

Advancing RSV maternal immunization: A roadmap brief

Next steps to help mothers safeguard themselves and their infants against RSV

A roadmap by the Advancing Maternal Immunization (AMI) collaboration outlines activities needed for a new vaccine that, if approved, could help mothers safeguard themselves and their infants from a common cause of lower respiratory infections—respiratory syncytial virus (RSV). Of the more than 30 million childhood cases worldwide, RSV causes 3.2 million hospitalizations and 120,000 deaths a year in children under five, with most deaths in low- and middle-income countries (LMICs). Half of all RSV-related hospitalizations and deaths occur in the first six months of life. Mild cases can look like a cold, but infants are prone to dangerous complications like pneumonia and bronchiolitis.

Though no RSV vaccine yet exists, several are in development and the first could be available in the next few years. Several are designed to be given to pregnant women through maternal immunization (MI), which provides immunity that also passes to their infants for protection in the early, vulnerable months of life. Stakeholders working on RSV MI have much to learn from the experience and success of providing tetanus vaccine to women in LMICs. Beyond tetanus, however, the capacity to deliver MI efficiently, routinely, and equitably in many countries still needs strengthening.

The roadmap highlights activities that address gaps in essential evidence previously identified through AMI's *Advancing RSV Maternal Immunization: A Gap Analysis Report*. Developed by more than 60 experts from immunization and maternal, newborn, child health (MNCH) sectors and coordinated by PATH and the World Health Organization, the AMI roadmap helps stakeholders gauge when and where to direct efforts for addressing the obstacles inherent to RSV MI introduction in LMICs. Outlined are the activities needed to empower countries to make decisions about adoption amidst competing public health priorities.

RESULTS

While the roadmap provides a broad view of what is needed to make the introduction and wide-scale use of RSV MI in LMICs possible, it also recognizes that



RSV maternal immunization could empower women to choose to protect themselves and their babies from a common cause of lower respiratory infection – RSV. PHOTO: PATH/Cuong Nguyen Phu

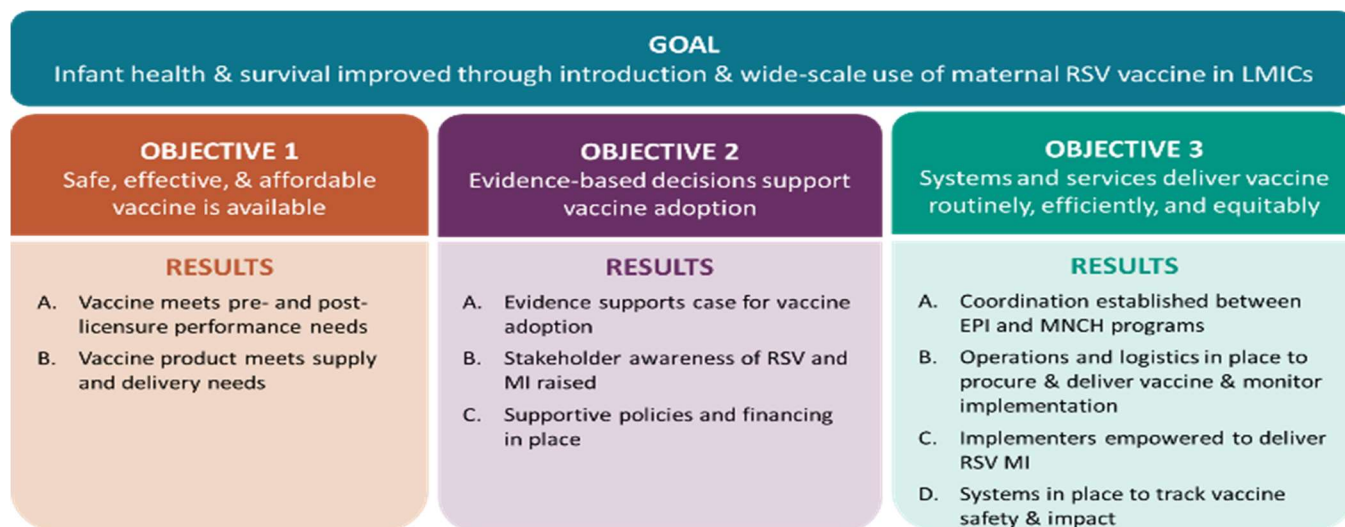
progress depends on many factors, including: generation of evidence required for decision-making; global and country decisions to recommend and prioritize maternal RSV vaccine; and health systems and services being prepared to deliver the vaccine efficiently and equitably. Identified are the following areas of work urgently needing action:

Ensuring the availability of safe, effective, and affordable maternal RSV vaccines—Work in this area calls for technical assistance to manufacturers to make sure that RSV vaccines meet performance, supply, and delivery needs for LMICs and to support LMICs in ensuring that systems are in place to track MI's safety and impact.

Supporting evidence-based global and country decision-making around maternal RSV vaccines—This work includes increasing stakeholder awareness of RSV's burden of disease and the public health case for a maternal RSV vaccine and ensuring informed policy and financing decisions around its introduction in LMICs.

Enabling systems and services to routinely, efficiently, and equitably deliver maternal RSV vaccines—Through formative research and demonstration projects, activities in this area support coordination between immunization and MNCH programs to ensure that operations and logistics are in place to optimally deliver the vaccine, health care personnel are empowered to provide it

The RSV MI Roadmap outlines activities under three broad objectives with key results that, if achieved, will help ensure that a maternal RSV vaccine reaches the women who need it most.



to pregnant women, and systems are prepared to monitor its implementation and resulting outcomes.

FULFILLING THE PROMISE OF MI

Maternal RSV vaccines may be available in the next several years and have the potential to improve infant health and survival in LMICs. While much has already been achieved to support RSV MI decision-making and delivery, additional work remains. Due to the multi-faceted and complex nature of the work ahead, many activities outlined in the roadmap must begin now to ensure that maternal RSV vaccines meet global policy and financing requirements; countries can make informed decisions around introduction; and mechanisms are in place to optimize vaccine delivery and monitor safety. Vaccines are still in development and compelling evidence will be needed for global and country decision-makers to appropriately prioritize maternal RSV vaccine amidst other public health needs. Changes to health systems and services may also be needed to optimize vaccine delivery in LMICs.

Beginning work on these activities now is important so that women have the opportunity to protect themselves and their babies from RSV. RSV MI has the potential to improve overall healthcare for women and babies, which are often underserved populations in LMICs. It is also a natural opportunity to lay a foundation that extends beyond RSV

prevention since the platforms that need to be developed and strengthened for RSV MI could be the same as those needed to deliver additional MIs in the future and could strengthen ANC and immunization services overall. In short, the near-term activities in the roadmap will also benefit health systems over the long term.

The roadmap activities build upon existing evidence, guidance, experience, and systems, and complement current efforts in the field. Based on these experiences, the next step towards informed maternal RSV vaccine decision-making and rapid and efficient introduction and uptake in LMICs is to identify responsible parties for ensuring that specific pieces of this work are conducted when needed, efforts are coordinated, and that results are shared with appropriate stakeholders.

Every family deserves to see their children survive and thrive no matter where they live. With maternal RSV vaccines on the horizon, the activities outlined in the roadmap are intended to help mothers and infants everywhere have every chance to benefit without delay when vaccines become available. AMI will update the roadmap as work progresses, additional evidence becomes available, gaps are filled, and new gaps are identified. We welcome input, which can be sent to AMISecretariat@path.org.