Vaccinations against Respiratory Infections in Iceland 2020–2025

Executive Summary

This report provides the first consolidated national overview of vaccinations against respiratory infections in Iceland, covering the period 2020–2025. It describes changes in vaccination recommendations, uptake across age groups, and developments in the epidemiology of four major respiratory pathogens: pneumococcus, influenza virus, SARS-CoV-2, and respiratory syncytial virus (RSV).

The period was marked by substantial changes in respiratory disease epidemiology and prevention. The COVID-19 pandemic led to an unprecedented national vaccination effort, while infection prevention measures temporarily suppressed the circulation of other respiratory pathogens. Following the lifting of restrictions in society, influenza, RSV, and pneumococcal infections resurged. New vaccines and preventive measures also became available, expanding opportunities to protect vulnerable populations.

Main findings

Pneumococcal vaccination. Uptake of routine pneumococcal vaccination among infants remained very high throughout the period. In contrast, vaccination among older adults and other risk groups was substantially underutilised. Following the pandemic-related decline in 2020–2021, invasive pneumococcal infections increased and remained at approximately 40 reported cases annually during 2022–2025. In 2025, around 70% of cases occurred among people aged 60 years and older. The availability of broader-valency conjugate vaccines offers new opportunities to improve protection in these groups.

Influenza vaccination. Annual influenza vaccination continues to be an important measure for reducing severe illness and pressure on healthcare services. Vaccination uptake among older adults remained below the World Health Organization's 75% target, despite efforts to improve accessibility. The introduction of publicly funded influenza vaccination for young children was an important development. Uptake increased progressively, exceeding 70% among the youngest eligible children in 2025, although participation among older preschool children remained considerably lower. Further improvements in access, communication and individual invitations may help increase coverage.

COVID-19 vaccination. The national COVID-19 vaccination programme achieved very high uptake during its initial rollout in 2021. However, participation in subsequent vaccination campaigns declined substantially, falling below 50% even among the oldest age groups by 2024. As the epidemiology of COVID-19 changed, vaccination recommendations shifted from broad population coverage towards protecting those at greatest risk of severe disease. Unlike influenza and RSV, COVID-19 did not demonstrate a consistent seasonal pattern, with notable

increases in transmission during the summers of 2024 and 2025. These developments highlight the need for flexible, evidence-based decisions on vaccination timing and target groups rather than automatically aligning COVID-19 vaccination with annual influenza campaigns.

RSV prevention. New preventive options became available during the reporting period, including RSV vaccines for adults and the long-acting monoclonal antibody nirsevimab for infants. Iceland introduced a publicly funded nirsevimab programme in autumn 2025, achieving approximately 85% uptake among eligible infants. However, RSV circulation was unusually low in 2025, and the programme's impact on hospitalisations and severe disease is being assessed. Continued monitoring over several RSV seasons will be essential. Uptake of RSV vaccines among adults remained very limited during the reporting period.

Conclusions and future priorities

The findings demonstrate important achievements in respiratory infection prevention, particularly high uptake of routine childhood pneumococcal vaccination and the successful initial implementation of infant RSV prophylaxis. At the same time, substantial opportunities remain to improve vaccination uptake among older adults and other individuals at increased risk of severe disease.

Priorities include improving access to vaccination, strengthening targeted communication and individual follow-up, and ensuring that recommendations reflect the epidemiology and disease burden of each infection. Continued investment in vaccination registries, disease surveillance and evaluation of preventive programmes will support evidence-based decision-making and more effective use of healthcare resources.

The analyses are based primarily on electronically recorded vaccinations in the national vaccination registry and national infectious disease surveillance data. Interpretation should take account of changes in testing and surveillance practices during the reporting period, differences in the populations eligible for vaccination, and limitations in identifying individuals belonging to specific clinical risk groups.

The Chief Epidemiologist