

The Initial Impacts of COVID-19 on Children and Youth (Birth to 24 years): Literature Review in Brief

Kaitlyn Jones, Office of Human Services Policy

August 2021

HIGHLIGHTS

- COVID-19 had significant impacts on the development, emotional and behavioral health, social, and economic well-being of children and youth across America, further exacerbating already existing inequities.
- COVID-19 disruptions to early childhood services, programs, and schools exacerbated inequities and highlighted challenges to service provision.
- Children, youth, and families also lost much more than learning opportunities with the closure of schools and ECE services.
- Children and families involved with the child welfare system experienced increased stress and fewer services.
- Building resilience in children, youth, and families can help promote equity and support recovery efforts.
- Further research and information is needed to fully understand all of the short- and long-term impacts COVID-19 has had and will have on children and youth.

The COVID-19 pandemic, similar to previous natural disasters, has and is expected to further exacerbate inequalities faced by many in our communities.¹ Individuals most impacted by the pandemic are those that were already economically and socially marginalized due to historical inequities, including low-income families with children, children, youth, and families of color, youth in foster care and those who have aged out, and children and youth living with disabilities. These groups in particular may benefit from additional support now and in the future to address long-lasting impacts of the COVID-19 pandemic.

A literature search was performed through computerized databases to identify both qualitative and quantitative information focused on the impacts of COVID-19 on children and young people served by or representative of those served by human services programs (predominantly low-income). For this brief, impacts are defined as causing an effect on or change in the development, emotional and behavioral health, or social or economic well-being of children and youth (age birth to 24). The initial scan revealed that while published literature focuses on the short-term impacts of COVID-19, there is limited research published on the types of supports children and young people are receiving, and what the long-term impacts may be among children and young people due to COVID-19. As a result, a search of the gray literature was conducted and additional articles were located using a backward search through relevant articles' reference lists.

COVID-19 had significant impacts on the development, emotional and behavioral health, and social and economic well-being of children and youth across America, further exacerbating already existing inequities.

As of April 8, 2021, children^a represented 13.5 percent of all reported COVID-19 cases². Although the number of children affected by the disease is relatively small compared to other age groups, the indirect effects caused by the pandemic, such as the shutdown of schools, childcare centers, after-school programs, and recreational activities, disconnected nearly 60 million children and youth from essential resources and supports³. There is a particular concern for children and youth who are enrolled in human services programs and rely on school and other community resources for their developmental, nutritional, and emotional and behavioral health needs as a result of their low socioeconomic status, learning difficulties, physical disability, and/or emotional and behavioral difficulties.⁴ Indirect effects of the pandemic such as layoffs or job

^a Age ranges reported for children varied by state. Two states defined child as 0-14, sixteen states defined child as 0-17, two states defined child as 0-18, thirty states/territories defined child as 0-19, and two states defined child as 0-20.

losses, whether for parents of younger children or for youth and young adults themselves, also threatened the well-being of children and youth. For example, in July 2020, approximately 20 percent of households with children under five, an estimated two million households, reported having a hard or very hard time paying for food, housing, medical care, and heating since March 2020.⁵ The *COVID Impact Survey*^b in June 2020 estimated that 20 percent of households were experiencing food insecurity, with variation across states (37 percent in Louisiana, 31 percent in Texas, 13 percent in Colorado, and 14 percent in Oregon).⁶

COVID-19 produced more barriers and financial difficulties among children and youth historically prevented from equal access to opportunities and resources. This includes children and youth who are living with a disability, living with pre-existing mental health conditions, experiencing homelessness, from a low-income household, and who are Black, Latino, and American Indian.^{7,8,9,10} Low-income, Black, and Latino households with children reported being more likely to experience emotional and behavioral problems¹¹, food insecurity¹², housing instability¹³, financial struggles¹⁴, and other material hardships¹⁵, such as difficulty accessing healthcare, emotional supports, child care, and social supports since the beginning of the pandemic. Asian and Latino students reported the highest levels of feeling disconnected from school and poorer emotional and cognitive health¹⁶. In addition, children and youth living with a disability reported not receiving additional supports from schools¹⁷ and experiencing higher levels of emotional difficulties.¹⁸

COVID-19 disruptions to early childhood services, programs, and schools exacerbated existing inequities and highlighted challenges to service provision.

The COVID-19 pandemic created a disruption in the early care and education (ECE) services for children and families. ECE programs including child care, Head Start, home visiting, and pre-K provide a safe place for children to learn, grow developmentally, and build relationships with peers and caring adults. Most ECE programs closed to in-person services at the beginning of the pandemic, and most child care centers that closed were in low- and middle-income neighborhoods.^{19,20} An April 2020 survey found nearly all of home visiting programs reported that social distancing was required and 88 percent were required to stop in-person home visits.²¹ Head Start centers reported that 96 percent were closed for in-person services in April 2020.²² The loss of relationships and learning opportunities that early care and education programs provide can exacerbate the large achievement gaps between children from low-income families and their peers.^{23,24} In addition, the closure of child care facilities caused panic and stress for many families, and created economic difficulties by making it challenging for parents and guardians to return to work. In August 2020, a survey of parents with young children found that 14 percent of child care programs had permanently closed and over 70 percent of child care arrangements had closed or were operating at reduced capacity or hours.²⁵ This caused an interruption in care for many families, with children from low-income families^{26,27} and children living with a disability²⁸ more likely to experience a disruption. As ECE services have re-opened, participation has been uneven. Preschoolers whose families had incomes under \$25,000 per year had the steepest declines in overall participation in fall 2020, with just 13 percent attending preschool in-person.²⁹ In December of 2020 there was a 25 percent decline in enrollment compared to pre-pandemic levels, although participation had increased from spring of 2020.³⁰

Virtual services proved challenging for many young children and families and the ECE programs serving them. Some ECE services transitioned quickly to virtual delivery. As soon as April of 2020, almost two-thirds of home visiting programs were frequently using interactive video conferencing to replace in-person, in-home visits, and some also reported using telephone and text to communicate.³¹ By January 2021, 26 percent of Head Start grantees reported they were open for in-person services, 39 percent for in-person and virtual/remote services, and 30 percent for virtual/remote services only.³² However, even the transition to virtual services left many families behind, particularly those without internet access who are more likely to be Black, Latino, and American Indian/Alaska Native.³³ Low-income households also had less access to internet.³⁴ Developmentally, young children have difficulty focusing on a computer or tablet for extended periods of time, do not understand that the person on the other side of the screen is an actual person, and overall do not respond as quickly or easily to virtual services.³⁵ ECE programs reported some of the biggest challenges to providing virtual programs or services include promoting social-emotional development through socialization with other children, families' lack of access to stable internet and devices, children needing more support than parents can provide, and the inability to conduct

^b Provides national and regional statistics about physical health, mental health, economic security, and social dynamics in the United States.

valid developmental screenings.^{36,37,38,39} Developmental screenings provide an opportunity to refer families to needed services as early as possible to mitigate or minimize the potential negative impact on overall development.^{40,41,42}

Children, youth, and families lost much more than learning opportunities with the closure of schools and ECE services.

Food insecurity intensified as millions of children lost access to free or subsidized school lunches and healthy snacks. The closure of schools, ECE services, in addition to job layoffs and losses of income, made more families and communities susceptible to experiencing food insecurity, especially for children and youth from low-income neighborhoods.⁴³ Reports of experiencing food insecurity tripled in households with children during the pandemic⁴⁴ and more than tripled for Head Start children.⁴⁵ However, a national survey conducted in June 2020 found that parents did not report significant changes in enrollment in food assistance programs such as SNAP^c and WIC^d since March 2020.⁴⁶ Additionally, the number of families who reported receiving free or reduced-priced lunch decreased from pre-pandemic levels to June 2020 by 2.1 percent, and of the 17.5 percent of families eligible for the Pandemic Electronic Benefit Transfer (P-EBT)^e program only five percent reported enrollment.⁴⁷ As more flexibilities were allowed, states and schools were able to develop innovative solutions to get food to children and youth, including Grab-n-Go meal sites, meal deliveries to school bus stops or homes, and delivery of shelf-stable food packages.⁴⁸ However, it is unclear whether these approaches ensure that food was distributed effectively and equitably.

Social isolation, disruption in routines, stress, and concerns about the health and safety of loved ones had a negative impact on the emotional and behavioral health of young children. Several studies found that children (age zero to five) from lower income households, single-parent families, and Black households, as well as young children with disabilities, experienced the largest increases in emotional or behavior problems, including depression.^{49,50,51,52} A survey administered by youth, also found that students who felt safer at school than home, students who lacked consistent Wi-Fi access, and students from lower socioeconomic statuses tended to have more emotional changes.⁵³ Stressors experienced by families such as the closure of ECE services plus material hardships, job loss, economic worries, and loss of family members due to the pandemic, negatively affected care-giver well-being, consequently having an adverse effect on the emotional and behavioral health of young children.^{54,55,56,57} For some children and families, adversities experienced during the pandemic, as well as disease containment measures such as quarantine and the resulting social isolation, are traumatic events.^{58,59} Exposure to chronic stress during infancy and early childhood can have negative effects on brain, biological, and socioemotional development⁶⁰ and increases risk later in life for academic and social difficulties, addiction, physical illness, lack of economic self-sufficiency, and early mortality.⁶¹

During the pandemic, youth's mental health challenges increased and access to school-based mental health services decreased. For children and youth, physical and social distancing and other COVID-19 restrictions fostered feelings of isolation and loneliness, disrupted routines, and limited access to extended family, friends, and other community support networks. During the pandemic, almost one in four parents of children ages five to 12 reported their children were experiencing overall worsened mental or emotional health,⁶² and more than one in four youth ages 13 to 19 reported losing sleep because of worry, feeling unhappy or depressed, feeling constantly under strain, or experiencing a loss of confidence in themselves during the pandemic.⁶³ The percentage of 3rd to 12th grade students who reported they had an adult at school they could talk to about their feelings dropped from 46 percent pre-pandemic to 41 percent in the fall of 2020, and then to 39 percent in the spring of 2021.⁶⁴ Asian and Latino youth⁶⁵ and LGBTQ+ youth⁶⁶ were significantly more likely to report isolation, mental health challenges, and disconnection. Prior to the pandemic, students who had public insurance, were from low-income households, and were either Black or Latino, experienced higher rates of anxiety and depression, while also having limited access to behavioral healthcare.⁶⁷ This was expected to be exacerbated due to the pandemic as school services may have been suspended or limited,^{68,69} creating further barriers to the access of mental health services for adolescents from low-income households and Black and Latino students, all who have been shown to

^c Supplemental Nutrition Assistance Program

^d Special Supplemental Nutrition Program for Women, Infants, and Children

^e U.S. Department of Agriculture (USDA) program for eligible school children to receive temporary emergency nutrition benefits loaded on EBT cards that can be used to purchase food during the COVID-19 pandemic.

be more likely than other students to utilize in-school services.⁷⁰ In a survey among high schools students and principals, 86 percent of principals reported their schools offered mental health programs or services both before and during the pandemic, while only two-thirds of students agreed. However, students from low-income families and Black and Latino students were slightly less likely to report their schools had mental health services available before and during the pandemic.⁷¹ With increased mental health concerns, and the lack of mental health professionals available to students before and during the pandemic, the need for trained professionals amplified. A May 2020 survey among high school and middle school students and a December 2020 survey among elementary and middle school principals both reported that students had a hard time accessing mental health services and there were not sufficient school-based mental health professionals to adequately serve all students in need of services.^{72,73}

For youth and college students, the COVID-19 pandemic had a negative impact on educational plans, current labor market participation, and future employment expectations. From spring 2020 to spring 2021, the number of high school seniors who reported a change in their plans for after high school increased, with a higher proportion of students who were eligible for free or reduced lunch, Latino, and English Language Learners reporting changing their plans.⁷⁴ Students described many reasons behind their decision to delay college or change future plans including financial ability, the cancellation of sports seasons and standardized testing jeopardizing chances for athletic and merit-based scholarships, cancellation of extracurricular events that were important for resumes, shifts in academic performance during remote learning that compromised college admission, lack of access to trusted adults in schools that could help with college or career advice, and financial feasibility of career aspirations after seeing so many others lose their jobs during the pandemic.⁷⁵ The pandemic also created a disruption in the academic experience of college students, causing declines in GPA and study hours, changes in major choice, delay of graduation, decline in student enrollment in the fall of 2020, and negative experiences with online teaching.⁷⁶ Prior to the pandemic, college students from low-income high schools were less likely to complete their college degree within six years (28 percent of college students from low-income high schools vs 51 percent from high-income high schools respectively).⁷⁷ Due to COVID-19, disparities widened with low-income college students 55 percent more likely to delay graduation, had 30 percent larger negative effects on semester GPA, and were 41 percent more likely to change their major than their peers.⁷⁸ The disparate economic and health impacts of COVID-19 can explain about 40 percent of the gap in delayed graduation and gaps in other educational outcomes between low- and high-income students.⁷⁹ Not only did COVID-19 create more barriers for student success, it also affected post-college prospects, such as finding a job and expected earnings.⁸⁰ The pandemic had a huge impact on the labor market, especially for young workers. Employed youth and college students experienced a decline in wages, drop in weekly hours worked, and the loss of a job, internship, or a job offer during the pandemic.⁸¹ Youth ages 16 to 24 were more likely to experience unemployment,^{82,83} partially due to cuts in specific industries^f that employ large numbers of young employees⁸⁴ and many 18 to 24 year olds reported COVID-19 related reasons for being without employment.⁸⁵

Children and families involved in the child welfare system experienced increased stress and fewer services.

The disruption of daily lives and schedules caused by COVID-19 increased risk factors of maltreatment for families and resulted in fewer opportunities for professionals to detect risk and support families. Prior to the pandemic being a young or single parent, having low education or income, experiencing high levels of parenting stress and economic stress, not understanding children's needs or development, and substance abuse issues had all been identified as risk factors for child maltreatment.⁸⁶ Studies during the pandemic found that the loss of a job, food insecurity, housing instability, and loneliness were the most significant risk factors for child maltreatment.^{87,88,89} The pandemic's stay at home orders resulted in less contact with children and youth among mandated reporters for child maltreatment, abuse, and neglect, particularly school personnel.^{90,91,92} This created barriers for the identification of family violence and limited treatment options. Communities across the U.S. saw a drop in the reporting of child abuse cases at the beginning of the pandemic. At the same time, reports from Emergency Departments (ED) found that the total number of ED visits related to child abuse and neglect also decreased. However, the proportion of visits related to child abuse and neglect per 100,000 ED visits increased, suggesting that caregivers were more likely to go to the ED for complaints related to child abuse and neglect

^f Industries that experienced the greatest losses in employment during the pandemic were leisure and hospitality, especially food services; education and health services; professional and business services; retail trade; and arts, entertainment, and recreation.

than other complaints.⁹³ While it is expected that child abuse and neglect cases would rise during the pandemic due to increased risk factors and less contact with mandated reporters, there is not strong evidence to show that abuse and neglect rates rose or cases were not identified during the pandemic. While little academic research is yet available, some communities report fewer foster care entries and fewer child fatalities during the pandemic than previously.⁹⁴

As social services agencies curtailed in-person services and courts closed to all but essential activities, opportunities for strengthening families as well as for reunifying children in foster care became limited. Visitation, a key factor in maintaining ties between parents and children in foster care, also was severely reduced during the crisis.⁹⁵ In addition, home investigations, court appearances, and home-based parenting programs were halted, disrupting reunifications and legal permanency of children and their families.^{96,97,98} As a result, many families became even more fractured than they had been initially. While federal agencies urged flexibility in service provision and with permanency timelines,⁹⁹ families and their advocates felt challenged by limitations in virtual services and contact, particularly with very young children.^{100,101} Others report, however, that parental participation in some types of services as well as virtual hearings was more robust than in traditional formats and look forward to incorporating some elements of virtual services in their practices even after the pandemic ends.^{102,103} The pandemic likely had differential impacts on youth depending upon pre-pandemic factors. A study of 54 youth (28 of whom were in foster care by August 2020, and 25 living with foster families and family members) found that youth in stable placements with positive relationships had a better time coping with quarantine and strengthened bonds with their caregiver(s), while youth who experienced conflicted relationships with caregivers had higher stress levels with some cases resulting in placement disruption.¹⁰⁴

Youth in and transitioning out of foster care are at particular risk for experiencing impacts from the pandemic due to their experiences, existing hardships, and structural barriers. Hardships are especially acute for these youth who typically have few family resources to fall back on. Housing and food insecurity were key issues for these youth, 65 percent of whom reported that COVID-19 had a major negative impact on their education progress or attainment.¹⁰⁵ Additionally, almost 50 percent reported being laid-off, no longer having reliable gig work, or having hours/income severely cut.¹⁰⁶ Studies have reported the loss of supports provided through educational institutions as well, compounding hardship. Nationally, estimates indicate that around 10,000 youth in foster care and alumni were living in college dorms before the pandemic began.¹⁰⁷ The transition to remote learning resulted in closure of residential, dining, and student facilities further restricting foster youth's access to essential resources and services. However, some schools are allowing students with extraordinary circumstances to remain in the dorms.¹⁰⁸ The COVID-19 pandemic has also particularly affected the mental health of foster youth in transitional housing. Not only are youth experiencing more behavioral and mental health issues, but it has become harder for them to receive services.¹⁰⁹

Building resilience in children, youth, and families can help promote equity and support recovery efforts.

Human services programs, child protection agencies and reporters, mental health and psychiatric services, schools, the medical system, community organizations, and advocacy bodies all have the potential to become vectors of resilience and healing for children and youth affected by the adversities and/or trauma caused or intensified by the COVID-19 pandemic.¹¹⁰ Building resilience in children, youth, and families through services and supports administered by human services programs can build strength in families, mitigate adverse effects caused by the pandemic, and address current inequities. This includes meeting the basic needs of children and youth, providing emotional and behavioral support, building connections and social capital, and supporting caregiver well-being.¹¹¹

Further research and information is needed to fully understand all of the short- and long-term impacts COVID-19 has and will have on children and youth.

This brief examined the available information on the impact of COVID-19 on the development, emotional and behavioral health, and social or economic well-being of children and youth (age birth to 24). This is not a comprehensive summary of every potential impact but rather a first step in examining how the COVID-19 pandemic affected children and youth. Further research and information gathering is needed to fully understand the short- and long-term impacts COVID-19 will

have, as well as lessons that can be learned for future disruptive events. Some possible areas to consider exploring more in-depth include:

- the current needs of children and families as they return to school and care settings.
- the different experiences and trajectories related to ECE access, attendance, COVID-19 impact, and outcomes throughout the entire duration of the pandemic.
- the long-term outcomes of COVID-19, particularly related to social and emotional well-being.
- the association between caregiver pandemic experience/caregiver well-being and child outcomes. There are also opportunities for two-generation programs to better understand and meet the needs of children and caregivers.
- virtual and hybrid models of multiple programs and services including, early childhood care and education, mental health services, and job training and apprenticeships programs.
- the impact of COVID-19 restrictions on the social connections and relationships of children and youth with supportive adult(s) and their peers.
- the pandemic impact on conducting developmental screenings and subsequent referrals for services.
- the intersection of restrictions, reopening, enrollment, and the cost of child care.
- trends in child welfare system events during the pandemic including, reports, foster care entries, exits and caseloads.
- lessons learned during the pandemic to better understand how virtual visits can be used to enhance parents' continued connections with children in foster care (supplementing rather than replacing in-person visits) and how virtual aftercare for intensive treatment programs and for populations in rural communities establishes and especially maintains connections and reduces social isolation.
- lessons learned about ensuring equity and effectively supporting children and youth in a pandemic, particularly the strengths of communities that successfully mitigated the impacts on children and youth.

¹ Substance Abuse and Mental Health Services Administration, (SAMHSA). (2018). *Behavioral health conditions in children and youth exposed to natural disasters*. SAMHSA - Disaster Technical Assistance Center. Retrieved from <https://www.samhsa.gov/sites/default/files/srb-childrenyouth-8-22-18.pdf>

² American Academy of Pediatrics, & Children's Hospital Association. (2021). *Children and COVID-19 state data report*. American Academy of Pediatrics and the Children's Hospital Association. Retrieved from <https://downloads.aap.org/AAP/PDF/AAP%20and%20CHA%20-%20Children%20and%20COVID-19%20State%20Data%20Report%202.4.21%20FINAL.pdf>

³ Masonbrink, A. R., & Hurley, E. (2020). Advocating for children during the COVID-19 school closures. *Pediatrics (Evanston)*, 146(3) doi:10.1542/peds.2020-1440

⁴ SAMHSA, *Behavioral health conditions in children and youth exposed to natural disasters*.

⁵ Center for Translational Neuroscience. (2020). A hardship chain reaction. Center for Translational Neuroscience. Retrieved from <https://medium.com/rapid-ec-project/a-hardship-chain-reaction-3c3f3577b30>

⁶ COVID Impact Survey. (2020). Social, economic, health impacts persist as american's grapple with convergence of pandemic and civil unrest. Retrieved from <https://www.covid-impact.org/blog/social-economic-health-impacts-persist-as-americans-grapple-with-convergence-of-pandemic-and-civil-unrest>

⁷ Dooley, D., Bandealy, A., & Tschudy, M. (2020). Low-income children and coronavirus disease 2019 (COVID-19) in the US. *JAMA Pediatrics*, 174(10), 922-923.

⁸ SAMHSA, *Behavioral health conditions in children and youth exposed to natural disasters*.

⁹ Shonkoff, J. P. & Williams, D.R. (2020). *Thinking about Racial Disparities in COVID-19 Impacts through a Science-Informed, Early Childhood Lens*. Retrieved from <https://developingchild.harvard.edu/thinking-about-racial-disparities-in-covid-19-impacts-through-a-science-informed-early-childhood-lens/>

¹⁰ Center for Translational Neuroscience, *A hardship chain reaction*.

¹¹ Center for Translational Neuroscience. (2020). *Flattening the other curve*. Center for Translational Neuroscience. Retrieved from <https://medium.com/rapid-ec-project/flattening-the-other-curve-7be1e574b340>

¹² Center on Budget and Policy Priorities. (2021a). *Tracking the COVID-19 recession's effects on food, housing, and employment hardships*. Center on Budget and Policy Priorities. Retrieved from <https://www.cbpp.org/research/poverty-and-inequality/tracking-the-covid-19-recessions-effects-on-food-housing-and>

¹³ Consumer Financial Protection Bureau. (2021). *Housing insecurity and the COVID-19 pandemic*. Consumer Financial Protection Bureau.

¹⁴ Parker, K., Minkin, R., & Bennett, J. (2020). *Economic fallout from COVID-19 continues to hit lower-income americans the hardest*. PEW Research Center. Retrieved from <https://www.pewresearch.org/social-trends/2020/09/24/economic-fallout-from-covid-19-continues-to-hit-lower-income-americans-the-hardest/>

¹⁵ Center for Translational Neuroscience, *A hardship chain reaction*

¹⁶ America's Promise Alliance. (2020). *The state of young people during COVID-19 findings from a nationally representative survey of high school youth*. America's Promise Alliance.

¹⁷ ParentsTogether Action. (n.d.). *ParentsTogether survey reveals remote learning is failing our most vulnerable students*. Retrieved from [https://parentstogetheraction.org/2020/05/27/parentstogether-survey-reveals-remote-learning-is-failing-our-most-vulnerable-students-2/#:~:text=Just%2020%25%20of%20parents%20whose,receiving%20any%20support%20at%20all.&text=Almost%20twice%20as%20concerned%20about,%25%20for%20those%20without%20IEPs\).](https://parentstogetheraction.org/2020/05/27/parentstogether-survey-reveals-remote-learning-is-failing-our-most-vulnerable-students-2/#:~:text=Just%2020%25%20of%20parents%20whose,receiving%20any%20support%20at%20all.&text=Almost%20twice%20as%20concerned%20about,%25%20for%20those%20without%20IEPs).)

¹⁸ Center for Translational Neuroscience, *Flattening the other curve*.

¹⁹ Malik, R., Hamm, K., Lee, W., Davis, E. & Sojourner, A. (2020). *The coronavirus will make child care deserts worse and exacerbate inequality*. Center for American Progress. Retrieved from <https://www.americanprogress.org/issues/early-childhood/reports/2020/06/22/486433/coronavirus-will-make-child-care-deserts-worse-exacerbate-inequality/>

²⁰ Center for Translational Neuroscience. (2020). *Not in the same boat*. University of Oregon Center for Translational Neuroscience. Retrieved from <https://medium.com/rapid-ec-project/not-in-the-same-boat-2d91ed57df2d>

²¹ Home Visiting Applied Research Collaborative. (2020). *COVID-19's early impact on home visiting*. Home Visiting Applied Research Collaborative. Retrieved from <https://www.hvresearch.org/wp-content/uploads/2020/04/COVID-19s-Early-Impact-on-Home-Visiting.pdf>

²² Office of the Assistant Secretary for Planning and Evaluation. (2021). *COVID-19 and economic opportunity: Unequal effects on economic need and program response*. U.S. Department of Health and Human Services.

²³ Ibid

²⁴ Barnett, W.S. & Jung, K. (2021). *Seven Impacts of the Pandemic on Young Children and their Parents: Initial Findings from NIEER's December 2020 Preschool Learning Activities Survey*. New Brunswick, NJ: National Institute for Early Education Research.

²⁵ Smith, L., & Tracey, S. (2020). *Child care in COVID-19: Another look at what parents want*. Bipartisan Policy Center. Retrieved from <https://bipartisanpolicy.org/blog/child-care-in-covid-another-look/>

²⁶ Center for Translational Neuroscience, *Not in the same boat*.

²⁷ Malik et al. *The coronavirus will make child care deserts worse and exacerbate inequality*.

²⁸ Pears, K.C., Miao, A.J., Green, B.L., Lauzus, N., Patterson, L. B., Scheidt, D., & Tremaine, E. (2021). *Oregon Preschool Development Grant Birth to Age 5 Strengths and Needs Assessment: 2020 Statewide Household Survey Results*. Report submitted to the Oregon Early Learning Division and Early Learning Council, March 2021. Retrieved from https://oregonearlylearning.com/wp-content/uploads/2021/04/FINAL_psu-pdg-ph3-household-survey.pdf

²⁹ Barnett & Jung, *Seven Impacts of the Pandemic on Young Children and their Parents: Initial Findings from NIEER's December 2020 Preschool Learning Activities Survey*.

³⁰ Ibid

³¹ Home Visiting Applied Research Collaborative, *COVID-19's early impact on home visiting*.

³² Office of Head Start. (2021). 2020-2021 Data Collection for COVID. Unpublished data. Retrieved from <https://aspe.hhs.gov/system/files/pdf/265391/covid-19-human-service-response-brief.pdf>

- ³³ Office of the Assistant Secretary for Planning and Evaluation. (2021) *People in Low-Income Households Have Less Access to Internet Services-2019 Update*. U.S. Department of Health and Human Services. Retrieved from <https://aspe.hhs.gov/system/files/pdf/263601/internet-access-among-low-income-2019.pdf>
- ³⁴ Ibid
- ³⁵ Office of the Assistant Secretary for Planning and Evaluation. (2021). *Virtual human services for different populations*. U.S. Department of Health and Human Services. Retrieved from <https://aspe.hhs.gov/system/files/pdf/265096/VHS-Different-Populations.pdf>
- ³⁶ Home Visiting Applied Research Collaborative, *COVID-19's early impact on home visiting*
- ³⁷ Tulsa SEED Survey. (2020). *Parents, teachers, and distance learning during the COVID-19 pandemic: A snapshot from tulsa, OK*. Retrieved from <https://medium.com/@TulsaSEED/parents-teachers-and-distance-learning-during-the-covid-19-pandemic-a-snapshot-from-tulsa-ok-5b5fdb54ea18>
- ³⁸ Office of the Assistant Secretary for Planning and Evaluation, *Virtual human services for different populations*.
- ³⁹ Office of the Assistant Secretary for Planning and Evaluation, *COVID-19 and economic opportunity: Unequal effects on economic need and program response*.
- ⁴⁰ Constantino, J. N., Sahin, M., Piven, J., Rodgers, R., and Tschida, J. (2020). The impact of COVID-19 on individuals with intellectual and developmental disabilities: clinical and scientific priorities. *Am. J. Psychiatry* 177, 1091–1093. doi: 10.1176/appi.ajp.2020.20060780
- ⁴¹ Patel, K. (2020). Mental health implications of COVID-19 on children with disabilities. *Asian Journal of Psychiatry*, 54, 102273. doi:10.1016/j.ajp.2020.102273
- ⁴² Aishworiya, R., Kang, Y.Q. (2020). Including children with developmental disabilities in the equation during this COVID-19 Pandemic. *J Autism Dev Disord*. <https://doi.org/10.1007/s10803-020-04670-6>
- ⁴³ Barboza, G. E., Schiamberg, L. B., & Pahl, L. (2020). A spatiotemporal analysis of the impact of COVID-19 on child abuse and neglect in the city of los angeles, california. *Child Abuse & Neglect*, 104740. doi:10.1016/j.chiabu.2020.104740
- ⁴⁴ Schanzenbach, D.W., & A. Pitts. (2020). *How much has food insecurity risen? Evidence from the Census Household Pulse Survey*. Institutes for Policy Research Rapid Research Report. <https://www.ipr.northwestern.edu/documents/reports/ipr-rapid-research-reports-pulse-hh-data-10-june-2020.pdf>
- ⁴⁵ U.S. Department of Health and Human Services - Office of Head Start (HHS/OHS). (2021). *Office of head start COVID-19 updates*. Retrieved from <https://eclkc.ohs.acf.hhs.gov/about-us/coronavirus/ohs-covid-19-updates>
- ⁴⁶ Patrick, S. W., Henkhaus, L. E., Zickafoose, J. S., Lovell, K., Halvorson, A., Loch, S., . . . Davis, M. M. (2020). Well-being of parents and children during the COVID-19 pandemic: A national survey. *Pediatrics*, 146(4)
- ⁴⁷ Ibid
- ⁴⁸ Dunn, C., Kenney, E., Fleischhacker, S., Bleich, S. (2020). Feeding Low-Income Children during the Covid-19 Pandemic. *New England Journal of Medicine*, 382(18). doi: 10.1056/NEJMp2005638.
- ⁴⁹ Center for Translational Neuroscience, *A hardship chain reaction*
- ⁵⁰ Barboza et al., *A spatiotemporal analysis of the impact of COVID-19 on child abuse and neglect in the city of los angeles, california*.
- ⁵¹ Hatem, C., Lee, C. Y., Zhao, X., Reesor-Oyer, L., Lopez, T., & Hernandez, D. C. (2020). Food insecurity and housing instability during early childhood as predictors of adolescent mental health. *Journal of Family Psychology*, 34(6), 721-730. doi:10.1037/fam0000651
- ⁵² Patrick et al., *Well-being of parents and children during the COVID-19 pandemic: A national survey*.
- ⁵³ The Prichard Committee Student Voice Team. (n.d). *Coping with COVID-19 Student-to-Student Study*. Retrieved from https://daa63d47-9ff1-4bc7-a7fe-8a8288621c18.filesusr.com/ugd/163a29_a12957f8fd214190a876229a4e3eb43f.pdf
- ⁵⁴ Center for Translational Neuroscience, *A hardship chain reaction*
- ⁵⁵ Barboza et al., *A spatiotemporal analysis of the impact of COVID-19 on child abuse and neglect in the city of los angeles, california*.
- ⁵⁶ Hatem et al. *Food insecurity and housing instability during early childhood as predictors of adolescent mental health*.
- ⁵⁷ Patrick et al., *Well-being of parents and children during the COVID-19 pandemic: A national survey*.
- ⁵⁸ America's Promise Alliance, *The state of young people during COVID-19 findings from a nationally representative survey of high school youth*

- ⁵⁹ Ye, J. (2020). Pediatric mental and behavioral health in the period of quarantine and social distancing with COVID-19. *JMIR Pediatrics and Parenting*, 3(2), e19867. doi:10.2196/19867
- ⁶⁰ National Scientific Council on the Developing Child. (2014). *Excessive stress disrupts the architecture of the developing brain: Working paper 3*. Center on the Developing Child at Harvard University.
- ⁶¹ Center for Translational Neuroscience, *A hardship chain reaction*
- ⁶² Verlenden, J., Pampati, S., Rasberry, C., Liddon, N., Hertz, M., Kilmer, G., Heim Viox, M., Lee, S., Cramer, N., Barrios, L., & Ethier, K. (2021). Association of Children’s Mode of School Instruction with Child and Parent Experiences and Well-Being During the COVID-19 Pandemic — COVID Experiences Survey, United States, October 8–November 13, 2020. *Morbidity and Mortality Weekly Report (MMWR) 2021*, 70 (11), 369–376. DOI: [http://dx.doi.org/10.15585/mmwr.mm7011a1external icon](http://dx.doi.org/10.15585/mmwr.mm7011a1external%20icon).
- ⁶³ America’s Promise Alliance, *The state of young people during COVID-19 findings from a nationally representative survey of high school youth*
- ⁶⁴ YouthTruth. (2021). *Students weigh in, part III: learning & well-being during COVID-19*. YouthTruth. <https://youthtruthsurvey.org/wp-content/uploads/2021/08/YouthTruth-Students-Weigh-In-Part-III-Learning-and-Well-Being-During-COVID-19.pdf>
- ⁶⁵ America’s Promise Alliance, *The state of young people during COVID-19 findings from a nationally representative survey of high school youth*
- ⁶⁶ Kurtz, H., Lloyd, S., Harwin, A., Chen, V., & Furuya, Y. (2021). *Student mental health during the pandemic: Educator and teen perspectives*. Bethesda, MD: EdWeek Research Center. Retrieved from https://fs24.formsite.com/edweek/images/Mental_Health_Survey_Report_SL_3.30.21_Sponsored.pdf
- ⁶⁷ Ali, M. M., West, K., Teich, J. L., Lynch, S., Mutter, R., & Dubenitz, J. (2019). Utilization of mental health services in educational setting by adolescents in the united states. *The Journal of School Health*, 89(5), 393-401. doi:10.1111/josh.12753
- ⁶⁸ Ibid
- ⁶⁹ Panchal, N., Kamal, R., Cox, C., Garfield, R., & Chidambaram, P. (2021). Mental Health and Substance Use Considerations Among Children During the COVID-19 Pandemic. KFF. Retrieved from <https://www.kff.org/coronavirus-covid-19/issue-brief/mental-health-and-substance-use-considerations-among-children-during-the-covid-19-pandemic/#:~:text=anxiety%20and%20depression.-,Adolescents,worsened%20emotional%20and%20cognitive%20health>.
- ⁷⁰ Ali, M. M., West, K., Teich, J. L., Lynch, S., Mutter, R., & Dubenitz, J. (2019). Utilization of mental health services in educational setting by adolescents in the united states. *The Journal of School Health*, 89(5), 393-401. doi:10.1111/josh.12753
- ⁷¹ Kurtz et al., *Student mental health during the pandemic: Educator and teen perspectives*.
- ⁷² National Association of Elementary School Principals, (NAESP). (2021). NAESP releases results of midyear national principal survey on COVID-19 in schools. Retrieved from <https://www.naesp.org/news/naesp-releases-results-of-midyear-national-principal-survey-on-covid-19-in-schools/>
- ⁷³ The Prichard Committee Student Voice Team, *Coping with COVID-19 Student-to-Student Study*.
- ⁷⁴ YouthTruth, *Students weigh in, part III: learning & well-being during COVID-19*
- ⁷⁵ The Prichard Committee Student Voice Team, *Coping with COVID-19 Student-to-Student Study*.
- ⁷⁶ Aucejo et al., *The impact of COVID-19 on student experiences and expectations: Evidence from a survey*.
- ⁷⁷ National Clearinghouse Research Center. (2020). High school benchmarks 2020: National College Progression Rates. National Clearinghouse Research Center. Retrieved from https://nscresearchcenter.org/wp-content/uploads/2020_HSBenchmarksReport.pdf
- ⁷⁸ Aucejo et al., *The impact of COVID-19 on student experiences and expectations: Evidence from a survey*.
- ⁷⁹ Ibid
- ⁸⁰ Ibid
- ⁸¹ Ibid
- ⁸² Handwerker, E. W., Meyer, P. B., Piacentini, J., Schultz, M., & Sveikauskas, L. (2020). *Employment recovery in the wake of the COVID-19 pandemic*. U.S. Bureau of Labor Statistics.

- ⁸³ HHS/ASPE tabulations from the Current Population Survey and PULSE Survey. (2020). Employment during COVID-19. Retrieved from <https://youth.gov/youth-topics/employment-during-covid-19>
- ⁸⁴ Dey, M., & Loewenstein, M. A. (2020). *How many workers are employed in sectors directly affected by COVID-19 shutdowns, where do they work, and how much do they earn?* U.S. Bureau of Labor Statistics
- ⁸⁵ HHS/ASPE tabulations from the Current Population Survey and PULSE Survey, *Employment during COVID-19*.
- ⁸⁶ Center for Disease Control and Prevention. (2021). *Risk and Protective Factors*. Retrieved from <https://www.cdc.gov/violenceprevention/childabuseandneglect/essentials/index.html>
- ⁸⁷ Lawson, M., Piel, M. H., & Simon, M. (2020). Child maltreatment during the COVID-19 pandemic: Consequences of parental job loss on psychological and physical abuse towards children. *Child Abuse & Neglect, 110*(Pt 2), 104709. doi: 10.1016/j.chiabu.2020.104709
- ⁸⁸ Barboza et al., *A spatiotemporal analysis of the impact of COVID-19 on child abuse and neglect in the city of los angeles, california*
- ⁸⁹ Rodriguez, C. M., Lee, S. J., Ward, K. P., & Pu, D. F. (2021). The Perfect Storm: Hidden Risk of Child Maltreatment During the Covid-19 Pandemic. *Child maltreatment, 26*(2), 139–151. <https://doi.org/10.1177/1077559520982066>
- ⁹⁰ Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2021). *The implications of COVID-19 for mental health and substance abuse*. KFF. Retrieved from <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>
- ⁹¹ Baron, E. J., Goldstein, E. G., & Wallace, C. T. (2020). Suffering in silence: How COVID-19 school closures inhibit the reporting of child maltreatment. *Journal of Public Economics, 190*, 104258. doi:10.1016/j.jpubeco.2020.104258
- ⁹² Barboza et al., *A spatiotemporal analysis of the impact of COVID-19 on child abuse and neglect in the city of los angeles, california*
- ⁹³ Swedo, E., Idaikkadar, N., Leemis, R., Dias, T., Radhakrishnan, L., Stein, Z., . . . Holland, K. (2020). *Trends in U.S. emergency department visits related to suspected or confirmed child abuse and neglect among children and adolescents aged <18 years before and during the COVID-19 pandemic*. Centers for Disease Control and Prevention (CDC). Retrieved from <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6949a1-H.pdf>
- ⁹⁴ Fitzgerald, M. (2021, June 15). No evidence of pandemic child abuse surge in new york city, but some see other crises for child welfare system. *The Imprint*. <https://imprintnews.org/top-stories/no-evidence-of-pandemic-child-abuse-surge-in-new-york-city-but-some-see-other-crises-for-child-welfare-system/55991>
- ⁹⁵ Singer, J., & Brodzinsky, D. (2020). Virtual parent-child visitation in support of family reunification in the time of COVID-19. *Developmental Child Welfare, 2*(3), 153–171. <https://doi.org/10.1177/2516103220960154>
- ⁹⁶ Welch, M. & Haskins, Ron. (2020). *What COVID-19 means for America's child welfare system*. Brookings Institute. Retrieved from <https://www.brookings.edu/research/what-covid-19-means-for-americas-child-welfare-system/>
- ⁹⁷ Hager, E. (2020). Coronavirus leaves foster children with nowhere to go. The Marshall Project. Retrieved from <https://www.themarshallproject.org/2020/03/24/coronavirus-leaves-foster-children-with-nowhere-to-go>
- ⁹⁸ Loudenback, J. (2020). *Dependency court backlog finds many Los Angeles children still in limbo*. Center for Health Journalism at the University of Southern California. Retrieved from <https://centerforhealthjournalism.org/fellowships/projects/dependency-court-backlog-finds-many-los-angeles-children-still-limbo>
- ⁹⁹ Children's Bureau. (2020). *Tips for supporting virtual family time*. U.S. Department of Health and Human Services. Retrieved from https://www.childwelfare.gov/pubPDFs/bulletins_familytime.pdf
- ¹⁰⁰ Casey Family Programs. (2020). *What do we know about virtual court hearings?* Retrieved from <https://caseyfamilypro-wpengine.netdna-ssl.com/media/20.07-QFF-TS-Virtual-Permanency-Courts.pdf>
- ¹⁰¹ Singer & Brodzinsky, *Virtual parent-child visitation in support of family reunification in the time of COVID-19*.
- ¹⁰² Tiano, S. (2021, March 3.). Virtual child welfare court is the way of the future, leading texas judges say. *The Imprint* Retrieved from <https://imprintnews.org/child-welfare-2/virtual-child-welfare-court-is-the-way-of-the-future-leading-texas-judges-say/52655>
- ¹⁰³ Reed, A., & Alder, M. (2020, July 23.). Virtual hearings put children, abuse victims at ease in court . *Bloomberg Law* Retrieved from <https://news.bloomberglaw.com/us-law-week/virtual-hearings-put-children-abuse-victims-at-ease-in-court>

- ¹⁰⁴ Bell, B. (2020). The Impact of COVID-19 on Youth in Foster Care. *Texas Youth Performance Study*. <https://utytps.socialwork.utexas.edu/2020/10/07/youth-in-care-more-family-bonding-time-during-covid-quarantine/>
- ¹⁰⁵ Greeson, J. K. P., Jaffee, S., Wasch, S., & Gyourko, J. (2020). *The experiences of older youth in & aged out of foster care during COVID-19*. The Field Center for Children's Policy, Practice, & Research
- ¹⁰⁶ John Burton Advocates for Youth. (2020). *Covid-19 & thp-nmd*. John Burton Advocates for Youth. Retrieved from <https://www.jbaforyouth.org/covid-19-thp-survey/>
- ¹⁰⁷ National Center for Housing and Child Welfare. (n.d.). *Coping with COVID-19*. Retrieved from <https://static1.squarespace.com/static/5a7dcc2a0100277e36127414/t/5e9de8b8761e844263daa5d7/1587407034068/Covid+19+housing+.pdf>
- ¹⁰⁸ Ibid
- ¹⁰⁹ Greeson et al., *The experiences of older youth in & aged out of foster care during COVID-19*
- ¹¹⁰ Collin-Vézina, D., Brend, D., & Beeman, I. (2020). When it counts the most: Trauma-informed care and the COVID-19 global pandemic. *Developmental Child Welfare*, 2(3), 172-179. doi:10.1177/2516103220942530
- ¹¹¹ Bartlett, J. D., & Vivrette, R. (2020). *Ways to promote children's resilience to the COVID-19 pandemic*. Child Trends.