

# Rotavirus Vaccine

Vaccines have saved more lives compared to any other medical intervention. Vaccines help the immune system recognize and fight bacteria and viruses that cause serious diseases.

## Rotavirus is a vaccine preventable disease.

- **Rotavirus** is very contagious and causes severe diarrhea in babies and young children.
- It causes inflammation of the stomach and intestines, called gastroenteritis or “gastro”.
- Rotavirus is most severe and occurs more frequently in very young children.
- Children who are immune compromised have a high risk of severe disease, which could cause death.
- 4 out of 10 children see a doctor, 2 out of 10 visit an emergency department, and 1 out of 10 require hospitalization.
- Since the rotavirus immunization program began, doctor visits, emergency room visits and hospitalizations for rotavirus diarrhea have decreased by 75% across Canada.
- Most children have had a rotavirus infection by 5 years of age. A person can get a rotavirus illness more than once, but each new infection tends to be milder.

## What are the symptoms of rotavirus illness?

- Symptoms start within days after contact with rotavirus and include fever, vomiting, and diarrhea.
- Diarrhea can last for a week.
- Severe and frequent diarrhea and/or vomiting can lead to dehydration in young children, and may require a visit to the emergency department and/or hospitalization so that intravenous (IV) fluids can be given.

## How do people get rotavirus?

- Rotaviruses are found in the stool (poop) of infected people. Rotaviruses spread easily by the fecal-oral (hand to mouth) route and maybe transferred in the air when breathing.
- An infected person can spread the virus before they feel sick until 24 hours or longer after their diarrhea stops.
- Rotaviruses can survive on unwashed hands and on surfaces for hours.

Common ways to be exposed to rotaviruses include:

- Direct person-to-person contact with someone who is infected.
- Touching surfaces (tables, counters) or objects (toys) contaminated with a rotavirus and then placing these objects or fingers in the mouth.

## How can rotavirus illness be prevented?

- Immunize your baby with the rotavirus vaccine. When your baby is immunized, you help protect others as well.
- Do not eat food or drinks prepared by an infected person, or drink contaminated water.
- Do not prepare food if you have symptoms of vomiting or diarrhea.
- Wash your and your child’s hands often with soap and warm water (or use hand sanitizer if you cannot wash your hands) after using the toilet, diapering and before preparing or eating food.
- Anyone who has diarrhea or vomiting should stay home from school, daycare or work, and should not return until they are symptom-free for 24 hours. This is especially important for those who work with food, children or the elderly, and in health care settings.
- Rotavirus vaccines only protect babies from diarrhea and vomiting caused by some rotavirus strains. They cannot protect against diarrhea and vomiting caused by other viruses.

## Who can get this vaccine for free?

- The rotavirus vaccine is free for babies who are between 6 weeks to 8 months of age. The rotavirus vaccine is given at the same time as other childhood immunizations.
- Your baby may get 2 to 3 doses depending on the vaccine brand used.
- The vaccine is given by mouth (no needle). Liquid drops are placed into the baby’s mouth to swallow.
- Babies can breastfeed, eat and drink any time before or after receiving the rotavirus vaccine.
- It is important that babies get their first dose on time, because it cannot be given once a baby is 15 weeks old.
- **The last dose must be given before 8 months of age.**

## Special Considerations

- The vaccine form of the rotavirus may be found in the baby’s stool (poop) for a week after being immunized
- To prevent the spread of rotaviruses to others, it is very important that parents and caregivers wash their hands very well after changing the baby’s diapers.

It is important to stay in the clinic for 15 minutes after getting any vaccine because there is an extremely rare possibility of a life-threatening allergic reaction called anaphylaxis. This may include hives, difficulty breathing, or swelling of the throat, tongue or lips.

This reaction can be treated, and occurs in less than one in one million people who get the vaccine. **If this happens after you leave the clinic, get medical attention or call 911 right away.**

## Who should not get this vaccine?

- Babies who have diarrhea or are vomiting, with or without a fever, should delay immunization.
- A baby who had a serious or life-threatening reaction to a previous dose of a rotavirus vaccine or any components of the vaccine.
- A baby who has a history of intussusception (a condition where the intestine folds into itself causing a blockage).
- A baby who has an uncorrected congenital gastrointestinal tract malformation (e.g. Meckel's diverticulum) that would predispose them for intussusception.
- A baby whose mother took monoclonal antibody medications or other immune suppressing medications during pregnancy.
- A baby with a weakened immune system related to a known disease (excluding HIV) or medical therapy should have a consultation with a medical specialist before receiving this vaccine.
- A baby with a family history related to **specific diseases such as severe combined immune deficiency syndrome (SCID), or recurrent and unexplained deaths in the family must** have a consultation with a medical specialist before receiving this vaccine.

## What are common reactions to this vaccine?

**Vaccines are very safe and effective. It is much safer to get the vaccine than to get a rotavirus infection.**

- Common temporary reactions such as fever, diarrhea, and vomiting may occur within 1 week after immunization.
- Less common temporary reactions include irritability, loss of appetite, flatulence (gas), and abdominal pain.
- Intussusception occurs in about 34 out of 100,000 babies in their first year. The current rotavirus vaccines have demonstrated a small increased risk of intussusception (1 to 7 cases per 100,000 doses). Intussusception related to rotavirus vaccines is extremely rare.
- Only treat a fever (at least 6 to 8 hours after immunization) **if** your child is uncomfortable, refusing fluids and not sleeping.

## Who should you report reactions to?

- Report any adverse or unexpected reactions to your local public health nurse, your doctor, nurse practitioner or call 811 as soon as possible.

## Talk to a public health nurse:

- If you have questions or concerns about you or your child's reaction to an immunization.
- If you or your child had to go to a doctor, a hospital or to a health centre with a symptom that might be related to immunization.

## What do the vaccines contain?

**RotaTeq®** is a 3-dose series and contains human-bovine rotavirus reassortants G1, G2, G3, G4, and P1A, sucrose, sodium citrate dihydrate, sodium phosphate monobasic monohydrate, sodium hydroxide, polysorbate 80, diluent and Vero cell culture media. Trace amounts of fetal bovine serum may be present. Preservative-free, thimerosal-free and latex-free.

**Rotarix®** is a 2-dose series and contains human rotavirus RIX4414 strain (live, attenuated), produced on Vero cells. Di-sodium adipate, Dulbecco's Modified Eagle Medium (DMEM), sucrose, and water for injection. Preservative-free, thimerosal-free and latex-free.

Components of porcine circoviruses (PCV) 1 and 2 have been detected in RotaTeq® and components of PVC 1 have been detected in Rotarix®. The source is porcine-derived material used in the manufacturing of these vaccine. PCV-1 and PCV-2 do not cause illness in humans, or pose a safety risk. These viruses are not pork products and are acceptable to individuals who do not consume pork products.

Provincial immunization fact sheets are available at [www.saskatchewan.ca/immunize](http://www.saskatchewan.ca/immunize).

**For more information contact your local public health office, your physician, nurse practitioner, HealthLine online or by calling 811.**

Reference: [Canadian Immunization Guide](#). Product monographs (RotaTeq® 2023, Rotarix 2023).

Use **Acetaminophen** (all ages; Tylenol®, Tempra®) or **Ibuprofen** (6 months & older; Advil®, Motrin®) to treat fevers and pain. **Never give ASA** (Aspirin®) to children younger than 18 years old because of the serious risk of Reye's syndrome.