types of meningococcal bacteria (A, C, Y, and W-135).

- Additional vaccine doses are recommended later on for some individuals who have higher risk of disease or exposure (e.g. travel to certain areas, military/laboratory personnel, contact with a known case).

What are the side effects of this vaccine?

- The Meningococcal ACYW₁₃₅ vaccine is safe and generally well-tolerated. Common side effects are mild and short-lived and include headache, fatigue, and injection site reactions such as pain, redness and swelling. These side effects mean your immune system is responding to the vaccine and building up protection. Apply ice to the site and/or take a non-aspirin pain reliever to help minimize pain and/or swelling. Serious reactions are rare.
- Students are observed for a minimum of 15 minutes after their vaccination to ensure there are no immediate side effects. Anyone who experiences serious health effects after they leave the clinic should consult their doctor and notify York Region Public Health

More about the Meningococcal ACYW₁₃₅ vaccine (Menactra®, Menveo®, Nimenrix® vaccine)

- Students in grades 7-12 in Ontario are eligible for one dose of the Meningococcal ACYW₁₃₅ vaccine as part of the student immunization program. In addition, individuals born in 1997 or after are able to receive a dose if not already vaccinated.
- As an *Immunization of School Pupils Act* requirement in Ontario all students aged 12 and older must to be up-to-date with their meningococcal vaccine or have a valid exemption to attend school, otherwise they could face school suspension. If your child received a dose of this vaccine in the past (between ages of 1-5 years) another dose is not required for school attendance, but it is safe and recommended for your child to still receive an additional dose in the pre-teen or teen years.
- Meningococcal ACYW₁₃₅ vaccine is a different vaccine from (and provides more protection than) the meningococcal C vaccine (Men-C-C vaccine such as NeisVac-C® or Menjugate®) which is typically given to babies at one year of age and only protects against C strain meningitis.
- Get protection early, be vaccinated at the earliest opportunity. If your child misses being vaccinated in school, they can still receive Meningococcal ACYW₁₃₅ vaccine at a York Region Public Health community clinic. Visit york.ca/immunization for clinic information.

Who should not get this vaccine at school and should consult their health care provider?

- Those who have had a severe reaction to a vaccine (e.g., anaphylaxis)
- Those who have an illness or take any medication that weakens the immune system
- Those with previous severe allergic reaction to Meningococcal ACYW₁₃₅ vaccine or any of its specific components or container (e.g. diphtheria toxoid carrier protein)
- Those who have received a Meningococcal conjugate vaccine within the past 4 weeks
- Vaccination should be postponed in persons with moderate or severe acute illness. Persons with minor acute illness may be vaccinated if not under isolation for COVID-19.