



SIM CANADA

433 Blvd de L'Île
Pincourt, Québec
Canada J7W 8Z6

Beyond the Hospital Bed: Why Universal RSV Prevention is the Right Investment for Alberta

Alberta Budget 2026 Consultations

January 15, 2026



About the Society for Intelligence Management

The Society for Intelligence Management (SIM) is an independent association that promotes evidenced based knowledge translation, education and training, communication, and decision making. Its mandate is to ensure that the flow of information is accurate, reliable, and contributes to informed decision-making in a rapidly evolving world. To learn more about SIM, visit <https://intelsociety.org/>

About the RSV Awareness Consortium

The RSV Awareness Consortium is a collaborative of health advocates, including non-governmental organizations, dedicated to spreading evidence-based knowledge. Our goal is to drive meaningful change across Canada by investing in both individual and societal health literacy, encouraging critical thinking and empowering people to make informed, independent decisions.

Our mission is to prevent RSV through proactive education, targeted outreach, and strong community support. We are committed to delivering accurate, unbiased information that helps individuals take charge of their health. To learn more about the consortium, visit <https://rsvawareness.ca/>

The Issue

Respiratory syncytial virus (RSV) remains a primary driver of infant hospitalizations where roughly 80% of infant admissions occur in previously healthy, full-term babies¹. Simultaneously, RSV poses a growing burden on aging populations. In adults over 70, the virus is now recognized as a major cause of pneumonia and exacerbations of chronic heart and lung disease². Many hospitalized adults over 50 with RSV have at least one chronic medical condition, which can lead to acute complications, such as cardiovascular events including heart attack, arrhythmia, or stroke – triggered by the systemic inflammation caused by the virus³.

The cost-effective choice for Alberta is a strategic expansion of the provincial RSV prevention program to cover a broader population, moving away from high-risk barrier eligibility and taking a multi-pillar approach where a range of effective products offer Albertans choice in protection.

Background: The Threat of RSV

Respiratory syncytial virus (RSV) is a common and highly contagious respiratory virus that infects the lungs and breathing passages. Nearly all children will have been infected with RSV by the age of two⁴. While RSV can affect people of all ages, causing mild, cold-like symptoms in healthy adults and older children, it poses a significant health risk to healthy infants and young children and is the leading contributor to hospitalization among infants in North America^{5,6,7}.

For infants, especially those under 6 months, premature babies, and those with underlying heart or lung conditions or weakened immune systems, RSV can lead to severe illness and potentially life-threatening complications, including bronchiolitis⁸, pneumonia⁹, long-term lung issues such as recurrent asthma and wheezing later in childhood, dehydration and apnea that can lead to reduced fluid intake and pauses in breathing, particularly in very young infants^{10,11}. Respiratory failure, in the most severe cases, necessitates advanced medical interventions such as intubation and mechanical ventilation¹².

Other risk factors for severe RSV disease in infants include chronic lung disease (e.g., bronchopulmonary dysplasia), cystic fibrosis with respiratory involvement, hemodynamically significant chronic cardiac disease, or compromised immune systems. Infants with risk factors born outside of the typical RSV season are also at risk for severe illness. Infants born just before the RSV season (May through September) generally have the highest risk of medically attended RSV during their first season¹³. It is important to note that a significant proportion (approximately 80%) of infants hospitalized with RSV have no preexisting medical conditions, highlighting that healthy term infants are also vulnerable^{14,15}.

While the pediatric burden of RSV is well-documented, the virus creates a critical and often under-recognized health crisis for older adults. Individuals aged 65 to 84 currently represent approximately 20% of weekly RSV detections, a rate that climbs significantly for those with underlying heart or lung conditions¹⁶. For this population, RSV is not merely a cold but a severe respiratory threat that frequently causes pneumonia or exacerbates chronic illnesses, leading to hospital stays.

Current Status

A single infant RSV hospitalization can cost Alberta's provincial healthcare system between \$8,000 to \$15,000, while a senior's admission can exceed \$60,000 due to the length of stay and complexity^{17,18}.

During the 2024-2025 RSV season, Alberta recorded 3,375 hospitalizations across all ages¹⁹. Most RSV outbreaks among older adults occur within long-term care and supportive living facilities, where the virus spreads rapidly among the most vulnerable residents^{20,21}. Recognizing this economic and clinical strain, Alberta Health has significantly expanded with success its provincial immunization program in March 2025, lowering the eligibility age for the free, single-dose vaccine to 70 years and older (and 60 years and older for Indigenous residents) to move from reactive, high-cost emergency care toward a more sustainable, proactive prevention model²².

The burden of RSV in Alberta is heavy and disproportionately affects infants, serving as the leading cause of hospitalization for children under one year old. Most concerning for parents is that hospitalized infants were previously healthy with no underlying medical conditions. Beyond the immediate clinical risk of severe lower respiratory tract infections, the burden extends to long-term health complications like childhood asthma and places a profound strain on families, who face an average of seven days in the hospital and significant out-of-pocket costs. While Alberta currently provides preventative treatment to high-risk infants, the ongoing healthcare impact has led to a strong push for universal immunization programs to protect all infants across the province.

Key Considerations for Action

The cost-effective choice for Alberta is the strategic expansion of the provincial RSV prevention program to cover a broader population, moving away from high-barrier eligibility. This includes expanding:

- ***Alberta's Pediatric RSV Prevention Program to cover all healthy infants*** and not just high-risk infants (including those born prematurely or with certain heart/lung conditions). Following the lead of other provinces like Ontario and Quebec by adopting a universal program would protect the 80% of infants currently ineligible for RSV protection who may end up in the pediatric intensive care unit (PICU). Eligibility of vaccination during pregnancy is an additional option for consideration.
- ***Alberta's Senior RSV Prevention Program to cover younger (60 years and older) healthy adults and those with chronic diseases living in the community.***

The Evidence

The availability of nirsevimab, a long-acting monoclonal antibody, alongside new RSV vaccines for seniors and pregnant women, has fundamentally altered the RSV prevention landscape. Real-world evidence from the 2024–2026 respiratory seasons indicates that these products significantly reduce the incidence of medically attended RSV infections and associated acute respiratory illnesses (ARI). In pediatric populations, nirsevimab has demonstrated high effectiveness in preventing lower respiratory tract infections (LRTI) and hospitalizations among infants²³. Population-level data from Quebec's first universal nirsevimab campaign (2024–2025) showed a 66% reduction in RSV-associated hospitalizations²⁴. Similarly, administrative data from Ontario's 2024–2025 implementation reported a reduction in RSV-related hospitalizations and a reduction in pediatric intensive care unit (PICU) admissions²⁵. Real-world findings from the United States and Europe further support the impact of maternal vaccination, which provides passive immunity to newborns and reduces the risk of early-infancy hospitalization^{26,27}.

For older adults, real-world data from 2024–2026 suggests that RSV vaccines maintain high effectiveness against the most severe clinical outcomes. Observational studies from the US Centres for Disease Control and Prevention (CDC) indicate that these vaccines are between 75% and 83% effective at preventing RSV-related hospitalizations in adults aged 60 and older²⁸. In high-risk cohorts, such as adults over 75, effectiveness against critical illness and ICU admission reached 92% to 95%²⁹. This level of protection exceeds the historical real-world effectiveness of seasonal influenza vaccines in comparable age groups, which typically ranges from 40% to 60%. By averting potential hospitalizations, RSV immunization can mitigate the clinical and economic burden on the provincial healthcare system.

Conclusion

The transition from reactive management to proactive prevention marks a significant advancement in Alberta's public health strategy for respiratory syncytial virus (RSV). By expanding its use of specialized vaccines and monoclonal antibodies, the province can easily address the burden of a virus that disproportionately affects those at the start and later stages of life. However, achieving universal coverage requires a more comprehensive approach to eligibility. The benefits of universal coverage though, as demonstrated in other Canadian jurisdictions, include: 1) drastic reductions in PICU admission and long-term complications like childhood asthma and geriatric frailty; 2) shift in spending from high-cost emergency care to lower-cost community-based prevention; and 3) enhanced capacity within the healthcare system during the peak of RSV season, ensuring that hospital beds remain available for other critical care needs. By investing in expanding the RSV program, Alberta is choosing to spend thousands on prevention rather than tens of thousands on acute and tertiary care. This strategy stabilizes the provincial healthcare system during the peak of respiratory disease season and ensures that Alberta's healthcare dollars are used to keep citizens healthy in their communities rather than in hospital beds.

¹ National Advisory Committee on Immunization. (2024). Statement on the Prevention of Respiratory Syncytial Virus (RSV) Disease in Infants. Public Health Agency of Canada. <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-prevention-respiratory-syncytial-virus-disease-infants/naci-statement-2024-05-17.pdf>

² Kenmoe S, Nair H. The disease burden of respiratory syncytial virus in older adults. *Curr Opin Infect Dis*. 2024;37(2):129-136.

³ Loeb M, Lee N, Neish CS et al. (2025, September 22-23). Respiratory syncytial virus (RSV) hospitalization, discharge patterns, and associated costs among adults aged ≥ 50 years in Ontario, Canada [Conference presentation abstract]. The 29th Annual Conference of the Canadian Association for Population Therapeutics, Toronto, ON, Canada. [CAPT Abstract Booklet 2025](#)

⁴ Daniels D. A review of respiratory syncytial virus epidemiology among children: linking effective prevention to vulnerable populations. *JPIDS*. 2024;13(Suppl 2):S131-S136.

⁵ Li Y, Wang X, Blau DM, Caballero MT, Feikin DR, Gill CJ, et al. Global, regional, and national disease burden estimates of acute lower respiratory infections due to respiratory syncytial virus in children younger than 5 years in 2019: A systematic analysis. *Lancet*. 2022;399(10340):2047-64

⁶ National Advisory Committee on Immunization (NACI). Statement of the prevention of respiratory syncytial virus (RSV) disease in infants. 2024. <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-prevention-respiratory-syncytial-virus-disease-infants/naci-statement-2024-05-17.pdf>

⁷ Schanzer DL, Langley JM, Tam TW. Hospitalization attributable to influenza and other viral respiratory illnesses in Canadian children. *Pediatr Infect Dis J*. 2006;25(9):795-800.

⁸ Bronchiolitis is an inflammation of the small airways in the lungs, which can cause congestion and make breathing difficult. It is a very common complication of RSV in infants and young children.

⁹ Pneumonia is inflammatory condition of the lung. RSV can lead to an infection and inflammation of the lungs.

- ¹⁰ Abrams EM, Doyon-Plourde P, Davis P, Brousseau N, Irwin A, Siu W, & Killikelly A. Burden of disease of RSV in infants, children and pregnant women and people. *Canada Communicable Disease Report*. 2024;50(1-2):1–15.
- ¹¹ Baraldi E, Checcucci Lisi G, Costantino C, Heinrichs JH, Manzoni P, Riccò M, Roberts M, Vassilouthis N. RSV disease in infants and young children: Can we see a brighter future? *Hum Vaccin Immunother*. 2022;18(4):2079322.
- ¹² Peña-López Y, Sabater-Riera J, Raj P. Severe respiratory syncytial virus disease. *J Intensive Med*. 2024;4(4):405-416.
- ¹³ Gantenberg JR, van Aalst R, Bhuma MR, Limone B, Diakum D, Smith DM, Nelson CB, Bengtson AM, Chaves SS, La Via WV, Rizzo C, Savitz DA, Zullo AR. Risk analysis of respiratory syncytial virus among infants in the United States by birth month. *JPIDS*. 2024;13(6):317-327.
- ¹⁴ Vadlamudi, NK, et al. Healthcare costs and resource utilization for acute respiratory syncytial virus pediatric hospitalizations in Canada: a population-based study. *The Lancet Regional Health Americas*. 2025;51:101257.
- ¹⁵ Shin T, Lee JK, Kieffer A, Greenberg M, Wu J. Health economic evaluation of implementing a universal immunization program with nirsevimab compared to standard of care for the prevention of respiratory syncytial virus disease in Canadian infants. *Hum Vaccin Immunother*. 2025;21(1):2480875.
- ¹⁶ Public Health Agency of Canada (2026). Canadian Respiratory Virus Surveillance Report. <https://health-infobase.canada.ca/respiratory-virus-surveillance/rsv.html>
- ¹⁷ Vadlamudi NK, et al. Healthcare costs and resource utilization for acute respiratory syncytial virus pediatric hospitalizations in Canada: a population-based study. *The Lancet Regional Health Americas*. 2025;51:101257.
- ¹⁸ Loeb M, Lee N, Neish CS et al. (2025, September 22-23). Respiratory syncytial virus (RSV) hospitalization, discharge patterns, and associated costs among adults aged ≥ 50 years in Ontario, Canada [Conference presentation abstract]. The 29th Annual Conference of the Canadian Association for Population Therapeutics, Toronto, ON, Canada. [CAPT Abstract Booklet 2025](#)
- ¹⁹ Alberta Health. (2026). Respiratory Virus Dashboard. <https://www.alberta.ca/stats/dashboard/respiratory-virus-dashboard.htm>
- ²⁰ Ferrante C, Bancej C, & Atchessi N. Disease burden attributable to respiratory syncytial virus outbreaks in long-term care. *Canada Communicable Disease Report*. 2024;50(12):25–34.
- ²¹ Alberta Health. (2026). Respiratory Virus Dashboard. <https://www.alberta.ca/stats/dashboard/respiratory-virus-dashboard.htm>
- ²² Alberta College of Pharmacy. (2025, March 18). RSV immunization program eligibility expansion. <https://abpharmacy.ca/news/rsv-immunization-program-eligibility-expansion/>
- ²³ Sumsuzzman DM, et al. Real-world effectiveness of nirsevimab against respiratory syncytial virus disease in infants: a systematic review and meta-analysis. *The Lancet Child Adolesc Health*. 2025;9(6); 393-403.
- ²⁴ Carazo S, et al. Nirsevimab effectiveness, number needed to immunize and impact on severe RSV outcomes in preterm, high-risk and healthy-term infants, Quebec, Canada. Preprint. <https://doi.org/10.1101/2025.07.27.25332262>. Accessed 7 January 2026.
- ²⁵ BORN Ontario. (2025). 2024-2025 RSV Season Data: Maternal and Infant Immunization Uptake. <https://www.bornontario.ca/initiatives-resources/>
- ²⁶ Halasa N, et al. Interim evaluation of maternal RSV vaccination and nirsevimab effectiveness. *MMWR / CDC*. 2025. <https://www.cdc.gov/mmwr/volumes/74/wr/mm7416a1.htm>
- ²⁷ Williams TC, et al. Bivalent prefusion F vaccination in pregnancy and respiratory syncytial virus hospitalization in infants in the UK: results of a multicentre, test-negative, case-control study. *The Lancet Child & Adolescent Health*. 2025;9(9):655-662.
- ²⁸ Surie D, Self WH, Zhu Y, Yuengling KA, Johnson CA, Grijalva CG, Dawood FS; Investigating Respiratory Viruses in the Acutely Ill (IVY) Network. RSV vaccine effectiveness against hospitalization among US adults 60 years and older. *JAMA*. 2024;332(13):1105-1107.
- ²⁹ Tartof SY, et al. Estimated vaccine effectiveness for respiratory syncytial virus-related lower respiratory tract disease. *JAMA Netw Open*. 2024;7(12):e2450832.

