

Rotavirus

“I just wish we had known”: A True Story

“As first-time parents, we had never even heard of rotavirus until our twin boys got it,” said Michele. “Even if I had heard of this disease before, I could not have imagined just how sick it would make my babies.”

Michele’s twins, William and Andrew, were born 2 months premature in April 2006. After much love, nurturing, and a diet of high-calorie formula to help them gain weight, the boys were thriving. Within a few months, they were healthy, happy infants with no evidence that they had been born early.

However, when they were 10 months old, they came down with severe diarrhea and vomiting. “They had so much vomiting and diarrhea that they were like limp little rag dolls,” Michele described. “William’s eyes were sunk back in his head, and they both were so weak, they couldn’t cry. It was agonizing to watch my children suffer, and I felt helpless to ease their pain.”

The doctor immediately recognized rotavirus as the cause of their illnesses. Unfortunately, since the twins were already sick with the disease, vaccination could not help. The rotavirus vaccine had been licensed by the U.S. Food and Drug Administration (FDA) and recommended for all infants by the Centers for Disease Control and Prevention (CDC) only a few months before William and Andrew’s birth. When new vaccines are added to the recommended schedule, it can take several months for large numbers of doses of the new vaccines to be manufactured and distributed throughout the

United States.

For the next five weeks after the boys got sick, Michele and her husband kept constant vigil over them, trying to keep them hydrated. Making sure they drank enough to keep them going was the major challenge. “With the constant vomiting and diarrhea, the boys lost a lot of weight,” Michele said. “It was like we were going back to square one again with fragile, premature infants.”

If Michele and her husband had not been able to keep the boys hydrated at home by getting them to drink enough, the twins would have had to go to the hospital for IV fluids—a costly strain on the entire family, both emotionally and financially. Fortunately, the boys made a full recovery.

However, weeks of constant worry took a lasting toll on the family. Adding to the stress, the boys could not return to child care until they recovered, and the family had to go through a very difficult process to find a good baby sitter. That’s because Michele and her husband both used up the time they could take off from work before the babies were over their illnesses. “I had to hand over my very sick babies to someone else to care for them. I still get choked up and cry when I think about that stressful time,” Michele explained.

“I just wish we had known about this vaccine and had been able to get it to protect our boys,” said Michele. “I’d encourage parents to talk about this vaccine with their doctor, because it can save children and parents from so much suffering.”

Rotavirus is Serious

“If your infant or young child has ever had severe diarrhea and vomiting that lasted for days, there is a good chance rotavirus was to blame,” said CDC’s Dr. Daniel Payne.

Rotavirus is the most common cause of severe diarrhea and vomiting among children in the United States and around the world. “Even when there is access to quality health care, some babies can be ill for weeks, becoming weak and even losing weight,” said Dr. Payne. In places without good health care, dehydration from rotavirus infection can be deadly.

“Unless children are vaccinated, almost all of them get rotavirus before their 5th birthday,” explained Dr. Payne. “Before rotavirus vaccine was widely used in the United States, rotavirus was responsible for more than 400,000 doctors’ visits, and between 55,000 and 70,000 babies were hospitalized each year because of this disease.”

Rotavirus Symptoms

Rotavirus infection may not be severe for some children. It may start out like a mild illness. But for some, rotavirus is much more serious. Infected children have a fever and upset stomach, with diarrhea and vomiting. “First of all, children who have rotavirus generally have more severe diarrhea than if they had other common intestinal infections,” explained Dr. Payne. “Rotavirus infection can last from 3 to 8 days, up to as long as few weeks in serious cases.” ▶



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Children who have severe diarrhea and vomiting can lose so much fluid that they become dehydrated. If parents cannot get a child to drink enough fluid, the child may need to go to the hospital to get an IV (a needle into the vein) to replace fluids and minerals needed to survive.

How Rotavirus Spreads

Rotavirus is very contagious, spreading mainly person-to-person through the fecal-oral route. In other words, the virus is taken in by mouth from contact with objects, or from food or drinks, that have become contaminated by the feces (stool) of an infected person. For example, if a child has the virus on her hands and plays with a toy, and then another child plays with the same toy, the virus is very likely to be passed on.

“Children are more at risk than any other age group for getting a rotavirus infection. Since they are constantly exploring, touching objects, and then putting their fingers in their mouths, there’s no good way to prevent infection besides using rotavirus vaccine,” said Dr. Meg Fisher of the American Academy of Pediatrics.

Although all children are at risk for rotavirus, those in child care centers or settings with many young children are at a higher risk for rotavirus infections. The reality is that the disease spreads very easily and is hard to control, because rotavirus can live a long time on hard surfaces like a changing table, countertop, and toys.

Rotavirus Vaccine Works

Because the virus is so tough and lives for several days or weeks on surfaces that are not disinfected, it is very difficult to stop its spread just by hand washing or disinfecting surfaces to keep a baby’s

environment clean. The best way to protect young children from rotavirus is to get them vaccinated. Rotavirus vaccine is painless because it is given orally (swallowed) instead of by a shot. It is the only U.S. childhood vaccine given orally. Depending on the brand your doctor uses, two or three doses of the vaccine are needed, starting at 2 months of age.

Rotavirus vaccine works well. Studies show that among children who get the vaccine, most of them do not get ill with rotavirus. Importantly, the vaccine works especially well to prevent serious illness and hospitalizations.

“It’s heartbreaking for parents to watch their children suffer and get weak from days of severe diarrhea and vomiting caused by rotavirus,” said Dr. Fisher. “Now thanks to rotavirus vaccination, I see fewer cases. And even if a vaccinated child gets rotavirus, the vaccine provides a great benefit, because the disease is almost always much milder.”

Vaccinated children can still get diarrhea and vomiting caused by other germs even though they get rotavirus vaccine.

Rotavirus Vaccine Safety

Two rotavirus vaccines are licensed for use in the United States, RotaTeq® and Rotarix®. These rotavirus vaccines have been shown to be safe and effective at preventing severe diarrhea from rotavirus. A small proportion of vaccinated infants may have mild diarrhea, vomiting, or irritability following rotavirus vaccination. Rotavirus vaccine can be given to infants at the same time as other vaccines. If you have questions about rotavirus vaccine, ask your doctor or visit <http://www.cdc.gov/vaccines/vpd-vac/rotavirus>.

Benefits of Rotavirus Vaccine

Getting a vaccine to protect against rotavirus as recommended—

- Prevents most infants and young children from getting severe rotavirus diarrhea.
- Reduces the severity of symptoms if vaccinated children do get infected.
- Prevents hospitalizations.

Risks of Rotavirus Vaccine

- Mild symptoms may include irritability, diarrhea, and vomiting.
- **Serious side effects are rare.**
The possible risk of intussusception ranges from about 1 case out of 20,000 infants to 1 case out of 100,000 infants.

Selected References

Centers for Disease Control and Prevention (CDC). Rotavirus. In: Atkinson W, Hamborsky J, McIntyre L, Wolfe S, eds. Epidemiology and Prevention of Vaccine-Preventable Diseases (The Pink Book). 11th ed. Washington, DC: Public Health Foundation, 2009. p. 245–256. <http://www.cdc.gov/vaccines/Pubs/pinkbook/default.htm>

McKenna M. Rota and pneumococcus vaccine success stories: pediatric emergency practitioners wonder “Where have the kids gone?” *Ann Emerg Med* 2009;53(4):A23–A25. [http://www.annemergmed.com/article/S0196-0644\(09\)00137-1/fulltext](http://www.annemergmed.com/article/S0196-0644(09)00137-1/fulltext)

CDC. Reduction in rotavirus after vaccine introduction—United States, 2000–2009. *MMWR* 2009;58(41):1146–1149. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5841a2.htm>

CDC. Rotarix® Rotavirus Vaccine: Rare Side Effect Possible: Questions and answers for parents and caregivers <http://www.cdc.gov/vaccines/vpd-vac/rotavirus/Vac-label-parents.htm>

CDC. Questions & Answers about Intussusception <http://www.cdc.gov/vaccines/vpd-vac/rotavirus/intussusception-FAQs.htm>



The Centers for Disease Control and Prevention, the American Academy of Family Physicians, and the American Academy of Pediatrics strongly recommend vaccines.

800-CDC-INFO (800-232-4636)
<http://www.cdc.gov/vaccines>