Highland
Community Planning Partnership

Highland Children and Young People's Needs Assessment

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Version	Issued	Summary of changes
1	30/03/2023	Final draft with additional content on young carers and neurodiversity to be confirmed
2	22/06/2023	Final version with additional content on young carers and updated cover page

Distribution	Method
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Contents

1. Introduction

This report aims to provide an overview of the population health and wellbeing needs of children, young people and families in Highland. It forms part of a programme of work undertaken in spring 2023 to inform the Highland Integrated Children's Services Plan 2023-2026 priorities and planning.

A health needs assessment (HNA) assesses a population's unmet health and healthcare needs to support planning and commissioning services. The definition used by the National Institute for Health and Care Excellence (NICE) is as follows[1]:

> A systematic process used by NHS organisations and local authorities to assess the health problems facing a population. This includes determining whether certain groups appear more prone to illness than others and pinpointing any inequalities in terms of service provision. It results in an agreed list of priorities to improve healthcare in a particular area.

This report has been completed as a rapid 'desk-based' HNA, drawing together information gathered from local and national sources. It utilises epidemiological and comparative approaches to explore trends and inequalities in outcomes for children and young people.

A rapid report of this type cannot provide a complete picture of the population needs of children and young people. Instead, it gives an overview of key points to help understand the population's needs and contribute to the planning and improvement of services.

2. Main Points

- Highland has a declining population of children and young people. Population projections forecast a continued reduction in the size of the population of children and young people.
- Highland has a significant remote and rural geography and a high proportion of areas in the most access deprived in Scotland. One in three children and young people under 18 reside in remote rural areas.
- The provision of services across the Highland geography is challenging. Statutory services, third sector organisations and other community groups should work collaboratively to improve the outcomes of Highland's children and young people.
- In Highland, most income deprived people live in places not identified among the most deprived areas by the SIMD. This distribution is a significant consideration for policy, strategy and the spatial targeting of resources.

- Tackling child poverty is a national priority. It is a complex task to measure child poverty, particularly in rural areas, accurately. Work should be undertaken to improve data sources that provide detail at a local level.
- Adverse childhood experiences are associated with poor educational, social, physical and mental health outcomes. Risk factors for childhood adversity are often co-occurring and interlinked. Actions identified should recognise the importance of different approaches and the connections between risk factors.
- There have been decreasing numbers of births in Highland, and the trend is expected to continue.
- Teenage pregnancies have fallen markedly, but this long-standing national priority has room for further improvement.
- Recording and reporting complex social factors and vulnerabilities in the maternity record are essential. Data capture about vulnerable women should continue to be improved.
- Preventative activity pre-conception and during pregnancy should be strengthened, and prevention explicitly considered as a part of service and pathway design or redesign.
- Identifying early child development problems is essential for understanding individual and collective developmental support needs. Early identification gives the best opportunity to support children and families to improve outcomes.
- There is strong evidence that breastfeeding is one of the most preventative health measures for children and mothers, with short-term and long-term benefits. Actions to improve breastfeeding uptake should be prioritised.
- Immunisation programmes for children are effective at protecting children from serious infectious diseases. There is a need to promote and improve the uptake of childhood vaccination.
- There is a need to support children and young people to maintain a healthy weight throughout childhood.
- Oral health improvement activities should continue with work to prevent dental caries in children, focusing on initiatives to reduce oral health inequalities.
- Preventing harm from substance use among young people is a long-standing national and local priority. Evidence based work to prevent and delay alcohol, tobacco and other drug use among young people should be prioritised.

- Children and young people's mental health and emotional wellbeing are critical concerns. Actions should ensure children and families receive support and services appropriate to their needs, including access to specialist CAMHS services.
- Schools should continue focused work to improve attendance, support children and young people with additional support for learning needs and promote inclusion.
- All children and young people should be supported to fulfil their potential through educational attainment and positive destinations upon leaving school.
- Processes to identify and support children and young people at risk of harm must continue to be improved.
- Learning from child death reviews should inform service delivery improvements and identify emerging trends that could influence the wider children's service strategy.

3. Population

Those commissioning and providing for the local health, educational and social needs of children and young people need to be aware that demands vary with the size of each annual population cohort and the cumulative sum of the individuals making up consecutive age groups.

As a result of birth rates and migration, the absolute number of children and young people of different ages living in Highland changes each year.

In Scotland, the definition of a child varies in different legal contexts. Statutory guidance supporting the Children and Young People (Scotland) Act 2014 and the United Nations Convention on the Rights of the Child 1989 include all children and young people under the age of 18 years[2] [3]. The following section extends this definition to cover those aged 18 to 24.

3.1. Population of children and young people

In 2021, 59,586 children and young under 25 years living in Highland comprised 25 percent of the area's population (Figure 1).

Children in their first year of life make up less than one percent of the total population of Highland and Scotland.

Figure 1: Children and young people living in Highland and Scotland by age group in 2021[1]

	Highland		Scotland	
	Number	**Percentage**	**Number**	**Percentage**
under 1 year	1,842	0.8	46,782	0.9
01-04	8,321	3.6	208,655	3.9
05-11	17,239	7.4	416,545	7.7
12-17	15,866	6.6	352,999	6.3
18-24	16,318	6.8	444,357	8.4
under 18	*43,268*	*18.2*	*1,024,981*	*18.7*
Total of children and young people	59,586	25.0	1,469,338	26.8

Source: National Records of Scotland, Mid-year population estimate for 2021
1 Percentage of the total population of the area

3.2. Population change

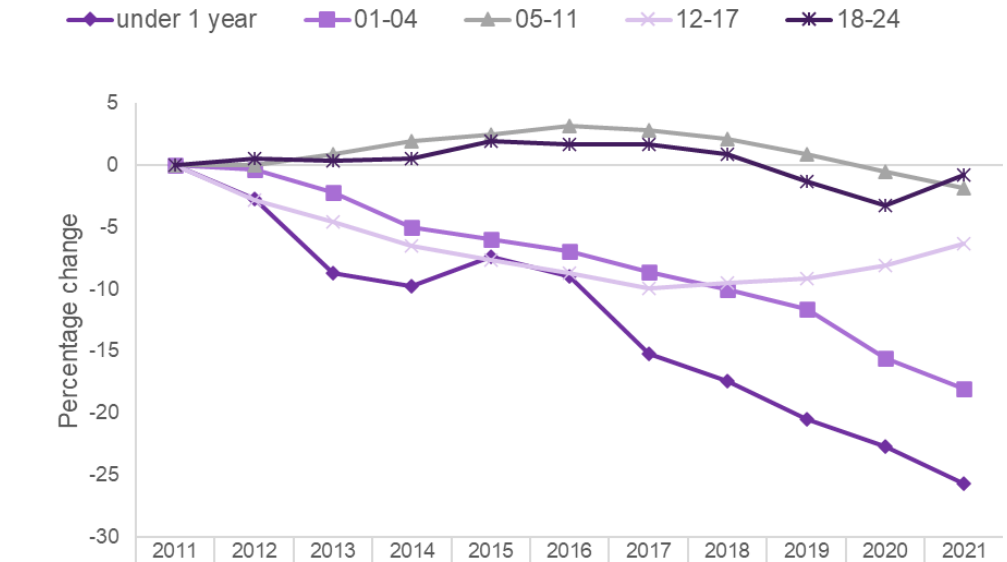
Over the last ten years, the population of children and young people under 24 in Highland has decreased from 63,587 to 59,586 (- 6.3 percent). There are substantial reductions in the number of children in the youngest age groups resulting from a sustained decline in annual births (Figures 2 and 3). We discuss birth trends in detail in section 5. Birth rates are at similarly low levels in the Scottish population, with a consequent notable decline in younger children (Figure 4).

Figure 2: Number of children and young people living in Highland in 2011 and 2021 by age group

	Age						Total of children and young
	under 1 year	01-04	05-11	12-17	18-24	under 18	
2011	2,480	10,148	17,562	16,945	16,452	47,135	63,587
2021	1,842	8,321	17,239	15,866	16,318	43,268	59,586
Percentage change	**-25.7**	**-18.0**	**-1.8**	**-6.4**	**-0.8**	**-8.2**	**-6.3**

Source: National Records of Scotland, Population Estimates Time Series

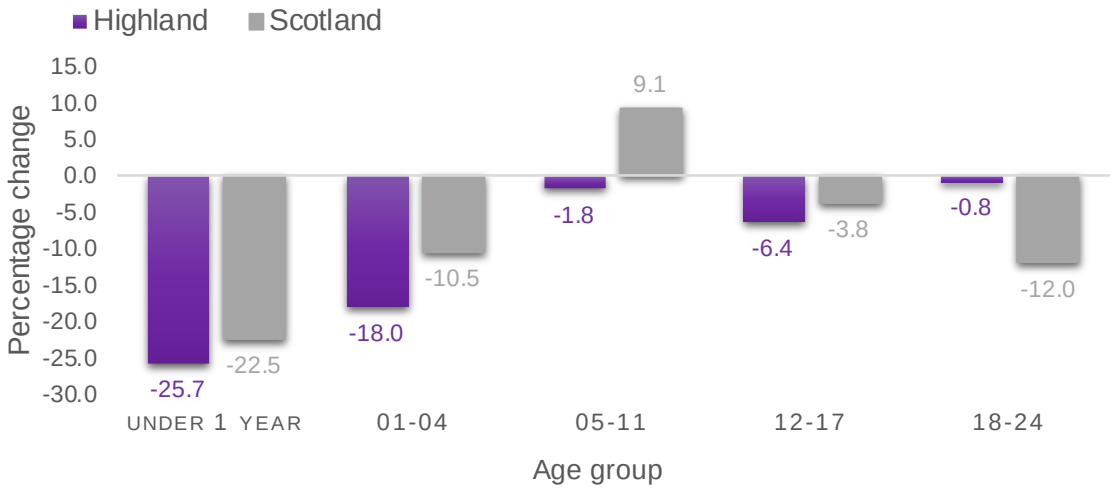
Figure 3: Percentage change in the number of children and young people living in Highland between 2011 and 2021 by age group



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
under 1 year	0	-2.7	-8.8	-9.8	-7.4	-9.0	-15.2	-17.4	-20.5	-22.7	-25.7
01-04	0	-0.4	-2.2	-5.1	-6.0	-6.9	-8.6	-10.1	-11.6	-15.6	-18.0
05-11	0	0.0	0.8	1.9	2.4	3.2	2.8	2.1	0.9	-0.5	-1.8
12-17	0	-2.8	-4.6	-6.6	-7.7	-8.7	-10.0	-9.5	-9.2	-8.1	-6.4
18-24	0	0.5	0.4	0.5	1.9	1.6	1.6	0.9	-1.3	-3.3	-0.8

Source: National Records of Scotland, Population Estimates Time Series

Figure 4: Percentage change in the number of children and young people living in Highland and Scotland between 2011 and 2021

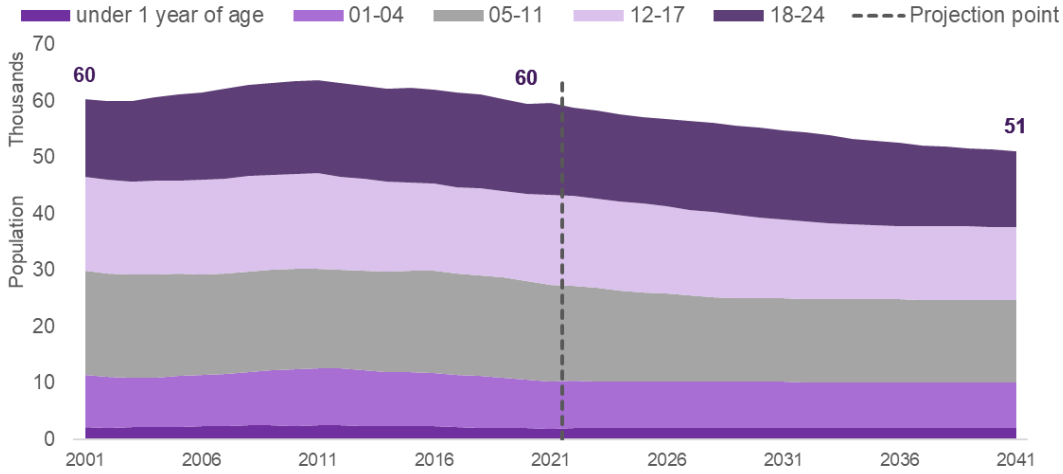


Source: National Records of Scotland, Population Estimates Time Series

3.3. Population projections

The 2018-based population projections for Highland forecast a continued reduction in the size of the population of children and young people (Figure 5 and Figure 6).

Figure 5: Estimated and projected population of children and young people living in Highland by age group, 2001 to 2041



Source: National Records of Scotland, Population Estimates Time Series Data and Population Projections for Scottish Areas (2018-based)

Figure 6: Estimated and projected population of children and young people living in Highland by age group, 2011, 2021 and 2031[1]

	under 1 year of age	01-04	05-11	12-17	18-24	Total	under 18 years of age
2011	2,480	10,148	17,562	16,945	16,452	63,587	47,135
2021	1,842	8,321	17,239	15,866	16,318	59,586	43,268
2031	1,991	8,141	14,819	13,997	15,794	54,742	38,948

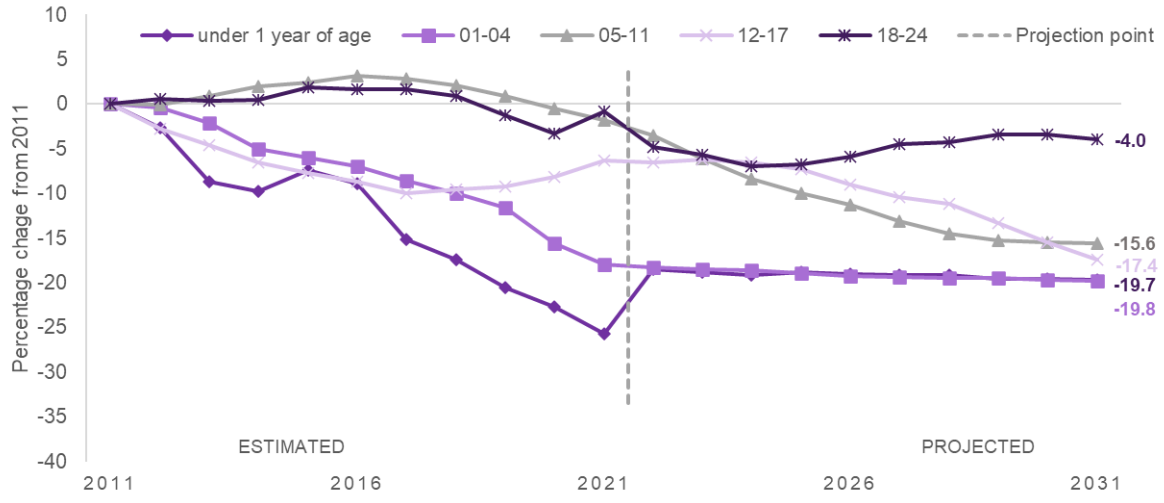
Source: National Records of Scotland, Population Estimates Time Series Data and Population Projections for Scottish Areas (2018-based)

Lower birth rates are the key factor contributing to the continued projected decline in the population of children and young people living in Highland. The birth rate assumptions informing the 2018-based projections underestimate the further decreases in recent years.

A consequence is a disjuncture between the estimated and the projected population that is most apparent in the population under one year old between 2021 and 2022 (Figure 7). As the successive birth cohorts of the projection age from this point, there is in-built inflation of the future population of children and young people across the projection course in all age groups.

If more recent birth trends continue, the expectation should be a smaller population of children and young people living in Highland than currently projected.

Figure 7: Percentage change in the estimated and projected population of children and young people living in Highland by age, 2011 to 2031



Source: National Records of Scotland, Population Estimates Time Series Data and Population Projections for Scottish Areas (2018-based)

3.5. Remoteness and rurality

The Scottish Urban Rural Classification (SGURC) is consistent with the government's core definition of rurality, which defines settlements of 3,000 or fewer people as rural. It also classifies areas as remote based on drive times from settlements of 10,000 or more people[4]. Using population thresholds and access criteria creates layers of sophistication in the classification (Figure 8).

We focus on the population of Highland children and young people who potentially live at a distance from service points in our major population centres in remote and rural areas. These places include villages, islands, peripheral coastal communities, and small towns in remote and very remote locations.

Figure 8: Scottish Government Urban Rural Classification (8-fold)

Area Class	Definition
1. Large Urban Areas	Settlements of over 125,000 people
2. Other Urban Areas	Settlements of 10,000 to 125,000 people
3. Accessible Small Towns	Settlements of between 3,000 and 10,000 people and within a 30-minute drive time of a settlement of 10,000 or more
4. Remote Small Towns	Settlements of between 3,000 and 10,000 people and with a drive time between 30 and 60 minutes to a settlement of 10,000 or more
5. Very Remote Small Towns	Settlements of between 3,000 and 10,000 people and with a drive time of over 60 minutes to a settlement of 10,000 or more
6. Accessible Rural Areas	Areas with a population of fewer than 3,000 people and within a drive time of 30 minutes to a settlement of 10,000 or more
7. Remote Rural Areas	Areas with a population of fewer than 3,000 people and with a drive time of between 30 and 60 minutes to a settlement of 10,000 or more
8. Very Remote Rural Areas	Areas with a population of fewer than 3,000 people and with a drive time of over 60 minutes to a settlement of 10,000 or more

Source: Scottish Government Urban Rural Classification 2020

In Highland, one in three children and young people under 18 years reside in remote rural areas, with one in five living in very remote rural areas. In contrast, one in twenty children lives in remote rural areas in Scotland, with one in forty living in very remote rural areas (Figure 9 and Figure 10).

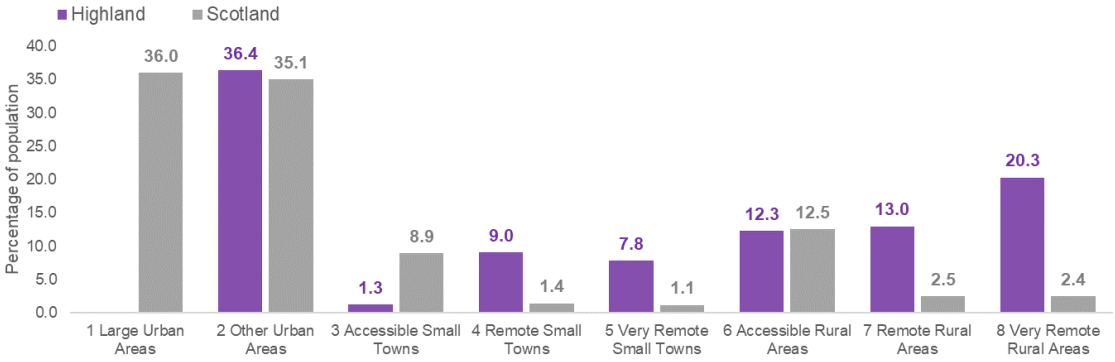
The table below shows the population under 18 years of age, but the distribution of children and young people is similar across the SGURC by age group in Highland (Figure 11).

Figure 9: Percentage of the population aged under 18 years of age living in urban and rural areas in Highland and Scotland in 2021

	Highland		Scotland	
	Population	*Percentage of population*	Population	*Percentage of population*
1 Large Urban Areas	0	*0.0*	369,243	*36.0*
2 Other Urban Areas	15,736	*36.4*	359,554	*35.1*
3 Accessible Small Towns	542	*1.3*	91,712	*8.9*
4 Remote Small Towns	3,905	*9.0*	14,335	*1.4*
5 Very Remote Small Towns	3,383	*7.8*	11,725	*1.1*
6 Accessible Rural Areas	5,311	*12.3*	128,027	*12.5*
7 Remote Rural Areas	5,604	*13.0*	25,360	*2.5*
8 Very Remote Rural Areas	8,787	*20.3*	25,025	*2.4*
Total	**43,268**	***100***	**1,024,981**	***100***

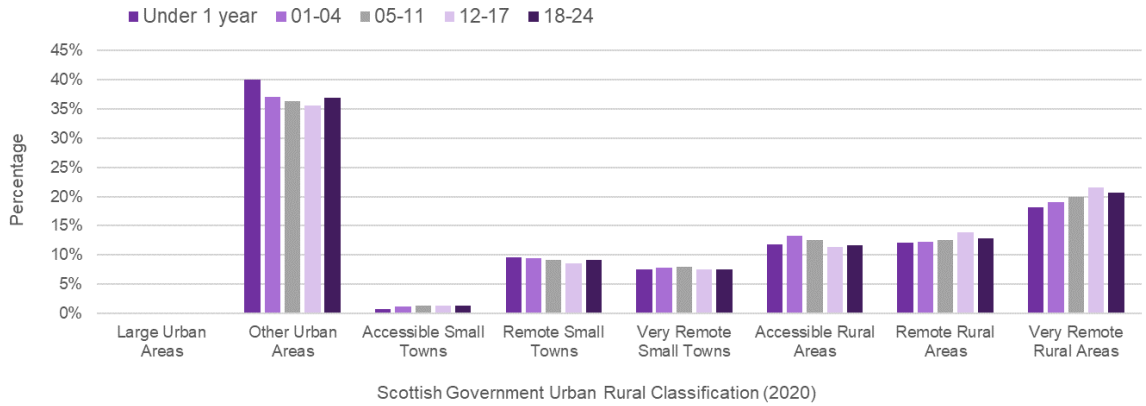
Source: Scottish Government Urban Rural Classification 2020 and NRS Small Area Population Estimates for 2021

Figure 10: Percentage of the population aged under 18 years of age living in urban and rural areas in Highland and Scotland in 2021



Source: Scottish Government Urban Rural Classification 2020 and NRS Small Area Population Estimates for 2021

Figure 11: Percentage of the population of children and young people living in urban and rural areas in Highland by age group in 2021



Source: Scottish Government Urban Rural Classification 2020 and NRS Small Area Population Estimates for 2021

Policy concerns in rural and remote areas often focus on economic regeneration, employment, rural prices and poverty, housing and fuel poverty, and population ageing, particularly the retention of young adults in such communities[5]. The needs of children and younger people living in these areas are often less directly recognised.

Common issues experienced by children and young people, at varying intensity levels with increasing remoteness and rurality, are the impacts of poor transport infrastructure, limited local choices, isolation from peers and lack of opportunity to socialise outside school, and poorer digital connectivity. Remote and rural areas are also potential places where children and young people who differ from their peers because of protected characteristics are at higher risk of social isolation[6].

Research also points to the benefits of living in remote and rural areas, with people reporting a stronger sense of belonging and community than urban populations, better neighbourhood environments and higher levels of subjective wellbeing[7]. A recent community consultation in Caithness described good community spirit, the quiet and scenic landscape and smaller classes in primary schools[6].

For organisations working in rural and remote locations, challenges to supporting children and young people are funding and achieving economies of scale in services, the availability of suitable premises and recruiting and retaining staff[8].

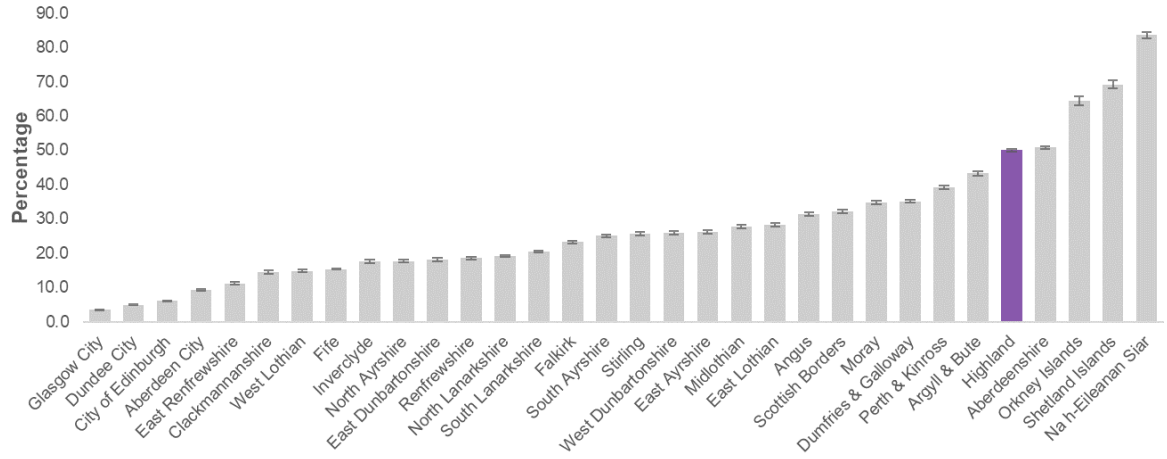
3.6. Access

Rural areas have worse access in terms of distance to services, including health, public health and social care services. Transport is essential for children and young people to access education, health services, employment, shopping and leisure. Access problems compound other disadvantages, including higher daily living costs in rural and remote places[5].

The Scottish Index of Multiple Deprivation access domain identifies that fifty percent of children and young people live in the twenty percent most access deprived areas in Scotland, with residents experiencing longer travel times to local services and poorer digital access. The Highland area has many places among the very most access deprived nationally[1].

[1] Travel time indicators include drive times and public transport times. Drive times to GP surgery, Post Office, Retail Centre, Primary School, Secondary School and Petrol Station. Public transport times to GP surgery, Post Office and Retail Centre.

Figure 12: Young people living in the most access deprived quintile, aged 00-25 years in 2020



Source: ScotPHO Community Profiles – SIMD 2016, Scottish Government and Public Health Scotland

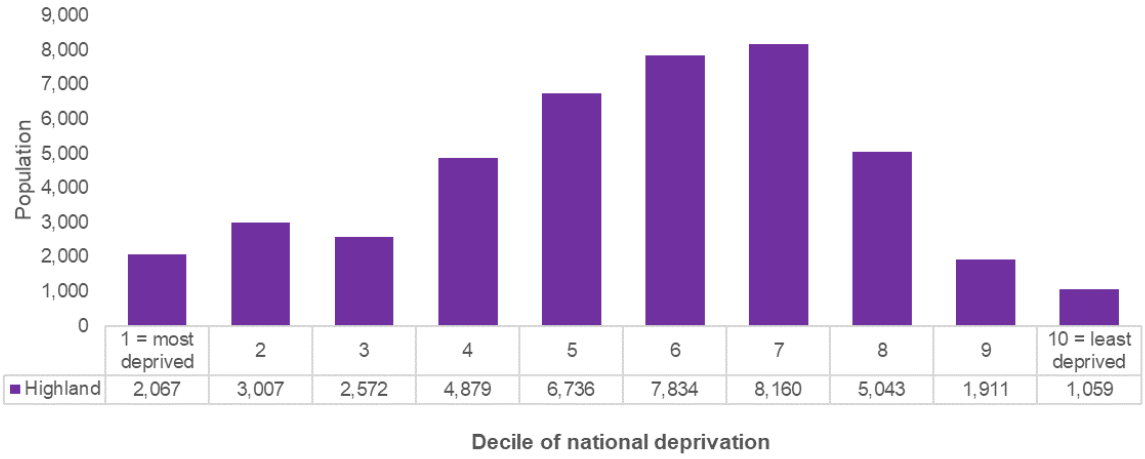
4. Social context and inequalities

4.1. Deprivation

National and local organisations can use the Scottish Index of Multiple Deprivation (SIMD) to identify areas of need and to allocate funding and resources. The SIMD combines 33 indicators across seven domains – income, employment, health, education, housing, geographic access and crime – into a single index for 6,976 small areas (data zones) with similar populations of around 800 people. Each data zone is ranked according to the overall SIMD score. For analysis and making funding decisions, ranks can be grouped into categories such as quintiles, deciles or the 15 percent most deprived areas in Scotland[9].

Figure 13 shows a decile distribution of children and young people by national SIMD ranking. The majority of the Highland population lives in areas ranked in deciles five to seven nationally. Targeting the most deprived ten percent would direct resources towards around 2,000 children and young people.

Figure 13: Number of children and young people aged under 18 years of age living in Highland in 2021 by national decile of the Scottish Index of Multiple Deprivation



	1 = most deprived	2	3	4	5	6	7	8	9	10 = least deprived
Highland	2,067	3,007	2,572	4,879	6,736	7,834	8,160	5,043	1,911	1,059

Source: Scottish Index of Multiple Deprivation 2020v2 and National Records of Scotland Small Area Population Estimates 2021

There are 312 data zones in Highland, with 22 recognised as being in Scotland's most deprived 15 percent of areas (N =1,046). These 22 areas are seven percent of Highland data zones and two percent of the national total[10]. The locations have similar levels of deprivation as some of Scotland's most deprived urban areas.

Nearly eight percent of Highland's children and young people live in these 22 areas. Most of this population lives in areas classified as urban (Inverness or Fort William) or remote and very remote small towns. A single remote rural area in the Seaboard area of East Ross is identified. Only 171 children and young people are estimated to live in this area, two percent of the total population under 18 in remote rural Highland (Figure 14).

Figure 14: The population of children and young people under 18 years of age who live in areas of Highland classified as the most 15 percent deprived in Scotland by the Scottish Urban Rural Classification

	Number living in the most deprived 15 percent of areas in Scotland	Percentage of the population living in the most deprived 15 pecent of areas in Scotland	Percentage of the population of the SGURC who live in the most derpived 15 percent of areas in Scotland	Percentage of the total population	Population total
1 Large Urban Areas	0	0.0	0.0	0.0	0
2 Other Urban Areas	1,849	53.8	11.8	4.3	15,736
3 Accessible Small Towns	0	0.0	0.0	0.0	542
4 Remote Small Towns	868	25.3	22.2	2.0	3,905
5 Very Remote Small Towns	547	15.9	16.2	1.3	3,383
6 Accessible Rural Areas	0	0.0	0.0	0.0	5,311
7 Remote Rural Areas	0	0.0	0.0	0.0	5,604
8 Very Remote Rural Areas	171	5.0	1.9	0.4	8,787
Total	**3,435**	**100**	**7.9**	**7.9**	**43,268**

Source: Scottish Index of Multiple Deprivation 2020v2, National Records of Scotland Small Area Population Estimates 2021 and the Scottish Government Urban Rural Classification 2020

The use of small areas in the SIMD helps to identify concentrations of deprivation potentially hidden in more extensive administrative geography, such as a Community Partnership or Council Ward. However, the Scottish Government acknowledge that the tool has limitations in rural areas where data zone populations are less socially and economically homogenous[11].

The index also does not capture important aspects of the deprivation experience in rural areas, such as social isolation and population loss. Therefore, the metric can overlook people and households experiencing multiple deprivations in remote or rural areas. It is important to remember the official guidance to users of the SIMD that 'not everyone living in a deprived area is deprived, and not all deprived people live in deprived areas'[9].

In Highland, more income deprived individuals live in places not identified among the most deprived areas by the SIMD[12]. Spatial targeting needs to consider the utility of the SIMD for that purpose and, if necessary, use other data sources in conjunction.

4.2. Child poverty

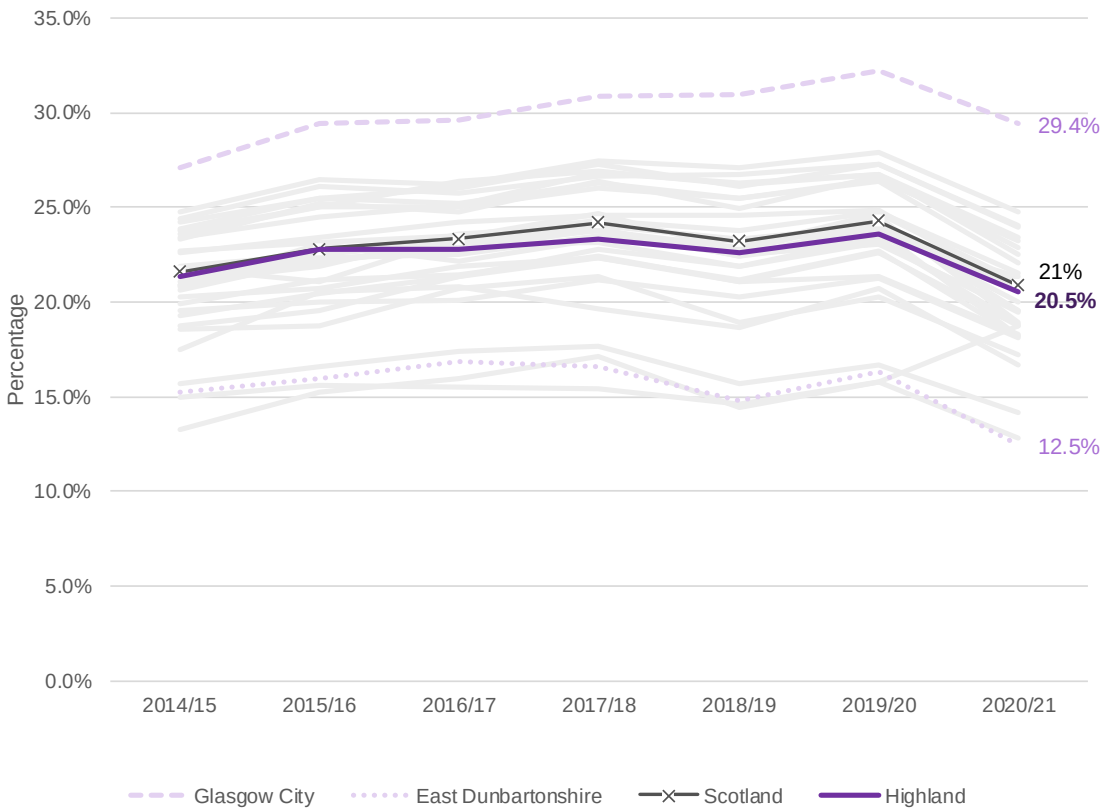
The challenges to tackling child poverty were set out in the Child Poverty (Scotland) Act 2017 and re-iterated in the latest national delivery plan for 2022 to 2026, Best Start, Bright Futures[13].

Children living in poverty are more likely to have health issues, including mental health problems, gain fewer qualifications, experience stigma and bullying at school and be at higher risk of being care experienced[14].

Research shows that 53 per cent of children in Scotland have experienced poverty in the last 12 years. Families move in and out of poverty and can easily be pushed into poverty[15].

Around one in five children under 16 live in relative poverty (below 60 percent of median income after housing costs) in Highland. This figure is comparable to Scotland as a whole (Figure 15)[16].

Figure 15: Percentage of children aged under 16 years living in income poverty after housing costs by Local Authority in Scotland

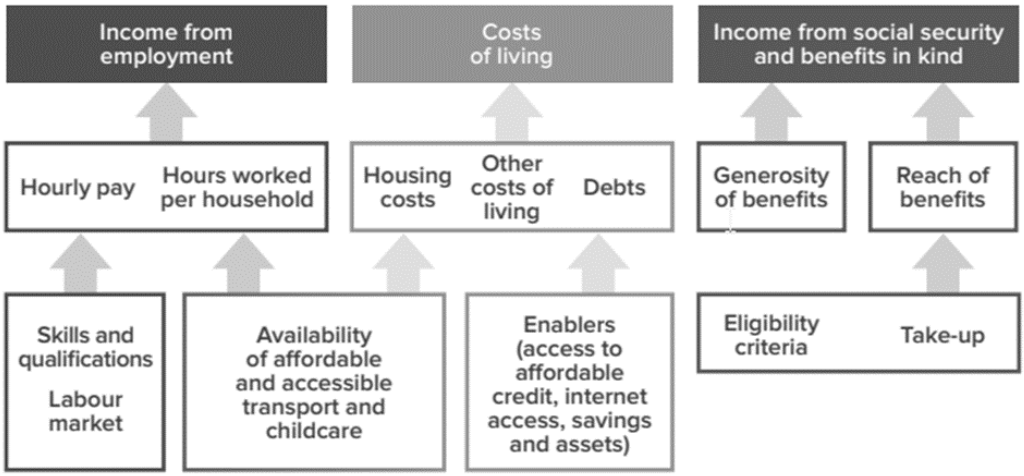


Source: End Child Poverty Coalition

The COVID-19 pandemic significantly impacted low-income households in Scotland[17]. However, the latest figures produced by the End Child Poverty Coalition suggest a reduction in relative poverty can be observed in 26 of 32 local authority areas in Scotland, including Highland. For 2020/21, the report estimates that Scotland had the lowest child poverty rate in the UK at 21 percent.

The Scottish Government's investment in the new Scottish child payment and other Social Security payments will have influenced the positive trends[18]. Local interventions to tackle child poverty and its impacts will have also contributed. For Highland, these were last reported in 2020/21.

Figure 16: Drivers of child poverty reduction



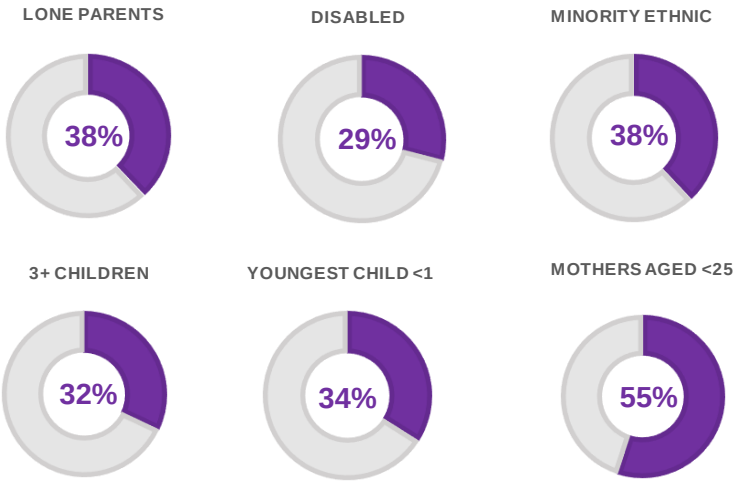
Source: Scottish Government. Best Start, Bright Futures: tackling child poverty delivery plan 2022 to 2026

While these figures are welcome, there is rising concern that the continuing cost of living crisis will likely result in more children and their families in poverty. The Resolution Foundation estimated that the typical working-age household across the UK would be around £1,100 worse off in 2022. The Institute for Fiscal Studies estimated that, by October 2022, the inflation rate faced by the least affluent ten per cent of households could be as much as 75 per cent higher than that faced by the most affluent ten percent[19]. Significant increases in food and energy costs form a larger part of low-income households' budgets.

The priority of policy focuses on children at greatest risk of poverty where the mother is less than 25, lone parent families, ethnic minority families, families with three or more children or a child under one and families where someone in the house is disabled (Figure 17).

Almost 90 percent of all children in poverty in Scotland live within these six priority family types, and these families will often experience multiple combinations of disadvantages.

Figure 17: Priority families in relative poverty in Scotland; percentage of children aged under 16 years living in income poverty after housing costs



Source: Scottish Government. Best Start, Bright Futures: tackling child poverty delivery plan 2022 to 2026

Particularly in rural areas, it is a complex task to accurately measure child poverty, profile the population in at-risk groups and describe the factors related to changes, such as social security, income from employment and the cost of living. Currently, data sources that provide detail at Local Authority and Community Partnership are limited[20].

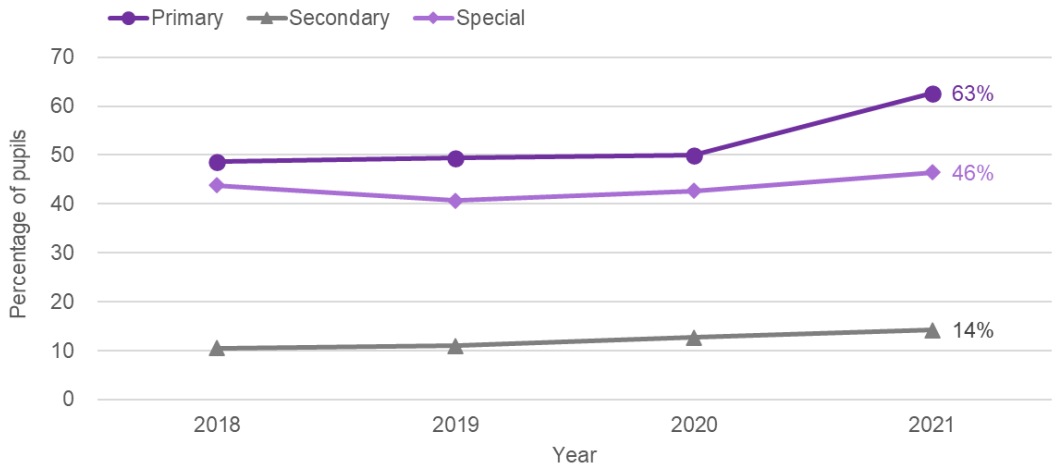
4.3. Free school meals

Free school meals (FSM) are considered a critical tool for mitigating the adverse health effects of child poverty among low-income families. Children receiving free school meals obtain a higher proportion of their daily energy and nutrient intake from their school meals than those who pay. Free school meals may improve health and wellbeing and reduce health inequalities.

Receipt of free school meals is considered a marker of poverty due to its restrictive eligibility criteria. Children who receive FSM are more likely to be living in low-income households. However, evidence suggests that many poorer families are slipping through the FSM net due to restrictive eligibility thresholds, leading to greater levels of food insecurity among children[21].

In 2021, 63 percent of primary school and 46 percent of secondary school pupils were registered for free school meals in Highland (Figure 18). Free school meal registrations are affected by changes to the eligibility criteria and the economic circumstances of pupils and their parents.

Figure 18: Proportion of pupils with free school meals by sector in Highland



Source: Scottish Government School Education Statistics

4.4. Housing and homelessness

A secure, nurturing environment is vital to the wellbeing of children and families. Housing plays an important role in improving health and wellbeing and reducing health inequalities through several routes, including affordability; quality; fuel poverty; and housing as a home within a community[22]. The location of a dwelling, its physical characteristics and the experiences of its inhabitants influence physical, mental and social health[23].

In 2021 there were an estimated 110,743 households in Highland, an increase of 8,365 (eight percent) since 2011. The average household size in Highland has decreased by seven percent from 2.24 people in 2011 to 2.09 in 2021. In Scotland, the average household size in 2021 was 2.12 people[24].

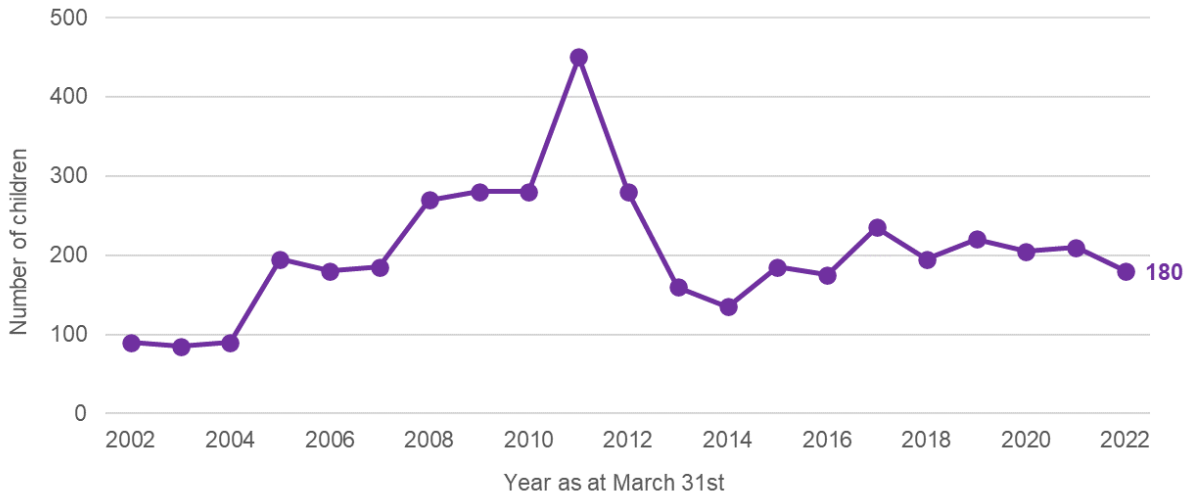
The 2018-based household projections for Highland forecast a three percent reduction in households with children between 2018 and 2028. Households with children are projected to comprise 20-25 percent of all households in 2028. In comparison, households with those aged 65 years and over are expected to make up 30-35 percent of households.

The causes of homelessness and the adverse effects on health and wellbeing are well evidenced[25]. Poverty, a lack of affordable housing, restrictions on access to, and levels of, social security support are all factors; these often interact with individual and interpersonal vulnerabilities such as mental health problems or relationship breakdown.

Preventing homelessness will always be the best option. If prevention is not possible, the duration of homelessness should be minimised, and suitable temporary accommodation provided.

In Highland, 180 children were in temporary accommodation at the end of March 2022 compared to 210 in 2021 (Figure 19). The number of children in temporary accommodation in the last five years has been stable.

Figure 19: Number of children in temporary accommodation in Highland, 2002 to 2022



Source: Scottish Government Homelessness in Scotland, Table 28

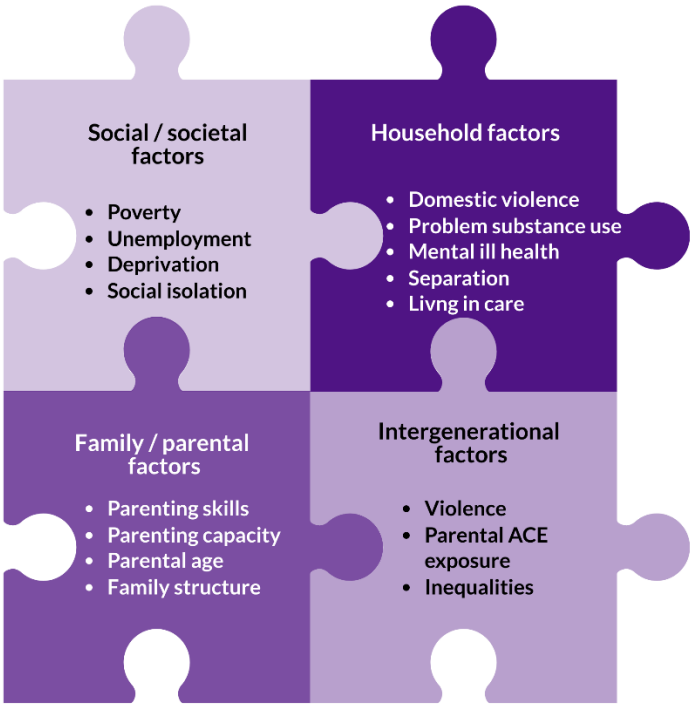
4.5. Adverse childhood experiences

The term adverse childhood experiences (ACEs) describe a wide range of stressful or traumatic experiences that babies, children and young people can be exposed to while growing up[26].

Adverse experiences often cluster in children and young people's lives and are associated with poor educational, social, physical and mental health outcomes across the life course. Evidence from population studies has found that the health and social risks associated with childhood adversity increase with the number of ACEs people report[27]. In Scotland, just over one in seven adults have reported experiencing four or more adverse childhood experiences[28].

The risk factors associated with the increased likelihood of experiencing abuse, trauma and stress in childhood are varied (Figure 20). The Institute of Health Equity summarised interacting risk factors for adverse childhood experiences as the social context in which families live, parenting and family structure, and household factors[29]. These risk factors are often co-occurring and interlinked. Usually, the cumulative effects of a combination of factors rather than a single issue lead to a child's experience of adversity and stress.

Figure 20: Interlocking model of risk factors for adverse childhood experiences



Source: Based on UCL Institute of Health Equity

The impact of childhood adversity can be offset by safe, secure, responsive adult relationships that buffer the effects of stress and adversity and support the development of resilience, a key mechanism to make sense of and recover from threat and fear.

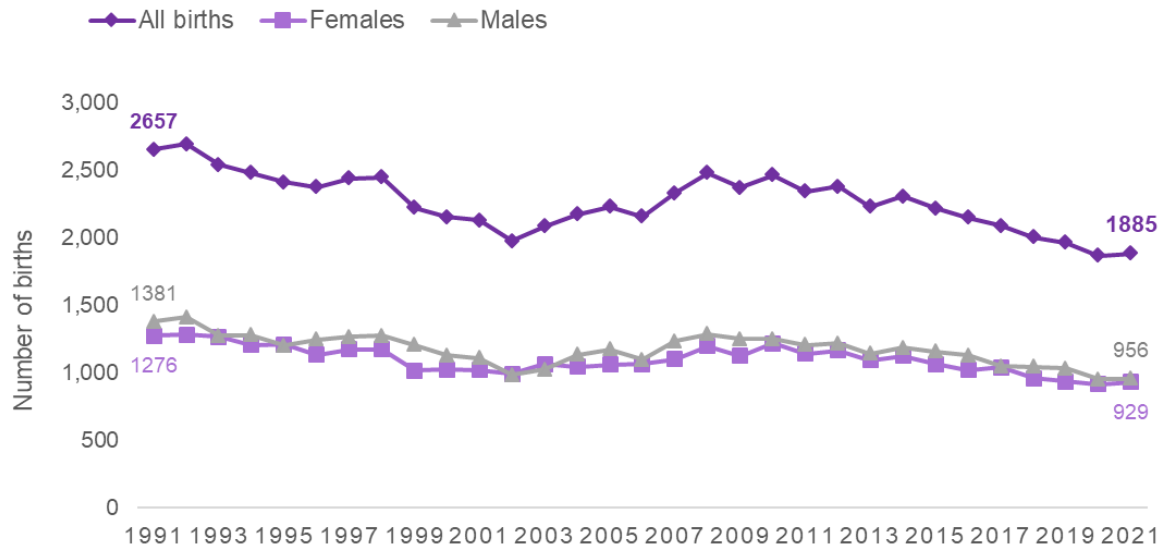
A public health report on adverse childhood experiences, resilience and trauma in Highland was undertaken in 2018[27]. Understanding and responding to childhood adversity and trauma remains a public health priority.

5. Pregnancy and birth

5.1. Births and fertility rate

There were 1,885 live births registered to Highland residents in 2021, slightly more than in 2020 (Figure 21). The number of children born nationally and locally in recent years is historically low.

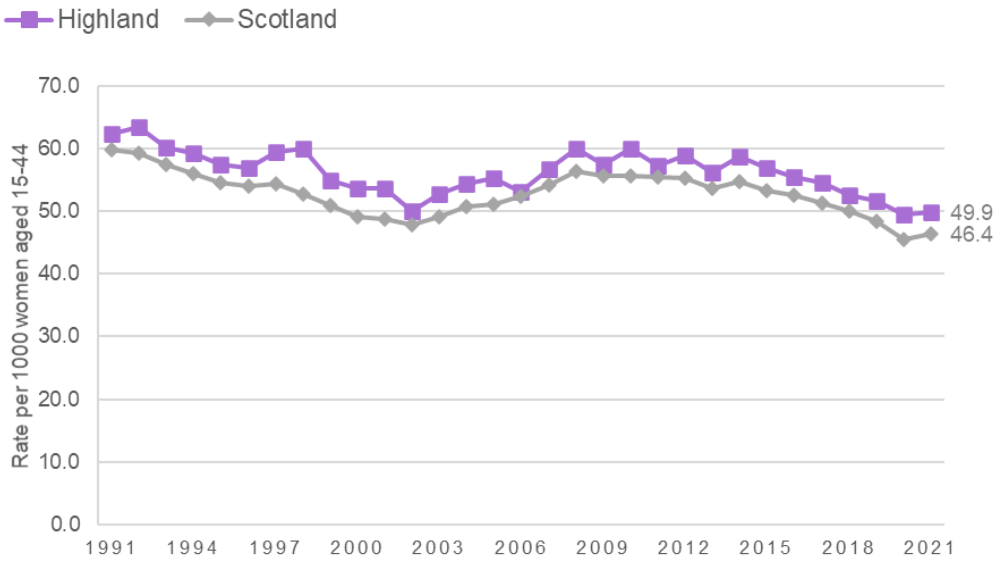
Figure 21: Annual number of live births in Highland by sex, 1991-2021



Source: National Record of Scotland Births (Time Series)

Annual birth rates in Highland are consistently higher than Scotland's but closely follow the national pattern, with the current decline starting from 2008 (Figure 22).

Figure 22: General Fertility Rate, total live births per 1,000 women aged 15 to 44 years, in Highland and Scotland, 1991-2021



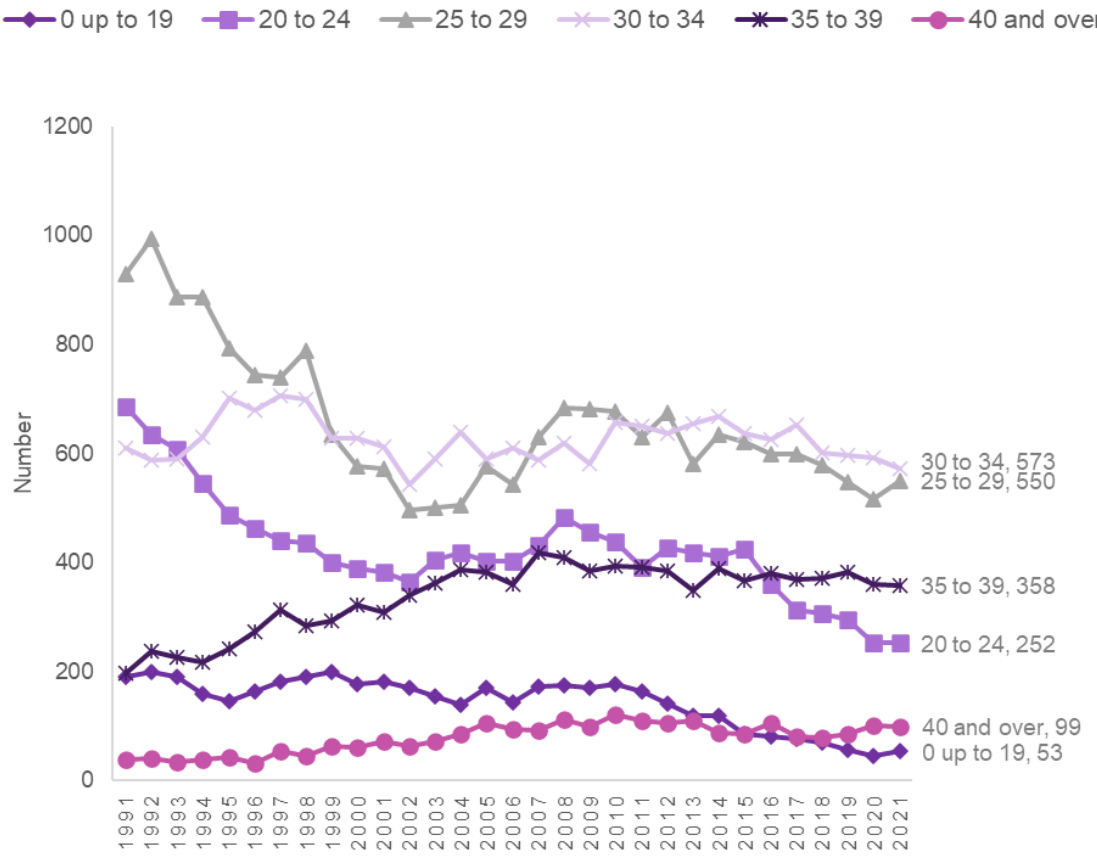
Source: National Record of Scotland Births (Time Series)

5.2. Births by the age of the mother

The decline in the number of births in the 1990s resulted primarily from women in their twenties postponing having children. From 2001 until 2008, there was a rise in the number of births. Increases are noted in women in their twenties having children, coupled with an increase among women in their 30s and 40s who had perhaps postponed starting a family (Figure 23).

However, since 2008 there has been a decline in the number of births, possibly explained by women leaving motherhood until later in life, women having fewer children and periods of economic uncertainty. The beginning of the recent fall coincided with the banking crisis and financial crash.

Figure 23: Births to Highland residents by mother's age, 1991-2021



Source: National Record of Scotland Births (Time Series)

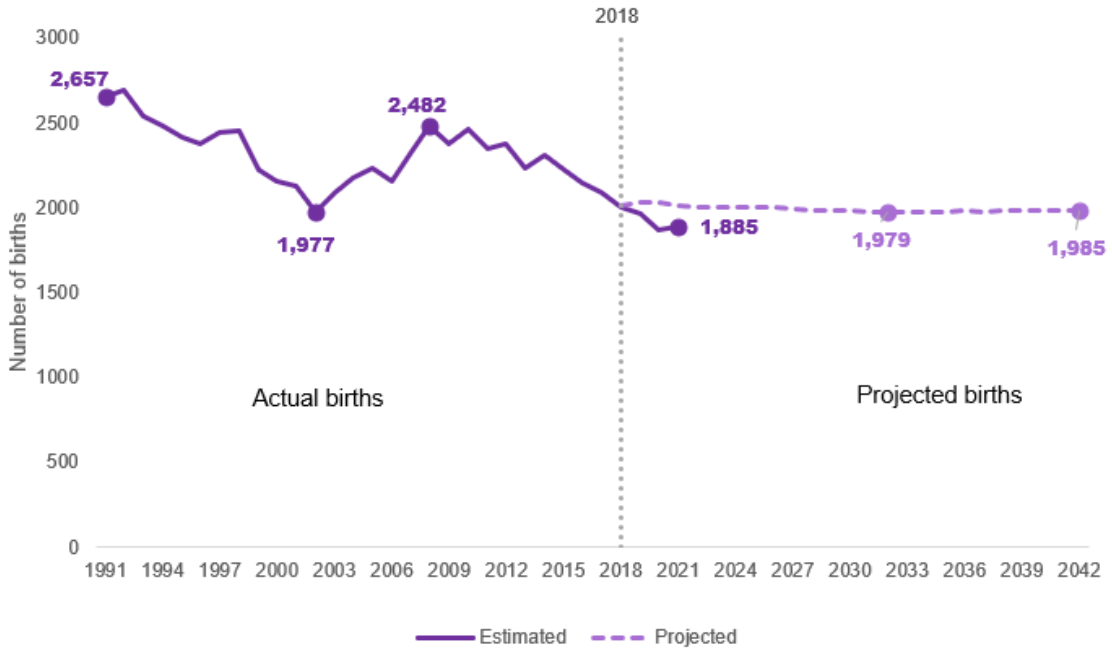
Currently, around 100 women aged 40 or older who are residents of Highland give birth each year. According to the Royal College of Midwives, older women are more likely to require increased resources. Older mothers are more at risk of pre-eclampsia, miscarriage and complicated pregnancies that could result in forceps or caesarean section for delivery.

More recently, the immediate impact of the COVID-19 pandemic did not modify recent birth trends (Figure 21, Figure 23).

5.3. Projected number of births

In Highland, the annual number of births per year was projected to remain between 1,970 and 2,000 (Figure 24). However, the actual number of births has further reduced in recent years. The current projection may be overly optimistic. There has been a fall in inward migration in the principal years of family formation following Brexit, and the trend of mothers waiting until they are older before having families continues.

Figure 24: Actual and projected number of births in Highland, 1991 to 2042



Source: National Record of Scotland Births Time Series, Population Projections for Scottish Areas (2018-based)

5.4. Teenage Pregnancy

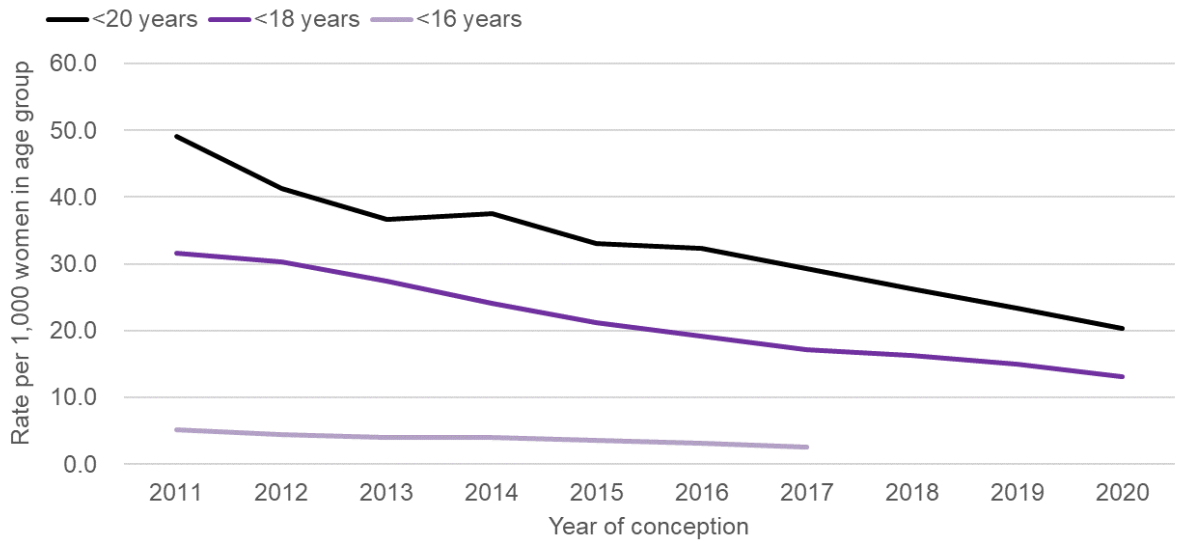
Many teenage women experience unintended or unwanted pregnancies, although this may be a planned, positive life choice for some women. Reducing unintended teenage pregnancy has been a long-standing priority for the Scottish Government.

Evidence from the Family Nurse Partnership in 2022 highlighted that younger mothers are more likely to live in deprived areas. This group has increased risks associated with deprivation and adverse outcomes in pregnancy, including higher smoking and preterm birth rates[30].

Since 2011 overall teenage pregnancy rates per 1,000 women in the under-20 age group have fallen almost 59 percent (from 49.1 in 2011 to 20.3 in 2020). In terms of the total number of teenage pregnancies, there were 319 in 2011 compared to 120 in 2020.

Due to small numbers, the number and rates of teenage pregnancy in the under-16 and under-18 age groups have been aggregated into three-year periods. They show similar rates of decline (Figure 25).

Figure 25: Teenage pregnancy by age group at conception in Highland, 2011 to 2020[1,2]



Source: NRS birth registrations & Notifications of abortions performed under the Abortion (Scotland) Regulations 1991. Public Health Scotland.
1 Rates of pregnancies in women under 16 and 18 years are for three year periods. Rates are calculated using the female population aged 13-15, 15-17 and 15-19.
2 The under 16's values have been suppressed due to the potential risk of disclosure from 2016-2018

5.5. Antenatal care

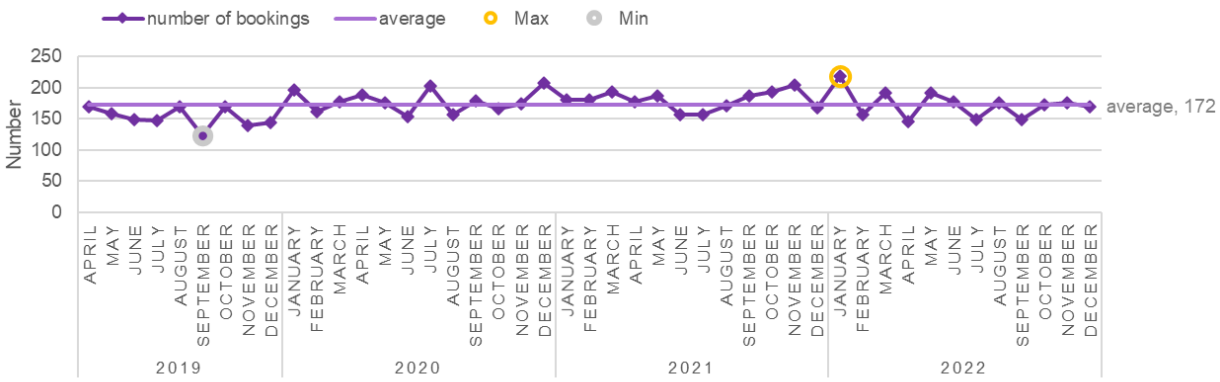
Early access to high-quality antenatal care improves long-term health outcomes for mothers, babies and families. The booking appointment is the midwife's first contact with a pregnant woman to assess her needs and to arrange an early pregnancy scan and antenatal screening.

Women at the most significant risk of poor health outcomes are the least likely to access and benefit from antenatal healthcare.

There were 2,070 pregnancies booked for maternity care by Highland residents in 2022, an average of 173 a month. The maximum number of bookings in a month during the period shown in Figure 26 occurred in January 2022 (218).

Understanding variations in booking numbers and changes in the demography of women booking is essential for planning antenatal services and services for those of reproductive age. The order of this variation will be larger in areas with smaller populations booking for maternity care across Highland.

Figure 26: Number of Highland pregnancies booked for antenatal care by month, April 2019 to December 2022[1]



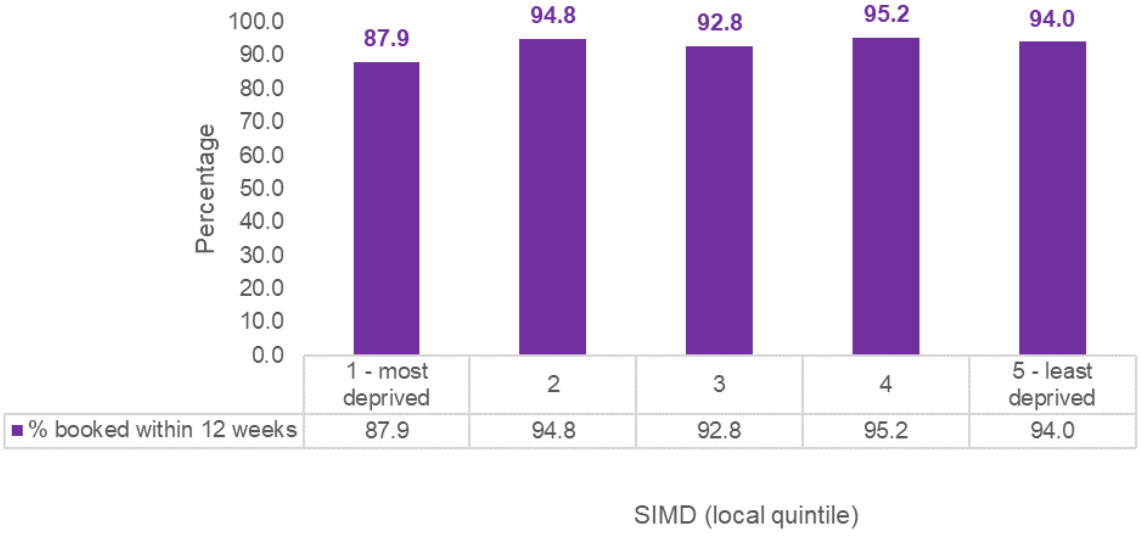
Source: Public Health Scotland Antenatal Booking Collection (ABC)
[1] Some women may have more than one pregnancy during 12 months

Women are encouraged to book before they are 13 weeks pregnant and, ideally, before ten weeks. The NICE guideline on antenatal care recommends that the booking appointment ideally occurs within ten weeks[31]. In 2022, 93 percent of pregnancies in Highland were booked by 12 weeks of gestation.

Early access to antenatal services is a current Scottish Government Local Delivery Plan (LDP) LDP standard[32]. The standard states that at least 80 percent of pregnant women in each deprivation quintile of the Scottish Index of Multiple Deprivation (SIMD) will be booked for antenatal care by the 12th week of gestation.

In Highland in 2022, pregnant women from more deprived areas were less likely to be booked within 12 weeks than pregnant women living in areas in the least deprived quintile (Figure 27).

Figure 27: Percentage of Highland pregnancies booked within 12 weeks by SIMD in 2022



Source: Public Health Scotland Antenatal Booking Collection (ABC)

5.6. Vulnerability factors during pregnancy

Antenatal care with complex social factors

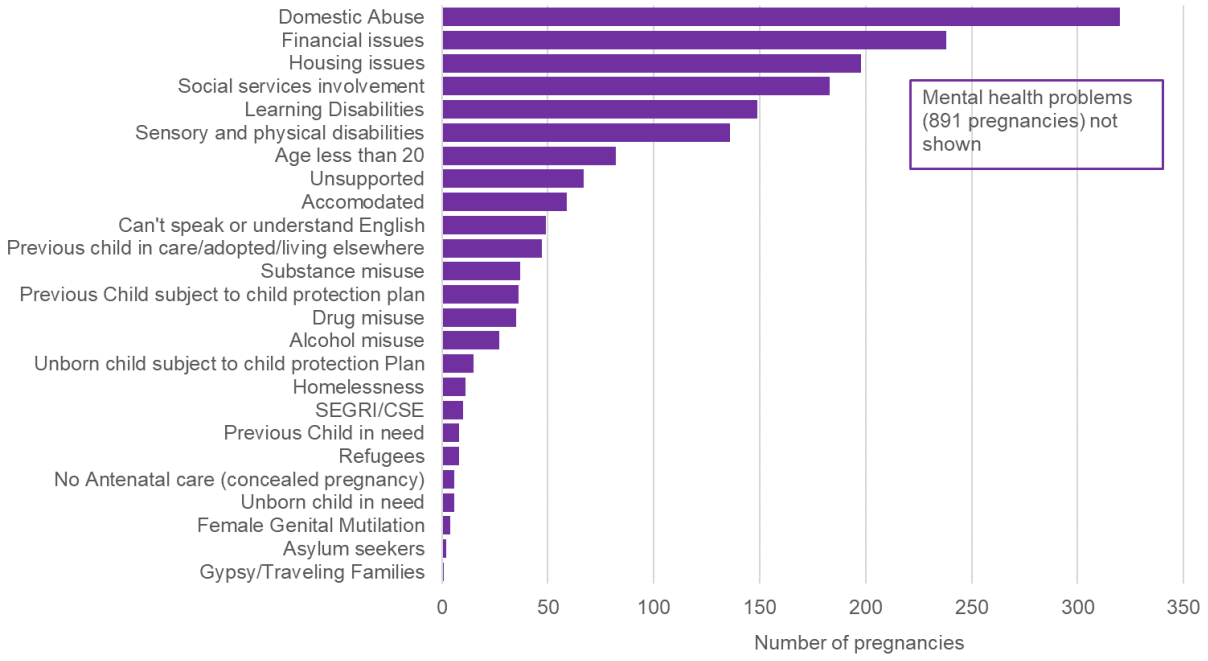
Pregnant women presenting for antenatal care with a complex social factor or vulnerability are most at risk of poor pregnancy outcomes[33]. Complex social factors in pregnancy include poverty; homelessness; substance misuse; recent arrival as a migrant; asylum seeker or refugee status; difficulty speaking or understanding English; age under 20; and domestic abuse. Screening during pregnancy will determine local needs and how these might be met.

In 2022, around 60 percent (1,250) of the pregnancies booked in Highland had at least one complex social factor or vulnerability reported on the BadgerNet maternity record. In 71 percent of pregnancies with a vulnerability recorded, the most common issue was a mental health problem. Mental health includes a family history of mental health problems, a previous mental health history and a current concern within the pregnancy.

The next most common concerns recorded in 2022 were domestic abuse, financial issues, housing and accommodation issues, social services involvement, disabilities, language difficulties and problematic substance use (Figure 28).

The needs of all pregnant women with a vulnerability recorded must be considered. Recording complex and multiple social factors and vulnerabilities is essential for service planning. The vulnerability criteria in the BadgerNet vulnerability report are changing to include pregnancies with the criminal justice system or prison involvement.

Figure 28: Antenatal bookings with a vulnerability reported during pregnancy, 2022



Source: BadgerNet Maternity
Mental health problems are not shown to help with the reading of other categories

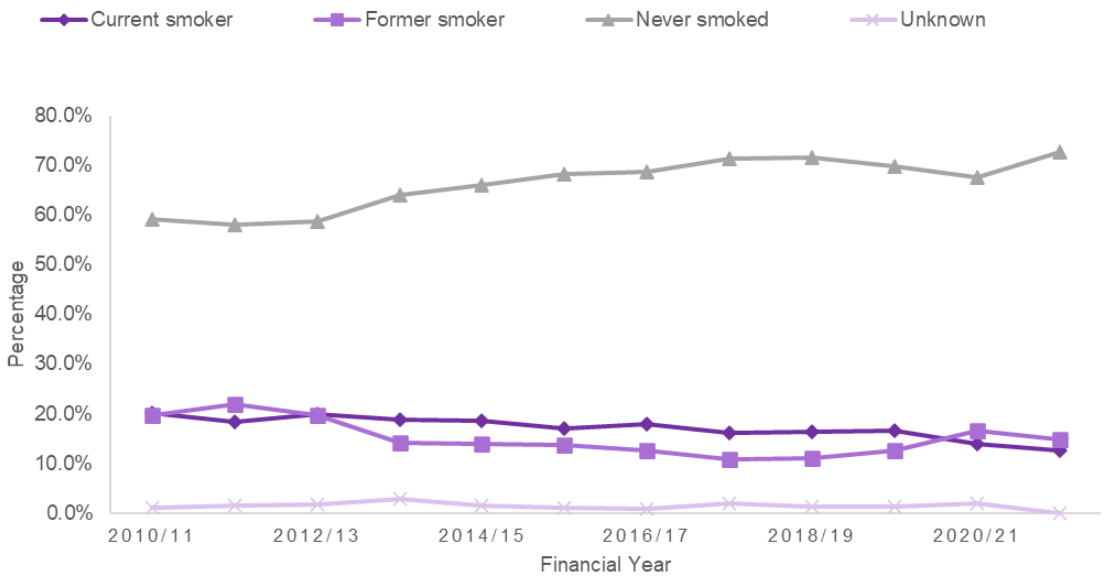
Smoking in pregnancy

Smoking during pregnancy is harmful to both mother and baby. Maternal smoking is associated with preterm and low birth weight babies and increased risk of miscarriage, stillbirth and Sudden Infant Death Syndrome (SIDS). It also increases the risk of the baby developing many respiratory conditions, attention and hyperactivity difficulties; learning difficulties; problems of the ear, nose and throat; obesity; and diabetes[34].

Smoking rates during pregnancy are lower than in the past. Still, over 13 percent of women in NHS Highland are recorded as smoking at antenatal booking. The smoking rate at booking means that over 230 infants a year are born to mothers who smoke (Figure 29).

Smoking at antenatal booking is self-reported and consequently may under-report smoking prevalence.

Figure 29: Percentage of women by smoking status at antenatal booking in Highland, 2010/11-2021/22[1]

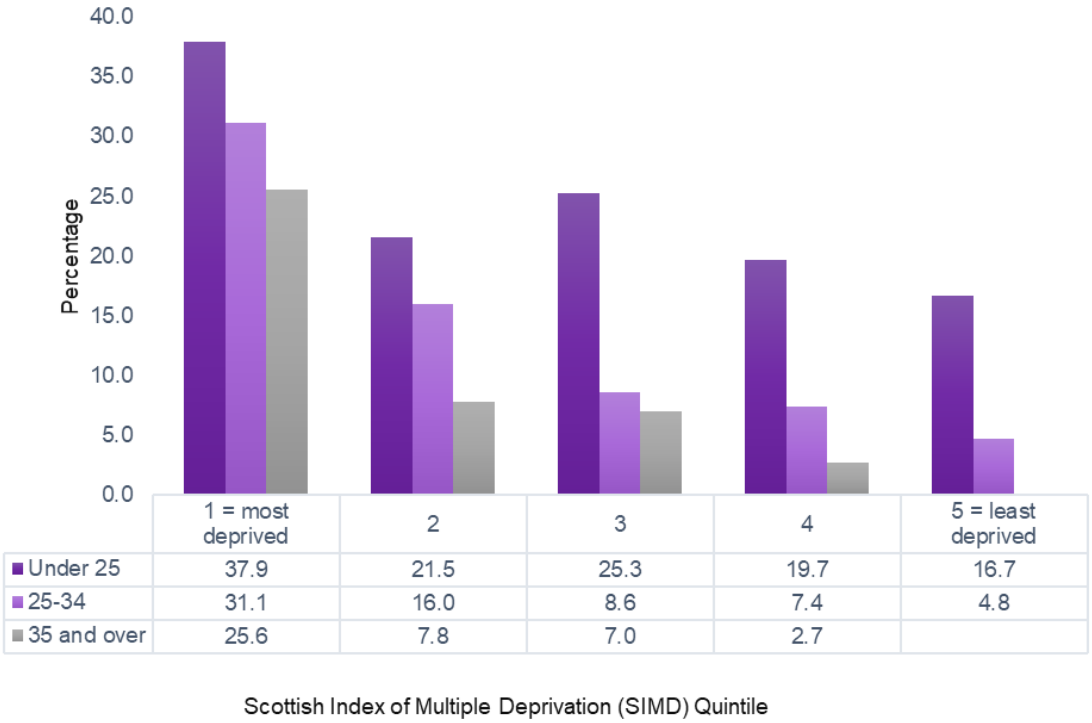


Source: Public Health Scotland (SMR02) Open Data
[1] Women who delivered in 2010/11 to 2021/22

Deprivation and age are key risk factors for smoking. There are also marked differences between women of different ages and socio-economic groups in smoking behaviour during pregnancy (Figure 30). Infants born to smokers are much more likely to become smokers themselves, which perpetuates cycles of health inequalities.

Giving every child the best start in life must include protecting babies from the damage of tobacco smoke, both before and after birth. Smoking remains a significant challenge to population health and the NHS.

Figure 30: Percentage of women resident in Highland smoking at antenatal booking by age group and SIMD quintile, 2021/22[1]



	1 = most deprived	2	3	4	5 = least deprived
Under 25	37.9	21.5	25.3	19.7	16.7
25-34	31.1	16.0	8.6	7.4	4.8
35 and over	25.6	7.8	7.0	2.7	

Source: Public Health Scotland (SMR02) Open Data
[1] Women who delivered in 2021/22

Alcohol and drug use in pregnancy

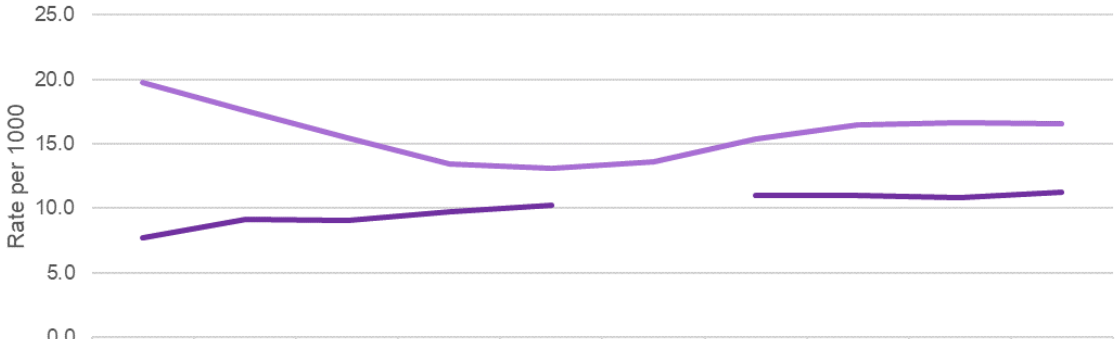
Alcohol and substance use are part of the 'complex social factors' covered by the NICE guidance on antenatal care for pregnant women[33]. Problem substance use causes serious harm to fetal development. National estimates suggest that around one percent of pregnant women will be problem drug users, and a further one percent problem alcohol users, although some may use both[35]. Women who use drugs and alcohol during pregnancy experience stigma, as do their families and communities.

Problem substance use is often associated with socio-economic deprivation and maternal health problems, including poor nutrition, smoking, mental health problems, complications from chronic infection, domestic abuse and homelessness. The effects of alcohol and drugs on the baby include intrauterine growth restriction, preterm delivery, fetal alcohol syndrome, fetal alcohol spectrum disorders, increased rates of stillbirth, neonatal death and sudden infant death. These outcomes are multifactorial and are also affected by socio-economic deprivation.

Information on alcohol and drug use is collected as part of maternity recording but is based upon self-report, and data should be interpreted cautiously.

The rate of pregnancies recording drug use in Highland in 2019/20 - 2021/22 was 11.2 per 1,000 maternities (Figure 31). The rate is equivalent to drug use in around 20 pregnancies a year in Highland. The Scottish rate was 16.6 per 1,000, and reported rates are consistently higher nationally.

Figure 31: Rate per 1,000 maternities recording drug use in Highland[1] and Scotland, 2010/11-2021/22



	2010/11-2012/13	2011/12-2013/14	2012/13-2014/15	2013/14-2015/16	2014/15-2016/17	2015/16-2017/18	2016/17-2018/19	2017/18-2019/20	2018/19-2020/21	2019/20-2021/22
Highland	7.7	9.2	9.1	9.7	10.2		11.0	11.0	10.9	11.2
Scotland	19.8	17.6	15.4	13.5	13.1	13.6	15.4	16.5	16.7	16.6

Source: Public Health Scotland (SMR02) Open Data
[1] No data reported for Highland in the extract for 2015/16/ - 2017/18

Maternal Body Mass Index at booking

A high body mass index (BMI) during pregnancy increases the risk of complications for both mother and baby. Obesity in pregnancy is associated with an increased risk of miscarriage, stillbirth and recurrent miscarriage. Possible adverse outcomes are maternal blood clots, gestational diabetes, postpartum haemorrhage, pre-eclampsia, and extended labour. While other risk factors will contribute, risks for the baby include congenital disorders, fetal macrosomia, growth problems, childhood asthma and childhood obesity.

In 2021/22, over 50 percent of Highland women giving birth were overweight or obese at the time of booking (Figure 32).

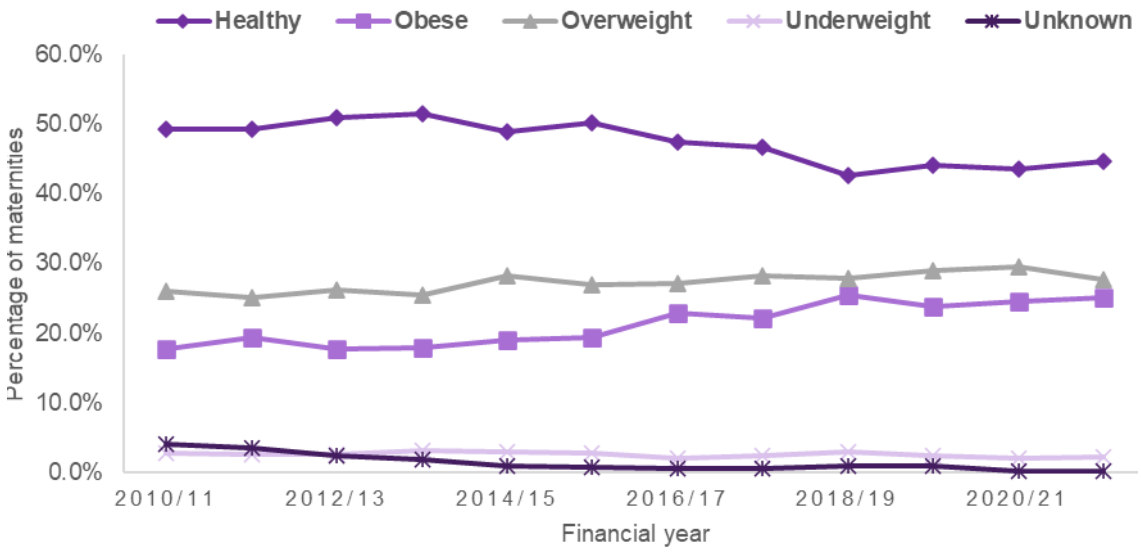
Figure 32: Number and percentage of maternities in Highland by BMI group in 2021/22

	Maternities	Healthy	Obese	Overweight	Underweight	Unknown	Total
2021/22	number	813	456	505	42	5	1,821
	percentage	44.6	25.0	27.7	2.3	0.3	100

Source: Public Health Scotland (SMR02) Open Data

The proportion of women who are overweight or obese is increasing (Figure 33).

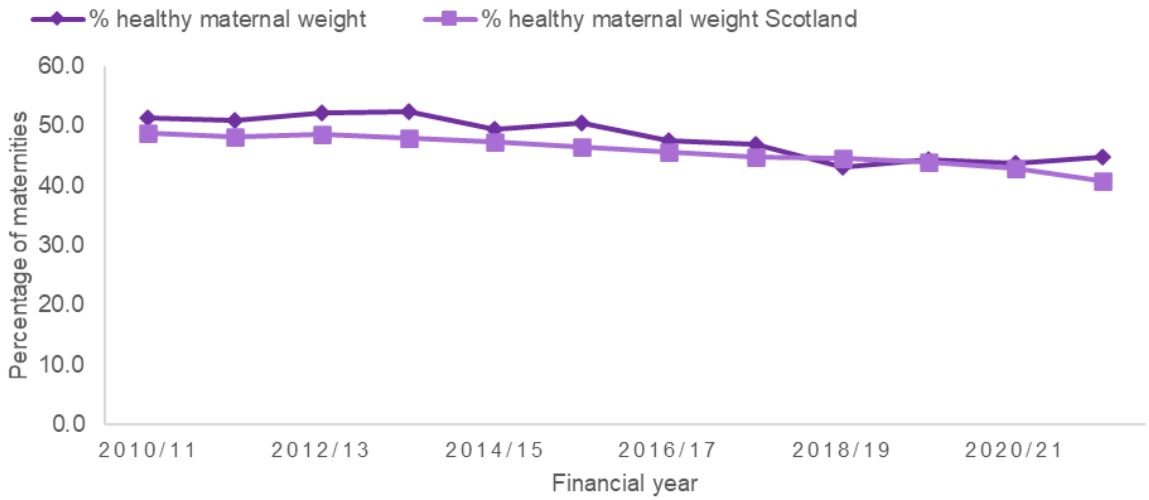
Figure 33: Percentage of maternities by BMI group in Highland, 2010/11 to 2021/22



Source: Public Health Scotland (SMR02) Open Data

The long-term trend to have fewer pregnancies of a healthy weight are similar in Highland and Scotland (Figure 34).

Figure 34: Percentage of maternities of healthy weight in Highland and Scotland, 2010/11 to 2021/22



Source: Public Health Scotland (SMR02) Open Data

A high level of maternal obesity has implications for maternity and neonatal service provision. Increased resources are needed to care for these mothers. There is a higher use of caesarean section associated with obesity[36].

5.7. Gestation

Gestation refers to the number of weeks pregnant a woman is when she delivers her baby.

- Babies are 'due' at 40 weeks gestation.
- Those born between 37 and 41 weeks are referred to as born 'at term'.
- Babies born at less than 37 weeks are considered preterm or premature.
- Babies born at 42 weeks or over are considered post-term or over-due.

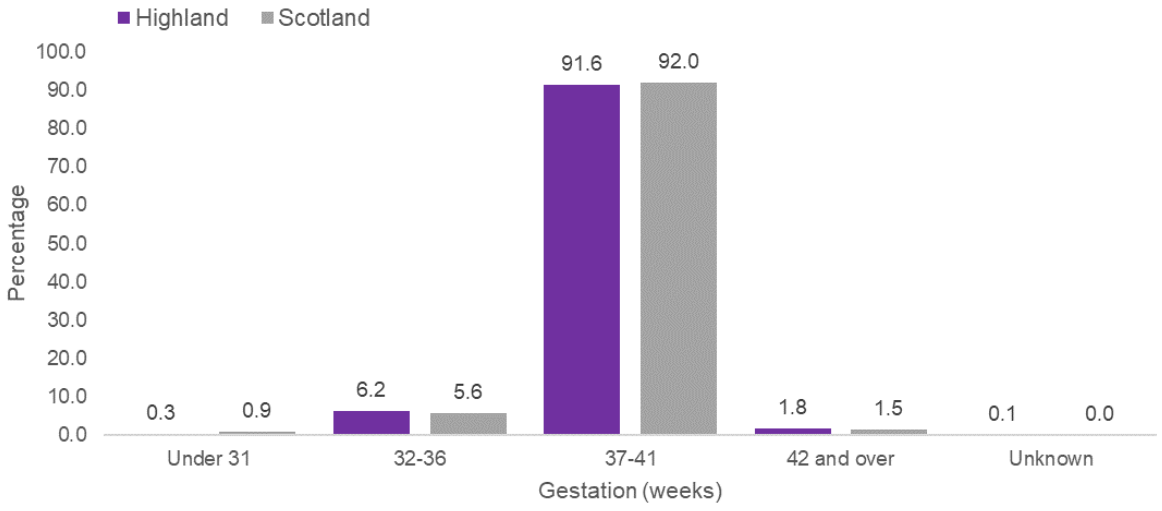
Gestation at delivery strongly influences the health of babies. Babies born preterm can have multiple difficulties in the days and weeks following birth. The consequences of being born too early can continue to affect health and development throughout childhood and adult life.

Known risks for preterm delivery

- Maternal poverty, deprivation and stress.
- Low or high maternal age or BMI.
- Maternal smoking, alcohol or drug misuse.
- Previous preterm deliveries.
- Multiple pregnancy (twins or more).
- Maternal health issues or infections arising during the pregnancy.

In Scotland, being born too soon is the principal reason babies require admission to neonatal care and the single most significant cause of death in early infancy[36].

Figure 35: Gestation in weeks of live singleton births in Highland and Scotland in 2021/22

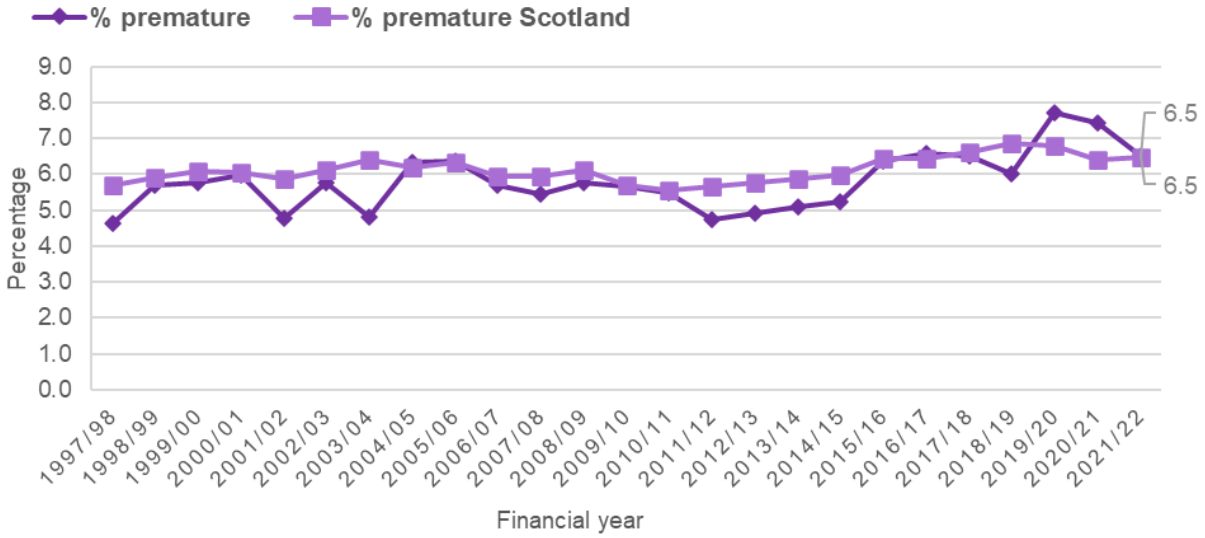


Source: Public Health Scotland (SMR02) Open Data

In Highland and Scotland in 2021/22, 6.5 percent of live singleton babies were born prematurely (Figure 35). Babies from multiple pregnancies are much more likely to be born prematurely. Instances of multiple pregnancies are relatively low and vary in Highland from

year to year. Highland and Scotland's preterm singleton birth rate has generally increased (Figure 36).

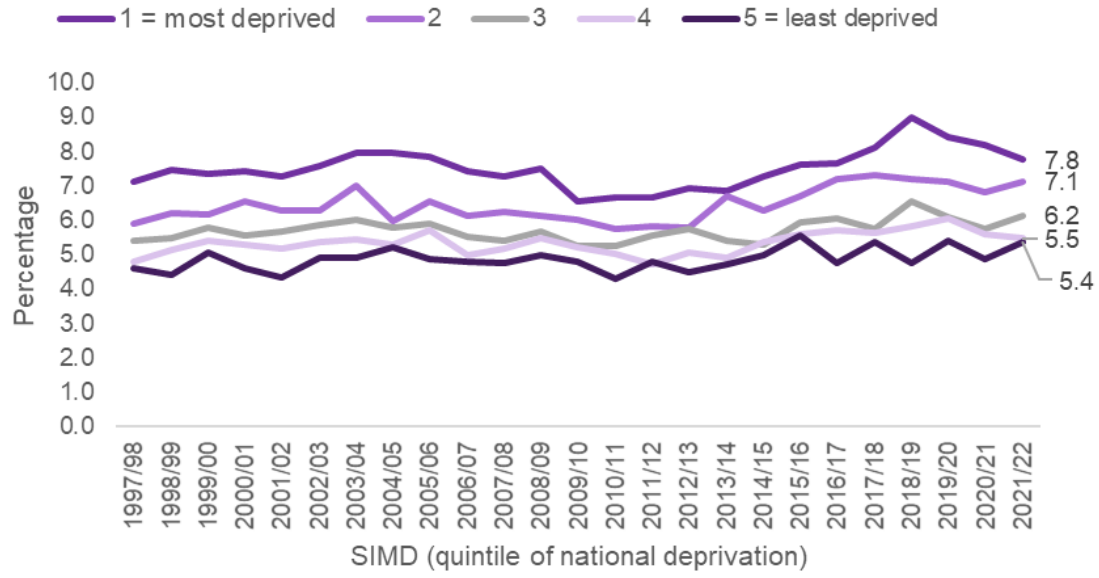
Figure 36: Percentage of premature births (under 37 weeks of gestation) in Highland and Scotland,1997/98 to 2021/22



Source: Public Health Scotland (SMR02) Open Data

Preterm birth rates are generally higher in younger and older women. In Highland in 2021/22, 9.5 percent of births to women under 25 were premature. In women over 35 years, this was 7.2 percent, and in women aged 25-34, 5.4 percent. Rates of prematurity are consistently higher in women living in deprived areas (Figure 37).

Figure 37: Percentage of premature births (under 37 weeks gestation) by SIMD in Highland, 1997/98 to 2021/22



Source: Public Health Scotland (SMR02) Open Data

5.8. Birth weight

Birth weight is the first weight of the newborn measured immediately after birth, and a weight lower than 2500 grams is considered low birth weight (LBW). Babies weighing 2500 grams and 3999 grams at birth are considered to have a 'normal' birthweight, and a birthweight of 4000 grams or more is considered larger than average or macrosomic.

Many factors that increase the risk of premature birth also increase the risk of growth retardation in the womb and LBW. Risk factors contributing to low birth weight can include a mother's young age, multiple pregnancies, previous LBW infants, poor nutrition, heart disease or hypertension, drug addiction, alcohol misuse, and insufficient prenatal care. Environmental risk factors include smoking, lead exposure, and other types of air pollution.

Low birth weight infants may be more at risk for many health problems compared to infants of normal weight. Some babies may become sick in the first six days of life (perinatal morbidity) or develop infections. Other babies may even suffer from longer-term issues such as delayed motor and social development or learning disabilities.

Low birth weight is a headline indicator for monitoring health inequalities in Scotland.

Risk factors for high birth weight include maternal obesity, significant pregnancy weight gain, and maternal diabetes.

The primary complications of foetal macrosomia occur because of birth injuries and traumatic deliveries. There is a risk of obesity, metabolic complications and hypoglycemia at birth for the baby.

In 2021/22, 4.6 percent of live singleton babies born to Highland residents had low birth weights, and 13.6 percent of babies were macrosomic (Figure 38).

Figure 38: Birthweight of live singletons born to residents of Highland and Scotland in 2021/22

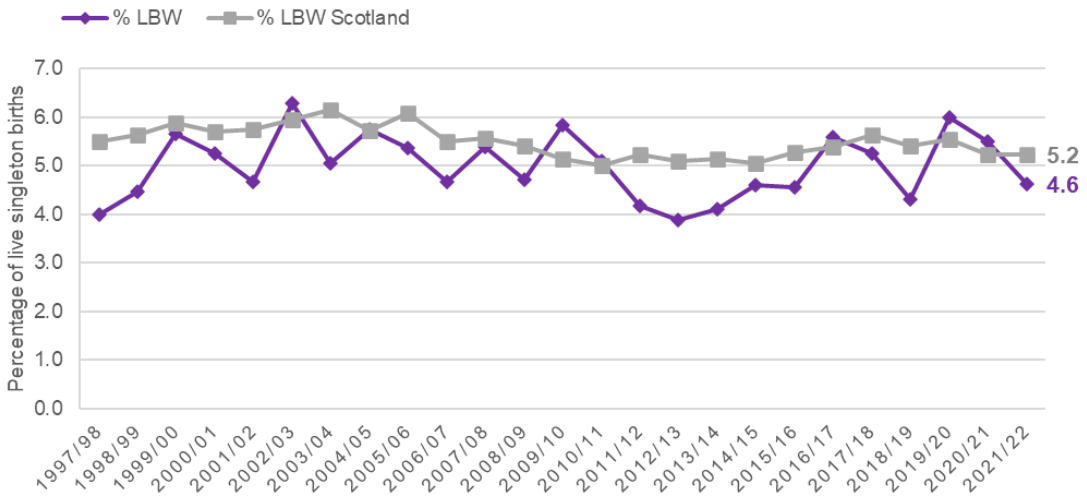
		<1500g	1500-2499g	2500-3999g	4000g+	Not Known	Total live singleton births
Highland	Number	4	79	1,472	244	0	1,799
	Percentage	0.2	4.4	81.8	13.6	0.0	100
Scotland	Number	373	2,036	37,652	5,919	23	46,003
	Percentage	0.8	4.4	81.8	12.9	0.0	100

Source: Public Health Scotland Births in Scotland 2022, Table 6.5

While the proportion of singleton babies born preterm has increased over time, the proportion of singleton LBW babies has been relatively consistent (Figure 39). An explanation is that

babies born at any gestation have, on average, become slightly heavier over the same period[36].

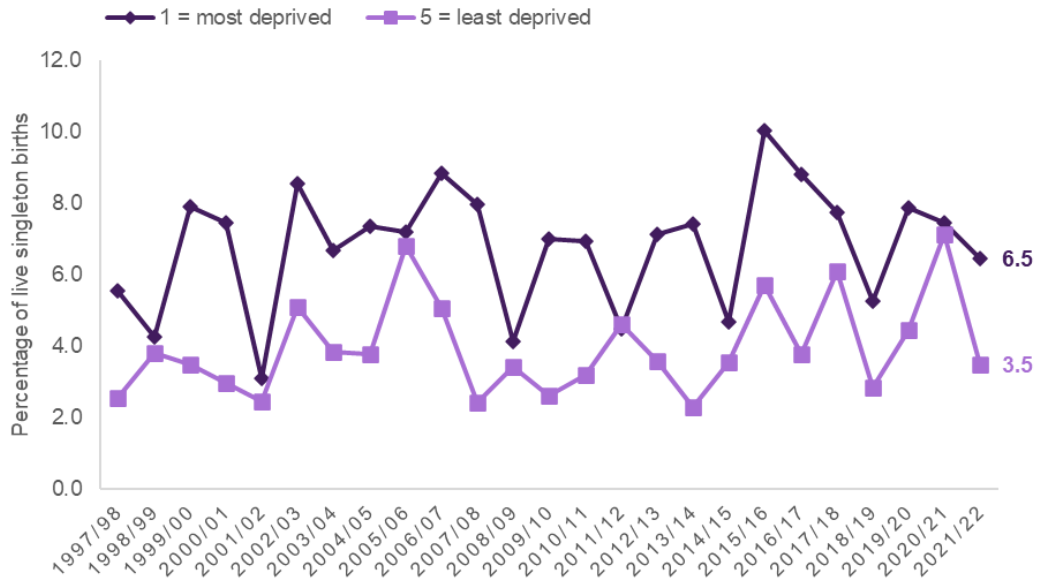
Figure 39: Live singleton births with low birth weight born to residents of Highland and Scotland, 1997/98 to 2021/22



Source: Public Health Scotland (SMR02) Open Data

The relationship between low birthweight and deprivation is consistent over time in Highland, with higher proportions of singleton LBW babies born to mothers resident in the most deprived areas (Figure 40).

Figure 40: Live singleton births with low birth weight by deprivation in Highland, 1997/98 to 2021/22



Source: Public Health Scotland (SMR02) Open Data

6. Infancy and Early Years

6.1. Child health reviews and developmental delay

Child health reviews provide the opportunity to assess children's health, development, and wider wellbeing alongside giving health promotion advice and parenting support.

Review programmes occur at a Health Visitor's first visit, 6-8 week review, 13-15 month review, 27-30 month review and 4-5 years review[37].

13-15 Month Review	**27-30 Month Review**
The review is carried out around 13-15 months of age by a Health Visitor. The process started in April 2017 and is offered to all children. Examples of information collected include development (social, behavioural, communication, gross motor, vision, and hearing), physical measurements (height and weight) and diagnoses/health issues. Identification data such as name, address, GP are also checked and updated.	A Health Visitor carries out the 27-30 months review. This review process started in April 2013 and is offered to all children (previously, only children requiring structured additional or intensive support were invited for a review at this stage). The information collected is similar to the 13-15 month stage.

The Child Health Systems Programme Pre-School (CHSP Pre-School) supports the delivery of the child health programme by facilitating the call and recall of children at review points and recording the findings and outcomes of the child health review.

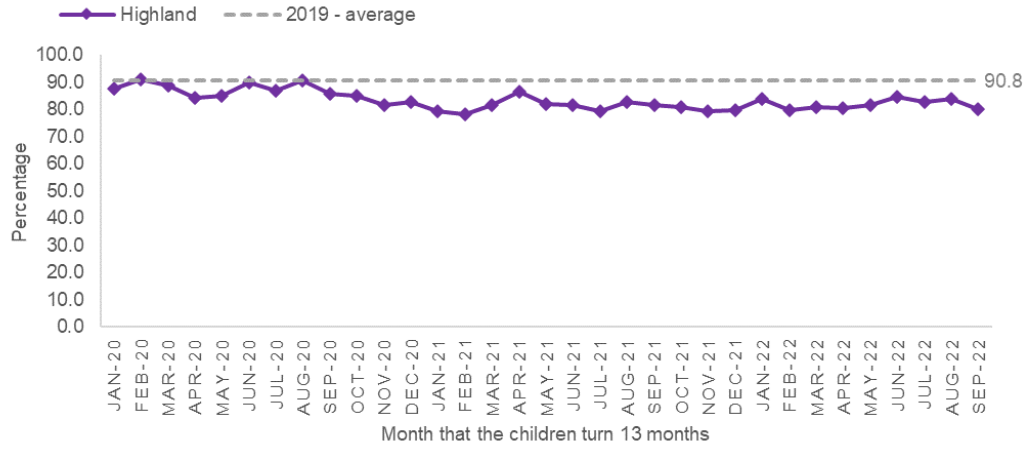
Child health review coverage

It was essential that children received their routine health reviews during the COVID-19 pandemic and that their data was submitted to the CHSP Pre-School.

The review process was generally sustained at a high level. However, coverage at both 13-15 month and 27-30 month review points remains lower than in 2019 in Highland, with no evidence of a trend.

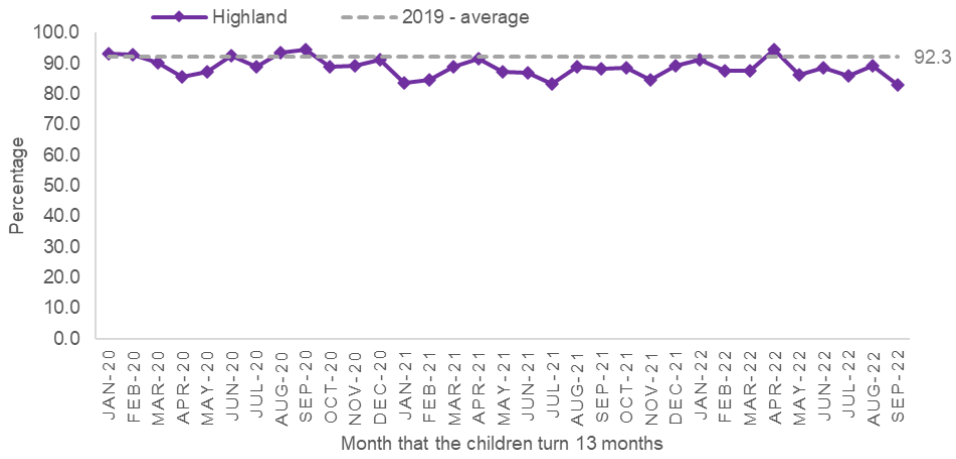
The charts below show that the reviews for a minority of children currently happen later in life.

Figure 41: Children in Highland recorded as receiving their 13-15 month review by 17 months of age or younger



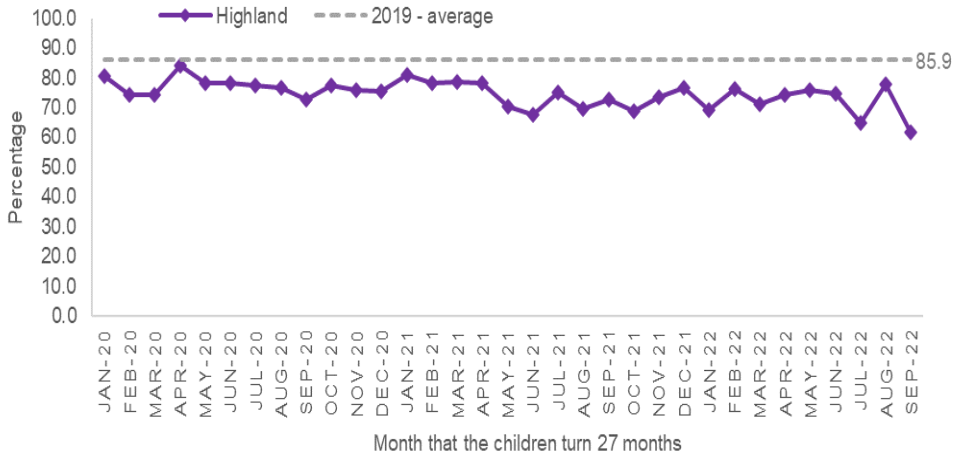
Source: Public Health Scotland, COVID-19 Wider Impact on the Healthcare System Dashboard

Figure 42: Children in Highland recorded as receiving their 13-15 month review by the date information was extracted (20 February 2023)



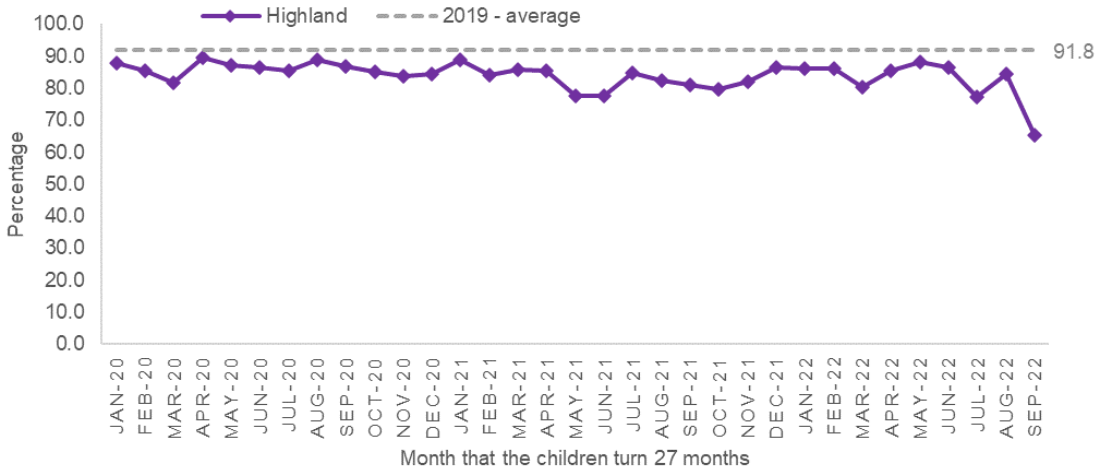
Source: Public Health Scotland, COVID-19 Wider Impact on the Healthcare System Dashboard

Figure 43: Children in Highland recorded as receiving their 27-30 month review by 31 months of age or younger



Source: Public Health Scotland, COVID-19 Wider Impact on the Healthcare System Dashboard

Figure 44: Children in Highland recorded as receiving their 27-30 month review by the date information was extracted (20 February 2023)



Source: Public Health Scotland, COVID-19 Wider Impact on the Healthcare System Dashboard

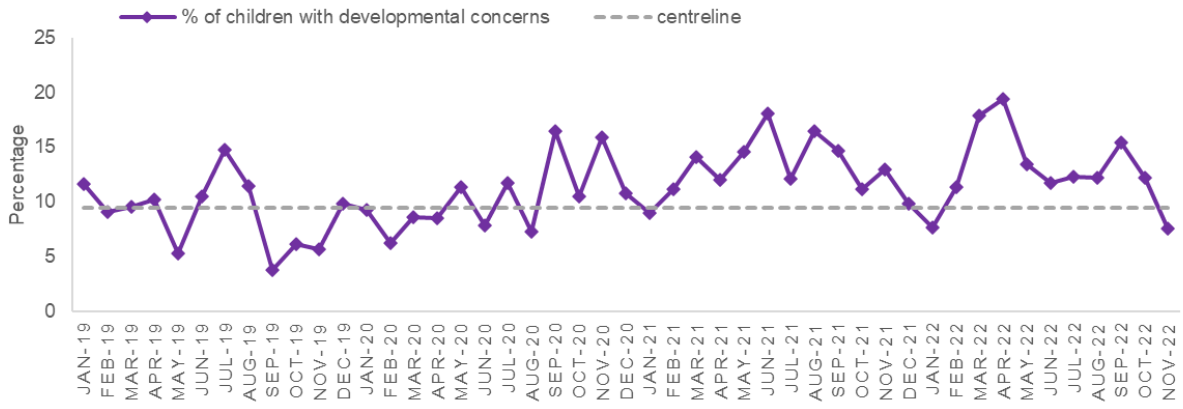
6.2. Early child development

Biological factors (such as being born prematurely) and environmental factors (such as the parenting and opportunities for play and exploration children receive) influence early child development[38].

Identifying early child development problems is crucial as they are strongly associated with long-term health, educational, and social difficulties. Early identification gives the best opportunity to support children and families to improve outcomes.

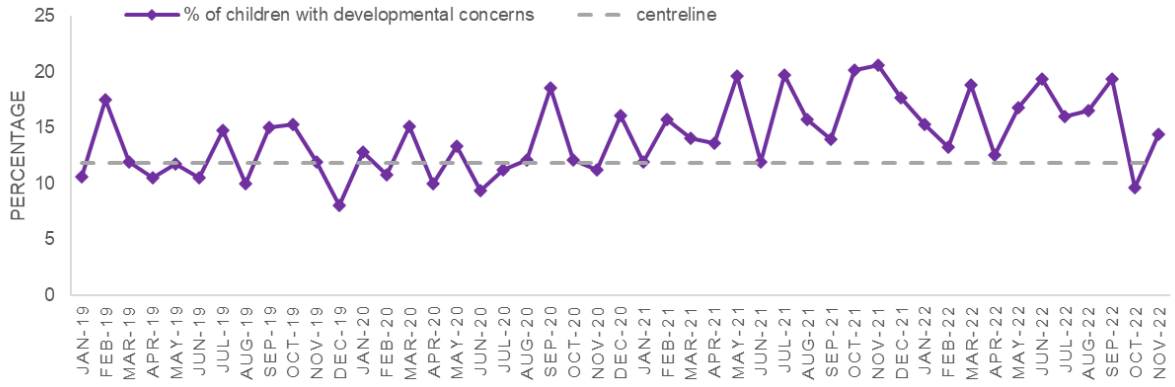
There has been a sustained increase in the proportion of children experiencing a developmental concern at their 13-15 month and 27-30 month reviews in Highland. These increases can be seen from the data points above the centreline from February 2021 (Figure 45) and after July 2021 at 27-30 month review (Figure 46).

Figure 45: Percentage of children living in the Highland HSCP with one or more developmental concerns recorded at the 13-15 month review



Source: Public Health Scotland, COVID-19 Wider Impact on the Healthcare System Dashboard
The centreline is the monthly median from January 2019 to March 2020.

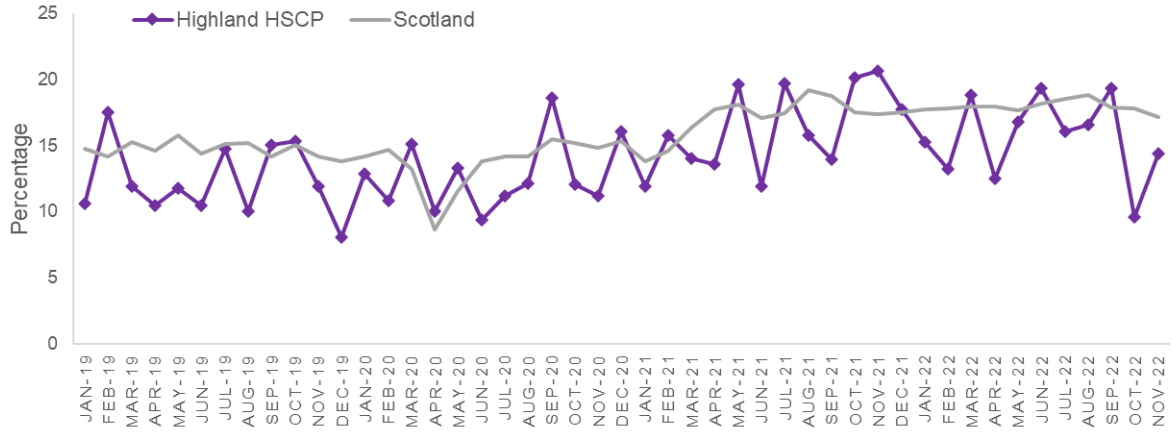
Figure 46: Percentage of children living in Highland with one or more developmental concerns recorded at the 27-30 month review



Source: Public Health Scotland, COVID-19 Wider Impact on the Healthcare System Dashboard
The centreline is the monthly median from January 2019 to March 2020

The upward trend to a new higher level is also observed in Scotland at 27-30 months (Figure 47) and occurs at 13-15 months[39].

Figure 47: Percentage of children living in Highland and Scotland with one or more developmental concerns recorded at the 27-30 month review



Source: Public Health Scotland, COVID-19 Wider Impact on the Healthcare System Dashboard

Nationally the increase in the number of children with more than one developmental concern is seen across all quintiles of deprivation at 27-30 months. In Scotland, the proportion of children identified with concerns about development in the speech, language and communication, emotional/behavioural, personal/social, and problem-solving domains is higher in 2021 and 2022 than in the previous two years at both review points.

The sustained increase in developmental delay both locally and nationally coincides with limitations on social contact to control the transmission of COVID-19. Monitoring these children and future cohorts at their review points remains essential for understanding individual and collective developmental support needs.

6.3. Infant feeding

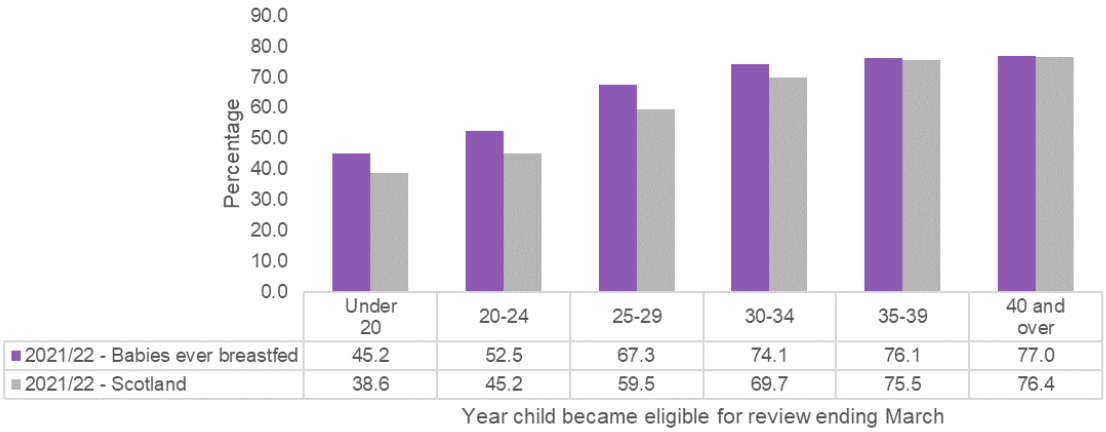
Breastfeeding is part of the natural reproductive process and an essential public health activity that should be encouraged. There is strong evidence of the short-term and lifelong health benefits of breastfeeding for both mothers and infants[40]. There is clear economic evidence that investing in improving breastfeeding practices are cost saving preventative actions[41]. The Scottish Government has adopted as policy World Health Organisation guidance recommending exclusive breastfeeding for the first six months of an infant's life. However, breastfeeding rates in Scotland remain low compared to those of comparable countries.

Breastfed infants have a lower risk of infection, particularly those affecting the ear, respiratory tract and gastrointestinal tract. Breastfeeding women have lower risks of breast cancer, epithelial ovarian cancer and hip fracture later in life[42]. There is increasing evidence that breastfeeding helps protect against becoming overweight or obese over the life course[43]. Infant feeding patterns are strongly determined by many demographic variables, including age, deprivation, and ethnicity and are known to be influenced by smoking behaviour.

Infant feeding data is available from Health Visitor reviews collected for child health surveillance. The source can be used to monitor breastfeeding initiation, duration and exclusivity. Infant feeding patterns are strongly determined by demographic variables, including age, deprivation, and ethnicity and are known to be influenced by smoking behaviour.

In Highland, 69 percent of babies born in 2021/22 started breastfeeding. Younger women are less likely to have begun breastfeeding by the time of the first Health Visitor review (Figure 48).

Figure 48: Breastfeeding initiation recorded at First Visit by maternal age in Highland and Scotland in 2021/22

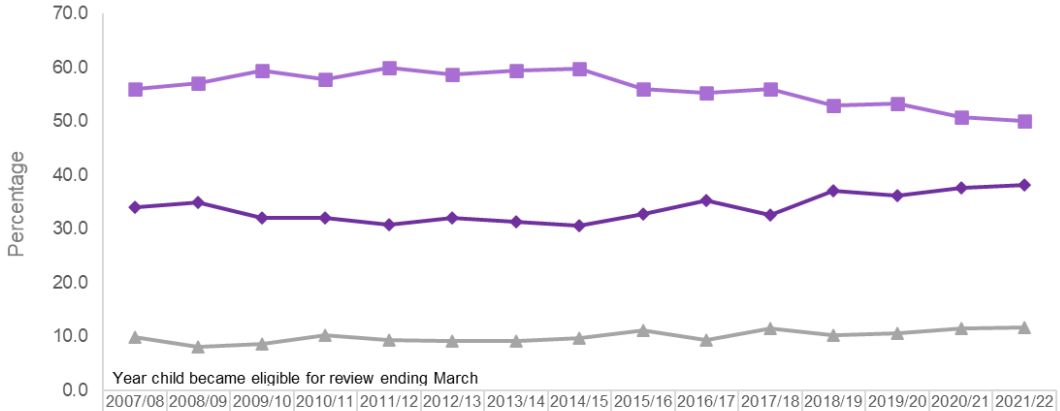


	Under 20	20-24	25-29	30-34	35-39	40 and over
2021/22 - Babies ever breastfed	45.2	52.5	67.3	74.1	76.1	77.0
2021/22 - Scotland	38.6	45.2	59.5	69.7	75.5	76.4

Source: Public Health Scotland Infant Feeding Open Data

By 6-8 weeks of age, in 2021/22, 38 percent of babies were still exclusively breastfed, and 12 percent were mixed breast and formula fed (Figure 49). Adding exclusive breastfeeding and mixed feeding, half of Highland babies received breast milk at 6-8 weeks of review. The modest improvement in babies breastfed from 2014-15 primarily results from an increase in women in their twenties exclusively breastfeeding.

Figure 49: Infant feeding at health visitor 6-8 week review in Highland

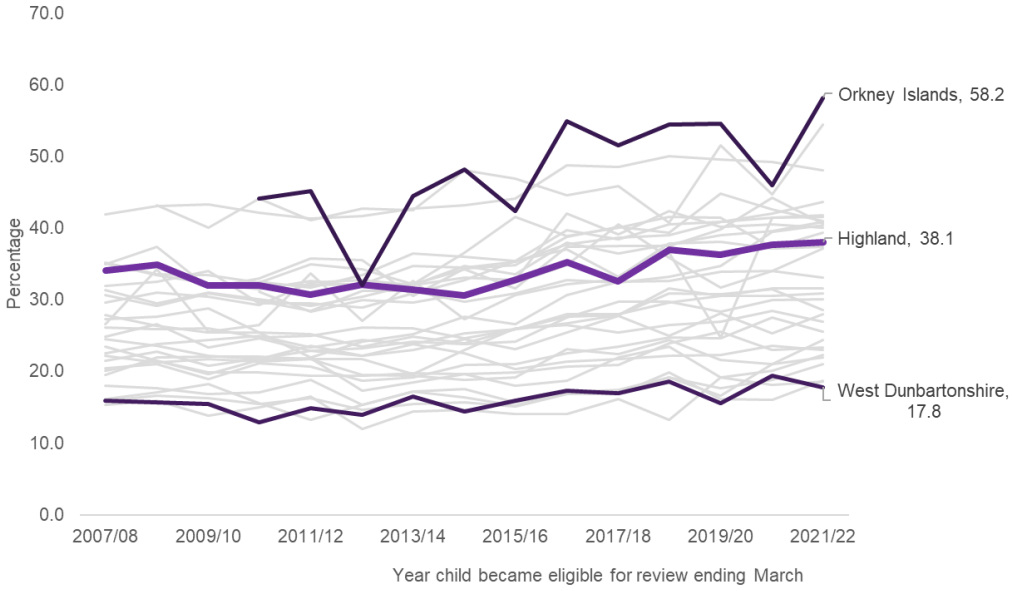


	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Exclusive breast	34.0	34.9	32.0	32.0	30.7	32.1	31.4	30.5	32.8	35.3	32.6	37.0	36.2	37.7	38.1
Formula	56.1	57.0	59.4	57.8	59.9	58.8	59.4	59.8	56.1	55.3	56.0	52.8	53.2	50.8	50.1
Mixed breast and formula	9.9	8.0	8.6	10.3	9.4	9.2	9.2	9.6	11.1	9.4	11.4	10.2	10.5	11.4	11.7

Source: Public Health Scotland Infant Feeding Open Data

Highland currently has relatively 'mid-table' breastfeeding rates compared to other council areas in Scotland (Figure 50).

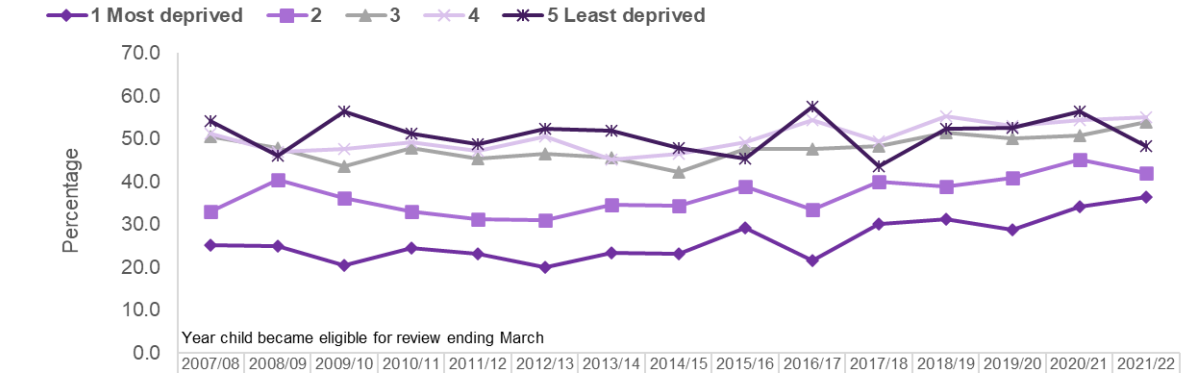
Figure 50: Percentage of babies exclusively breastfed at 6-8 week review by local authority area of residence



Source: Public Health Scotland Infant Feeding Open Data

Breastfeeding is more common among women who live in less deprived areas (Figure 51). From 2012/13, an increasing trend in the proportion of babies breastfed at 6-8 weeks in the more deprived areas in Highland can be seen. Consequently, over time, there has been a reduction in the inequalities gap in breastfeeding. This pattern is also observed nationally and is influenced by the association between the age of mothers and deprivation. However, breastfeeding remains a significant factor in inequalities in health; not being breastfed is both a cause and consequence of social inequality.

Figure 51: Overall breastfeeding (exclusive or mixed) by deprivation level (SIMD) in Highland at 6-8 weeks review



	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
1 Most deprived	25.1	24.9	20.4	24.4	23.2	20.0	23.2	23.1	29.1	21.6	30.1	31.2	28.7	34.1	36.5
2	33.0	40.5	36.1	33.1	31.1	30.9	34.5	34.3	38.8	33.4	39.9	38.9	40.9	45.1	41.9
3	50.5	47.9	43.5	47.8	45.5	46.4	45.5	42.1	47.6	47.5	48.3	51.4	50.1	50.8	53.9
4	51.2	47.0	47.6	49.1	47.1	50.5	45.1	46.4	49.1	54.3	49.4	55.3	53.0	54.4	55.0
5 Least deprived	54.1	46.0	56.4	51.2	48.8	52.4	51.9	47.9	45.4	57.6	43.5	52.2	52.6	56.4	48.4

Source: Public Health Scotland Infant Feeding Open Data

6.4. Childhood Immunisations

Immunisation programmes for children are effective in reducing the burden of disease. They aim to protect the individual child from many serious infectious diseases and prevent the spread of disease in the wider population[44].

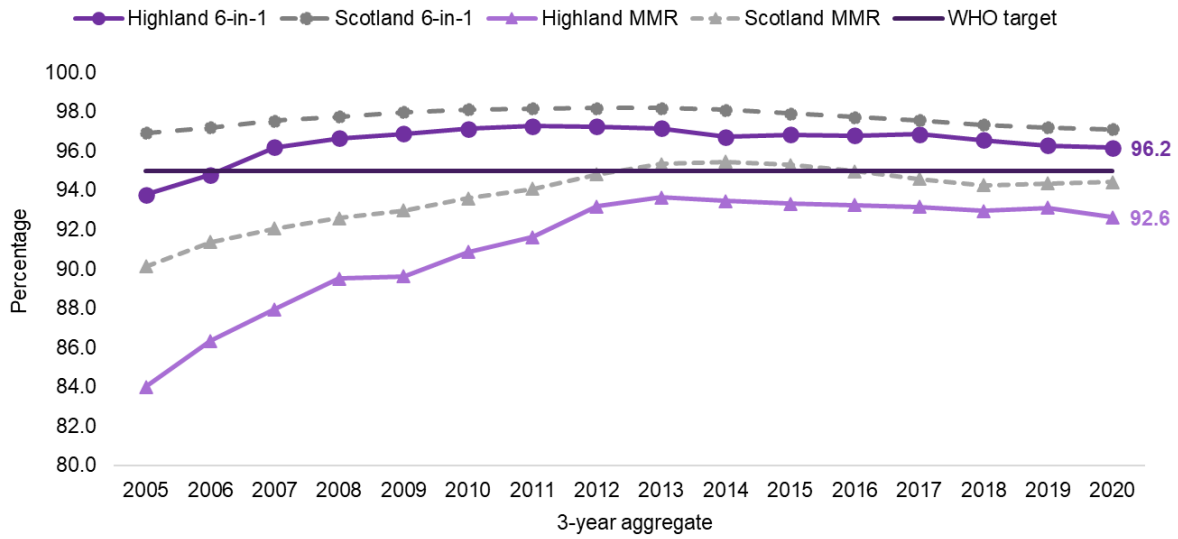
The European Region of the World Health Organization (WHO) recommends that on a national basis, at least 95 percent of children are immunised against diseases preventable by immunisation and targeted for elimination or control. These include diphtheria, tetanus, pertussis, polio, Haemophilus influenzae type b (Hib), measles, mumps and rubella.

There is an expectation that all UK routine childhood immunisations that are evaluated up to five years of age achieve the 95 percent coverage in line with the WHO target. Immunisation uptake rates are monitored at 12 months, 24 months, five years and six years of age.

In Highland, uptake of the 6-in-1 vaccine at 24 months has consistently achieved 95 percent coverage, though, since 2012/14, there is evidence of a decreasing trend (Figure 52).

The uptake of the MMR vaccine at 24 months has decreased and was consistently below the national coverage rate.

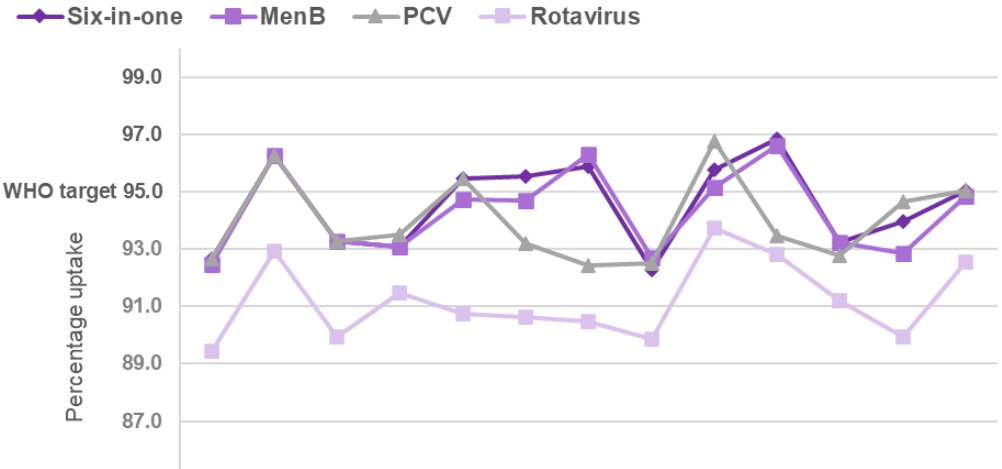
Figure 52: Childhood immunisation uptake (6-in-1 and MMR) at 24 months in Highland and Scotland



Source: Scottish Public Health Observatory Online Profiles

Childhood immunisation services continued during the COVID-19 pandemic to ensure children remained protected and to prevent a resurgence of serious infectious diseases, including diphtheria, whooping cough, and measles. Quarterly uptake rates of routine childhood immunisations at 12 months in Highland remained high, except for rotavirus, which averaged 91 percent uptake (Figure 53).

Figure 53: Primary childhood immunisations uptake rates at 12 months in Highland by quarter



	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3
Six-in-one	92.7	96.3	93.3	93.1	95.5	95.5	95.9	92.3	95.8	96.9	93.2	94.0	95.0
MenB	92.5	96.3	93.3	93.1	94.7	94.7	96.3	92.7	95.2	96.6	93.2	92.9	94.8
PCV	92.7	96.3	93.3	93.5	95.5	93.2	92.4	92.5	96.8	93.5	92.8	94.6	95.0
Rotavirus	89.5	92.9	89.9	91.5	90.8	90.6	90.5	89.8	93.7	92.8	91.2	90.0	92.5

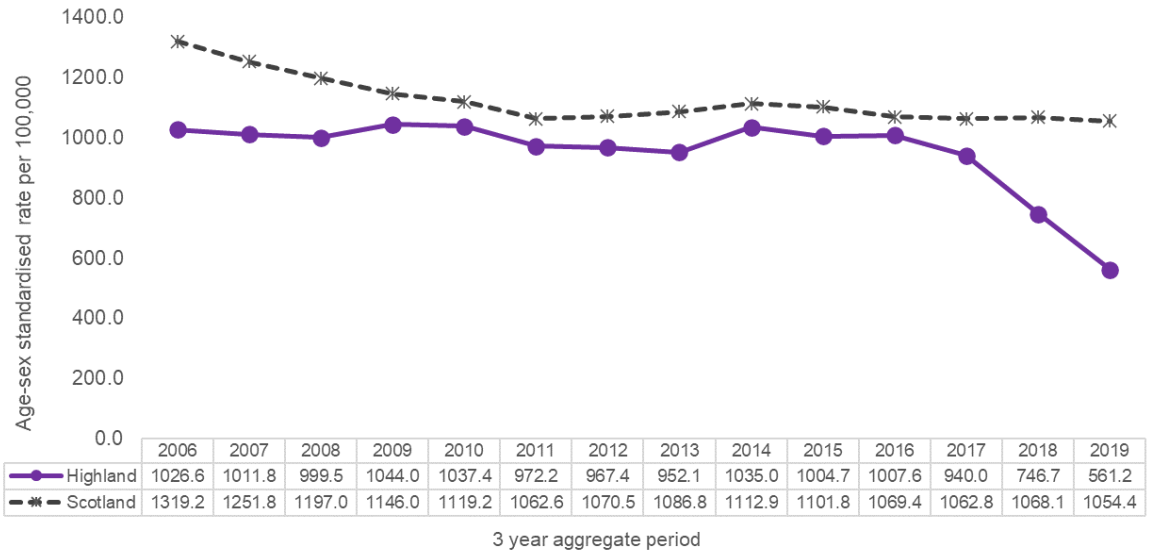
Source: Public Health Scotland Childhood Immunisation Open Data

6.5. Unintentional injuries in the under 5's

Unintentional injury is a source of harm to children and young people[45]. Children are particularly vulnerable; unintentional injury is a leading cause of emergency hospital admission and death in children. The term 'unintentional injury' is used to reflect the fact that many such events can potentially be prevented[46].

In Highland, around 120 children under five are admitted to a hospital annually due to unintentional injury. Rates in the last two periods have been impacted by the COVID-19 pandemic, with periods of lockdown resulting in decreased injuries (Figure 54, Figure 55).

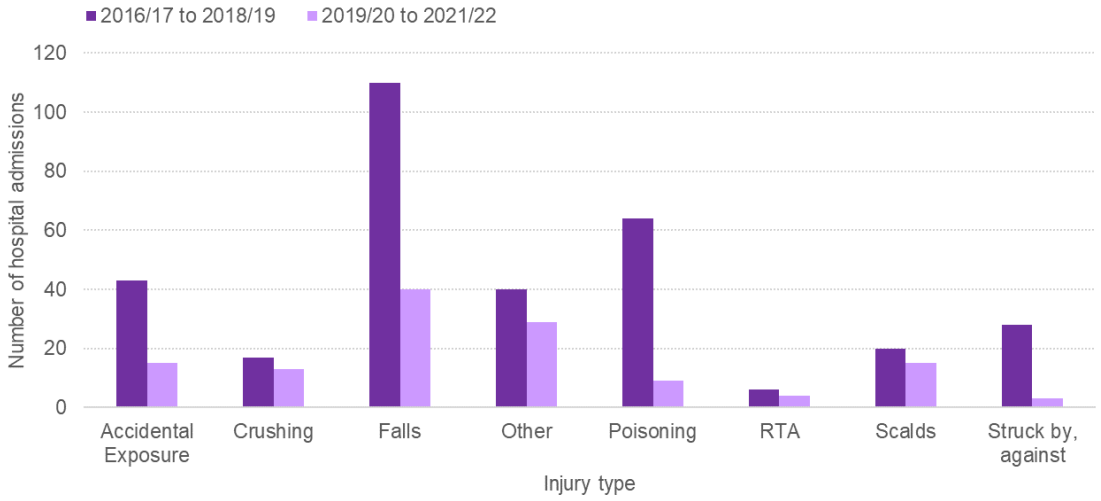
Figure 54: Unintentional injuries in under 5s in Highland and Scotland



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Highland	1026.6	1011.8	999.5	1044.0	1037.4	972.2	967.4	952.1	1035.0	1004.7	1007.6	940.0	746.7	561.2
Scotland	1319.2	1251.8	1197.0	1146.0	1119.2	1062.6	1070.5	1086.8	1112.9	1101.8	1069.4	1062.8	1068.1	1054.4

Source: Scottish Public Health Observatory Online Profiles
Emergency hospital admissions for unintentional injury in children under five; three-year rolling average number and directly age-sex standardised rate per 100,000 population.

Figure 55: Emergency hospital admissions as a result of an unintentional injury by injury type for children aged under 5 in Highland



Source: Public Health Scotland Unintentional Injuries Open Data
Emergency hospital admissions for unintentional injury in children under five; three-year aggregate number.

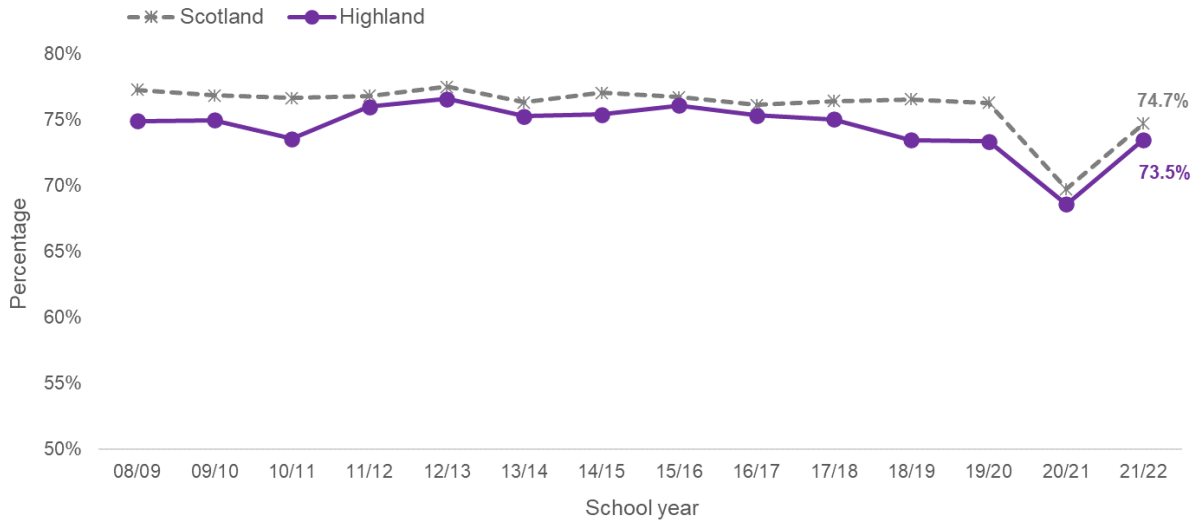
7. Primary school age

7.1. Child healthy weight

Monitoring healthy weight in childhood is a way of seeing how well the needs of children are being met. Maintaining a healthy weight throughout childhood is associated with many health and wellbeing benefits. Obesity and being overweight in childhood are associated with health problems in later life, including type 2 diabetes and cardiovascular disease. The early years are critical for establishing good nutrition and healthy eating habits and for reducing the likelihood of children becoming overweight or experiencing obesity in later life.

Child height and weight are measured in Primary 1 children and used to monitor those at risk of unhealthy weight. In the school year 2021/22, 73.5 percent of Primary 1 children in Highland measured had a healthy weight compared to 74.7 percent in Scotland (Figure 56). Child healthy weight rates in Highland are decreasing and consistently lower than in Scotland. Coverage was not complete in 2019/20 and 2020/21 due to COVID-19.

Figure 56: Percentage of Primary 1 children with a healthy weight in Highland and Scotland

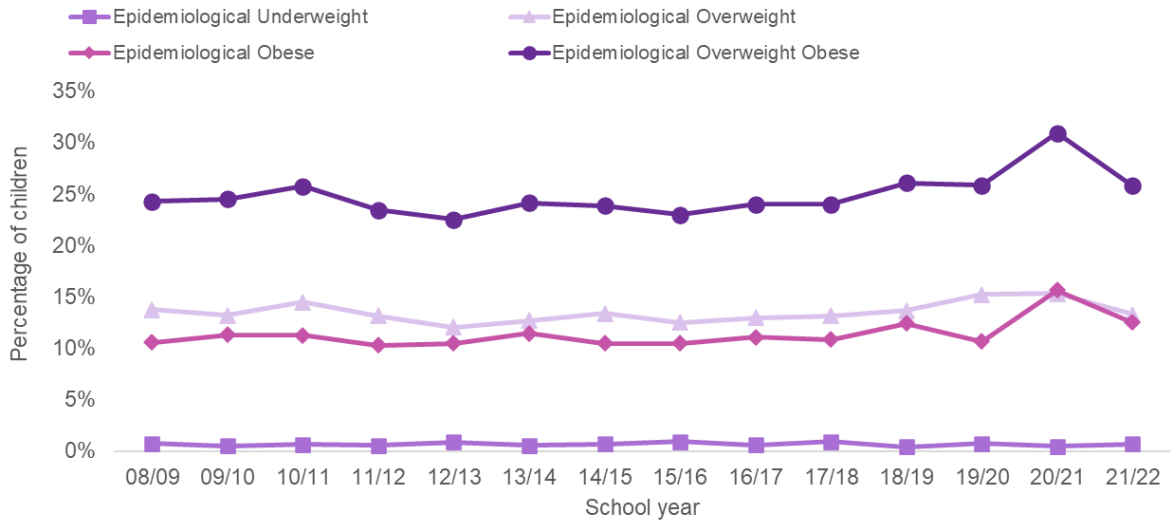


Source: Child Health Systems Programme School (CHSP-S), Public Health Scotland
Children in Primary 1 receiving a review whose BMI falls within the epidemiological threshold for healthy weight (BMI>2nd and <85th centile).
Coverage was lower in 2019/20 and 2020/21 due to COVID-19.

In Highland, as in Scotland, the proportion of children at risk of overweight or obesity increased markedly in 2020/21. Nationally and locally, the BMI distribution of Primary 1 children in 2021/22 appears more similar to pre-pandemic years than in 2020/21, with around one in four children already at risk of overweight or obesity (Figure 57).

The risk of unhealthy weight is linked to deprivation, with prevalence higher in the most deprived areas of Highland.

Figure 57: Trend in selected BMI measures (epidemiological categories) in Highland



Source: Child Health Systems Programme School (CHSP-S), Public Health Scotland
Children in Primary 1 receiving a review whose BMI falls within epidemiological categories: underweight (BMI ≤ 2nd centile), overweight (85th-<95th centile), obese (≥ 95th centile), overweight and obese combined ((≥ 85th centile).

7.2. Oral health

Good oral health is essential for general wellbeing and eating, speaking, and socialising properly. Poor oral health can be associated with pain, disfigurement, infection, school absences and poor nutrition and weight. Dental caries is one of the most common diseases of childhood, yet it is entirely preventable. Dental neglect can be an indicator of other unmet needs.

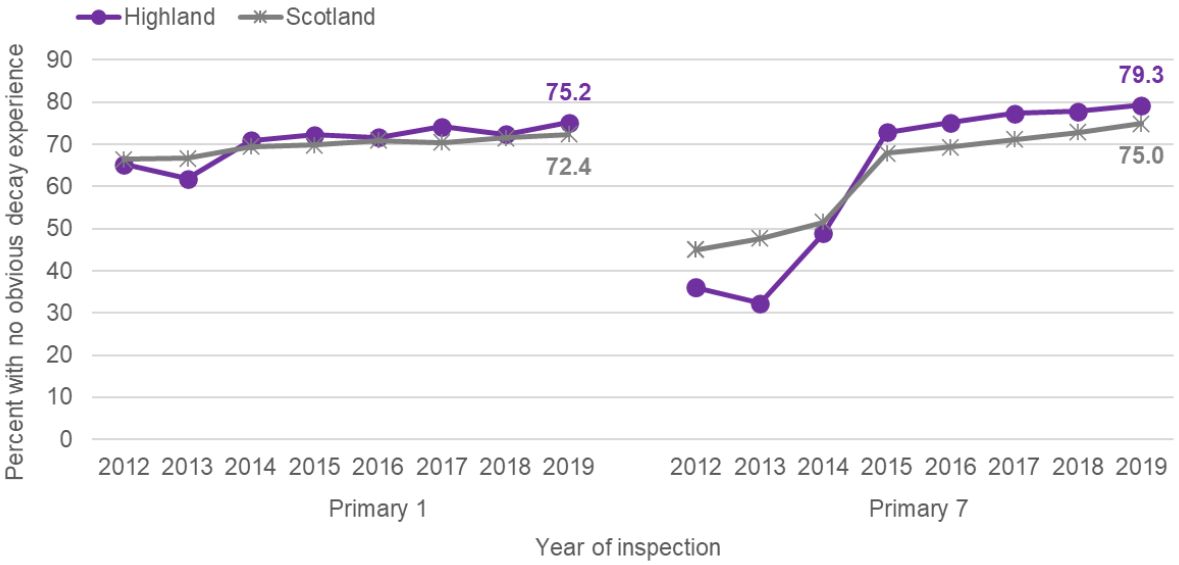
The National Dental Inspection Programme (NDIP) in Scotland has two levels. All children in Primary 1 (P1) and Primary 7 (P7) receive a basic inspection. In alternate years a detailed epidemiological examination of a representative sample of P1 or P7 children is undertaken.

In the school year 2021/22, public health measures to limit the transmission of COVID-19 affected the inspection programme. These included more limited school access and transferring some dental staff to other duties. NHS Highland was only able to provide a partial submission[47].

In Highland, the proportion of P1 children with no obvious decayed, missing or filled teeth has shown improvement, rising from 65 percent in 2012 to 75 percent in 2019. The levels of dental decay in P7 children showed a sharp improvement from 2012 to 2015, followed by a more gradual improvement in oral health. In 2019, 79 percent of P7 children in Highland schools had no obvious dental decay experience (Figure 58).

Oral health improvement activities through the Childsmile Programme should be the focus of initiatives to reduce oral health inequalities.

Figure 58: Percentage of Primary 1 and Primary 7 children with no obvious dental decay experience in Highland and Scotland



Source: National Dental Inspection Programme (NDIP) database, Public Health Scotland
No obvious dental decay experience means no obvious decayed, missing and filled primary teeth.

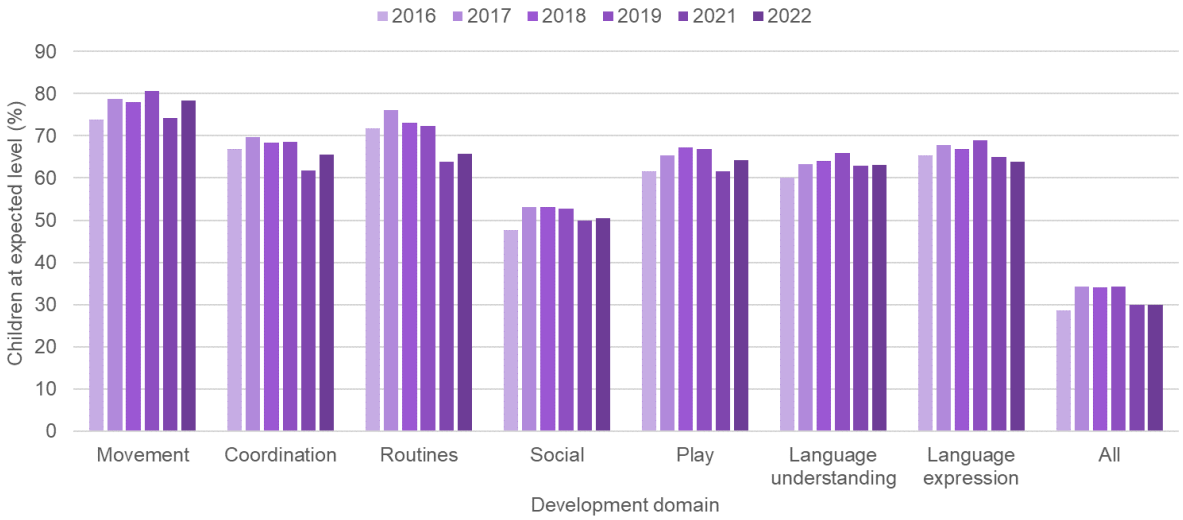
7.3. Developmental overviews at the primary transition

The Highland education service has used developmental overviews since 2015 to track children's skills and development. The developmental overviews are based on a strengths-based tool that assesses children's development in seven domains: movement, coordination, routines, social, play, language understanding and language expression.

Every child should have a developmental overview updated in the months before transitioning to primary school. These overviews provide schools with general transition information and the first sight of patterns of strengths and need in a class environment. The developmental overviews also support tracking an individual child's development, identifying and clarifying concerns, supporting requests for advice or assistance, and signposting to supporting services and initiatives.

The proportion of children achieving the expected level of development was lower in all domains in 2021 compared to the period 2017 to 2019 (Figure 59). In 2022, the desired levels of language understanding and expression had not improved on the 2021 level. Monitoring these children and future cohorts remains essential for understanding individual and collective developmental support needs.

Figure 59: Trend in developmental overviews at the transition to primary school in Highland, 2016 to 2022



Source: Highland Council Educational Psychology Service
Data was not collected in 2020 due to COVID-19.

8. Secondary school age

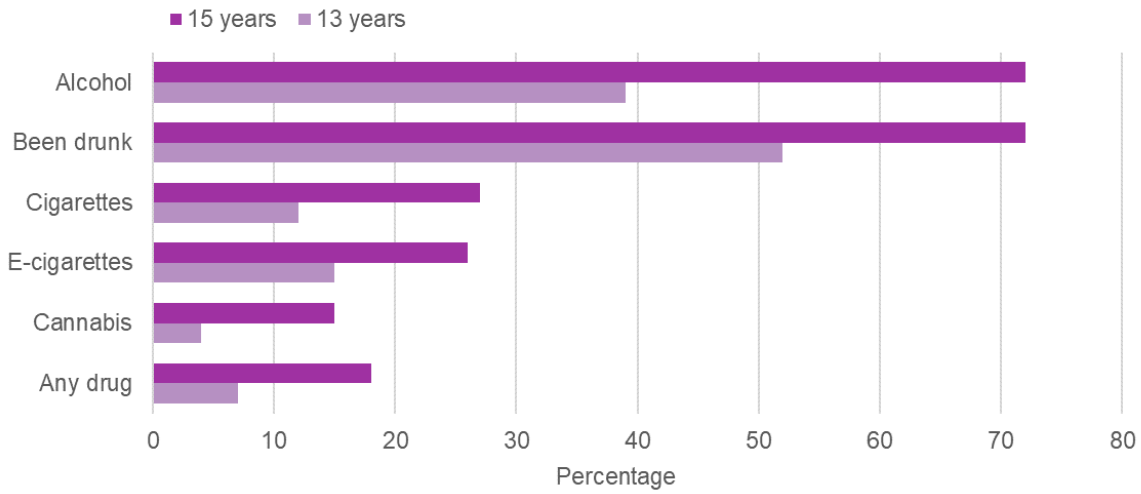
8.1. Substance use

Preventing harm caused by alcohol, tobacco and other drugs among young people is a national[48] and local priority[49] and central to the Getting it Right for Every Child (GIRFEC) approach to improving outcomes and supporting the wellbeing of children and young people[50]. Collectively, the avoidable harm from these substances is a major influence on preventable ill health across the life course.

The Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) is a long established survey used to measure long-term trends in young people's smoking, alcohol and drug use behaviours[51]. SALSUS 2018 was the latest survey providing local authority level results. The survey aimed to achieve a representative sample of pupils from Secondary 2 (S2) and Secondary 4 (S4) pupils in local authority and independent schools. Pupils in S2 are referred to as 13-year-olds and S4 pupils as 15-year-olds.

Key prevalence measures show that most pupils do not use substances regularly (Figure 60). For both age groups, drinking alcohol in the last week remains more common than smoking one or more cigarettes in the last week (regularly) or having used drugs in the last month.

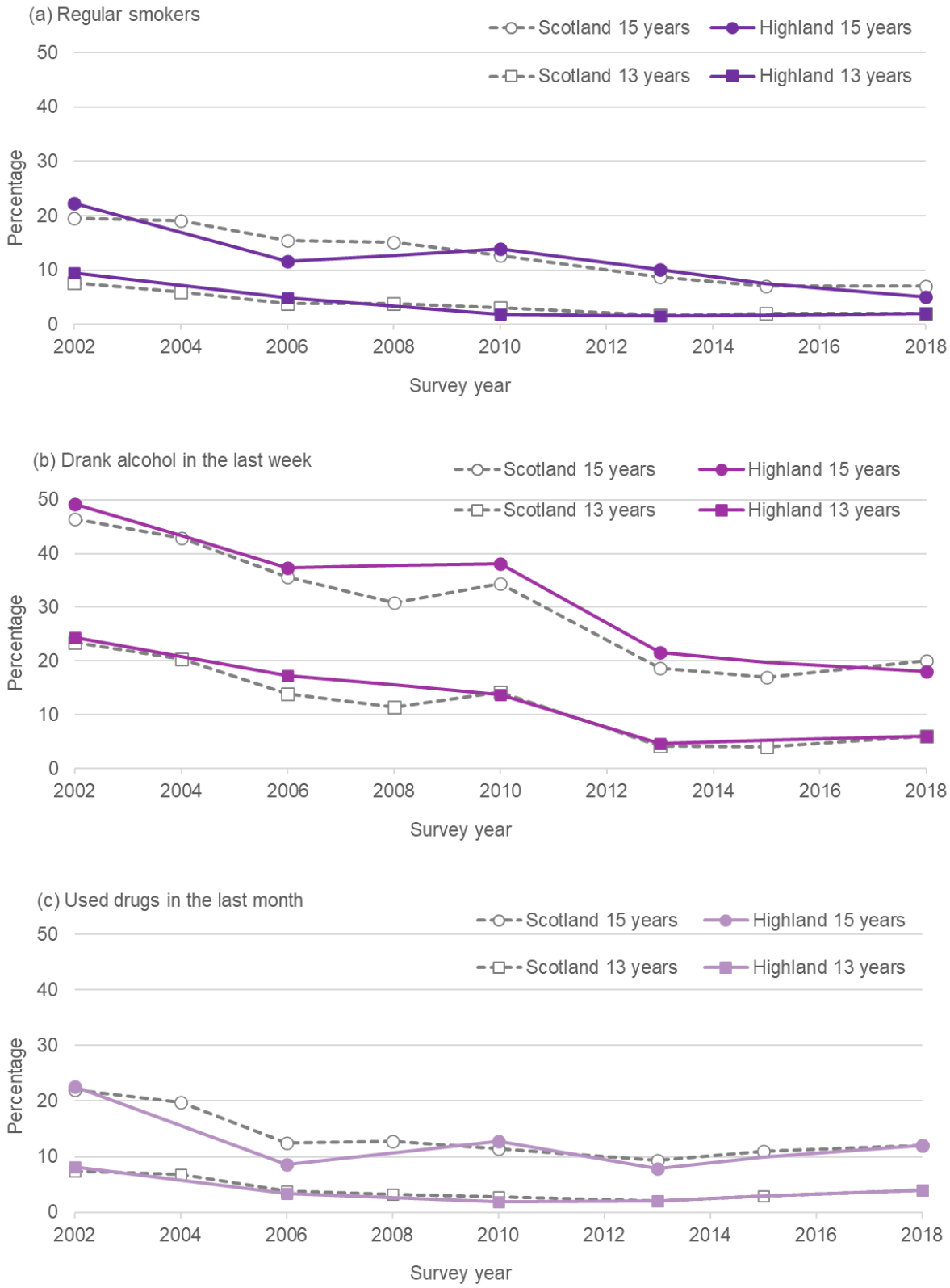
Figure 60: Proportion of pupils reporting ever having used substances by age in Highland, 2018



Source: Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS)

In both cohorts, the prevalence of cigarette smoking has declined over time since 2002 (Figure 61). In 2018, increases in drinking in the last week among 13-year-olds and using drugs in the last month among 13-year-olds and 15-year-olds were reported in Highland. Findings from the 2018 survey show that, of 15-year-olds, around three in four pupils had tried alcohol and had ever been drunk, one in four had ever tried smoking cigarettes or using e-cigarettes, and one in five had used drugs, including cannabis.

Figure 61: Trends in the proportion of pupils (a) smoking regularly (b) drinking alcohol in the last week (c) using drugs in the last month



Source: Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS)

Problematic use of drugs and alcohol is associated with multiple risk factors and vulnerabilities. The evidence highlights children and young people most likely to develop problems with alcohol and drugs as including: care experienced children, homeless younger people, young offenders, children who have experienced trauma, children and young people in families with problem drug use, children experiencing deprivation, and younger people not in work or education[52].

Planet Youth, also known as the Icelandic Prevention Model, is an evidence based primary prevention approach that aims to reduce and delay alcohol, tobacco and other drug use among young people. The approach works by increasing protective factors for substance use, the kind of things that, if part of a young person's life, can reduce the risk. Examples of protective factors include:

- In families, protective factors include having clear boundaries, parents disapproving of their child using substances, and families that spend time together.
- With peers, protective factors include friends that don't use substances and avoid other risky behaviours.
- For schools, protective factors include being motivated to learn and to feel safe at school.
- For leisure time, protective factors include being involved in structured activities, having meaningful use of time, and being involved in communities.

Highland is one of five Planet Youth model pilot sites across Scotland. Highland has five secondary schools involved in the pilot. Findings from a survey of 356 S4 pupils on Highland undertaken in Autumn 2021 highlight that behavioural harms continue to start early for many young people (Figure 62).

Figure 62: Findings from the Highland Planet Youth survey, 2021

Source: Planet Youth

8.2. Mental health and wellbeing

The mental health of children and young people has been identified as a concern across Scotland[53]. Supporting children's and young people's mental health and wellbeing benefits the individual and society by preventing problems from arising and intervening early. Support can range from prevention and early intervention activities to specialist services and direct intervention, especially where trauma and adversity impact on mental health and emotional wellbeing.

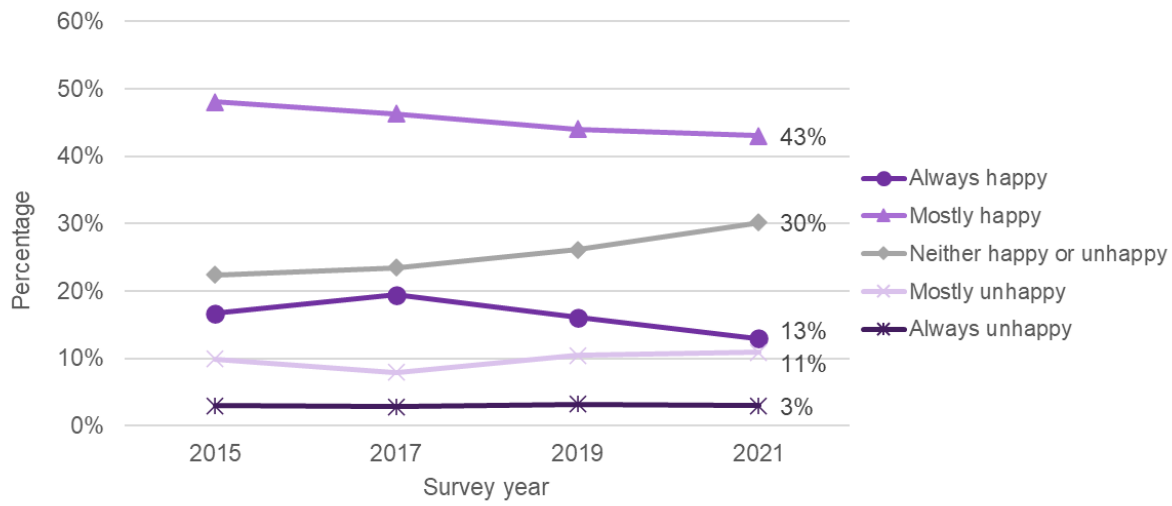
There is evidence that the pandemic has affected the mental health of children and young people. COVID-19 and the restrictions put in place to contain the virus have increased the risk of people experiencing poor mental health and trauma. This includes people living with domestic or child abuse during lockdown, facing poverty, financial hardship and unemployment, severe/chronic illness, and bereavement[54]. The long-term impact of the pandemic has not yet fully developed.

The Highland Lifestyle Survey is a biannual survey completed by pupils in P7, S2 and S4. The response rate in 2021 was 48 percent and has varied between 44 percent in 2017 and 66 percent in 2013.

Data from this survey are used as an ongoing measure of the progress made in schools to support the wellbeing of children and young people in Highland. The next survey is planned for 2023.

Children who responded to the survey in 2021 reported lower levels of happiness compared to pupils in previous years (Figure 63).

Figure 63: Levels of happiness reported in P7, S2 and S4 pupils in Highland, 2015 to 2021

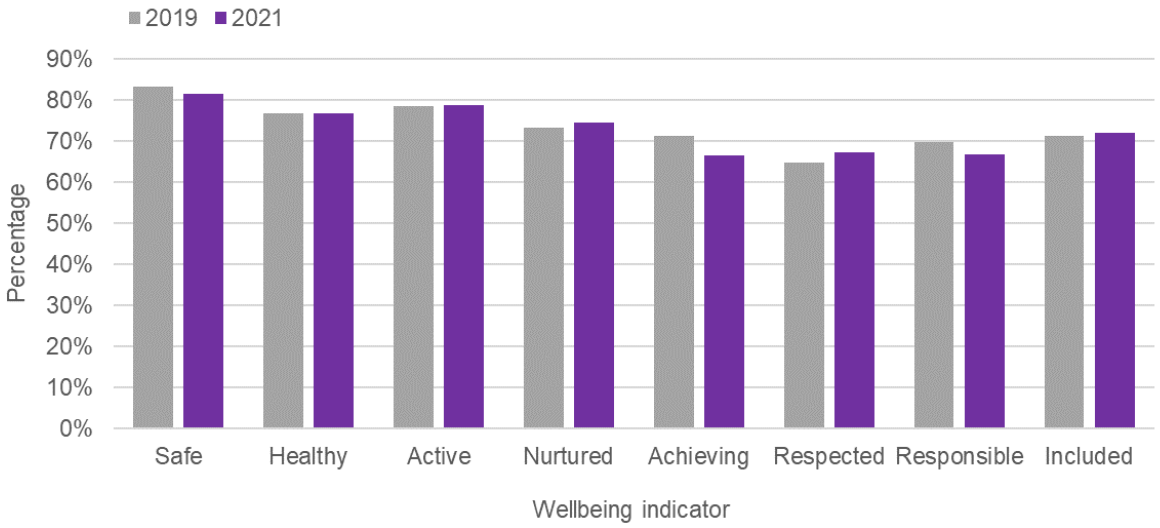


Source: Highland Lifestyle Survey

The Getting it Right for Every Child (GIRFEC) principles use an approach to considering children and young people's wellbeing that is rights-based, strengths-based, and adaptable enough to take account of stage of development and the complexity of each child or young person's life circumstances[50]. The approach uses eight wellbeing indicators (SHANARRI) that, when considered together, give a holistic view of the needs of each child or young person.

The Highland Lifestyle Survey measures and reports the indicators (Figure 64). It should be of particular concern that one in three Highland children do not feel they are achieving.

Figure 64: Percentage of Highland children reporting their wellbeing needs are met using the SHANARRI principles, 2019 and 2021



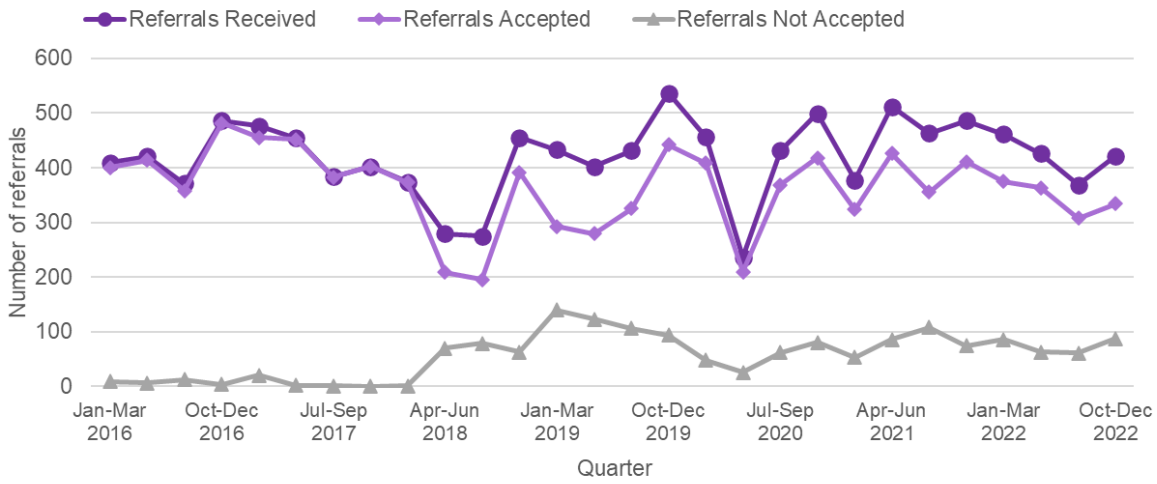
Source: Highland Lifestyle Survey

8.3. Childhood and Adolescent Mental Health Services

The Scottish Government aims to make Child and Adolescent Mental Health Services (CAMHS) accessible to children, young people and families[55]. Most children and young people requiring CAMHS are experiencing serious mental health problems. CAMHS also have an important role in supporting the mental health capability of the wider network of children's services. All children and families should receive support and services that are appropriate to their needs.

Referrals to CAMHS have increased in recent years. The lowest number of referrals received in a quarter was during the first national lockdown between April and June 2020 (Figure 65).

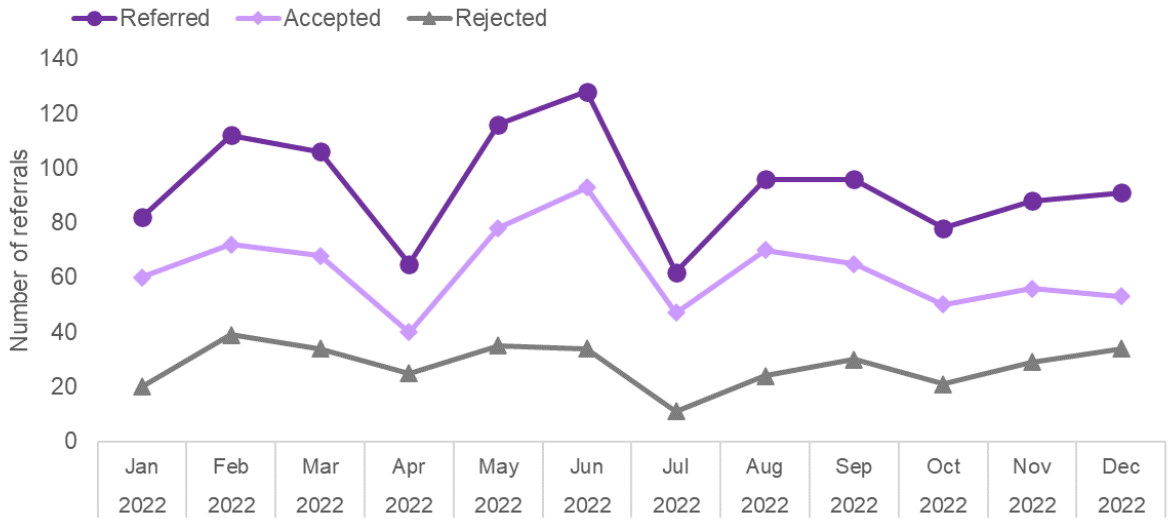
Figure 65: Referrals for CAMHS in NHS Highland by quarter, January 2016 to December 2022



Source: Public Health Scotland CAMHS Open Data

There were 1,120 referrals to CAMHS in Highland in 2022 (Figure 66). The average number of referrals a month was 93 (range 62 to 128). Two in three referrals (67 percent) were accepted onto the waiting list. The majority (76 percent) of referrals in 2022 were for children and young people aged between 12 and 17 years.

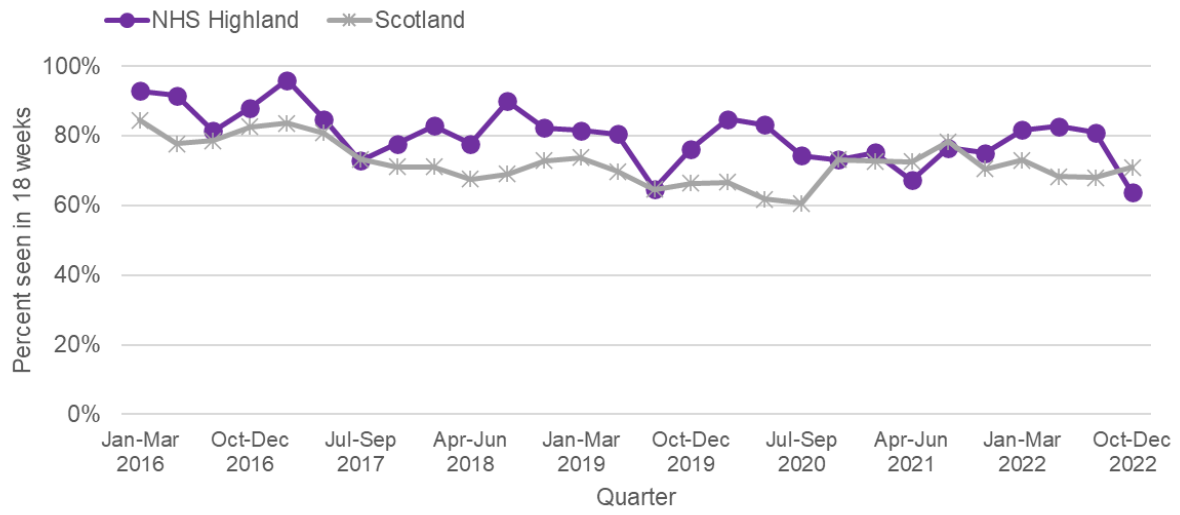
Figure 66: Referrals number for CAMHS in Highland by month in 2022



Source: NHS Highland Management Information

CAMHS have been subject to an 18 week wait target from referral to treatment for specialist services from December 2014. The national target is that 90 percent of young people will commence specialist CAMHS services within 18 weeks of referral. The percentage of children waiting less than 18 weeks from CAMHS referral to starting treatment is generally higher in NHS Highland than in Scotland (Figure 67).

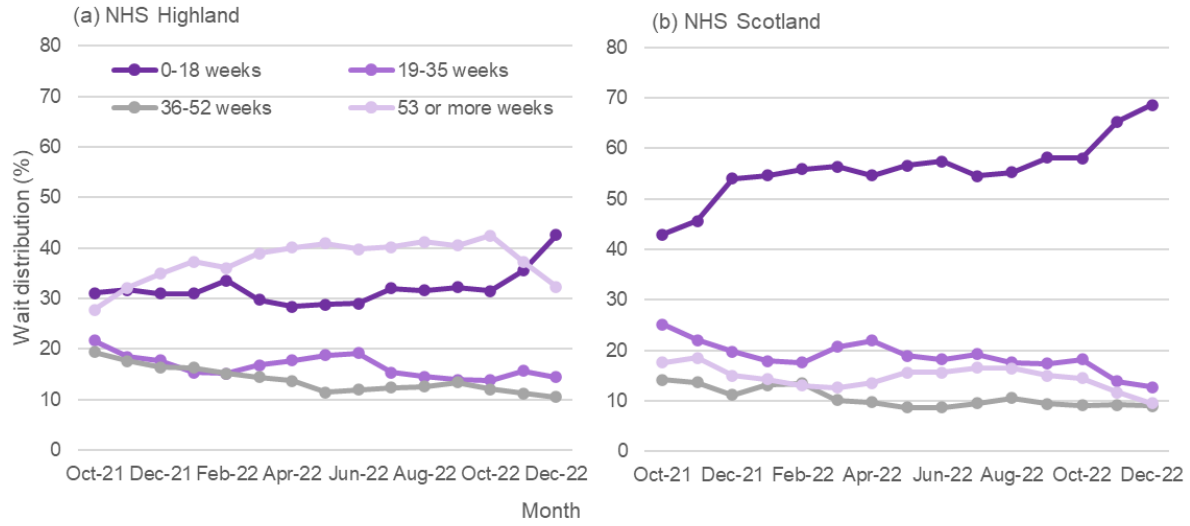
Figure 67: Wait distribution (%) of patients who started treatment for CAMHS in NHS Highland by quarter, January 2016 to December 2022



Source: Public Health Scotland CAMHS Open Data

Some children and young people still face very long waits for CAMHS. Benchmarking shows a higher-than-average distribution of long waits to access services in NHS Highland compared to Scotland (Figure 68).

Figure 68: Wait distribution (%) of patients waiting for treatment for CAMHS in (a) NHS Highland and (b) NHS Scotland by month



Source: Public Health Scotland CAMHS Open Data

In Highland, an improvement plan to support actions to meet the national waiting times standard and service specification for CAMHS set by the Scottish Government has been agreed upon. Achieving and sustaining waiting list targets is required to ensure that children, young people, and their carers do not continue to experience unnecessary delays in treatment.

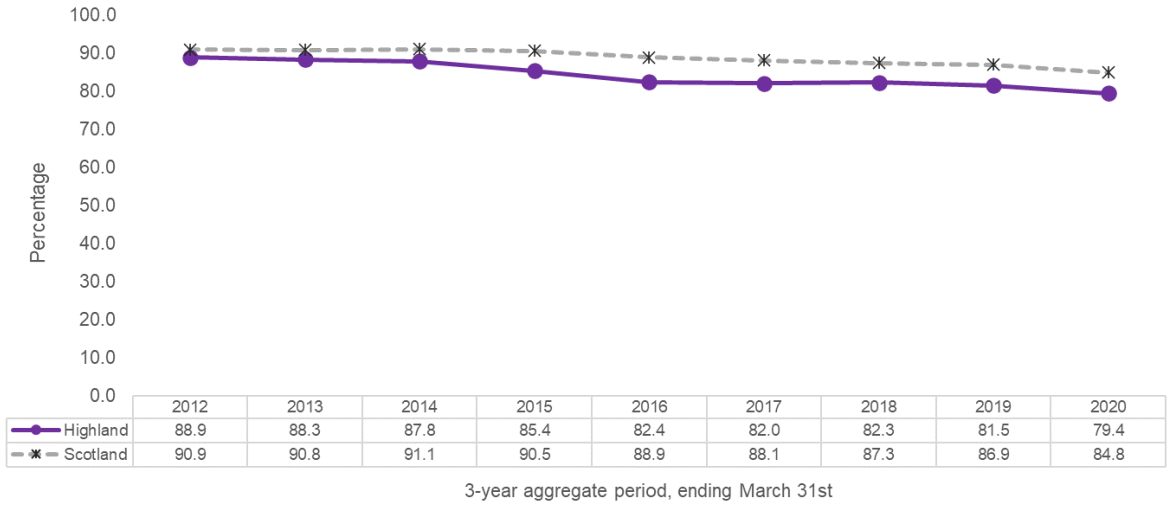
8.4. HPV immunisation

The Human Papillomavirus (HPV) is a common virus which usually has no symptoms. Most people who become infected with HPV clear the virus from their body. Others may develop a range of cancers (including cervical, anogenital and head and neck) in later life. The most common HPV-related cancer is cervical cancer[56].

The schools-based HPV immunisation programme in Scotland started in 2008, with immunisation offered to females in secondary school. The immunisation schedule has changed over time and has been offered to different year groups. In 2019 the immunisation programme became universal, with males in the first year of secondary school eligible alongside females. The programme is currently offered to all pupils in their first (S1) and second (S2) years of secondary school. Eligible pupils who have not started or completed the course of immunisations are given other opportunities to be vaccinated in S3 and S4.

In the three-year period 2017/18 to 2019/20, 79.4 percent of girls in Highland had completed the course of HPV immunisation (Figure 69). Uptake rates in Highland show a decreasing trend and are consistently lower than for Scotland.

Figure 69: Completed course of HPV immunisation in girls by end of S3 school year in Highland and Scotland

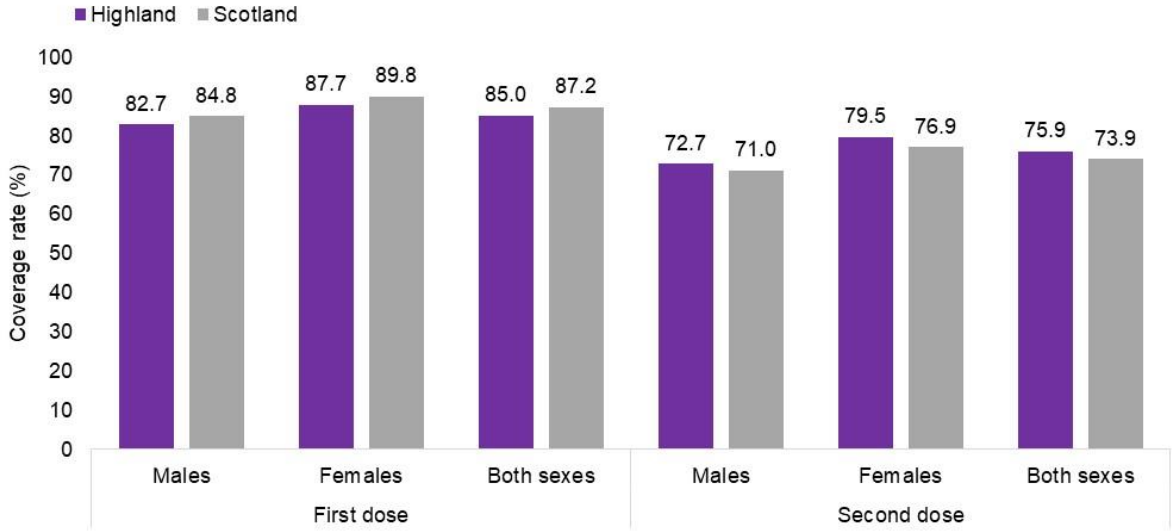


	2012	2013	2014	2015	2016	2017	2018	2019	2020
Highland	88.9	88.3	87.8	85.4	82.4	82.0	82.3	81.5	79.4
Scotland	90.9	90.8	91.1	90.5	88.9	88.1	87.3	86.9	84.8

Source: Scottish Immunisation & Recall System (SIRS), Public Health Scotland, ScotPHO Online Profiles
3-year rolling average number and percentage completed course of HPV immunisation.

HPV immunisation coverage rates by the end of the school year 2021/22 (Figure 70) report coverage for males and females. Disruption to schools during academic years 2019/20 and 2020/21 due to the COVID-19 pandemic has impacted the delivery of the HPV immunisation programmes.

Figure 70: HPV immunisation coverage rates by the end of the school year 2021/22 in Highland and Scotland



Source: Scottish Immunisation & Recall System (SIRS), Public Health Scotland

9. Education and Attainment

9.1. Early learning and childcare provision

Early learning and childcare (ELC) is the term used to describe the full range of early education available in Scotland today. ELC settings offer education and care to children up to school age. They are crucial to helping children succeed and contribute to closing the poverty-related gap in children's outcomes[57].

In 2021, there were 186 early learning and childcare centres in Highland, of which 17 were Gaelic-medium providers (Figure 71). There were 4,092 children registered for ELC, an increase of 3.5 percent from 3,952 registrations in 2020.

Figure 71: Number of Early Learning and Childcare centres and registrations in Highland, 2017 - 2021

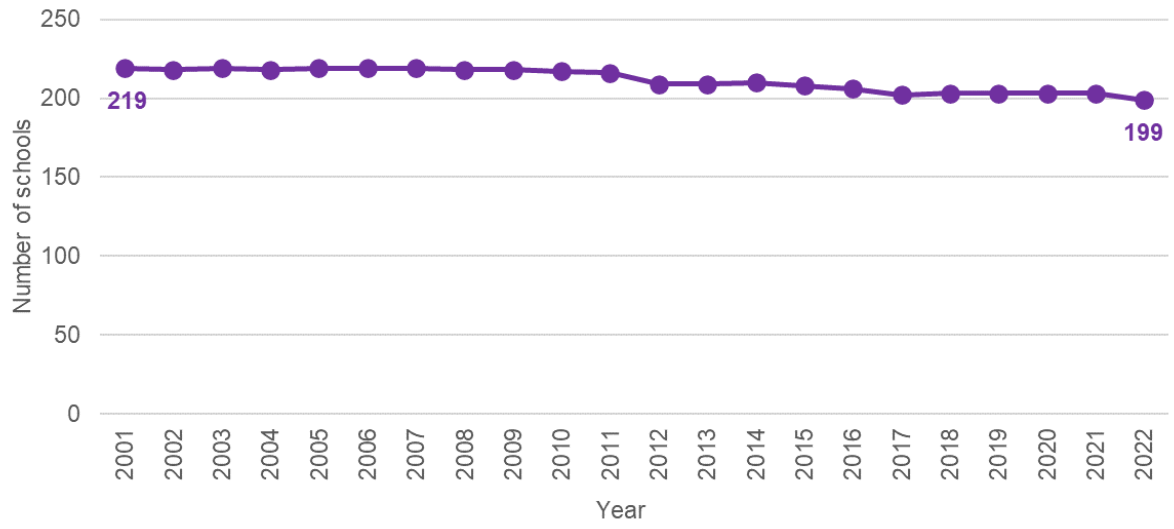
	Number of ELC Centres			Number of GM providers			Number of children in ELC		
Year	Local authority	Partnership	Total	Local authority	Partnership	Total	Local authority	Partnership	Total
2017	137	54	**191**	15	3	**18**	3,018	1,034	**4,052**
2018	137	51	**188**	15	3	**18**	3,142	1,064	**4,206**
2019	139	48	**187**	15	3	**18**	2,951	1,045	**3,996**
2020	140	48	**188**	15	3	**18**	2,832	1,120	**3,952**
2021	139	47	**186**	15	2	**17**	2,953	1,139	**4,092**

Source: Scottish Government School Education Statistics
GM: Gaelic-medium providers

9.2. Teaching provision

In Highland, there are currently 199 schools open. Of these, 29 are secondary schools, 167 are primary schools, and three are special schools (Figure 72).

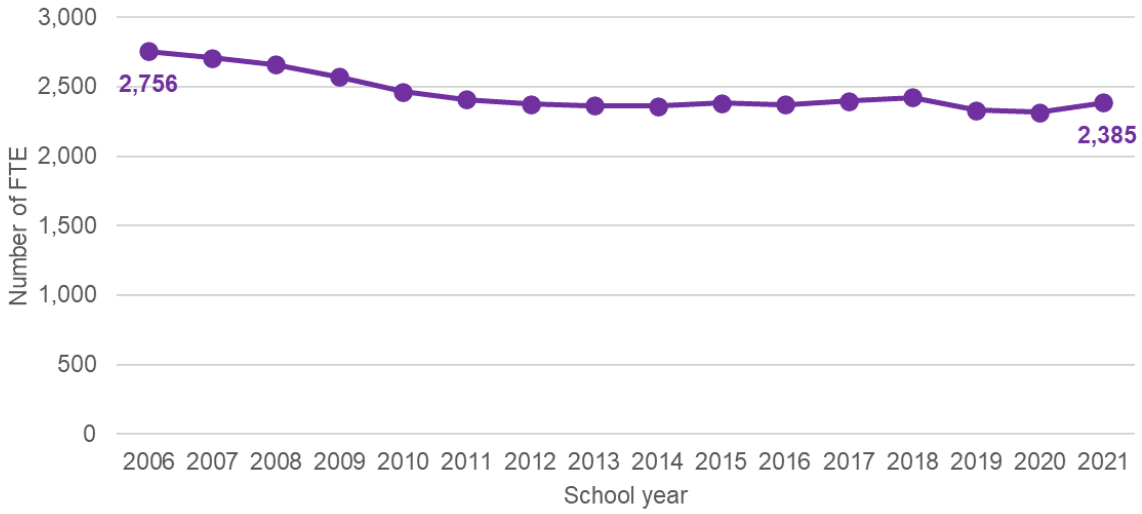
Figure 72: Number of schools in Highland, 2001-2022



Source: Scottish Government School Education Statistics

In 2021, the number of school teachers in publicly funded schools and early learning centres in Highland was 2,385 full-time equivalents (Figure 73).

Figure 73: Number of teachers in publicly funded schools (including ELC), Highland, 2006-2021

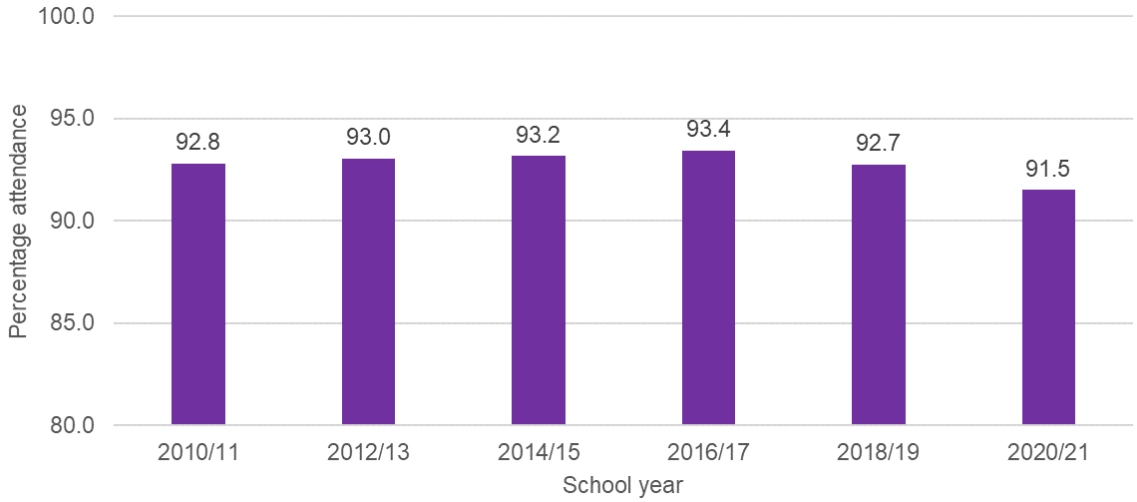


Source: Scottish Government School Education Statistics
Note: Teacher figures are based on the number of full-time equivalents (FTE) as of September of the school year

9.3. School attendance

The school attendance rate in Highland, for both primary and secondary pupils, was 91.5 percent in 2020/21 (Figure 74). Attendance reporting for the 2020/21 school year was significantly impacted by the COVID-19 pandemic and excludes periods of COVID-19 related school closures.

Figure 74: Percentage attendance for schools open in Highland, 2010/11-2020/21



Source: Scottish Government School Education Statistics
Note: Information on attendance and absence is collected biennially.

9.4. Digital Inclusion

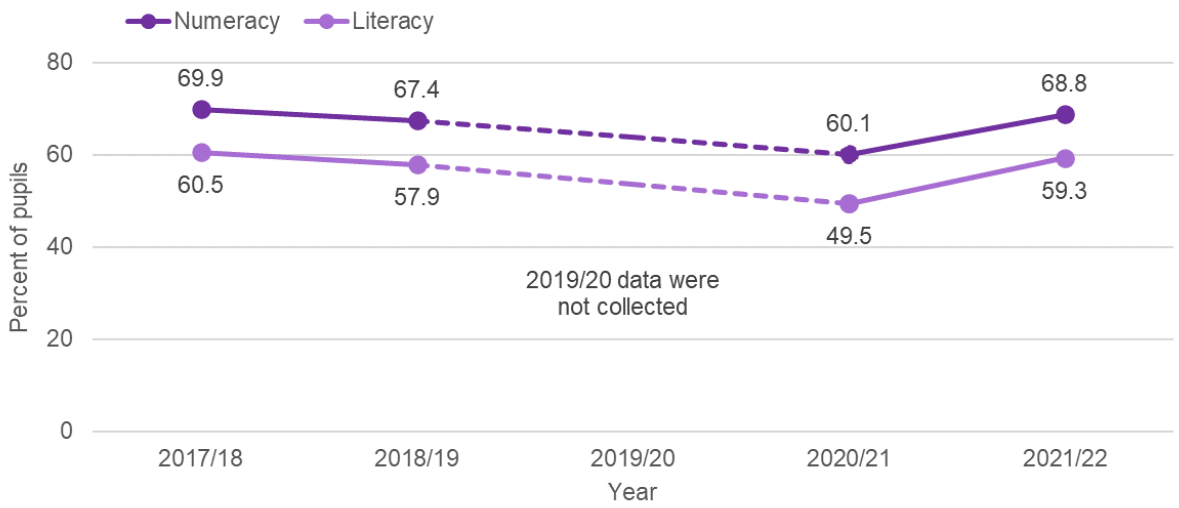
At the end of the school session 2021/22, there were 30,453 pupils in Highland Council Schools. The number of pupils in Primary 6 (P6) to Secondary 6 (S6) classes was 18,692. All pupils from P6 to S6 are issued a digital device, either a tablet or computer.

9.5. Educational outcomes

Primary phase attainment

The achievement of Curriculum for Excellence (CfE) levels provides information on school pupils attainment of expected levels of numeracy and literacy. Literacy comprises three components: reading, writing, and listening and talking. It covers all P1, P4 and P7 pupils. The percentage of primary school pupils achieving the expected CfE levels for numeracy and literacy increased in 2021/22 compared to 2020/21 and 2018/19 (Figure 75).

Figure 75: Percentage of P1, P4 and P7 pupils achieving the expected level of numeracy and literacy, Highland

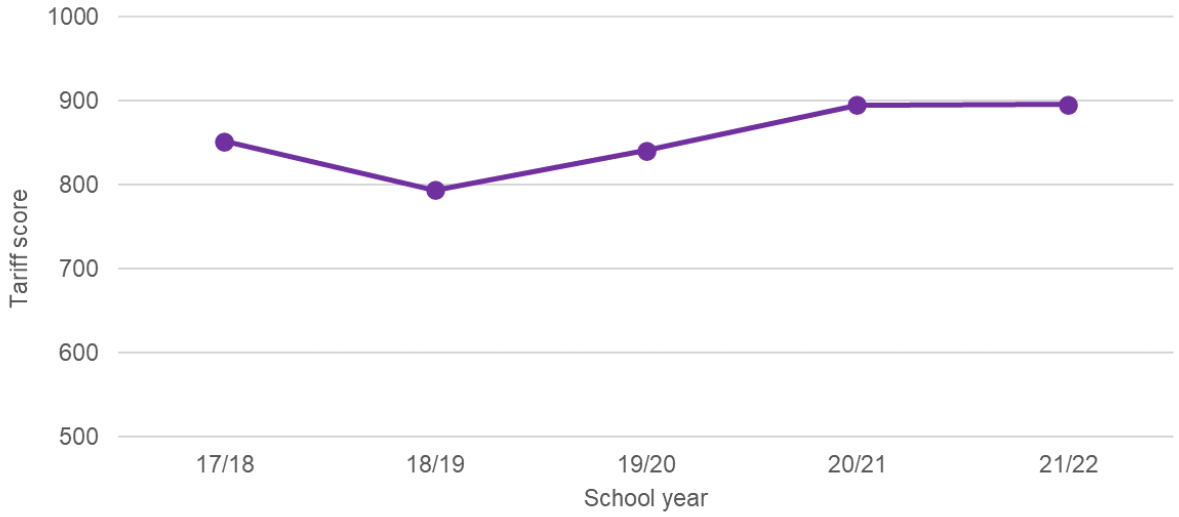


Source: Scottish Government School Education Statistics
Note: Data were not collected in 2019/20 due to the COVID-19 pandemic.

Senior phase attainment

Educational attainment is associated with improved outcomes in later life. The overall tariff scale measures the latest and best achievement in each subject area for national qualifications and wider awards. Qualifications are awarded tariff points based on their Scottish Credit and Qualifications Framework (SCQF) level. In Highland, the average overall tariff score in 2020/21 and 2021/22 has improved from previous years (Figure 76).

Figure 76: Overall Average Tariff Score in Highland

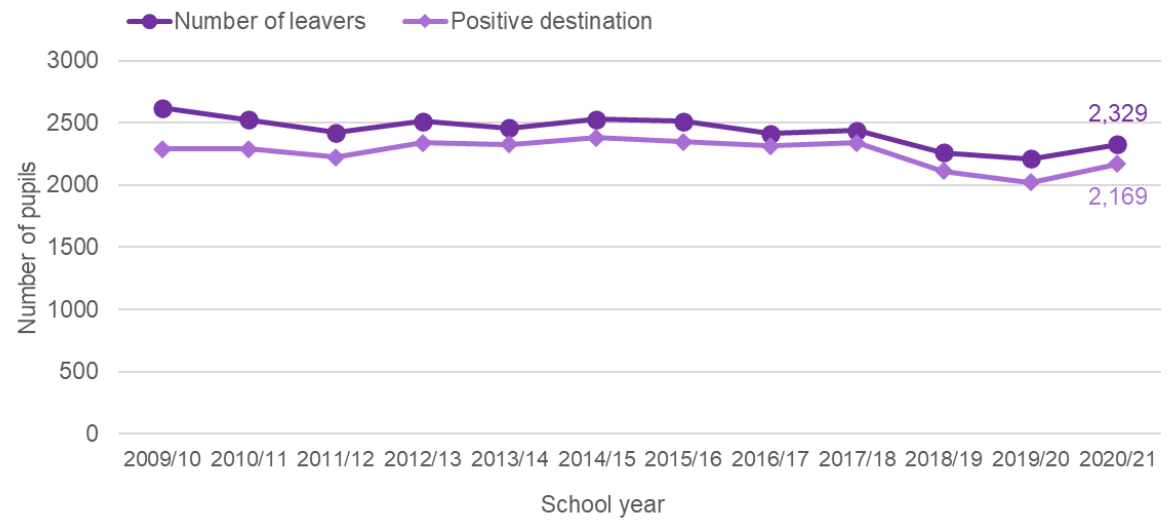


Source: Scottish Government School Education Statistics

Positive destinations

In 2020/21, 93.1 percent of young people leaving secondary school were in a positive initial destination. Positive destinations include higher education, further education, training, voluntary work, employment and activity agreements. The most common initial destinations were higher or further education and employment, with 46.8 percent and 43.7 percent of leavers in these categories respectively.

Figure 77: Number of Highland school leavers in positive destinations

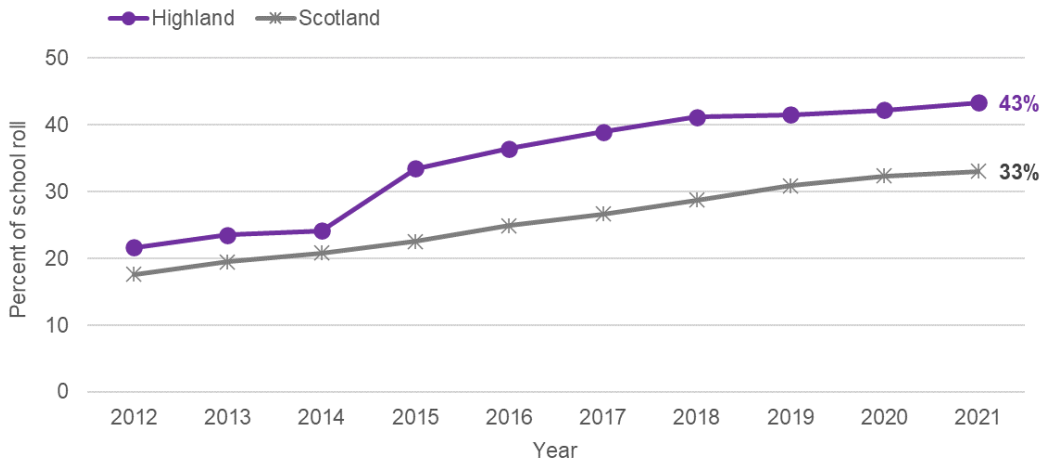


Source: Scottish Government School Education Statistics

9.6. Pupils with Additional Support Needs

In 2021, 43 percent of pupils in Highland schools were recorded with additional support for learning needs (Figure 78). The number of pupils recorded with additional learning support needs has increased since 2015, likely reflecting continued improvements in recording and increases in child-specific needs. The most common reasons for support recorded in 2021 were social, emotional and behavioural problems, dyslexia and other specific learning difficulties, English as an additional language and family issues.

Figure 78: Proportion of school roll with additional support for learning, Highland and Scotland



Source: Scottish Government School Education Statistics

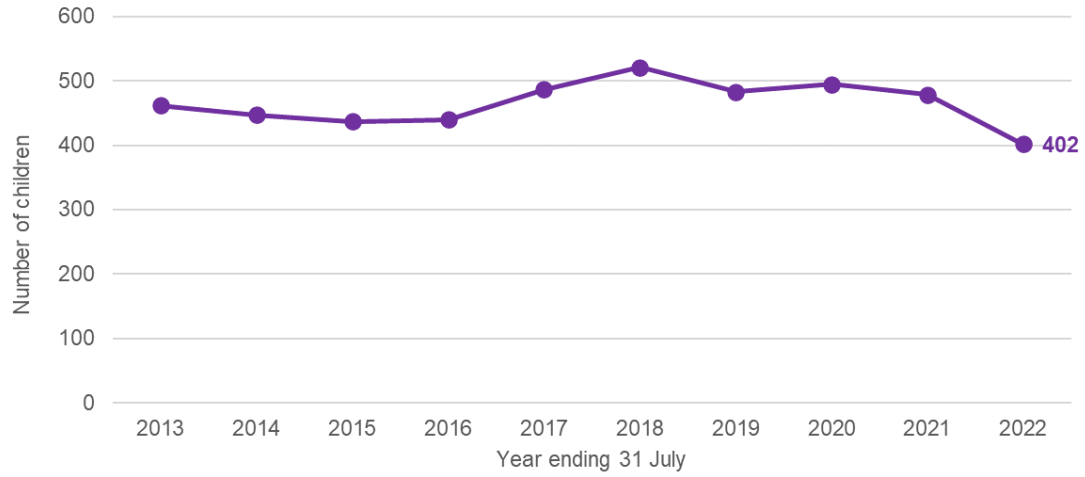
10. Vulnerable children

10.1. Looked after Children

Children may become looked after for various reasons, including abuse or neglect at home, having complex disabilities requiring specialist care, or involvement in the justice system.

In July 2022, there were 402 looked after young children in Highland, representing 0.9 percent of the total population aged 0-17 years. The number of looked after children have broadly decreased since 2018 (Figure 79). This is due to a combination of factors, including COVID-19 stretching services in 2021 and the effects of the early intervention strategy.

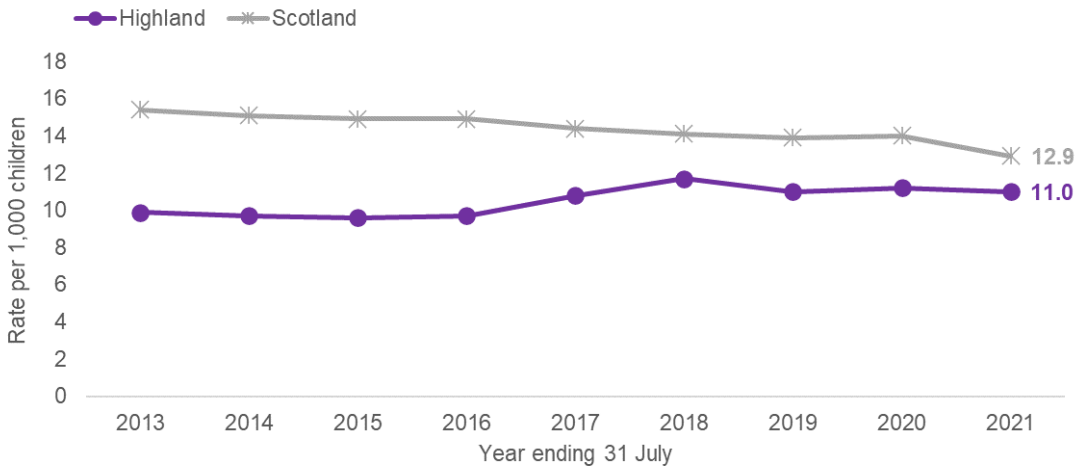
Figure 79: Number of looked after children on 31 July in Highland, 2013 – 2022[p]



Source: Scottish Government Children's Social Work Statistics
Data for 2022 are provisional and subject to change.

Rates of looked after children in Highland show a decreasing trend and are consistently lower than for Scotland (Figure 80).

Figure 80: Rates of looked after children on 31 July in Highland and Scotland, 2013 – 2021

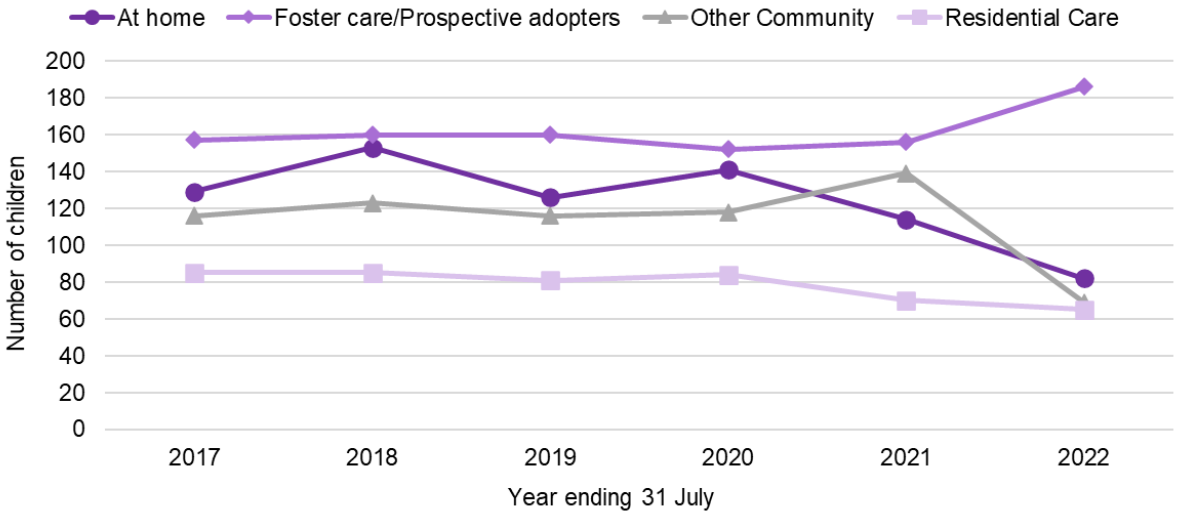


Source: Scottish Government Children's Social Work Statistics, Scottish Public Health Observatory Online Profiles
Rate per 1,000 children aged 0 to 17 years.

There are several types of placements in which looked after children or young people could be looked after, including at home, foster care, with prospective adopters, kinship care (where they are placed with friends or relatives) or residential accommodation.

In 2022, the most common open placement was with foster carers or prospective adopters (Figure 81). The number of looked after children placed at home or in other community placements decreased in 2022. Around 16 percent of placements are in residential accommodation.

Figure 81: Number of looked after children by type of placement in Highland, 2017 to 2022

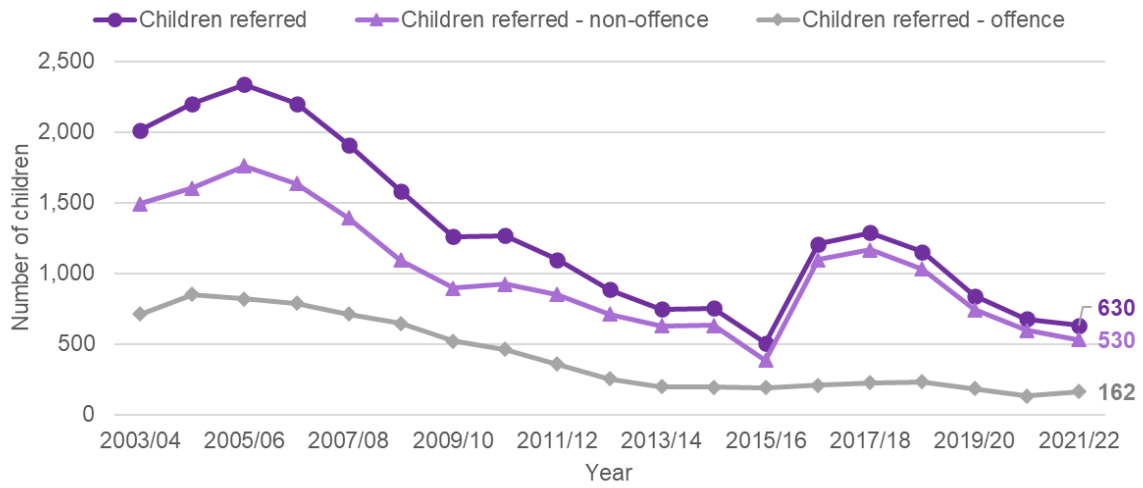


Source: Scottish Government Children's Social Work Statistics
Data for 2022 are provisional and subject to change.

10.2. Scottish Children's Reporter Administration

The Scottish Children's Reporter Administration (SCRA) receives referrals for at-risk children. In Highland, 630 children were referred to the SCRA in 2021/22. Three in four referrals (77 percent) were on care and protection (non-offence) grounds (Figure 83). A small number of children were referred to the Reporter on both non-offence and offence grounds.

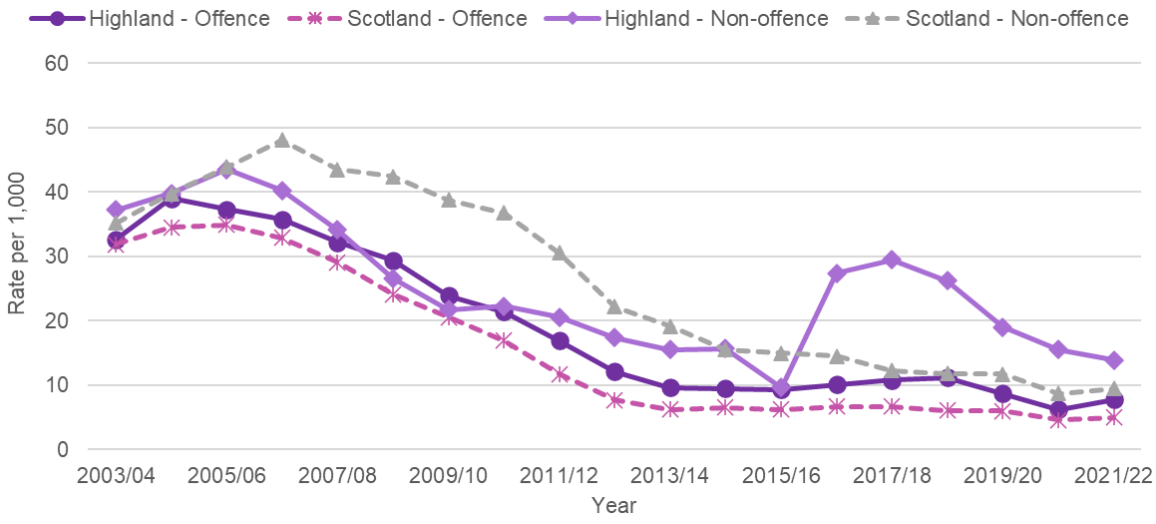
Figure 82: Children referred to the SCRA by referral type in Highland and Scotland



Source: Scottish Children's Reporter Administration (SCRA) Online Statistical Dashboard

Referral rates to the SCRA have decreased since 2003/04, except for an increase in referrals for care and protection in Highland from 2016/17 to 2018/19 (Figure 83). The reasons for the trends in referrals to the SCRA are a complex combination of changes in legislation, changes within the Children's Hearings System, changes in guidance and changes arising from the implementation of Getting it Right for Every Child (GIRFEC).

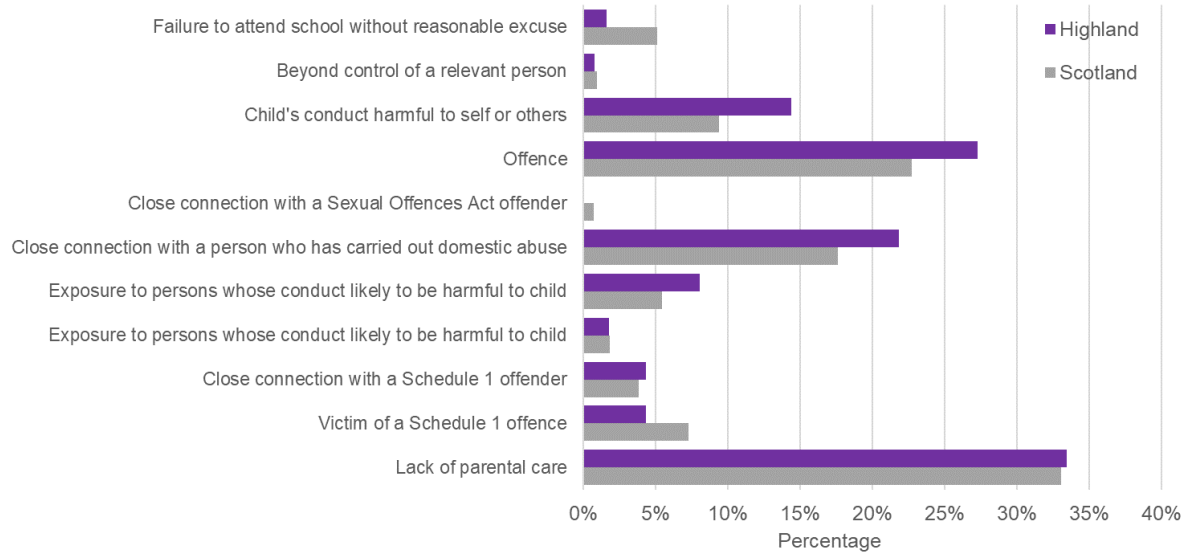
Figure 83: Rate of referrals to the SCRA by referral type in Highland and Scotland



Source: Scottish Children's Reporter Administration (SCRA) Online Statistical Dashboard
Non-offence: Rate per 1,000 population aged under 16 years
Offence: Rate per 1,000 population aged between 8 and 16 years

In 2021/22, the most common ground assigned by Reporters to children referred was lack of parental care, followed by offence, close connection with a person who has carried out domestic abuse and child's conduct harmful to self or others (Figure 84). The police were the main source of referrals to the SCRA. In Highland, 88 compulsory supervision orders (CSOs) were made as a result of children's hearings in 2021/22.

Figure 84: Grounds for referral to the SCRA in Highland and Scotland, 2021/22

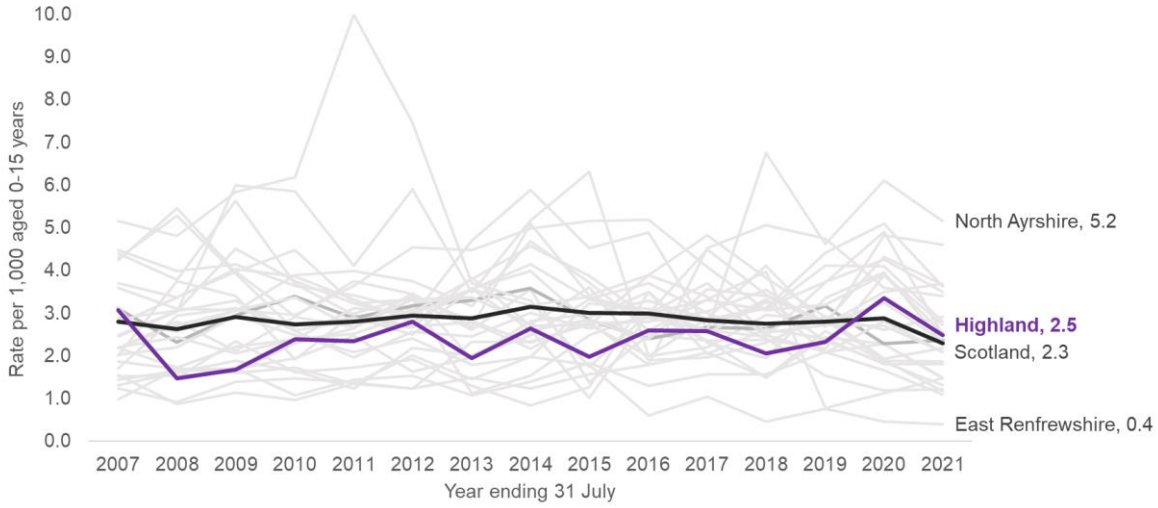


Source: Scottish Children's Reporter Administration (SCRA) Online Statistical Dashboard

10.3. Child Protection

In Highland, there were 96 children on the child protection register on 31 July 2021, a rate of 2.5 per 1,000 children aged 0-15 years. The rate of child protection registrations in Highland shows variability from year to year due to the small number of children involved. The rate of child protection registrations in Highland was not significantly different to Scotland in 2021 (Figure 85).

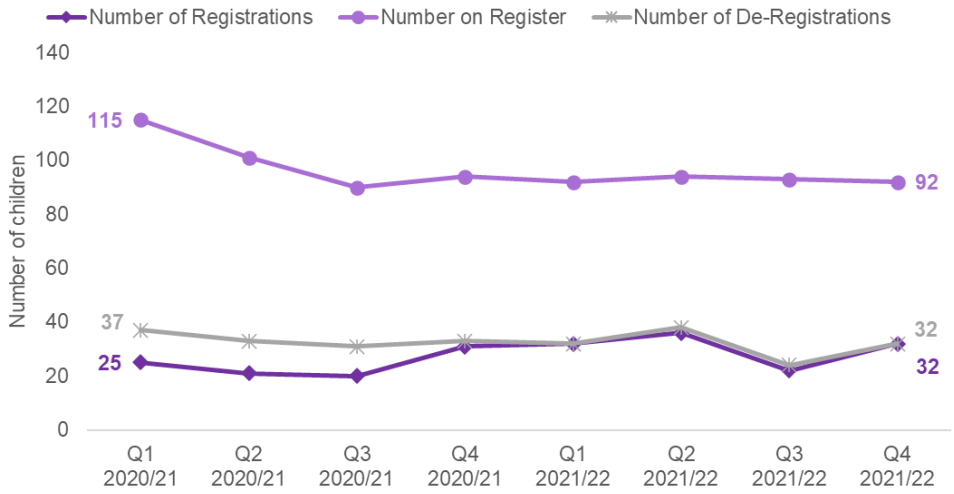
Figure 85: Children on the child protection register by Council area, rate per 1,000 children under 16 years



Source: Scottish Government Children's Social Work Statistics, Table 2.4
Excludes Na h-Eileanan Siar, Orkney Islands and Shetland Islands

Quarterly data presented to the Highland Child Protection Committee shows registrations have been steady since the end of initial lockdown restrictions in 2020 when the number of children on the register was at its highest. At the end of the reporting period, there were 92 children on the child protection register in Highland (Figure 86).

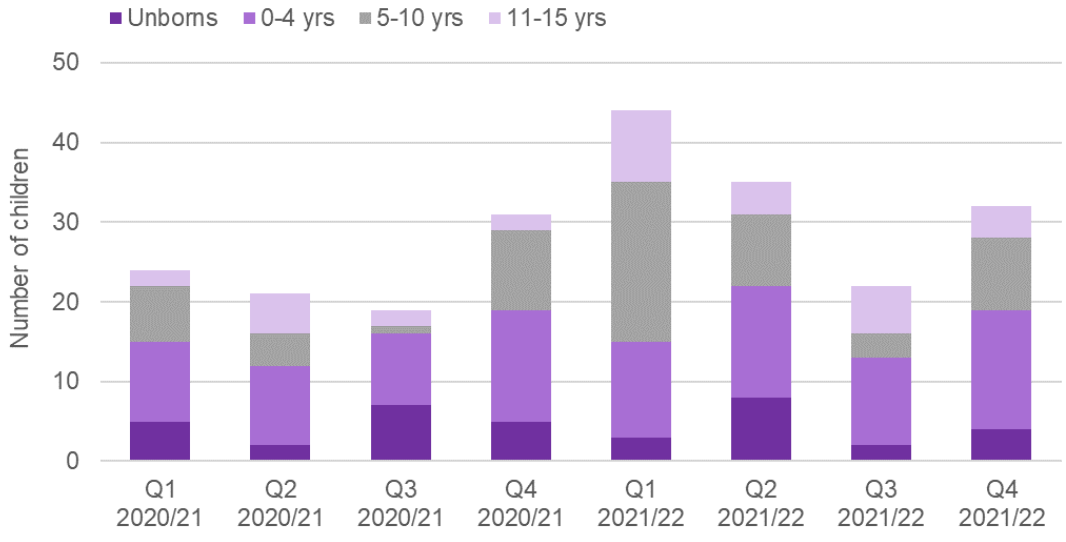
Figure 86: Child protection registrations, de-registration's and register size by quarter, Highland



Source: Highland Council Social Work IT System

Most children on the child protection register in the two-year period 2020/21 and 2021/22 were aged ten years or below (Figure 87). There is variation in the number of registrations in each age category by quarter. There was a slight increase in registrations in the 5-10 and 11-15 age groups in 2021/22. The numbers involved are low overall and would require audit work to understand.

Figure 87: Percentage of children on the Child Protection Register in Highland by age and quarter, 2020/21 to 2021/22



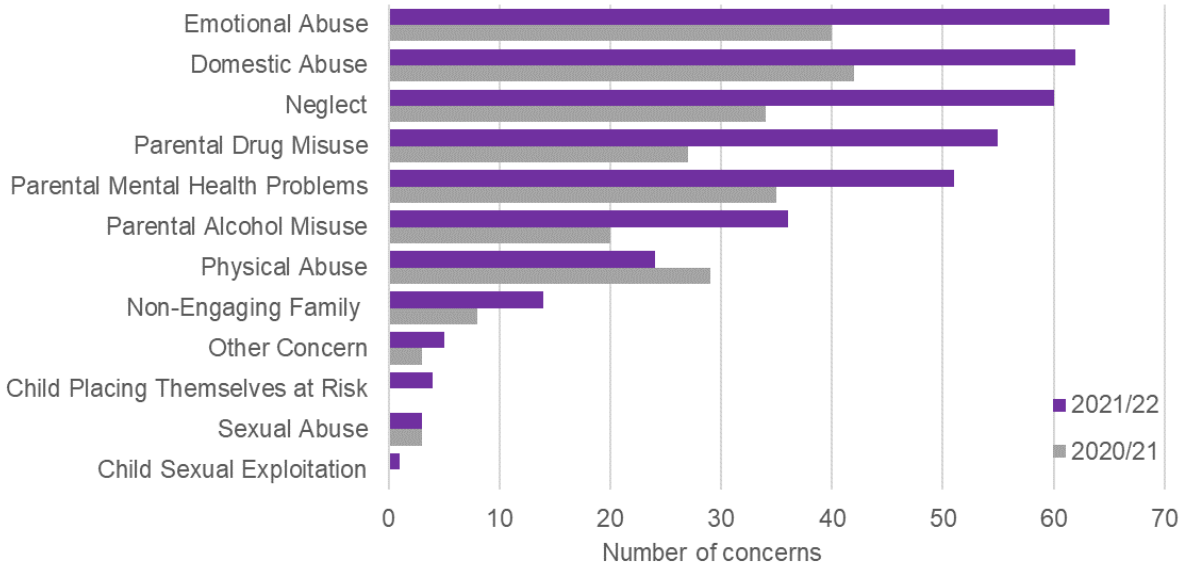
Source: Highland Council Social Work IT System
Age 16-17 years not shown due to small numbers <5

In total, 380 concerns were identified in child protection registrations in 2021/22. Of the concerns identified, the most common were emotional abuse, domestic abuse, neglect, parental drug misuse and parental mental health problems (Figure 88).

Parental factors accounted for most registrations in 2021/22, which increased compared to 2020/21. Registrations as a result of physical and sexual abuse remained at similar levels. The concerns of 'Children placing themselves at risk', 'Child Sexual Exploitation' and 'Other concern' have increased. The numbers involved remain low but may indicate an increasing number of at-risk children within the community.

The total number of concerns identified increased from 248 in 2020/21 to 380 in 2021/22. The increasing number of risks supports practitioner thinking that cases are becoming more complex. Audit work in 2022/23 will enable a more comprehensive look at case complexity.

Figure 88: Concerns identified in child protection registrations in Highland, 2020/21 and 2021/22



Source: Highland Council Social Work IT System

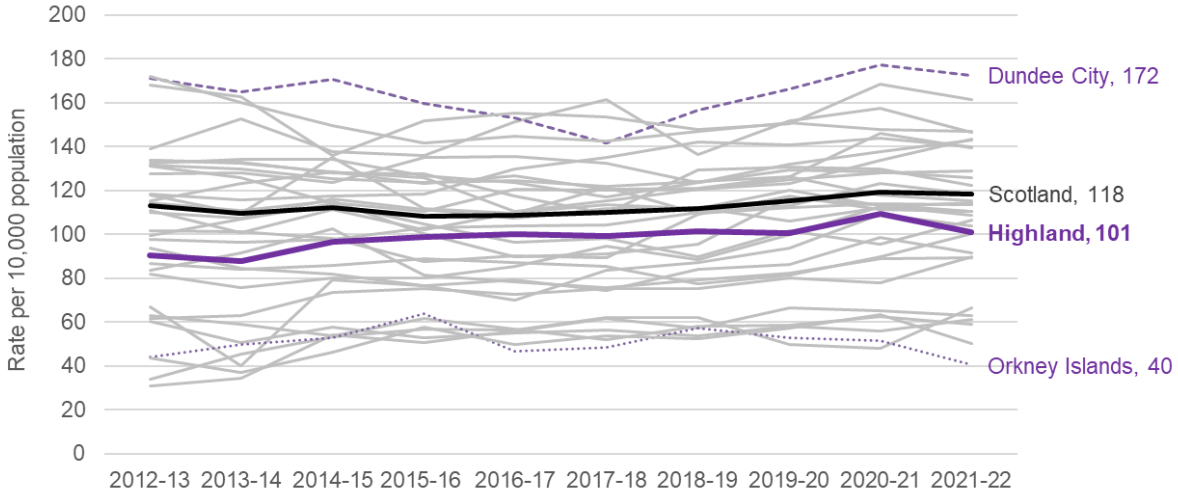
10.4. Gender based violence

A child witnessing domestic abuse is an adverse experience that impacts many childhood outcomes, including mental health problems, the ability to concentrate and socialise, and educational outcomes below the child's potential.

In 2021-22, the police recorded 2,401 domestic abuse incidents in Highland, a decrease of 7 percent compared to 2,576 incidents the previous year. The reported data are likely to be a considerable underestimate of the true extent of the issue. Rates of recorded domestic abuse

are consistently lower in Highland than in Scotland, though they have increased since 2013-14 (Figure 89).

Figure 89: Rate of incidents of domestic abuse recorded by the police per 10,000 population, by local authority, 2012-13 to 2021-22

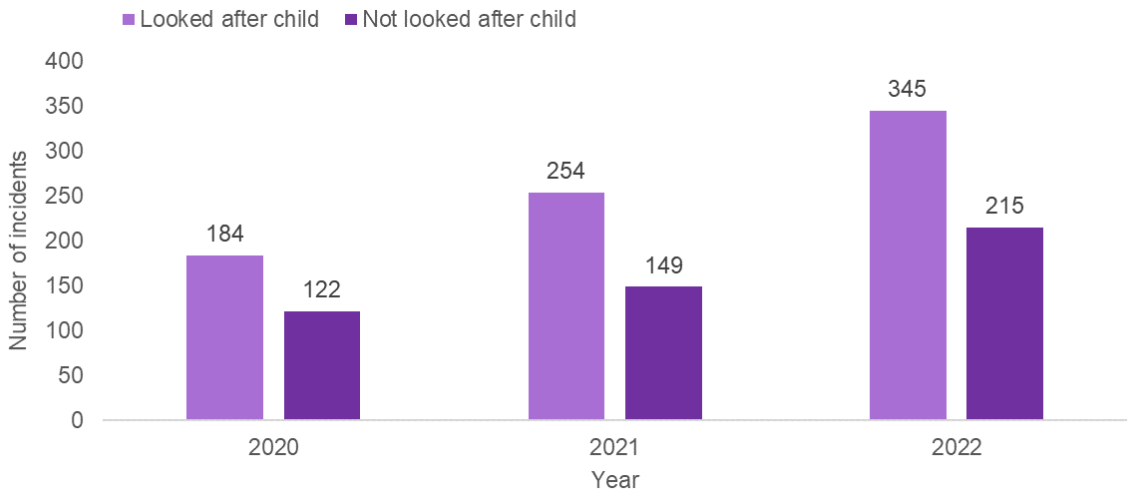


Source: Scottish Government, Domestic abuse recorded by the police in Scotland statistics

10.5. Children missing from home

Police Scotland recorded 1,267 incidents of missing children in Highland in the three-year period 2020 to 2022. Of the recorded incidents, 781 (62 percent) involved looked after children. The number of incidents reported increased in 2022 compared to 2020 and 2021. The numbers reported in 2020 and 2021 are likely affected by periods of lockdown enforced during COVID-19 restrictions (Figure 90).

Figure 90: Number of incidents of missing children recorded by the police[1] in Highland, 2020 to 2022



Source: Police Scotland management report
1. Number of police reports not the number of missing children. Children may be reported as missing on multiple occasions and for different time periods.

10.6. Young carers

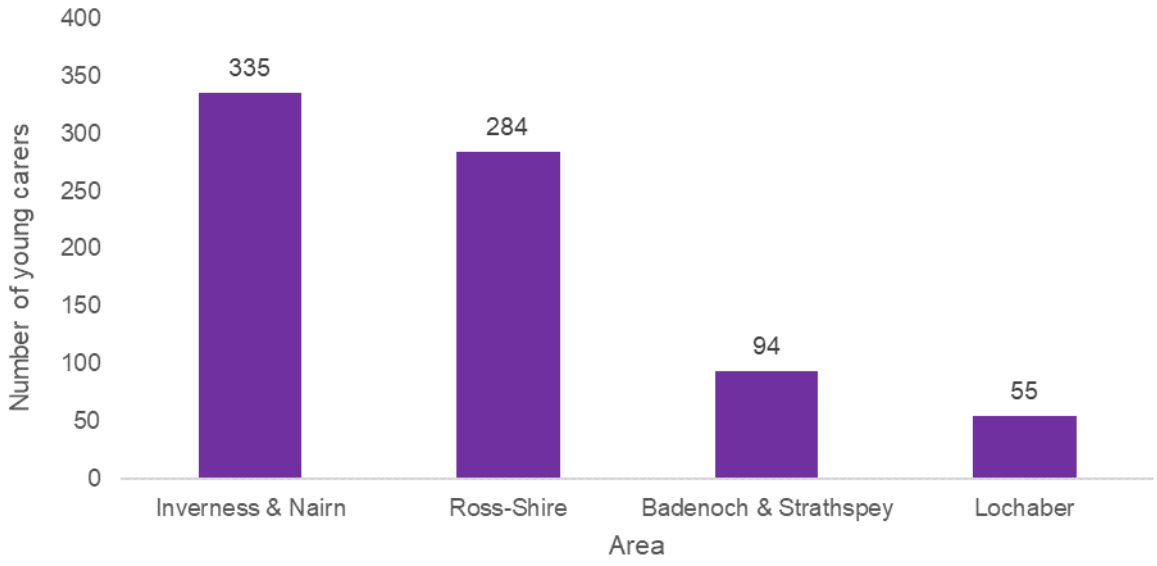
Young carers are those who provide care, assistance or support to family members, friends, neighbours or others because of either long term physical or mental ill health, disability or problems related to old age. The Carers (Scotland) Act 2016 defines young carers as those aged under 18 or who are aged 18 and a pupil at school[58]. The local authority is responsible for identifying young carers in schools in the area.

Evidence suggests that young carers struggle with their everyday lives due to many distinct factors that come with carrying out an unpaid caring role[59]. These can include feeling isolated, being bullied, worrying about the cared-for person when they are away from them, low self-esteem, anxiousness, and feeling tired. All these factors can impact on their mental health, physical health, attendance in school, and their behaviours. By identifying young carers early, they will be given the best possible chance of succeeding in school.

In April 2023, the Highland Lifestyle Survey completed by pupils in P7, S2 and S4 indicated that 9.2 percent of pupils identified themselves as a young carer. Two thirds (68.4 percent) of young carers reported they care for one person, 18.1 percent care for two people and 10.5 percent care for three or more people. The majority of pupils (71.4 percent) who are young carers reported they receive support to help with their caring.

Connecting Young Carers is funded by the Highland Council to provide information, support and respite to young carers in Highland. Young carers referred to the service can access social groups, events, funding, and supportive relationships. In April 2023 there were 768 young carers registered with the service across four areas in Highland (Figure 91).

Figure 91: Number of young carers supported by Connecting Young Carers in Highland, April 2023



Source: Connecting Young Carers management report

10.7. Children with Exceptional Healthcare Needs

Children with Exceptional Healthcare Needs (CEN) is a National Managed Clinical Network to strengthen specialist services for children with complex and exceptional healthcare needs in Scotland.

A child or young person (up to the age of 19) is defined as having exceptional healthcare needs if they:

- have severe impairment recorded in at least four categories together with enteral/ parenteral feeding
  OR
- have severe impairment recorded in at least two categories and require ventilation/CPAP
  AND
- the impairments are sustained and ongoing or expected to last more than six months.

The CEN assessment criteria use six impairment categories for assessing needs: learning and mental functions, communication, motor skills, self-care, hearing, and vision.

In January 2023, 42 children and young people met these criteria in Highland. In addition, many children have chronic and long-term health needs that do not meet the CEN criteria. For instance, 63 children and young people were supported with enteral feeding in January 2023.

10.8. Child deaths

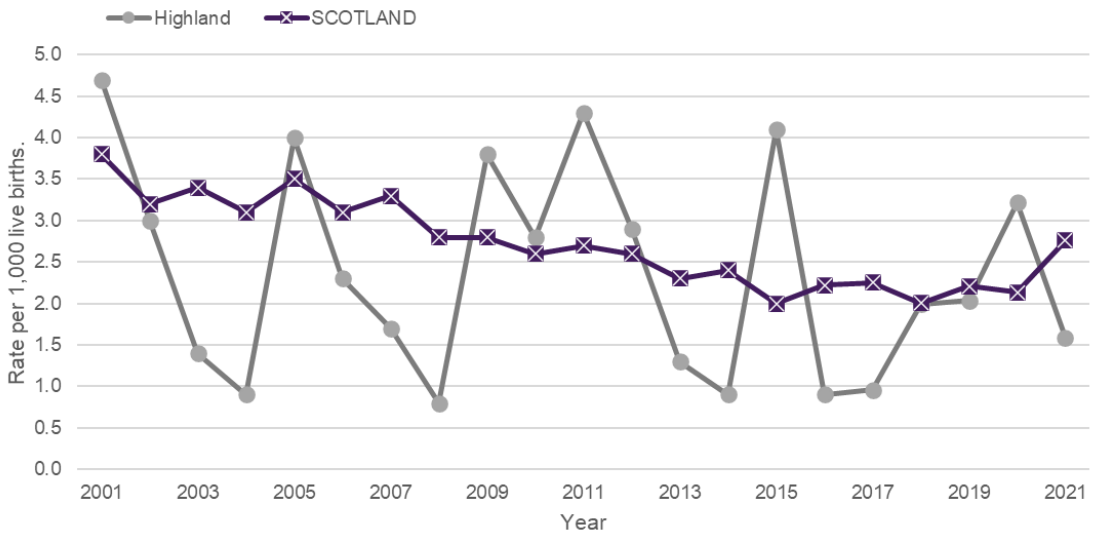
Most deaths during childhood occur during the first year of life, particularly in the first month of life (the neonatal period). Neonatal mortality accounts for about 70 to 80 percent of infant deaths.

Most neonatal deaths are from perinatal causes, particularly preterm births, and are closely related to maternal health and congenital conditions, which disproportionately affect the most disadvantaged in society.

Nationally infant mortality rates have declined, but in more recent years, the downward trend appears to flatten with an increase in the rate in 2021 (Figure 92). Pre-pandemic evidence highlights that from 2016, Scotland's most deprived quintile had already experienced rising infant and neonatal mortality trends[60].

A lack of improvement in this international sentinel indicator should be viewed as a health warning for society.

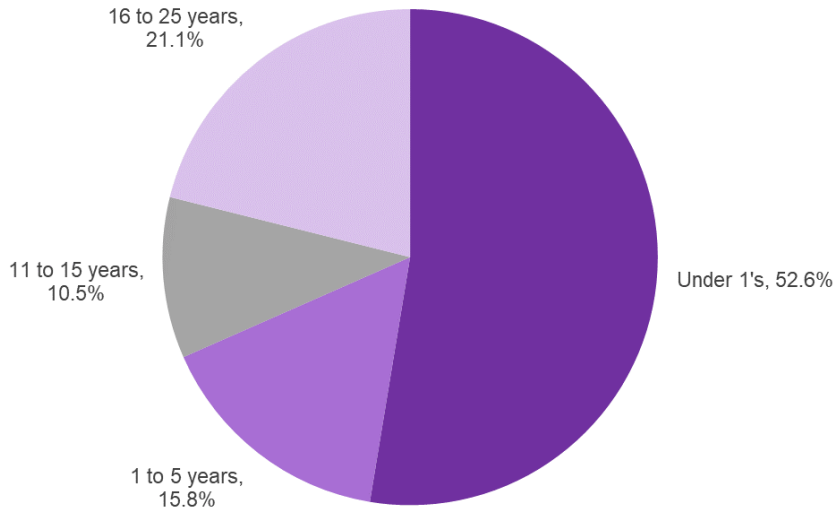
Figure 92: Infant mortality rates per 1,000 live births in Highland and Scotland



Source: National Record of Scotland Vital Events, Table 1.3

In 2021, a child death review panel was set up in NHS Highland to review the deaths of all live-born children up to their 18th birthday or 26th birthday for care leavers receiving aftercare or continuing care at the time of their death. In the year to September 2022, 20 deaths met these criteria (Figure 93).

Figure 93: Age of infant, children and young people's deaths meeting child death review criteria



Source: National Records of Scotland, NHS Highland Child Deaths Review team

The wider understanding and systematic learning from child deaths should be used to inform service delivery improvements and identify emerging trends that could influence the wider child service strategy. Key learning from the first year of the child death review process includes the need for support to die at home, understanding of the care experience and family involvement.

11. Conclusions

This needs assessment summarises outcome data for children and young people in the Highland local authority area. A rapid review of this type cannot provide a complete picture of the population needs of children and young people. It highlights key points to help inform the planning and improvement of integrated children's services in Highland.

The following main points are identified:

- Highland has a declining population of children and young people. Population projections forecast a continued reduction in the size of the population of children and young people.
- Highland has a significant remote and rural geography and a high proportion of areas in the most access deprived in Scotland. One in three children and young people under 18 reside in remote rural areas.
- The provision of services across the Highland geography is challenging. Statutory services, third sector organisations and other community groups should work collaboratively to improve the outcomes of Highland's children and young people.
- In Highland, most income deprived people live in places not identified among the most deprived areas by the SIMD. The distribution of income deprivation is a significant consideration for policy, strategy and the spatial targeting of resources.
- Tackling child poverty is a national priority. It is a complex task to measure child poverty, particularly in rural areas, accurately. Work should be undertaken to improve data sources that provide detail at a local level.
- Adverse childhood experiences are associated with poor educational, social, physical and mental health outcomes. Risk factors for childhood adversity are often co-occurring and interlinked. Actions identified should recognise the importance of different approaches and the connections between risk factors.
- There have been decreasing numbers of births in Highland, and this pattern of decreasing birth numbers is expected to continue.
- Teenage pregnancies have fallen markedly, but this long-standing national priority has room for further improvement.
- Recording and reporting complex social factors and vulnerabilities in the maternity record are essential. Data capture about vulnerable women should continue to be improved.
- Preventative activity pre-conception and in pregnancy should be strengthened, and prevention explicitly considered as a part of service and pathway design or redesign.

- Identifying early child development problems is essential for understanding individual and collective developmental support needs. Early identification gives the best opportunity to support children and families to improve outcomes.
- There is strong evidence that breastfeeding is one of the most preventative health measures for children and mothers, with short-term and long-term benefits. Actions to improve breastfeeding uptake should be prioritised.
- Immunisation programmes for children are effective at protecting children from serious infectious diseases. There is a need to promote and improve the uptake of childhood vaccination.
- There is need to support children and young people to maintain a healthy weight throughout childhood.
- Oral health improvement activities should continue with work to prevent dental caries in children, focusing on initiatives to reduce oral health inequalities.
- Preventing harm from substance use among young people is a long-standing national and local priority. Evidence informed work to prevent and delay alcohol, tobacco and other drug use among young people should be prioritised.
- Children and young people's mental health and emotional wellbeing is a concern. Actions should ensure children and families receive support and services appropriate to their needs, including access to specialist CAMHS services.
- Schools should continue focused work to improve attendance, support children and young people with additional support for learning needs and promote inclusion.
- All children and young people should be supported to fulfil their potential through educational attainment and positive destinations upon leaving school.
- Processes to identify and support children and young people at risk of harm must continue to be improved.
- Learning from child death reviews should inform service delivery improvements and identify emerging trends that could influence the wider children's service strategy.

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