

Respiratory disease includes a wide range of acute and chronic diseases that substantially contribute to the medical and economic burden on Ireland's health system.

Respiratory disease places a huge burden on individuals, the Irish population and the health services. Respiratory disease caused 19.4% of all deaths in Ireland in 2024. Between 2015 and 2024 the age-standardised death rate from respiratory disease fell by 15.8%, little more than half the 28.2% improvement achieved in cardiovascular disease. Excluding lung cancer, respiratory mortality among people aged under 65 years did not improve at all over the decade. Falling rates do not mean a falling burden: the number of deaths from diseases of the respiratory system rose by 10.8%, and the 4,284 deaths registered in 2024 were the highest of the decade. In 2022 Ireland's death rate from diseases of the respiratory system was 24.6% higher than the average of eight comparator European countries, even though Ireland's overall mortality was at the comparator average. Respiratory disease is the cause group on which Ireland performs worst relative to its peers. The International Respiratory Coalition estimates that respiratory disease cost Irish society €15.1 billion in 2023, based on the value of healthy life years lost.

In 2025 respiratory disease accounted for 82,003 inpatient discharges (11.5% of all inpatient admissions) and 559,054 bed days (13.3% of all inpatient bed days) in publicly funded acute hospitals. Comparable figures for cardiovascular disease were 9.1% and 12.4%. Respiratory admissions are longer than average, at 6.8 days against 5.9 days for all causes, and people aged 65 years and over accounted for 73.3% of respiratory bed days. Four respiratory diagnoses (COPD, unspecified acute lower respiratory infection, pneumonia and influenza) accounted for almost 10% of all emergency inpatient admissions and 11.1% of emergency bed days. Because these figures count principal diagnoses in public hospitals only, they understate the true burden.

Access to specialist respiratory care is deteriorating. At the end of July 2026, 29,169 adults were waiting for a first respiratory outpatient appointment, 54% more than in

January 2022. Of these, 20.7% had waited more than a year, against 17.8% across all specialties. National workforce planning estimates that the respiratory consultant workforce would need to grow by approximately a quarter to meet current need, and by 86% by 2038. Unfilled posts are concentrated in smaller hospitals. Lung transplantation has not recovered from the pandemic, with 13 transplants performed in 2024 compared with 38 in 2019. Critical care beds operate at 94% occupancy, and patients in Ireland are more severely ill on admission to intensive care than their UK counterparts.

Respiratory disease falls most heavily at the extremes of life. In 2025, 21.1% of paediatric inpatient admissions were for a respiratory condition, as were 18.8% of admissions among people aged 85 years and over. The age-standardised respiratory death rate among males is 39% higher than among females. Asthma is the exception and is the only respiratory cause of death in Ireland where women die at a higher rate than men.

National data is not available for primary care, but the burden is reflected by the fact that more than one in five people (21.7%) active on the General Medical Services (GMS) scheme received at least one inhaled bronchodilator in 2023, up from 19.7% in 2016. Over the same period the number receiving oral corticosteroids, a marker of poorly controlled asthma and of COPD exacerbation, rose by 28% while the scheme population fell.

Asthma

An estimated 450,000 people have doctor-diagnosed asthma in Ireland. As it typically begins earlier in life than many other chronic diseases, it can impose a high lifetime burden on individuals, caregivers and the community. For the year 2023, the societal cost of asthma in Ireland was estimated at €1.6 billion.

Asthma deaths have not fallen. Between 2016 and 2024 there were between 59 and 94 asthma deaths each year, and the 94 deaths

provisionally registered in 2024 were the highest in that period. The age-standardised death rate in 2024 was essentially unchanged from 2015. Between 2020 and 2024, 64% of asthma deaths were among women. In the UK, more than two thirds of asthma deaths have been found to involve potentially avoidable factors, and Ireland has not undertaken a comparable national review.

In 2024 asthma accounted for 9,521 hospitalisations in publicly funded acute hospitals, of which 4,116 were inpatient discharges; 57% of inpatient discharges were among females. Cost is a barrier to treatment. In a 2026 survey of parents of children with asthma, 9% reported having forgone their child's medication in the previous three months for financial reasons.

Bronchiectasis

Bronchiectasis is a distinct chronic lung disease with its own European guideline and European registry. The prevalence of bronchiectasis in Ireland is unknown. International estimates of 53 to 566 cases per 100,000 adults would correspond to approximately 20,000 to 40,000 people in Ireland. National hospital data report bronchiectasis only in combination with COPD, which conceals its burden. In 2023, 74 deaths were attributed to bronchiectasis, two thirds of them (66%) among women.

In November 2025, brensocatib became the first licensed disease-modifying therapy for bronchiectasis in Europe. There is no national clinical programme in Ireland currently, although a Bronchiectasis Model of Care for Ireland is in development by the National Clinical Programme for Cystic Fibrosis with the HSE, RCPI and ICGP. Irish participation in the European Bronchiectasis Registry is limited to a small number of centres, so Irish patients are largely absent from European comparative data and from the interventional studies that follow from it.

Chronic Obstructive Pulmonary Disease

The prevalence of COPD in Ireland is unknown. HSE estimates suggest that up to 380,000 people may be living with COPD, of whom only around 110,000 have been diagnosed. COPD accounts for approximately 92% of deaths from chronic lower respiratory disease, which caused

1,950 deaths in 2024. Although the age-standardised death rate for chronic lower respiratory disease fell over the decade, the number of deaths rose by 14.6% between 2015 and 2024.

COPD places a significant burden on acute hospitals. In 2025 it was the third most common principal diagnosis among emergency inpatients, with 14,912 discharges. In 2024 there were 16,211 inpatient discharges for COPD and bronchiectasis, using 127,743 bed days, and 76.9% of these admissions were among people aged 65 years and over. Approximately one in four patients is readmitted within 90 days, and COPD-related hospital care is estimated to cost approximately €140 million a year. In 2021 Ireland's age-standardised COPD hospitalisation rate was 219.2 per 100,000 population, almost double the OECD average of 118.8 and the fourth highest of reporting countries.

Where the integrated End to End COPD Model of Care has been fully resourced, hospitalisations fell by 12% between 2018 and 2024. Fewer than one in five patients with COPD enrolled in the Chronic Disease Management Programme have undergone spirometry. There are regional variations in both hospitalisations and mortality, with age-standardised mortality for chronic lower respiratory disease ranging from 36.3 per 100,000 population in Galway to 70.5 in Longford. Around 1 in 25 people in Ireland carry a defective gene for Alpha-1 antitrypsin deficiency, the most common genetic cause of COPD.

Lung Cancer and Mesothelioma

Lung cancer is the leading cause of cancer death in Ireland in both males and females, accounting for one in five cancer deaths in 2023 (19.7%). An average of 2,859 cases were diagnosed each year between 2021 and 2023, together with 51 cases of mesothelioma. Smoking was responsible for 73% of lung cancer cases diagnosed in 2022. Mortality from lung cancer fell by 19.3% between 2015 and 2024. This pattern is more consistent with the effect of decades of tobacco control than with earlier detection.

Age-standardised five-year net survival has

improved by 166% since 1999–2003, to 25%, but remains among the lowest of any cancer. Stage at diagnosis now limits further gains. 61% of cases are diagnosed at stage III or IV and only 20% at stage I, when five-year survival is 59.5%, compared with 5.6% at stage IV. Approximately a quarter of cases are still diagnosed following an emergency presentation. Ireland screens for breast, cervical and colorectal cancer, but not for lung cancer. A Lung Health Check pilot is testing low-dose CT screening in high-risk groups in North Dublin and the North East.

Rapid Access Lung Clinics saw 97% of referred patients within 10 working days, the only rapid-access cancer pathway to meet its target. However, only 61.0% of patients received lung cancer surgery within the recommended timeframe in 2025, against a target of 90%. The radiotherapy target has not been met in any year since 2017. The National Cancer Strategy 2017–2026 expires this year.

Cystic Fibrosis

Ireland has one of the highest reported incidences of cystic fibrosis in the world. Newborn screening identified cystic fibrosis in approximately one in every 2,000 births in 2024, and 1,454 people attended an Irish cystic fibrosis centre for care that year.

Highly effective CFTR modulator therapy has changed the natural history of cystic fibrosis but has not cured it. The predicted median survival for a person born with cystic fibrosis today is 62.6 years, although this estimate is becoming less certain as the number of deaths falls. Cystic fibrosis is now an adult multisystem condition. In 2024, 62% of the registered population were adults and 17.4% were aged 40 years or older, compared with 7.7% in 2014. No member of the Cystic Fibrosis Registry of Ireland underwent a lung transplant in 2023 or 2024, compared with 20 in 2014. However, 4.1% of the registered population were ineligible for any modulator on genotype grounds, and 10.7% of those eligible were not receiving one at their last clinic visit of the year. This minority carries a disproportionate share of the disease burden, and their needs risk becoming less visible as population-level indicators improve.

An older population brings needs for which Ireland has no national pathway. Adults with cystic fibrosis have a five to ten-fold higher risk of colorectal cancer than the general

population, with onset typically two to three decades earlier. International guidance recommends screening colonoscopy from age 40 years, but there is no cystic fibrosis cancer surveillance pathway in Ireland. Twenty women with cystic fibrosis were pregnant in each of 2023 and 2024, and there is no national pre-conception, obstetric or lactation pathway. Depression and anxiety occur at two to three times general population rates, and international guidance recommends annual screening from age 12 years.

In 2024 there were 378 inpatient discharges and 1,493 day-cases for cystic fibrosis. Most care is now delivered through home intravenous therapy, outpatient and virtual review and multidisciplinary input that national hospital data do not capture, so falling admission numbers should not be read as falling demand. The healthcare needs of people with cystic fibrosis are multisystem and include respiratory, gastrointestinal, hepatic, endocrine and diabetes, and reproductive issues, malignant disease and multiple complex atypical infections. Quality of life is further compromised by the major psychological and social issues related to cystic fibrosis. The National Clinical Programme for Cystic Fibrosis (NCPCF) is a unique clinical programme that deals with the healthcare and quality of life of people with cystic fibrosis from birth to over 90 years of age. It includes nominees from the multidisciplinary cystic fibrosis teams throughout Ireland, who work together to plan and direct the delivery of care. The programme has delivered “Cystic Fibrosis: A Model of Care for Ireland” and a model of care for cystic fibrosis and lung transplantation.

Interstitial Lung Disease

Interstitial lung disease (ILD) is a group of more than 200 disorders. Many of them can progress to irreversible scarring of the lungs. An estimated 11,016 people are living with ILD in Ireland. ILD accounted for €935.9 million in annual societal cost in 2023. Neither incidence nor prevalence is measured at national level. Deaths from chronic interstitial lung disease rose by 44%, from 376 in 2016 to 540 in 2023, while deaths from sarcoidosis were unchanged at 20. Between 2013 and 2018, Ireland had the highest age- and sex-standardised mortality rate for idiopathic pulmonary fibrosis of the 24 EU countries studied: 11.1 deaths per 100,000

person-years, against a European mean of 3.9. Lung transplantation fell to 15 procedures in 2024 (all indications), the lowest total in five years. Two actions would make a great difference to ILD in Ireland. The first is a national ILD registry with multi-annual funding and public reporting. The second is formal inclusion of ILD in the National Clinical Programme.

Obstructive Sleep Apnoea

Obstructive sleep apnoea (OSA) is increasingly recognised as a public health problem internationally, owing to its high prevalence, frequent under-diagnosis and association with cardiovascular disease, type 2 diabetes and cognitive dysfunction. There is no national data on its prevalence in Ireland. On international estimates that at least 4% of middle-aged adults are affected, more than 50,000 people in Ireland may have the condition, although this is a projection rather than an Irish estimate.

Sleep studies were the seventh most common principal procedure among elective inpatients in 2024, with 1,931 procedures. There is no national screening programme. The Irish Sleep Society has called for national epidemiological research, and for targeted screening of high-risk groups such as commercial drivers.

Paediatric Respiratory Disease

Respiratory illness is the single largest cause of acute hospital activity among children in Ireland. In 2024, 23.7% of inpatient admissions among children aged 0–14 years were for respiratory disease. Respiratory diagnoses were also the most common reason for admission to paediatric critical care in the two Children's Health Ireland units, at 34% of admissions, and 92% of these admissions were unplanned. In 2023 there were 148 admissions of children aged under 16 years to adult intensive care units, more than double the number in 2022. Mortality from respiratory causes in childhood remains low and is largely confined to the perinatal period and to congenital malformations of the lung.

Prevention works. The pilot infant RSV immunisation programme for the 2024/2025 season achieved 83% uptake. Among infants born during the programme period, it was followed by a 78% reduction in RSV

hospitalisations and a 71% reduction in intensive care admissions. Routine childhood immunisation, however, is in decline. Coverage is below the WHO target of 95% for every routinely reported childhood vaccine, and pneumococcal conjugate vaccine coverage at 24 months is 80.9%. Tuberculosis notifications among children aged under 15 years rose from 8 in 2023 to 14 in 2025, the highest level since 2016. National data on paediatric respiratory activity in primary care are not available.

Prevention

Much respiratory disease is preventable. Ireland has introduced major population-level measures, including smoke-free workplace legislation, standardised tobacco packaging and childhood immunisation programmes, but preventable exposure remains substantial. In 2025, 17% of adults were current smokers. This level has been broadly unchanged since 2019, and Ireland did not meet the Tobacco Free Ireland target of below 5% by 2025. 8% of the population use e-cigarettes, rising to 18% among people aged 15–24 years, and 17% of current users have never smoked.

Poor air quality contributes to an estimated 1,700 premature deaths in Ireland each year. Ireland met EU legal air quality limits in 2024, but it did not meet the more protective WHO guideline levels for several pollutants, and it faces difficulty meeting the stricter EU standards due in 2030. Radon is the second leading cause of lung cancer after smoking, yet public awareness of radon fell from 82% in 2020 to 71% in 2025. Occupational exposures contribute to preventable cases of asthma, COPD, interstitial lung disease, lung cancer and mesothelioma. These risks follow a social gradient: smoking, poor housing conditions and hazardous occupational exposure are all more common among people experiencing disadvantage.

Pulmonary Vascular Disease

National incidence data for pulmonary embolism and prevalence data for pulmonary hypertension are not available. An analysis of Irish acute public hospital data estimated that 25,465 cases of pulmonary embolism were diagnosed among adults between 2015 and 2022, a mean annual incidence of 85 per

100,000 population. There were 149 deaths from pulmonary embolism in 2023. In 2024, pulmonary heart disease and diseases of the pulmonary circulation accounted for 2,068 inpatient discharges using 17,102 bed days. Breathlessness was reported by 65% of patients attending an Irish post-embolism clinic, which underlines the importance of structured follow-up. Pulmonary hypertension is a progressive and often fatal disease. Between 2010 and 2020, 415 patients were referred to the National Pulmonary Hypertension Unit, an estimated annual incidence of 7.93 per million population. This is lower than the incidence reported by other European centres, which suggests that the condition is under-recognised in Ireland. There were 63 deaths from pulmonary hypertension in 2023, one in five of them among people aged under 50 years. Specialist care is centralised in a single national unit with long waiting lists. Pulmonary endarterectomy and balloon pulmonary angioplasty for chronic thromboembolic pulmonary hypertension are not available in the Republic of Ireland and require referral to the United Kingdom.

Respiratory Infectious Diseases

Pneumonia remains an important cause of death and hospital activity, particularly among older people. It caused 929 deaths in 2024, over 90% of them among older people. The five-year age-standardised death rate for pneumonia fell by around two fifths, from 38.87 per 100,000 population in 2015–2019 to 23.82 in 2020–2024. The sharpest fall came in 2020, however, and much of it reflects the certification of deaths to COVID-19 rather than a fall in deaths from lower respiratory infection. Influenza caused 176 deaths in 2024, the highest annual number since at least 2016.

In 2024 there were 17,965 inpatient discharges for pneumonia, using 178,572 bed days, or 31% of all respiratory inpatient bed days; 62.8% of these admissions were among people aged 65 years and over. Influenza notifications reached 38,762 in 2025, the highest of the past six years. Vaccine-preventable infections have re-emerged: pertussis notifications rose from 18 in 2023 to 713 in 2024, and measles notifications from 4 to 207. In 2025 pertussis notifications fell to 348 and measles to 51, both still well above

pre-2024 levels, and there were 7,774 RSV notifications. Invasive pneumococcal disease is rising: incidence increased from 8.4 per 100,000 population in 2023 to 9.5 in 2024, when 488 confirmed cases and 38 deaths were reported. Chronic lung disease was the most commonly recorded risk factor, and disease caused by non-vaccine serotypes increased, particularly among people aged 65 years and over. In 2025 there were 1,554 notified outbreaks of respiratory infection, affecting 11,745 people. Surveillance reporting has not fully recovered from the pandemic: several HPSC annual epidemiological reports from 2019 onwards were not published, so some national figures on respiratory infection are available only for earlier years.

Tuberculosis

Ireland remains a low-incidence country for tuberculosis (TB), with 285 cases notified in 2025, a rate of 5.2 per 100,000 population. However, notifications have returned to pre-pandemic levels and are no longer falling. The number of cases notified in 2025 was more than double the level consistent with the WHO End TB Strategy target for 2030. Notifications among children rose to 14 in 2025, the highest since 2016. An Irish study of 85 patients found the median time from symptom onset to treatment is 110 days. In 2024 TB accounted for 216 hospital admissions and 4,002 bed days.

Ireland's first National TB Strategy was published in 2024. Two years in, of the fifteen actions prioritised for the first year, two have been delivered and seven have not yet begun, and the National TB Lead post remains vacant. A selective BCG vaccination programme for higher-risk infants began with babies born from 1 June 2026. It will begin to close a gap that has been open since universal neonatal vaccination ceased in 2015.

Respiratory Disease Burden for Older People

Respiratory disease falls most heavily on older people, and the older population is growing fastest. The number of people aged 65 years and over rose by 36.7% between 2016 and 2025, more than twice the growth of the population as a whole. In 2024 the age-standardised death rate from respiratory disease was 780.7 per 100,000 among people

aged 65 years and over, against 17.2 among those aged under 65 years, and respiratory disease accounted for 20.7% of the all-cause death rate in this age group, little changed from 20.1% in 2016. More than nine in ten deaths from chronic lower respiratory disease, pneumonia and chronic interstitial lung disease occur at 65 years and over.

People aged 65 years and over accounted for 53.4% of respiratory inpatient admissions in 2025 but 73.3% of respiratory inpatient bed days, because length of stay rises from 7.98 days at ages 65–74 to 11.21 days at 85 years and over. In 2024 older people accounted for 76.9% of admissions for COPD and bronchiectasis and 82.0% of the bed days for that grouping, for 66.9% of lung cancer admissions and for 62.8% of pneumonia admissions. Because bed demand is concentrated in the oldest age groups, and those groups are growing fastest, respiratory bed days will rise faster than admissions unless more care is delivered in the community.

Ireland performs well on influenza vaccination in this age group, with uptake of 75.4% among people aged 65 years and over against an OECD average of 52.4%. It has 3.5 long-term care workers per 100 people aged 65 years and over against an OECD average of 5.0, and 2.9 hospital beds per 1,000 population against 4.2, with 545 avoidable hospital admissions per 100,000 population against an OECD average of 473. RSV vaccination is recommended for adults aged 75 years and over and other high-risk groups, but has not been introduced as a funded programme. No national data are available on the prevalence of chronic respiratory disease among older people, or on respiratory prescribing by age.

Call to Action

The enjoyment of the highest attainable standard of health is a fundamental human right. Achieving it for people in Ireland requires more than a further description of the problem. Therefore, we make three specific asks of Government.

1. A National Respiratory Strategy. Ireland needs a single, over-arching national strategy for respiratory health, covering the acute and chronic conditions set out in this report and

spanning prevention, diagnosis, treatment, rehabilitation and end-of-life care. Its priorities should include national data on the prevalence and outcomes of respiratory disease, early and objective diagnosis in the community, a national lung cancer screening programme, restoration of childhood immunisation uptake to 95%, a tobacco-free generation, air quality standards aligned with WHO guideline values, equitable access to treatment and specialist services, and a respiratory workforce resourced to meet the growing needs of an ageing population.

The individual stand-alone national clinical programmes will continue to play a vital role in the planning and delivery of care for those living with respiratory diseases, standardising care quality and improving health outcomes.

2. A Respiratory Steering Group to deliver it.

The strategy should be developed by an expert Steering Group with a named independent chair, reporting directly to the Minister for Health, comprising policymakers, clinicians across primary and secondary care, allied health professionals, researchers, patient organisations, patients and carers. The Steering Group should publish the strategy within a defined timeframe and continue thereafter as the body responsible for independent oversight of implementation and annual public progress reporting.

3. An Implementation plan with multi-annual funding. A strategy without committed resources changes nothing. The experience of respiratory and cancer care in Ireland is that published plans stall in the absence of dedicated, protected funding. The Respiratory Strategy must therefore be accompanied from the outset by a costed implementation plan with multi-annual funding attached to each commitment, and with responsibility for delivery assigned.