

The Irish Longitudinal  
Study on Ageing

The Irish Longitudinal Study on Ageing

# TILDA at 20

Two Decades of Insight into Life,  
Health and Ageing in Ireland



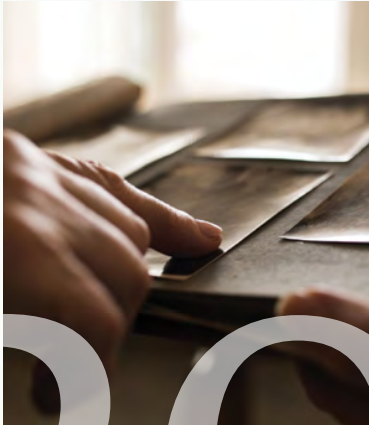
An Roinn Sláinte  
Department of Health

**HR<sup>B</sup>** Health  
Research  
Board

*The*  
**ATLANTIC**  
*Philanthropies*



WHO Collaborating Centre  
for Longitudinal Studies  
on Ageing and the Life Course



---

# Introduction

Over the past two decades, Ireland has experienced a profound demographic transition. People are living longer than ever before, changing the experience of ageing in ways that are both complex and full of opportunity. To understand this transformation, The Irish Longitudinal Study on Ageing (TILDA) was established in 2006 to track how health, social circumstances, and economic factors interact over time.

This document brings together key insights from 20 years of TILDA research. It highlights what we have learned about growing older in Ireland and demonstrates how this rich evidence base has informed national policy, healthcare practice, and planning for the future.

At the heart of this work are the thousands of participants across the country who have dedicated their time and personal experiences over many years. Their continued involvement has created an evolving picture of ageing, providing the vital knowledge needed to improve outcomes for future generations.

# Why ageing matters now

*“Ageing is not simply about living longer. It is about ensuring those extra years are lived with health, independence and purpose.”*

**Professor  
Rose Anne Kenny,**  
Founding Principal  
Investigator, TILDA



---

Ireland's population is ageing at an unprecedented rate. The number of people aged 65 and over is projected to double by 2051, with significant implications for healthcare, communities and the economy.

But ageing is not simply a challenge to be managed. It is also a reflection of progress. Improvements in healthcare and living conditions mean more people are living longer lives. The central question is no longer whether people are living longer, but how those additional years are experienced.

TILDA shows how this can be achieved. By following individuals over time, it reveals how health, lifestyle and social circumstances interact to shape ageing trajectories.

A consistent finding is that many of the factors influencing ageing are not fixed. They can be modified through prevention, early intervention and supportive environments. This creates an opportunity not only to improve outcomes for today's older population, but to shape healthier ageing for future generations.

# Understanding Ageing Over Time

TILDA is Ireland's national study of ageing. Since 2006, it has followed over 10,000 adults aged 50 and over, collecting detailed information on their health, social circumstances and economic wellbeing every two years.

Unlike one-off studies, TILDA tracks the same individuals over time. This allows researchers to observe how lives change, how health evolves and how different factors influence outcomes as people age.

Data collection combines in-depth interviews, self-completed questionnaires and comprehensive health assessments, including clinical measures and biological samples. TILDA also created Ireland's first national biobank for ageing research, enabling new insights into how and why we age.

TILDA examines ageing across interconnected areas: physical health, cognitive function, mental wellbeing, economic circumstances, lifestyle behaviours and social participation. Bringing these together offers a holistic view.

---

TILDA is recognised as a research infrastructure of national and international significance. Since 2024, it has been designated a WHO Collaborating Centre for Longitudinal Studies on Ageing and the Life Course and forms part of a global network of longitudinal ageing studies.

Most importantly, TILDA is made possible by its participants. Alongside taking part in the study, many contribute through the Public and Patient Involvement (PPI) group, helping to shape research priorities and study design. Their contribution reflects a shared national effort to better understand ageing and improve outcomes for future generations.

*“Ageing unfolds over time,  
and understanding it requires  
following lives over time.”*



# Data Collection Waves

Since 2006, TILDA has followed the lives of thousands of adults across Ireland, building one of the most comprehensive longitudinal studies of ageing in the world.

Since then, each wave adds a new layer of insight into how health, social circumstances and economic wellbeing evolve over time.



**PILOT**  
2006-09

## Establishing TILDA

Design, piloting and infrastructure development created Ireland's first longitudinal study on ageing.



**WAVE 1**  
2009-11

## The Baseline

More than 8,000 adults aged 50+ joined TILDA, creating a nationally representative picture of ageing in Ireland.



**WAVE 2**  
2012

## Tracking Change

Repeated measures began revealing how health, social and economic experiences evolve over time.



**WAVE 8**  
2026+



**WAVE 7**  
2024-2025

**Looking Forward**

TILDA continues to generate evidence to support healthier, longer and more connected lives.



**WAVE 6**  
2020-2023

**Renewal and Expansion**

New measures and continued follow-up deepened understanding of ageing in a changing Ireland.



**WAVE 5**  
2018

**Expanding the Evidence**

Evidence showed ageing is diverse and shaped across the life course.



**WAVE 4**  
2016

**Growing Research Impact**

Insights from TILDA increasingly informed policy, clinical practice and public understanding.



**WAVE 3**  
2014-15

**Building Understanding**

Understanding how environment and life circumstances shape ageing.



# TILDA at

## Twenty years of evidence,

**10,500**

participants  
across Ireland



**17**

years of  
longitudinal data



**650+**

peer-reviewed  
publications



**1000+**

researchers  
using TILDA data  
internationally

**600+**

trained interviewers  
across all waves



**50m+**

data points across  
waves and biomarkers



**80+**

PhDs and postdocs  
trained

**50+**

national reports



# a Glance

## infrastructure and impact

500+



national and international policy documents

140+

citations in Oireachtas debates



20+

international partners and 15+ universities collaborating



4000+



professionals trained through the TILDA Frailty Programme



300+

jobs created: interviewers, nurses, analysts



23

members of the Public and Patient Involvement group

network of



19

international longitudinal studies on ageing

# 20 Insights

## Evidence from TILDA: Building a

---

**1 in 8**

adults are deficient in vitamin B12 and 1 in 7 in folate

---

---

**Vitamin D**

deficiency is widespread, especially in winter

---

---

**Positive perceptions**

of ageing are linked to better health and more active lives

---

---

**1 in 4**

older adults receive inappropriate medications

---

---

TILDA evidence has informed **Irish Policy**

---

---

**74%**

of older adults take part in social activities each week

---

---

Only **20-30%** of ageing is explained by genetics

---

---

Coastal blue space supports **Mental Health**

---

---

Over **1 in 3** older adults live with multiple conditions

---

---

**Tooth loss** is linked to poorer health and higher mortality

---

# from 20 Years

## better future for ageing in Ireland



---

Over  
**1 in 3**  
older adults  
take 5 or more  
medications

---

---

Open-fire  
smoke harms  
**brain  
health**

---

---

Lifelong learning  
strengthens  
**brain  
resilience**

---

---

**Cleaner  
air**  
reduces chronic  
lung disease

---

---

**Wellbeing**  
often improves  
from midlife into  
older age

---

---

**45%**  
of adults  
aged  
50+ own a  
pet

---

---

The built  
environment  
shapes  
**Autonomy**

---

---

**Wealth  
and Health**  
move together  
in later life

---

---

**1 in 6**  
adults over  
50 provide  
regular unpaid  
care

---

---

**Complex  
needs**  
drives most  
healthcare use

---

## How We Age

The following pages explore what TILDA has revealed about ageing in Ireland across three key areas: health, social connection and economic wellbeing.

Together, these findings show that later life is shaped by many connected influences. Physical and mental health, relationships, community, work, income and access to support all play an important role in how people experience ageing.

Importantly, TILDA shows that ageing trajectories can change. Risks can build over time, but the right supports, environments and interventions can help people live longer, healthier and more fulfilling lives.



Exploring the  
three key areas



Health  
Social  
Economic

*“How we age is shaped not only by health, but by connection, purpose and the environments ground us.”*

# Health

## Health in later life and ageing

Health in later life is shaped by biological, behavioural and social factors that interact over time. The environments people live in, from the air they breathe to the homes they heat, also leave their mark.

TILDA's longitudinal approach makes it possible to observe these processes as they unfold. This provides insight not only into disease, but into trajectories of health, resilience and decline.

Most people in Ireland aged 50 and over rate their health as good or very good, a finding that challenges many assumptions about ageing.

*“Many conditions  
associated with ageing  
are not inevitable.”*



---

Many conditions associated with ageing are not inevitable: they are linked to modifiable factors such as early detection, treatment, physical activity and social engagement.

Health in later life is shaped by many connected influences, from clinical care and physical activity to environment and daily life.

The research insights that follow explore how TILDA has advanced understanding of cardiovascular health, falls and cognitive ageing, and how that evidence has informed practice and policy.



## → Cardiovascular Health

Hypertension and atrial fibrillation:  
hidden, treatable, important.

TILDA has provided detailed evidence on cardiovascular health in Ireland, highlighting both the scale of risk and the challenges of detection.

Hypertension affects approximately two-thirds of adults aged 50 and over. Yet many people are unaware they have the condition or do not have it adequately controlled. Because hypertension often presents without symptoms, it can go undetected until a serious health event.

Awareness and treatment have improved over time, but effective control remains a challenge: particularly among individuals with multiple conditions.

*“Hypertension often  
has no symptoms.”*



---

Atrial fibrillation, a type of abnormal heart rhythm, presents a related challenge. Although less common, it carries a high risk of stroke and is frequently missed. TILDA found that many individuals were unaware of their condition, and some at high risk were not receiving appropriate treatment.

Both conditions are linked to broader aspects of ageing, including mobility and cognitive health. These findings support a more integrated approach to cardiovascular care, with greater emphasis on early detection and primary care monitoring.

*“Many cardiovascular risks are treatable.”*



## → Falls and Physical Resilience

From accident to opportunity for prevention.

Falls are one of the most common causes of injury and loss of independence in later life. TILDA found that around 1 in 5 adults aged 50 and over reported at least one fall in the past year, with about 1 in 10 needing medical attention.


Falls are rarely caused by a single factor. They typically reflect a combination of blood pressure changes, medication use, reduced strength and balance, and underlying health status.

Orthostatic hypotension (a drop in blood pressure when standing) has been identified as an important and often missed contributor, more than doubling the risk of falling. Low vitamin D also adds further risk.

Fear of falling matters too. It can lead to reduced activity, which in turn weakens the body and increases vulnerability to further falls.

---

TILDA evidence has helped to shape Ireland's national falls prevention strategy and informed new prevention programmes now active across hospitals nationwide. Early studies have shown reduced readmissions and highlighted the potential to prevent many falls before they occur.

A photograph of an older woman with short grey hair and glasses, wearing an orange and white striped long-sleeved shirt. She is standing on a beach with her arms raised in the air, smiling broadly. The background shows the ocean and a cloudy sky.

*“Falls are not  
an inevitable part  
of ageing.”*

## → Cognitive Reserve

Brain health is built across the life course.

Cognitive ageing varies widely between individuals, and TILDA shows clearly why. Education is among the most powerful influences: those with greater educational attainment tend to maintain sharper cognitive function for longer, with early investment in learning providing protection that extends across the entire life course. Social engagement and physical health add further layers of resilience.

The concept of cognitive reserve helps explain this variation. People who remain mentally and socially active appear better able to maintain function over time.

Together, these findings show that brain health in later life is shaped by many factors, and that opportunities to support cognitive health begin much earlier than old age.

*“Brain health is shaped  
long before old age.”*



*“The environments we live in shape how we age.”*

## → The Air We Breathe

### Environment also shapes cognitive health

Environmental exposures also play a role in cognitive health. TILDA research found that indoor air pollution from open fires, particularly peat and coal, was associated with poorer cognitive outcomes, with some of the strongest effects seen among women.

These findings highlight that brain health is shaped not only by medical care, but also by the environments in which people live.

# Social

## Social Dimensions of Ageing

Ageing is shaped not only by health, but by the social and physical environments people live in. Relationships, participation, purpose, and place all influence wellbeing over time.

TILDA's evidence shows that social factors (connection, caregiving, community life) are closely linked to mental and physical health outcomes.

The findings also point to a more nuanced picture of ageing. While some experience increased vulnerability, many report stable or improving quality of life, particularly in early older age.

The research insights that follow illustrate how social experiences shape ageing trajectories, and how the spaces around us, from local neighbourhoods to coastlines, can support or hinder a good later life.



*“Connection, purpose  
and place shape how we  
experience ageing.”*



## → Quality of Life

Wellbeing after 50: not a simple decline.

Contrary to common assumptions, wellbeing in later life does not follow a simple downward path. TILDA shows it often improves from age 50 into the mid-60s, before gradually declining at older ages.

A substantial majority of older adults maintain stable or improving wellbeing over time. For many, later life brings greater autonomy, reduced work pressures and more time for family, friendships and personal interests.

TILDA's findings paint an especially encouraging picture for women, many of whom describe the years after active parenting as a period of renewed freedom, purpose and social connection.

Social engagement is a particularly strong influence: regular participation in community life is consistently linked to higher wellbeing. Loneliness, while less widespread, has a disproportionate negative effect.



Physical capability and economic security matter too, supporting independence and continued participation. Where conditions such as multimorbidity or depression do reduce quality of life, their impact can be softened by social engagement and good care.

Together, these findings challenge the idea that ageing is defined by decline. For many, later life is a period of stability, adaptation and continued wellbeing: a foundation for national approaches to positive ageing.

*“Later life can bring renewed freedom, purpose and connection.”*

## → Social Connection and Wellbeing

Strong social networks support health, resilience and quality of life.

Most older adults in Ireland maintain strong social connections. TILDA shows that relationships, community participation and meaningful social contact are central to wellbeing in later life.

Strong social connection can help buffer against the challenges that sometimes accompany ageing. However, persistent loneliness remains a significant issue, particularly among those living alone, recently bereaved or managing complex health difficulties.


TILDA shows that loneliness is not just a social concern. People who are persistently lonely are more likely to experience depression, use healthcare services more often, and report lower quality of life.

Importantly, loneliness is not fixed. It rises and falls with life events and wider conditions. During the COVID-19 pandemic, levels increased sharply before partly recovering: evidence of both the fragility of social connection and the capacity to rebuild it.

---

Protective factors matter. Regular social participation, contact with family and friends, and increasingly digital connection all help. So does environment. TILDA research has linked higher exposure to coastal blue space, particularly sea views, to lower depression scores in older adults.

These findings frame loneliness as a modifiable public health issue. TILDA evidence has informed national responses, including social prescribing and partnerships with organisations such as ALONE that strengthen everyday connection.



*“Connection protects health and wellbeing across later life.”*

## → Caregiving and Social Contribution

Supporting those who support others.

Informal caregiving is central to Irish society. Many adults aged 50 and over provide regular care to spouses, parents and family members over extended periods.

For many, caregiving brings purpose, connection and meaning. But where care is intensive or sustained, it can also affect mental health, quality of life and physical wellbeing, particularly for those balancing responsibilities across generations.

TILDA's longitudinal data show that caregiving roles change over time, and that outcomes are shaped not only by the level of care provided, but by the supports available to carers themselves.

TILDA evidence has helped support stronger recognition of carers through respite supports, financial assistance and community partnerships with organisations such as Family Carers Ireland.

---

## → Age-Friendly Environments

Designing places for longer lives.

TILDA's impact extends beyond healthcare and into the design of everyday environments.

Research showed that many older adults could not cross roads safely within the time allowed at pedestrian crossings. In response, crossing times were reviewed and adjusted in parts of Dublin, improving accessibility and confidence for many older people.

TILDA findings also highlight the wider importance of place. Access to green and blue spaces supports mental health and physical activity, while poor walkability, limited seating and unsafe crossings can reduce independence and social participation.

Small changes to the built environment can have a significant impact on wellbeing, mobility and quality of life.

*“Caregiving is both contribution and care.”*

## → Creativity, Hobbies, and Everyday Connection

Where wellbeing is built day to day.

Everyday activities matter. Around 42 percent of adults aged 50 and over take part each week in hobbies such as gardening, crafts or other creative pursuits: often in shared or community settings that sustain social networks over time.

Creative and cultural participation is particularly powerful. Involvement in arts, music or group-based activities provides shared experience, expression, and a sense of belonging, all linked to higher wellbeing.

Pets are another, often overlooked, pathway to connection. Around 28 percent of older adults own a pet, most commonly a dog or cat. Pets bring companionship and routine, while dog walking in particular supports physical activity and casual contact with neighbours.

These forms of participation are remarkably stable over time and can play a protective role during transitions such as bereavement or a change in living circumstances.

---

TILDA evidence has helped demonstrate the importance of cultural and community participation for healthy ageing. Through collaboration with Creative Ireland, this work highlights how creativity, arts, and community engagement can support wellbeing, social connection, and quality of life in later life.

*“Shared activities create connection across generations.”*



# Economic

## Economic Dimensions of Ageing

Financial security shapes how people experience ageing. TILDA shows that income, pensions, work, caregiving, and the homes people live in all influence wellbeing in later life.

As people live longer, many now spend extended periods in retirement. This raises new questions about whether income, savings, and pension systems can support longer lives.

TILDA highlights that financial circumstances are closely tied to health, independence and quality of life.

Economic experiences vary widely, influenced by employment history, gender, and access to resources. The research insights that follow illustrate how economic factors shape ageing, and how this evidence has informed policy and planning in Ireland.



*“Economic security  
shapes how we age.”*

## → Retirement and Economic Security

Longer lives, changing transitions.

Patterns of work and retirement have changed significantly over recent decades. Many people now spend longer periods in retirement, while others remain in work later in life.

TILDA shows considerable variation in financial preparedness, shaped by employment history, pension coverage and income. Women in particular are more likely to rely on the State Pension, often reflecting time spent outside paid employment due to caregiving.

Retirement is not a uniform experience. For some, it brings flexibility and opportunity; for others, particularly those with limited resources or poorer health, it can increase vulnerability.

These findings have informed discussions around pension reform and long-term financial security in Ireland.

*“Care is one of society’s more valuable forms of work.”*

---

## → The Hidden Economy of Care

Valuing what is given freely.

One of TILDA's most significant economic findings concerns the scale and value of informal care. Many adults aged 50 and over provide regular unpaid support to family members and others in need.

The estimated annual value of this care exceeds €4 billion, highlighting its central role in sustaining families, communities and health services.

But caregiving can also carry financial and personal costs. Those providing intensive care are more likely to experience reduced income, fewer employment opportunities and increased strain over time.

TILDA's findings have contributed to greater recognition of carers within national policy, including financial supports, respite services and broader acknowledgement of informal care as part of Ireland's economic foundation.

## → Inequality, Wealth and Health

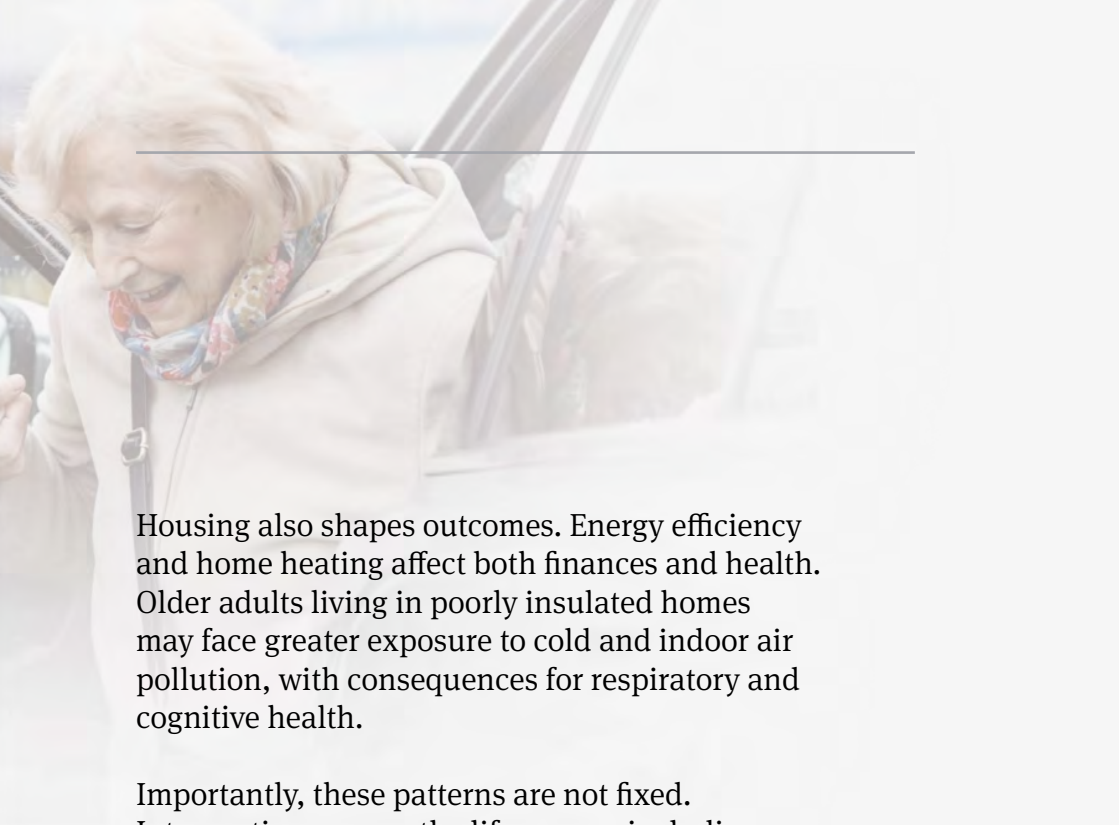
The economic gradient in ageing.

Wealth and health move together in later life. Adults with higher incomes and assets are more likely to experience better health, lower disability, and longer life expectancy.

Those with fewer economic resources are more likely to experience chronic illness, poorer physical function, and reduced quality of life.

TILDA shows that these differences build across the life course. Inequalities in education, employment, housing and access to services accumulate with age, shaping health and independence in later life.

The study's longitudinal design has been particularly valuable in showing how these trajectories widen over time. Education, in particular, emerges as a powerful life-course influence, shaping employment opportunities, health behaviours and cognitive resilience across later life.



---

Housing also shapes outcomes. Energy efficiency and home heating affect both finances and health. Older adults living in poorly insulated homes may face greater exposure to cold and indoor air pollution, with consequences for respiratory and cognitive health.

Importantly, these patterns are not fixed. Interventions across the life course, including education, healthcare access, income supports and improved housing, can reduce inequalities and improve later-life outcomes.

TILDA's evidence has strengthened understanding of how inequality becomes embedded over time and has informed national discussions on health equity, prevention and the targeting of supports to those most at risk.

*“Later-life outcomes are shaped long before old age.”*

---

## Looking Ahead

Over twenty years, TILDA has transformed understanding of ageing in Ireland. The findings show that ageing is shaped by health, financial security, social connection and the places people live. They also show that many of the factors influencing ageing can be changed: through early intervention, supportive environments and access to good care.

These insights are relevant not only for those currently in later life, but for future generations. Ageing is a lifelong process, influenced by education, work, relationships and environment.

As Ireland's population continues to age, the evidence generated by TILDA will remain central to planning for the future. By bringing together health, social and economic perspectives, the study provides a foundation for policies that support longer, healthier and more connected lives.

TILDA continues to evolve, supported by the ongoing commitment of its participants. Their contribution ensures that our understanding of ageing in Ireland will continue to grow in the years ahead.





---

# Thank You

TILDA is a collective achievement.

Built over twenty years through the generosity of participants and the dedication of researchers, funders, supporters and partners.

With gratitude to all those who have made this work possible.

TILDA was established with investment from the Department of Health, The Atlantic Philanthropies and Irish Life. It is currently funded by the Department of Health, with funding administered by the Health Research Board. This sustained investment has enabled TILDA to become one of the world's most comprehensive studies of ageing.

