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CHILD AND ADOLESCENT HEALTH AND WELLBEING IN SCOTLAND - EVIDENCE REVIEW



CHILDREN, EDUCATION AND SKILLS



CHILD AND ADOLESCENT HEALTH AND WELLBEING IN SCOTLAND – EVIDENCE REVIEW

Children and Families Analysis

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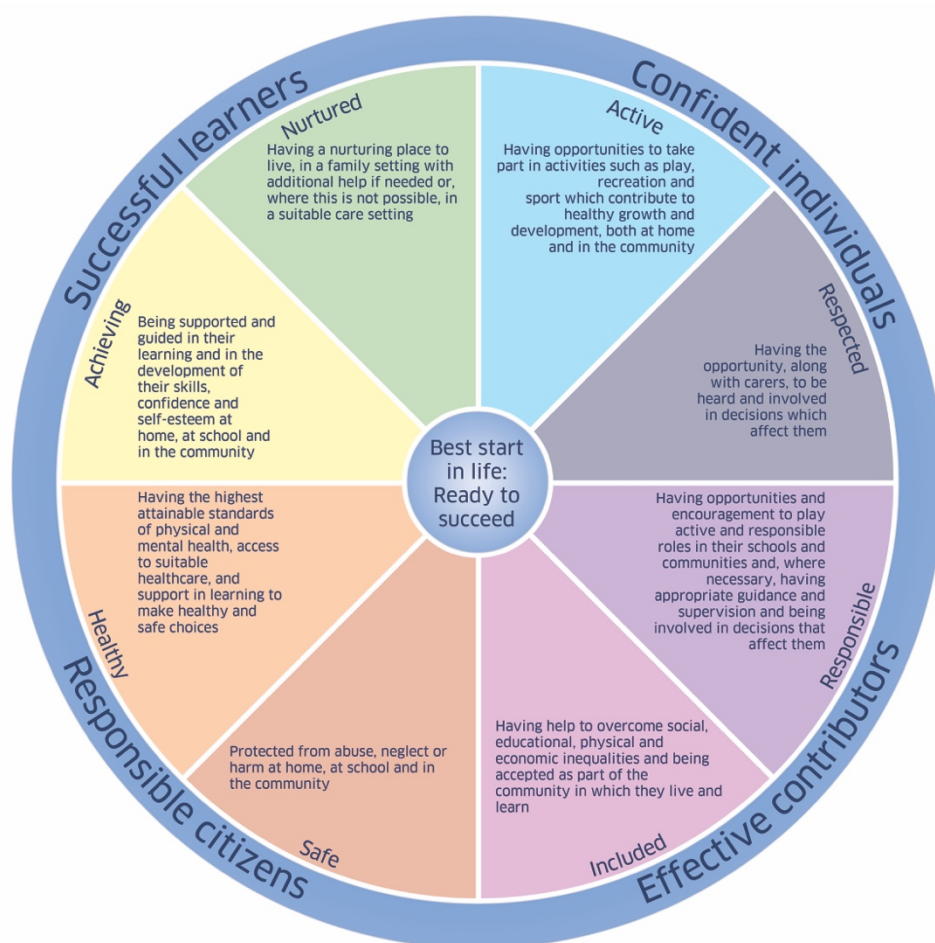
1. Introduction

This paper summarises the available evidence on child and adolescent health and wellbeing in Scotland. It presents the national quantitative data from a variety of sources to produce a picture of the current situation in terms of health and wellbeing outcomes for children and young people, as well as key drivers of wellbeing.

1.1 Background

Children’s and young people’s wellbeing has been widely acknowledged as being a key driver to positive life course trajectories. The Children and Young People (Scotland) Act 2014, which includes key parts of the Getting it Right for Every Child approach (GIRFEC), defines Child Wellbeing in terms of 8 indicators of wellbeing: Safe, Healthy, Active, Nurtured, Achieving, Respected, Responsible and Included (known as SHANARRI) (see Figure 1). This recognises that children’s well-being is multi-faceted and that it is important to measure it holistically across all the various domains that are relevant to a child’s life.

Figure 1 SHANARRI wellbeing wheel

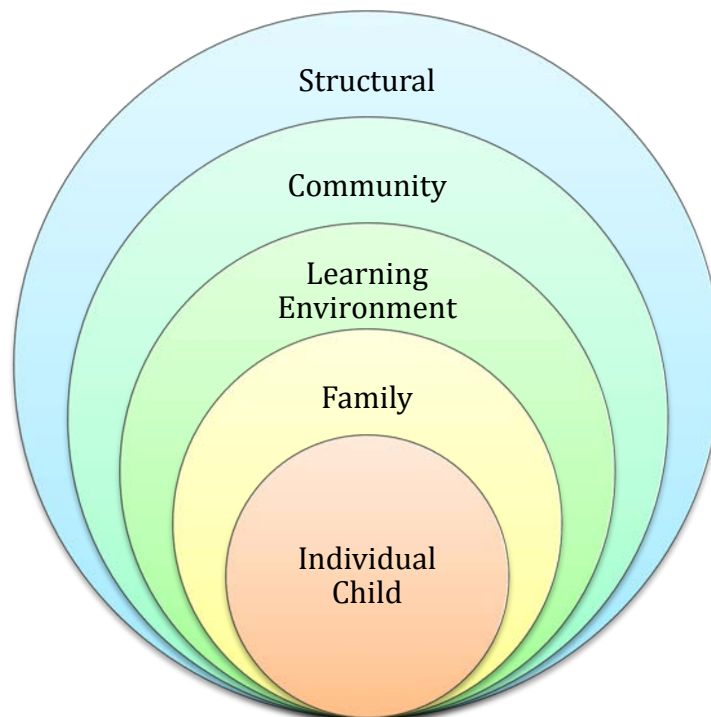


Inherent in this approach is an understanding that different wellbeing outcomes may also act as drivers of other aspects of wellbeing, either at the same time or in the longer term. Not only is positive wellbeing an important outcome in and of itself, it also increases children and young people's resilience, enabling them to achieve and maintain positive wellbeing even in adverse conditions or circumstances.

Evidence reviews into drivers of child health and wellbeing distinguish between 'protective factors' that eliminate risk or facilitate resilience, and have a positive impact on outcomes; and 'risk factors' that cause negative outcomes. Protective and risk factors sit at a number of conceptual levels, which interact with each other, as illustrated in Figure 2:

- **Individuals child drivers:** Learning and development, healthy living, general health, mental health, spirituality, emotional intelligence
- **Family drivers:** Family relations, family structure, parental healthy living, parental health
- **Learning environment drivers:** Teacher support, peer and friend relationships, educational environment, pressures and expectations
- **Community drivers:** Participation, social networks, social support, trust, safety
- **Structural drivers:** Wider economy and labour market, poverty and wealth, welfare and housing, social inclusion, discrimination, physical environment, violence, culture

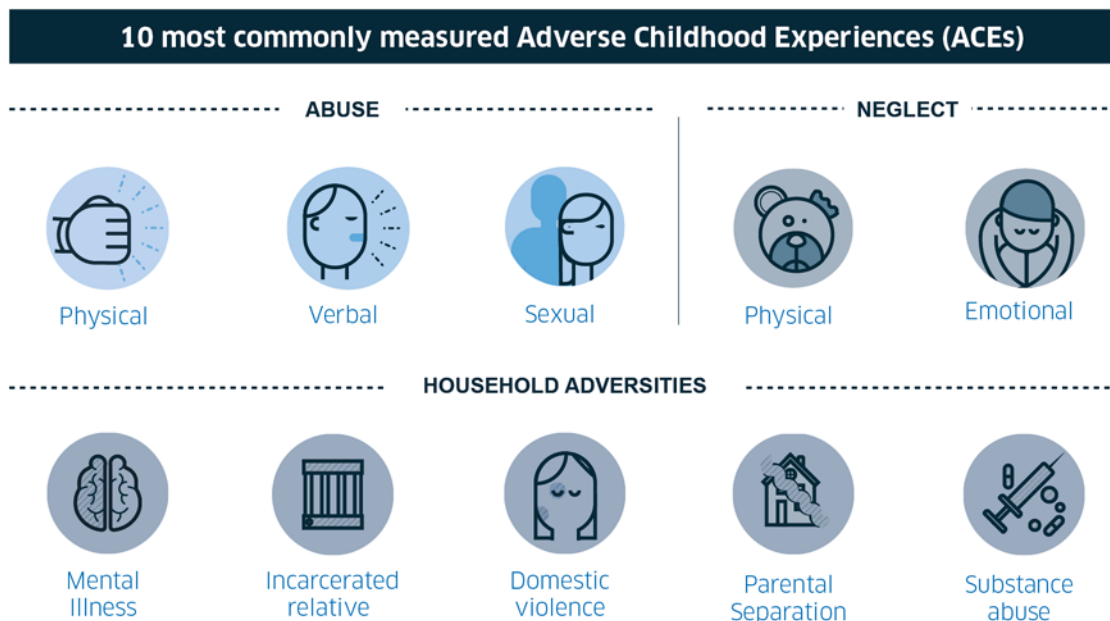
Figure 2 Levels of drivers of wellbeing



Risk factors often cluster together and young people who experience one risk factor are more likely to experience others and outcomes may then compound each other.

A number of risk factors are classed as Adverse Childhood Experiences (ACEs) which can have long-term detrimental effects on people’s health and wellbeing, particularly when someone experiences multiple ACEs in childhood. ACEs are stressful and/or traumatic events and experiences occurring in childhood (0-18 years). The ACEs that are typically measured consist of various types of childhood abuse and neglect, and family-related difficulties (see Figure 3).

Figure 3 Adverse Childhood Experiences



There is strong evidence that as the number of ACEs increases the risk of developing health harming behaviours increases, which can lead to numerous negative health and social outcomes. The ACEs literature also highlights the importance of resilience (protective factors) in mitigating the impact of ACEs. This is discussed in more detail in the relevant sections in the following chapters. Although ACEs are experienced across the whole income spectrum, the negative impacts of ACEs are more highly associated with deprivation. People living in deprived areas are more likely to experience a higher number of ACEs and have less access to resilience-building resources than those living in more affluent areas.

1.2 Data in this paper

For consistency with the Scottish Government’s multifaceted understanding of children’s wellbeing, this paper presents the data under the eight headings of the SHANARRI wellbeing wheel. It is important to remember that this approach seeks to provide a holistic picture of a child’s situation in its environment. While specific indicators are discussed separately under one SHANARRI domain, there is clearly cross-over between different domains and they should not be taken in isolation.

The evidence presented here seeks to cover available evidence from national cross-sectional Scotland level sources on all aspects of children’s wellbeing. Longitudinal

studies, which follow a cohort of individuals over time, have not been included. While they provide a rich source of data for understanding the relationships between various drivers and outcomes, they do not allow for tracking of outcomes over time at Scotland level and are therefore outwith the scope of this report.

The indicators listed here should not be understood as targets, and a number of measures are included to provide a rounded understanding, some of which do not necessarily have a clear desired direction of travel. Although this paper is based on a review of all national data sources, it does not claim to be comprehensive, e.g. where there are several similar measures, not all are included.

1.3 Structure of the report

Each chapter begins with a discussion of the indicators under the relevant SHANARRI domain, presenting the background to how these factors relate to wider health and wellbeing outcomes for children and young people and discussing any issues around the interpretation of trends.

The second section of each chapter then presents the data for each indicator, as well as information about data sources. For each indicator, where data allows, trends over time, any notable socio-demographic differences and comparisons with other countries are listed. In relation to socio-demographic differences, reference is made to the Scottish Index of Multiple Deprivation (SIMD), a measure of area deprivation. SIMD1 refers to the 20% most deprived areas while SIMD5 is the 20% least deprived areas.

The chapters conclude with a summary of key points within the given SHANARRI domain.

Chapter 10 provides an overall conclusion by drawing out key areas for action.

2. Safe

2.1 Elements within the Safe domain

The Safe SHANARRI domain is defined as 'Protected from abuse, neglect or harm at home, at school and in the community'. The measures identified for the Safe domain are around child protection, including accidental injury and assault, experience of bullying and physical fighting; and neighbourhood safety.

Care and protection

Most children in Scotland grow up feeling safe, but where this is not the case the implications for the child are far reaching. The issues relating to care and protection (including neglect, mental, physical or emotional abuse, parental substance misuse or poor parenting) are closely related to negative health and wellbeing outcomesⁱ. For example, children's experiences of domestic violence has been found to have a harmful impact on a range of outcomes, including impaired physical, mental and emotional development and, in some studies, increased risk of aggression in adolescence or early adulthoodⁱⁱ. Many care and protection issues are classed as ACEs, which are associated with a range of negative health and wellbeing outcomes in adulthood, particularly when multiple ACEs are experienced. For example, those with 4 or more ACEs have been found to be more likely to have been in prison, developed heart disease and type 2 diabetes, have committed violence in the last 12 months and display health-harming behaviours (high-risk drinking, smoking, drug use)ⁱⁱⁱ.

Where care and protection issues are the most serious, children may become 'looked after' by the local authority. There is evidence of particularly poor outcomes for young people who are looked after or care leavers. Care leavers are at increased risk of having experienced multiple ACEs which is also associated with poor outcomes.

Looked after young people tend to have lower levels of educational attainment than those who are not looked after. These differences are, in part, linked to the fact that looked after young people tend to leave school at younger ages. Looked after children are less likely than school leavers in general to go on to 'positive destinations', particularly higher education. Care leavers are also at a higher risk of experiencing long term unemployment or fractured employment routes and are overrepresented in the homeless population. Looked after children and care leavers generally experience poorer health than their peers. Young female care leavers are more likely to experience early pregnancy than those who are not care leavers. A third of young offenders reported having been in care at some point in their life^{iv}.

An increase in children on the child protection register, referred to Scottish Children's Reporter Administration (SCRA) and looked after by the local authority may be both due to greater family instability and an increase in the prevalence of child protection needs, but may also be due to better identification of existing cases through early intervention policies. Similarly, any differences in rates between Scotland and England are likely to be the result of different child protection systems as much as

any underlying differences in prevalence of issues between countries. While it is crucial to monitor these statistics and understand the experience of this highly vulnerable group of children and young people, it is not possible to identify a desired direction of travel for these three indicators.

This lack of clarity applies equally to indicators that are proxies for some of the care and protection issues: namely hospital admissions due to accidental injuries and assault. Accidental injuries may occur due to neglect, but also a number of other reasons. For example, young people from lower socio-economic groups are more likely to be injured due to fighting, while those from higher socio-economic groups are more likely to be injured through sport. For both injuries and assault, a decrease in admissions may be the result of fewer underlying issues, or a smaller proportion of cases where the child is taken to hospital and admitted.

Bullying and fighting

Bullying is a particular problem among children and adolescents and has a high prevalence across this age group as a whole. It has been linked to many short and long-term negative outcomes: for example, adolescent victims of bullying show reduced attendance and performance at school, poor social adjustment, increased medicine use, increased physical injury and higher levels of both physical and psychological health problems^{v,vi,vii,viii,ix}.

Bullying is related to factors both within schools and within families which are discussed in the Included and Nurtured chapters. Both bullies and victims tend to report low levels of attachment to, and engagement with, their school^x. Attitudes within a young person's peer group are also strong determinants of the prevalence of bullying and interventions that promote awareness and attitudinal change within the wider peer group context may be most effective in reducing bullying^{xi,xii}. Within families, supportive parental attitudes have been shown to protect children from being both victims and perpetrators of bullying; whereas problems in family communication are associated with increased risk of becoming a bully^{xiii}.

Physical fighting is the most visible form of violent behaviour among adolescents, and is also associated with participation in other activities that pose serious health risks, such as substance misuse^{xiv}. Unlike bullying, physical fighting does not necessarily involve a power imbalance between a perpetrator and victim. In extreme cases, fighting involving weapons can result in serious injury and death among young people^{xv}.

Neighbourhood safety

It is widely recognised within Scottish Government policy making that neighbourhood environment can impact the health of young people over and above individual factors. This includes aspects of both the social environment such as local social networks, and the physical environment such as crowding, pollutants, access to facilities and greenspace. Neighbourhood safety indicators cut across both social and physical aspects and low feelings of safety have been shown to adversely affect health outcomes in young people^{xvi}.

For example, less affluent areas are often associated with physical dilapidation and unsafe recreation spaces compared with more prosperous neighbourhoods. This is, in turn, associated with lower physical activity levels as well as fewer opportunities for social interaction, leading to a lack of social support and an increase in loneliness for adolescents^{xvii}. Even where there is good access to recreation spaces, negative perceptions of the area (e.g. high crime rate) can lead to low use. Perceptions of neighbourhood safety among both parents and young people themselves have been shown to be an important determinant of children's activity levels^{xviii}.

Consultation with young people has shown that they consider a secure environment, including feeling safe in their area, to be a prerequisite for health and wellbeing^{xix}. Research with children and young people in disadvantaged areas found that the need to avoid certain routes at certain times to avoid areas occupied by people perceived to be aggressive due to alcohol and drug use can mean that access to recreational or other resources is restricted. This, in turn, impacts on young people's current wellbeing and potentially their future development^{xx}.

Measures relating to young people's area discussed in this section relate specifically to perceptions of neighbourhood safety. Measures around access to greenspace and play areas are considered under Active, while relationships with neighbours are considered under Included. However, it is important to note the complex connections between all these factors.

2.2 Current position

Indicator	Headline figure	Date	Data source	Next data	Time trend	Key inequalities	International comparisons
Child protection and 'looked after' status							
Children on the Child Protection Register; rate per 1,000 children under 16 years	2.9/ 1,000	2016 /17	EAS	2017 /18	General upwards trend with a high level of fluctuation until 2014. Slight decrease in the last three years, which may be the start of a longer term decline	* Age 53% of children were under five * Gender No gender pattern	Comparisons with other UK countries are not meaningful due to different CP systems
Children 'looked after' by the local authority; rate per 1,000 population aged under 18 years	14.44/ 1,000	2017	EAS	2018	Numbers have decreased from a peak in 2012, and levels now stabilising	* Gender Slightly more males than females	Comparisons with other UK countries are not meaningful due to different definitions of 'looked after' children.
Children referred to SCRA for reasons of care and protection; rate per 1,000 children aged 0–15 years	14.5/ 1,000	2016 /17	SCRA	2017 /18	Substantial drop from a high of 48.1 in 2006/07 with a relatively stable rate since 2014/15	* Gender More males than females * Age higher number at older ages	/
Accidental injury							
Emergency hospital admissions for unintentional injury in children under 15 years; age–sex standardised rate per 100,000 population	829.3/ 100,000	2016 /17	ISD	2017 /18	Decreasing admission rates over the last ten years for both males and females	* Gender Higher admissions for males than females * SIMD Those from SIMD1 were more likely to be admitted than those from the less deprived areas	/
Assault							
General acute inpatient and day case admissions in young people aged 15–25 years due to assault; age–sex standardised rate per 100,000 population	108.2/ 100,000	2016 /17	ISD	2017 /18	The rate has decreased consistently and very substantially from 331.4 in 2007/08	* Gender Males are very substantially more likely to be admitted due to assault – a rate of 178.4, compared with 19.4 among females * SIMD Young people in SIMD1 are 6 times as likely to be admitted as those from	/

						SIMD5 (198.1 vs 32.9)	
Experience of Bullying and fighting							
Percentage of 11, 13 and 15 year olds who report having been bullied at school at least two times a month in the past two months	14%	2014	HBSC	2018	There was little change between 2002 and 2010, but an increase between 2010 and 2014 (from 9% to 15% for girls, and 10% to 13% for boys)	<p>* Gender Girls were more likely to be bullied than boys (15% vs 13%). At ages 11 and 15 there was little gender difference. At age 13, girls were more likely than boys to report being bullied (19% vs 14%)</p> <p>* Age 15 year olds were less likely to report being bullied (9%) than younger age groups (14-19%)</p>	Scotland performed worse than the average in international comparison for girls aged 11 (16% Scotland; 11% HBSC average); and girls aged 13 (18% Scotland; 11% HBSC average); it performed average for girls aged 15 and boys at all ages
Percentage of 11, 13 and 15 year olds who report having been bullied in writing via electronic media at least two times a month in the past two months	5%	2014	HBSC	2018	No time series, new question	<p>* Age/gender Little age variation for boys, but 13-year old girls were more likely than 11 and 15 year olds to be bullied via electronic media messages (9% vs 4%)</p>	For girls, Scotland reported worse than the international average at age 11 (4% Scotland, 3% HBSC average); age 13 (9% Scotland, 4% HBSC average); and age 15 (4% Scotland, 3% HBSC average); For boys, Scotland performed average at all ages.
Percentage of 11, 13 and 15 year olds who report having been bullied by someone posting unflattering or inappropriate pictures of them online at least twice a month in the past two months	3%	2014	HBSC	2018	No time series, new question	<p>* Age/gender For boys, a slight increase between the ages of 11 and 15 (from 1% to 4%). Among girls, the prevalence was lower at 11 years than at 13 (2% and 6%)</p>	Scotland performed average for all age/gender group except 13 year old girls, where it performed worse (6% Scotland, 2% HBSC average)
Percentage of 11, 13 and 15 year olds involved in a physical fight 3 times or	10%	2014	HBSC	2018	Between 2002 and 2014, fighting declined from 15% to 10%. This was driven by a	<p>* Gender Substantially more prevalent among boys (15%) than girls (5%)</p>	Scotland performed worse for 11 year old boys (21% Scotland, 18% HBSC

more in the last year					decline among boys (23% to 15%), with little change among girls	* Age Percentage declined with age from 14% at 11 to 7% at 15	average) and 11 year old girls (7% Scotland, 5% HBSC average), around international average for 13 year old girls, and 15 year olds, but better than average for 13 year old boys (10% Scotland, 15% HBSC average).
Area factors							
Percentage of 13 and 15 year olds who always feel safe in the area they live in	59%	2014	HBSC	2018	The percentage has increased consistently since 1998 (40%)	* Gender girls were slightly less likely to always feel safe (57% vs 60%) * Age For girls, the percentage declined between age 13 and 15 (61% to 52%), while there was little age difference for boys (62% and 58% at age 15)	Scotland only question
Percentage of 13 and 15 year olds who agree that it is safe for younger children to play outside during the day in the area where they live	80%	2014	HBSC	2018	There was little change over time	* Gender No gender difference * Age For boys, 15 year olds were less likely to say it is safe than 13 year olds (75% vs 84%)	Scotland only question
Percentage of households with children aged 6 to 12 that think it is very or fairly safe for children to go to a local playground with 2 or 3 friends	66%	2016	SHS ¹	/	/	* Urban/rural those in rural areas were generally more likely to say it is safe than those living in urban areas (78% vs 64%) * SIMD within urban areas, those from SIMD1 were less likely to feel it is safe than those from other urban areas (59% vs 66%)	/

¹ Questions around safety of play spaces were discontinued after 2016.

Percentage of households who are very or fairly concerned of bullying by children in playgrounds	37%	2016	SHS	/	/	* Urban/rural Those from rural areas were less concerned compared with those from urban areas (27% vs 39%) * SIMD in urban areas, those from SIMD1 were more concerned than those in other urban areas (53% vs 34%)	/
Percentage of households who are very or fairly concerned of children being harmed by adults in playgrounds	36%	2016	SHS	/	/	* Urban/rural Those from rural areas were less concerned than those from urban areas (27% vs 37%) * SIMD in urban areas, those from SIMD1 were more concerned than those in other urban areas (53% vs 32%)	/

2.3 Key points

- There has been a substantial drop in **hospital admissions due to both accidental injury and assault** over the last decade, as well as a reduction in the **percentage of young people involved in fights**.
- However, there has been a slight increase in the number of young people who say they **have been bullied** at least twice in the last two months and the prevalence was relatively high in the population at 10-15% over the last decade. Among 13 year old girls, the prevalence was significantly higher than the international average.
- Experience of physical harm and bullying is highly gendered. Boys were substantially more likely to be hospitalised due to both accidental injury or assault, and to be involved in fighting. Experience of bullying was more prevalent among girls than boys.
- Looking at **perceptions of neighbourhood safety**, six in ten young people reported always feeling safe in the area they live in. Rates were substantially higher in rural than urban areas and were also strongly patterned by area deprivation. People in households with children in the most deprived urban areas were around 20 percentage points more likely to be concerned about children being bullied or harmed by adults in playgrounds than those in other areas.

3. Healthy

3.1 Elements within the Healthy domain

The Healthy domain is defined as ‘Having the highest attainable standards of physical and mental health, access to suitable healthcare and support in learning to make healthy, safe choices’ and is the most data rich of the SHANARRI domains. The key indicators identified here are partly measures of health outcomes and partly measures that are known to drive these longer term health outcomes. Drivers of health outcomes include maternal health during pregnancy; neonatal health; health behaviours during early years; and teenage pregnancy. Health outcomes are: children’s general health; long term health conditions; children’s mental health; and children’s deaths.

Maternal health behaviours

Maternal health during pregnancy has a long term influence on health outcomes for the child. Specifically, maternal smoking and obesity are highlighted. Smoking during pregnancy can cause serious health problems for both mother and baby, including complications during labour, an increased risk of miscarriage, premature birth, stillbirth, low birthweight and sudden unexpected death in infancy^{xxi}. Obesity in pregnancy is associated with an increased risk of a number of serious adverse outcomes, including miscarriage, birth defects, thromboembolism, gestational diabetes, pre-eclampsia, dysfunctional labour, postpartum haemorrhage, wound infections, stillbirth and neonatal death. There is a higher caesarean section rate and lower breastfeeding rate in this group of women compared with women with a healthy BMI^{xxii}.

Neonatal health also has long term effects on child health. Babies born preterm can have multiple difficulties in the days and weeks following their birth and the consequences of being born preterm can affect health and development throughout childhood and adult life. In Scotland, premature birth is the single biggest reason babies require admission to neonatal care and the single biggest cause of death in early infancy. The more preterm a baby is, the higher the risks. Similarly, babies with a low birth weight (which may be due to their gestation) are at particular risk of short and long term health problems^{xxiii}.

Maternal health behaviours in the early years, such as breastfeeding and smoking, are also important. Breastfeeding provides the best nutrition for babies and young children and supports children’s health in the short and longer term. There is strong evidence that breastfeeding reduces children’s risk of gut, chest, and ear infections and leads to a small but significant improvement in brain development and IQ. Growing evidence suggests that breastfeeding also protects against Sudden Infant Death Syndrome (SIDS), promotes healthy weight in childhood and into adulthood, and reduces the risk of Type 1 and Type 2 diabetes and childhood leukaemia^{xxiv}. Exposure to second hand smoke has similar negative effects as smoking and has

been linked to asthma, lower respiratory tract infections, middle ear infections and SIDS in children^{xxv}.

Child health behaviours

Overall health is also driven by health behaviours of the child. These are often driven by parental influence, particularly for the youngest children. Poor diet (alongside physical activity, which is discussed in the Active chapter) is linked to a risk of many non-communicable diseases, including cardiovascular disease, Type 2 diabetes and certain types of cancer, as well as the risk of obesity. Obesity is, in turn, linked to a number of negative outcomes such as heart disease, diabetes, osteoarthritis, back pain, increased risk of certain cancers, low self-esteem and depression. Evidence on the economic costs of risk factors for chronic disease suggests that poor diet is a greater burden on the NHS than smoking, alcohol consumption, being overweight and obesity or physical inactivity^{xxvi}.

Specifically within diet measures, fruit and vegetable consumption has been identified as a protective measure against a large number of health issues including cancer, heart disease and diabetes^{xxvii}. Breakfast consumption is widely seen as an important component of a healthy diet and lifestyle, and can positively impact on children's health and well-being^{xxviii}, while skipping breakfast is associated with increased snacking^{xxix}. Common snack foods amongst children include sugary drinks, crisps and sweets, which in turn are associated with increased risk of dental cavities and excess body weight^{xxx}.

Adolescence is a critical period in the development of good eating habits as eating habits formed at this time can persist into adulthood, influencing the risk of major chronic diseases. As children move into adolescence, they tend to be given greater control over eating choices, in particular through increased opportunity to buy their own food and drink outside the home and without adult supervision, which may lead to increased consumption of unhealthy foods. However, parents can have a strong impact on adolescent eating habits^{xxxi}. Regularly eating together as a family during childhood has been linked to many benefits related to eating habits and emotional well-being in childhood and later in life. Family meals encourage regularity in eating patterns, which is associated with both better health and wellbeing, and also reduced risk of unhealthy weight control methods^{xxxii,xxxiii}.

Other positive health behaviours include uptake of immunisations, which protect against various diseases and tooth brushing, preventing tooth decay. Child behaviours relating to substance use (smoking, alcohol and drugs) have been included in the Responsible chapter.

Child health outcomes

Self-reported health is a general indicator of the burden of disease on society. It can reflect subjective experiences of both diagnosed and undiagnosed illnesses, and their severity, which more objective measures for the whole population can sometimes overlook. For the measure used here, young people aged 13 to 15 were asked to rate their own health, while for children under the age of 13 the question was answered by the parent or guardian completing the interview on their behalf.

Self-assessed general health is often a reflection of the presence or absence of long-term conditions, both physical and mental. People with a long-term condition, defined as any physical or mental health condition or illness lasting - or likely to last - for twelve months or more, are twice as likely as those without to be admitted to hospital and stay in hospital disproportionately longer^{xxxiv}.

Together with physical health, mental wellbeing is a central aspect of overall wellbeing. It is important as an indicator of quality of life and a population's overall health status. Mental ill health often co-exists with other diseases, including cancers and cardiovascular diseases^{xxxv}. Many risk factors, such as obesity, excessive alcohol consumption, and low levels of physical activity, are common to both mental health conditions and other non-communicable diseases. Adolescence is the peak age of onset for mental ill-health and the period when initial care is required^{xxxvi}. Those with mental health conditions have disproportionately higher disability and mortality than the general population, dying on average more than 10 years earlier^{xxxvii}.

In Scotland, children and young people's mental health is widely measured through two tools, the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) and the Strength and Difficulties Questionnaire (SDQ). WEMWBS is a tool for measuring positive mental wellbeing at a population level. The scale has 14 items designed to assess: positive affect (optimism, cheerfulness, relaxation) and satisfying interpersonal relationships and positive functioning (energy, clear thinking, self-acceptance, personal development, mastery and autonomy). The scale uses positively worded statements with a five-item scale ranging from '1 - none of the time' to '5 - all of the time'. The lowest score possible is therefore 14 and the highest score possible is 70; the measure presented here is the mean score. The scale was not designed to identify individuals with exceptionally high or low levels of positive mental health, although some analyses have grouped scores into categories.

The SDQ is a measure of emotional and behavioural problems. A total difficulties score is calculated by summing the scores for emotional problems, conduct problems, hyperactivity and peer problems, and scores are grouped into categories to identify different categories of children at risk. Please note that SDQ is currently being replaced by the Ages and Stages Questionnaire (ASQ) as part of the Universal Health Visiting Pathway, but SDQ will continue to be collected at national level through surveys. ASQ data is presented in the Achieving chapter. An additional ASQ module on social and emotional development (ASQ:SE) is used by some Health Boards, but this is not mandatory and there are currently no published national statistics available.

Additionally, measures of life satisfaction and confidence have been included as more general indicators of young people's mental wellbeing.

Hospitalisations for drug or alcohol misuse have been included in this chapter although as noted in the previous section, child behaviours related to substance use variables are reported in the Responsible chapter.

Finally, death rates are recorded for children and young people. Deaths may be due to a variety of reasons, both preventable and non-preventable. Suicide rates are given separately.

3.2 Current position

Indicator	Headline figure	Date	Data source	Next data	Time trend	Key inequalities	International comparisons
Mothers' health during pregnancy							
Percentage of all women recorded as 'current smoker' at first antenatal booking appointment	14.8%	2017	ISD	2018	Steady year on year decrease since 1998 (28.7%)	<p>* SIMD Percentages vary very substantially by area deprivation, from 26.5% in SIMD1 to 3.4% in SIMD5. However, the gap between the most and least deprived has reduced over time</p> <p>* Age smoking is common in younger than older women, declining from 33.1% among those aged under 20, to 8.8% among those aged 40 or above</p>	<p>In 2010, Scotland reported higher rates of smoking during pregnancy than other European countries (Euro-Peristat Perinatal Health Report).</p> <p>In (2015/16) UK comparison, the rate was slightly higher in Scotland (16%) than in England (14%) and slightly lower than in Wales (14%).</p>
Percentage of all women recorded as 'current smoker' at Health Visitor's first visit (10 days after birth)	17.2%	2016 /17	ISD	1201 7/18	Steady year on year decrease between 2001/02 (24.6%) and 2015/16 (14.0%) before increasing in 2016/17. There was a substantial reduction in the percentage with an unknown smoking status between 2015/16 and 2016/17 (from 6.5% to less than 1%)	<p>* SIMD In 2015/16, percentages ranged from 23.7% in SIMD1 to 3.9% in SIMD5</p> <p>* Age In 2015/16, smoking was more common in younger than older women, declining from 29.2% among those aged under 20, to 8.4% among those aged 40 or above (sub group analysis not available for 2016/17)</p>	/
Percentage of pregnant women recorded as obese at antenatal booking	23%	2017	ISD	2018	The percentage has increased year on year since first recorded in 2011 (17.6%)	* SIMD The percentage overweight or obese ranged from 44% in SIMD5 to 56% in SIMD1. The percentage has increased in all deprivation	In 2010, the percentage of overweight or obese women in European countries was typically about 30-37% but it was

						categories since 2014, but the increase has been steeper in women from SIMD1 leading to a widening of the deprivation gap over time * Age The percentage increased with age, from 36% in women under 20 years old to 59% in women aged 40 or above. There has been a consistent increase in the percentage in all the age groups under 40	much higher in Scotland at 48% (2010 Euro-Peristat Perinatal Health Report).
Neonatal health							
Perinatal mortality rate per 1000 births	5.7/1000	2017	NRS	2018	The rate has fluctuated year on year, but a general downwards trend is evident (e.g. 9.0 in 1992, 7.6 in 2002 and 6.5 in 2012)	/	/
Percentage of all singleton live births before 37 weeks' gestation	6.4%	2016/17	ISD	2017/18	The rate increased steadily from around 4.5% in the mid-1970s to 6.4% in the mid-2000s and has shown little change since.	* Age Preterm birth rates were highest among mothers in the youngest (under 20) and oldest (40 or above) age groups. * SIMD Rates were higher in mothers in SIMD1 (7.8%) than among those in SIMD5 (4.8%)	Scotland's rate is similar to that seen elsewhere in the UK and lies midway between that seen in other Western and Northern European countries
Percentage of all live singleton births with low birthweight	5.4%	2016/17	ISD	2017/18	The percentage with low birthweight has shown little change since records began in the mid-1970s. This is the result of the increase in preterm births combined with the fact that babies born at any given gestation have got, on average, slightly heavier over time.	* Age The percentage was highest in women under 20, although rates by age have fluctuated substantially over time * SIMD Rates were higher in mothers in SIMD1 (7.2%) than among those in SIMD5 (3.7%)	/
Parental health behaviours during early years							

Number of babies reported by parent as being breastfed at 6–8 week review	41%; 30% exclusive	2016 /17	ISD	2017 /18	Since 2001/02, the percentage has increased slightly. This is due to small increases in the proportion of babies receiving exclusive and mixed breastfeeding, most markedly since 2014/15	<p>* Age 56% of babies born to mothers aged 40 or above were breastfed compared with 12% of babies born to mothers aged under 20</p> <p>* SIMD Breastfeeding is much more common among mothers living in SIMD5 (60%) than SIMD1 (26%)</p> <p>* Ethnicity Babies from minority ethnic groups are more likely to be breastfed than White Scottish babies</p>	Comparative data by the WHO shows that UK breastfeeding rates are lower than in other Western European countries. The 2010 Infant Feeding Survey also found that the proportion of babies ever breastfed in Scotland (74%) was consistently and substantially lower than in England (83%), although it was higher than Wales (71%) and Northern Ireland (64%).
Percentage of babies reported by parent as being exposed to second-hand smoke at the 6–8 week review	8.2%	2016 /17	ISD	2017 /18	The percentage decreased substantially between 2007/08 (21.5%) to 2008/09 (14.7%), followed by a slower consistent reduction since then	<p>* SIMD The percentage was higher among mothers living in SIMD1 (14%) than SIMD5 (2.9%)</p> <p>* Age The percentage was higher among the younger age groups – 20.8% with mothers under 20, and 14.2% with mothers aged 20-24; compared with 4.9% among mothers aged over 35</p> <p>* Ethnicity Exposure was lowest among Asian and Black, Caribbean or African groups</p>	/
Immunisations							
Percentage of children taking up immunisation at 24 months for 5-in-1 vaccination	97.6%	2017	ISD	2016	Uptake rates were consistently high, although there was slight decrease for the third year in a row	/	/
General health							
Percentage of children	95%	2015	SHeS	2016	Little change over time	* Gender Girls were more likely	/

aged 0-15 who are in good or very good general health		-16 combined		-17 combined		than boys to report good health (97% and 94% respectively) * Age Percentage lowest among children aged 14-15 (91%), compared with 95-98% for children aged 0-13. This finding could in part be explained by the survey design asking parents of children aged 0-12 about their child's health status, and asking children aged 13-15 directly	
Percentage of children aged 0-15 with at least one long term health condition	16%	2016	SHeS	2017	/	* Gender Boys were significantly more likely than girls to have a condition (18% and 14% respectively)	/
Childhood obesity							
Percentage of primary 1 children whose BMI is within the top 5% of the 1990 UK reference range for their age and sex ("at risk of obesity")	10.5%	2016 /17	ISD	2017 /18	The percentage has increased slightly from 9.2% in 2007/08	* SIMD Children in SIMD1 were almost twice as likely to be at risk of obesity than those in SIMD5 (13.2% vs 7.1%). The inequality has widened over time as rates in deprived areas have increased, while rates in the least deprived areas have fallen * Gender The percentage was similar among boys (10.7%) and girls (10.2%)	/
Tooth decay							
Percentage of children receiving a letter 'C' (no obvious decay experience) at basic inspection	P1 70.9%; P7 69.4%	2016 /17	ISD	2017 /18	The percentage of P7 children with no obvious decay experience at detailed inspection has increased markedly since 2005 (53%) to 77% in 2017 (information from detailed inspection)	* SIMD The percentage with no decay experience at detailed inspection among P7s was 65.6% in SIMD1, compared with 86.5% in SIMD5. The gap between the most and least deprived dropped from 27 percentage points in 2010/11 to	/

						21 percentage points in 2012/13 and has stayed stable since. (information from detailed inspection)	
Mental health							
Mean score for S2 and S4 pupils on the Warwick–Edinburgh Mental Wellbeing Scale (WEMWBS)	48.4	2015	SALSUS	2018	<p>The average WEMWBS score for all pupils decreased slightly between 2010 and 2013 from 50.0 to 48.7. Between 2013 and 2015, there was only a minor decrease</p> <p>There was little change among boys, but girls showed a decrease in WEMWBS scores, particularly among S4 girls (from 45.1 to 44.4) but also S2 girls (from 48.7 to 48.2)</p>	<p>* Age/gender Mean scores were lowest among S4 girls (44.4) and slightly lower among S2 girls (48.2) than S4 boys (50.1) and S2 boys (51.4)</p> <p>* SIMD Pupils who in SIMD1 had a lower mean WEMWBS score than those in SIMD5 across all age/gender groups</p> <p>* Family structure Pupils who live with both parents had higher mean WEMWBS scores</p> <p>* Caring responsibilities Pupils who had caring responsibilities had lower mean WEMWBS scores</p> <p>* Relationship with parents Pupils who thought their parents knew more about their activities had higher WEMWBS scores. Pupils who were unlikely to talk to their parents about something that was worrying them had lower WEMWBS scores</p>	/
Percentage of S2 and S4 pupils with a slightly raised (previously “borderline”) or high or very high (previously, “abnormal”) SDQ Total	31% (15% slightly raised, 16% high or very	2015	SALSUS	2018	The proportion of all pupils with a slightly raised or high difficulties score has increased slightly between 2006 and 2015 (from 27% in 2006 to 31% in 2015).	<p>* Age/gender The percentage was substantially higher among S4 girls (39%) than other S4 boys and S2 pupils (15-30%). The gender difference is largely driven by the emotional</p>	/

Difficulties score	high)				<p>The percentage increased substantially among girls between 2010 and 2013, with little change among boys, and stayed stable between 2013 and 2015.</p>	<p>symptoms subscale. S4 girls were three times as likely to have a slightly raised or high score on this scale than S4 boys. On other subscales, there was either no gender difference or boys scored worse than girls</p> <p>* SIMD The percentage was higher in SIMD1 (34%) than SIMD5 (26%). However, the gap between pupils living in the most and least deprived areas has narrowed over time as the increase was slightly greater among those in SIMD5</p> <p>* Family structure Pupils who lived with both parents were less likely than those in other family situations to have a slightly raised or high score</p> <p>* Caring responsibilities Pupils who had caring responsibilities were more likely to have a slightly raised or high score</p> <p>* Relationship with parents Pupils who thought their parents knew more about their activities were less likely to have a slightly raised or high score. Pupils who were unlikely to talk to their parents about something that was worrying them were more likely to have a slightly raised or high score.</p>	
General wellbeing							

Percentage of 11,13 and 15 year olds who report high life satisfaction	87%	2014	HBSC	2018	No change in life satisfaction since it was first recorded in 2002	<p>* Gender The percentage was higher among boys (90%) than girls (84%). There was a gender difference at 13 and 15, but at not at 11</p> <p>* Age There was a decrease in life satisfaction with age. Among girls, life satisfaction decreased from 92% at 11, to 84% at 13 and 76% at 15. Among boys, there was no difference between ages 11 and 13, but rates were slightly lower among 15-year olds than 11-year olds (88% vs 92%)</p>	Scotland performed average in international comparison
Percentage of 11,13 and 15 year olds who always feel confident in themselves	16%	2014	HBSC	2018	There was a peak in confidence amongst boys in 2006 (27%), and girls in 2002 (16%) and rates have fallen since. In 2014 the percentage was similar to that seen in the early 1990s	<p>* Gender Boys were more likely to feel confident than girls (21% vs 11%). The gender difference was widest at age 13</p> <p>* Age Confidence decreased with age. Among 11-year olds, 25% felt confident, compared with 9% of 15-year olds</p>	Scotland only question
Eating behaviours							
Percentage of children aged 2-15 who had the recommended 5 portions of fruit and vegetables the previous day	13%	2016	SHeS	2017	The percentage has fluctuated between 12-15% since the start of the time series in 2008.	<p>* Gender the percentage was higher among girls (15%) than boys (11%)</p> <p>* Age There was no clear pattern by age group. However, the percentage of children who had eaten no fruit or vegetables the previous day increased with age.</p> <p>* SIMD The percentage was lower in SIMD1 (10%) than SIMD5 (18%)</p> <p>* Household income There</p>	/

						was no clear relationship. The percentage was highest in households in the highest income quintile (18%) but lowest in the second lowest income quintile (9%)	
Percentage of 11, 13 and 15 year olds who consume fruit daily	38%	2014	HBSC	2018	There was a slight increase in fruit consumption since 2002	<p>* Gender the percentage was higher among girls (42%) than boys (35%).</p> <p>* Age Fruit consumption decreased with age among both boys (from 41% at 11 to 29% at 15) and girls (from 50% to 36%)</p>	Scotland performed average in international comparison
Percentage of 11, 13 and 15 year olds who consume vegetables daily	38%	2014	HBSC	2018	There was a slight increase in vegetable consumption since 2002	<p>* Gender the percentage was higher among girls (42%) than boys (34%)</p> <p>* Age there was little difference between age groups</p>	Scotland performed average in international comparison
Percentage of children aged 2-15 who ate sweets or chocolates once a day or more in the last week	51%	2015 /2016 combined	SHeS	2016 /2017 combined	/	<p>* Household income The percentage was highest in households in the lowest income quintile (53%), but similar in all other quintiles (42% - 47%)</p> <p>* Gender no gender difference</p> <p>* Age No clear age difference</p> <p>* SIMD No clear relationship</p>	/
Percentage of 11, 13 and 15 year olds who consume sugary soft drinks daily	24%	2014	HBSC	2018	The percentage decreased between 2006 and 2010 (from 32% to 25% of boys and from 25% to 18% of girls), but has not changed significantly since 2010	<p>* Gender The percentage was higher boys (27%) than girls (20%), although there was no gender difference at age 11</p> <p>* Age Consumption increased with age, most markedly for boys between ages 11 (20%) and 13 (29%). For girls, the increase was less marked</p>	<p>Scotland performed worse in international comparison for 13 and 15 year olds:</p> <p>* 20% Scotland, 16% HBSC average among girls aged 13;</p> <p>* 29% Scotland, 21% HBSC average among boys aged 13;</p> <p>* 24% Scotland, 16%</p>

							<p>HBSC average among girls aged 15; * 31% Scotland, 22% HBSC average among boys aged 15.</p> <p>It performed average for 11 year olds.</p>
Percentage of 11, 13 and 15 year olds who eat breakfast every weekday	62%	2014	HBSC	2018	Between 2002 and 2014, there was little change among boys, whereas for girls there has been an increase (from 51% to 56%).	<p>* Age Younger adolescents were more likely to eat breakfast; 76% of 11-year olds did so compared with 50% of 15-year olds</p> <p>* Gender At ages 13 and 15 girls were less likely than boys to eat breakfast. There was no gender difference at age 11</p>	<p>Scotland performed better than average for 11 year olds: (79% Scotland, 73% HBSC average for boys; 75% Scotland, 70% HBSC average for girls).</p> <p>It performed worse than average for 13 year old girls (53% Scotland, 58% HBSC average) and 15 year olds (43% Scotland, 52% HBSC average boys, 57% Scotland, 62% HBSC average girls).</p> <p>Scotland performed average in international comparison for 13 year old boys.</p>
Substance misuse							
General acute hospital stays in young people aged 15–24 years with a diagnosis of alcohol misuse; rate per 100,000 population	303.8/100,000	2016/17	ISD	2017/18	The rate has fallen steadily from a peak of 638.4 in 2007/08	<p>* Gender The rate was higher among males (366.9) than females (240.7).</p> <p>* SIMD Alcohol related stays displayed a strong gradient by SIMD, being highest in the most deprived decile (data for all</p>	/

						ages)	
General acute inpatient and day case stays in young people aged 15–24 years with a diagnosis of drug misuse; rate per 100,000 population	131.52/100,000	2016/17	ISD	2017/18	The rate has fluctuated but broadly fell from a peak in 2002/03 (199.32) to a low in 2012/13 (104.20) before increasing to current levels. For 15-19 year olds, the rate fell between 1999/2000 (119.5) to 2012/13 (65.4) but then increased back to the previous level. For 20-24 year olds, the rate fell from 2002/03 (282.5)	* Age Rates were higher among the older age group 20-24 (143.8) than 15-19 year olds (118.1) * Gender Rates were very substantially higher among males (192.79) than females (70.24)	/
Deaths							
Deaths in children aged up to 1 year per 1,000 live births	3.3/1000	2017	NRS	2018	Substantial drop over longer-term, little change recently (e.g. averaged 32.9 for 1951-55, 18.8 for 1971-75, 6.6 for 1991-95 and 3.6 for 2011-15)	/	/
Deaths in children aged 1–4 years rate per 1,000 people	0.1/1000	2017	NRS	2018	Rates have fallen over longer-term, little change recently (e.g. averaged 1.4 for 1951-55, 0.8 for 1971-75, 0.3 for 1991-95 and 0.2 for 2011-15)	/	/
Deaths in children aged 5–9 years rate per 1,000 people	0.1/1000	2017	NRS	2018	Rates have fallen over longer-term, little change recently (e.g. averaged 0.6 for 1951-55, 0.4 for 1971-75, 0.2 for 1991-95 and 0.1 for 2011-15)	/	/
Deaths in children aged 10–14 years rate per 1,000 people	0.1/1000	2017	NRS	2018	Rates have fallen over longer-term, little change recently (e.g. averaged 0.5 for 1951-55, 0.3 for 1971-	/	/

					75, 0.2 for 1991-95 and 0.1 for 2011-15)		
Deaths in young people aged 15-24 years rate per 1,000 people	0.3/1000	2017	NRS	2018	Rates have fallen over longer-term, little change recently (e.g. averaged 1.0 for 1951-55, 0.7 for 1971-75, 0.7 for 1991-95 and 0.4 for 2011-15). Latterly rates have fallen for men (averaged 0.9 for 2001-05; 0.6 for 2011-15); less change for women (averaged 0.4 and 0.3).	* Gender The rate was lower among females (0.2) than males (0.5)	/
Suicide							
Deaths with underlying cause of 'intentional self-harm' or 'event of undetermined intent' (probable suicides), age 15-24, rate per 100,000 population, using the old coding rules	9.9/100,000	2017	ScotPHO (calculated from NRS figures)	2018	General downward trend from a peak in 2000 (22.8), but with some year-to-year fluctuations. 2017 is a slight decrease on 2016.	* Gender majority of suicides in this age group were male. Rates were much higher for men (16.2) than women (3.4)	/

3.3 Key points

- There are a number of positive developments within the health domain. **Maternal smoking during pregnancy** and **babies' exposure to second hand smoke** at 6-8 weeks have dropped substantially over time. **Tooth decay** has also reduced over time.
- **Breastfeeding rates** have increased over time, although they remain low in international comparison.
- The gap between individuals in the most and least deprived areas continues to be substantial for the four measures above, although it has reduced over time. Positive parental health behaviours were also more common among older mothers, who were also more likely to come from the least deprived areas.
- **Mental wellbeing** is emerging as a concern. Average WEMWBS scores have dropped over time, indicating a decline in positive mental health, while the percentage of children with a slightly raised, high or very high SDQ score has increased, indicating an increase in emotional and behavioural problems. The percentage of young people feeling confident in themselves has also fallen slightly.
- This overall trend is driven by a change among girls. Girls displayed lower levels of wellbeing than boys on all measures, with a larger gap at older ages. Girls' wellbeing in recent years in terms of WEMWBS and SDQ also declined in recent years, with little change among boys.
- Mental wellbeing decreased with age across childhood and adolescence, highlighting the importance of the teenage years. It was also lower in areas of higher deprivation.
- In terms of **obesity**, almost a quarter of pregnant women were recorded as obese at antenatal booking. The percentage has increased year on year since it was first recorded in 2011.
- This increase in obesity has been largest among women from the most deprived areas, leading to a further widening of the area deprivation gap.
- More than one in ten Primary 1 school children were at risk of obesity. The percentage has increased slightly over the last decade. Children from the most deprived areas were substantially more likely to be at risk of obesity.
- On **diet**, only 13% of children ate the recommended five portions of fruit and vegetables, and less than two thirds ate breakfast every weekday.
- **Deaths** in children aged under 1, and young people aged 15-24, including suicides, have fallen substantially over the last decade.

4. Achieving

4.1 Elements within the Achieving domain

The Achieving domain is defined as ‘Being supported and guided in learning and in the development of skills, confidence and self-esteem, at home, in school and in the community’. The key indicators identified here are around preschool development, attitudes to school, attendance and exclusions, school leaver attainment, school leaver destinations and youth employment.

Development, attainment and destinations outcomes

Attainment in education and success in employment is often seen to determine young people’s long term success in life, and is viewed as way of overcoming difficult circumstances for those from disadvantaged backgrounds. It is measured in different ways at different ages, with a recognition that at any stage, outcomes are driven by previous development/attainment, and that early identification of issues and intervention is therefore crucial.

At pre-school ages the focus is on achievement of developmental milestones in a number of domains (communication, gross and fine motor skills, problem solving, personal/social). Assessments are currently available at 27-30 months but in due course will also be available at 13-15 months and 4-5 years. During primary school and early secondary school, national measures focus on teachers’ judgement of whether the pupil has achieved the appropriate Curriculum for Excellence (CfE) level for the given age in reading; writing; listening and talking; and numeracy. This data has been collected since 2015/16 and has experimental statistics status until methods are fully established. Therefore, it is not appropriate to make direct year on year comparisons.

At the point of the young person leaving school, data is collected about their qualifications. While education is less of a guarantee of quality employment than it once was, the chances of a young person being in work increase with the level of qualification they hold. Qualifications also give individuals higher wages than workers with few or no qualifications, with increasing returns as the level of qualification increases^{xxxviii}. Positive destinations data is collected 9 months after the young person has left school. Positive destinations are defined as further or higher education, training, employment, voluntary work or an activity agreement.

Finally, the youth employment rate considers the rate of young people aged 16-24 in employment. Working lives are commonly beginning later as young people stay in education for longer. There is a considerable body of evidence to suggest that being unemployed when young leads to a higher likelihood of long term negative effects in later life in terms of lower pay, higher unemployment, fewer life chances and poorer health^{xxxix}. These effects seem to be stronger for younger people and those with lower levels of educational qualifications. The research shows that periods of poor quality or precarious work can also lead to such long-term negative effects^{xl}.

Drivers of attainment and destinations

A wide range of child outcomes at younger ages across other SHANARRI domains are recognised as pre-cursors of outcomes at school and school leaver age, and as such are drivers of attainment as well as outcomes in their own right. Attainment is positively influenced by a stable home environment (Safe), health and mental health (Healthy), good relationships with parents (Nurtured); feeling involved in decisions (Respected), absence of risk behaviours (Responsible) as well as poverty and peer relationships (Included). These are discussed in the appropriate chapters.

Drivers of attainment discussed in this chapter include attitudes to school, which are in turn influenced by relationships with teachers and the level of support young people are provided by teachers, as well as relationships with peers (discussed in the Included chapter). Young people spend a significant proportion of their time at school, and their perception of their school environment is a strong indicator of academic success as well as physical, emotional and mental health. Young people who perceive staff at their school as supportive and have a positive perception of their school are more likely to engage in health-promoting behaviours^{xii}, and have higher levels of academic achievement, lower levels of truancy and bullying, and better mental well-being^{xiii}. Attendance and exclusions are also recorded at national level. Young people with high levels of unexplained absences or who are excluded from school have lower levels of attainment. These measures are likely to be closely related to other factors listed above.

Another measure relevant to this section is the amount of pressure young people feel under from school work. Consultation with young people has shown that time to relax and participate in hobbies is an important factor for young people and that in some cases pressures from homework can cause stress and worry^{xiiii}. Stresses imposed by school work may also have longer term negative impacts on mental wellbeing.

4.2 Current position

Indicator	Headline figure	Date	Data source	Next data	Time trend	Key inequalities	International comparisons
Pre-school development							
Children with one or more developmental concerns at 27–30 month review	18%	2016 /17	ISD	2017 /18	/	<p>* SIMD 24% of children in SIMD1 had at least one developmental concern compared with 11% in SIMD5</p> <p>* Gender boys (23%) were more likely to have a concern than girls (12%).</p> <p>* 'Looked after' status 38% of children who were looked after by a local authority had at least one developmental concern compared with 18% of those who were not looked after</p>	/
Attitudes to school							
Percentage of S2 and S4 pupils who stated they like school 'a lot' or 'a little'	69%	2015	SALSUS	2018	Since 2002, the proportion of pupils who like school has remained fairly static, with only slight fluctuations	<p>* Age older children were more negative (75% in S2; 64% S4).</p> <p>* Gender There was no gender difference at S2, but at S4, boys were more likely to say they like school (69% vs 59%)</p>	/
Percentage of S2 and S4 pupils who feel strained or pressured by school work a lot of the time	36%	2015	SALSUS	2018	The percentage has increased over time in all age/gender groups, but particularly among S4 girls (from 26% in 2002 to 62% in 2015)	<p>* Age Perceived pressure increased substantially with age (22% S2; 49% S4)</p> <p>* Gender Girls were more likely to feel pressured. At S2, the difference was small, but at S4 girls were substantially more likely to feel pressured than boys (62% vs 36%)</p>	/
Teacher support							

Percentage of 11,13 and 15 year olds who report high levels of teacher support	31% ²	2014	HBSC	2018	The percentage was about the same as when the question was first asked in 2010	* Age The percentage dropped substantially with age from 53% at 11, to 21% at 13 and 15% at 15 * Gender Among primary school pupils, girls were more likely than boys to report high teacher support (58% vs 47%). There was no significant gender difference among secondary school pupils	Scotland performed worse than average at age 13 and 15 and reported the second lowest level of support across all HBSC countries. * 19% Scotland, 33% HBSC average among girls aged 13 * 21% Scotland, 36% HBSC average among boys aged 13 * 14% Scotland, 24% HBSC average among girls aged 15 * 25% Scotland, 28% HBSC average among boys aged 15 Scotland performed average among 11 year olds
Percentage of 15 year olds who say that their teacher shows an interest in every student's learning in every lesson	44.8%	2015	PISA	2018	/	/	Scottish students were more likely to report high levels of support from their teachers than the OECD average (34.3%).
Percentage of 15 year olds who say that the teacher gives extra help when we need it in every lesson	54.3%	2015	PISA	2018	/	/	Pupils in Scotland were more positive than the OECD average (39.7%)
Attendance							
Percentage of all secondary school half	93.3%	2016 /17	EAS	2018 /19	Since 2010/11 pupils' rate of attendance has	* SIMD Pupils living in areas with higher levels of deprivation had	/

² Previous reporting in the HBSC National Report that gave this percentage as 30% was incorrect.

days attended					remained relatively stable, increasing from 93.1% to 93.7% in 2014/15 then decreasing to 93.3% in 2016/17.	lower attendance rates, with the effect being greater in secondary and special school. In secondary schools, pupils living in SIMD1 had an attendance rate 6.6 percentage points lower than the pupils living in SIMD5 * 'Looked after' status 'Looked after' young people consistently have lower school attendance than average (91%)	
Percentage of S2 and S4 pupils who say they have truanted at least once in the last year	38%	2015	SALSUS	2018	The percentage declined between 2006 and 2013, but then increased for all groups except S4 boys	* Age S4 pupils were more likely than S2 pupils to have truanted (34% S2; 42% S4) * Gender No meaningful gender difference	/
Exclusions							
Cases of exclusion from primary and secondary school; rate per 1,000 pupils	26.8/1000	2016/17	EAS	2018/19	Substantial fall from 63.9/1000 in 2006/07	* Gender the rate was substantially higher among boys (42.0/1000) than girls (11.1/1000) * SIMD The rate was more than five times as high among pupils from SIMD1 (48.5/1000) than among pupils from SIMD5 (9.1/1000)	/
Percentage of pupils who have been excluded from secondary school	10%	2015	SALSUS	2018	The percentage has declined steadily over time, but there was no change between 2013 and 2015.	* Age No difference by school year * Gender S4 boys were more likely than S4 girls to have been excluded (13% vs 8%), but there was no gender difference at S2	/
Achievement of CfE levels							
Percentage of primary pupils achieving expected CfE levels in reading	P1 80%; P4 77%; P7 76%; S3 90%	2016/17	EAS	2017/18	New data collection in 2015/16. Experimental statistics for 2015/16 and 2016/17 so not	* SIMD Pupils in SIMD5 performed better than pupils in SIMD1 at all stages. The smallest performance gap in reading was	/

					appropriate to compare over time	at S3 (11 percentage points), while the largest performance gap was at P7 (19 percentage points) * Gender A higher percentage of females achieved the expected CfE level than males at all stages. The gap in reading was between 6 and 8 percentage points * Ethnicity A lower percentage of pupils of Other Ethnicity backgrounds achieved the expected CfE level in reading compared with other pupils	
Percentage of primary pupils achieving expected CfE levels in writing	P1 77%; P4 71%; P7 69%; S3 89%	2016 /17	EAS	2017 /18	New data collection in 2015/16. Experimental statistics for 2015/16 and 2016/17 so not appropriate to compare over time	* SIMD Pupils in SIMD5 performed better than pupils in SIMD1 at all stages. The smallest performance gap in writing was at S3 (12 percentage points), while the largest performance gap was at P4 (22 percentage points) * Gender A higher percentage of females achieved the expected CfE level in writing than males at all stages. The gap was between 8 and 14 percentage points * Ethnicity A lower percentage of pupils of Other Ethnicity backgrounds achieved the expected CfE level in writing compared with other pupils	/
Percentage of primary pupils achieving expected CfE levels in listening and talking	P1 85%; P4 83%; P7 81%; S3 91%	2016 /17	EAS	2017 /18	New data collection in 2015/16. Experimental statistics for 2015/16 and 2016/17 so not appropriate to compare over time	* SIMD Pupils in SIMD5 performed better than pupils in SIMD1 at all stages. The smallest performance gap in listening and talking was at S3 (11 percentage points), while the largest performance gap was at P7 (17	/

						percentage points) * Gender A higher percentage of females achieved the expected CfE level in listening and talking than males at all stages. The gap was between 6 and 8 percentage points * Ethnicity A lower percentage of pupils of Other Ethnicity backgrounds achieved the expected CfE level in listening and talking than other groups	
Percentage of primary pupils achieving expected CfE levels in numeracy	P1 83%; P4 75%; P7 70%; S3 88%	2016 /17	EAS	2017 /18	New data collection in 2015/16. Experimental statistics for 2015/16 and 2016/17 so not appropriate to compare over time	* SIMD Pupils in SIMD5 performed better than pupils in SIMD1 at all stages. The smallest performance gap in numeracy was at P1 (14 percentage points), while the largest performance gap was at P7 (21 percentage points) * Gender A higher percentage of girls achieved the expected CfE level in numeracy than boys across all stages, but the percentage is smaller than for other domains (2-3 percentage points) * Ethnicity A higher percentage of pupils of Asian – Chinese ethnic background achieved the expected CfE level in numeracy compared with all other ethnic backgrounds	/
Qualifications							
Percentage of school leavers with one or more qualification at SCQF Level 4 or better	96.3%	2016 /17	EAS	2017 /18	There has been a slight increase to between 2011/12 (95.8%) 2012/13 (96.3%), percentage has	* SIMD 98.7% of leavers in SIMD5 areas attained the qualification compared with 92.8% of the leavers in SIMD1.	/

					stayed steady since	* 'Looked after' status Looked after school leavers attainment was substantially lower than overall attainment. Children who were 'looked after' for the full year had an attainment rate of 78%, while children looked after for only half the year had a substantially lower rate at 65%. However, the gap between 'looked after' children and all school leavers has narrowed over the last seven years	
Percentage of school leavers with one or more qualification at SCQF Level 6 or better	61.2%	2016 /17	EAS	2017 /18	The percentage has increased steadily since 2012/13 (55.7%), although a slight decrease from 2015/16 (61.7%)	* SIMD 43.0% of leavers in SIMD1 compared with 80.6% from SIMD 5 achieved the qualification. There has been a small reduction in the gap over time * 'Looked after' status The gap between 'looked after' pupils and all leavers was very high at SCQF 6 level. Only 16% of children who were 'looked after' for the full year, and 8% of children who were 'looked after' for part of the year achieved this level	/
Positive destinations							
Number and percentage of all school leavers in positive destinations at 9-month follow-up	92.9%	2016 /17	EAS	2017 /18	The percentage increased from 2015/16 (91.4%). It has fluctuated but increased broadly from 90.4% in 2012/13.	* SIMD Pupils from SIMD1 were less likely to enter positive destinations than those from SIMD5 (87.6% vs 96.4%) * ASN Pupils with additional support needs (ASN) were similarly less likely to be in a positive destination * Ethnicity Pupils from the Asian	/

						<p>- Pakistani group had the highest proportion of leavers in a positive destination.</p> <p>* Gender 93.8% of girls and 92.1% of boys entered a positive destination.</p> <p>* 'Looked after' status 'Looked after' children had a substantially lower positive destinations rate – 76% for those 'looked after' for the full year, and 64% for those 'looked after' for part of the year. The rate has improved greatly from 40% (full year)/36% (part year) in 2009/10.</p>	
Youth employment							
Youth employment rate - percentage of people aged 16–24 years who are in employment	57.5%	2016 /17	EAS	2017 /18	The rate increased by 1.1 percentage points over the year from 56.5% in Oct 2015-Sep 2016, but was 0.9 percentage points lower than the peak 58.4% rate seen in Oct 2008-Sep 2009.	/	Youth employment rates in Scotland compare relatively well internationally.

4.3 Key points

- In terms of **attitudes to school**, over a fifth of S2 pupils and almost half of S4 pupils reported feeling pressured by school work.
- However, Scottish students were more positive about their teachers than students in other countries – 45% felt that their teacher was interested in every student’s learning in every lesson, compared with the OECD average of 34%.
- There is evidence that attitudes to school worsen with age. Older pupils were less likely to report high levels of teacher support or liking school, and were more likely to feel stressed by school work.
- Girls felt more negative about school, reported lower teacher support, and were very substantially more likely to feel stressed by schoolwork.
- **School attendance** has increased slightly over time, but almost four in ten pupils reported having truanted at least once in the last year.
- Looking at **achievement of Curriculum for Excellence (CfE) levels**, the percentages of pupils achieving the relevant level declined consistently between P1 and P7, before increasing by S3, for all domains (reading; writing; listening and talking; numeracy). The proportion of P7 pupils not achieving the CfE level ranged from a fifth to a third, depending on the domain.
- Girls were more likely than boys to achieve CfE levels in all domains and at all school years. There was also a gap of 10 to 20 percentage points in the achievement of CfE levels between the most and least deprived SIMD quintile, depending on domain and age.
- The percentage of **school leavers with SCQF level 6 qualifications** has increased steadily since 2012/13, while the percentage with SCQF level 4 qualifications has stayed steady at a very high level.
- The attainment gap between pupils from the most and least deprived areas has dropped slightly over time but remains substantial, particularly at SCQF 6 level (39 percentage points). The attainment gap between looked after children and overall attainment also remains high, although is reducing due to increased attainment of ‘looked after’ pupils.
- More than nine in ten young people were in a **positive destination** (education, training or employment) 9 months following leaving school.
- However, this differs substantially by area deprivation, with an 11 percentage point gap between SIMD1 and 5. Girls were also slightly more likely to move to a positive destination on leaving school.

5. Nurtured

5.1 Elements within the Nurtured domain

The Nurtured domain is defined as ‘Having a nurturing place to live in a family setting, with additional help if needed, or, where possible, in a suitable care setting’. The indicators identified here are around the young person’s relationship with their parent or principal carer.

Family relationships

Consultation with young people has highlighted the importance of positive relationships, including those with parents or main carers. Young people want to feel cared for by their family, and spend time with them. Previous research has identified that certain processes of family dynamics, specifically communication with parents, have a clear influence on adolescent development, life chances and health behaviours^{xliv}. Many studies have found healthier behaviours in children and adolescents who have open communication with their parents^{xlv} and perceive them to be emotionally and physically accessible^{xlvi}.

The childhood resilience literature shows that the single most common factor for children who develop resilience is at least one stable and committed relationship with a supportive parent, caregiver or other adult^{xlvii}. The ACEs literature highlights the importance of the presence of an always available trusted adult (who may or may not be a parent) in mitigating the negative impact of ACEs. Among people with four or more ACEs, the presence of such an adult more than halved the likelihood of poor mental-wellbeing in adulthood^{xlviii,xlix}.

Research has also found that spending time with family makes it more likely that young people will share parental and societal norms and values, protecting them against taking up specific risk behaviours such as excessive drinkingⁱ and leading to improved diet qualityⁱⁱ. It has also been found that an individual parent or carer can stimulate an interest in education that provides children with a diversion from difficulties in other aspects of their lives, enabling them to feel a sense of achievement and self-esteem. A range of evidence suggests that parental interest in a child’s education can support achievements in school, despite problems related to poverty or other family difficultiesⁱⁱⁱ.

It is worth noting that currently available data on family relationships is limited to secondary school ages, although it is known that nurturing family environments from birth and throughout early years and primary school are also associated with positive wellbeing. Children who have experienced sensitive, responsive care-giving are more likely to develop a secure attachment style, which is associated with positive outcomes including self esteem, self confidence, resilience and emotional regulation. A large proportion of children who have been maltreated develop a disorganised attachment style, which is a strong predictor of later relationship and emotional difficulties^{liii}.

5.2 Current position

Indicator	Headline figure	Date	Data source	Next data	Time trend	Key inequalities	International comparisons
Relationships with parents							
Percentage of S2 and S4 pupils who think their mother knows a lot or a reasonable amount about them	62%	2015	SALSUS	2018	The percentage has increased since 2010 (57%)	* Age The percentage reduced with age (68% S2; 57% S4) * Gender Percentage was higher among girls than boys at both S2 (71% vs 66%) and S4 (53% vs 61%)	/
Percentage of S2 and S4 pupils who think their father knows a lot or a reasonable amount about them	54%	2015	SALSUS	2018	The percentage has dropped since 2010 (59%)	* Age The percentage reduced with age (68% S2; 48% S4) * Gender Percentage was higher among boys than girls at both S2 (64% vs 57%) and S4 (52% vs 42%)	/
Percentage of S2 and S4 pupils who would talk to their mother if they were worried about something	76%	2015	SALSUS	2018	New question in 2015	* Age The percentage reduced with age (81% S2; 72% S4) * Gender There were no gender differences at either S2 or S4	
Percentage of S2 and S4 pupils who would talk to their father if they were worried about something	55%	2015	SALSUS	2018	New question in 2015	* Age The percentage reduced with age (62% S2; 49% S4) * Gender Percentage was higher among boys than girls at both S2 (69% vs 57%) and S4 (57% vs 42%)	/
Percentage of 11, 13 and 15 year olds who find it easy to talk to their mother	82%	2014	HBSC	2018	The percentage has stayed stable since 1998 (between 79% and 84%). Between 2010 and 2014, there was a slight increase in easy communication with mothers among boys.	* Age The percentage declined with age for both boys (91% at 11 to 74% at 15) and girls (89% to 72%) * Gender There was no gender difference at 11 and 15. At 13, boys were more likely than girls to report easy communication (86%	Scotland performed average in international comparison for 13 year olds and worse than average for 15 year olds (72% Scotland, 78% HBSC average girls; 74% Scotland, 80%

						vs 80%)	HBSC average boys).
Percentage of 11, 13 and 15 year olds who find it easy to talk to their father	66%	2014	HBSC	2018	There has been a steady increase in the percentage who find it easy to communicate with their father since 1994 for both boys (60% to 74%) and girls (47% to 59%).	<p>* Age The percentage declined with age for both boys (81% at 11 to 65% at 15) and girls (72% to 47%)</p> <p>* Gender Boys found it easier than girls to talk to their father at all ages and the gap became larger with age (81% vs 72% at 11; 65% vs 47% at 15)</p>	Scotland performed average in international comparison for 13 year olds and worse than average for 15 year olds (47% Scotland, 54% HBSC average girls; 64% Scotland, 73% HBSC average boys).
Percentage of 11, 13 and 15 year olds who report high levels of family support (composite score of emotional support, problem solving and decision making; 5.5 on a 7 point scale)	62%	2014	HBSC	2018	No time series, new question	<p>* Age Perceived family support reduced with age. 72% reported high family support at 11, 51% at 15</p> <p>* Gender At 13, boys were more likely to report high family support (66%) than girls (59%). There was no gender difference at 11 and 15</p>	Scotland performed worse than average in international comparison for 13 year old girls (65% Scotland, 69% HBSC average) and 15 year olds (54% Scotland, 64% HBSC average girls; 55% Scotland, 67% HBSC average boys). It performed average for 13 year old boys.

5.3 Key points

- The majority of young people in Scotland reported positive **family relationships** (between five and eight in ten depending on the measure), but a substantial minority did not. Scotland performed poorly on family relationships compared with other countries.
- There is strong evidence that family relationships worsen with age throughout childhood. Older children were less likely to say that their parents know a reasonable amount about them; were less likely to find it easy to talk to their parents; were less likely to talk to their parents if they were worried about something; and reported lower levels of family support. This worsening of relationships is more marked in Scotland than other countries.

6. Active

6.1 Elements within the Active domain

The Active domain is defined as ‘Having opportunities to take part in activities such as play, recreation and sport, which contribute to healthy growth and development, at home, in school and in the community’. The key indicators identified here are around area factors such as greenspace, active travel, physical activity and sedentary behaviour.

Area factors

As noted in the Safe chapter, one important link between neighbourhood environment and health outcomes is the availability of play areas and greenspace, which provide opportunities to be physically active, often without cost. As well as the availability of these facilities, it is also important whether they are used by young people. Likelihood of use is partly driven by an individual’s lifestyle and preferences, as well as wider social norms within an area, which in turn are driven by perceptions of the quality and safety of play areas and green spaces^{liv}. Young people themselves have indicated that open spaces for leisure are a prerequisite for health and wellbeing^{lv}.

Physical activity and exercise

Regular physical activity can improve physical and psychological health and quality of life. Participation in physical activity and sport amongst children and adolescents has been linked to multiple positive health outcomes. There is widespread consensus around the health, economic and social benefits of physical activity, with strong scientific evidence that sufficient, regular physical activity is beneficial for the health of body and mind. Physical activity improves the health of the heart, skeletal muscles, bones, blood, immune system and nervous system. Physical activity also improves psychological wellbeing; self-perception and self-esteem; and mood and sleep quality^{lvi}. Adolescence is a crucial time to establish an active lifestyle that will continue into adulthood.

Physical activity guidelines recommend 60 minutes of moderate to vigorous activity a day. One way of meeting this recommendation is through active travel to and from school. Further along the activity spectrum, measures include exercise and participation in sport. These can have the additional benefits of increasing resilience, feelings of achievement and belonging to a group and may prevent young people from participating in risky behaviours. Participation in sport was also found to be the most important childhood resilience factor after the presence of a trusted adult in research with people with four or more ACEs^{lvii}.

It is worth noting that the physical activity measure for children aged 2 to 15 from the Scottish Health Survey included here is largely based on parental report, which generally results in a higher level of adherence than child self-report studies or objective measurement through accelerometers.

Sedentary behaviour

Sedentary behaviour refers to participation in low energy activities requiring minimal physical movement. Contrary to what might be expected, levels of sedentary behaviour are not strongly correlated with how active a young person is, and time spent being sedentary (e.g. watching television or playing computer games) does not necessarily displace time spent engaging in physical activity^{lviii}. Sedentary behaviours, independently of lack of participation in physical activity, are associated with higher levels of obesity^{lix}, as well as negative dietary behaviours such as consumption of sugary drinks^{lx} and energy-dense snacks^{lxi}. They are also associated with poorer mental health^{lxii}.

6.2 Current position

Indicator	Headline figure	Date	Data source	Next data	Time trend	Key inequalities	International comparisons
Area factors							
Percentage of households with children aged 6 to 12 where children have access to at least one play area in their neighbourhood	92%	2016	SHS ³	/	No change over time	* SIMD No difference * Urban/rural No difference	/
Percentage of 13 and 15 year olds who use local greenspace weekly during summertime	64%	2014	HBSC	2018	The percentage decreased from 71% in 2010	* Age Weekly use declined with age. 68% of 13-year olds and 61% of 15-year olds used greenspace weekly * Gender At 15, the percentage was higher among boys than girls (65% vs 56%). There was no gender difference at 13	Scotland only question
Percentage of 13 and 15 year olds who used greenspace at least 2 hours a week in the summertime	54%	2014	HBSC	2018	The percentage decreased slightly from 58% in 2010	* Age The percentage declined with age, particularly among girls (59% to 46%) * Gender At 15, the percentage was lower among girls than boys (46% vs 56%). There was no gender difference at 13	Scotland only question
Active travel							
Percentage of primary and secondary school children normally travelling to school in an active way (walking, cycling, and using a scooter, skateboard or inline/roller skates).	48.8%	2017	Hands up Scotland	2018	The percentage travelling to school in an active way has remained relatively steady since 2008	* Age The percentage was higher among primary school pupils (53.1%) than secondary school pupils (42.7%) * School sector State school pupils were more likely to travel actively (49.2%) than	/

³ Question discontinued after 2016

						independent school pupils (17%)	
Physical activity/exercise							
Percentage of children aged 2-15 who meet physical activities guidelines (including activities at school)	76%	2016	SHeS	2017	<p>There has been an increasing trend since 2012 (70%).</p> <p>The percentage among girls has increased from 64% in 2008, while the percentage among boys has fluctuated.</p>	<p>* Age younger children were more likely than older children to meet the guidelines. The percentage was highest for those aged 5-7 (82%), then declined steadily with increased age, to 61% for those aged 13-15</p> <p>* Gender Boys were more likely to meet the guidelines (79%) than girls (72%). The difference in activity levels between boys and girls was largely explained by differences in the older age groups. At ages 5-7 and 8-10 the gender gap was 1-2 percentage points. This rose to 20 percentage points at 11-12 and 23 percentage points at 13-15</p> <p>* SIMD There was no clear pattern by area deprivation</p>	/
Percentage of 11,13 and 15 year olds who take part in vigorous physical activity at least 4 times a week	49%	2014	HBSC	2018	<p>The percentage has increased from 37% in 2002, although it has fluctuated substantially.</p>	<p>* Gender Participation in vigorous physical activity was higher among boys (56%) than girls (42%)</p> <p>* Age Frequency of vigorous activity was highest at age 11 (65% of boys and 56% of girls)</p>	<p>Scotland performed better than average at age 11, reporting the 4th highest proportions of pupils exercising 4+ times per week across all HBSC countries (61% Scotland; 42% HBSC average). At age 13, boys and girls report rates were only a little higher than the HBSC average (47% Scotland,</p>

							43% HBSC average). By age 15, Scotland performed average in international comparison.
Percentage of S2 and S4 pupils who do sport at least once a week outside of school	66%	2015	SALSUS	2018	/	* Gender Boys were substantially more likely to do sport (75%) than girls (57%) * Age the percentage decreased with age (71% to 61%)	/
Percentage of S2 and S4 pupils who participated in sports clubs, gyms, exercise or dance groups in the last 12 months	62%	2015	SALSUS	2018	Percentage increased between 2008 (54%) and 2013 (62%). There was no further change between 2013 and 2015 among S2 pupils and S4 girls and a small decrease in participation among S4 boys (64% to 61%).	* Age The percentage increased with age (66% S2; 58% S4) * Gender Participation was higher among boys than girls, and the gap widened between S2 (67% vs 61%) and S4 (69% vs 59%)	/
Children aged 2-15 had participated in sport outside of school in the week prior to interview	68%	2016	SHeS	2017	There has been relatively little change since 2010 (ranging between 70% and 66%) following a drop from 73% in 2009.	* Gender Sport participation rates in 2016 were similar for boys and girls (70% and 67%) and followed a similar time trend	/
Sedentary behaviour							
Percentage of 11,13 and 15 year olds who watch television for two or more hours every day during the school week	64%	2014	HBSC	2018	The percentage has decreased since 2002 (75%)	* Age The percentage was greater at ages 13 and 15 (both 68%) than at age 11 (57%) * Gender The percentage was greater for boys in all three age groups (62% vs 51% at 11; 71% vs 65% at 13; 72% vs 64% at 15)	With the exception of 15 year old girls, all the other groups have reported significantly higher levels compared with the HBSC average: * 51% Scotland, 47% HBSC average for girls aged 11; * 60% Scotland, 53% HBSC average for boys

							aged 11 * 65% Scotland, 61% HBSC average for girls aged 13; * 71% Scotland, 62% HBSC average for boys aged 13 * 72% Scotland, 65% HBSC average for boys aged 15
Percentage of 11, 13 and 15 year olds who play computer games for two or more hours every day during the school week	55%	2014	HBSC	2018	There was an increase in girls playing computer games between 2010 and 2014 (29% to 46%) but no change among boys	* Gender The percentage was greater for boys (65%) than girls (46%) * Age The percentage was higher at age 13 (61%) than 11 (52%) and 15 (53%)	Scotland performed significantly worse than the HBSC average: * 42% Scotland, 28% HBSC average for girls aged 11 * 61% Scotland, 46% HBSC average for boys aged 11 * 52% Scotland, 35% HBSC average for girls aged 13 * 70% Scotland, 56% HBSC average for boys aged 13 * 44% Scotland, 30% HBSC average for girls aged 15 * 64% Scotland, 54% HBSC average for boys aged 15 In all age/gender groups, the percentage in Scotland was among the highest of all HBSC countries

6.3 Key points

- **Physical activity** is a key driver of both physical and mental health. Around three quarters of children aged 2-15 met the physical activity guidelines of at least 60 minutes of moderate physical activity a day, leaving around a quarter who did not. Physical activity may include active travel, playing outside or participation in sports.
- Physical activity declined substantially with age. Among 13-15 year olds, only six in ten met the physical activity guidelines, compared with 82% of those aged 5-7. Primary school children were also more likely to travel to school in an active way, and younger teenagers were more likely to use greenspace and participate in sport (including through sports clubs) than older teenagers.
- Girls were less likely to meet the physical activity guidelines and were substantially less likely to take part in sports than boys. The gender difference was greater at older ages.
- **Sedentary behaviour** is a separate measure from physical activity, with independent negative health and wellbeing effects. The majority of young people participated in sedentary behaviour. There has been a shift between types of sedentary behaviour as the percentage of young people watching television for two hours a day decreased, while the percentage playing computer games for two hours increased.
- Boys were also more likely to engage in sedentary behaviour.

7. Respected

7.1 Elements within the Respected domain

The Respected domain is defined as ‘Having the opportunity, along with carers, to be heard and involved in decisions that affect them’. The key indicators identified here are around public attitudes to young people, and young people’s decision making in various contexts.

Public attitudes to young people

As noted in the Nurtured and Achieving chapters, positive relationships between young people and their families, as well as their teachers, are a crucial prerequisite for young people’s health and wellbeing. Relationships with any services young people use are also important. Consultation with children and young people has highlighted the importance of being respected and seen as individuals, within the home, schools, the community and by government. However, children and young people report often feeling looked down on or stigmatised, and say that this is one of the major issues affecting their confidence, wellbeing and potentially life outcomes^{lxiii}.

Participation in decision making

One aspect of a positive relationship is that the young person feels listened to and recognises that their views are valued, through involvement in decisions about their lives. Children and young people have stressed that they want their views to be heard and to make a meaningful contribution to making things better^{lxiv}. Involving young people in decision-making requires supporting them to take meaningful, responsible, age-appropriate roles working in co-operation with professionals and parents/carers^{lxv}. Where young people feel like they aren’t listened to this can lead to disaffection and potentially withdrawal from personal relationships, school and services, with further knock on effects on wider health and wellbeing^{lxvi}.

Conversely, participation in civic engagement groups has been found to be associated with increased confidence and mental wellbeing as well as positive health and wellbeing outcomes for children and adolescents^{lxvii}. Involving people in decision making can further improve service and policy design to meet the needs of young people, leading to longer term positive impacts^{lxviii}.

This domain has been relatively under researched in the past and there are no long term quantitative national measures. However, a number of surveys have been conducted recently to support the Year of Young People, with a desire to repeat the surveys or incorporate questions into national data collections.

7.2 Current position

Indicator	Headline figure	Date	Data source	Next data	Time trend	Key inequalities	International comparisons
Public attitudes to young people							
Percentage of adults in Scotland who agree that young people are trustworthy	41%	2017	SG (custom omnibus)	TBC	/	<p>* Age People aged 18-24 and over 65 were most likely to agree (49% and 50%), while those aged 25-49 were least likely to agree (32%)</p> <p>* Relationship with young people People who personally knew a young person were substantially more likely to agree (47%) than those who didn't (30%)</p> <p>* Occupational group Higher occupational grades (ABC1) were substantially more likely to agree than lower social grades (C2DE) (47% vs. 34%)</p> <p>* SIMD Attitudes improved as area deprivation increased – 33% in SIMD1 agreed, compared with 46% in SIMD5</p> <p>* Household income Those with an income of under 20K were least likely to agree (37%), and those with over 60K most likely to agree</p> <p>* Brexit vote People who voted Remain in the EU referendum were substantially more likely to agree (48%) than Leave voters (34%)</p>	/
Percentage of adults in	26%	2017	SG	TBC	/	* Relationship with young	/

Scotland who agree that young people take responsibility for their own actions			(custom omnibus)			<p>people People who knew a young person were more likely to agree (29%) than those who didn't (20%)</p> <p>* Household income 37% of those in the 60K+ income group agreed, while agreement was lowest in the 20-39K (26%)</p> <p>* Brexit vote People who voted Remain in the EU referendum were substantially more likely to agree that young people take responsibility for their own actions (35%) than those that voted Leave (21%)</p> <p>* There were no statistically significant differences by age, SIMD or occupational groups.</p>	
Percentage of adults in Scotland who say that 11-15 year olds should have 'a great deal' or 'quite a lot' of say over decisions that affect their life	31%	2017	SSAS	TBC	/	<p>* Age The percentage broadly decreased with age, from 41% among 18-24 year olds to 21% among 60-64 year olds</p> <p>* Marital status The percentage was higher among respondents who had never been married (38%) than other marital status groups (29%)</p> <p>* Children in household The percentage was higher among respondents who lived with children (37%) than those who didn't (28 %)</p> <p>There was no meaningful difference by gender or SIMD.</p>	/
Percentage of adults in Scotland who say that 16-	77%	2017	SSAS	TBC	/	There was no meaningful difference by age, gender or	/

18 year olds should have 'a great deal' or 'quite a lot' of say over decisions that affect their life						SIMD	
Percentage of adults in Scotland who say that secondary school pupils should have 'a great deal' or 'quite a lot' of say over how their school is run	38%	2017	SSAS	TBC	/	<p>* Age The percentage was higher among 18-24 year olds (52%) than age groups</p> <p>* Marital status The percentage was higher among respondents who had never been married (53%) than other marital status groups (33%).</p> <p>There was no meaningful difference by gender or SIMD.</p>	/
Percentage of adults in Scotland who say that young people aged 11 to 18 in Scotland today have a lot or a bit more opportunity to get on in life than young people 20 years ago	49%	2017	SSAS	TBC	/	<p>* Age The percentage broadly decreased with age, from 53% among 18-24 year olds to 38% among 60-64 year olds</p> <p>* Marital status The percentage was higher among respondents who had never been married (55%) than other marital status groups (47%)</p> <p>* Household income The percentage was highest among respondents from the lowest income quartile (43%) and highest among those from the highest income quartile (55%)</p> <p>There was no meaningful difference by gender or SIMD</p>	/
Involvement in decision making overall							
Percentage of secondary school pupils who agree that adults in general, such	58%	2017	YPiS	TBC	/	<p>* Gender Boys were more positive than girls (62% vs 55%)</p> <p>* Age The percentage</p>	/

as their family, teachers, youth workers, sport coaches and Scouts/Guides leaders, are good at listening to their views						decreased consistently between S1 (79%) and S5 (45%). However, perceptions improved in S6 (56%) * Health conditions Pupils with physical or mental health conditions were less likely to feel listened to (51%) than those without a health condition (63%)	
Percentage of secondary school pupils who agree that adults in general, such as their family, teachers, youth workers, sport coaches and Scouts/Guides leaders, are good at taking their views into account when making decisions that affect them	53%	2017	YPiS	TBC	/	* Gender Boys were more positive (58% agreed) than girls (51%) * Age The percentage decreased consistently between S1 (72%) and S5 (42%). However, perceptions improved in S6 (51%) * Health conditions Pupils with physical or mental health conditions were much less likely to feel listened to (47%) than those without a health condition (58%)	/
Decision making in schools							
Percentage of secondary school pupils who say they have a lot or some say over what they learn	33%	2017	YPiS	TBC	/	* Gender Boys were more positive (37%) than girls (31%) * Age The percentage decreased from S1 (48%) to S4-S6 (26-31%) * SIMD There was no consistent pattern by area deprivation.	/
Percentage of secondary school pupils who say they have a lot or some say over how they learn	39%	2017	YPiS	TBC	/	* Age Those in S1 were more positive than other school years (52%) * There were no other meaningful socio-demographic differences	/

Percentage of secondary school pupils who say they have a lot or some say over decisions that affect their school as a whole	31%	2017	YPiS	TBC	/	* Age Those in S1 were more positive than other school years (41%) * There were no other meaningful socio-demographic differences in findings	/
Decision-making in out of school activities							
Percentage of secondary school pupils who agree that they feel able to let the adults running out of school activities or groups know their views on how those groups/activities are run	70%	2017	YPiS	TBC	/	* Gender Boys were more positive (74%) than girls (67%) * Health conditions Pupils with a physical or mental health condition were less likely to agree (64%) than those without one (73%) * There were no other meaningful socio-demographic differences in findings	/
Percentage of secondary school pupils who agree that the adults running out of school activities or groups are good at listening to their views, in those groups/activities	70%	2017	YPiS	TBC	/	* Gender The gender difference was relatively small (73% boys vs 68% girls) * Age S1 pupils were most likely to agree (79%), and S5 pupils the least likely (65%). * SIMD Pupils from SIMD5 were more likely to agree (76%) than other quintiles (66 to 71%)	/
Percentage of secondary school pupils who agree that that adults running out of school groups or activities were good at taking their views into account when making decisions that affect them	66%	2017	YPiS	TBC	/	* Age S1 pupils were most likely to agree (75%), and S5 pupils the least likely (59%). There was no consistent pattern for other years * SIMD Pupils from SIMD5 were most likely to agree (72%) compared with other quintiles (61% to 66%)	/
Decision making by parents							
Percentage of parents of 15	86%	2015	PISA	2018	/	/	/

year olds who agree that 'My child's school provides an inviting atmosphere for parents to get involved'							
Percentage of parents of 15 year olds who agree that 'My child's school involves parents in the school's decision-making process'.	73.9%	2015	PISA	2018	/	/	/

7.3 Key Points

- **Attitudes to young people** were mixed. Only around four in ten adults in Scotland agreed that young people are trustworthy, and around a quarter agreed that young people take responsibility for their own actions. It should be noted that a large percentage of people neither agreed nor disagreed.
- Young people's **views on their influence on decision making** varied depending on the context of decision making. Around seven in ten agreed that they are being listened to and have their views taken into account in after school activities, around five in ten with adults in general, and around a third felt that they have a lot or some say on decision making in schools.
- Young people's perceptions of their influence were most positive in S1 and substantially less positive in the older school years. Boys were slightly more positive than girls.

8. Responsible

8.1 Elements within the Responsible domain

The Responsible domain is defined as 'having opportunities and encouragement to play active and responsible roles at home, in school and in the community, and where necessary, having appropriate guidance and supervision, and being involved in decisions that affect them'. The key indicators identified here are around participation in positive activities, risky behaviours and violence/offending.

Positive activities

Being responsible is often conceptualised in terms of the absence of 'irresponsible' behaviours. However, there has recently been a shift towards celebrating participation in positive activities, whether membership of clubs and groups, or volunteering. Such participation can have positive benefits for young people such as new experiences, improved peer relationships, exposure to role models and a feeling of belonging to a community^{lxxix}. Participation in positive activities has been shown to improve psychological wellbeing; self-perception and self-esteem; and skills development^{lxx}. Volunteering in particular also has wider benefits, strengthening community cohesion and public services^{lxxi}, which in turn act as protective factors for young people's health and wellbeing.

A particular type of volunteering is unpaid caring for a relative, friend or neighbour. This provides a crucial benefit to both the people being cared for and wider society, but the mental and physical health and wellbeing of carers can be negatively affected by the caring demands placed upon them^{lxxii}.

Substance use and sexual behaviour

Another broad area under the Responsible domain refers to risk behaviours such as smoking, alcohol and drug use, and unsafe sexual behaviours. As well as the negative physical health impacts of these, they are associated with increased injuries^{lxxiii}, increased sexual risk behaviour^{lxxiv} and emotional and mental health problems^{lxxv}, as well as lower academic achievement^{lxxvi}. Smoking, alcohol and drug use are often viewed as separate issues, but research has shown that these are often interrelated, with one leading to another^{lxxvii}. Adolescent substance use has also been shown to carry over into adulthood and can lead to problems of dependence^{lxxviii}. Early sexual activity has been strongly linked to adverse health outcomes such as sexually-transmitted infections^{lxxix}, unplanned pregnancies^{lxxx}, poor mental health and reduced academic performance^{lxxxi}. In addition, high numbers of sexual partners and inconsistent contraception can be health risk factors for young people^{lxxxii, lxxxiii}.

Another area under the Responsible domain is young people becoming involved in damaging behaviour towards others, from bullying others, to committing offences, and, in the most serious cases, going to prison. Young people committing offenses often has long term negative impacts on their life outcomes.

8.2 Current position

Indicator	Headline figure	Date	Data source	Next data	Time trend	Key inequalities	International comparisons
Volunteering							
Percentage of people aged 16 to 24 providing unpaid help to organisations or groups in the last 12 months	29%	2017	SHS	2018	Rates have fluctuated, with no consistent trend over time	* Gender Volunteering was higher among girls (33%) than boys (24%) * SIMD The rate was highest in SIMD (39%) and lowest in SIMD2 (21%) and SIMD1 (24%)	/
Percentage of people aged 16 to 24 who provide unpaid help to organisations or groups who volunteer once a week or more	44%	2016	SHS	2018	Evidence of some increase between 2007 (29%) and 2014 (51%)	There was no meaningful difference by SIMD or gender	/
Caring responsibilities							
Percentage of S2 and S4 pupils who have caring responsibilities	10%	2015	SALSUS	2018	/	* Age/Gender S2 boys were slightly more likely to report caring responsibilities (13%) than the other age/gender groups (9-10%)	/
Positive activities							
Percentage of S2 and S4 pupils who participated in a group, club or organisation in the last 12 months	79%;	2015	SALSUS	2018	Participation increased between 2006 (75%) and 2008 (78%) and has stayed stable since	* Age Participation was higher among S2 pupils (84%) than S4 pupils (74%) * Gender There was no gender difference at S2, but at S4 pupils participation was higher among boys (76%) than girls (72%)	/
Percentage of households	76%	2016	SHS ⁴	/	/	* Urban/rural Participation	/

⁴ Question discontinued after 2016.

with children ages 8 to 12 where children regularly take part in at least one leisure activity outside of school						was higher in rural areas (82%) than urban areas (74%) * SIMD Participation was lower in SIMD1 urban areas (68%) than other urban areas (77%)	
Smoking							
Percentage of S4 pupils who usually smoke one cigarette or more a week	7%	2015	SALSUS	2018	Smoking prevalence has dropped markedly from 29% in 1996	* Gender there was no gender difference, although over the previous three decades rates tended to be somewhat higher among girls	/
Percentage of S2 pupils who usually smoke one cigarette or more a week ('regular smokers')	2%	2015	SALSUS	2018	Smoking prevalence has dropped since 2002- 2004 (10% girls, 8% boys)	* Gender there was no gender difference, although over the previous three decades rates tended to be somewhat higher among girls	/
Median number of cigarettes smoked in the last week by S4 pupils who smoke at least one cigarette a week	25	2015	SALSUS	2018	The median number dropped from 34 in 2013	* Gender There was no gender difference	/
Percentage of 11, 13 and 15 year olds who have ever smoked tobacco	12%	2014	HBSC	2018	The percentage among 15 year olds has decreased from a peak in 1998 (68% girls; 59% boys).	* Age The percentage increased with age from 1% at 11, 8% at 13 and 28% at 15 * Gender At 13 and 15, the percentage was higher among girls than boys (11% vs 6%; 30% vs 26%). There was no difference at age 11	/
Alcohol							
Percentage of S4 pupils who have ever drunk alcohol	66%	2015	SALSUS	2018	The percentage has steadily decreasing since 2004 (86% girls; 83% boys)	* Gender Girls were slightly more likely than boys to have drunk alcohol (68% vs 63%)	/
Percentage of S2 pupils who have ever drunk alcohol	28%	2015	SALSUS	2018	The percentage has steadily decreased since 2004 (69% girls; 67% boys)	* Gender Boys were slightly more likely than girls to have drunk alcohol (29% vs 26%)	/
Percentage of S4 pupils who have drunk alcohol in the	17%	2015	SALSUS	2018	After a large decrease in prevalence between 2010	* Gender Girls were slightly more likely than boys to have	/

last week					(34%) and 2013 (18%), and little change between 2013 and 2015	drunk alcohol in the last week (19% vs 16%)	
Percentage of S2 pupils who have drunk alcohol in the last week	4%	2015	SALSUS	2018	After a large decrease in prevalence between 2010 (14%) and 2013 (4%), drinking in the last week has remained unchanged between 2013 and 2015	* Gender There was no gender difference	/
Percentage of S2 and S4 pupils who have ever drunk alcohol who have been drunk	62%	2015	SALSUS	2018	There has been a small decline in the percentage between 2002 and 2015	* Age Higher among older pupils (S2 45%; S4 68%) * Gender Girls were more likely than boys to have been drunk at least once (64% vs 59%)	/
Percentage of S2 and S4 pupils who have ever drunk alcohol who experienced a negative effect as a result	55%	2015	SALSUS	2018	Among S2 girls, the percentage increased from 44% in 2013 to 48% in 2015. There was no change among S2 boys and S4 pupils	* Age Higher among older pupils (S2 45%; S4 59%) * Gender Girls were more likely than boys to experience at least one negative effect (60% vs 50%). Girls were more likely than boys to have an argument due to drinking alcohol (34% vs 24%); boys were more likely to have gone to hospital or seen a doctor (11% vs 7%)	/
Percentage 15 year olds who drink weekly	14%	2014	HBSC	2018	Rates have declined since 1998 (45% of girls and 44% of boys).	* Gender boys were more likely to drink weekly than girls (17% vs 11%)	Scotland performed around average in international comparison
Drugs							
Percentage of S4 pupils who have used drugs in the last month	11%	2015	SALSUS	2018	The percentage has decreased gradually since 2002 (20% boys, 23% girls).	* Gender boys were more likely than girls to have used drugs (13% vs 9%)	/
Percentage of S2 pupils	3%	2015	SALSUS	2018	Drug use has decreased	* Gender No gender difference	/

who have used drugs in the last month					since 2002 (6% girls, 10% boys), although between 2013 and 2015, the percentage of 15 year old boys increased slightly from 11% to 13% in 2015. Drug use among 13 year olds and 15 year old girls remained stable.		
Percentage of S2 and S4 pupils who have ever used drugs who experienced a negative effect as a result	41%	2015	SALSUS	2018	There was no change in the percentage over time.	* Age Higher among older pupils (S2 35%; S4 43%) * Gender There was little gender difference in the percentage experiencing any negative effects (39% boys, 43% girls), although there were differences by gender in the effects experienced. Boys were more likely than girls to have had a fight (13% vs 8%) or have been in trouble with the police (13% vs 9%). Girls were more likely to have been sick (21% vs 17%), sent a text/email that they wish they hadn't (13% vs 10%) and to have done something they later regretted (19% vs 16%)	/
Percentage of 13 and 15 year olds who have used cannabis at least once	18% at 15; 4% at 13	2014	HBSC	2018	Among 15 year olds, there was a decrease between 2002 (35 boys, 39% girls) and 2010, with no change since.	* Gender There was no gender difference	Scotland performed around international average
Percentage 15 year olds who have used cannabis within the last month	10%	2014	HBSC	2018	There has been little change among boys since 2002, but there has been a	* Gender The percentage was higher among boys than girls (13% vs 8%)	Scotland performed worse than the average in international

					slight decrease among girls from 12% in 2002 to 8% in 2014		comparison for boys aged 15 (14% Scotland, 9% HBSC average). Scotland performed average for girls aged 15.
Sexual health							
Percentage of 15 year olds who have ever had sex	26%	2014	HBSC	2018	The percentage decreased between 1994 (38%) and 2010 (31%), and then decreased markedly by 2014. This was mainly driven by a decline among girls between 2010 and 2014 (from 35% to 27%).	* Gender The percentage was slightly higher among girls (27%) than boys (24%)	Scotland performed worse than the average for girls (27% Scotland, 17% HBSC average). Scotland performed around average in international comparison for boys
Percentage of 15 year olds who have had sex, who report having had sex at 13 or younger	24%	2014	HBSC	2018	The percentage had not changed in a consistent way	* Gender The percentage was higher among boys than girls (34% vs 16%)	/
Percentage of 15 year olds who have had sex, who have used neither a condom nor the contraceptive pill at the last occasion	29%	2014	HBSC	2018	There was an increase in the percentage from 19% in 2010	* Gender The percentage was higher among boys than girls (31% vs 27%)	/
Percentage of 15 year olds who have had sex, who have used a form of contraception at the last occasion	71%; 42% condom only, 13% pill only, 16% condom and pill	2014	HBSC	2018	The percentage using a condom declined from 2010 (63%), while the percentage using both condom and pill, as well as pill only (both 9%) increased slightly	* Gender Girls more likely than boys to have used the contraceptive pill (33% vs 24%). No gender difference for condom use	For condom use, Scotland performed worse than average in international comparisons for boys (57% Scotland, 68% HBSC average), and about average for girls. For pill, Scotland performed about average in international

							comparisons for boys and girls.
Bullying							
Percentage of 11, 13 and 15 year olds who report bullying others at least twice a month	4%	2014	HBSC	2018	The prevalence of bullying others has changed very little since 2002	* Gender The percentage was higher among boys than girls at 15 years (8% vs 1%). No difference at other ages	Scotland performed better than the average in international comparison at all age/gender groups: * 2% Scotland, 6% HBSC average among girls aged 13 * 3% Scotland, 11% HBSC average among boys aged 13 * 1% Scotland, 6% HBSC average among girls aged 15 * 8% Scotland, 12% HBSC average among boys aged 15
Offending							
Children referred to the SCRA for offence reasons; crude rate per 1,000 children aged 8–15 years	6.7	2016 /17	SCRA	2017 /18	The number has fallen substantially from a peak in 2005/06 (34.9) to 2013/14, and stayed stable since.	* Gender Large majority are boys (77% of referrals)	/
Young people aged 16–25 years in prison crude rate per 100,000 population	300.2	2012 - 2014	Scottish Prison service	No reporting due to technical issues	Fall over time – 19% fall in rate between 2009-11 and 2012-14	* SIMD 17 times as many young people from SIMD1 as SIMD5	/
Average daily prison population under 21	416	2016 -17	Scottish Prison Service	2017 -18	There has been a downward trend over time. There was a break in the	* Gender No data available by gender for this age group, but overall, large majority of prison	/

					data between 2013/14 and 2014/15 which means data can't be compared, but a downward trend is evident both before and after the break	population is male	
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8.3 Key Points

- Around three quarters of children and young people in Scotland **participated in positive activities** such as clubs and organisations.
- The prevalence of **substance use** has decreased in Scotland over the last two decades.
- The decrease has been most marked in smoking. For example, the percentage of S4 pupils who usually smoke at least one cigarette a week dropped 22 percentage points to 7% between 1996 and 2015. The median number of cigarettes smoked by these pupils also dropped.
- The percentage of S4 pupils who have drunk alcohol in the previous week halved from between 2010 and 2015, to 17%.
- The percentage of S4 pupils who have used drugs in the last month also halved between 2002 and 2015, to 11%.
- Looking at **sexual behaviours**, just over a quarter of 15 year old girls, and just under a quarter of 15 year old boys reported having had sex. This was higher than the international average for girls.
- The percentage of 15 year olds who had had sex who used no contraception increased substantially from 19% in 2010, to 29% in 2014.
- In terms of **offending**, there has been a substantial drop in young people referred to the Scottish Children's Reporter Administration on offense grounds, and in the prison population aged 16-25. A large majority of offenders were boys.

9. Included

9.1 Elements within the Included domain

The Included domain is defined as ‘Having help to overcome social, educational, physical and economic inequalities, and being accepted as part of the community in which they live and learn’. The key indicators identified here are around economic inclusion in terms of income and housing, teenage pregnancy, peer relations and neighbourhood relationships.

Economic inclusion

The socioeconomic context in which children and young people grow up impacts on their experiences and their health and wellbeing, both indirectly, through association between socio-economic position and other factors discussed in the preceding chapters, and independently, through a direct link between household incomes and health and wellbeing outcomes.

Child poverty and material deprivation is associated with both immediate and long term health issues; cognitive, social, emotional and behavioural development concerns; as well as a negative impact on young people’s future life prospects^{lxxxiv}. Child poverty has been shown to affect mortality, health at birth, growth, physical morbidity, blood pressure, body mass and psychological and developmental disorders^{lxxxv}. It has also been linked to poor self-regulatory behaviours^{lxxxvi}, which have long term effects into adulthood, as children and young people who experience a lack of control over their own lives are less likely to develop good habits (e.g. diet, exercise, positive coping strategies) which can act as protective factors against negative health and wellbeing outcomes^{lxxxvii}.

Many health issues emerging in childhood are irreversible and continue on into adulthood. Adverse childhood socioeconomic position is associated with a poorer health profile in mid-adulthood (45 years), independent of adult social position and across diverse measures of disease risk and physical and mental functioning^{lxxxviii}. One of the potential explanations for this link focuses on the role of chronic stress in early life causing a propensity to develop chronic diseases in later life, even when individuals appear to have successfully coped and adapted to a later adult role. Research also suggests that the duration of childhood spent in poverty may determine the long term impact on morbidity and mortality in later adulthood^{lxxxix}.

Where poor child health results in poor educational attainment, low self-esteem and disaffection with society, it may limit earning capacity and increase the risk of continued poverty throughout the lifespan^{xc}. OECD research has suggested that children’s social background is a stronger predictor of attainment than school systems^{xc}.

In the short term, one of the most immediate impacts of poverty is through housing quality. Children and young people living in damp, mouldy homes are more prone to respiratory problems, potentially leading to sleep loss and restrictions on children’s daily activities. Housing quality also affects mental health, increasing children’s

chances of experiencing stress, anxiety and depression. The space available within a home can also have an impact. Overcrowding has been linked to stress, tension and sometimes family breakup, anxiety and depression, a lack of privacy (particularly for adolescents) and disrupted sleep patterns. Housing quality can also impact on educational attainment, for example if there is insufficient quiet, warm space for children to do their homework^{xcii}.

Teenage pregnancy

One group that faces multiple barriers in terms of economic and other forms of inclusion is teenage mothers, and teenage pregnancy has therefore been included in this section. Pregnancy in young people is often both a cause and a consequence of social exclusion. Young people who are at higher risk of becoming parents tend to have poorer health and social outcomes compared with older parents^{xciii}, and these are generally intensified as a result of becoming a parent. Early pregnancy is a significant predictor of negative outcomes in the transition from school to work and young mothers are more likely to have lower educational qualifications and employment levels, and a higher risk of poverty^{xciv}. Young mothers also experience poorer mental health than older mothers^{xcv}.

In terms of outcomes for the baby, and linked to the Healthy domain, although young mothers have generally positive pregnancies and births^{xcvi}, birth weight is lower and infant mortality higher among babies born to teenage mothers than those born to older mothers. Teenage mothers also tend to have higher rates of smoking and lower rates of breastfeeding, which means their babies are less likely to benefit from the associated positive health outcomes^{xcvii}.

Peer relationships

Another aspect of the Included domain relates to peer relationships. Peer relationships become increasingly important during adolescence and support from peers can help young people cope with changes in their bodies, emotions, social relationships and school environment^{xcviii}. Peers can offer alternative attitudes, norms and behaviours to those conveyed by family^{xcix}, and may have both positive or negative impacts on health and wellbeing outcomes. In terms of positive influences, social support from peers has been linked with higher levels of physical activity^c and fewer negative mental health outcomes^{ci}. The ACEs literature also highlights the importance of peer support (alongside family and community support) in mitigating the negative effects of childhood adversity^{cii}. School friendships, particularly those developed through structured extracurricular activities may also increase educational engagement and lead to higher educational aspirations. Such benefits have been found to accrue unevenly for those who can afford to enrol in these activities and who are intrinsically motivated or encouraged by parents to do so^{ciii}.

Peers may also have a negative influence in terms of spreading negative attitudes towards school and school work. Some peer groups may also encourage risky health behaviours, such as early onset of alcohol consumption and binge-drinking^{civ}, smoking^{cv}, risky sexual behaviour^{cvi}, eating disorders^{cvi} and snacking and sugary drink consumption^{cviii}. However, the direction of influence between peer relationships and health behaviours is not always clear - peer norms may influence behaviour, but

equally young people may choose their friends based upon pre-existing shared behaviours (e.g. smoking^{cxix} or disordered eating^{cx}).

Neighbourhood relationships

As noted previously, children and adolescents who have a wider range of – or higher quality – social support networks have been found to benefit in terms of having better general health, quality of life and/or wellbeing, and fewer reports of negative health outcomes^{cxii}. This includes parental, peer and school relationships, as discussed in preceding sections, but also wider relationships within the neighbourhood.

Consultation with children and young people shows the value they place on being included within their community, interacting with, and being treated well by, those in the local area, such as shopkeepers and neighbours. Such positive relationships are described as a prerequisite for health and wellbeing by young people themselves^{cxiii}. Better relationships and trust within the community also increase feelings of safety, and where this is lacking this may lead to young people not taking advantage of the opportunities their physical neighbourhood environment offers, such as greenspace or recreational facilities^{cxiii}.

9.2 Current position

Indicator	Headline figure	Date	Data source	Next data	Time trend	Key inequalities	International comparisons
Economic inclusion							
Percentage of children living in relative poverty (living in households whose equivalised income is below 60 per cent of inflation adjusted median income) after housing costs	24%	2014 /15 - 2016 /17	FRS	2015 /16 - 2016 /17 2017 /18	The rate fell from 32% in 1995/96 – 1998/99 to a low of 21% in 2011/12 - 2013/14, but has since started rising again	<p>* Family structure 41% of lone parent households were in poverty, compared with 19% of couple households with children</p> <p>* Economic status 65% of children in poverty lived in a household with at least one person working. 58% of economically inactive households with children were in poverty, compared with 8% of households where all adults were in full time work</p> <p>* Age of mother 50% of children in households where the mother was under 25 were in poverty, compared with 22% where the mother was 25 or over</p> <p>* Disability children in households with a disabled person were more likely to be in poverty (30%) than in other households (21%)</p> <p>* Family size The rate was highest (31%) among households with three or more children and lowest among households with two children (19%)</p> <p>* Ethnicity (2013/14 – 2015/16 data) The rate was higher (37%) among minority ethnic households</p>	/
Percentage of children	22%	2014	FRS	2015	The rate fell from 40% in	(2013/14 – 2015/16 data)	/

living in absolute poverty (living in families with incomes less than 60% of inflation adjusted 2011-12 median income) after housing costs		/15 - 2016 /17		/16 - 2016 /17 2017 /18	1998/99 – 2000/01 to 22% in 2009/10 - 2011/12, and has not changed since	<p>* Family structure the rate was higher (34%) among lone adult households</p> <p>* Age of mother the rate was higher (44%) among households where the mother was under 25</p> <p>* Disability the rate was higher (29%) among households with a disabled person</p> <p>* Family size the rate was higher (29%) among households with three or more children</p> <p>* Ethnicity The rate was higher (37%) among minority ethnic households</p>	
Percentage of children in combined material deprivation (based on a suite of questions in the Family Resources Survey) and low income (below 70% of UK median income) after housing costs	12%	2014 /15 - 2016 /17	FRS	2015 /16 - 2016 /17 2017 /18	The percentage has fluctuated but not changed in a meaningful direction since 2010/11 – 2012/13	<p>(2013/14 – 2015/16 data)</p> <p>* Family structure the rate was higher (27%) among lone adult households</p> <p>* Age of mother the rate was higher (35%) among households where the mother was under 25</p> <p>* Disability the rate was higher (17%) among households with a disabled person</p> <p>* Family size the rate was higher (22%) among households with three or more children</p> <p>* Ethnicity The rate was higher (16%) among minority ethnic households</p>	/
Percentage of children in families who have been in relative poverty for three out of the past four years	10%	2012 /13 – 2015 /16	Understanding society	2013 /14 – 2016 /17	Slightly lower than in 2011-2012 to 2014-2015 (14%)	<p>* Family structure the rate was higher (29%) among lone adult households</p> <p>* Age of mother the rate was higher (26%) among households where the mother was under 25</p>	The rate is lower in Scotland than in England (18%), Northern Ireland (16%) and Wales (20%).

						<p>* Disability the rate was higher (22%) among households with a disabled person</p> <p>* Family size the rate was higher (22%) among households with three or more children</p> <p>* Ethnicity The rate was higher (15%) among minority ethnic households</p>	
Percentage of children, in primary 4 and above, registered for free school meals	37.4%	2018	EAS	2019	Down from 38.7% in 2015. Prior to that not comparable as pre universal P1-P3 provision	/	/
Percentage of households with children living in homes that fail the SHQS	40%	2016	SHCS	2017	Fluctuating, but general downwards trend from 2010 (57%)	<p>* Family structure Single parent families were less likely to live in a house that fails the standard (30%) than other family types (43%). This might be a result of single parents being more likely to live in social sector housing, where the standard is mandatory, unlike the private rented and owner occupier sectors</p> <p>* SIMD Those in the 15% most deprived areas were slightly more likely (44%) to live in a house that doesn't meet the standard than those elsewhere (39%)</p>	/
Percentage of households with children living in fuel poverty (required fuel costs >10% of income)	12%	2016	SHCS	2017	The percentage stayed mostly stable between 2010 and 2014 at around 20%, but has dropped since	<p>* Family structure Single parent families were substantially more likely to live in fuel poverty (23%) than those in other family types (8-11%)</p> <p>* SIMD Those in the 15% most deprived areas were more likely to be in fuel poverty (26%) than those in the rest of Scotland (9%)</p>	/

Teenage pregnancy							
Pregnancies in under 20-year-olds; crude rate per 1,000 females aged 15–19 years	31.6 /1000	2016	ISD	17	Rates have dropped consistently from a peak of 57.7 per 1,000 women in 2007, a 45.1% fall	* SIMD Pregnancy rates were five times higher in SIMD1 than SIMD5 (58.9 compared with 11.8 per 1,000), although the gap narrowed as rates from SIMD1 fell more. Teenagers from deprived areas were more likely to deliver, while those in the least deprived areas were more likely to terminate their pregnancy	No international comparisons available for pregnancy rates (conceptions), but data for live births in Scotland are higher than in the rest of Western Europe. In 2014, the UK had one of the highest rates of teenage births in Europe at 15.5/1000. This compares with 3.6/1000 in Denmark (the lowest). Comparable NRS data for Scotland showed a rate of 16.1/1000.
Peer relations							
Percentage of S2 and S4 pupils who have three or more close friends	81%	2015	SALSUS	2018	The percentage declined slightly between 2006 and 2015 (from 86-88%) for all groups except for S4 boys	* Age Little difference by school year (83% S2; 80% S4) * Gender At S4, boys were slightly more likely than girls to have three or more close friends (78% vs 81%). There was no gender difference at S2	/
Percentage of S2 and S4 pupils who see their friends at least three evenings a week	61%	2015	SALSUS	2018	The percentage spending 3 to 5 evenings out remained stable since 2000, while the percentage spending 6 or 7 nights out with their friends a week declined since 2004 (26% to 15%)	Little difference by school year or gender	/
Percentage of 13 and 15	88%	2014	HBSC	2018	The percentage has not	* Gender Percentage was higher	Scotland only question

year olds who find it easy ('easy' or 'very easy') to talk to their best friend about things that really bother them					changed in a meaningful way	among girls than boys (92% vs 85%)	
Percentage of 11, 13 and 15 year olds with a high level of peer support (composite measure of My friends really try to help me / I can count on my friends when things go wrong / I have friends with whom I can share my joys and sorrows / I can talk about my problems with my friends (Very strongly disagree = 1 to Very strongly agree = 7))	57%	2014	HBSC	2018	No time series, new question	* Gender Girls at all ages were more likely than boys to report high peer support (65% vs 49%). * Age There was little difference in perceived peer support between the ages of 11 and 13, but lower levels at 15 (from 67-70% to 60% for girls; from 51-52% to 43% for boys)	Scotland performed above average for 13 year old girls, average for 13 year old boys and below average for 15 year olds.
Percentage of 11, 13 and 15 year olds who agree that their classmates are kind and helpful	62%	2014	HBSC	2018	Percentage declined from (70%) in 2002. Since 2010, there has been no change in boys' perception of classmate support, but for girls there has been a slight decrease from 65% to 61%.	* Age The percentage declined with age, from 74% at 11 to 57% at 13 and 54% at 15 * Gender No gender difference	Scotland performed below average in international comparison
Percentage of 11, 13 and 15 year olds who report never feeling left out of things	17%	2014	HBSC	2018	The percentage increased between 1998 and 2010 (from 14% to 17% for girls; and 22% to 17% for boys), but then declined back to 1998 levels	* Gender Boys were more likely than girls to never feel left out (21% vs 13%). * Age The likelihood of never feeling left out decreased with age. Among girls, the decrease was largest between 11 and 13 (18% vs 10%), whereas for boys, the greatest change	Scotland only question

						occured between 13 and 15 (22% vs 16%).	
Neighbourhood relations							
Percentage of 13 and 15 year olds who agree that people say hello and talk to each other in the street	72%	2014	HBSC	2018	The percentage has declined from 79% in 2002	* Gender At age 15, 63% of boys agreed compared with 73% of girls. There was no gender difference at age 13	Scotland only question
Percentage of 13 and 15 year olds who agree that they can trust people in their local area	66%	2014	HBSC	2018	The percentage has not changed in a meaningful way	* Gender Boys had more positive perceptions than girls (67% vs 64%) * Age For boys, the percentage declined between ages 13 and 15 (71% to 63%), but there was no difference for girls	Scotland only question
Percentage of 13 and 15 year olds who agree that they can ask for help from neighbours	68%	2014	HBSC	2018	The percentage has declined from 75% in 2002	* Gender no gender difference * Age The percentage reduced with age, from 72% at 13 to 64% at 15	Scotland only question

9.3 Key points

- Almost a quarter of children lived in **relative poverty** after housing costs. Child poverty rates fell substantially between the late 1990s and 2011/12 - 2013/14 (21%), but have since started to increase.
- Almost two thirds of households in poverty had at least one working adult.
- Only 57% of 11, 13 and 15 year olds reported a high level of **peer support**. Among 15 year olds, this was lower than the international average.
- 62% of 11, 13 and 15 year olds agreed that their **classmates are kind and helpful**. This was lower than the international average for all ages and genders.

10. Summary

This paper has reviewed the wide evidence base on health and wellbeing of children and young people in Scotland. This chapter highlights areas of success, where outcomes for young people are positive, or going in the right direction, and areas for improvement, which may usefully be picked up in policy development going forward.

This paper has reviewed each measure individually, but it is worth bearing in mind that many outcomes are interrelated and that many measures, as well as being outcomes in their own right, will also be risk factors or contributors to other outcomes. Additionally, young people who experience one negative outcome are more likely to experience others, and these often compound each other.

Areas of success

One area where significant progress has been made is smoking in the ante-natal period and early years. Both maternal smoking during pregnancy, and babies' exposure to second hand smoke have shown a substantial drop.

Substance use among young people has also reduced very substantially. Smoking has displayed the most substantial drop, but alcohol and drug use have also more than halved over the last decade.

Another area where outcomes are moving into the right direction is children's safety. Fewer young people are now involved in fights, and referrals for offending behaviours have also displayed a substantial reduction over the last decade. Hospital admissions for accidental injury have dropped substantially, and the number of child deaths has also fallen, particularly among children under the age of one and teenagers.

A final area of positive performance is in educational qualifications and positive destinations. A very large majority of young people in Scotland now leave school with at least one SCQF Level 4 qualification and are in education, training or employment 9 months after leaving school. Young people's views of support given by teachers also reflect positively on Scotland in international comparisons.

In all these areas there is room for further improvement, but the trends suggest that current policy activity and/or wider societal trends are developing in the right direction.

Possible areas for future action

There are a number of broad areas where outcomes for young people are less positive, or show substantial room for improvement. Many of these are interrelated.

In the early years, while breastfeeding rates have increased over time, they remain low in international comparison and also continue to display a substantial gap by

area deprivation. Maternal obesity during pregnancy has also increased year on year since it was first recorded and again displays a strong deprivation gap.

Obesity is also increasing among children, which is likely to be partly because diet falls short of recommended good practice, with just over one in ten children eating the recommended five portions of fruit and vegetables and only two thirds eating breakfast every day. A substantial minority of children also do not meet the recommended guidelines of 60 minutes of physical activity per day.

The poor performance on diet and physical activity is also likely to contribute to falling levels of mental wellbeing, another source for concern. Many mental wellbeing measures – WEMWBS, SDQ and confidence – have shown a worsening position in recent years. This overall time trend is driven by change among girls, with little change among boys. Girls display lower levels of wellbeing than boys on all measures considered. This gender gap may be related to substantial gender gaps in measures that drive mental wellbeing, such as participation in sports and pressure of school work. Other factors such as social media use, on which there is currently no national cross-sectional data, may also be important. The gender gaps widen particularly among the older ages, and mental wellbeing also decreases with age, highlighting the importance of the teenage years.

Another driver of mental wellbeing is around relationships, and here Scotland also shows room for improvement. Looking at peer relationships, only around six in ten pupils report high levels of peer support, and that their classmates are kind and helpful. This is lower than the international average. Regular bullying is also experienced by 15 per cent of pupils, higher than the international average.

Regarding family relationships, a substantial proportion of between two and five in ten, depending on the measure, do not report good relationships with their parents. Scotland performed poorly in family relationships compared with the international average. Family relationships worsen with age throughout childhood on all measures. Public attitudes to young people also show that only a minority of people in Scotland hold positive attitudes to young people. For a significant number of young people, particularly young men, this means they have poor relationships with their peers their family and the wider society, suggesting their resilience and future wellbeing is severely compromised.

While progress in school qualifications and positive destinations measures are very positive for Scotland, the substantial area deprivation gap within this remains a concern. Teacher judgement data on attainment also shows that a notable percentage of between 15 and 30 per cent of pupils, depending on subject, do not achieve the given CfE level; and this data also shows that achievement drops off substantially throughout primary school, only picking up at secondary school.

A final area of concern to note is that child poverty has increased since 2011/12, with a quarter of children now living in relative poverty after housing costs. Poverty is a structural factor that is closely related to a wide range of negative health and wellbeing outcomes, and also has an independent long term effect on outcomes into adulthood. A large number of outcomes discussed in this review also vary substantially by area deprivation, highlighting the importance of understanding the

interaction between place and different inequality gaps and of seeking to address them holistically.

11. References

- ⁱ Hill M, Stafford A, Seaman P, Ross N, Daniel B. (2007) Parenting and resilience,, Joseph Rowntree Foundation; <https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/parentingresilience-children.pdf>
- ⁱⁱ Taulbut M, Walsh D. (2013) Poverty, parenting and poor health: comparing early years' experiences in Scotland, England and three city regions. GCPH. http://www.gcph.co.uk/publications/434_poverty_parenting_and_poor_health
- ⁱⁱⁱ NHS Health Scotland, Adverse Childhood Experiences <http://www.healthscotland.scot/population-groups/children/adverse-childhood-experiences>
- ^{iv} Equality, poverty and social security analysis (2017) The life chances of young people in Scotland: an evidence review for the First Minister's Independent Advisor on Poverty and Inequality, Scottish Government <http://www.gov.scot/Resource/0052/00522057.pdf>
- ^v Pickett, W. et al. (2013). Trends and socioeconomic correlates of adolescent physical fighting in 30 countries. *Pediatrics*, 131: e18-26.
- ^{vi} Copeland, W.E. et al (2013). Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry*, 70(4):419-26.
- ^{vii} Vieno, A. et al (2011). Different Forms of Bullying and Their Association to Smoking and Drinking Behavior in Italian Adolescents. *Journal of School Health*, 81(7): pp. 393-399
- ^{viii} Molcho, M., et al (2004). Substance use and youth violence. A study among 6th to 10th grade Israeli school children. *International Journal of Adolescent Medicine and Health*, 16(3): 239-251
- ^{ix} Nansel, T.R., et al. (2001). Bullying Behaviors Among US Youth. *JAMA: Journal of the American Medical Association*, 285(16): p. 2094.
- ^x Nansel, T.R., Craig, W., Overpeck, M.D., Saluja, G. and Ruan, W.J. (2004). Cross-national consistency in the relationship between bullying behaviors and psychosocial adjustment. *Archive of Pediatrics and Adolescent Medicine*, 158(8): 730-736.
- ^{xi} Laufer, A. and Harel, Y. (2003). The role of family, peers and school perceptions in predicting involvement in youth violence. *International Journal of Adolescent Medicine and Health*, 15(3): 235-244.
- ^{xii} Neville, F.G. (2015). Preventing violence through changing social norms. In P. Donnelly and C. Ward (Eds.) *Oxford Textbook of Violence Prevention: Epidemiology, Evidence, and Policy* (p239-244). Oxford: Oxford University Press
- ^{xiii} Eslea, M. and Smith, P.K. (2000). Pupil and parent attitudes towards bullying in primary schools. *European Journal of Psychology of Education*, 15(2): 207-219.
- ^{xiv} Sosin, D.M., Koepsell, T.D., Rivara, F.P., and Mercy, J.A. (1995). Fighting as a marker for multiple problem behaviors in adolescents. *Journal of Adolescent Health* 16(3): 209-215.
- ^{xv} Krug, E.G., Mercy, J.A., Dahlberg, L.L. and Zwi, A.B. (2002). The world report on violence and health. *Lancet*; 360(9339): 1083-1088.
- ^{xvi} McPherson, K et al (2013) Social capital and the health and wellbeing of children and adolescents, GCPH http://www.gcph.co.uk/publications/398_social_capital_and_the_health_and_wellbeing_of_children_and_adolescents?&aq=social+capital
- ^{xvii} Glasgow Centre for Population Health. (2013) Briefing Paper Concepts Series 11: The built environment and health: an evidence review. Glasgow: GCPH; 2013. Available at: http://www.gcph.co.uk/publications/472_concepts_series_11-the_built_environment_and_health_an_evidence_review
- ^{xviii} Mitchell R. Can our urban environments help us be (equally) well? Seminar presentation at "Nature and nurture, people and places"; 27 November 2013. Available at: <http://www.gcph.co.uk/events/140>
- ^{xix} Children's Parliament (2014) Mapping our Future, <https://www.childrensparliament.org.uk/wp-content/uploads/Mapping-Our-Future-report.pdf>
- ^{xx} Hill M, Turner K, Walker M, Stafford A, Seaman P. (2006) Children's perspectives on social exclusion and resilience in disadvantaged urban communities. In: Children, young people and social inclusion. Participation for what? Kay E, Tisdall M, Davis JM, Prout A, Hill M (eds.) University of Bristol; Polity Press
- ^{xxi} Royal College of Physicians (1992) Smoking and the young. London: Royal College of Physicians
- ^{xxii} Information Services Division (2017) Births in Scottish hospitals <http://www.isdscotland.org/Health-Topics/Maternity-and-Births/Publications/2017-11-28/2017-11-28-Births-Report.pdf>

- ^{xxiii} Pulver LS, Guest-Warnick G, Stoddard GJ, Byington CL, Young PC. Weight for gestational age affects the mortality of late preterm infants. *Pediatrics* 2009; 123: e1072-7.
- ^{xxiv} Victora CG, Bahl R, Barros A, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet* 2016; 387: 475-90.
- ^{xxv} Bardsley, D et al (2017) Scottish Health Survey 2016 Main Report. Scottish Government <http://www.gov.scot/Publications/2017/10/2970/downloads#res-1>
- ^{xxvi} Scarborough, P, Bhatnagar, P, Wickramasinghe, KK, Allender, S, Foster, C and Rayner, M (2011). The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: an update to 2006–07 NHS costs. *J Public Health*; 33:527-535.
- ^{xxvii} Bardsley, D et al (2017) Scottish Health Survey 2016 Main Report. Scottish Government p.114 <http://www.gov.scot/Publications/2017/10/2970/downloads#res-1>
- ^{xxviii} Rampersaud, G.C., Pereira, M.A., Girard, B.L., Adams, J. and Metz, J.D. (2005). Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. *Journal of the American Dietetic Association*, 105(5): 743-760.
- ^{xxix} Berkey, C.S., Rockett, H.R.H., Gillman, M.W., Field, A.E. and Colditz, G.A. (2003). Longitudinal study of skipping breakfast and weight change in adolescents. *International Journal of Obesity*, 27(10): 1258-1266.
- ^{xxx} Sheiham, A. and Watt, R.G. (2000). The common risk factor approach: a rational basis for promoting oral health. *Community Dentistry and Oral Epidemiology*, 28(6): 399-406.
- ^{xxxi} Pedersen, S., Grønhoj, A. and Thøgersen, J. (2015). Following family or friends. Social norms in adolescent healthy eating. *Appetite*, 86: 54-60.
- ^{xxxii} Franko, D.L., Thompson, D., Affenito, S.G., Barton, B.A. and Striegel-Moore, R.H. (2008). What mediates the relationship between family meals and adolescent health issues. *Health Psychology*, 27(2S): S109-117.
- ^{xxxiii} Videon, T.M. and Manning, C.K. (2003). Influences on adolescent eating patterns: the importance of family meals. *Journal of Adolescent Health*, 32(5): 365-373
- ^{xxxiv} Bardsley, D et al (2017) Scottish Health Survey 2016 Main Report. Scottish Government p.178 <http://www.gov.scot/Publications/2017/10/2970/downloads#res-1>
- ^{xxxv} Academy of Medical Royal Colleges (2009). *No Health Without Mental Health*. <https://www.rcpsych.ac.uk/pdf/ALERT%20print%20final.pdf>
- ^{xxxvi} McGorry, PB, Bates, T and Birchwood, M (2013). Designing youth mental health services for the 21st century: examples from Australia, Ireland and the UK. *British Journal of Psychiatry*; 202(54):30-35.
- ^{xxxvii} *Mental Health Strategy for Scotland 2012-2015*. Edinburgh: Scottish Government, 2012. Available from: www.gov.scot/Publications/2012/08/9714/2
- ^{xxxviii} Scottish Government (2017) The life chances of young people in Scotland: an evidence review for the First Minister's Independent Advisor on Poverty and Inequality, <http://www.gov.scot/Publications/2017/07/3569/0>
- ^{xxxix} Scottish Government (2015) Consequences, risk factors, and geography of young people not in education, employment or training (NEET). <http://www.gov.scot/Publications/2015/10/2258>
- ^{xl} Harkins, C. and J. Egan, (2013) The rise of in work poverty and the changing nature of poverty and work in Scotland: what are the implications for population health? http://www.gcph.co.uk/assets/0000/4018/In-work_poverty_FINAL_Oct.pdf
- ^{xli} McLellan, L et al (1999) Health behaviour and the school environment in New South Wales, Australia, *Social Science and Medicine*, 49(5), pp.611-19
- ^{xlii} Frieman, J.C. et al (2009) The relationship of schools and emotional health and bullying, *International Journal of Public Health*, 54(2), pp251-259
- ^{xliii} Children's Parliament (2017) What Kind of Scotland? <https://www.childrensparliament.org.uk/wp-content/uploads/WhatKindofScotlandOnline2017.pdf>
- ^{xliiv} Collins W.A. and Steinberg L. (2006). Adolescent development in interpersonal context. In Damon W (Series eds.) and Eisenberg N (Eds.). *Handbook of Child Psychology* (5th ed.). New York: Wiley; pp.1005-1052.
- ^{xliv} Oman, R.F., Vesely, S.K., Tolma, E. and Aspy, C.B. (2007). Does family structure matter in relationships between youth assets and youth alcohol, drug and tobacco use? *Journal of Research on Adolescence*, 17(4): 743-766.

- ^{xlvi} Stattin H. and Kerr M. (2000). Parental monitoring: a reinterpretation. *Child Development*, 71(4): 1072-1085.
- ^{xlvii} Center on the Developing Child, Harvard University <https://developingchild.harvard.edu/science/key-concepts/resilience/>
- ^{xlviii} Bellis, M., Hardcastle, K., Ford, K. et al (2017) Does continuous trusted adult support in childhood impart life-course resilience against adverse childhood experiences - a retrospective study on adult health-harming behaviours and mental well-being. *BMC Psychiatry BMC series* 2017 17:110
- ^{xlix} Hughes, K et al (2018) Sources of resilience and their moderating relationships with harms from adverse childhood experiences http://www.wales.nhs.uk/sitesplus/documents/888/ACE%20%26%20Resilience%20Report%20%28Eng_final2%29.pdf
- ⁱ Kuendig, H. and Kuntsche, E. (2006). Family bonding and adolescent alcohol use: moderating effect of living with excessive drinking parents. *Alcohol and Alcoholism*, 41: 464-471.
- ⁱⁱ Gillman, M.W., Rifas-Shiman, S.L., Frazier, A.L., Rockett, H.R.H., Camargo, C.A., Field, A.E., Berkey, C.S. and Colditz, G.A. (2000). Family dinner and diet quality among older children and adolescents. *Archives of Family Medicine*, 9: 235-240.
- ⁱⁱⁱ Dodds, S (2016) Health and early years, children and young people: a GCPH synthesis, http://www.gcph.co.uk/assets/0000/5914/Health_and_Early_Years_web.pdf
- ⁱⁱⁱⁱ NHS Health Scotland (2011) Briefing on attachment, http://www.healthscotland.com/uploads/documents/18212-A_brief_guide_to_attachment.pdf
- ^{lv} Glasgow Centre for Population Health (2008) It's More Than Just the Park: Facilitators and Barriers to the Use of the Urban Greenspace http://www.gcph.co.uk/assets/0000/0393/GCPH_briefing_paper_FS_17_web.pdf
- ^{lv} Children's Parliament (2017) What Kind of Scotland? <https://www.childrensparliament.org.uk/wp-content/uploads/WhatKindofScotlandOnline2017.pdf>
- ^{lvi} Brown WJ, et al (2012). Development of Evidence-based Physical Activity Recommendations for Adults (18-64 years). Report prepared for the Australian Government Department of Health, August 2012. [www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines/\\$File/DEB-PAR-Adults-18-64years.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines/$File/DEB-PAR-Adults-18-64years.pdf)
- ^{lvii} Hughes, K et al (2018) Sources of resilience and their moderating relationships with harms from adverse childhood experiences http://www.wales.nhs.uk/sitesplus/documents/888/ACE%20%26%20Resilience%20Report%20%28Eng_final2%29.pdf
- ^{lviii} Pearson, N. et al. (2014). Associations between sedentary behaviour and physical activity in children and adolescents: a meta-analysis. *Obesity Reviews*, 15(8), 666-675.
- ^{lix} Leech, R.M., et al (2014). The clustering of diet, physical activity and sedentary behaviour in children and adolescents: a review. *International Journal of Behavioural Nutrition and Physical Activity*, 11(4).
- ^{lx} Kremers, S.P.J. et al (2007). Adolescent screen-viewing behaviour is associated with consumption of sugar-sweetened beverages: The role of habit strength and perceived parental norms. *Appetite*, 48: 345-350.
- ^{lxi} Pearson, N. and Biddle, S.J.H. (2011). Sedentary behaviour and dietary intake in children, adolescents, and adults: a systematic review. *American Journal of Preventive Medicine*, 41(2): 178-188.
- ^{lxii} Hallal, P.C., Andersen, L.B., Bull, F.C., Guthold, R., Haskell, W. and Ekelund, U. (2012). Global physical activity levels: surveillance progress, pitfalls, and prospects. *The Lancet*, 380(99838): 247-257.
- ^{lxiii} Children's Parliament (2017) What Kind of Scotland? <https://www.childrensparliament.org.uk/wp-content/uploads/WhatKindofScotlandOnline2017.pdf>
- ^{lxiv} Children's Parliament (2017) What Kind of Scotland? <https://www.childrensparliament.org.uk/wp-content/uploads/WhatKindofScotlandOnline2017.pdf>
- ^{lxv} Lawson L, Kearns A. 'Power to the (young) people'? Children and young people's empowerment in the relocation process associated with urban re-structuring. *International Journal of Housing Policy* 2016;16(3):376-403. Available at: <http://www.tandfonline.com/doi/full/10.1080/14616718.2016.1143788>
- ^{lxvi} Children's Parliament (2017) What Kind of Scotland? <https://www.childrensparliament.org.uk/wp-content/uploads/WhatKindofScotlandOnline2017.pdf>

- ^{lxvii} McPherson K et al (2013). The role and impact of social capital on the health and wellbeing of children and adolescents: a systematic review. Glasgow: GCPH; http://www.gcph.co.uk/publications/398_social_capital_and_the_health_and_wellbeing_of_children_and_adolescents
- ^{lxviii} Children in Scotland/SG (2018) The Impact of Children and Young People's Participation on Policy Making <http://www.gov.scot/Publications/2018/02/7671/0>
- ^{lxix} Children's Parliament (2017) What Kind of Scotland? <https://www.childrensparliament.org.uk/wp-content/uploads/WhatKindofScotlandOnline2017.pdf>
- ^{lxx} Hill M, et al (2007) Parenting and resilience. York: Joseph Rowntree Foundation, <https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/parentingresilience-children.pdf>
- ^{lxxi} Scottish Government (2016) Scotland's People Annual Report: Results from the 2016 Scottish Household Survey, <http://www.gov.scot/Publications/2017/09/9979/0>
- ^{lxxii} Scottish Government (2015) Scotland's Carers <http://www.gov.scot/Resources/0047/00473691.pdf>
- ^{lxxiii} Naimi, T.S., Brewer, R.D., Mokdad, A., Denny, C., Serdula, M.K. and Marks, J.S. (2003). Binge drinking among US adults. *Journal of the American Medical Association*, 289: 70-75
- ^{lxxiv} Tapert, S.F., Arons, G.A., Sedlar, G.R. and Brown, S.A. (2001). Adolescent substance use and sexual risk-taking behavior. *Journal of Adolescent Health*, 28: 181-189.
- ^{lxxv} Lien, L., Sagatun, A., Heyerdahl, S., Sogaard, A.J. and Bjertness, E. (2009). Is the relationship between smoking and mental health influenced by other unhealthy lifestyle factors? Results from a 3-year follow-up study among adolescents in Oslo, Norway. *Journal of Adolescent Health*, 45: 609-617.
- ^{lxxvi} Fergusson, D.M., Horwood, L.J. and Beautrais, A.L. (2003). Cannabis and educational achievement. *Addiction*, 98(12): 1681-1692.
- ^{lxxvii} Jackson, C. Haw, S. and Frank, J. (2010). Adolescent and Young Adult Health in Scotland: Interventions that address multiple risk behaviours or take a generic approach to risk in youth. Edinburgh: Scottish Collaboration for Public Health Research and Policy.
- ^{lxxviii} Viner, R.M. and Taylor, B. (2007). Adult outcomes of binge drinking in adolescence: findings from a UK national birth cohort. *Journal of Epidemiology and Community Health*, 61: 902-907.
- ^{lxxix} Epstein, M., Bailey, J.A., Manhart, L.E., Hill, K.G., Hawkins, J.D., Haggerty, K.P. and Catalano, R.F. (2014). Understanding the link between early sexual initiation and later sexually transmitted infection: test and replication in two longitudinal studies. *Journal of Adolescent Health*, 54(4): 435-441.
- ^{lxxx} Godeau, E., Gabhainn, S. N., Vignes, C., Ross, J., Boyce, W. and Todd, J. (2008). Contraceptive use by 15-year-old students at their last sexual intercourse: results from 24 countries. *Archives of Pediatrics & Adolescent Medicine*, 162(1): 66-73.
- ^{lxxxi} Sabia, J. J. and Rees, D. I. (2008). The effect of adolescent virginity status on psychological well-being. *Journal of Health Economics*, 27(5): 1368-1381.
- ^{lxxxii} Valois, R.F., Oeltmann, J.E., Waller, J. and Hussey, J.R. (1999). Relationship between number of sexual intercourse partners and selected health risk behaviours among public high school adolescents. *Journal of Adolescent Health*, 25(5): 328-335.
- ^{lxxxiii} Reed, J., England, P., Littlejohn, K., Bass, B.C. and Caudillo, M.L. (2014). Consistent and inconsistent contraception among young women: Insights from qualitative interviews. *Family Relations*, 63(2): 244-258
- ^{lxxxiv} Dodds, S (2016) Health and early years, children and young people: a GCPH synthesis, http://www.gcph.co.uk/assets/0000/5914/Health_and_Early_Years_web.pdf
- ^{lxxxv} Naven L, Egan J. (2013) Addressing child poverty in the NHS in Scotland – the role of nurses. *Primary Health Care* 2013;23(5):16-22. <http://journals.rcni.com/doi/abs/10.7748/phc2013.06.23.5.16.e747>
- ^{lxxxvi} McEwen B. Of Molecules and Mind: Stress, the Individual and the Social Environment. GCPH Seminar Series 3, lecture 3; 23 January 2007. Available at: <http://www.gcph.co.uk/events/32>
- ^{lxxxvii} Dodds, S (2016) Health and early years, children and young people: a GCPH synthesis, http://www.gcph.co.uk/assets/0000/5914/Health_and_Early_Years_web.pdf
- ^{lxxxviii} McLean J. (2013) Psychological, social and biological determinants of ill health (pSoBid). Glasgow: GCPH; http://www.gcph.co.uk/publications/421_psychological_social_and_biological_determinants_of_ill_health_psobid

- ^{lxxxix} Packard CJ, et al (2011) Early life socioeconomic adversity is associated in adult life with chronic inflammation, carotid atherosclerosis, poorer lung function and decreased cognitive performance: a cross-sectional, population-based study. *BMC Public Health* 11:42 <http://bmcpubhealth.biomedcentral.com/articles/10.1186/1471-2458-11-42>
- ^{xc} Naven L, Egan J. Addressing child poverty in the NHS in Scotland – the role of nurses. *Primary Health Care* 2013;23(5):16-22. Available at: <http://journals.rcni.com/doi/abs/10.7748/phc2013.06.23.5.16.e747>
- ^{xc i} Dodds, S (2016) Health and early years, children and young people: a GCPH synthesis, http://www.gcph.co.uk/assets/0000/5914/Health_and_Early_Years_web.pdf
- ^{xc ii} Lawson L, Kearns A. (2016) Changing contexts and critical moments: interim outcomes for children and young people living through involuntary relocation. Unpublished manuscript; cited in Dodds, S (2016) Health and early years, children and young people: a GCPH synthesis, http://www.gcph.co.uk/assets/0000/5914/Health_and_Early_Years_web.pdf
- ^{xc iii} Bradshaw, P; Schofield, L & Maynard, L (2014) The experiences of mothers aged under 20: Analysis of data from the Growing Up in Scotland study. Edinburgh: The Scottish Government <http://www.gov.scot/Publications/2014/02/8789>
- ^{xc iv} Independent Advisor on Poverty and Inequality (2017) The Life Chances of Young People in Scotland, A Report to the First Minister <http://www.gov.scot/Publications/2017/07/1451>
- ^{xc v} Mental Health Foundation (2013) Young mums together: promoting young mothers' wellbeing. Available from: <https://www.mentalhealth.org.uk/publications/young-mums-together-report>
- ^{xc vi} Bradshaw, P; Schofield, L & Maynard, L (2014) The experiences of mothers aged under 20: Analysis of data from the Growing Up in Scotland study. Edinburgh: The Scottish Government <http://www.gov.scot/Publications/2014/02/8789>
- ^{xc vii} NHS Health Scotland, Maternal health and early years for early years workers, <http://www.maternal-and-early-years.org.uk/topic/pregnancy/teenage-pregnancy>
- ^{xc viii} Sawyer, S.M., Afifi, R.A., Bearinger, L.H., Blakemore, S., Dick, B., Ezeh, A.C. and Patton, G.C. (2012). Adolescence: a foundation for future health. *The Lancet*, 379(9826): 1630-1640
- ^{xc ix} Brown, B.B. and Larson, J. (2004). Peer relationships in adolescence. *Handbook of Adolescent Psychology Bulletin*, 21: 995-998.
- ^c Fitzgerald, A., Fitzgerald, N. and Aherne, C. (2012). Do peers matter? A review of peer and/or friends' influence on physical activity among American adolescents. *Journal of Adolescence*, 35(4): 941-958
- ^{ci} Ueno, K. (2005). The effects of friendship networks on adolescent depressive symptoms. *Social Science Research*, 34: 484-510.
- ^{cii} Hughes, K et al (2018) Sources of resilience and their moderating relationships with harms from adverse childhood experiences http://www.wales.nhs.uk/sitesplus/documents/888/ACE%20%26%20Resilience%20Report%20%28Eng_final%29.pdf
- ^{ciii} Dodds, S (2016) Health and early years, children and young people: a GCPH synthesis, http://www.gcph.co.uk/assets/0000/5914/Health_and_Early_Years_web.pdf
- ^{civ} Ali, M.M. and Dwyer, D.S. (2010). Social network effects in alcohol consumption among adolescents. *Addictive Behaviours*, 35: 337-342.
- ^{cv} Holliday, J.C., Rothwell, H.A. and Moore, L.A.R. (2010). The relative importance of different measures of peer smoking on adolescent smoking behaviour: cross-sectional and longitudinal analyses of a large British cohort. *Journal of Adolescent Health*, 47(1): 58-66.
- ^{cvi} Ali, M.M. and Dwyer, D.S. (2011). Estimating peer effects in sexual behaviour among adolescents. *Journal of Adolescence*, 34(1): 183-190.
- ^{c vii} Hutchinson, D.M. and Rapee, R.M. (2007). Do friends share similar body image and eating problems? The role of social networks and peer influences in early adolescence. *Behaviour Research and Therapy*, 45: 1557-1577.
- ^{c viii} Wouters, E.J., Larsen, J.K., Kremers, S.P., Dagnelie, P.C. and Geenen, R. (2010). Peer influence on snacking behavior in adolescence. *Appetite*, 55(1): 11-17.
- ^{c ix} Mercken, L. et al (2012). A longitudinal social network analysis of peer influence, peer selection, and smoking behavior among adolescents in British schools. *Health Psychology*, 31(4): 450-459.
- ^{cx} Rayner, K.E., Schniering, C.A., Rapee, R.M., Taylor, A. and Hutchinson, D.M. (2013). Adolescent girls' friendship networks, body dissatisfaction, and disordered eating: examining selection and socialization processes. *Journal of Abnormal Psychology*, 122(1): 93-104.

^{cx}_i Dodds, S (2016) Health and early years, children and young people: a GCPH synthesis, http://www.gcph.co.uk/assets/0000/5914/Health_and_Early_Years_web.pdf

^{cx}_{ii} Children's Parliament (2017) What Kind of Scotland? <https://www.childrensparliament.org.uk/wp-content/uploads/WhatKindofScotlandOnline2017.pdf>

^{cx}_{iii} Hill M, Tuet al (2006) Children's perspectives on social exclusion and resilience in disadvantaged urban communities. In: Children, young people and social inclusion. Participation for what? Kay E, et al (eds.) University of Bristol; Polity Press; 2006.



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