


Priorities for the child public health response to the COVID-19 pandemic recovery in England

Catherine Hefferon,¹ Catherine Taylor ,^{1,2} Davara Bennett,³ Catherine Falconer,⁴ Melisa Campbell,⁵ Joanna G Williams,^{6,7} Dave Schwartz,⁸ Ruth Kipping,⁷ David Taylor-Robinson²

¹Department of Public Health, Health Education England North West Liverpool, Liverpool, UK

²Department of Public Health, Policy & Systems, University of Liverpool, Liverpool, UK

³Department of Public Health and Policy, University of Liverpool, Liverpool, UK

⁴Department of Public Health, Somerset County Council, Taunton, UK

⁵Department of Public Health, Liverpool City Council, Liverpool, UK

⁶Public Health Department, Bristol City Council, Bristol, UK

⁷Department of Population Health Sciences, University of Bristol, Bristol, UK

⁸Plymouth City Council, Plymouth, UK

Correspondence to

Catherine Taylor, Public Health, Health Education England North West Liverpool, Liverpool, UK; catherine.taylor35@nhs.net

CH and CT contributed equally.

CH and CT are joint first authors.

RK and DT-R are joint last authors.

Received 13 July 2020

Revised 9 October 2020

Accepted 13 November 2020

Published Online First

9 December 2020



© Author(s) (or their employer(s)) 2021. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Hefferon C, Taylor C, Bennett D, *et al.* *Arch Dis Child* 2021;**106**:533–538.

ABSTRACT

Child health is at risk from the unintended consequences of the COVID-19 response and will suffer further unless it is given proper consideration. The pandemic can be conceived as a systemic shock to the wider determinants of child health, with impacts on family functioning and income, access to healthcare and education. This article outlines COVID-19 impacts on children in England. Key priorities relate to the diversion of healthcare during lockdown; interruption and return to schooling; increased health risks and long-term impacts on child poverty and social inequalities. We provide an overview of mitigation strategies and policy recommendations aimed to assist both national and local professionals across child health, education, social care and related fields to inform the policy response.

INTRODUCTION

There is growing concern that child health in England, already at crisis point pre-COVID-19, will suffer further in the pandemic recovery, unless prioritised in policy discussions.^{1–4} Thankfully, the direct effects of coronavirus infection on children are rarely severe. Despite a small number of children presenting with a multisystem inflammatory state,⁵ rates of child illness and death have been low.⁶

Of greatest concern for children is the ‘collateral damage’ caused by the unintended consequences of COVID-19 restrictions, first introduced on 23 March 2020.⁴ Many are concerned that these indirect effects will disproportionately and dramatically affect disadvantaged children and young people (C&YP) who, in the absence of mitigating policies, risk being overlooked.^{1–4} This article outlines key COVID-19 impacts on children including diversion of healthcare; interruption of and return to education; increased health risks; and long-term impacts on child poverty and social inequalities. Public health academics and local authority public health leads for C&YP in England hosted a workshop to identify impacts, which informed a targeted, but non-systematic, review of emerging literature between March and July 2020. Issues highlighted relate to England, unless otherwise acknowledged, as restrictions and impacts differ across the UK. **Table 1** outlines mitigation strategies and policy recommendations to assist national and local professionals across child health, education, social care and related fields, with the policy response.

What is already known on this topic?

- ▶ Child health in England was already at crisis point pre-COVID-19.
- ▶ While the direct health impact of COVID-19 infection on children and young people is rarely severe, longer term indirect impacts are currently unclear.

What this study adds?

- ▶ Our review highlights a range of risks to child health in England, resulting from the unintended consequences of the COVID-19 response.
- ▶ Long-terms risks may result from diversion of healthcare, interruption of schooling, impact on mental health and increased social inequalities, among other things.
- ▶ A considered and multidisciplinary policy response that prioritises children’s right to health is required in order to mitigate against rising inequalities.

DIVERSION OF HEALTHCARE

Rising COVID-19 admissions across Europe in early 2020 prompted widespread cancellation of routine National Health Service (NHS) services from 17 March to maximise inpatient beds for the April ‘peak’.⁷ General practices were asked to deliver remote triage and care to patients, wherever possible.⁸ In April 2020, emergency department attendances in England were 57% lower than April 2019.⁹ While representative data on the scale and impact of diversion of care for children is lacking, there is clear concern about children presenting late for acute illnesses. In a recent survey of UK A&E paediatricians, a third reported witnessing delayed presentations, particularly for new diagnoses of diabetes mellitus, diabetic ketoacidosis and sepsis, and 18% reported delays. Community paediatricians expressed concerns about falling referrals for child protection and oncologists for cancer referrals.¹⁰ Although another study of routine data suggested that late presentation has been rare,¹¹ disruptions to planned outpatient visits, operations or healthcare have prompted anxiety for families and may have led to increased morbidity for some children.

Table 1 Impact of COVID-19 on C&YP and summary of mitigating actions/policy recommendations

Topic area	Summary of impact	Summary of mitigating actions/policy recommendations
Delivery of healthcare	<ul style="list-style-type: none"> ▶ Cancelled outpatient and inpatient health services ▶ Backlog of pent up demand for paediatric health services. ▶ Late presentation of acute need. ▶ Disruption in provision of universal health visiting, dental health and school delivered immunisation programmes. 	<ul style="list-style-type: none"> ▶ Ensure universal early years public health services are prioritised and supported financially, with targeted help for children and families in poverty. ▶ Robust business continuity planning. ▶ Prioritise essential services including healthcare, social care, emergency services, utilities and the food chain. ▶ Guidance, online consultations and outreach, for conditions other than COVID-19. ▶ Build on the reset, restore and recover model promoted by the Royal College of Paediatrics and Child Health. ▶ Innovation in new delivery models of services for children.
Interruption of schooling and early years provision	<ul style="list-style-type: none"> ▶ Widening gap in attainment between children from the poorest and most wealthy families. ▶ Families with children with special educational needs and/or disabilities have been under additional pressure during this period. ▶ Encouraging and sustaining infection prevention control measures is likely to be particularly difficult within children. 	<ul style="list-style-type: none"> ▶ Provide support for young people in critical transitions, and low-income or at-risk C&YP who lack IT and good home study environments. ▶ Targeted support for disadvantaged pupils to catch up, including funding tutors and extra classes. ▶ Universities to consider lowering admission offers to disadvantaged applicants to address the current awards process. ▶ A focus on holistic care, and supporting children's emotional needs and mental health and well-being on return to school. ▶ Reform childcare/early years education to improve the quality, affordability and availability of childcare. ▶ Introduce age-specific and evidence-based handwashing interventions such as eBug.
Increased health impact of lockdown – domestic abuse and safeguarding	<ul style="list-style-type: none"> ▶ Challenging behaviour, parental drug and alcohol abuse, and mental health issues all exacerbated. ▶ Lack of face-to-face contact means reduced opportunities for intervention and support in domestic abuse or other safeguarding issues – for both perpetrators and victims. ▶ Children becoming aware of, and witnessing, existing domestic abuse due to stay at home measures. ▶ Stay-at-home measures and fears about COVID-19 have made it more difficult for victims to leave and speak out about domestic abuse. ▶ Lack of oversight and safeguarding mechanisms for families where 'hidden harm' exists. ▶ Chronic underfunding of adult and child abuse services. ▶ Disruption to multiagency risk assessment conference (MARAC) functioning and reduction in MARAC referrals – particularly concerning given the level of risk. 	<ul style="list-style-type: none"> ▶ Helping volunteers and the wider community to be alert and watch out for signs of abuse and what they can do to help. ▶ Support community organisations responding to local needs. ▶ Ring-fenced funding for specialist services for Black, Asian and minority ethnic women and other marginalised groups. ▶ Provide safety advice and support services for women at risk of domestic abuse. ▶ Involvement of domestic abuse professionals in wider contingency planning. ▶ Planning for the surge in demand in services (domestic abuse, adult and children's social care). ▶ Greater cross-departmental working and shared funding (justice, police, housing, the domestic abuse sector and wider agencies). Identify how Safeguarding Adult Boards can provide support and help to facilitate robust partnership efforts. ▶ National 'code word' campaign as a route to emergency support, via supermarkets/pharmacies. ▶ Increased provision of specialist domestic abuse specialists such as Independent Domestic Violence Advocates in hospitals. ▶ Ensure regular updates about safe accommodation options available for domestic abuse victims and which support services and perpetrator programmes are still available. ▶ Set up virtual MARAC meetings while face-to-face meetings are not possible.
Increased health impact of lockdown - Emotional well-being and mental health	<ul style="list-style-type: none"> ▶ C&YP coping with significant changes to their routine. ▶ Impact of parental stress and coping on children. ▶ Increased anxiety levels reported for C&YP. ▶ Some reduction in mental health referrals for early years. ▶ Double burden on services as social distancing measures begin to be lifted – backlog from the last few months and emerging issues requiring treatment and support. ▶ Limited professional and informal support in the early postnatal period leading to poorer perinatal mental health. 	<ul style="list-style-type: none"> ▶ Encourage and support other forms of social contact. ▶ Restrict duration of isolation ▶ Encourage daily physical activity ▶ Capacity building and planning for surge in demand following the lifting of social distancing measures. ▶ Maximising the use of technology, in a way that includes those who are digitally excluded. ▶ Restarting services and delivering them in ways that mitigate and reduce inequalities, such as targeting areas of lower socio-economic status.
Increased health impact of lockdown - Young carers	<ul style="list-style-type: none"> ▶ Restricted personal contact, schooling and travel may exacerbate inequalities already experienced by young carers. ▶ The impact on carers of 'shielding' parents is likely to be long term. ▶ Increased physical caring responsibilities and emotional dependence from prolonged time at home. ▶ Reduced capacity to home school due to lack of physical space or IT equipment. ▶ Increased risk of infection from undertaking shopping for food and medication. ▶ Coronavirus Act 2020 temporarily removing local authority statutory duties to assess young carers could further isolate this group. 	<ul style="list-style-type: none"> ▶ Councils to actively 'check' on known young carers and ensure they are not providing excessive or inappropriate care. ▶ Schools to reassess their approach to and provision of ongoing support, including identification of previously unknown carers and encouragement to attend school. Where non-attendance, schools should make regular contact with young carers. ▶ Information resources developed for social workers, carers and parents to help young carers understand the situation and stay safe. ▶ Supermarkets to include young carers in dedicated shopping times for vulnerable groups. ▶ The Government to advise pharmacies to ensure that young carers continue to access required medication. ▶ The NHS to consider the support for young carers, for example, within hospital discharge and in maintaining digital contact.
Child poverty and social inequalities	<ul style="list-style-type: none"> ▶ Existing inequalities exacerbated by the COVID-19 pandemic and lockdown. ▶ The predicted recession is likely to disproportionately affect children and families, in the context of existing levels of child poverty in the UK prior to the pandemic. 	<ul style="list-style-type: none"> ▶ Provide immediate emergency support for children to ensure all parents can cover the basic costs of raising their children in the face of reduced income as a result of the pandemic. ▶ More generous payments to families with children through child benefit and universal credit should be a policy priority, and the two-child limit should be scrapped. ▶ Prioritise families with children when developing policies around housing, early years childcare, public transport and digital access to education.

C&YP, children and young people; NHS, National Health Service.

Some local universal children's services have been reorganised to deliver health visiting and midwifery services virtually. While appropriate for some families, remote contact may be less effective for the most disadvantaged, curbing opportunities to support families and safeguard children, and potentially widening inequalities. Paediatric dental services were cancelled

altogether, including routine dental check-ups and planned hospital treatment.

While infant immunisations have continued through primary care, uptake was reportedly down, with preprint data suggesting that measles, mumps and rubella (MMR) vaccinations in England fell by nearly 20% during early lockdown compared

with previous years.¹² School-aged programmes were ceased as per national guidance, again prompting concern, particularly for children in marginalised groups with historically low vaccine uptake. An example of successful innovation in this arena is the Derbyshire Community Health Services' drive-through human papillomavirus (HPV) immunisation clinics, set up to replace school-based clinics from May 2020.

As COVID-19 restrictions are lifted, a double burden on services is anticipated from the combined backlog accrued during lockdown (including rescheduled appointments and delayed care seekers) and mental health issues emerging as a result of the crisis, requiring treatment and support. Catch up programmes will require additional resources to manage backlogs. The Royal College of Paediatrics and Child Health has set out three principles for recovery of paediatric services following COVID-19: 'reset, restore and recover'.¹³

INTERRUPTION OF SCHOOLING AND EARLY YEARS PROVISION

School closures have interrupted educational trajectories and increased educational inequalities for C&YP.¹⁴ In addition to providing education, schools and early years' settings play a vital role as sources of safety, structure and food for vulnerable children.

Although schools in England remained open to vulnerable and key workers' children throughout, attendance was low. In May, around 2% of all children attended school and between 4% and 10% of vulnerable children. In June, as schools allowed nursery, reception, year 1 and year 6 pupils to attend, attendance increased to 9% of children, of which 17%–18% were vulnerable.¹⁵ In mid-June, when years 10 and 12 were permitted to return, only 16% and 13.8% attended, respectively.¹⁶

Although provision was made for most children to learn remotely, engagement and access has differed by socioeconomic status. In May 2020, a survey reported that only 42% of pupils were returning homework. This figure was only 30% in the most deprived areas compared with 49% in the least deprived.¹⁷ A quarter of pupils had little or no home IT access, significantly affecting access to learning resources. Children in the highest income quintile reported more home learning resources and parental support and spent over 75 min/day longer on home learning than those in the lowest income quintile.¹⁸ Although many local authorities and schools have provided laptops and creative opportunities for connecting and learning,¹⁹ inequalities in home education are likely to be substantial and further widen entrenched educational inequalities.¹⁸ Some special educational needs schools remained fully closed at the time of writing, leaving families struggling with a lack of respite and support.

Just over a third of early years settings in England remained open during lockdown, with only 5% of places attended.²⁰ Most young children have spent lockdown within home environments where, for some, household dysfunction and parents' psychological stress may have negatively contributed to early child development. The phased return to early years settings and schools has involved a careful balancing of perceived risk against the provision of childcare and education. In late May, 60% of parents surveyed were not planning to return children to nursery due to safety fears and lack of clear government guidance.²⁰ On 8 June 2020, as lockdown in England eased, average occupancy rates in early years settings were 37%, just over half that in spring 2019 (77%),²¹ highlighting concern about the potential for collapse of the sector in the absence of government investment.²⁰

Evidence demonstrating lower transmission rates of COVID-19 in children²² has supported the return of all pupils to full-time education from September. However, COVID-19 cases within educational settings will require groups of children to self-isolate for up to 14 days, creating further long-term disruption and uncertainty for many. Central government have committed to £1 billion funding to provide catch-up tutoring for the most disadvantaged pupils.²³ In the long term, further systematic changes could consider a reduced focus on results and provision of more support for addressing well-being and mental health.

INCREASED HEALTH RISKS OF LOCKDOWN

Safeguarding and domestic abuse

In England, 2 million families struggle with domestic abuse, parental substance misuse or parental mental health issues. Rates of domestic abuse increase in times of crisis, for example, following Hurricane Katrina.²⁴ During the first three weeks of UK lockdown, 14 women and 2 children were killed by men, at least 10 of them allegedly by their partners, ex-partners or fathers. This is over double the average number of women killed over a three week period in the last decade.²⁵ Urgent care proceedings in the family courts have also sharply increased, which may in part reflect prioritisation of care cases but may also suggest a heightened risk to children under lockdown. There has been a concomitant reported surge in calls to domestic abuse helplines and online services.²⁶ The UK's national domestic abuse helpline saw a 66% rise in calls and a 950% increase in website visits, with an associated increase in demand for refuge places.²⁷ Many services in this chronically underfunded sector have reported staffing issues due to COVID-19 and refuges are at reduced capacity. Hidden need is more likely to remain hidden and reported need unmet.

With few vulnerable children attending school, opportunities for safeguarding interventions by teachers and school nurses may be reduced: schools and education services accounted for 20% of referrals to children's social care in 2018–2019.²⁸ The relaxation of some statutory child protection duties, including allowing phone calls over face-to-face visits and less frequent health assessments for children in care, in order to ease the burden on children's services, have been heavily criticised.²⁹ While this legislation has been clarified, these measures remain in place for use at the discretion of local councils.³⁰ Charities and other organisations working to tackle domestic abuse, including the police, courts, children's and adult's social care, are advised to develop contingency plans, addressing increased long-term demand for services as lockdown lifts.²⁴ Improved data collection and emergency funding, particularly to support vulnerable groups such as disabled and Black, Asian and minority ethnic (BAME) women, are also required.³¹

Emotional well-being and mental health

The impact of social isolation on emotional well-being and mental health is an overarching area of concern for all age groups but particularly for children.³² Before the pandemic, C&YP's mental health was already in crisis.³³ The pandemic has exacerbated problems, increasing family stress, removing protective environments such as school and decreasing physical access to services. Many C&YP have experienced higher levels of anxiety and depression during lockdown.³⁴ A survey by Young Minds found that 83% of young people with existing mental health needs found the pandemic had contributed to further deterioration.³⁵ Similarly, younger children appear to have

struggled during lockdown, with parents of children aged 4–10 years reporting increased behavioural and attention difficulties. However, for teenagers without prior mental health concerns, there was little change in both parent-reported and self-reported measures.³⁶

While referrals to NHS mental health services initially slowed, a sharp rise in referral rates has now been reported in many areas³⁷ including a surge in use of online mental health platforms.³⁸ Childline have delivered almost 7000 counselling sessions to children who contacted them with concerns directly relating to COVID-19, and over 2000 counselling sessions per week since lockdown began, for C&YP with more general mental health and well-being concerns.³⁹ A recent systematic review suggested that C&YP experiencing loneliness during lockdown may be up to three times as likely to develop depression in future.⁴⁰

Reliance on social media to maintain social connections while unable to socialise in person has further raised concerns about the impact of excessive screen time on development, particularly for younger children.⁴¹ For adolescents, where peer interaction is a vital aspect of development, digital platforms may help mitigate the negative effects of lost face-to-face interactions; however, concerns about the negative influences of social media persist.⁴² Some teenagers report positive outcomes from lockdown, including learning new skills, appreciating friendships and bonding with parents and siblings. However, there will be huge inequalities in experiences, dependent on access to technology, availability of personal space and relationships with family.⁴³ The Mental Health Foundation warns that pupils will face significant challenges as lockdown eases and suggest that schools should prioritise well-being, and a supported recovery and transition, over academic achievement.^{42 44}

Parental mental health is a major determinant of child mental health.³² The impact on finances and associated financial worries have disproportionately affected anxiety levels for women, in addition to C&YP.³⁴ For pregnant women there may also be an impact on perinatal mental health, related to the well-being of the baby, the impact of lockdown and restrictions on partners and relatives attendance at births. Following birth, limited professional and informal support in the early postnatal period may contribute to worse perinatal mental health and delays in recognition of deteriorating mental health; however, the short-term and long-term consequences to child health and development are as yet unknown.⁴⁵

Young carers

As parents become ill with COVID-19, caring responsibilities may increasingly fall to C&YP. For those caring for parents with long-term conditions who are 'shielding', this burden will continue for the foreseeable future, with potentially long-lasting consequences.

An estimated 700 000 children regularly shoulder caring responsibilities in UK households.⁴⁶ Young carers already face significant inequalities including higher rates of school absenteeism and lower educational attainment. They are often from lower income households, have worse levels of mental and physical health themselves and can be 'hidden' within other marginalised groups such as BAME communities.⁴⁷ Despite this, young carers often have limited contact with support agencies such as social services, relying instead on schools, voluntary organisations and more informal family support networks.⁴⁸ School holidays can significantly increase caring responsibilities, and during term time, young carers rely on after-school provision for completing homework.⁴⁸ Meanwhile, undertaking shopping

trips for food and medication may increase the risk of infection for young carers (table 1).

CHILD POVERTY AND SOCIAL INEQUALITIES

The COVID-19 pandemic is predicted to precipitate the worst global recession since the Great Depression, much worse than the 2008 Great Recession.³ Previous recessions have exacerbated child poverty, with long-lasting consequences for children's health, well-being and learning outcomes.⁴⁹ Prepandemic, child poverty, a major driver of poor child health, had risen to 4.1 million children (2017), amounting to over 30% of all English children.⁵⁰ Child poverty was already predicted to rise beyond 5 million by 2022,⁵¹ and now these predictions may be far worse in the absence of mitigating policies.

In 2019, 1.3 million UK children were eligible for free school meals, with a further 1 million ineligible but still considered to be living in food insecurity. Many of these children who rely on school meals to sustain their nutrition have gone hungry over the lockdown period.⁵² Initial survey data show that at the start of lockdown, half of eligible children received no form of free school meal provision. While the Government did continue free school meal vouchers throughout the summer holidays following lobbying by professional footballer Marcus Rashford,⁵³ further recommendations to increase eligibility for free schools meals and develop a Child Food Poverty Taskforce have not been taken forward.⁵⁴

Long-term recovery planning must prioritise families with children.² A real concern is that the burden of fiscal stabilisation after the initial phase of the pandemic response will fall disproportionately on poor families with children and lead to a new round of cuts to local authority services. Any new policy should therefore be assessed according to its impact on household finances and service provision for families with children. Modelling from the Child Poverty Action Group has shown how even small increases to child benefits can have widespread impacts: an additional £10 a week for each child would reduce child poverty by a 5%. In addition, many policy recommendations stress the need for more generous universal credit payments to families with children and advocate the scrapping of the two-child limit.³

CONCLUSIONS

Children are especially vulnerable to determinants of health, such as living conditions, family income, parental employment, education and access to health services. The pandemic can be conceived as a systemic shock to these determinants, with complex short-term and long-term impacts. Evidence of these impacts and appropriate mitigation strategies is rapidly evolving and requires careful synthesis. Many impacts will be long term and take time to emerge, for example, life-course effects on obesity and mental health stemming from increased early years adversity.⁵⁵

However, we already know what is required to improve child health and reduce inequalities in the context of a crisis and should stick to accepted principles⁵⁶ developed with and in the best interests of C&YP and aligned to the UN Convention on Rights of the Child.⁵⁷ The voices of C&YP should inform policy responses. When surveyed about what makes them happy, C&YP continually emphasise the importance of being loved, safe and listened to, and while they do not deal with finances directly, they stress the importance of having well-funded schools and family finances to meet basic needs.⁵⁸ Within this rapidly evolving situation, a proactive and concerted policy focus on

children is required at a national and local level to ensure that they are not further overlooked in the pandemic recovery phase.

Contributors RK and DT-R conceptualised the study. CH, CT, CF, DB, MC, RK and DT-R conducted the literature review and edited the manuscript. All of the coauthors reviewed and agreed on the finalised version.

Funding DB, DT-R and RK are funded by the National Institute for Health Research School for Public Health Research. DT-R is funded by the MRC on a Clinician Scientist Fellowship (MR/P008577/1).

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data sharing is not applicable as no datasets generated and/or analysed for this study.

This article is made freely available for use in accordance with BMJ's website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may use, download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.

ORCID iD

Catherine Taylor <http://orcid.org/0000-0001-7315-4789>

REFERENCES

- Green P. Risks to children and young people during covid-19 pandemic. *BMJ* 2020;369:m1669.
- Clark H, Coll-Seck AM, Banerjee A, et al. After COVID-19, a future for the world's children? *Lancet* 2020;396:298–300.
- Sinha I, Bennett D, Taylor-Robinson DC. Children are being sidelined by covid-19. *BMJ* 2020;369:m2061.
- Crawley E, Loades M, Feder G, et al. Wider collateral damage to children in the UK because of the social distancing measures designed to reduce the impact of COVID-19 in adults. *BMJ Paediatr Open* 2020;4:e000701.
- Mahase E. Covid-19: concerns grow over inflammatory syndrome emerging in children. *BMJ* 2020;369:m1710.
- Göttinger F, Santiago-García B, Noguera-Julían A, et al. COVID-19 in children and adolescents in Europe: a multinational, multicentre cohort study. *Lancet Child Adolesc Health* 2020;4:653–61.
- NHS England. Urgent next steps on nhs response to covid-19 letter simon stevens [Internet]., 2020. Available: <https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/urgent-next-steps-on-nhs-response-to-covid-19-letter-simon-stevens.pdf> [Accessed 3 Jul 2020].
- NHS England. Letter to GPs and their commissioners: Next steps on GP response to COVID-19 19/03/2020 [Internet], 2020. Available: <https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/preparedness-letter-primary-care-19-march-2020.pdf> [Accessed 3 Jul 2020].
- NHS England. A&E Attendances and Emergency Admissions April 2020 Statistical Commentary [Internet], 2020. Available: <https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2020/05/Statistical-commentary-April-2020-jf8hj.pdf> [Accessed 3 Jul 2020].
- Lynn RM, Avis JL, Lenton S, et al. Delayed access to care and late presentations in children during the COVID-19 pandemic: a snapshot survey of 4075 paediatricians in the UK and Ireland. *Arch Dis Child* 2021;106:e8.
- Roland D, Harwood R, Bishop N, et al. Children's emergency presentations during the COVID-19 pandemic. *Lancet Child Adolesc Health* 2020;4:e32–3. doi:10.1016/S2352-4642(20)30206-6
- McDonald HI, Tessier E, White JM, et al. Early impact of the coronavirus disease (COVID-19) pandemic and physical distancing measures on routine childhood vaccinations in England, January to April 2020. *Euro Surveill* 2020;25:2000848. doi:10.2807/1560-7917.ES.2020.25.19.2000848
- RCPC. Reset, Restore, Recover - RCPC principles for recovery [Internet]. RCPC, 2020. Available: <https://www.rcpch.ac.uk/resources/reset-restore-recover-rcpch-principles-recovery> [Accessed 3 Jul 2020].
- Blundell R, Joyce R, Dias MC, et al. Covid-19: the impacts of the pandemic on inequality [Internet]., 2020. Available: <https://www.ifs.org.uk/publications/14879> [Accessed 6 Jul 2020].
- ONS. Attendance in education and early years settings during the coronavirus outbreak: 23 March to 11 June 2020 [Internet]. GOV.UK, 2020. Available: <https://www.gov.uk/government/publications/coronavirus-covid-19-attendance-in-education-and-early-years-settings> [Accessed 3 Jul 2020].
- Whittaker F. Year 10 attendance reaches 16% in first week of phased return [Internet]. SchoolsWeek, 2020. Available: <https://schoolsweek.co.uk/year-10-attendance-reaches-just-16-in-first-week-of-phased-return/> [Accessed 3 Jul 2020].
- NFER. Schools Responses to Covid-19 - Pupil Engagement in Remote Learning [Internet]. NFER, 2020. Available: <https://www.nfer.ac.uk/schools-responses-to-covid-19-pupil-engagement-in-remote-learning/> [Accessed 3 Jul 2020].
- Andrew A, Cattán S, Dias MC, et al. Learning during the lockdown: real-time data on children's experiences during home learning [Internet], 2020. Available: <https://www.ifs.org.uk/publications/14848> [Accessed 3 Jul 2020].
- GOV.UK. New major package to support online learning [Internet]. Available: <https://www.gov.uk/government/news/new-major-package-to-support-online-learning> [Accessed 10 Jul 2020].
- Hill A. Early years and childcare sector at risk of collapse in England. *The Guardian* [Internet], 2020. Available: <https://www.theguardian.com/education/2020/jun/01/early-years-childcare-sector-at-risk-collapse-england> [Accessed 3 Jul 2020].
- Early Years Alliance. New report shows scale of crisis in early years sector | early years alliance [Internet], 2020. Available: <https://www.eyalliance.org.uk/news/2020/06/new-report-shows-scale-crisis-early-years-sector> [Accessed 3 Jul 2020].
- Viner RM, Russell SJ, Croker H, et al. School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *Lancet Child Adolesc Health* 2020;4:397–404.
- Richardson H. £1bn catch-up tutoring fund for England's pupils. *BBC News* [Internet], 2020. Available: <https://www.bbc.com/news/education-53100881> [Accessed 3 Jul 2020].
- Safe Lives. Consultation response to Home Office preparedness Safelives.pdf [Internet], 2020. Available: <https://safelives.org.uk/sites/default/files/resources/Consultation%20response%20to%20Home%20Office%20preparedness%20Safelives.pdf> [Accessed 3 Jul 2020].
- Smith KI. Coronavirus Doesn't Cause Men's Violence Against Women [Internet]. Karen Ingala Smith, 2020. Available: <https://kareningalasmith.com/2020/04/15/coronavirus-doesnt-cause-mens-violence-against-women/> [Accessed 7 Jul 2020].
- Care proceedings rise steeply in family courts during UK lockdown [Internet]. *the Guardian*, 2020. Available: <http://www.theguardian.com/world/2020/apr/14/family-court-urgent-care-hearings-rise-since-coronavirus-lockdown> [Accessed 6 Jul 2020].
- Johnson S. How many children at risk? UK health visitors count the cost of lockdown. *The Guardian* [Internet], 2020. Available: <https://www.theguardian.com/society/2020/jul/07/children-risk-health-visitors-count-cost-lockdown> [Accessed 7 Jul 2020].
- GOV.UK. Characteristics of children in need: 2018 to 2019 [Internet]. Available: <https://www.gov.uk/government/statistics/characteristics-of-children-in-need-2018-to-2019> [Accessed 10 Jul 2020].
- Willow C. Ministers use COVID-19 to destroy children's safeguards [Internet]. Article 39, 2020. Available: <https://article39.org.uk/2020/04/23/ministers-use-covid-19-to-destroy-childrens-safeguards/> [Accessed 7 Oct 2020].
- GOV.UK. Coronavirus (COVID-19): guidance for children's social care services [Internet]. Available: <https://www.gov.uk/government/publications/coronavirus-covid-19-guidance-for-childrens-social-care-services/coronavirus-covid-19-guidance-for-local-authorities-on-childrens-social-care> [Accessed 10 Jul 2020].
- EVAW. Rapidly Compiled – Initial Briefing on the COVID-19 Pandemic and the Duty to Prevent Violence Against Women & Girls [Internet], 2020. Available: <https://www.endviolenceagainstwomen.org.uk/wp-content/uploads/EVAW-Coalition-Briefing-on-COVID19-Pandemic-and-Duty-to-Prevent-VAWG-April-2020-FINAL.pdf> [Accessed 3 Jul 2020].
- United Nations. Policy brief covid and mental health final [Internet], 2020. Available: https://www.un.org/sites/un2.un.org/files/un_policy_brief_covid_and_mental_health_final.pdf [Accessed 3 Jul 2020].
- Gunnell D, Kidger J, Elvidge H. Adolescent mental health in crisis. *BMJ* 2018;361:k2608.
- Fancourt DD, DF B, DHW M, et al. *Department of Behavioural Science & Health*. 59.
- Coronavirus having major impact on young people with mental health needs – new survey [Internet]. YoungMinds. Available: <https://youngminds.org.uk/about-us/media-centre/press-releases/coronavirus-having-major-impact-on-young-people-with-mental-health-needs-new-survey/> [Accessed 9 Jul 2020].
- University of Oxford. Children show increase in mental health difficulties over COVID-19 lockdown [Internet]. Available: <https://www.ox.ac.uk/news/2020-06-16-children-show-increase-mental-health-difficulties-over-covid-19-lockdown> [Accessed 9 Jul 2020].
- Price B. Lack of access to mental health help 'devastating'. *BBC News* [Internet], 2020. Available: <https://www.bbc.com/news/uk-wales-52771502> [Accessed 9 Jul 2020].
- Health Tech Digital. Lockdown-fuelled surge in mental health app downloads. [Internet]. Digital Health Technology News, 2020. Available: <https://www.healthtechdigital.com/lockdown-fuelled-surge-in-mental-health-app-downloads/> [Accessed 3 Jul 2020].
- NSPCC. Almost 7,000 Childline counselling sessions with children about the impact of coronavirus (COVID-19) outbreak [Internet]. NSPCC. Available: <http://www.nspcc.org.uk/about-us/news-opinion/2020/childline-coronavirus-counselling/> [Accessed 7 Jul 2020].
- Loades ME, Chatburn E, Higson-Sweeney N, et al. Rapid systematic review: the impact of social isolation and loneliness on the mental health of children and adolescents in the context of COVID-19. *J Am Acad Child Adolesc Psychiatry* 2020;59:1218–39.

- 41 Stiglic N, Viner RM. Effects of screentime on the health and well-being of children and adolescents: a systematic review of reviews. *BMJ Open* 2019;9:e023191.
- 42 Orben A, Tomova L, Blakemore S-J. The effects of social deprivation on adolescent development and mental health. *Lancet Child Adolesc Health* 2020;4:634–40.
- 43 Hunt E. 'I'm losing my teenage years': young contend with life in lockdown. *The Guardian* [Internet], 2020. Available: <https://www.theguardian.com/society/2020/may/09/im-losing-my-teenage-years-young-contend-with-life-in-lockdown-coronavirus> [Accessed 9 Jul 2020].
- 44 Returning to school after the coronavirus lockdown [Internet]. Mental Health Foundation, 2020. Available: <https://www.mentalhealth.org.uk/coronavirus/returning-school-after-lockdown> [Accessed 9 Jul 2020].
- 45 Thapa SB, Mainali A, Schwank SE, et al. Maternal mental health in the time of the COVID-19 pandemic. *Acta Obstet Gynecol Scand* 2020;99:817–8.
- 46 Joseph S, Kendall C, Toher D, et al. Young carers in England: findings from the 2018 BBC survey on the prevalence and nature of caring among young people. *Child Care Health Dev* 2019;45:606–12.
- 47 Wong S. Young carers in the NHS. *Br J Gen Pract* 2017;67:527–8.
- 48 Department for Education. *The lives of young carers in England*, 2016: 135.
- 49 Rajmil L, Hjern A, Spencer N, et al. Austerity policy and child health in European countries: a systematic literature review. *BMC Public Health* 2020;20:564.
- 50 Taylor-Robinson DC, Lai ET, Whitehead M, et al. Child health unravelling in UK. *BMJ* 2019;72:l963.
- 51 GOV.UK. Monitoring social mobility 2013 to 2020 [Internet]. Available: <https://www.gov.uk/government/news/monitoring-social-mobility-2013-to-2020> [Accessed 6 Jul 2020].
- 52 medRxiv [Internet]. Half of children entitled to free school meals do not have access to the scheme during the COVID-19 lockdown in the UK. Available: <https://www.medrxiv.org/content/10.1101/2020.06.19.20135392v1> [Accessed 9 Jul 2020].
- 53 Sinha IP, Lee AR, Bennett D, et al. Child poverty, food insecurity, and respiratory health during the COVID-19 pandemic. *Lancet Respir Med* 2020;8:762–3.
- 54 BBC News. Rashford 'disappointed' by food poverty response [Internet], 2020. Available: <https://www.bbc.com/news/uk-54309133> [Accessed 7 Oct 2020].
- 55 Straatmann VS, Lai E, Law C, et al. How do early-life adverse childhood experiences mediate the relationship between childhood socioeconomic conditions and adolescent health outcomes in the UK? *J Epidemiol Community Health* 2020;74:969–75.
- 56 The BMJ. Covid-19: We are not "all in it together"—less privileged in society are suffering the brunt of the damage [Internet], 2020. Available: <https://blogs.bmj.com/bmj/2020/05/22/covid-19-we-are-not-all-in-it-together-less-privileged-in-society-are-suffering-the-brunt-of-the-damage/> [Accessed 9 Jul 2020].
- 57 OHCHR. | Convention on the Rights of the Child [Internet]. Available: <https://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx> [Accessed 7 Oct 2020].
- 58 ONS. Children's views on well-being and what makes a happy life, UK: 2020 - Office for National Statistics [Internet], 2020. Available: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/childrensviewsonwellbeingandwhatmakeahappyliifeuk2020/2020-10-02> [Accessed 8 Oct 2020].