

Media Release

**Embargoed: 00:01 CEST, Saturday, 18 April 2026**

ESCMID Global 2026

## **Maternal RSV vaccination cuts infant hospitalisation risk by over 80%, major UKHSA study finds**

**(Saturday, 18 April 2026, Munich, Germany) The largest real-world study of its kind, presented today at ESCMID Global 2026, shows that maternal vaccination against respiratory syncytial virus (RSV) reduces the risk of hospitalisation in young infants by over 80% when given at least two weeks before birth.<sup>1</sup>**

RSV is a common virus that can cause severe respiratory illness in infants and young children, including lower respiratory tract infections (LRTIs) such as bronchiolitis and pneumonia.<sup>2,3</sup> It is a leading cause of infant hospitalisation worldwide, with early-life infection linked to potential longer-term effects including recurrent wheeze or asthma, repeat hospital admissions and impaired lung health.<sup>4, 5, 6</sup>

In England, a national maternal RSV vaccination programme was introduced on 1 September 2024, offering the Bivalent Prefusion F vaccine to pregnant women from 28 weeks' gestation.

To evaluate its impact on infant hospitalisations due to RSV-associated LRTI, researchers from the UK Health Security Agency (UKHSA) conducted a retrospective cohort study using linked national datasets, including NHS maternity records, immunisation data and hospital and laboratory data. The analysis included 289,399 infants born between 2 September 2024 and 24 March 2025, representing around 90% of births in England during this period.

Across the study population, 4,594 RSV-associated hospitalisations were recorded. Although infants born to unvaccinated mothers made up 55% of the total cohort, they accounted for 87.2% of hospitalisations.

In contrast, infants whose mothers were vaccinated at least 14 days before birth had a markedly lower risk of hospitalisation, with vaccine effectiveness estimated at 81.3%, relative to the unvaccinated group.

Lead author and UKHSA epidemiologist Matt Wilson commented, "As the largest study to date examining the impact of this vaccine on infant hospitalisation, these findings provide robust evidence that vaccination offers substantial protection against severe illness in young infants. We found a clear relationship between timing and protection, with effectiveness increasing as the interval between vaccination and birth lengthens, reaching close to 85% when vaccination occurs at least four weeks before delivery."

He continued, “While at least two weeks are typically needed for optimal protection, infants born 10 to 13 days after vaccination had around 50% fewer hospital admissions compared with those whose mothers were unvaccinated, whereas no reduction was seen when vaccination occurred less than 10 days before birth. This reinforces the importance of vaccinating as early as possible within the recommended window, while also showing that even when given later in pregnancy, some protection is still possible from around 10 days before birth, although earlier vaccination remains preferable.”

The study also investigated outcomes in preterm infants. Vaccine effectiveness was estimated at 69.4% in preterm infants, when allowing at least 14 days between vaccination and birth.

“These findings are particularly important for preterm infants, who are among the most vulnerable to severe RSV infection,” added Wilson. “With sufficient time between vaccination and birth, we saw good levels of protection in these babies. Giving the vaccination early in the third trimester, as recommended by the World Health Organization, could protect most preterm infants.”

Looking ahead, Wilson said that further work is needed to assess the impact of the maternal RSV vaccination programme on infant hospitalisations at a population level and to better understand how protection changes later in infancy. He added that UKHSA will be looking at maternal vaccination and monoclonal antibody immunisation effectiveness in very preterm infants, for whom both are recommended.

He also emphasised the potential for wider global impact, explaining, “While survival from RSV bronchiolitis is high in high-income countries, it remains a major cause of infant mortality in low- and middle-income countries. These findings underscore the potential benefits of wider rollout of maternal RSV vaccination globally in line with the World Health Organization’s recommendations.”

**ENDS**

**Notes to editors:**

A reference to ESCMID Global must be included in all coverage and/or articles associated with this study.

For more information or to arrange an expert interview, please contact the ESCMID Press Office at: [communication@escmid.org](mailto:communication@escmid.org)

**About the study author:**

Matt Wilson is an epidemiologist working in the Immunisation and Vaccine Preventable Diseases division at the UK Health Security Agency and is a member of the NIHR Health

Protection Research Unit in Vaccines and Immunisation. He has an MSc in Epidemiology from the London School of Hygiene and Tropical Medicine.

### **About the European Society of Clinical Microbiology and Infectious Diseases:**

The European Society of Clinical Microbiology and Infectious Diseases (ESCMID) is the leading society for clinical microbiology and infectious diseases in Europe. ESCMID is proud to unite over 13,500 members as well as 45,000 affiliated members through 77 national and international affiliated societies. ESCMID's mission is to champion medical progress in infection for a healthier tomorrow and plays an important role in emerging infectious diseases and antimicrobial resistance education and research.

Website: [www.escmid.org/](http://www.escmid.org/)

### **References:**

1. Wilson, M., Whitaker, H., Walker, J., et al. (2026). Maternal RSV vaccination and reduced risk of hospitalisation for babies in England – 2024/45. Oral presentation. *ESCMID Global 2026*.
2. Munro, A. P. S., Martínón-Torres, F., Drysdale, S.B. et al. (2023). The disease burden of respiratory syncytial virus in Infants. *Current Opinion in Infectious Diseases*. 36(5):379-384.
3. European Lung Foundation (ELF). (n.d.). Acute lower respiratory infections. <https://europeanlung.org/en/information-hub/lung-conditions/acute-lower-respiratory-infections/>
4. World Health Organization. (n.d.). Global Influenza Programme: Respiratory Syncytial Virus Surveillance. <https://www.who.int/teams/global-influenza-programme/global-respiratory-syncytial-virus-surveillance>
5. World Health Organization. (2025). WHO outlines recommendations to protect infants against RSV – respiratory syncytial virus. <https://www.who.int/news/item/30-05-2025-who-outlines-recommendations-to-protect-infants-against-rsv-respiratory-syncytial-virus>
6. World Health Organization. (2025). Respiratory syncytial virus (RSV). [https://www.who.int/news-room/fact-sheets/detail/respiratory-syncytial-virus-\(rsv\)#:~:text=Respiratory%20syncytial%20virus%20\(RSV\)%20is,access%20to%20supportive%20medical%20care.](https://www.who.int/news-room/fact-sheets/detail/respiratory-syncytial-virus-(rsv)#:~:text=Respiratory%20syncytial%20virus%20(RSV)%20is,access%20to%20supportive%20medical%20care.)