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 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 health care provider and notify York Region Public Health 1-877-464-9675 ext. 73452 or via vaccineinformationline@york.ca.

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 severe allergic reaction to previous Hepatitis B vaccine or any of its specific components or container (e.g including aluminum, latex, yeast, or Thimerosal).
- As a precaution, delay getting the vaccine if you have a fever or feel very unwell until you are feeling better.

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 infects people of all sexes. It has more than 100 strains, including about 40 that affect the anogenital area. Eight out of 10 Canadians become infected with HPV during their lifetime. 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 resolve 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 also 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 safe sex for those who are sexually active. The use of condoms does not fully protect against HPV.

How effective is the HPV-9 vaccine?

- 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. Following graduation from secondary school, students need to purchase the HPV9 vaccine through their health care providers. This vaccine is strongly recommended for students.
- The Gardasil 9® vaccine series requires two doses recommended no earlier than 6 months apart 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 the 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 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)
- Individuals younger than 9 years of age or older than 45 years of age
- As a precaution, delay getting the vaccine if you have a fever or feel very unwell until you are feeling better.

MENINGOCOCCAL QUADRIVALENT VACCINE INFORMATION

(MENACTRA®, MENVEO® OR NIMENRIX® MENINGOCOCCAL-C-ACYW$_{135}$ 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 few hours, and the disease can be fatal for 10 percent of the infected people. 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 and young adults 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 ACYW$_{135}$ vaccine?

- The quadrivalent meningococcal vaccine (Men-C ACYW $_{135}$) 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 for some individuals who have a 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 ACYW$_{135}$ 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 ACYW$_{135}$ vaccine (Menactra®, Menveo®, Nimenrix® vaccine)

- Students in grades 7-12 in Ontario are eligible for one dose of the Meningococcal ACYW$_{135}$ vaccine as part of the student immunization program. In addition, individuals born in 1997 or after can 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.
- For immunizations received outside of a York Region Public Health clinic please report them here to update your child's immunization records and avoid potential suspension from school.
- Meningococcal ACYW$_{135}$ 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 ACYW$_{135}$ 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 severe allergic reaction to Meningococcal ACYW$_{135}$ 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
- As a precaution, delay getting the vaccine if you have a fever or feel very unwell until you are feeling better.