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# Respiratory Syncytial Virus (RSV) Vaccine & Pregnancy: What You Need to Know

## Why should you consider RSV vaccine during pregnancy?

RSV usually causes only mild upper respiratory infections for most people, including pregnant women. However, it can lead to severe disease in babies and some young children. RSV is the No. 1 cause of infant hospitalizations in the United States, with four out of five of these hospitalizations in otherwise healthy infants with no underlying medical conditions. Infant RSV hospitalization rates are even higher in American Indian infants, at 4-10 times greater than the general population. Pregnant women who get the RSV vaccine, Abrysvo™, pass antibodies to the baby, helping prevent RSV lower respiratory tract in infants when they are most vulnerable.

## What are the maternal RSV vaccine recommendations?

The Advisory Committee on Immunization Practices (ACIP) recommends maternal RSV vaccine when these criteria are met:

- Pregnant women during 32-36 weeks gestation who have not received this vaccine during a previous pregnancy
- During the months of September through January

## How effective is the maternal RSV vaccine?

When given between gestational weeks 32 and 36, the maternal RSV vaccine was shown to be 91% effective in preventing severe medically attended RSV-associated lower respiratory tract infections in infants from 0-90 days and 76% effective from 0-180 days, though real-world effectiveness data may differ somewhat from the clinical trial data. It takes about 14 days from the time of maternal vaccination for best maternal antibody development and transfer to the infant to occur. Babies who are born at least two weeks after their mother receives RSV vaccine are protected from birth through the first RSV season, when the risk of severe infection is greatest.

## What are the side effects of the maternal RSV vaccine?

Side effects such as pain, redness, and swelling at the injection site can occur after maternal RSV vaccine administration. In the clinical trials, the vaccine was given between 24-36 weeks gestation. There was a greater number of preterm births prior to 37 weeks gestation observed in the patients receiving the vaccine compared to those receiving placebo. To reduce this potential risk, the maternal RSV vaccine was approved only for later term usage between 32-36 weeks gestation. The FDA is requiring the manufacturer to do additional studies that will look more closely at the potential risk of preterm births after receipt of this vaccine, though no increased levels of preterm births were observed in those who received the vaccine between September 2023 and January 2024.

## Can the maternal RSV vaccine be given at the same time as other vaccines?

The maternal RSV vaccine may be given at the same time as other recommended vaccines. Pregnant women are recommended to receive tetanus, diphtheria, and pertussis (Tdap), influenza and COVID-19 vaccines. Talk to your health care provider about what is best for you and your baby's health care needs.

## How expensive is the maternal RSV vaccine?

Maternal RSV vaccine is covered by private insurance. Medicaid also covers the maternal RSV vaccine. The North Dakota Vaccines for Children Program (VFC) provides maternal RSV vaccine for pregnant women under 19 who are uninsured, underinsured (private insurance does not cover immunizations), Medicaid-eligible, or American Indian/Alaska Native.

## Where can I get the maternal RSV vaccine?

Talk to a trusted health care provider, pharmacy or local public health about maternal RSV vaccine.

## If I receive maternal RSV vaccine, will my baby need to be immunized for RSV?

RSV disease in infants can be prevented either by maternal RSV vaccination or infant immunization with the monoclonal antibody, nirsevimab (Beyfortus™). For most babies, either the maternal RSV vaccine or the monoclonal antibody is recommended, but not both. Infants born during subsequent pregnancies should receive nirsevimab.

## What is the best option to protect my baby from RSV?

As an alternative to the maternal RSV vaccine, your baby could receive nirsevimab within the first

week after birth during RSV season (October-March). While both products are safe and effective, there are a number of factors to consider when choosing between the maternal RSV vaccine and nirsevimab.

Both options provide good RSV protection for about six months.

- The maternal RSV vaccine may be better able to continue providing protection as the virus mutates, while studies indicate that protection from nirsevimab may last longer.
- The maternal RSV vaccine avoids an injection for the infant.
- There is no risk of adverse pregnancy outcomes with nirsevimab, while there was a very small risk of preterm birth with the maternal RSV vaccine in clinical trials. To lessen this risk, the vaccine is recommended later in pregnancy at 32-36 weeks.
- If the mother is immunocompromised, or the infant is born within 14 days of vaccination, protection from the maternal RSV vaccine may be reduced.
- If the mother received the maternal RSV vaccine during a previous pregnancy, the infant should be immunized with nirsevimab.

If an infant is born within 14 days of maternal RSV vaccination, the infant should receive nirsevimab as there was insufficient time for the infant to receive maternal antibodies. There are also rare circumstances when a health care provider may, using their clinical judgement, recommend nirsevimab for an infant born more than 14 days after maternal vaccination. Additionally, children at higher risk of severe RSV are recommended to receive a dose of nirsevimab at the beginning of their second RSV season.

- Children with chronic lung disease of prematurity requiring medical support in the last 6 months
- Children with severe immunocompromise
- Children with cystic fibrosis with manifestations of severe lung disease
- American Indian or Alaska Native children

Beyond that, additional doses of nirsevimab are not recommended as the risk of severe RSV infection decreases with increasing age.

Parents should talk to a trusted health care provider when deciding what is best for their infant.