



Advancing High Performance Health

RSV Maternal Vaccine Preparedness Quality and Innovation Collective (QuIC)



RSV Maternal Vaccine Preparedness QuIC
Interim Report and Lessons Learned | June 2024

Executive Summary



A National Partnership

In 2023, the AMGA launched a Quality and Innovation Collective (QuIC) to raise awareness of the burden of RSV disease in infants and improve RSV maternal vaccination rates. The initiative aims to conduct high-level discussions and collaboration among representatives from select healthcare organizations and systems on the implementation of multiple and diverse interventions designed to improve RSV maternal vaccination rates.¹



Respiratory Syncytial Virus (RSV)

RSV is the most common cause of bronchiolitis in infants and is responsible for >80% of lower respiratory tract infections (LRTIs) in infants aged <1 year.² Infants aged ≤6 months are at greatest risk for severe RSV.³

RSV is also the leading cause of hospitalization and a driver of healthcare resource utilization in infants. Annually, among infants aged <1 year, RSV is responsible for⁴⁻⁶:

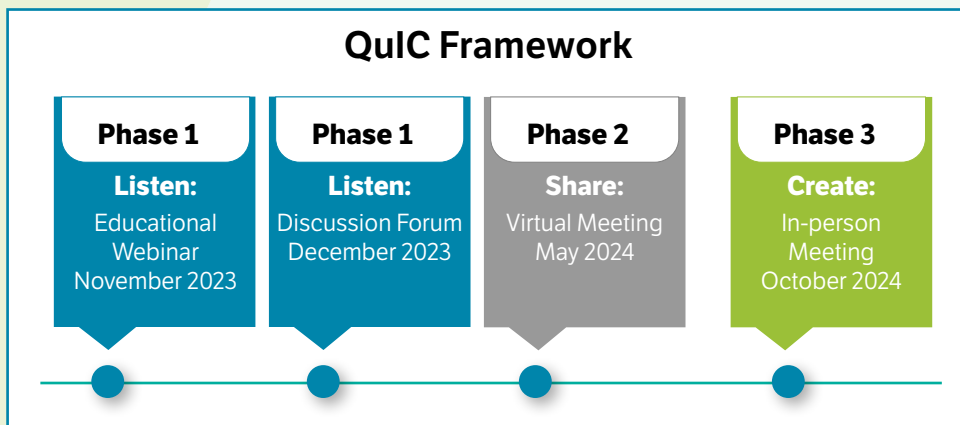
- ~80,000 hospitalizations
- ~132,000 emergency visits
- ~100 respiratory deaths

RSV vaccine is one of 4 maternal vaccines recommended by the CDC (Centers for Disease Control and Prevention), ACOG (American College of Obstetricians and Gynecologists), AAP (American Academy of Pediatrics), and AAFP (American Academy of Family Physicians) for pregnant mothers. The other 3 vaccines are influenza (flu), Tdap (tetanus, diphtheria, and pertussis), and COVID-19.⁷⁻¹⁰



Collaborative Approach and Goal

The goal of the RSV Maternal Vaccine Preparedness QuIC is to engage the AMGA member organizations to collect insights and share best practices on strategies for creating and implementing successful immunization programs for pregnant mothers and raising awareness of the burden of RSV disease.¹



RSV = respiratory syncytial virus.

National Advisory Committee



Christopher Russo, MD, MBA, CPE, FAAP
Director Pediatrics,
Wellspring Health



Elisabeth M. Stambaugh, MD, MMM, FACOG
Chief Medical Officer, Wake
Forest Health Network



Raminder K. Khangura, MD
Maternal & Fetal Medicine,
Obstetrics & Gynecology
Henry Ford Health



Sarah Pugh, PhD, MPH
US Medical & Scientific Affairs,
Maternal Immunization Lead
Pfizer, Inc.

RSV Maternal Vaccine Preparedness QulC

Phase 1: Listen

The initiative focused on awareness of RSV burden and the role of RSV maternal vaccinations. Participants had the opportunity to listen to colleagues' experience in raising awareness of RSV and developing vaccine programs within their organizations.¹

Phase 2: Share

A selection of health systems shared their experience and insights on key factors for implementing a successful RSV maternal vaccination program.¹

Participating Organizations



Part of Optum



RSV = respiratory syncytial virus.

Best Practice Guide for Implementing an RSV Maternal Immunization Program

Participating health systems identified 5 areas of focus that are critical for successful implementation of an RSV maternal program and shared their experience and insights from Season 1—the first RSV season after the CDC’s Advisory Committee on Immunization Practices issued its recommendation for the vaccine on September 22, 2023—within their respective organizations:



1. Determining and Assigning Vaccination Champions

A Vaccination Champion can ensure focused leadership and advocacy for RSV vaccination during pregnancy by spearheading efforts to promote vaccination acceptance among pregnant mothers and ensuring adherence to vaccination guidelines.

Experience From Season 1:

- Implement a broad set of vaccination champions across system divisions, including women’s health, maternal and fetal medicine, pediatrics, medication safety, and pharmacy
- Champions can spearhead development of order sets and protocols and their socialization to help ensure a consistent approach to vaccination across providers, especially given that different provider groups may utilize different EMR systems

Key health system insight:

“Vaccination champions were important for driving program implementation within our organization. We had a medical director champion, a maternal health champion, and a pediatric champion who collaborated to raise awareness with staff about the importance of the program and availability of the vaccine.”



2. Educating Prenatal Care Providers and Reinforcing the Importance of Vaccination

By defining clear roles, standardizing protocols, and enhancing provider confidence through ongoing education opportunities, healthcare organizations and systems can improve vaccination rates.

CDC = Centers for Disease Control and Prevention;
EMR = electronic medical record;
RSV = respiratory syncytial virus.



Experience From Season 1:

- Create protocols and order sets and educate HCPs as early as possible on these to help establish a consistent approach for the vaccination of eligible pregnant mothers
- Educate on approved RSV vaccines and the availability of the appropriate vaccine for use in pregnant mothers at 32 through 36 weeks gestational age
- Ensure awareness of RSV maternal vaccine availability among providers not administering the vaccine, such as those in pediatrics and at inpatient centers with NICUs
- Identify opportunities to make the RSV maternal vaccine available to a broad group of providers including OB/GYNs, primary care and family practices with prenatal clinics, and pop-up clinics that may be especially important for underserved patients such as teen mothers
- Utilize a cross-functional steering committee for formulary decision-making, and clinical decision-making and to serve as a program implementation team
- Utilize pop-up clinics for OB/GYNs that focus exclusively on the RSV maternal vaccination
- Implement touch points between system nurse navigators and pregnant mothers to discuss vaccination
- Ensure a vaccination champion or other contact is in place for each vaccination site/clinic to refer to for any issues or questions

Key health system insight:

“We had a lead at each of our clinics and used the OB/GYN service line to consistently share information throughout the RSV season.”



3. Leveraging the Electronic Medical Record (EMR)

EMR systems can help to streamline workflows, enhance communication, facilitate data-driven decision-making, and ultimately help to improve maternal and infant health outcomes. Patient tracking, risk assessment, coordination of care, vaccination management, data analysis and surveillance, and patient education/engagement are activities available when the RSV maternal vaccination is incorporated within an EMR system.

Experience From Season 1:

- Establish as early as possible due to possibly long lead times in getting the vaccine incorporated
- Identify mothers who did and did not receive the RSV maternal vaccine; this information is particularly critical for pediatric providers to be aware of
- Enable use of health maintenance reports for providers and patients that call out eligibility for the RSV maternal vaccination; these should be available for all pregnant mothers during the RSV season, not just those whose gestational period coincides with the RSV season
- Facilitate stocking, prescriptions, performance tracking, and use of seasonal best practice alerts related to the RSV maternal vaccine
- Consider utilizing RSV maternal modules that may be available for different EMR platforms for more straightforward software updates and adding maternal work flows linked to Immunization Information Systems
- Assess capabilities of the EHR to link maternal and infant charts

Key health system insight:

“The health maintenance report is patient-facing in the portal/app and will alert the patient that they are eligible for the vaccine based on gestational age. This also shows up internally as a ‘health maintenance care gap’ for the provider during each visit with a patient.”



4. Engaging in Patient Education and Outreach

Patient education and outreach are essential for promoting maternal immunization uptake, addressing vaccine hesitancy, empowering pregnant mothers to make informed decisions, and fostering community support for immunization as a vital component of prenatal care. Bodies such as the CDC, ACOG, AAP, and AAFP can be sources of information about the risk of RSV to infants and the availability of RSV maternal vaccination.

Experience From Season 1:

- Link patient outreach to the existing flu education and outreach plan, including approaches such as asking eligible patients at each visit if they want to receive the vaccine
- Utilize fact sheets and other resources with patients to spur conversation about and educate on the RSV maternal vaccine and the infant monoclonal antibody as safe and effective ways to prevent severe LRTIs due to RSV in infants according to ACOG¹¹
- Consider pop-up clinics that focus exclusively on the RSV maternal vaccination
- Consider how teen pregnancies will be covered by outreach if OB/GYN offices are not engaged in the Vaccines for Children program
- Leverage EMRs for patient outreach using “My Chart” or other modules that are effective in ensuring health equity
- Consider social media for outreach

Key health system insight:

“Pregnant mothers worry about getting vaccinated no matter how much we recommend the vaccine. Fact sheets that we can use prior to vaccination can help in our education about the risk of RSV in infants.”

AAP = American Academy of Pediatrics
AAFP = American Academy of Family Physicians; ACOG = American College of Obstetricians and Gynecologists;
CDC = Centers for Disease Control and Prevention; EMR = electronic medical record; LRTI = lower respiratory tract infection; RSV = respiratory syncytial virus.



5. Monitoring and Measuring Using a Dashboard

Analysis of program effectiveness and identification of areas for improvement are important for setting and tracking vaccination goals.

Experience From Season 1:

- Evaluate vaccination program for gaps and determine the need for targeted outreach
- Collaborate with representatives in population health to establish a baseline volume goal and start date for the vaccination program and patient outreach and then monitor progress
- Assess the opportunity to establish an organizational RSV maternal vaccination goal and the ability to align this with goals for other vaccinations such as HPV, flu, or Tdap (eg, goal for Tdap is vaccination of 80% of eligible patients)

Key health system insight:

“Initially, we just monitored performance of the program without a specific goal in place, but next year we will assess the opportunity to align the RSV maternal target with the Tdap target, which is around 80%.”

In summary, the shared best practices of health systems that successfully implemented an RSV maternal program during Season 1 can serve as important learnings for other organizations that are getting started with their program implementation. These insights can help to improve the readiness of health systems as they establish their respective vaccination programs and ultimately improve maternal vaccination rates and care of infants at risk for RSV infection.



HPV = human papillomavirus; RSV = respiratory syncytial virus; Tdap = tetanus, diphtheria, pertussis.

The AMGA RSV Maternal QuIC Team

John W. Kennedy, MD, President, AMGA Foundation and Chief Medical Officer, AMGA

Danielle Casanova, MBA, Vice President, Population Health Initiatives & Health Equity, AMGA

Earlean Chambers, RN, MS, CPHQ, Senior Director of Clinical and Quality, Population Health Initiatives, AMGA Foundation

Senait Temesgen, Senior Program Manager, Population Health Initiatives, AMGA Foundation

Saleaha Pirezada, MHA, Coordinator, Population Health Initiatives, AMGA Foundation

For additional information, please contact Senait Temesgen at the AMGA: stemesgen@amga.org

References

1. American Medical Group Association. Maternal respiratory syncytial virus vaccine preparedness quality and innovation collective. Accessed May 17, 2024. <https://www.amga.org/performance-improvement/best-practices/quality-and-innovation-collective/maternalrsvquic/>
2. Piedimonte G, Perez MK. Respiratory syncytial virus infection and bronchiolitis. *Pediatr Rev*. 2014;35(12):519-530.
3. Centers for Disease Control and Prevention (CDC). RSV in infants and young children. April 12, 2024. Accessed May 6, 2024. <https://www.cdc.gov/rsv/high-risk/infants-young-children.html>
4. McLaughlin JM, Khan F, Schmitt H-J, et al. Respiratory syncytial virus-associated hospitalization rates among US infants: a systematic review and meta-analysis. *J Infect Dis*. 2022;225:1100-1111.
5. Suh M, Movva N, Jiang X, et al. Respiratory syncytial virus burden and healthcare utilization in United States infants <1 year of age: study of nationally representative databases, 2011-2019. *J Infect Dis*. 2022;226(S2):S184-S194.
6. Hansen CL, Chaves SS, Demont C, Viboud C. Mortality associated with influenza and respiratory syncytial virus in the US, 1999-2018. *JAMA Netw Open*. 2022;5(2):e220527.
7. CDC. Prenatal care and routinely recommended vaccinations. February 21, 2024. Accessed May 6, 2024. <https://www.cdc.gov/vaccines/pregnancy/hcp-toolkit/downloads/prenatal-care-and-routinely-recommended-vaccinations-508.pdf>
8. American College of Obstetricians and Gynecologists (ACOG). ACOG immunization champions. 2024. Accessed May 6, 2024. <https://www.acog.org/programs/immunization-for-women/activities-initiatives/acogs-immunization-champions>
9. American Academy of Pediatrics. Child & Adolescent Immunization Schedule by Age (Addendum updated June 27, 2024). Accessed July 10, 2024. <https://publications.aap.org/redbook/pages/Immunization-Schedules>
10. American Academy of Family Physicians. Vaccination recommendations for respiratory syncytial virus in patients who are pregnant. Accessed May 6, 2024. https://www.aafp.org/dam/AAFP/documents/patient_care/immunizations/rsv/RSV%20Vaccine%20for%20Pregnant%20People.pdf
11. ACOG. Maternal RSV vaccination. Accessed June 26, 2024. <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2023/09/maternal-respiratory-syncytial-virus-vaccination>

The RSV Maternal QuIC is sponsored by Pfizer, Inc.



Advancing High Performance Health

One Prince Street
Alexandria, VA 22314-3318

amga.org/foundation





INDICATION

ABRYSVO is a vaccine indicated for active immunization of pregnant individuals at 32 through 36 weeks gestational age for the prevention of lower respiratory tract disease (LRTD) and severe LRTD caused by respiratory syncytial virus (RSV) in infants from birth through 6 months of age.

IMPORTANT SAFETY INFORMATION

- Do not administer ABRYSVO to individuals with a history of a severe allergic reaction (e.g., anaphylaxis) to any component of ABRYSVO
- A numerical imbalance in preterm births was observed compared to placebo in 2 clinical studies. Data are insufficient to establish or exclude a causal relationship between preterm birth and ABRYSVO. To avoid potential risk of preterm birth with use of ABRYSVO before 32 weeks of gestation, administer to pregnant individuals at 32 through 36 weeks gestational age
- Appropriate medical treatment must be available in case of an anaphylactic reaction
- Syncope (fainting) may occur in association with administration of injectable vaccines, including ABRYSVO. Procedures should be in place to avoid injury from fainting
- Immunocompromised individuals, including those receiving immunosuppressive therapy, may have a diminished immune response to ABRYSVO
- Vaccination with ABRYSVO may not protect all vaccine recipients
- In clinical trials with pregnant individuals, the most commonly reported ($\geq 10\%$) adverse reactions were pain at the injection site (40.6%), headache (31.0%), muscle pain (26.5%), and nausea (20.0%)
- In clinical trials with infants born to pregnant individuals, low birth weight (5.1% ABRYSVO versus 4.4% placebo) and neonatal jaundice (7.2% ABRYSVO versus 6.7% placebo) were observed

Individuals who received ABRYSVO during pregnancy are encouraged to contact 1-800-616-3791 to enroll in a Pregnancy Exposure Registry.

Please see full Prescribing Information for ABRYSVO.