



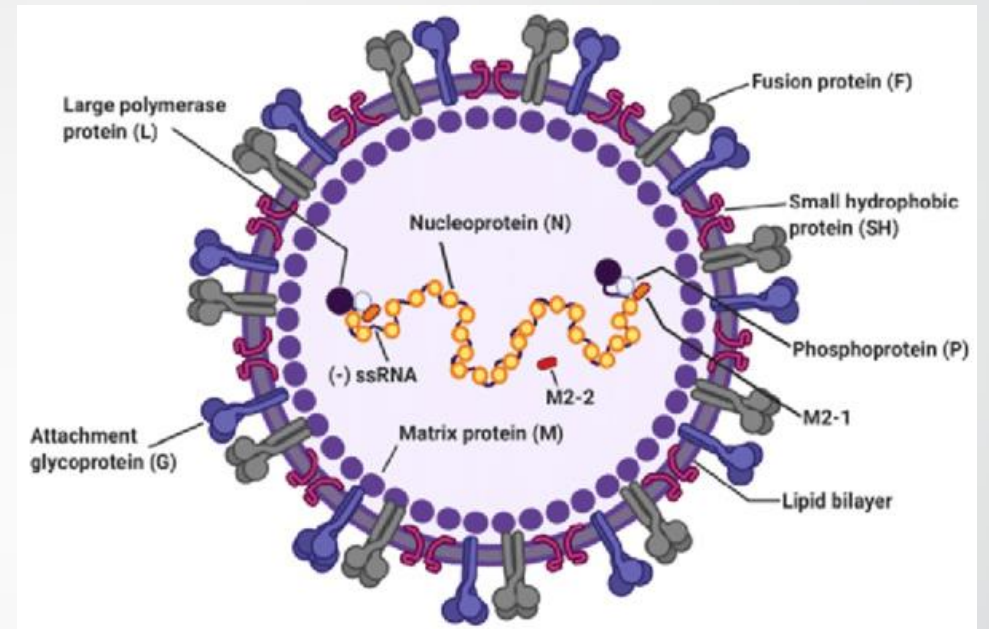
# RSV Vaccination in Pregnancy

Eric H. Dellinger, MD

Division of Maternal-Fetal Medicine

USCSOM-Greenville

# Why Vaccinate for RSV?



- Respiratory Syncytial Virus (RSV) is a virus that spreads in the fall and winter.
- RSV causes mild cold-like symptoms. Most people recover in 1-2 weeks.
- RSV can be dangerous for babies and young children. It is the leading cause of hospitalization among infants in the United States.

# When is RSV Season?

- In most regions of the United States RSV season starts in the fall and peaks in the winter, but the timing and severity of RSV season can vary from place to place and year to year.
- The goal of maternal RSV vaccination is to protect babies from getting very sick with RSV during their first RSV season. In most of the continental United States, this means maternal RSV vaccine will be given in [September through January](#).

# Who should get the maternal RSV vaccine?

- People who are 32 0/7 - 36 6/7 weeks pregnant during September through January should get one dose of maternal RSV vaccine to protect their babies. RSV season can vary around the country.
- Alternative option (patient preference) is to rely on administration of nirsevimab to the infant after birth.

# How is the maternal RSV vaccine administered?

- Maternal RSV vaccine is given as a shot into the mother's upper arm. Only a single dose (one shot) of maternal RSV vaccine is recommended. It is not yet known whether another dose might be needed in later pregnancies.
- Maternal RSV vaccine can be administered at the same time as other vaccines routinely recommended during pregnancy.

# Vaccine Fatigue

JUST  
GIVE IT  
**ONE**  
MORE  
SHOT.



VACCINE  
FATIGUE?  
We get it.

Flu

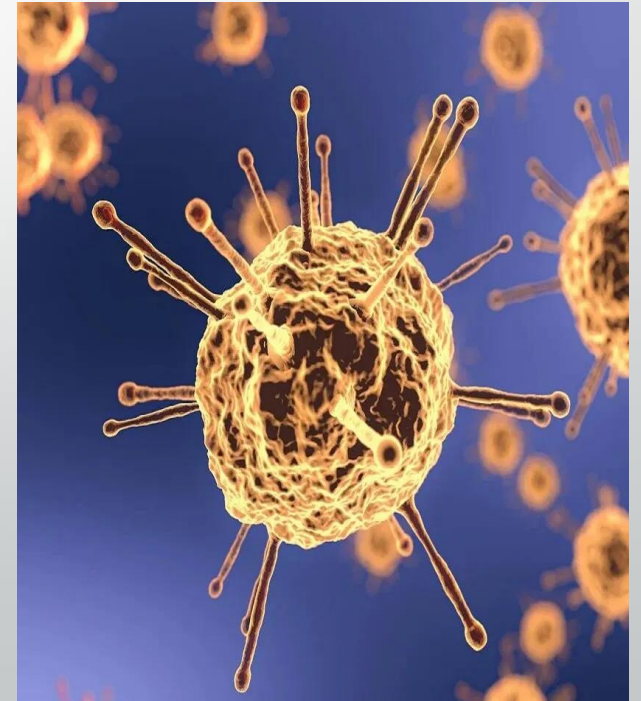
Covid

RSV

TDap

# How Abrysvo Works

Abrysvo contains proteins from the surface of the RSV virus. When a person is given the vaccine, the immune system treats the viral proteins as 'foreign' and makes defences against them.



# How well does the maternal RSV vaccine work?

- When someone gets RSV vaccine, their body responds by making a protein that protects against the virus that causes RSV. The process takes about 2 weeks.
- When a pregnant person gets RSV vaccine, their protective proteins (called antibodies) also pass to their baby. So, babies who are born at least 2 weeks after their mother gets RSV vaccine are protected at birth, when infants are at the highest risk of severe RSV disease.
- The vaccine can reduce a baby's risk of being hospitalized from RSV by 57% in the first six months after birth.



# How well does the maternal RSV vaccine work?

- Among approximately 3,500 vaccinated pregnant individuals, compared to approximately 3,500 pregnant individuals who received placebo:
  - Vaccine reduced the risk of severe LRTI in infants by 81.8% within 90 days after birth, and 69.4% within 180 days after birth.
- In a subgroup of pregnant individuals who were 32 - 36 weeks:
  - 1,500 received vaccine and 1,500 received placebo
  - Vaccine reduced the risk of LRTI in infants:
    - By 34.7% within 90 days after birth (91.1% for severe LRTI)
    - By 57.3% within 180 days after birth (76.5% for severe LRTI)

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

- Side effects most often reported - pain at the injection site, headache, muscle pain, and nausea.
- **Pre-eclampsia** occurred in 1.8% of pregnant people who received the maternal RSV vaccine compared to 1.4% of pregnant people who received a placebo.
- Small increase in the number of **preterm births** in vaccinated pregnant people (5.7% vs 4.7%). It is not clear if this is a true safety problem related to RSV vaccine or if this occurred for reasons unrelated to vaccination (low- to middle-income countries).
- FDA is requiring the manufacturer to do additional studies that will evaluate the risk of preterm birth and pre-eclampsia.

# Other Risks

- Abrysvo, made by Pfizer — approved for pregnant women
- Arexvy, by GSK - is indicated for individuals 60 years of age and older. At least 128 pregnant women have been mistakenly given the alternative vaccine. Evidence from animal testing “strongly suggests” that Arexvy might **exacerbate RSV infection** in children younger than 2, rather than mitigate it.

# How do I pay for the maternal RSV vaccine?

- Private health insurance
- Most private health insurance plans cover the maternal RSV vaccine, but there may be a cost depending on the plan.
- Medicaid
- Beginning October 1, 2023, most people with coverage from Medicaid and Children's Health Insurance Program (CHIP) will be guaranteed coverage of all vaccines recommended by the Advisory Committee on Immunization Practice.



Discussion or Questions?

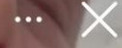


# Neonatal RSV

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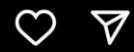


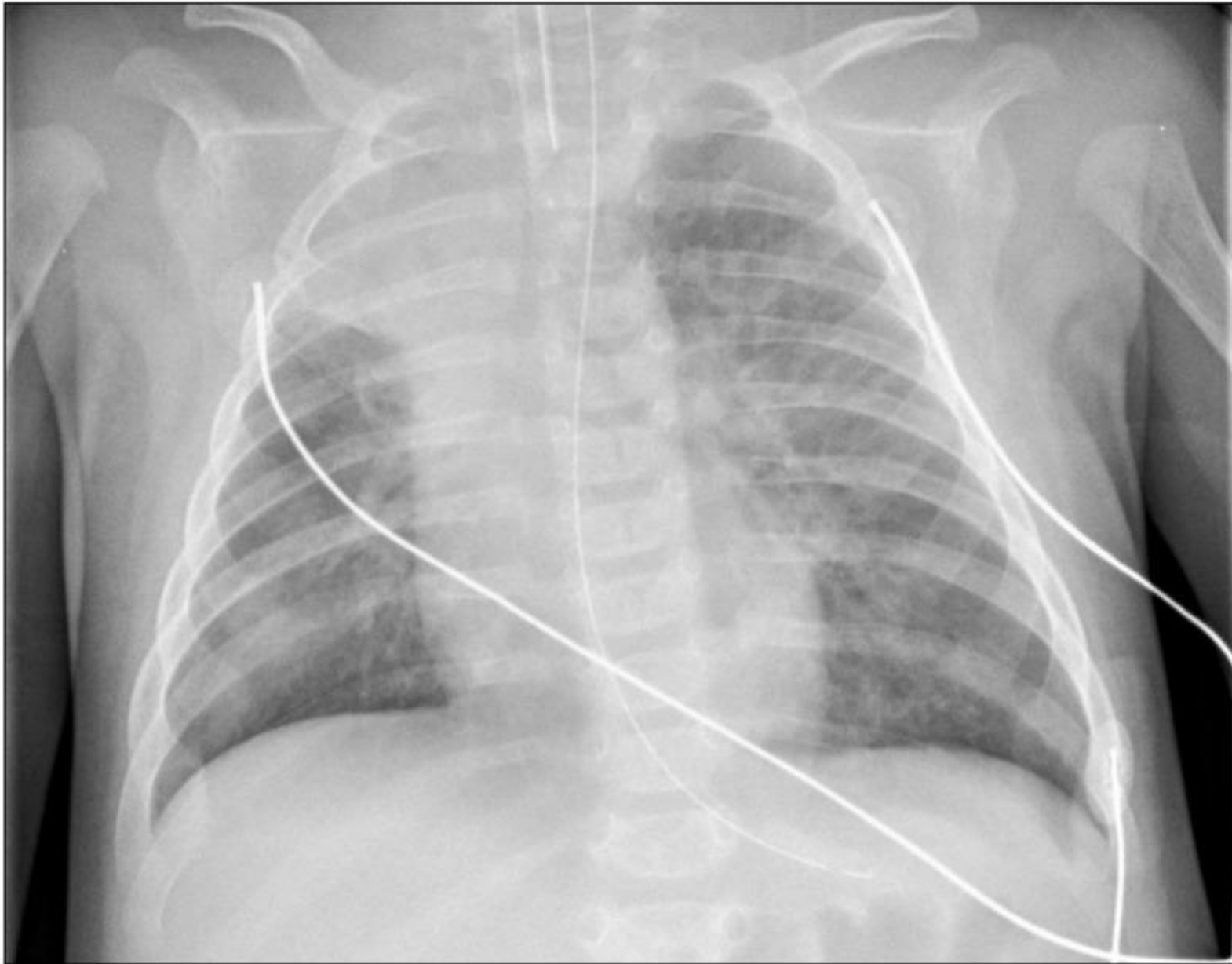
RSV 6d



This is what chest retractions look like.

Send message





Collapsed right upper lobe

Hyperinflated left lung

Bilateral perihilar, peribronchial thickening.



# Neonatal RSV

- An estimated 58,000–80,000 children under age 5 years, most of them infants under age 6 months, are hospitalized each year nationwide because of RSV infection, with some requiring oxygen, intravenous fluids, or mechanical ventilation.
- Each year, an estimated 100–300 children younger than age 5 years die because of RSV in the United States.



# RSV Prevention: Monoclonal Antibody Products

- Nirsevimab is a long-acting monoclonal antibody product for the prevention of RSV in infants and some young children
- The CDC recommends one dose of nirsevimab for all infants younger than 8 months, born during—or entering—their first RSV season.
- For some children between the ages of 8 and 19 months who are at increased risk of severe RSV disease ([severely immunocompromised](#)), a dose of nirsevimab is recommended in their second season
- Nirsevimab has been shown to reduce the risk of both hospitalizations and health care visits for RSV in infants by ~ 80%.

# RSV Prevention: Monoclonal Antibody Products

- Most newborns and infants will not need both maternal vaccination and monoclonal antibody administration.
- Earliest time of vaccination is 32 weeks
- 14 days are needed from vaccination for development and transplacental transfer of maternal antibodies to protect the infant
- Therefore, infants born at less than 34 weeks should receive nirsevimab regardless of maternal vaccination status

# RSV Prevention: Monoclonal Antibody Products

- Rarely, infants born to mothers who were vaccinated at least 14 days before birth may be recommended to receive nirsevimab:
  - Infants who have undergone cardiopulmonary bypass.
  - Infants with substantial increased risk for severe RSV disease.
  - Additionally, in situations where the pregnant person may not mount an adequate immune response to vaccination (eg, people with immunocompromising conditions) or have conditions associated with reduced transplacental antibody transfer (eg, people living with HIV infection), administration of the monoclonal antibody may be considered based on the judgment of the health care professional



COCOONING  
DAYS ARE  
THE BEST DAYS

