



National Audit Office

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## Report

by the Comptroller  
and Auditor General

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**Department of Health & Social Care**

# Childhood obesity

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Department of Health & Social Care

# Childhood obesity

Report by the Comptroller and Auditor General

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Gareth Davies  
Comptroller and Auditor General  
National Audit Office

2 September 2020

This report examines the effectiveness of the government's approach to reducing childhood obesity in England by considering the evidence base and progress so far.

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## Key facts

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**20.2%**

proportion of 10 to 11 year old children who were classified obese in 2018/19

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**26.9%**

proportion of 10 to 11 year old children who were classified obese in the most deprived areas in 2018/19

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**£61.7m**

recorded spending by local authorities on childhood obesity in 2018/19, including the National Child Measurement Programme

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**20%**

ambition for sugar reduction in foods most commonly eaten by children by 2020

**2.9%**

overall sugar reduction in foods most commonly eaten by children by September 2019

**£240 million**

revenue generated by the Soft Drinks Industry Levy in 2018-19

**£6.1 billion**

government estimate of annual cost of obesity to the NHS

**£1.5 million**

funding over three years from 2019-20 to 2021-22, for five local authorities to develop local actions to tackle childhood obesity

# Summary

**1** In the simplest terms, obesity is caused by energy intake exceeding energy use. In England, a large proportion of children are obese, particularly older children. Children who are overweight or obese have a higher chance of being obese adults, increasing the risk that they develop chronic diseases such as some cancers, type 2 diabetes and heart disease. Overweight or obese children are more likely to experience bullying, stigmatisation and low self-esteem than other children. Obesity also doubles the risk of dying prematurely and obese adults are more likely to be living with conditions like depression. There is evidence to suggest that obesity is a material risk factor for COVID-19 in adults. Government estimates that the cost of obesity to the NHS is £6.1 billion and £27 billion to wider society. Successive governments have tried to tackle the problem of childhood obesity.

**2** The Department of Health & Social Care (the Department) is responsible for setting and overseeing obesity policy in England. In 2016, it published the first chapter of a new childhood obesity plan (the plan). The plan aimed to significantly reduce England's rate of childhood obesity over the next 10 years. The second chapter of the plan was published in 2018 and aimed to halve childhood obesity and reduce the gap in obesity between children from the most and least deprived areas by 2030.

**3** The Department runs the Childhood Obesity Programme (the programme) to oversee the delivery of the actions set out in the plan. Several other government departments lead individual projects within the programme. NHS England & NHS Improvement (NHSE&I) is responsible for commissioning services which treat complications associated with obesity. Local authorities also have a role to support people who are already obese. The NHS Long Term Plan, published in 2019, also placed increased focus on prevention. This included the aim to support more obese people to attend weight management services.

**4** In terms of public health, Public Health England's (PHE) objective is to protect and improve the nation's health and wellbeing, and reduce health inequalities by promoting healthier behaviours, advising government, supporting action by local authorities, the NHS and the public and providing an evidence base to improve understanding of public health challenges. Local authorities are responsible for improving the health of their local population and for delivering public health services, including reducing childhood obesity, for which they receive an annual ringfenced public health grant from government. They must provide several mandated public health functions with the grant (including the National Child Measurement Programme), but otherwise have a large degree of freedom in how they spend it. This includes spending on obesity services for adults and children which respond to the specific health challenges of local authorities.

**5** On 18 August 2020, the government announced that it will merge PHE's health protection responsibilities with NHS Test and Trace to form the new National Institute of Health Protection with immediate effect. The government intends to engage on the future options for where PHE's other public health responsibilities, including its work on reducing childhood obesity, will sit in the future.

**6** This report examines the effectiveness of the government's approach to reducing childhood obesity in England by considering the evidence base and progress so far. We have focused on children as dealing with obesity early in life prevents future costs and obesity-related health problems. We have also focused on preventive measures rather than treatment. The report sets out:

- levels and trends in childhood obesity (Part One);
- government action to reduce childhood obesity (Part Two); and
- local authorities' role in reducing childhood obesity (Part Three).
- We set out our audit approach in Appendix One and evidence base in Appendix Two.

## **Key findings**

**7 The government estimates that treatment of obesity-related conditions in England costs the NHS £6.1 billion each year.** It also estimates that wider costs to society – for example, from absence from work – could be as much as £27 billion annually. There are limits with both these estimates. The cost to the NHS is based on 2014 costs which have been inflated and does not take into account changes in trends in obesity. The cost to wider society is based on a report from 2007 which overestimated increases in obesity by some 10% (paragraph 1.3).

**8 In 2018/19, nearly one tenth of 4 to 5 year olds and more than one fifth of 10 to 11 year olds were obese.** We estimate that roughly 1.4 million children aged between 2 and 15 were classified as obese in 2018. The rates for younger children (4 to 5 year olds) are stable between 2009/10 and 2018/19 while rates for older children (10 to 11 year olds) have increased slightly from 18.7% to 20.2% over the same period (paragraphs 1.2, 1.6 and Figure 2).

**9 Children in deprived areas are twice as likely to be obese than those in less deprived areas, and the gap is widening.** In 2018/19 in England, nearly 13% of 4 to 5 year olds in the most deprived areas were classified as obese compared with 6.4% of children living in the least deprived areas – a gap of 6.5%. At ages 10 to 11, this gap is greater with 26.9% of children living in the most deprived areas classified as obese, compared with 13% in the least deprived. This problem has worsened over time, particularly for older children. For 10 to 11 year olds, the gap has increased from just under 10% to nearly 14% from 2009/10 to 2018/19 (paragraphs 1.10 and 1.11 and Figures 6, 7 and 8).

**10 Obesity rates for children in different ethnic groups vary considerably.** For example, just over 9% of white children were obese in 2018/19 at age 4 to 5, compared with more than 15% of black children. These rates increase to more than 18% and nearly 29% respectively by age 10 to 11, widening the gap with white children. Some of this variance will be due to deprivation, as ethnic minorities are over-represented in deprived areas. However, PHE and the Department do not know the extent to which deprivation impacts on the variance in obesity seen in ethnic minorities and acknowledge more research is required (paragraph 1.12 and Figures 9 and 10).

**11 Previous governments have tried to reduce rates of childhood obesity but with limited success.** Successive governments have implemented strategies to tackle obesity with a strong focus on children. In 2008, the government set an ambition to reduce the proportion of overweight and obese children to 2000 rates by 2020. In 2011, the new government set a new ambition to achieve a sustained downward trend in the level of excess weight in children by 2020. These strategies had little impact on childhood obesity. While obesity rates in younger children are stable for now, obesity rates for 10 to 11 year olds have increased slightly from 19% at the time of the 2011 strategy to 20.2% in 2018/19. The Department has not fully evaluated whether these past strategies reduced childhood obesity. Therefore, it will struggle to prioritise actions or apply lessons from past strategies to its new approach with confidence of success (paragraphs 2.3 to 2.7, 2.12 and Figure 12).

**12 The current ambitious childhood obesity plan takes a more interventionist approach.** The government's childhood obesity plan has a stretching goal to halve childhood obesity by 2030 (which, at 2017/18 rates, would be to have reduced levels to 4.8% in 4 to 5 year olds, and 10% in 10 to 11 year olds). It also aims to reduce the gap in obesity between children from the most and least deprived areas by 2030 although has not set a target for the latter aim. While the plan has many similar themes and interventions to previous strategies, it includes more innovative legislative and regulatory action such as taxation. PHE notes that the plan is moving from voluntary to more legislative measures and has clear monitoring of delivery. However, other elements of the plan remain voluntary or subject to self-assessment. The United Nations Children's Fund (UNICEF) has noted that although much remains to be done to tackle childhood obesity, the UK is paving the way to ensure that all children grow up in a healthy food environment (paragraphs 2.9 to 2.15).

**13 While the Department oversees the programme, it has few mechanisms to influence the performance and engagement of other departments.** Due to the cross-government nature of the programme, accountability is fragmented as many projects in the programme have wider objectives and sit outside of the Department's control. While the Department has developed an overall governance structure for the programme, projects delivered by other departments are subject to their own departmental governance, accountability and monitoring arrangements and have different priorities for delivery. This means the senior responsible owner is not able to hold other departments to account for delivering their projects. There are no mechanisms to help the Department manage the risks that arise from this limited control (paragraphs 2.20 and 2.21 and Figure 13).

**14 There is limited awareness and co-ordination across departments of wider activities that may impact on childhood obesity rates.** The programme covers many of the influences that the surroundings, opportunities, or conditions of life have on promoting obesity in individuals or populations including food production and marketing, physical activity and food in the public sector. There are wider factors and activities that can influence and impact on obesity, such as sponsorship of sporting events by the food industry. These are not projects as such and so may not easily fit into the programme. Currently there is no co-ordination of these activities across government to ensure that they are compatible with the overall aim of reducing childhood obesity and there are no plans to introduce some co-ordination (paragraph 2.22).

**15 Given its focus on treatment, NHSE&I has no formal role in the programme.**

The NHS's main role is to respond to, manage and commission services to treat medically diagnosed conditions linked to obesity, such as type 2 diabetes. This does not include community based preventive services, for which local authorities are largely responsible. In January 2019, the NHS's Long Term Plan set out some changes to how NHSE&I will help reduce obesity including additional support for people with type 2 diabetes, such as weight management services, where there is evidence that GP referrals to such services can lead to weight reduction. In autumn 2020, NHSE&I will begin to pilot low calorie diets on the NHS to help adults diagnosed with type 2 diabetes lose weight through a 12-month, low calorie weight-loss programme (paragraphs 2.18 and 2.19).

**16 The childhood obesity plan is focusing on the right areas for interventions but the evidence that those interventions will reduce obesity rates is more limited.**

In 2007, in response to the report by the Government's Office for Science Foresight Programme, *Tackling Obesities: Future Choices*, the Department committed to take forward a research agenda on obesity. It did not act on that commitment until 2017 when it sponsored the creation of the National Institute of Health Research's Obesity Policy Research Unit to provide a research base for policies into obesity. PHE generated and brought together much of the evidence to support the sugar reduction work in the programme. It would be unrealistic to expect there to be detailed evidence for every intervention. This will particularly be the case for innovative approaches which have not been widely applied or in place for long enough to have been adequately evaluated. Our high-level review of the evidence base for, or evaluations of, interventions in the programme suggests that the focus of interventions, for example, calorie reduction, is largely right. However, the evidence base that the type of intervention used will reduce childhood obesity rates is more mixed. Some of the interventions have evidence of their effectiveness while for other interventions in the plan the evidence is limited or conflicting (paragraphs 2.23 to 2.25).

**17 The Department does not know how much is spent tackling childhood obesity across central government.**

The Department has a £2.2 million programme budget for 2019-20 for the management of the programme. It also funds specific interventions in the programme as does PHE. Four other government departments fund other programme interventions. However, the Department has not been tasked to monitor how much is spent on all interventions across the programme, therefore there is no government-wide understanding on what has been spent tackling childhood obesity (paragraphs 2.29 to 2.32).

**18 The Department cannot accurately quantify local authority spending on childhood obesity.** PHE oversees local authorities' spending of the public health grant, with local authorities reporting how they spend this grant. However, because of the way local authorities categorise this spending, it is likely that some spending on childhood obesity services is not accurately reported. Local authorities report spending of £61.7 million on childhood obesity, with little change in recent years, out of total public health expenditure of £3.4 billion (paragraphs 3.4 and 3.5, and Figures 15 and 16).

**19 Progress on the programme's key aim to reduce sugar and calories is mixed.** As part of the programme, HM Treasury introduced a tax in March 2016 on sugary drinks (the Soft Drinks Industry Levy (SDIL) or sugar tax), which became law in 2018. The tax was to encourage industry to reduce sugar in certain drinks and raised £240 million in 2018-19. PHE has made some progress with encouraging industry to reduce sugar levels in certain products. However, this has not been the case across all products and government will not meet its ambition to have industry reduce sugar by 20% in certain products by 2020. PHE was due to report the latest progress in the first half of 2020 but now intends to report later in the year. PHE has not reported on progress with its ambition to have industry reduce calories by 20% in food that contribute significantly to children's calories by 2024. PHE has engaged with stakeholders on this and intends to publish final guidance for industry on achieving the government's ambition for calorie reduction in 2020 along with timeframes for reporting progress (paragraphs 2.33, 2.34 and Figure 14).

**20 Local authorities have discretion to tackle childhood obesity as they see fit in their local area.** The Department and PHE offer some tools and guidance through PHE. In January 2020, PHE did some work to understand the number of local authorities using the whole-systems approach and the specific interventions they may use to tackle childhood obesity. This work suggested that up to one third of local authorities were using the whole-systems approach to obesity in their local area. The Department recognised a lack of evidence about local interventions and, with PHE, launched the Trailblazers project in 2019 which aims to test interventions using existing powers and share good practice. In this, five local authorities receive £100,000 funding per annum for three years from 2019-20 to 2021-22, to support their local interventions – a total of £1.5 million (paragraphs 3.6 to 3.8).

**21 On 27 July 2020, the government announced a new strategy to reduce obesity in adults and children.** This was partly in response to evidence indicating that people who are overweight or obese who contract COVID-19 are more likely to be admitted to hospital, to an intensive care unit and to die from COVID-19, compared with those of a healthy body weight. This strategy pledged to take forward some elements of the existing programme, such as the 9pm advertising watershed. However, it did not include other elements of the programme which had not been implemented at that time, for example, the ban on selling energy drinks to children, which the Department committed to in July 2019. The Department's consultation on this proposal ended in November 2018, but it had not published its response, policies for, or timescales for implementation as of July 2020 (paragraph 2.16).

### **Conclusion on value for money**

**22** Governments have been grappling with childhood obesity since the 2000s, with limited success. In 2018/19, nearly one tenth of 4 to 5 year olds and more than one fifth of 10 to 11 year olds were classified obese. We estimate that roughly 1.4 million children aged from 2 to 15 years old were classified obese in 2018. Not only is obesity increasing for 10 to 11 year olds, it is increasing even faster for children in deprived areas. While the Department's programme aims to tackle this issue, it is not yet clear that the actions within the programme are the right ones to make the step-change needed in the timescale available. Progress with the programme has been slow and many commitments are not yet in place, although the new strategy announced in July 2020 has signalled new legislation and greater willingness to act to reduce obesity. The government will need to act with greater urgency, commitment, co-ordination and cohesion if it is to address this severe risk to health and value for money.

## Recommendations

- a **The Department should establish a robust evidence base**, commissioning further research if necessary, of what works to establish which interventions in the programme and actions by local authorities work best to reduce childhood obesity.
- b **By autumn 2021, with the Cabinet Office, the Department should introduce stronger mechanisms into the Childhood Obesity Programme** that will hold other departments responsible for delivering their projects.
- c In line with the timing of the proposed spending review, **the government should target support and funding to local authorities and population groups who have the greater obesity problems.**
- d By spring 2021, the Department should have established its **timetable for responding to consultations and for implementing all elements in the programme**, including the measures relating to children announced in the new obesity strategy in July 2020.
- e **The Department should provide greater support to local authorities** to help them implement efforts to reduce childhood obesity.