

# Growing well to live well:

## Understanding the burden of disease





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## Foreword

Health is more than the absence of illness, it is a resource for life that needs care and nurture. Yet, traditional approaches often frame health through a narrow biomedical lens, focusing on diagnosis and treatment rather than prevention. This limits opportunities to create lasting change. Similarly, attributing chronic disease and early death solely to poor lifestyle choices overlooks the deeper social and economic factors that shape health across the life course.

Too often, what we call early intervention happens after opportunities have already been lost. In Ayrshire and Arran, the consequences are stark: too many lives cut short by violence, suicide, drug-related deaths, and alcohol harms. These patterns are not random, they reflect decades of structural inequality and adversity, compounded by the collapse of core industries and tourism in the 1980s, the financial crash of 2008, the COVID-19 pandemic and ongoing constraints on public finances. These events have left a profound mark on families and communities.

This Director of Public Health Report calls for a different approach, one rooted in curiosity, compassion, and an understanding of health as a shared resource. It offers actionable insights to help translate system intent into real experiences of accessible care, matched to need at the earliest point. By recognising the intersecting challenges faced by those most disadvantaged, we can design services that respond to people's lives, not just their symptoms.

Change is possible, and within our grasp, if we act together. Professionals, communities, and systems all have a role to play in creating conditions where health can flourish. Together, we have the opportunity to turn adversity into progress and create a future where every person in Ayrshire and Arran can live well.







## Introduction

Scotland, and Ayrshire and Arran in particular, is facing significant challenges in health and wellbeing. Life expectancy is no longer improving for the most disadvantaged communities, and more people are living longer but in poorer health. At the same time, the healthcare system is under pressure due to limited resources and funding, and public trust in health and social care is being tested. The overall burden of disease is projected to rise by 21%, with the most disadvantaged groups affected the most.

To respond effectively, we must focus on prevention and invest in the conditions that empower people to live healthier lives. This includes safe relationships, secure housing, access to education and healthcare and fair employment or adequate income. These factors are especially important in the early years of life, as they shape long-term health outcomes. Strengthening these foundations can improve health across all ages and reduce inequalities.

This Director of Public Health Report aims to support the local implementation of national policy in Ayrshire by providing clear, actionable insights. It seeks to guide the best use of finite resources to improve health outcomes for all communities, across all ages, from pre-birth to later life, and across diverse settings including urban, rural, affluent and disadvantaged areas. The report aligns with key national strategies, including Scotland's Population Health Framework, Scotland's Public Sector Reform Strategy: Delivering for Scotland and the Vision for Health and Social Care Scotland. These frameworks set out a refreshed direction for improving population health, reducing inequalities, and ensuring public services are sustainable, effective and person-centred.

Despite the pressures, there are many opportunities to affect change. The NHS can act as an Anchor Organisation, using its reach and resources to promote prevention through both universal and targeted approaches. There is growing evidence on the value of investing in preventive potential, realistic medicine, and maximising opportunities for proportionate universalism to improve outcomes and reduce inequality. Collaborations, such as with the Centre for Health Equity and the application of Marmot principles, offer practical ways to embed fairness and effectiveness in service design. By further improving the way we work together across sectors and communities, we can build a healthier, more equitable future for Ayrshire and beyond.

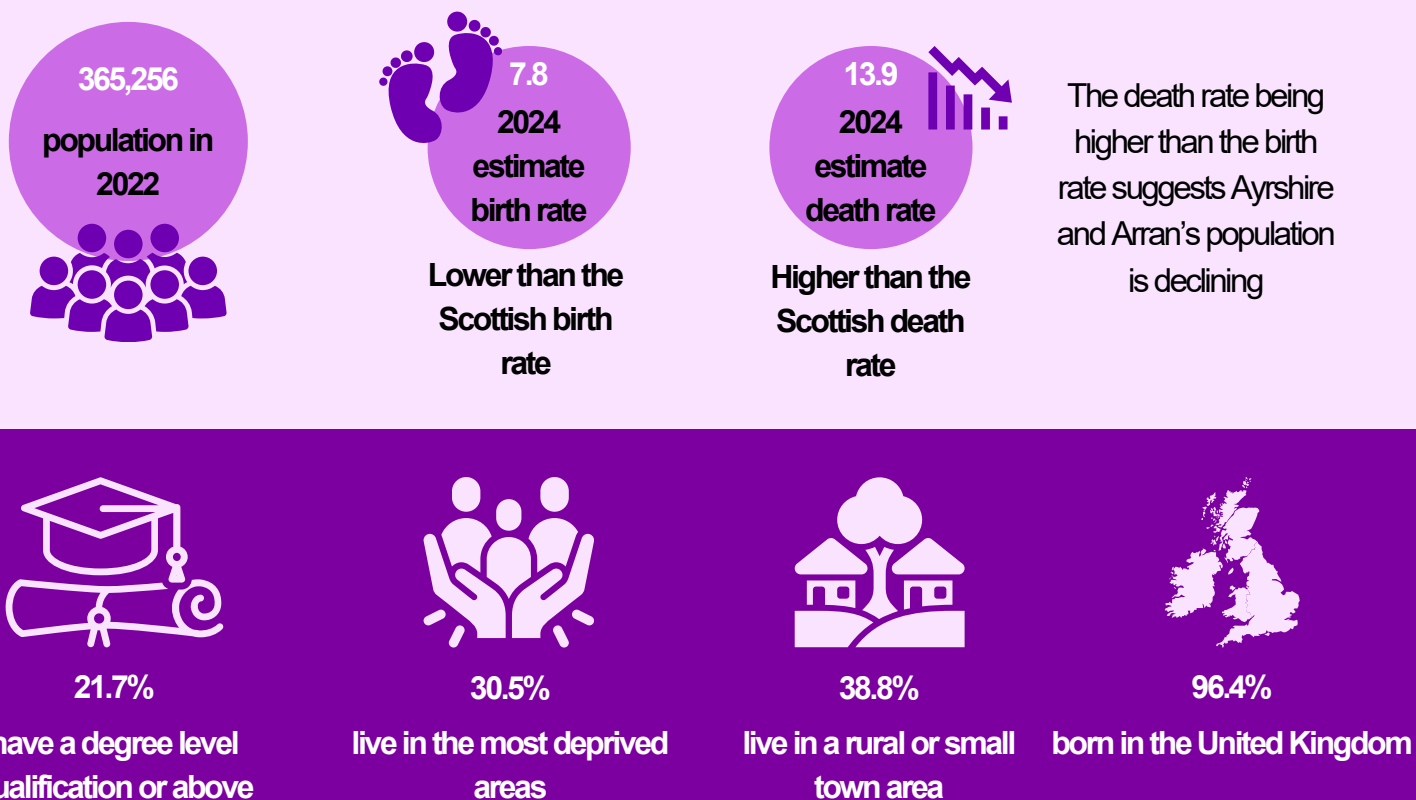


## Understanding the Population of Ayrshire and Arran

Insights into the population of NHS Ayrshire and Arran are detailed in Figure 1. They show an overall declining population where more people are dying than are being born or moving into the area<sup>(1)</sup>. At the same time, the population is ageing as less babies are born. Nearly one in three citizens live in the most deprived communities. Rurality is also a main feature of Ayrshire and Arran's geographical make up, with many people living in remote or small-town areas. There is a small ethnic minority population of 3.6%<sup>(2)</sup>.

Figure 1. Demography

### According to the 2022 Scotland Census and National Records Scotland



[Click Here for the Scottish Census](#)

In 2024, there were 2812 births in Ayrshire and Arran, accounting for 6.1% of all births in Scotland for that year. The majority of these births occurred in East and North Ayrshire, 1043 and 1012 respectively. In the same year, there were 5178 deaths in Ayrshire and Arran, accounting for 8.3% of all Scottish deaths in 2024<sup>(1)</sup>.



### The Urban Rural Classification<sup>(3)</sup>

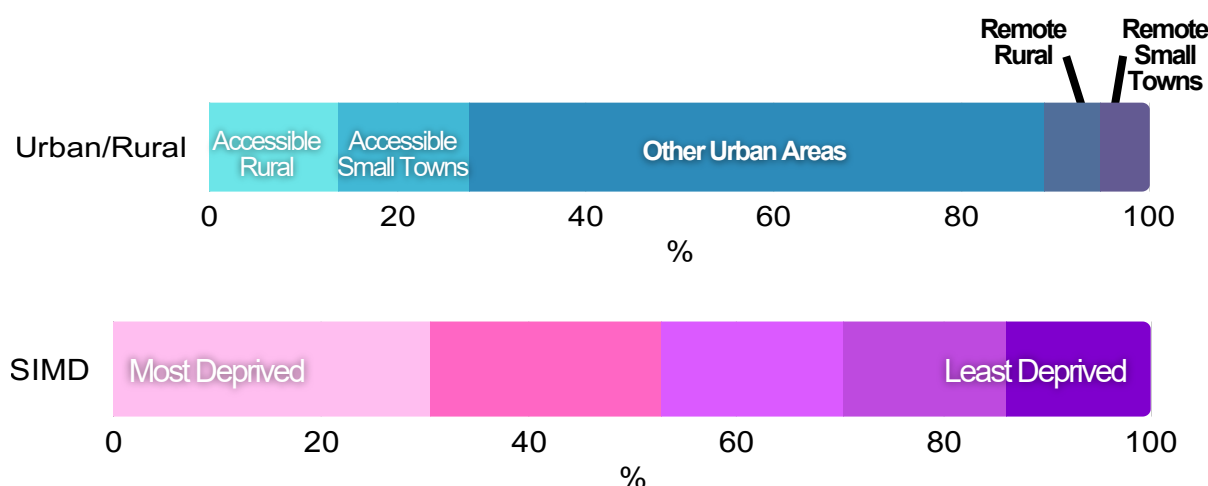
Details the balance of the population living in a range of urban or built-up areas and rural and country areas.

### Scottish Index of Multiple Deprivation<sup>(4)</sup>

Details the areas of greatest deprivation across Scotland.

Together, these measures provide information on the challenges in family and community life. In Ayrshire and Arran, the two measures indicate high levels of population deprivation across urban and rural communities, shown in Figure 2 below.

Figure 2. Scottish Index of Multiple Deprivation of Ayrshire and Arran



Geographical isolation creates barriers to healthcare and increases the inequalities faced by Ayrshire and Arran's rural communities. Poor transport links, fuel poverty and length of travel impact on the ease of access to services for rural populations. These issues highlight the importance of efforts to increase primary, secondary and tertiary prevention measures in these rural communities and to improve health outcomes within these populations. The ultimate goal is to reduce unplanned care and manage planned care more effectively in order to reduce the inequalities experienced by Ayrshire and Arran's rural communities.



## A Life Course Lens

This report brings attention to the key risks and influences that have shaped the experience of health for the Ayrshire and Arran population over time, and that continue to influence health outcomes to the current time through a life-course lens. This approach provides texture and context for the experience of both health and illness across a life and between generations.

The approach:

- Captures the consistent features in life as well as the twists and turns in the paths of individual lives.
- Recognises the influence of historical changes on human behaviour.
- Recognises the importance of timing of lives, not just in terms of chronological age, but also in terms of biological age, psychological age, social age, and spiritual age.
- Captures and defines the ways in which humans are interdependent.
- Understands and focuses on the family as mediator of life experiences and how people learn and acquire the skills to navigate and negotiate the wider world and life.
- Details that all people have choices in navigating their life journey, even as there can be constraints alongside opportunities.
- Celebrates diversity in life journeys and the many origins and sources of that diversity.
- Is clear of the linkages and associations between childhood and adolescence, early adulthood, middle and later years of life.

Exploring the intersection of challenge and adversity, alongside opportunities and hope in community and family life, informs an understanding how health is mediated for individuals alongside preventive opportunities to reduce the development of poor outcomes/chronic illness and disease.

This is informed by understanding of each of the following and intersections and associations between each of them:

- Health as a fundamental human right.<sup>(5)</sup>
- Health inextricably linked to community and planetary wellbeing.<sup>(6)</sup>
- Health as a resource (physical, mental and spiritual) for and across life.<sup>(7)</sup>

This report provides examples of challenges for the populations of Ayrshire and Arran and opportunities being realised for preventive work across the life course. The report provides context for the challenges of the population that translate into challenges for the provision of health and social care and wider partner services (education, housing, police, fire-service, third sector and business).



## Health as a Fundamental Human Right

The Universal Declaration of Human Rights details how human rights are the rights and freedoms that all people have, as all are born equal. These include the right to life, to be free from torture and abuse; to go to school and to work; to have the right to shelter and to food; and the right to practise a religion and the right to think, and say what people want to, as long as it doesn't cause harm to anyone.

Human rights can also be understood as detailing the underpinning requirements for all people to grow, develop and live well in the context of family, community and civil life. In the absence of rights not being accessed or assured, health and wellbeing are compromised.

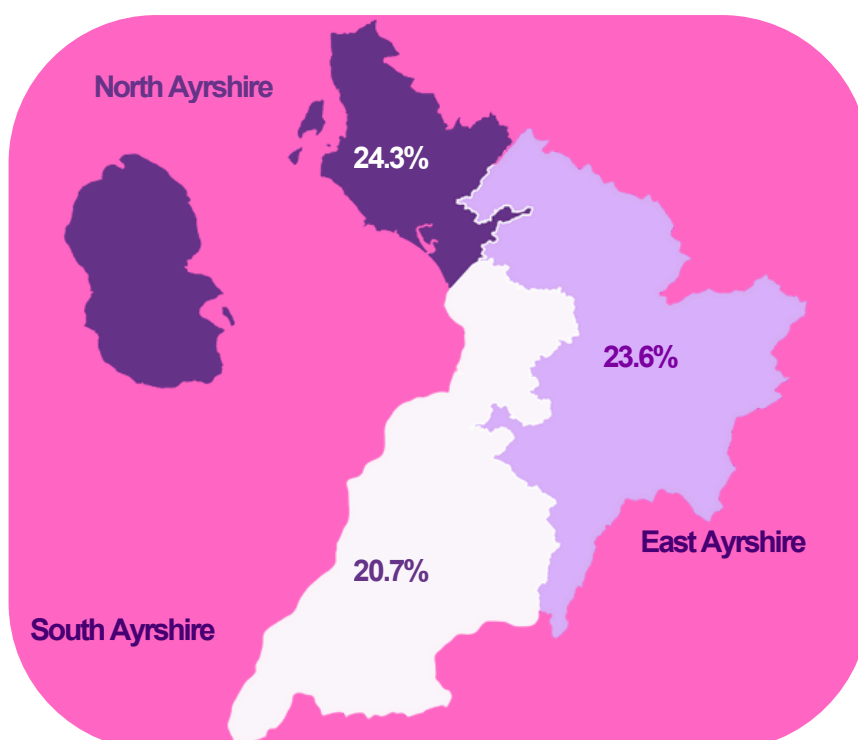
Investing in health is not simply about reducing health care costs. Rather it is about investing in human health, happiness and wellbeing, with an understanding of the intersections of family, individual and family and what helps and what hinders for all people to live well and in good health.

### Spotlight: Poverty

Poverty in Ayrshire and Arran is a multifaceted issue influenced by various social, economic and geographical factors. Child poverty is of particular concern, with each of the Ayrshire local authorities experiencing higher levels of child poverty than the Scottish average percentage<sup>(8)</sup>, as detailed in Figure 3. This can come about from low household income, parental unemployment and high levels of housing insecurity.

Figure 3. Child Poverty

% of children aged under 16 living in relative poverty, after housing costs





According to EndPoverty (2025)<sup>(9)</sup>, relative poverty is: “the level of poverty that changes based on context– it is relative to the economic climate. Relative poverty is when a household receives 60% of the average household income in their own economy. They do have some money, however, not enough to afford anything above the basics.”

In 2023/24, North Ayrshire had the highest percentage of children aged under 16 living in relative poverty, after housing costs, in Ayrshire and Arran.

The national average of children under 16 years old living in relative poverty, after housing costs, was 19.1%. This results in all three local authorities in Ayrshire and Arran having a higher percentage than the Scottish average.



The Scottish Government said<sup>(10)</sup>:

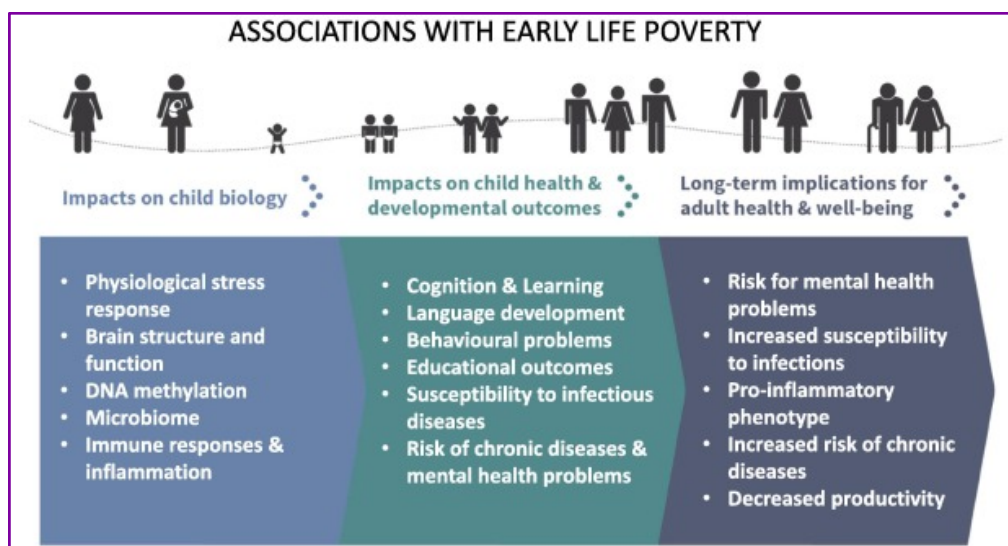
“Poverty and health are deeply interconnected, forming a cycle where poor health exacerbates poverty and poverty makes achieving good health more challenging. The early years are a critical developmental period, marked by heightened sensitivity to environmental influences, including poverty-related stress and deprivation, and increased vulnerability to disruptions in how the genetic code is expressed”.



The data in Figure 3 will undoubtedly mask pockets of poverty and deprivation such as in South Ayrshire. South Ayrshire has some of the least deprived areas within the health board, such as Belmont, Muirhead, Prestwick East and Alloway and Doonfoot, however, it also contains some of the most deprived, Ayr North Harbour, Wallacetown and Newton South and Lochside, Braehead and Whitletts. These vast areas of affluence may mask the true poverty occurring within the local authority and so we must remain vigilant and mindful of this when planning services and outreach projects in the area.



Figure 4. The Influence of Poverty on Child Health and Development<sup>(11)</sup>



Schmidt, K.L et al from Figure 4 said<sup>(11)</sup>:

“Early life poverty is associated with changes in numerous biological pathways and physiological systems in the body. These biological changes can have pronounced effects on child development and health outcomes in the short term and can also lead to long-lasting effects on health and the risk of disease that last throughout the life course”

Such research insights bring understanding as to why the experience of health for so many of the Ayrshire population is so challenging, and why the demand for services and associated costs are high. Necessary preventive work to address child poverty is explored later in this report.

### Spotlight: Resilience

Resilience, in the context of exposure to significant adversity, is “both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their wellbeing, and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways”<sup>(12)</sup>.

This is a wider framing of adversity than seeing it as a matter of grit and determination to struggle through tough times. The approach also gives a role and responsibility to systems and services to meet people along the way, capturing the ‘duty bearer’ responsibilities to ensure human rights can be realised. ‘Duty bearers are state or non-state actors, that have the obligation to respect, protect, promote, and fulfil human rights of rights-holders’<sup>(13)</sup>.



## Health Inextricably Linked to Community and Planetary Wellbeing

Planetary health is a concept that focuses not only on human health but wider, on the health of our planet. Health is not only a privilege of human beings. Planetary health emphasises the interconnected nature of human health and environmental health.

The Scottish Government's National Spatial Strategy<sup>(14)</sup> recognises the above and seeks to support the planning and delivery of:

- Sustainable places, where we reduce emissions, restore and better connect biodiversity.
- Liveable places, where we can all live better, healthier lives.
- Productive places, where we have a greener, fairer and more inclusive wellbeing economy.

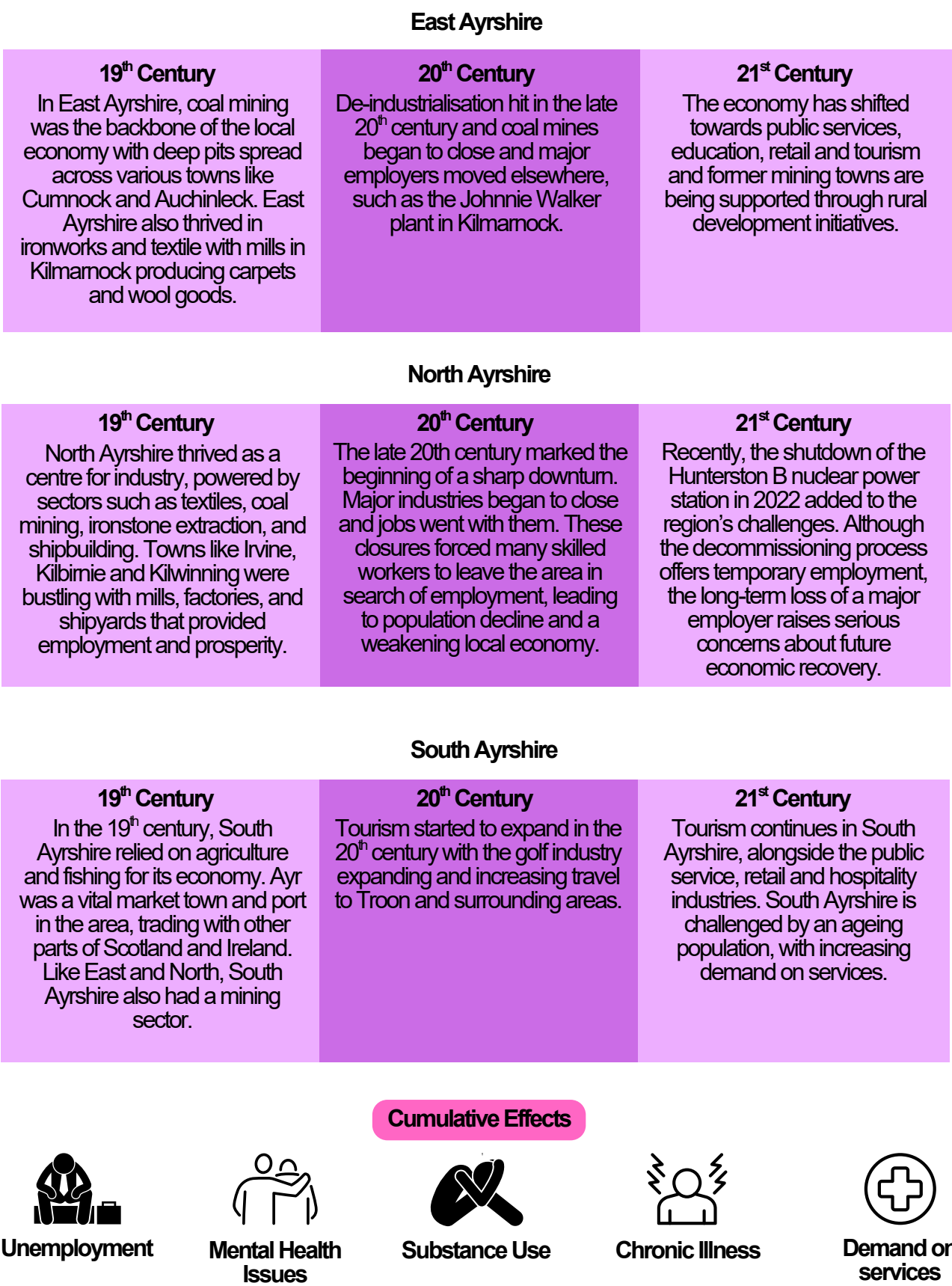
Significant social and economic changes across the Ayrshires from the nineteenth to the twenty first century have shaped the experience of health in powerful ways. While the development of mining and heavy industry and related tourism contributed to wealth creation and opportunities for many, the impact of deindustrialisation and the loss of tens of thousands of jobs across the south-west of Scotland from the 1970s and 1980s has had a ripple effect that is still playing out in current times. Within short periods of time many men lost employment and associated income and in an essentially gendered society, the means to provide for their families with associated impacts on the role of women and for the experience of children and young people growing up. It continues to be challenging to ensure the employment opportunities experienced in decades past.

These changes have been confounded by the 2008 financial crash, the impact of the COVID-19 pandemic, and the subsequent times of austerity, alongside the impact of war and wider global uncertainty.





Figure 5. Health Inextricably Linked to Community and Planetary Wellbeing in Ayrshire and Arran





## Spotlight: Change and Challenge for Ayrshire Communities

### East Ayrshire: Coal Mining

The Lost Villages was an oral history project by the Scottish Oral History Centre which ran from March 2021 to August 2024<sup>(15)</sup>. The 'miners' row villages' in the Ayrshire coalfield are a remarkable and distinctive man-made feature in the landscape and transformed the upland areas where they were set. When they were built, they played a vital role but could not survive the exhaustion of the mineral resources they were built to exploit.

The oral history project set out to reconstruct the social and cultural life of the vibrant coalfield communities that existed in East Ayrshire and the experience of pit closures, depopulation and community disintegration in these so-called 'lost villages'; telling the story from lived experience; from the memories of those who witnessed working in the coal mines and living in the miners' rows and what it meant when the pits closed. The work aimed to capture the 'intangible history' of life in the 'row villages and the impact of deindustrialisation into the twentieth century.

### North Ayrshire: Industry

North Ayrshire's proud industrial heritage once supported strong, interconnected communities. Generations found employment in textiles, chemicals, steel, electronics and energy, with major employers such as Pringle, ICI, Glengarnock Steelworks, Sanmina-SCI and Hunterston B power station anchoring the local economy. Their closures over recent decades have led to widespread job losses, economic instability and population decline, as skilled workers moved elsewhere in search of employment.

### South Ayrshire: Fishing and Tourism

Alongside a coal mining industry similarly impacted by industrial decline into the 1980s, South Ayrshire has a notable marine heritage with Ayr as a major port and centre for import/export and coastal trade.

The Carrick coast has had a long-established and thriving fishing industry with reports of fishing boats queuing to get into the harbour at Ayr and a thriving fish market until the 1970s. In more recent years there has been greater regulation of the fishing industry, a move to greater industrialisation with the use of bigger boats requiring different harbour and port facilities and a related decline in fish stocks while the demand for fish types has also changed.

Ayr, as well as a thriving centre for rural and industrial commerce also developed as a thriving resort town to serve the demand for leisure and recreation of the Clyde based industrial workforce. The Gaiety Theatre and Station Hotel are current reminders of more prosperous and certain economic times. As industries declined alongside associated economic challenges for families, there was an associated effect and decline of the tourism industry.



The rich cultural and industrial heritage of Ayrshire communities as explored in the examples above has been considerably impacted by changes over the last forty years.

Deindustrialisation of urban centres, the depopulation of rural communities with the loss of mining and fishing has had a ripple effect far beyond the immediate loss of jobs. Local businesses, shops, and services that depended on the spending power of the local community, have also suffered, leading to further closures and reduced community infrastructure, alongside the development of out-of-town shopping complexes. This economic contraction has deepened deprivation and contributed to poorer health outcomes. These effects are evident in the Burden of Disease Study that informs this report. Discrete populations across Ayrshire and Arran now rank among the most deprived in Scotland, with high rates of mental health issues, substance use, and chronic illness linked to economic stress and social instability.

Public Health insights and skills are essential to understanding and responding to the interconnected challenges experienced across Ayrshire and Arran. Tackling the root causes of poor health means investing in the social determinants; secure housing; education; employment and community support, while also strengthening local economies and services. By focusing on prevention, realising untapped preventive potential, early intervention, and inclusive regeneration, Ayrshire communities can begin to reverse the long-term impacts of industrial decline and create the physical and relational environments that will underpin the development of healthier, more resilient communities.

### Spotlight: Intergenerational Effects

Research shows that intergenerational transmission can become evident when a parental trait affects the trait in their child by inheritance of certain genes or by cultural transmission or by through interplay between nature and nurture<sup>(16)</sup>.

A wider framing than genetics alone, an understanding of intergenerational effects captures the interconnected nature of many influences and experiences as people grow and develop across life, the risks to health and their associated experience of both health and ill health.

### Spotlight: Adverse Childhood Experiences

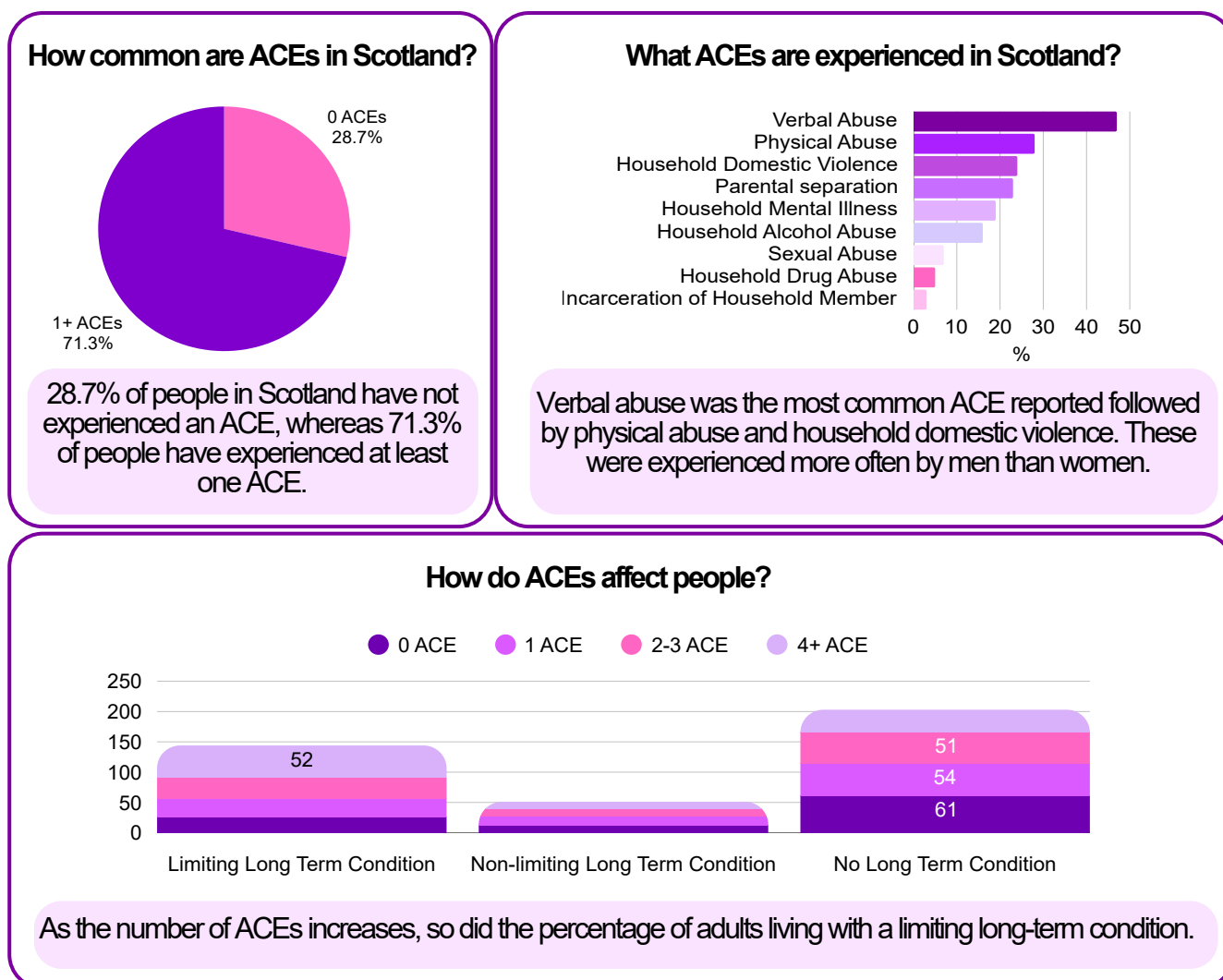
Adverse childhood experiences (ACEs) are traumatic and/or stressful experiences that occur in childhood that can impact individuals throughout their lives. ACEs can lead to poor health and social outcomes later in life. The most common ACEs are abuse (physical, sexual and emotional); neglect and growing up in a household affected by domestic violence; or with adults who use alcohol and/or drugs; with adults who live with mental illness; with adults who have spent time in prison; and with parents who have separated<sup>(17)</sup>.



The 2019 Scottish Health Survey<sup>(17)</sup> explored the exposure to childhood adversity in Scotland. The dose response effect of exposure to more than four adverse childhood experiences detailed in Figure 5 leaves people at greater risk of poorer physical and mental health, and of health behaviours that can compromise wellbeing, including problematic alcohol and drug use, being at risk of, or a victim of, violence or mental illness and being at higher risk of suicide. The risk of experiencing at least four or more of the markers of childhood adversity is doubled in the more deprived areas of Scotland, many of which lie within Ayrshire and Arran.

Adversity can be understood as a stressor, and not all stress is bad; some stress is needed for healthy growth and development. Stress also indicates the presence of risk and threat that can be protective in nature, even lifesaving if necessary. Toxic stress is produced when the body's stress response system is activated from prolonged, frequent and strong periods of time and where there are no adult relationships to buffer the impact. This can occur in situations where a higher number of ACEs are being experienced and where there is no adult/s to act as a buffer to the stress being felt.

Figure 6. Experience of Childhood Adversity in Scotland





### Positive Childhood Experiences (PCEs)

PCEs in childhood can include closeness, support, loyalty, protection, love, importance and responsiveness to the child's health needs. Here, the contribution to resilience is demonstrated and the mitigating effects against experiences of adversity that buffer against the risk of experiencing toxic stress. PCEs support resilience in children and are protective, offsetting prior exposure to early adversity. Children with more PCEs have lower chances of developing depression and poor mental health into adulthood.

It is noted that having no markers of adversity combined with a lack of positive childhood experiences can leave an individual vulnerable, reflecting the benefits that positive relational and wider experiences confer as children grow and develop life skills and resilience to navigate the ever evident challenges of twenty first century living.

#### Spotlight: Toxic Stress

Toxic stress occurs when an individual experiences excessive or prolonged activation of their stress response systems in the body and brain. This toxic stress can have damaging effects on various aspects of life such as learning, behaviour and health across the individual's lifespan <sup>(18)</sup>.

#### Spotlight: Attachment

Attachment theory highlights how important a child's emotional bond to their primary caregiver is. Any disruption or loss of this emotional bond can affect a child both emotionally and psychologically. This can last into adulthood and have an impact on their future relationships <sup>(19)</sup>.

#### Spotlight: Community Adversity

The intersecting influences of childhood, family and community adversity is demonstrated in Figure 7. These can be understood as influencing the considerable burdens of disease experienced by the populations of Ayrshire and Arran and related years of life lost to illness, addiction and premature death explored in this report.



Figure 7. Adverse Community Experiences<sup>(20)</sup>







## Health as a Resource for Life

Understanding health as a resource for life demonstrates the interconnected nature of positive and negative experiences as people grow and develop through life journey experiences.

The origins of adult health and wellbeing and disease can be understood as involving the following:

- Intrinsic features: personality and genetics
- Relational experiences in the earliest weeks, months and subsequent years of life
- The relational and material resources that are available in and across family and community life that intersect to help or hinder the experience of health across life

## Challenges to Achieving Health: Understanding the Burden of Disease across NHS Ayrshire and Arran

As explored in previous sections, community and family experiences shape and influence biology/physiology and the way children grow and develop and how adults experience family life and the workplace as well as ageing and later life.

More is known than at any other point in time about how an individual's unique make up interacts with a wide range of relational and environmental experiences to inform their experience of health and wellbeing, and the risk of experiencing poor physical or mental health and their risk of developing drug or alcohol dependency or chronic illness.

Despite this knowledge, across Ayrshire, lives are cut short and living well is compromised through high levels of drug, alcohol and suicide deaths among relatively young adults (24-45 years); all of whom are someone's daughter or son and sometimes parent.

For adults and people in their middle and later years, lives are also cut short by preventable non-communicable illnesses such as ischaemic heart disease and stroke.

As explored throughout this report, these intersecting and cyclical effects are wide ranging across individual, peer, family and community life. The burden and individual, family and community costs of these conditions are detailed below.

The Burden of Disease work programme details the years of good health lost from living with an illness or health condition as well as the years of life lost to premature (early) death<sup>(21)</sup>.



### **DALY rates**

A DALY is a disability-adjusted life year, which represents one year of “healthy” life lost to either premature death or living with an illness or disability.

DALY rate is the number of DALYs per 100,000 of the population. A high DALY rate means many people are either dying early from a particular cause or are living many years with its effects.

DALYs help us compare the burden of different diseases and injuries across ages, genders and geographical areas. They also allow us to monitor how the health of an area is changing and the effectiveness of public health measures that may have been implemented, such as vaccination programmes and targeted health projects in a certain area.

Throughout this report, we will refer to the number of DALYs and DALY rates.

Figures 8 and 9 detail the top 5 diseases or injuries with the highest number of DALY rates in Ayrshire and Arran in 2019 in comparison to Scotland.

Of note, is the near consistent experience of poorer health for men and women in Ayrshire compared to Scotland across different age bands as detailed, with reference to cardiac and stroke related conditions from 45 years, and drug related deaths for people aged 25-45.





Figure 8. Understanding the Burden of Disease across Males in Ayrshire and Arran by DALY rate in 2019<sup>(21)</sup>

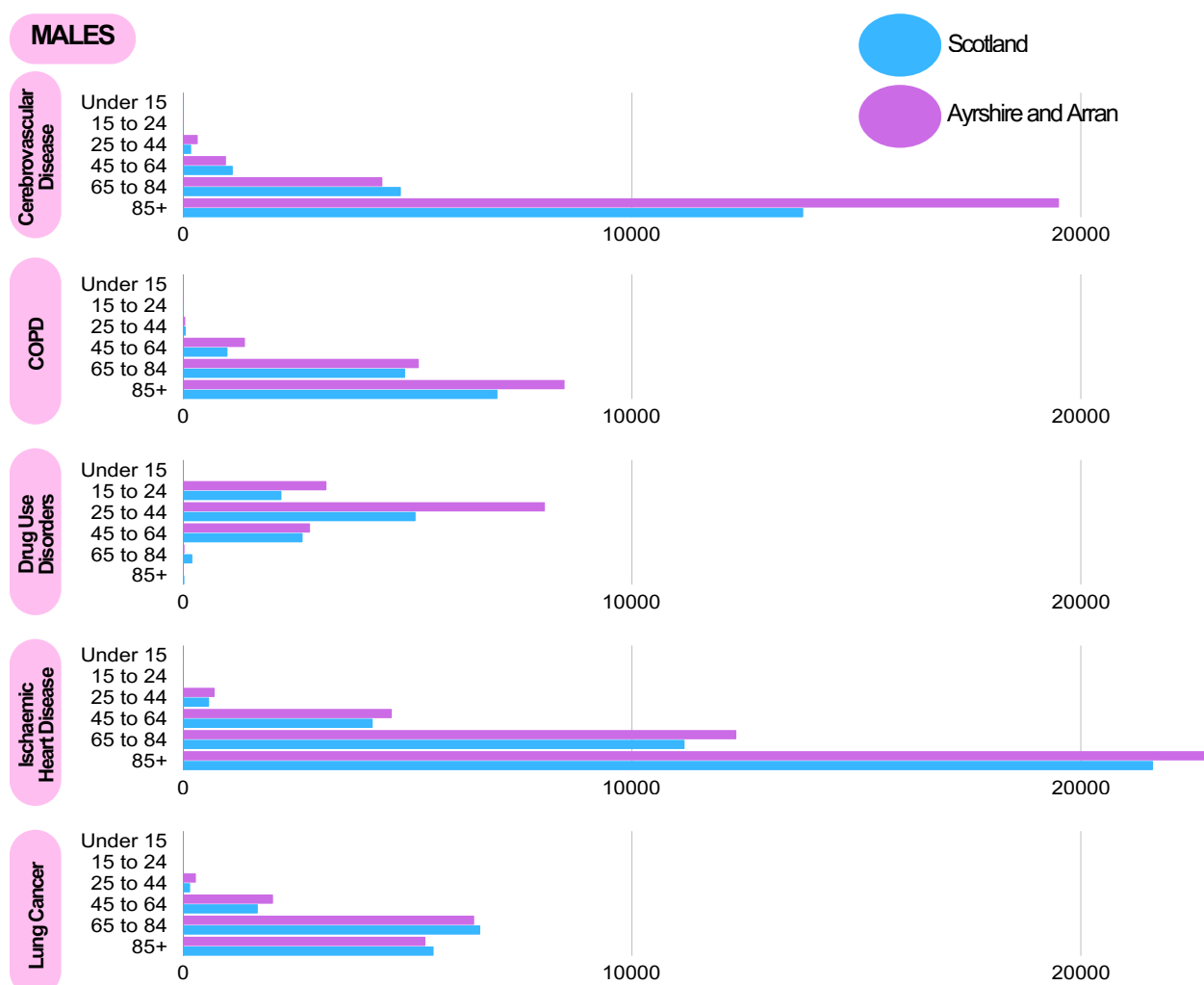


Figure 8 highlights the top 5 diseases/injuries with the highest DALY rates for males in Ayrshire and Arran. These are cerebrovascular disease, COPD, drug use disorders, ischaemic heart disease and lung cancer. These diseases/disorders affect the male population at different stages within their life course. As Figure 8 shows, cerebrovascular disease, COPD, ischaemic heart disease and lung cancer affect the older male population more whereas the highest burden of drug use disorders is seen in the 25 to 44 year age range for males in Ayrshire and Arran.

This figure also highlights the comparison between Ayrshire and Arran and the national Scottish data. This is particularly evident in the burden of cerebrovascular disease in the 85+ year old male age range where Ayrshire and Arran has a DALY rate of 19,514 compared to a Scottish rate of 13,817.



Figure 9. Understanding the Burden of Disease across Females in Ayrshire and Arran by DALY rate in 2019<sup>(21)</sup>

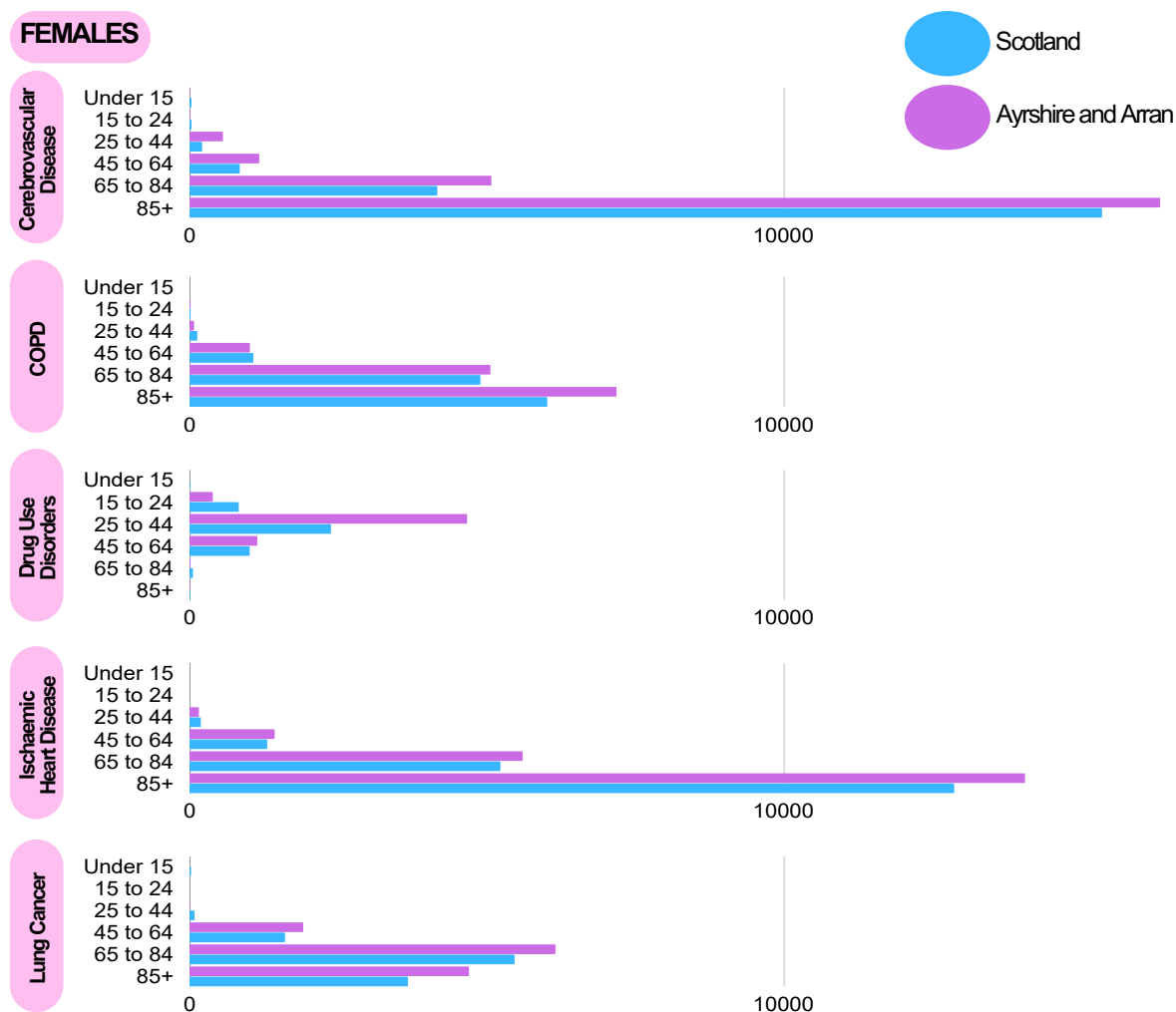
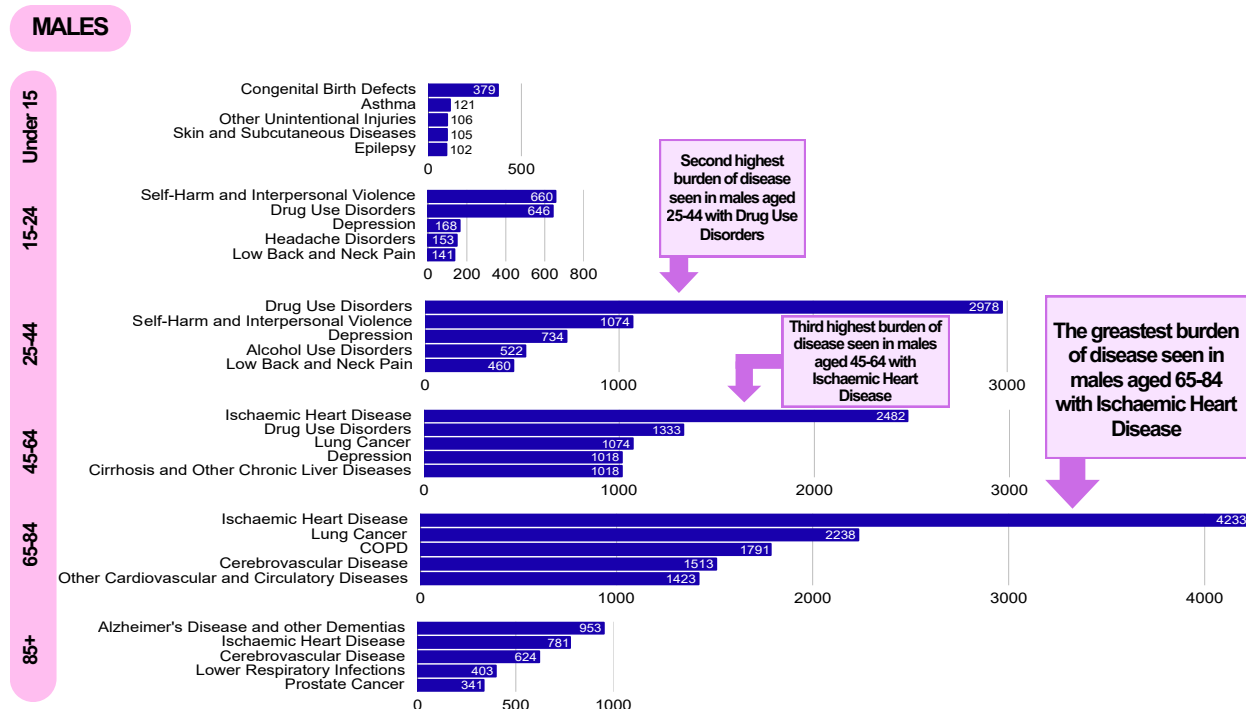


Figure 9 highlights the top 5 diseases/injuries with the highest DALY rates for females in Ayrshire and Arran. These are cerebrovascular disease, COPD, drug use disorders, ischaemic heart disease and lung cancer, similar to their male counterparts. Similarly, these diseases/disorders affect the female population at different stages within their life course. As Figure 9 shows, cerebrovascular disease, COPD, ischaemic heart disease and lung cancer affect the older male population more whereas the highest burden of drug use disorders is seen in the 25 to 44 year age range for males in Ayrshire and Arran.

Figures 10 and 11 detail the burden of poor health across the life course for residents of Ayrshire and Arran with the top 5 diseases/injuries for each age group. The greatest numbers of years lost to poor health and premature death for males aged 65-84 is ischaemic heart disease, noting the onset increasing from 45 to 64 years. It is of considerable concern to see the years of life lost to addiction and premature death for males aged 24 to 45 years. Figures 10 and 11 are both measured by the number of DALYs as opposed to the DALY rates in Figures 8 and 9.



Figure 10. Understanding the Life Course Burden of Disease across Males in Ayrshire and Arran by number of DALYs in 2019<sup>(21)</sup>



For men, the greatest burden of disease is felt by males aged 65-84 with ischaemic heart disease, followed by drug use disorders in males aged 25-44 years old and thirdly males aged 45-64 years old with ischaemic heart disease.

Figure 11. Understanding the Life Course Burden of Disease across Females in Ayrshire and Arran by number of DALYs in 2019<sup>(21)</sup>





For women, the greatest burden of disease is lung cancer for women aged 65-84, mostly a legacy effect from the later reduction in smoking by women in recent years. The second greatest burden of disease is for women aged 65-84 years from ischaemic heart disease, noting as for men, the emerging pattern of disease from 45-66 years.

## Understanding and Realising Preventive Potential

The burden of disease, as explored above, provides insights for why NHS Ayrshire and Arran has higher rates of hospital admissions in comparison to the Scottish average rate<sup>(22)</sup>, high rates of people with long term conditions<sup>(21)</sup> and high levels of drug related health harms and deaths<sup>(23)</sup>.

These challenges can be attributed to high levels of deprivation<sup>(22)</sup>, concentrated in particular communities, and an older age structure<sup>(24)</sup>, likely leading to higher demand for health care. In addition, the remote and rural nature of the Health Board geography can make accessing health care and providing care at home even more challenging<sup>(21)</sup>.

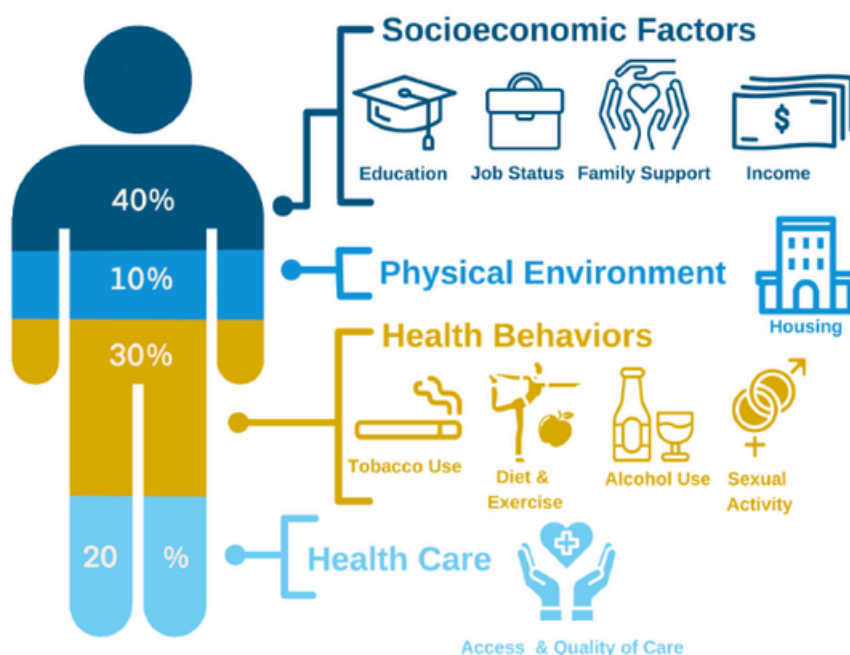
This is the starting point for effecting change and ensuring a golden thread of preventive activity across the work of the NHS Board, Acute Services and Health and Social Care Partnerships using the Community Planning Partnerships. The challenge is ensuring a preventive approach that transcends organisational, structural and financial boundaries across Ayrshire to best effect.

It is instructive to understand the different contributions to health as a resource. As this report details, poor health is more than a result of poor health decisions and lifestyle factors.

As detailed in Figure 12<sup>(25)</sup>, the respective contributions to health inform a preventive approach. A preventive health approach seeks to maximise the benefits of whole population approaches (universal/primordial prevention) where small contributions can produce scale effects (school cultures and ethos<sup>(26)</sup>/tobacco cessation advice in primary care<sup>(27)</sup>). It asks that the component parts of wider system of services and care understand and seek to maximise the opportunities to support health as a resource for life: how by working together in a myriad of different ways, improvements in health and experiences of health and other services benefit individuals and populations.



Figure 12. Four Pillars of Health<sup>(25)</sup>



## Universal Prevention

Universal (primordial) prevention has a particular contribution to make in reducing the risk of developing long term health conditions and maximising success in school/learning and work through ensuring high quality universal health care and education services (maternity through to health visiting/school nursing and pre-school/nursery, primary secondary school and higher education). Developmentally informed approaches are aware of and are informed by the needs of children and young people at different points in their life. This supports the framing of health as a resource for life that can ebb and flow and benefit from additional inputs and supports as needs present. This is particularly important given the understanding of time sensitive developmental windows in the first 1001 days of life and also, for understanding the challenges of adolescence, as explored elsewhere in this report.

## Primary Prevention

Primary prevention is action that tries to stop problems happening in the first place and is closely aligned to the functions of universal prevention though may be more topic focused.

This can be through actions at a population level that reduce risks or those that address the cause of the problem.



## Secondary Prevention

Taking a universal approach does not offset the need to respond to particular needs and vulnerabilities for children or adults as they present. Secondary prevention is action which focuses on early detection of a problem to support early intervention and treatment and to reduce the level of harm. It seeks to reduce risks and harms at the point of a presenting need, for example early intervention through GIRFEC<sup>(28)</sup> processes or the timely identification and management of high blood pressure through primary care<sup>(29)</sup>.

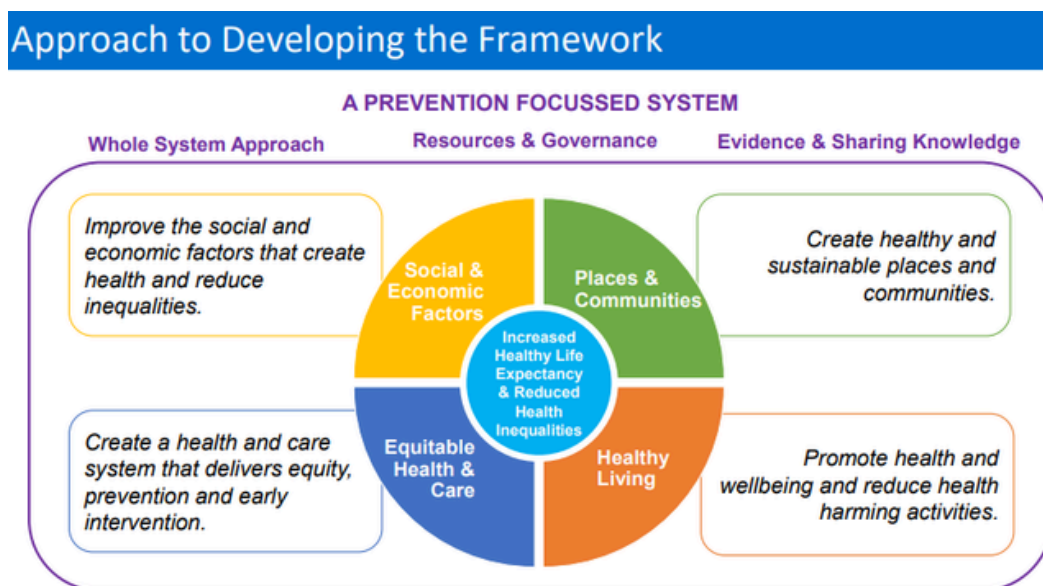
## Tertiary Prevention

Tertiary prevention seeks to minimise risks and harms once health care or wider needs are established or at a high threshold of need. This can involve action that attempts to minimise the harm of a problem through careful management, for example, a care experienced child/young person in conflict<sup>(30)</sup> with the law or by managing a long-term condition like chronic renal disease<sup>(31)</sup>.

## A Prevention Focused System

None of the preventive tiers are exclusive; needs can escalate and then settle, they may escalate again. The goal of preventive approaches is to reduce the likelihood of a problem developing and reducing the level of presenting need, complexity and risk within as short a time as possible. An individual, family and community can have evidenced needs that move up and down and back again across the preventive continuum. This is where there is scope for better understanding the flow and relationships through the different layers of prevention with a better experience of health for individuals and likely less pressure and sometimes costs for the NHS and partners.

Figure 13. A Prevention Focused System<sup>(32)</sup>





The timescales involved and the likelihood that investment from some services creates savings for other services can make the realising of preventive spend opportunity quite challenging to realise and evidence. This requires leadership and management commitment as well as long term planning. This can be out of synch with political and funding cycles.

The Framework for achieving the preventive potential for individuals, families and communities is detailed in the Population Health Framework<sup>(32)</sup> with the key preventive drivers that underpin a prevention focused system identified as:

- Social and Economic Factors
- Places and Communities
- Enabling Healthy Living
- Equitable Health and Care

These are familiar framings with a range of associated activity as detailed in this report.

There is a considerable preventive role with Community Planning Partners, through for example, ensuring affordable, well-built houses in communities that are served by shops selling affordable quality food, and 'attuned to need' high quality universal education services where children benefit from interventions that allow them to learn, as well as attuned to need secondary interventions; for example, people in distress or in contact with police and justice services.

## Access to Services



The World Health Organisation say:

"Equity of access to health services is central to universal health coverage, particularly for the most vulnerable and marginalised people in our societies. Too many cannot access the care they need due to economic, geographic, epidemiological or cultural barriers"<sup>(33)</sup>.



### Spotlight: Rural Communities

People who live in rural areas are often challenged with lengthy public transport commutes to reach services, and for those who have more than one health issue, the number of different appointments can mount up, often creating financial and time pressures to be able to attend them. Tensions can arise within rural areas, as new houses are built and the steadfast community expands, the gap between the old and the new widens.



The Dalmellington Community Health Hub<sup>(34)</sup> vision began with an aim to support people to self-manage their diabetes more easily by bringing a wide variety of support services from the NHS, health and social care partnership and voluntary sector together for one day per week at Dalmellington Community Centre. This enabled people to attend Diabetic eye Screening (DES) tests, Community Treatment and Care appointments, foot care services, smoking cessation support, home energy or financial advice, and many other services all at the same central village location.

During the course of the initial 2-year pilot, Dalmellington went from an area with the lowest uptake of DES appointments to one of the highest in Ayrshire, demonstrating that breaking down barriers to access enables people to engage with services that they need.





## Life Course Opportunities to Realise Preventive Potential

As explored throughout this report, preventive potential can be most usefully applied across the life course. Understanding health as a resource across life means there are opportunities to shape and influence using evidence and knowledge to inform activity.

The rest of this report explores key analytical insights where a preventive intervention will make a difference to areas of identified need and risk, across a continuum of universal, primary, secondary and tertiary activity.

## Preconception and Pregnancy

### Life Course Spotlight

**Safeguarding  
Midwifery**

**Maternal  
Obesity**

The first step in the life course, health and wellbeing during preconception and pregnancy is a foundational step for shaping the beginning of the baby's life while influencing the long-term health trajectories of both the mother and the baby.

The health of a mother during pregnancy can directly influence foetal development such as brain development, the immune system, and the risk of developing chronic diseases later in life such as diabetes and heart disease.

Pregnancy is often when women are most engaged with healthcare, and antenatal care provides a unique opportunity to provide education, nutritional support, mental health support and risk factor reduction. A mother's positive experiences during antenatal care can create healthy foundations for motherhood. Family history and the experiences of life that women and partners bring to becoming pregnant inform the likelihood of conception and shape the experience of pregnancy and the growth and development of the foetus. Risk factors for poor pregnancy outcomes include poverty, obesity, dietary deficiencies, alcohol consumption, mental health issues and recreational drug use.

Poverty during pregnancy is evident in Ayrshire and Arran with 35.1% of maternities originating in the most deprived area of the health board, SIMD 1, with 21.2% from SIMD 2<sup>(35)</sup>. That results in over half of Ayrshire and Arran's maternities coming from the two most deprived areas. This is further reflected by 33.1% of children under 1 years old living in SIMD 1 in East Ayrshire, 45.2% in North Ayrshire and 22.5% in South Ayrshire<sup>(36)</sup>.



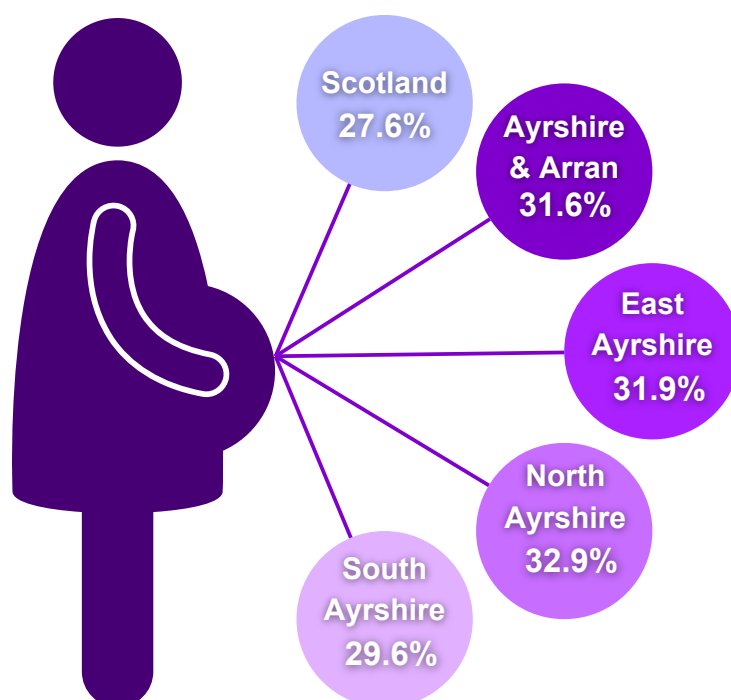
## What are we doing in Ayrshire and Arran to provide support to pregnant women?

The safeguarding midwifery service provides holistic antenatal and postnatal care to women with socially complex needs. Underpinned by GIRFEC principles (a process discussed in the infancy section below), safeguarding midwives will coordinate the appropriate support to optimise the health and wellbeing of mum and baby. When child protection concern is present, safeguarding midwives will work with the lead professional and social work to contribute to the child's plan. Care is individualised to the woman's needs and a comprehensive package of Parentcraft education is provided to support the transition to parenthood.

### Spotlight: Maternal Obesity

Data on Body Mass index (BMI) collected at antenatal booking allow trends in maternal healthy weight to be analysed at health board and local authority level. Over the last 15 years, there has been a steady increase in the percentage of pregnant women recorded with obesity both locally and nationally. Obesity is defined as a BMI of 30 and over. According to Public Health Scotland, obesity in pregnancy poses increased risk of serious adverse outcomes including miscarriage; congenital conditions; gestational diabetes; postpartum haemorrhage; pre-eclampsia; higher Caesarean section rate and complications during birth. Understanding the origins of obesity as an outcome from a range of complex and nuanced life-course influences is important in addressing stigma and shame for women who experience obesity during pregnancy. High levels of obesity for women can be understood in the context of poverty, inequality and limited options for eating healthily.

Figure 14. % of Pregnant Women Recorded as Obese (BMI 30 and over) at Antenatal Booking from 2021/22 to 2023/24 <sup>(37)</sup>



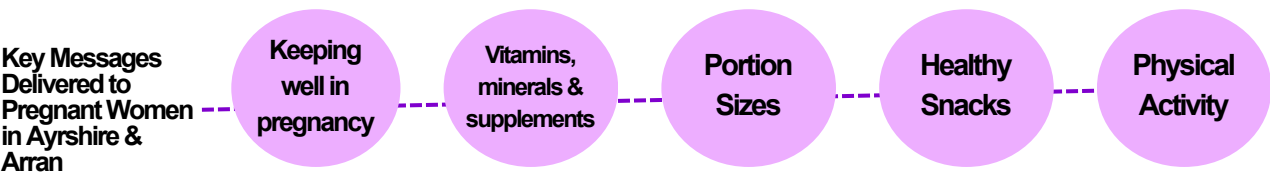


Ayrshire and Arran’s maternal obesity % for the previous time period was 31.6%, the highest of any of the Scottish health boards. North Ayrshire ranks joint 2nd highest for maternal obesity in Scotland in terms of council areas. East Ayrshire also ranks in the top 10 council areas for maternal obesity, whilst South Ayrshire ranks within the top 20 out of 32 council areas.

**What are we doing in Ayrshire and Arran to tackle Maternal Obesity?**

In 2023, a needs assessment was undertaken in the Carrick area in South Ayrshire to determine the needs of local pregnant women. The survey explored a range of issues including current healthy eating knowledge; barriers to eating healthily; access to support or information and physical activity levels. Based on the findings, the Dietetic Health Improvement Team is working collaboratively with South Ayrshire Council’s Thriving Communities Team to develop a local programme for pregnant women. Findings have also been used to inform work in North Ayrshire to pilot the introduction of maternal practitioner role to offer support to all pregnant women.

In 2025/26, work will be undertaken to develop a pathway of care to include support for women with a high BMI and more complex nutritional needs.





Infancy 0-3 Years Old

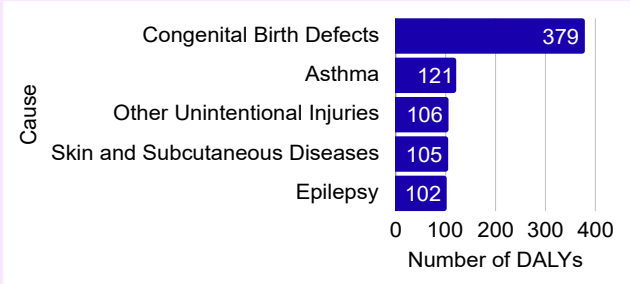
Life Course Spotlight



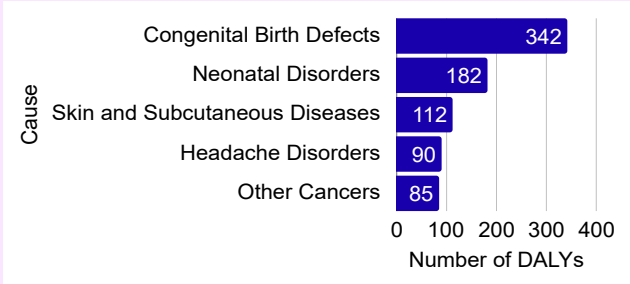
Infancy is a crucial stage during the life course, with major physical and emotional developments occurring during this phase. The first 1001 days (conception to toddlerhood) are understood as foundational for nurturing health and wellbeing<sup>(38)</sup>. Investment in this time creates a ten-fold benefit from investment across life<sup>(39)</sup>.

The first few years of life are the most active for creating neural connections, and more than 1 million new neural connections are formed every second in these years. By age 3, a child’s brain reaches around 80% of its adult size<sup>(40)</sup>. These neural connections create the foundation of human adaptability and resilience, the interface between cognitive and emotional skills. Neural connections are primarily mediated by the experiences of relationships with parents/primary carers. Attuned and responsive interactions inform the attachment experience of infants, with a time sensitive developmental window of 24 months. Interactions with key adults also inform speech and language skills taken through life which are established by 13-15 months. While there are always opportunities to make up for missed developmental experiences, time sensitive developmental windows maximise the potential and ensure infants get the best possible start in life. Key interactions during this period of life creates the foundation of human adaptability and resilience and the interface between cognitive and emotional skills.

Top 5 Burden of Disease: Under 15 Males



Top 5 Burden of Disease: Under 15 Females

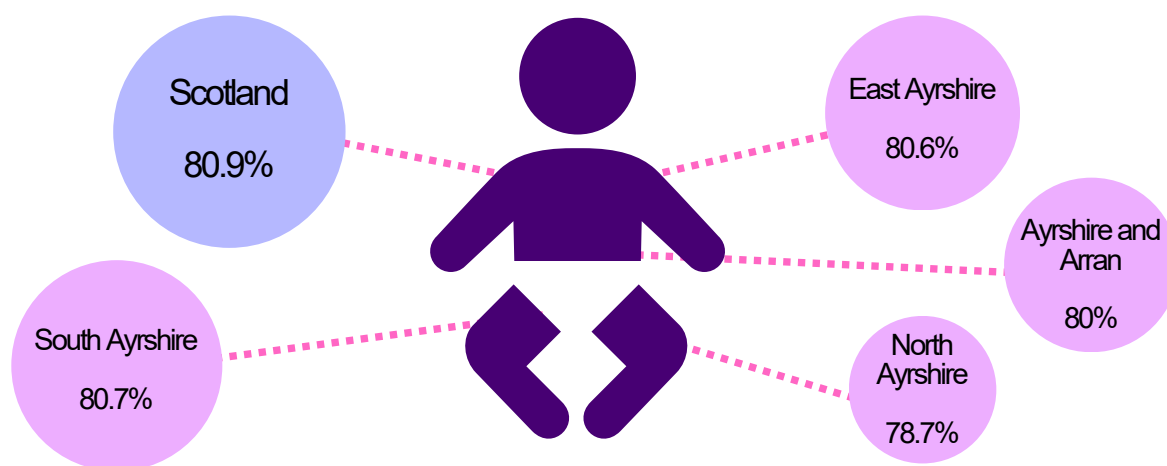




### Spotlight: Healthy Birth Weight

Healthy birth weight is an early development biomarker of the life course approach and can be influenced by various factors such as the health and wellbeing of the mother. Babies with low birth weights can experience both short term and long-term outcomes. Babies born with low birth weights have a higher risk of death and illness soon after birth and also have a higher risk of developing non-communicable diseases in the long term.

Figure 15. % of Babies Born in 2021/22 to 2023/24 with a Healthy Birth Weight<sup>(37)</sup>

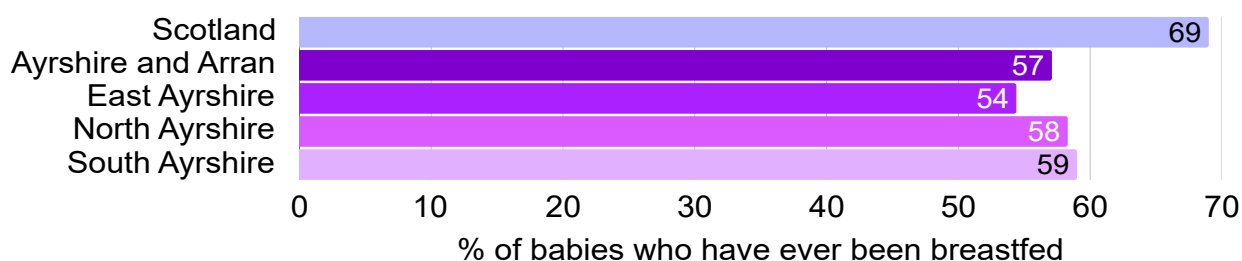


Ayrshire and Arran's % of babies born in 2021/22 and 2023/24 with a healthy birth weight was 80.0%, lower than the % for Scotland as a whole (80.9%). Out of the three local authorities, North Ayrshire had the lowest % of babies born with a healthy birth weight at 78.7%.

### Infant Feeding

The WHO and UNICEF both recommend exclusive breastfeeding for the first six months of a baby's life due to the protective benefits breastfeeding can offer. This includes immunity against infection and secure infant-caregiver attachment.

Figure 16. Average % of Babies who have ever been breast fed between birth and the time of review 2024<sup>(37)</sup>





Ayrshire and Arran's % of babies ever breastfed in 2024 was 57.1%, lower than the Scottish average for 2024 of 69.0%. Out of the three local authorities, East Ayrshire had the lowest % of babies ever breastfed in 2024 at 54.4%.

Breastfeeding has both short and long term benefits for both mother and baby. Babies who are breastfed are at a reduced risk of infection and reduced risk of childhood obesity later in their life course. Breastfeeding also reduces the mother's risk of developing various cancers, obesity and cardiovascular disease<sup>(41)</sup>.

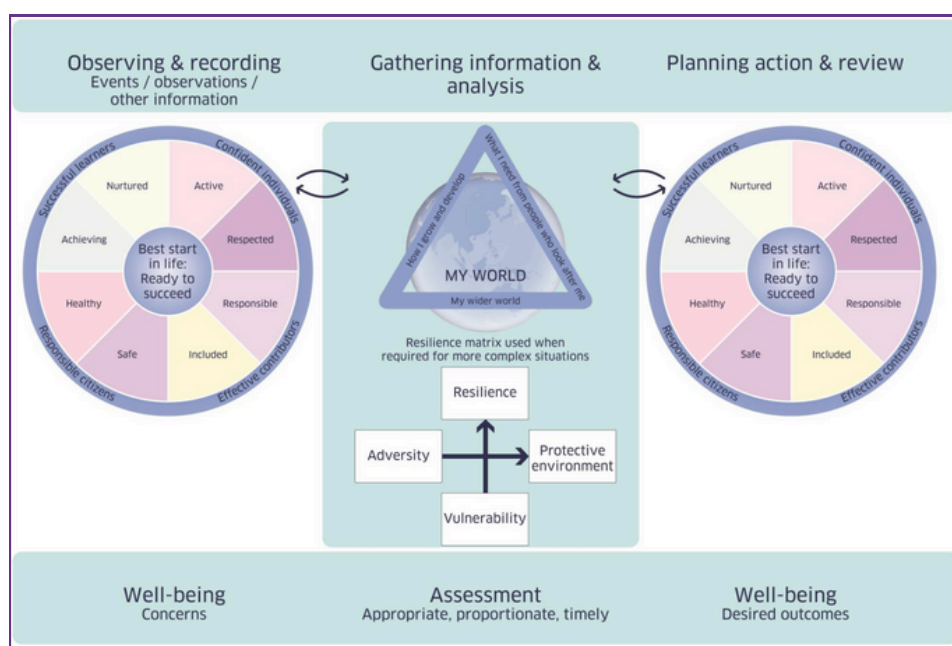
### Spotlight: Family Focused Care

Getting it right for every child (GIRFEC) is Scotland's commitment to provide all infants, children, young people and their families with the right support at the right time. This is so every infant, child and young person in Scotland can reach their full potential.

GIRFEC, as a strengths-based approach, seeks to realise children's rights on a day-to-day basis and is underpinned by key values and principles. NHS Ayrshire and Arran recognised the crucial role of children and ensure their voice is heard in line with The UN Convention on the Rights of the Child.

The National Practice Model below in Figure 17, sets out a shared framework and approach to identification, assessment and analysis of an infant, child or young person's wellbeing needs. The National Practice Model brings together the My World Triangle, Resilience Matrix, 8 wellbeing indicators and the 4 contexts for learning within the Curriculum of Excellence<sup>(42)</sup>, to support overall assessment.

Figure 17. The National Practice Model<sup>(28)</sup>





### **What are we doing in Ayrshire and Arran regarding Family Focused Care?**

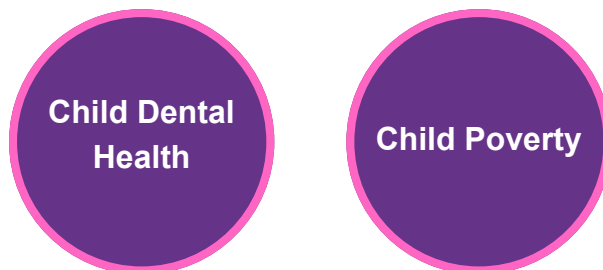
Within NHS Ayrshire and Arran, we have developed a Pan Ayrshire Practitioner Guide and Child and Young Person's Pathway. Interventions have been developed following engagement with families. The National GIRFEC refresh in September 2023 saw NHS Ayrshire and Arran move away from Team around the Child to Team with the Family. The Ayrshire GIRFEC website is accessible to all staff within Ayrshire and Arran, as well as the public. There is an online GIRFEC principles training module that is a prerequisite to other practitioner training e.g. AYRshare.

The Practitioner Guide<sup>(43)</sup> supports practitioners to understand GIRFEC practice across Ayrshire and Arran and improve outcomes for children and young people. It includes information about the role of the named person and the lead professional and covers Children's Planning including assessment, request for assistance and a Child and Young Person's Plan.



## Childhood 4 to 11 Years Old

### Life Course Spotlight



Children at this age have a disposition to curiosity and an interest to learn.

Even as the impact of exposure to negative influences can be pervasive across the life-course, positive childhood experiences are protective and can offset prior exposure to early adversity. Children who do not have experience of adversity as they grow and also lack positive childhood experiences, are at risk of poorer outcomes.

Learning is possible and enhanced when early education/childcare, primary school and wider learning environments are attuned to and supportive of a range of needs. The pandemic has had a wide-ranging impact on the health and wellbeing of children in their early years that is working through to school aged children<sup>(44)</sup>.

The cost-of-living crisis and high levels of childhood poverty brings additional pressures for children's physical and mental health.

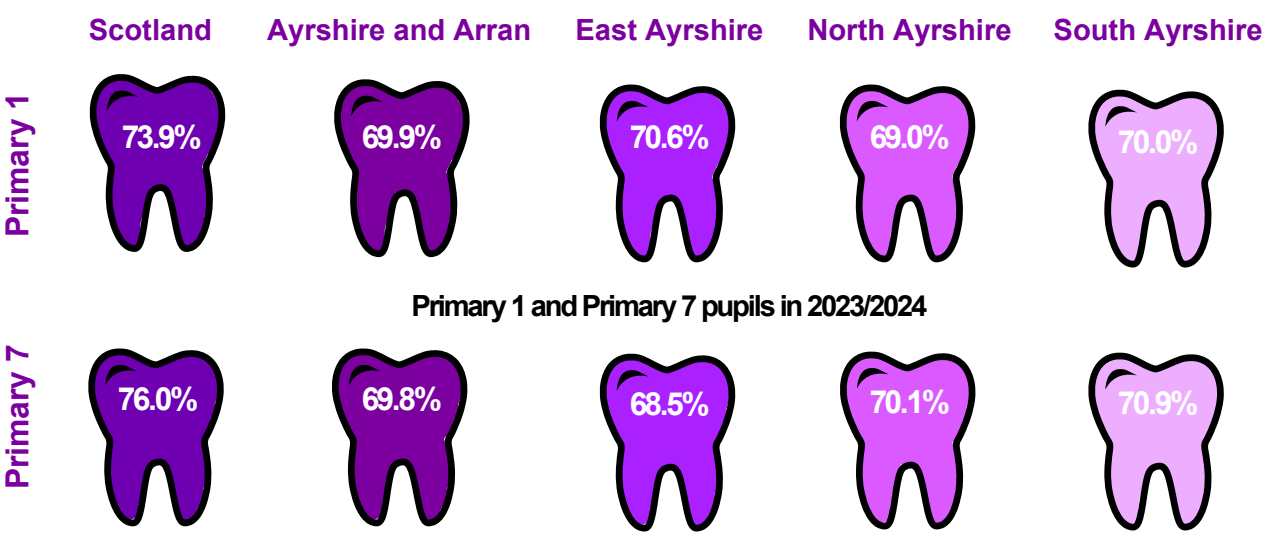




**Spotlight: Child Dental Health**

The % of children in P1 with satisfactory dental health in Ayrshire and Arran, 69.9%, is lower than that of the Scottish %, 73.9%. Ayrshire and Arran had the worst Primary 1 dental health of any health board in 2023/24.

Figure 18. % of Children in Primary 1 and Primary 7 receiving a letter “C” (no obvious decay experience but should continue to see the family dentist on a regular basis) at basic inspection<sup>(37)</sup>



**What are we doing in Ayrshire and Arran to improve Child Dental Health?**

The Childsmile programme provides a range of interventions to improve oral health for pre-school and school-age children across Scotland. NHS Ayrshire and Arran has seen consistent improvements in the oral health of primary school aged children, but this has slowed in recent years. Lots of work and effort has been put in to ensure the programme is targeted to the families and communities which need the most support. Strong partnerships with other services including health visiting and school nursing means we can identify and support children quickly.

Between 2023 and 2025, NHS Ayrshire and Arran offered automatic referral to the dental health support workers team for any 3-year-old child living in a SIMD1 area who is not registered with a dental practitioner. This programme sought to support access to dental care during a period of time when access to dental services has become more challenging. Over a two-year period, nearly 800 children were identified through this pathway and were offered support.

Moving forward, the Childsmile team in Ayrshire and Arran will be reviewing the local service in line with a change in the national strategic direction. This will including re-balancing the amount of activity in different interventions. Action towards this will be monitored through the oral health improvement action plan.



**Key Components**



Supervised tooth-brushing in all nursery settings



Fluoride varnish in a targeted group of nurseries and schools



Prevention advice in dental surgeries



Dental health support workers who provide support in the community

It is important to highlight that in Scotland, NHS dental treatment is free for anyone under the age of 26 and people who are pregnant or have given birth within the past 12 months.

### Spotlight: Child Poverty

According to the Scottish Government, around 1 in 4 children in Scotland live in poverty<sup>(45)</sup>. Studies suggest that early chronic stress linked to child poverty may get “under the skin” and affect physical health later in life<sup>(46)</sup>.

South Ayrshire had the 10<sup>th</sup> highest child poverty rate in Scotland at 24.4%, which equates to around 4807 children in South Ayrshire living in poverty. Poverty is highest in Ayr North Harbour, Wallacetown and Newton, with two data zones within this area ranking 13<sup>th</sup> and 20<sup>th</sup> most deprived areas in Scotland<sup>(4)</sup>.

### What are we doing in Ayrshire and Arran to tackle Child Poverty?

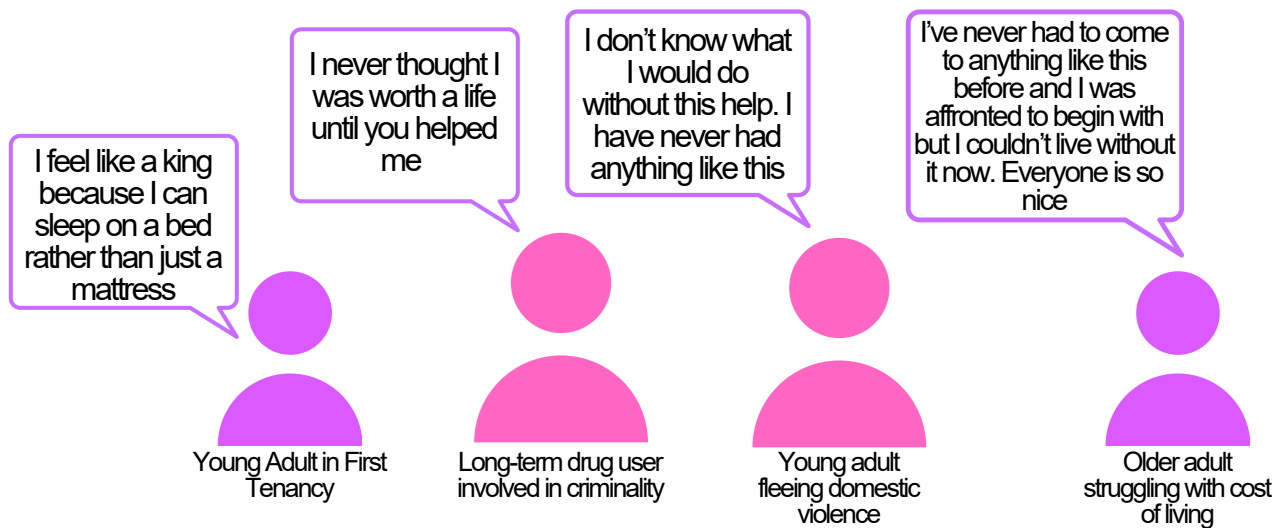
An example of an initiative to address the influence of child is the work being developed in Newton Primary School in Ayr which sits within Ayr North Harbour, Wallacetown and Newton intermediate zone, a very deprived area, highlighted in the spotlight above.

With support from a range of services and volunteers, Newton Primary School has responded to the needs of families and community throughout lockdown by setting up its own household, food and clothes bank. This support continually adapts to this day to meet the wide range of needs of the local community. The number of people using the bank has risen to 120 people weekly, with new people utilising the service every week. Various factors can affect the need for the bank, such as prison release, energy costs, benefit changes and seasonal demand.

‘The support bank is a vital lifeline, giving hope within the heart of the community’ Service User



Figure 19. Working for Wallacetown Service User Feedback



A further example of work to address child poverty is being undertaken by the NHS Ayrshire and Arran Public Health Department who work with the respective Local Authorities and have led on the development of the Ayrshire and Arran Child Poverty Action Plan. This seeks to prevent and reduce the risk factors of poverty from pre-birth throughout the life course.

The plan includes:

- An Emergency Infant Food Pathway has been finalised and will be circulated to staff working with children and families.
- The Young Patient Family Fund. This will support the parents and siblings of young inpatients by covering expenses for travel, food and overnight accommodation.
- Various visuals have been produced to circulate important information such as the "Worried About Money?" leaflet and the "Money Worries" poster displayed in NHS Ayrshire and Arran hospitals.



Adolescence 12 to 18 Years Old

Life Course Spotlight



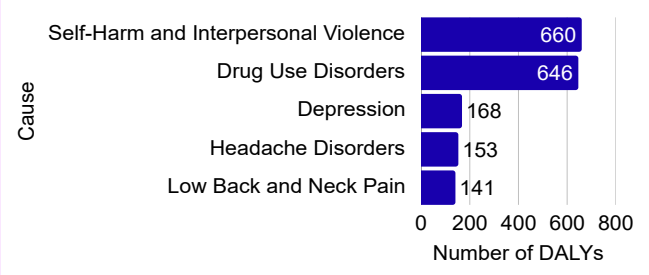
Adolescence and early adulthood are a crucial period in the development of lifelong mental health, where a myriad of co-occurring changes in the brain present both risks and opportunities. These changes take energy and can be understood as an explanation for changes in mood and personality, as resources are diverted to meet the additional demands of brain changes.

This is a period when there is an increase in executive function; where literacy and numeracy skills are tested and where self-esteem and a positive sense of self can reflect attachment and early relationship experiences.

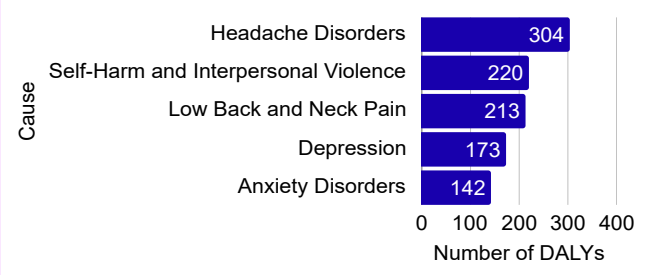
Positive relationships with family, peers and school protect mental health while poor relationships, bullying and exclusion from school, creates risk which can manifest into risky behaviours such as self-harm and interpersonal violence and drug and alcohol abuse, highlighted in the top 5 burden of disease for this age group.

It is also a time when there can be challenges with parent relationships, as young people begin to seek autonomy and independence which can be understood as a healthy developmental task (individuation).

Top 5 Burden of Disease: 15-24 Year Old Males



Top 5 Burden of Disease: 15-24 Year Old Females





**Spotlight: Teen Pregnancy**

In Scotland, there has been an increase in teenage pregnancy for the first time in 10 years, with an increase seen across all NHS boards, mainly in the 17 to 19 age group<sup>(47)</sup>.

Public Health Scotland report that younger teenagers are more likely to have a pregnancy ending in TOP (termination of pregnancy) than older teenagers.

From 2011 to 2022, all three Ayrshire local authorities have been on a general decline in the rate of teenage pregnancies in under 16 and 18 year olds per 1000 women.

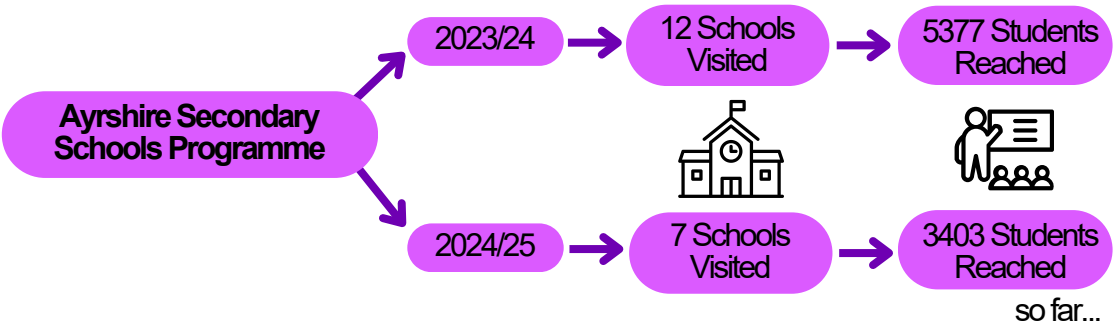
**What are we doing in Ayrshire and Arran regarding Teen Pregnancy?**

Targeted health improvement work continues within NHS Ayrshire & Arran with the updated Sexual Health website (SHAYR)<sup>(48)</sup>, including a new chat function for young people to chat with sexual health staff and new STI postal testing. Free condom provision is available by post and from community pharmacies across Ayrshire.

A programme of work in Ayrshire Secondary Schools is ongoing. The Public Health team run a rolling programme of education sessions within secondary schools, covering relationships; consent; STI's; pregnancy and how to access services at community pharmacy. Young people have the opportunity to speak 1:1 to staff at the end of the session and seek confidential advice.

One of the key challenges in recent years is that women are reluctant to use hormonal contraception as a result of social media and #Greensex campaigns. Public Health launched a 'myth busting' campaign in November – December 2024 to try and counteract the misinformation available online. The advert was shown 111,807 times with 997 clicks to the SHAYR website.

Figure 20. Ayrshire Sexual Health Secondary School Programme Summary





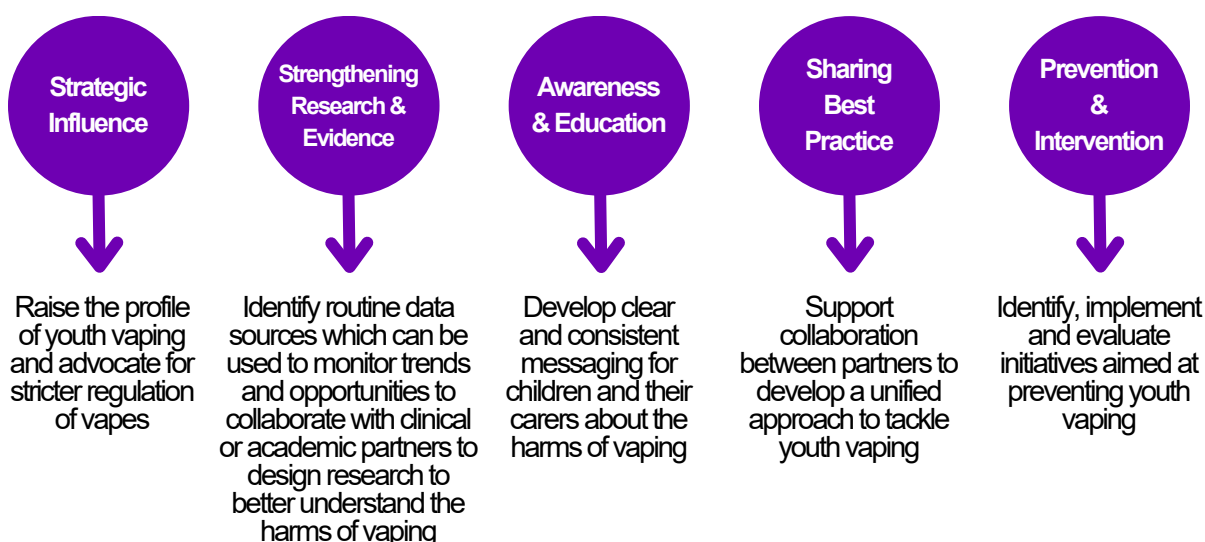
### Spotlight: Youth Vaping

Youth vaping presents significant health risks, exposing our young people to nicotine addiction, toxic chemicals and respiratory harms. Children who vape are more likely to transition to smoking traditional cigarettes, which risks undoing the efforts that have been made over the last few decades to prevent smoking related harms. Recent evidence<sup>(49)</sup> suggests that the recent rise in youth vaping may have slowed the decline of children smoking traditional cigarettes and contributing to young people taking up smoking.

### What are we doing in Ayrshire and Arran to tackle Youth Vaping?

The Public Health Department have produced a position statement and accompanying action plan to tackle youth vaping across Ayrshire. Public Health have great momentum and are working closely with our partners across education, alcohol and drug partnerships, police, trading standards, fire, paediatrics, school nursing and the Quit Your Way team. Public Health have established a Youth Vaping Taskforce who have responsibility for delivery of the action plan which aligns to the following aims in Figure 21.

Figure 21. Youth Vaping Taskforce Action Plan and Aims



### Spotlight: Corporate Parenting

Ayrshire and Arran understands the responsibility of being a corporate parent with a dedicated corporate parenting structure and action plan within the board which complements the actions laid out in our partner's corporate parenting plans and facilitates joint progress towards shared goals, which our ICYP (Infants, children and young people) have told us impact upon their experiences.



Corporate Parenting was originally a data driven focus of the ICYPPB (Infant, Children and Young People's Programme Board) led by the Director of Public Health, which has supported its evolution into a Task Force, with oversight from a programme board.

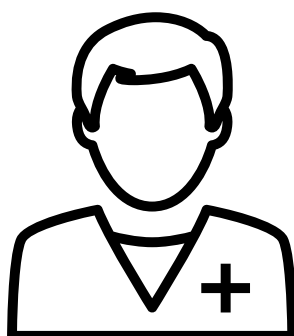
Senior work-stream leads have been supported by a Public Health Project Manager to ensure a population health perspective guides the systems and pathways improvement work which has been developed over the past 3 years.

There has been great interest nationally in several of the themes and projects of the Corporate Parenting Task Force Group due to the whole systems and Public Health approach.

### What are we doing in Ayrshire and Arran regarding Corporate Parenting?

In Ayrshire and Arran, there is the Health Safety Check for ICYP Accommodated in an Emergency. This is a new Pan Ayrshire service which aims to mitigate risks to health and wellbeing of children who require to be relocated to a setting outside the family home in an emergency. This is called the Health Safety Check (HSC). The HSC emphasises the need for collaboration between health and care professionals, social workers and carers to safeguard children's health. It also addresses equality and diversity, ensuring that communication is tailored to the needs of care experienced children and young people and their carers.

The HSC service was developed, tested, implemented and rolled out to enhance early identification and support for the health needs of ICYP. By practising Realistic Medicine, we are delivering a personalised approach to care, ensuring the people we care for are involved in shared decision-making, with a focus on what matters most to the children and young people we care for.



I am a clinical team leader for school nurses with a specific remit for the school aged children and care experienced children and young people in South Ayrshire. I have been part of the team who carry out HSCs at the request of social work colleagues. Myself and the teams I manage have interrogated health systems and shared relevant, necessary and proportionate information with social care colleagues, to uphold the rights of the children we look after, to good health

Clinical Team Leader, Children's Health, South Ayrshire Health and Social Care Partnership



## Young Adult 19 to 24 Years Old

### Life Course Spotlight

Young Adult  
Mental Health

Migrant TB  
Screening

Young adults continue to seek autonomy and independence as part of an ongoing developmental process.

The pre-frontal cortex of the brain matures last, not finishing until around the age of 25. This means that executive functions such as reason, long-range planning and impulse control might not be fully operational into early adulthood. This may be more pronounced when prior developmental phases were not completed in optimal conditions.

This means that executive functions such as reason, long-range planning and impulse control might not be fully operational into early adulthood.

The continued presence of attuned and safe adults is no less important even as peers become more important and influential. ACEs can still have latent effects during this period in a person's life, which can be reflected in impulsivity, displayed in the top 5 burden of disease for this age range, self-harm, drug use, depression and anxiety.





## Young Adult Mental Health

The mental health of young adults has become an increasingly important issue over recent years, as the percentage of young people aged 16 to 24 years old in Ayrshire and Arran reporting to have a mental health condition has increased from 2.5% in 2011 to 14.3% in 2019.

Figure 22. % of People Aged 16 to 24 Years Old in Ayrshire and Arran Reporting to have a Mental Health Condition<sup>(2)</sup>



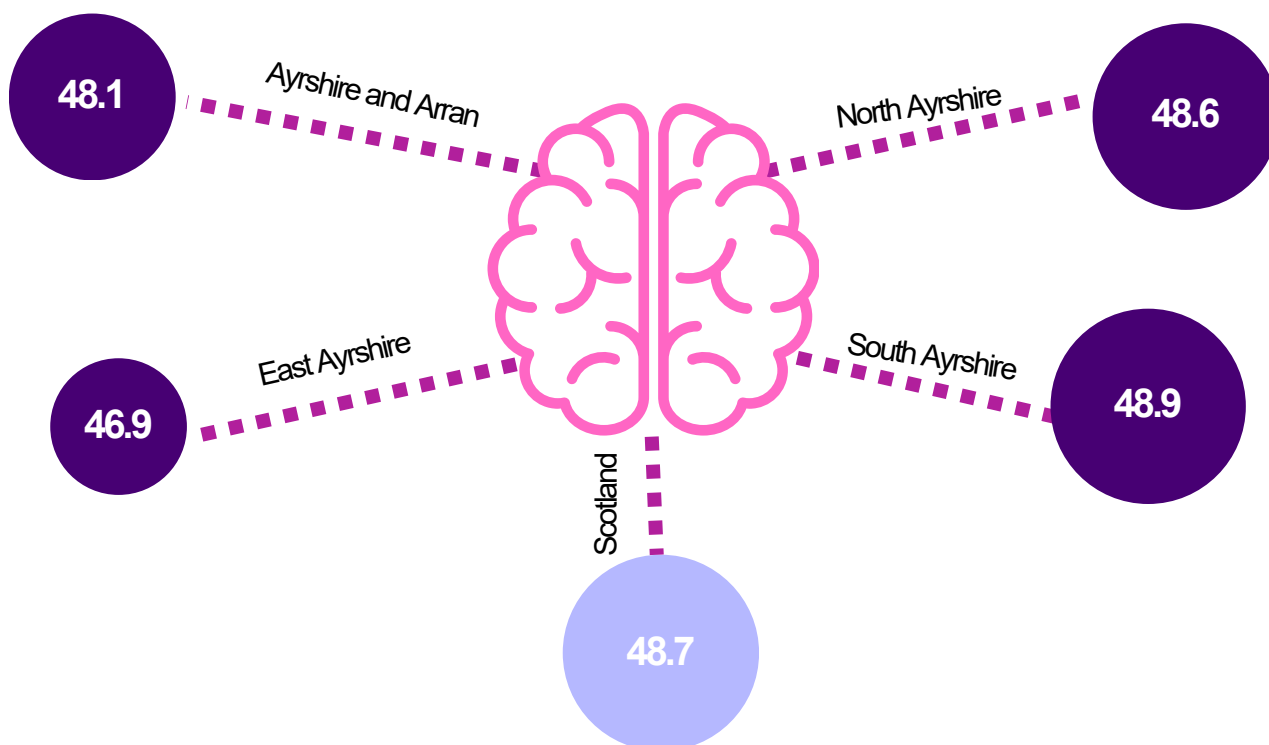
The extent and nature of brain development across adolescence and young adulthood creates opportunities and risks. Opportunities to consolidate positive experiences in life to date and risks that innate vulnerabilities to mental health difficulties may be accentuated or become visible, shaped also, by life experiences and real time circumstances.

The mental health needs of young people appear to be increasingly challenging following the COVID-19 pandemic, with notable increases in mental health struggles. This suggests there were influences and impacts on growth and development across this age group during this time.

Mental wellbeing is measured using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). The questionnaire consists of 14 positively worded items designed to assess: positive affect (optimism, cheerfulness, relaxation) and satisfying interpersonal relationships and positive functioning (energy, clear thinking, self-acceptance, personal development, mastery and autonomy). The total score ranges from 14 to 70 with higher scores indicating greater wellbeing. The average Scottish score was 48.7 for 2019-2023.



Figure 23. WEMWBS Scores for Adults of All Ages<sup>(37)</sup>



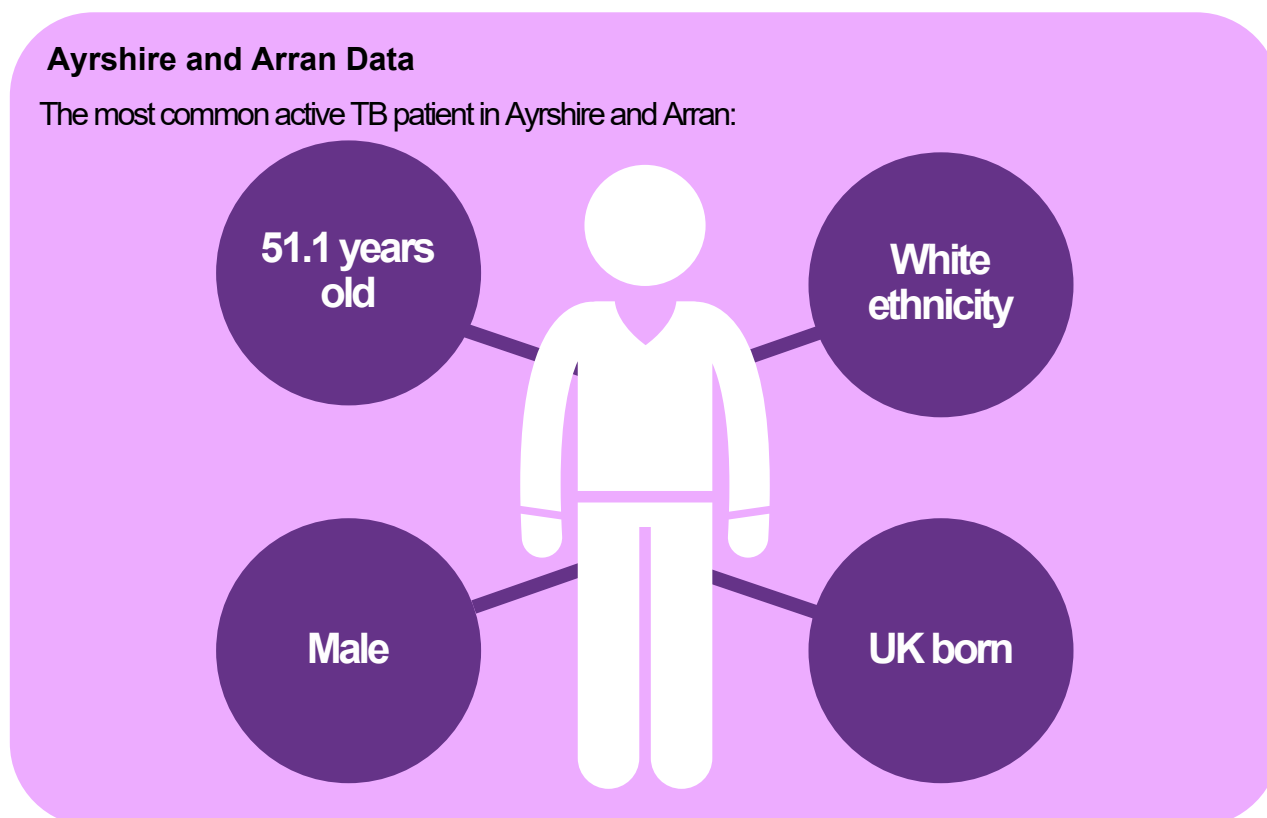
East Ayrshire scored the lowest for WEMWBS with 46.9, with North Ayrshire also falling below the Scottish average of 48.7 with a score of 48.6. South Ayrshire scored slightly higher than the national figure, with a score of 48.9, highlighting the greater wellbeing felt by those living in South Ayrshire.

### Spotlight: Tuberculosis

In Ayrshire and Arran, tuberculosis (TB), both active and latent, remain a respiratory issue for many individuals. Active TB is an infection which involves symptoms and the person is contagious whereas latent TB is an inactive form of infection and people with latent TB are not infectious and cannot spread TB to others. In Ayrshire and Arran, the most common active TB case looks like the image in Figure 24 below.



Figure 24. NHS Ayrshire and Arran's most common active tuberculosis patient



Over 66% of active TB cases in Ayrshire and Arran are male, over 71% are white and over 72% are born in the UK. The majority, 68%, of active TB cases in Ayrshire and Arran live in the two most deprived areas, SIMD 1 and 2. These cases are not defined to any one of the local authorities, in fact, the cases are spread widely throughout East, North and South Ayrshire.

### What are we doing in Ayrshire and Arran to tackle the spread of tuberculosis?

Public health continue to develop and improve an active programme of case-finding, contact tracing, support for individuals diagnosed with TB, and Directly Observed Therapy (DOT) for those struggling to complete medication. Health checks and health screening are offered to the migrant population on their arrival to Scotland. The type of health screening offered is dependent on the country from which the migrant has arrived from as different countries have varying levels of infectious diseases. One health screening programme offered in Ayrshire and Arran is the Tuberculosis Screening Programme.

Migrant Public Health Scotland has recommended targeted tuberculosis (TB) screening for individuals seeking refuge or asylum in Scotland. Ayrshire & Arran are also one of the first Boards to develop a programme of TB screening for new migrants.



To achieve this, NHS Ayrshire and Arran established a Migrant Screening Service in 2021. This has undergone significant development to meet service demands. In the 2-year period of 2023-25, NHS Ayrshire and Arran have offered screening with a trained nurse to all asylum seekers, people arriving on UK Government Resettlement Schemes and unaccompanied young people. The average age of screened individuals is 23 years old, and common countries of origin include Ukraine, Syria, Afghanistan and Vietnam.

The arrival of unaccompanied young people is often unanticipated and can lead to difficulties in estimating the likely demands on resources. NHS Ayrshire and Arran works closely with the three local councils to ensure these young people are assessed and are able to access appropriate healthcare for TB, blood-borne viruses and sexual health, if required.

The Migrant Screening Service plays an essential role in protecting the health of migrants and the wider Ayrshire population.



Adults 25 to 49 Year Olds

Life Course Spotlight

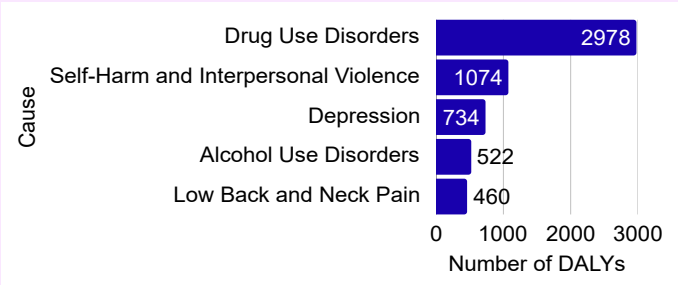


The relationship skills and resilience acquired through attachment experiences in childhood, adolescence and early adulthood are taken into adult years. They inform adult relationships with family and community. Healthy relationships can be understood as protective for physical and mental health.

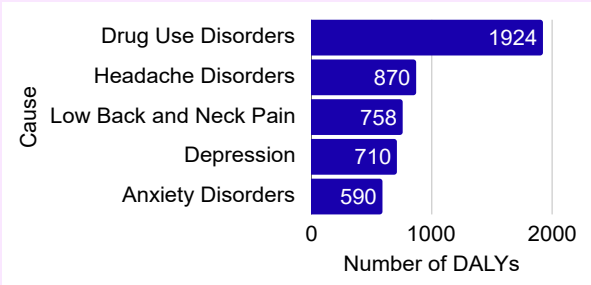
Some mental health conditions peak in this age group, typically due to life pressures such as work, family, financial and societal. Self-harm and interpersonal violence in men peaks during this age range at 1074 years lost.

In Ayrshire and Arran, drug use disorders are a significant issue within this age range. This age range often experiences the highest rate of drug-related deaths in the health board. These high rates can be attributed to multiple factors such as socioeconomic deprivation, with the majority of drug-related deaths occurring in SIMD 1, the most deprived areas.

Top 5 Burden of Disease: 25-44 Year Old Males



Top 5 Burden of Disease: 25-44 Year Old Females

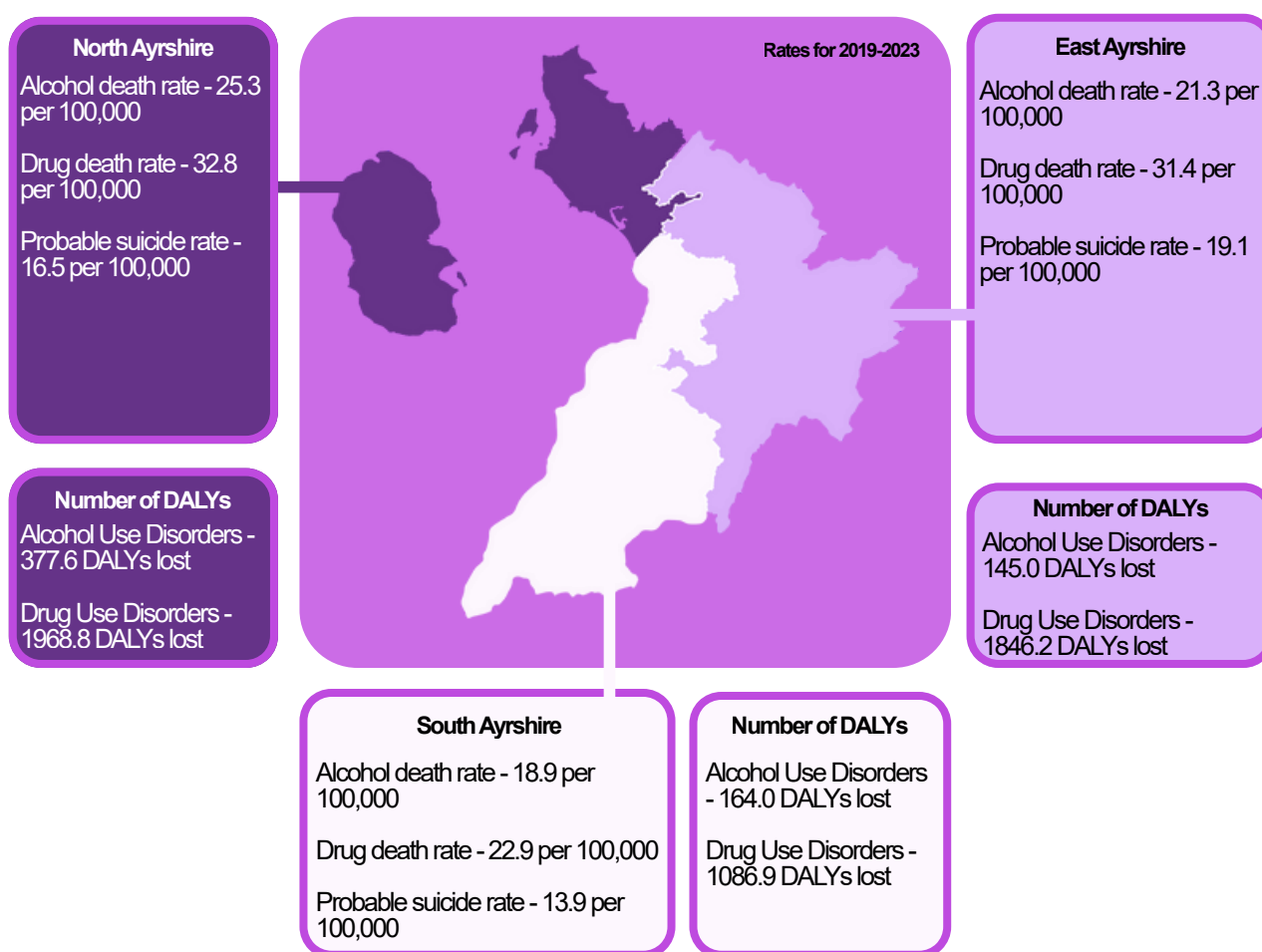




## Substance Use

In Ayrshire and Arran, deaths due to alcohol, drugs and suicide in adults aged 25 to 49 years remains a significant public health concern. In particular, drug-related deaths have risen in recent years, mirroring national trends in Scotland. Drug, alcohol and suicide related fatalities all contribute substantially to premature mortality in Ayrshire and Arran, highlighting the urgent need for targeted interventions and support.

Figure 25. Deaths due to Alcohol, Drugs and Suicide in Adults aged 25 to 49 years old in Ayrshire and Arran<sup>(1)</sup>





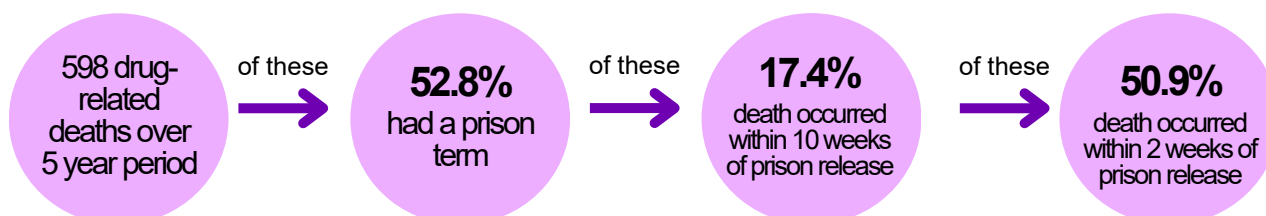
## Early Prison Release

The relationship between early prison release and drug-related deaths is well-documented and proposes a significant public health issue. Individuals released from prison face a significant elevated risk of drug-related death, particularly within the first two weeks of release.

Analysis by the NHS Ayrshire and Arran Public Health Department Research and Data team identified a cohort of individuals who experienced a prison stay and subsequently died due to drug misuse, abuse or overdose<sup>(50)</sup>.

Figure 26. Risk of Drug Death on Leaving Prison in Ayrshire and Arran

### In Ayrshire and Arran between 2017 and 2021...



These findings highlight the need for targeted interventions for recently released prisoners to reduce the risk of drug-related deaths, particularly within the first two weeks of release. This could involve enhanced support services; monitoring; and rehabilitation programmes tailored to this vulnerable group.

### Spotlight: Community Sentencing

Community sentences are the collective ways that courts can punish someone convicted of committing an offence other than by imposing a custodial sentence. Research and evidence shows us that community sentences are more effective than short term prison sentences, supporting and addressing people's needs and avoiding disruption to factors that can prevent re-offending, including housing, employment, relationships and access to services such as healthcare.

A sustained focus on prevention and effective interventions, including community sentences, has helped ensure reconviction rates remain at a 20 year low<sup>(51)</sup>.



### **What are we doing in Ayrshire and Arran to help individuals with community sentences?**

As a partner of the Community Justice Ayrshire Partnership, the Public Health team are supporting individuals sentenced to unpaid work across East Ayrshire. These individuals receive stress awareness, healthy eating and active living training. This training gives individuals coping mechanisms and structured action plans to support them and help protect the public, promote resistance from offending and enable rehabilitation.

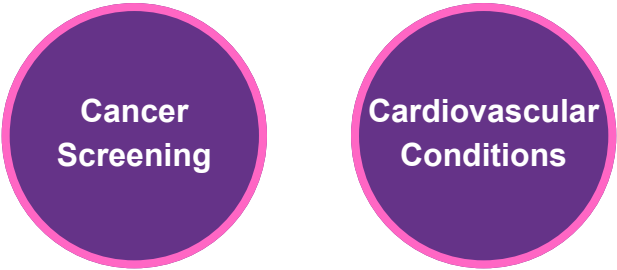
Unpaid work has led to reinvigorating the grounds at East Ayrshire Community Hospital and the redesign of the gardens at the Kyle Chemotherapy Unit at Ailsa Hospital.





Middle Age 50 to 69 Years Old

Life Course Spotlight



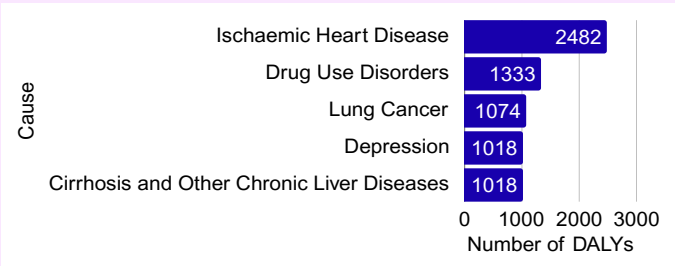
Adults play a key role in Ayrshire and Arran’s community, often as caregivers, volunteers and experienced members of the workforce. Prioritising their physical and mental health not only enhances their quality of life but also reduces the pressures on local health and social care services.

Many people in this age group are transitioning towards retirement, and a pivotal moment in the life course emerges. The capacity for resilience and coping skills acquired across the life course to date, alongside subsequent traumatic experiences and related life challenges, inform the presence of physical and mental health challenges.

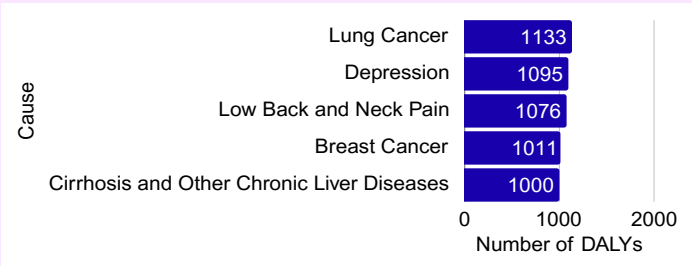
Biological ageing and environmental factors intertwine and often result in chronic conditions such as cardiovascular conditions, which are prominent in Ayrshire and Arran. Conditions such as obesity negatively impact the health of this population, with 34% of individuals in Ayrshire and Arran being obese, with 70% being overweight (including obese). This leaves Ayrshire and Arran with one of the highest obesity levels in Scotland for a health board<sup>(17)</sup>.

As a preventative measure, major cancer screening programmes begin during this age group, such as the bowel and breast cancer screening initiatives. Early detection through both of these programmes significantly improves treatment outcomes if cancer is detected.

Top 5 Burden of Disease: 45-64 Year Old Males



Top 5 Burden of Disease: 45-64 Year Old Females



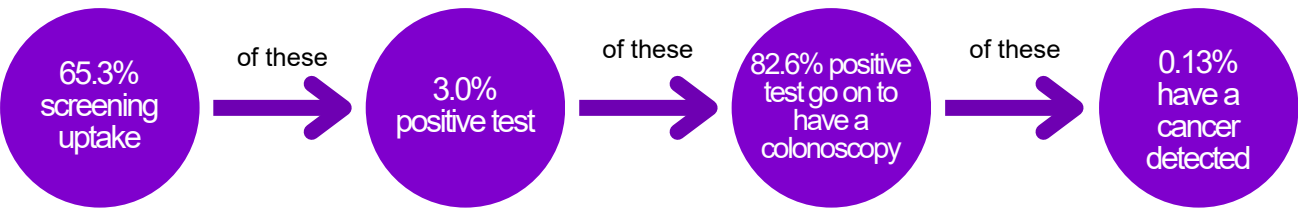


Cancer Screening

In Scotland, bowel and breast cancer screening programmes begin at age 50. Both types of cancer are two of the most common cancers in Scotland, with breast cancer being the most common amongst women. These screening programmes allow the NHS to detect cancerous cells as early as possible, increasing the affected individual's chance of survival <sup>(52)</sup>.

Figure 27. Bowel Cancer Screening May 2022 - April 2024<sup>(53)</sup>

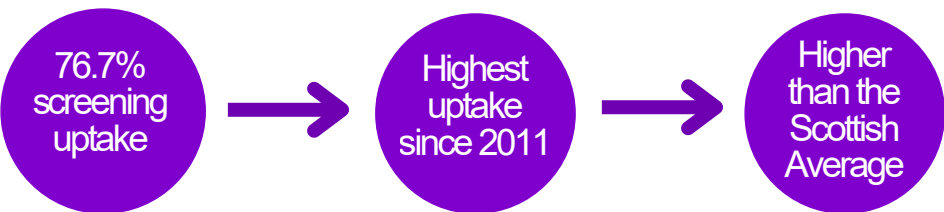
Bowel Cancer Screening  
May 2022-April 2024



Ayrshire and Arran ranked 12<sup>th</sup> out of 14 health boards for bowel screening programme uptake with a percentage uptake of 65.3%, falling short of the national average of 65.7%. Amongst the health boards, the percentage uptake ranged from 61.0% to 73.7%. In terms of deprivation, the bowel cancer screening uptake increased as the deprivation levels improved, highlighting the issues of access to services for those living in the most deprived areas.

Figure 28. Breast Cancer Screening 2020/2023<sup>(54)</sup>

Breast Cancer Screening  
2020/2023



Ayrshire and Arran had the 9th highest breast cancer screening uptake for a health board in Scotland. The uptake of 76.7% met the acceptable minimum standard of 70% uptake but fell short of the target of 80%. The uptake for the breast cancer screening programme for all health boards ranged from 72.8% to 86.2%. The breast cancer screening uptake for SIMD 1 areas in Ayrshire and Arran fell below the acceptable standard of 70%, an uptake of 68.9%. However, even though Ayrshire and Arran's uptake within SIMD 1 fell below the standard, it was the second highest uptake for SIMD 1 for all health boards. Ayrshire and Arran's uptake in the least deprived area, SIMD 5, was also the second highest uptake.



### Spotlight: Ageing Well

As individuals get older, physical and cognitive health tend to decline. However, wellbeing is consistently found to be higher later in life in comparison to young and middle aged adults. However, this high wellbeing declines in the oldest of the older population. The influence of social relationships on the risk of death are comparable to other established mortality risk factors such as smoking and alcohol consumption. The influence of social relationships on the risk of death actually exceeds that of the influence of physical activity and obesity. It has also been found that loneliness has a significant detrimental effect on the health of an individual and can be linked with an increase risk of mortality over a 6 year follow up period in older adults aged 60 and over.

### What are we doing in Ayrshire and Arran to support health and wellbeing as people age?

South Ayrshire has signed up to the World Health Organisation's Age Friendly Community Model. The outworking of the model locally is sited within the Community Planning Partnership and has led to the development of an Ageing Well Strategy<sup>(55)</sup>. The strategy was informed by a range of engagement activities and the formation of Ageing Well Champion's Board. The work is centred around the recognition that frailty is an indicator of ageing, and that a range of preventive approaches will sustain health and reduce the progression of frailty where increasing health and social care inputs are required. Whilst still in its early days of delivery, there has already been some significant work, shown in Figure 29.

Figure 29. Ageing Well Strategy



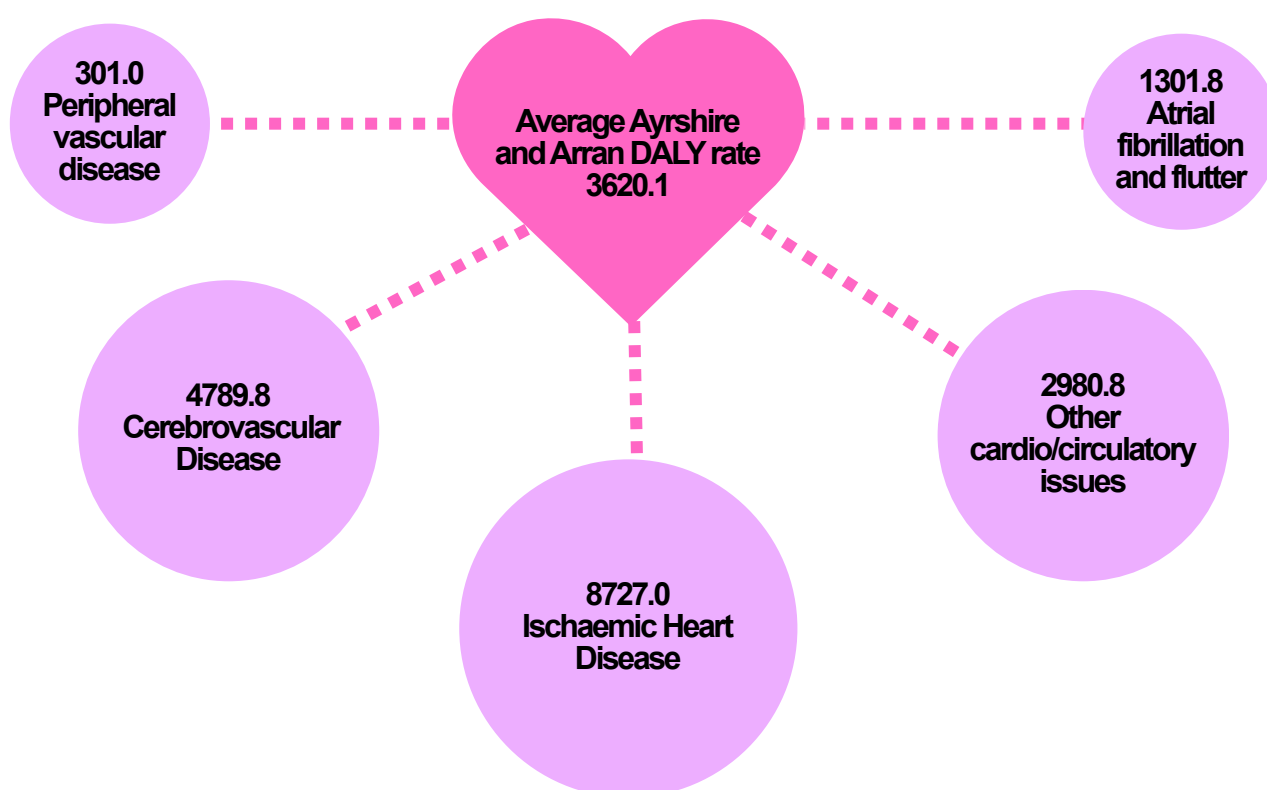


### Spotlight: Cardiovascular Disease

In the 65 to 84 age range, Figures 8 and 9 show the number of DALYs lost due to cardiology conditions and diseases dramatically increases. These conditions include ischaemic heart disease, cerebrovascular disease, atrial fibrillation and flutter, peripheral vascular disease and other cardiovascular and circulatory conditions.

The data clearly indicates that the burden of cardiovascular disease increases significantly with age. Older populations, 65+, bear the greatest burden, which underscores the importance of focusing healthcare resources and interventions on these age groups<sup>(21)</sup>.

Figure 30. DALY rates for Cardiovascular Conditions in 2019 in Individuals aged 65 to 84 Years Old in Ayrshire and Arran<sup>(21)</sup>



In terms of cerebrovascular disease, Ayrshire and Arran has a significant burden of disease amongst the population. For Ischaemic Heart Disease, Ayrshire and Arran has the 4<sup>th</sup> highest burden of disease for any Scottish Health Board, 4<sup>th</sup> for Cerebrovascular Disease, 1<sup>st</sup> for Other cardio/circulatory Issues, 6<sup>th</sup> for Atrial Fibrillation and Flutter and 10<sup>th</sup> for Peripheral Vascular Disease. Out of all of these conditions, the highest burden disease in the Ayrshire and Arran local authorities is seen in Ischaemic Heart Disease in East Ayrshire with a DALY rate of 9424.4.



## Reducing Cardiovascular Risk Through Person-Centred Prevention

High blood pressure, high cholesterol and diabetes or pre-diabetes are important modifiable risk factors for developing ischaemic heart disease and stroke. People are likely to be unaware initially that they carry these often silent risks, which is why early identification is important to reduce risk of adverse outcomes. This is an example of secondary prevention – identifying risk factors at an early stage, allowing effective intervention. Prioritising future health benefits may be more difficult if people have challenges meeting their immediate needs. The cost of living crisis, combined with the changes in local employment patterns outlined in the introduction to this report, confer financial challenges for many individuals and families. Just as there are limited resources in the health service, the personal resources in terms of time, energy and motivation that are available to individuals are finite and it is unfair and unrealistic to expect people to prioritise possible future health impacts when their capacity to meet basic everyday needs, like food security, is uncertain. Health checks offered in traditional healthcare settings are often least accessible to those in the population who have most capacity to benefit.

Adopting a proportionate universalism approach means ensuring equitable access to screening by developing person-centred services that take into account what is important to individuals and meets them where they are. The healthcare public health team are developing approaches that offer screening for cardiovascular risk factors in settings where individuals access support for wider determinants of health, for example by working with local authority teams to offer screening at community larger locations.

## Women's Heart Health

Although higher numbers of men experience cardiovascular disease, it remains the leading cause of mortality in both females and males. It is increasingly recognised that heart disease is often overlooked in women, in part due to its perception as a predominantly male disease. Furthermore, rates of heart disease between men and women converge after menopause, when the protective effect of female sex hormones is lost. Women often experience disproportionate barriers in accessing prevention, for example related to transport or caring responsibilities. We are committed to improving the experience of women in relation to heart health by:

- Improving awareness about how heart disease presents in women through a targeted campaign for the public and health professionals
- Developing access to screening to identify cardiovascular risk factors in community settings accessed by women



## What are we doing in Ayrshire and Arran to reduce Cerebrovascular Disease?

Atrial fibrillation is a form of cardiac arrhythmia that affects around 1 in 10 people aged over 65. While often symptomless, it is a risk factor for stroke; people with unmanaged atrial fibrillation are five times more likely to have a stroke<sup>(56)</sup>. Working in collaboration with the stroke team and primary care, the healthcare public health team has developed a screening pilot at Dalmellington Community Hub using a portable Kardia device, with creation of pathways that will allow diagnosis and intervention without the need to travel to hospital. Positioning diagnostic services closer to communities in this way is an important aspect of reforming services to make prevention more person-centred, as identified in the recently published Health and Social Care Service Renewal Framework<sup>(57)</sup>. There is potential to expand this model to other community settings, with long term benefits for individuals and for the health service.



Older Adults 70 to 89 Years Old

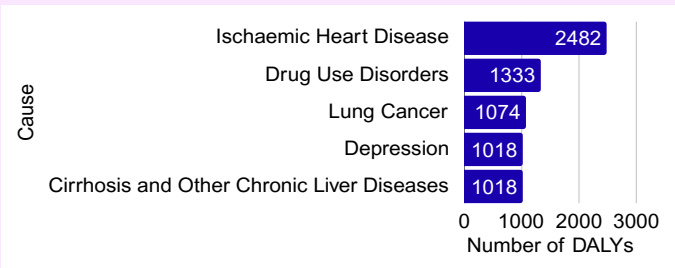
Life Course Spotlight



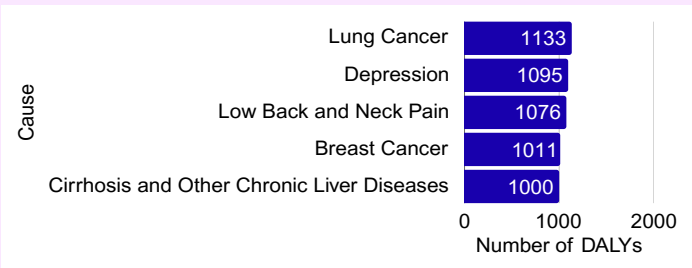
As we transition from middle age into older adulthood, the cumulative effects of ageing, social determinants of health and chronic conditions are reflected in the health of the population. The burden of ischaemic heart disease in men and lung cancer in women continues and accelerates within this age range, as highlighted in the top 5 burden of disease for this age group.

The burden of chronic obstructive pulmonary disease (COPD) peaks within this age range and Ayrshire and Arran see the highest rates for a health board in Scotland, as discussed next. These high rates of COPD could be due to deprivation, environmental exposure such as years of mining work or high smoking rates in the health board with 20% of the population currently smoking cigarettes and 10% currently smoking e-cigarettes or a vaping device<sup>(17)</sup>. These numbers of smokers and vapers could be an underestimate due to underreporting. These latent effects of childhood adversity and risky behaviour choices throughout the life course can greatly impact the health of this population.

Top 5 Burden of Disease: 65-84 Year Old Males



Top 5 Burden of Disease: 65-84 Year Old Females

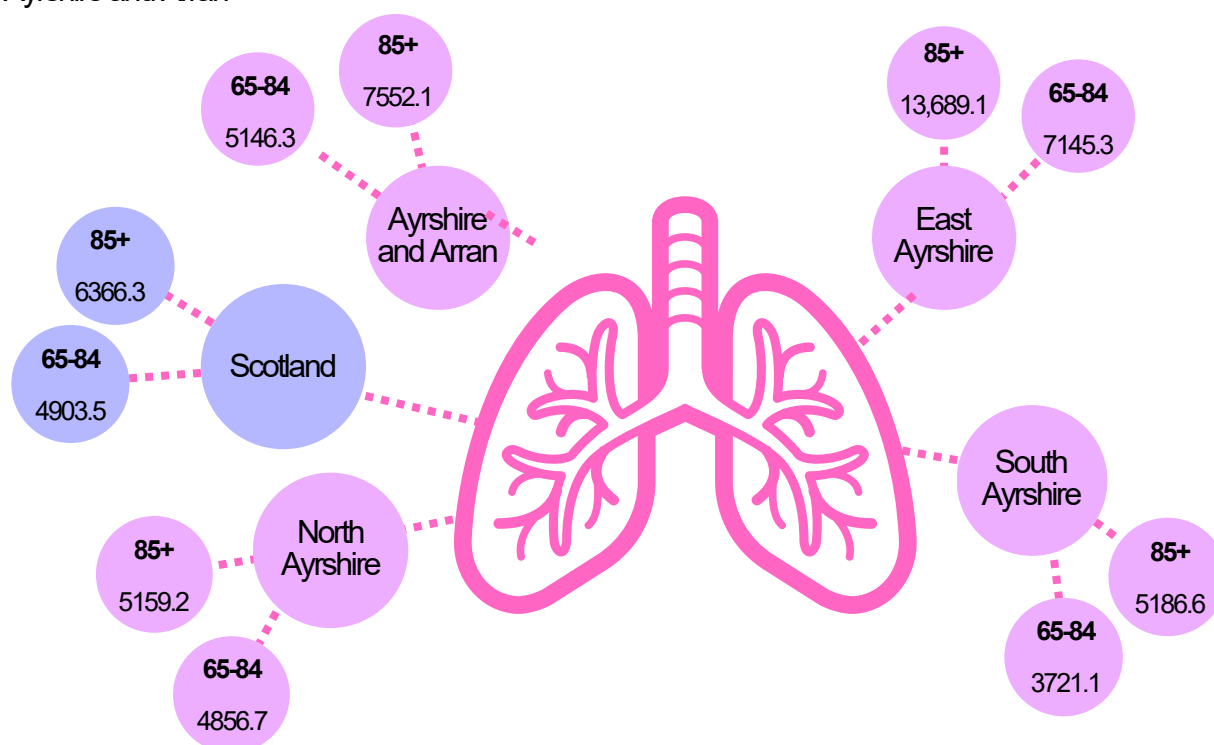




### Spotlight: Chronic Obstructive Pulmonary Disease (COPD)

Chronic obstructive pulmonary disease (COPD) is a group of lung conditions that cause the individual breathing difficulties. In the older adult population, it can be particularly impactful as ageing lungs are already less efficient and so COPD adds a significant burden. Prompt diagnosis of COPD is important as breathing difficulties worsen over time. Early treatment and support can keep symptoms under control and reduce the chance of developing complications.

Figure 31. DALY Rate of COPD in 2019 in Individuals aged 65-84 Years Old and 85 + Years Old in Ayrshire and Arran<sup>(21)</sup>



COPD in Ayrshire and Arran presents a serious issue. Ayrshire and Arran have the highest DALY rate for individuals aged 85 and over for any health board in Scotland and the third highest for individuals aged 65 to 84 years old. The effects of COPD in Ayrshire and Arran appears to significantly affect East Ayrshire, where the burden of COPD is the worst in Scotland for a local authority in the 85 years old and over age range and second highest for the 65-84 year old age range. East Ayrshire has a COPD DALY rate of 13,689.1 for people aged 85 and over, as shown in Figure 31. This could be linked to the mining culture, previously present within East Ayrshire.





## What are we doing in Ayrshire and Arran regarding COPD?

Spirometry testing is recognised as the gold standard for the diagnosis, assessment and monitoring of COPD<sup>(58)</sup>. Removal of spirometry testing from the GMS contract has led to inequities in access for the population, which can further risk widening of health inequalities.

Inadequate access to early high quality spirometry testing can result in delayed diagnosis, misdiagnosis and potential for inappropriate treatment pathways that may have side effects and are a waste of resource.

The Healthcare Public Health Team are working in collaboration with colleagues in the South Ayrshire Health and Social Care Partnership to pilot a community service that delivers spirometry testing that is accessible for all South Ayrshire residents and as close to home as possible. It is expected that early access to community-based spirometry will support early diagnosis, therefore reducing exacerbations and complications of the disease and reducing front door presentations, as well as reducing the number of people misdiagnosed with COPD.

If the pilot is successful, it will provide important learning and information to support building a community spirometry service for all people living in Ayrshire and Arran.



## Elderly 90+ Years Old

### Life Course Spotlight

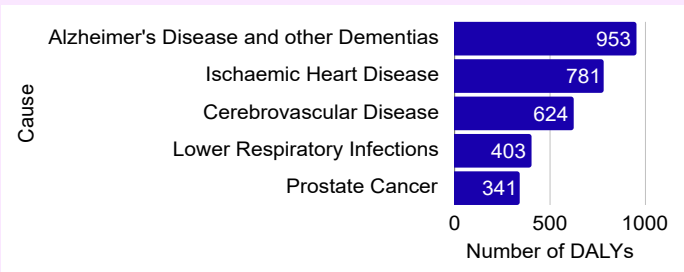


As life expectancy increases, the number of people living into their tenth decade has increased, bringing significant health related challenges. Resilience and sense-making cognitive functioning may be the more challenging, alongside multi-morbidity and higher prevalence of long-term conditions.

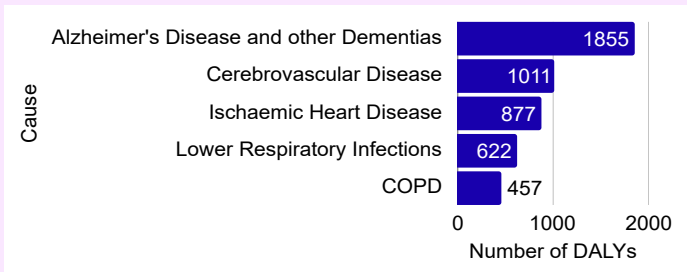
Elderly adults face a range of health issues which can be due to the natural ageing process, which is progressing due to an ageing population in Ayrshire and Arran. Lifestyle and genetic factors will also play a role in the level of health at this stage of life. According to the Burden of Disease, the conditions with the highest DALY rates in Ayrshire and Arran are Alzheimer’s disease and other dementias, cerebrovascular disease and ischaemic heart disease.

Ischaemic heart disease remains an issue in individuals aged 85 and over, with it still appearing in the top 5 burden of disease list for both males and females.

Top 5 Burden of Disease: 85+ Year Old Males



Top 5 Burden of Disease: 85+ Year Old Females





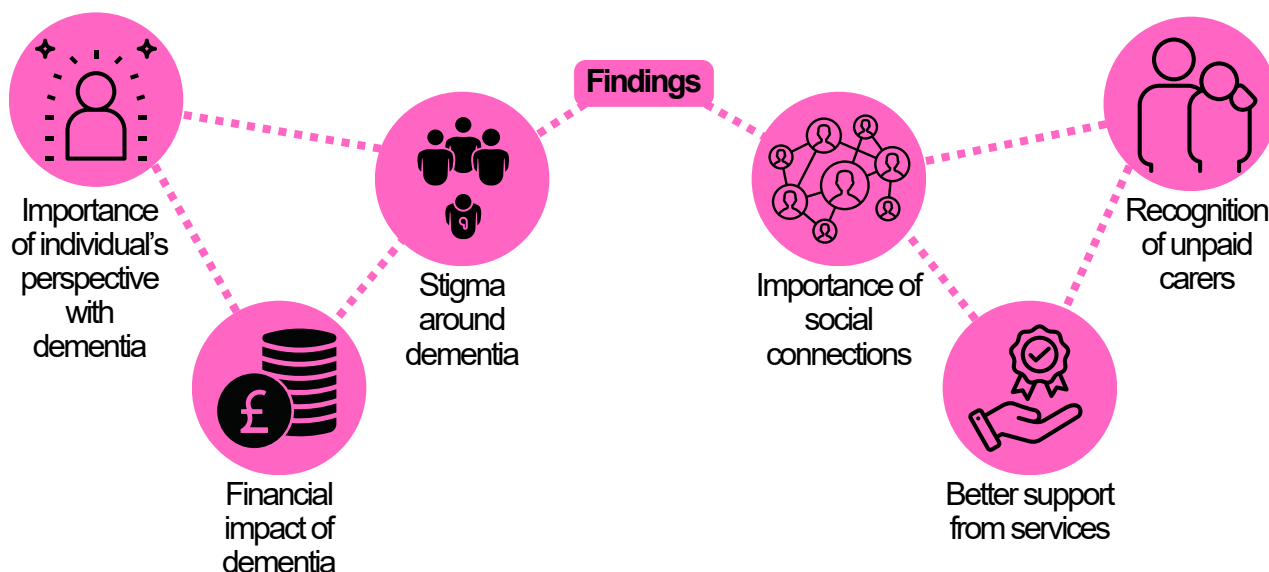
### Spotlight: Alzheimer's Disease and Other Dementias

Alzheimer's disease and other dementias, according to the burden of disease, have a DALY rate of 29,670.6 per 100,000 of the population in Ayrshire and Arran. The DALY rate increases dramatically at 85 years old and over in Ayrshire and Arran, with the rate increasing from 4171.4 for 65 to 84 years old to 29,670.6 in 85 years and over. In Ayrshire and Arran, the age-standardised mortality rate for Alzheimer's and other dementia deaths is 106.5, 12th highest for a health board in Scotland.

### What are we doing in Ayrshire to care for those with Alzheimer's and Dementia?

In East Ayrshire, Local Conversations<sup>(59)</sup> events are held to let the local community get informed about what is going on in their local area. Specific dementia-focused Local Conversations have been held in 2024 in Galston, Kilmarnock and Cumnock. Figure 25 below highlights the findings from these meetings and what is most important to the community in regards to Dementia care.

Figure 32. East Ayrshire Local Conversations - Dementia Care Findings





## Concluding Comments

This Director of Public Health Report details the origins and challenges of the high levels of health and social care need in the NHS Ayrshire and Arran population, from multiply disadvantaged urban communities; to clusters of rural deprivation; isolated communities; and an ageing and frailer population. The Report details how the seeding of poor health risk lies in the complex intersections of socioeconomic factors (40%) the physical environment (10%) that influence health related behaviours (30%) and health care needs (20%). These breakdowns, as demonstrated by Marmot<sup>(6)</sup>, serve as actionable insights where the preventive potential to reduce demand and mitigate needs lie.

When the influences on the creation and sustaining of health as a resource for life are understood through a life course lens, intersecting with family and community experiences, the origins of the high burden of poor health that results in too many Ayrshire citizens not living, or being able to live in their later years becomes more visible.

It also presents possibilities to further realise preventive potential through both universal (health and education) and more targeted work as needs become visible: timely understanding and assessment of needs in family life or condition specific disease (a specific and measurable condition) or illness (health needs as experienced by an individual) or risk for a child or a vulnerable adult.

The Report details examples of good work and innovation. The challenge lies in the scaling up of universal prevention and the targeted approaches through primary, secondary and tertiary prevention to the point where we see evidence of whole population and targeted population effects. Alongside the good work, are the persistent and devastating consequence of years of life lost to illness and premature death, particularly for young adults (24-45 years) where the toll of addiction, suicide and alcohol are evidenced.

This in turn informs an understanding of the financial challenges experienced by the NHS Ayrshire and Arran and the three Health and Social Care Partnerships in response to the burden of poor health across the population.



This informs and facilitates the NHS Board and partners in dialogue with families and communities to deliver on necessary public sector reform and achieve the changes identified in the public sector reform goals of the Scottish Government<sup>(61)</sup>

1. For people who need more support, particularly those experiencing disadvantage, public services will come to you. These services will be person-centred, accessible and you will not be required or expected to navigate different organisations or complex systems.
2. For communities, this will mean shaping local places, with public service organisations sharing power and resources with you to deliver what is needed for individual communities.
3. For public service staff, you will be empowered to provide tailored support and be trusted to work with people to deliver beyond organisational boundaries to best support the person or family in front of you.
4. For public service leaders, this will mean you lead as part of a collective, shaping a system that puts people, communities and places at its heart to meet their needs and maximise public value and ensure fiscal sustainability. Beyond leading your own organisation and sector, you will work collaboratively, forging partnerships that drive lasting change, address root causes and provide support early to avoid long-term, complex and expensive interventions later, rising above individual, organisational and sectoral interests.

### Actionable Insights

- All people can thrive when their fundamental relational and basic wants and needs (income, food, housing, health care) are met. This supports the creation of resilience to negotiate and navigate the challenges that undoubtedly exist across life. In the absence of relational certainty, uncertainty over income, food and housing, people do less well; people rarely thrive in environments of enduring scarcity.
- Life course framings bring additional awareness and opportunities to realise the preventive potential within the most challenged communities of Ayrshire where the consequences of societal and economic changes in the 1980s have had such devastating consequences: evidenced as too many young men and women living with the impact of drug and alcohol and mental health needs and distress, evidenced in high rates of drug, alcohol and suicide deaths before the age of 45 years.
- Realising the preventive potential for the populations of NHS Ayrshire and Arran will lead to benefits in the quality of life and experience of health across all income groups; with the greatest benefits for those experiencing the greatest challenges in family and community life and their experiences of health and wellbeing and premature, preventable death.
- Realising the preventive potential of health and social care services, where needs and risks are identified early and met in a timeous manner, will further contribute to a motivated and energised workforce and realise additional improvements in the experience of care and health potential of individuals.



## Recommendations

The Ayrshire and Arran NHS Board, and the senior leadership within the Health and Social Care Partnerships, Ayrshire Local Authorities and wider Community Planning Partners are challenged, encouraged and invited to:

1. Build a stronger understanding of how poverty and lack of opportunity affect people in the most disadvantaged communities across North, South, and East Ayrshire.
2. Recognise the benefits of both universal and targeted approaches in using health as a resource for life: from before birth, through all life stages, and across generations: for individuals, families, and communities
3. Work with purpose, pace, and scale across systems and services to unlock this preventive potential for all Ayrshire citizens. Every partner should take responsibility and act within their sphere of influence to deliver the opportunities outlined in this report.
4. The 2026 Director of Public Health (DPH) Report will build on these themes. It will guide the planning and design of services that meet the diverse needs of people at different ages and life stages, from urban centres to remote towns and villages. This work will support the Caring for Ayrshire Action Plan: citizens at the centre of care, accessing the right care, in the right place, at the right time.
5. Key asks of the Public Health Department and all partners/programmes of work involves examining:
  - a. What is being delivering and how we ensure maximum impact (across a prevention continuum) to effect change in this space as a team.
  - b. How we demonstrate leadership and collaboration across the whole system to fully realise preventive potential.
  - c. How we ensure our work reaches those most affected by poverty and inequality, including rural and remote communities.
  - d. The gaps are in our current approach, and what practical steps we can take to close them.
  - e. How we embed prevention across all systems and services, not just in strategic plans.
  - f. What evidence demonstrates progress and impact across communities.





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**Fig. 22.** % of People Aged 16 to 24 Years Old in Ayrshire and Arran Reporting to have a Mental Health Condition

**Fig. 23.** WEMWBS Scores for Adults of All Ages

**Fig. 24.** NHS Ayrshire and Arran’s Most Common Active Tuberculosis Patient

**Fig. 25.** Deaths Due to Alcohol, Drugs and Suicide in Adults aged 25 to 49 Years Old in Ayrshire and Arran

**Fig. 26.** Risk of Drug Death on Leaving Prison in Ayrshire and Arran

**Fig. 27.** Bowel Cancer Screening May 2022 - April 2024

**Fig. 28.** Breast Cancer Screening 2020-2023

**Fig. 29.** Ageing Well Strategy

**Fig. 30.** DALY Rates for Cardiovascular Conditions in 2019 in Individuals aged 65 to 84 Years Old in Ayrshire and Arran

**Fig. 31.** DALY Rate of COPD in 2019 in Individuals aged 65 to 84 Year Old and 85+ Year Olds in Ayrshire and Arran

**Fig. 32.** East Ayrshire Local Conversations - Dementia Care Findings





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