

## NSECE Snapshot:

# Mental Health and Well-being of Center-based Child Care Workers from 2019 during the COVID-19 Pandemic: Key Findings by Race and Ethnicity

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### Summary Findings

The COVID-19 pandemic imposed heavy health-related and economic stressors that disproportionately affected Black and Hispanic women.<sup>1</sup> Given the racial/ethnic differences in the experience of the COVID-19 pandemic, it makes sense to investigate for potentially distinct experiences across races/ethnicities in the mental health and well-being of the CCEE workforce during that unprecedented time. Among individuals in the center-based CCEE workforce in 2019, a survey-based measure of risk of depression increased from 8.4% in 2019 to 28.2% in 2021 and 27.0% in 2022. This overall increase in the risk of depression between 2019 and 2021, remaining high in 2022, was found across all four race and ethnicity subgroups examined in this snapshot. Individuals described in this snapshot participated in the 2019 National Survey of Early Care and Education (NSECE) and the NSECE COVID-19 Longitudinal Follow-up in 2021 and 2022. These individuals represent 825,000 of the 1.36 million center-based workers in 2019; they may or may not have worked in CCEE after 2019 and do not represent the CCEE workforce in 2021 or 2022. The findings have several important limitations, and results need to be interpreted with caution.

Numerous public health studies have documented the disproportionate impacts of COVID-19 on racial and ethnic minorities, and have identified systemic social inequities as drivers of these disparities.<sup>2,3,4</sup> Studies have found that Black/African-American and Hispanic/Latino individuals have experienced a disproportionate burden of COVID-19-related outcomes, as evidenced by the higher infection and fatality rates<sup>5</sup> and higher number of children whose households experienced unemployment during the pandemic.<sup>6</sup>

<sup>1</sup> Tout, K. (2021). Child care and COVID-19: Support children by investing in early educators and program sustainability (Child Evidence Brief, No. 10). Society for Research in Child Development.

<sup>2</sup> Marrett, C. B. (2021). Racial disparities and COVID-19: the social context. *Journal of racial and ethnic health disparities*, 8, 794-797. <https://link.springer.com/article/10.1007/s40615-021-00988-8>

<sup>3</sup> Romano SD, Blackstock AJ, Taylor EV, et al. Trends in Racial and Ethnic Disparities in COVID-19 Hospitalizations, by Region — United States, March–December 2020. *MMWR Morb Mortal Wkly Rep* 2021;70:560–565. DOI: [http://dx.doi.org/10.15585/mmwr.mm7015e2external\\_icon](http://dx.doi.org/10.15585/mmwr.mm7015e2external_icon).

<sup>4</sup> Hill, L., & Artiga S (2022). COVID-19 Cases and Deaths by Race/Ethnicity, KFF, Retrieved from <https://www.kff.org/racial-equity-and-health-policy/issue-brief/covid-19-cases-and-deaths-by-race-ethnicity-current-data-and-changes-over-time/>

<sup>5</sup> Yancy, C. W. (2020). COVID-19 and African Americans. *JAMA*, 323(19), 1891-1892.

<sup>6</sup> BoBokun, A., Himmelstern, J., Jeong, W., Meier, A., Musick, K., & Warren, R. (2020). The unequal impact of COVID-19 on children's economic vulnerability. *ECONOFACT*. Retrieved from <https://econofact.org/the-unequal-impact-of-covid-19-on-childrens-economic-vulnerability>

The COVID-19 pandemic posed unprecedented challenges for the child care and early education (CCEE) sector. We know less about how center-based workers of different races and ethnicities experienced health, social, and economic challenges during this difficult time, and how these challenges may have affected their mental health and well-being. This snapshot partially fills this gap in knowledge by examining the mental health and well-being of the individuals in the center-based CCEE workforce in 2019, by race and ethnicity, as collected in longitudinal data from 2019, 2021 and 2022 in the National Survey of Early Care and Education (NSECE). This analysis focuses on examining mental health and well-being by race/ethnicity but does not examine factors that are more immediate results of the systemic social inequities, such as measures of health, social, and economic challenges.

### **About the NSECE**

The National Survey of Early Care and Education (NSECE) is a set of four integrated, nationally representative surveys conducted in 2012 and 2019. These were surveys of 1) households with children under 13, 2) home-based providers of CCEE, 3) center-based providers of CCEE, and 4) the center-based workforce. Together, they characterize the supply of and demand for early care and education in America in 2012 and 2019 and permit better understanding of how well families' needs and preferences coordinated with providers' offerings and constraints. The 2019 NSECE largely replicated the design of the 2012 NSECE; both are cross-sectional surveys with no intentional overlap in sampled households or providers. The study was funded by the Office of Planning, Research, and Evaluation (OPRE) in the Administration for Children and Families (ACF), U.S. Department of Health and Human Services.

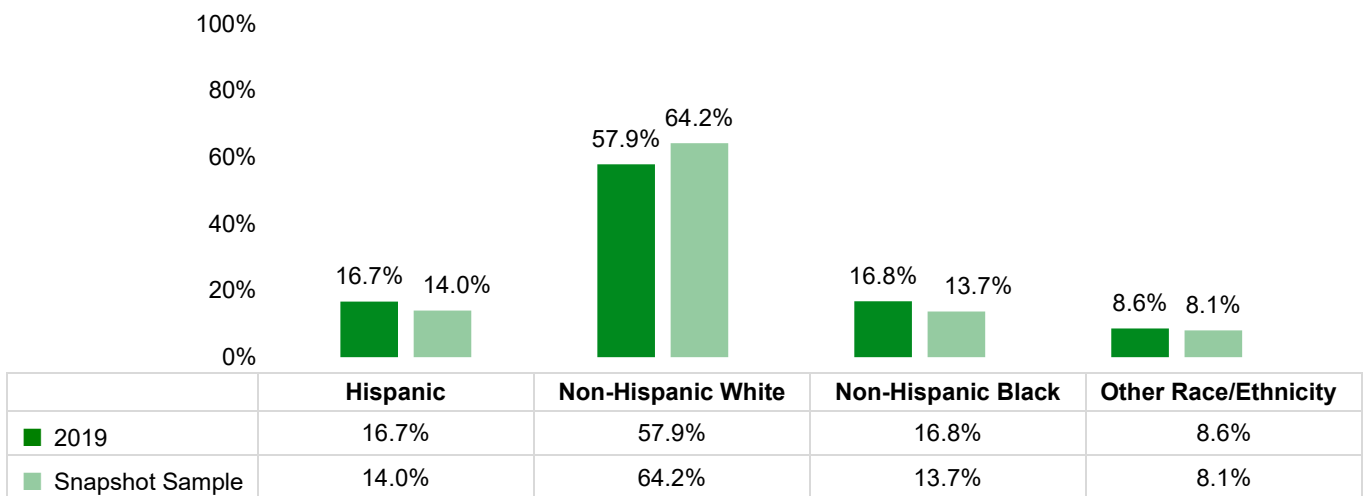
### **About the data for this snapshot**

This snapshot draws from data collected in NSECE Workforce Surveys in 2019 (March 2019 – July 2019), and in the COVID-19 Longitudinal Follow-up Wave 1 (January 2021-March 2021) and Wave 2 (November 2021 – February 2022). The nationally representative sample in 2019 was comprised of one or two classroom-assigned instructional staff members from each center-based provider that completed a center-based provider interview in the 2019 NSECE. One classroom serving children birth through age 5 not yet in kindergarten was selected at random from one of the age groups the center-based program reported serving. Workforce respondents were selected at random from a list of classroom staff. All workers in the 2019 NSECE were asked to participate in the NSECE COVID-19 Longitudinal Follow-up, whether or not they were still working in CCEE. The analytic sample in this snapshot includes 2,032 respondents from the NSECE Workforce Surveys in 2019 and COVID-19 Longitudinal Follow-up Surveys who represent 825,000 members of the center-based CCEE workforce in 2019, which is about 60% of the full center-based workforce in 2019.

# Overview of the Data

The 2019 NSECE Center-based Workforce Survey indicated that there were 1.36 million teachers, assistant teachers, and aides in center-based CCEE classrooms in 2019. This snapshot uses data representing 825,000 members of the center-based CCEE workforce from 2019 (60% of the full workforce that year). This subsample of the 2019 NSECE respondents (referred to as the “snapshot sample”) includes respondents who subsequently participated in Wave 1 and Wave 2 COVID-19 Longitudinal Follow-up Workforce interviews and completed the items on mental health in all three time points. Exhibit 1 compares the distribution, according to race and ethnicity, of all center-based CCEE workers in 2019 to the subset of those workers who make up the snapshot sample. The overall distributions of race and ethnicity appear similar between the full sample in 2019 and the snapshot sample.

**Exhibit 1. Percentage of Workers by Race and Ethnicity in the Center-based CCEE Workforce in 2019 and in the Snapshot Sample**



Source: National Survey of Early Care and Education Workforce Surveys: 2019, COVID-19 Longitudinal Follow-up Waves 1 and 2. 2019 sampling weight used for 2019 estimates and COVID-19 Longitudinal Follow-up cumulative weight used for snapshot sample.  
 Note: Any respondent who identified themselves as “Hispanic or Latino” is included in the Hispanic group. Respondents who identified themselves as “Not Hispanic or Latino” but identified themselves as “White Only” are captured in the Non-Hispanic White group, and respondents who identified themselves as “Not Hispanic or Latino” but identified themselves as “Black or African American only” are captured in the Non-Hispanic Black group. All remaining non-Hispanic respondents are included in the “Other Race/Ethnicity” group.

The questionnaires for the 2019 NSECE Center-based Workforce Survey, and the Wave 1 and Wave 2 COVID-19 Longitudinal Follow-Up Workforce Surveys all included the seven-item Center for Epidemiological Studies-Depression Scale short form (CES-D-SF) that asks respondents to indicate how often in the prior week they felt in particular ways that are often associated with depression (see [How Risk of Depression is Measured in this Snapshot](#)). In this snapshot, we examine the percentage of workers in the snapshot sample with depressive symptomology and examine changes among four racial/ethnic groups, at the three time points of data collection: 2019, 2021 (from Wave 1 of the COVID-19 Longitudinal Follow-up), and 2022 (from Wave 2 of the COVID-19 Longitudinal Follow-up).

## How Risk of Depression is Measured in this Snapshot

**Center for Epidemiologic Studies-Depression Scale (CES-D) short form (CES-D-SF)** is a seven-item short form of the 20-item Epidemiologic Studies Depression Scale (CES-D), which is widely used to screen for risk of depression in U.S. community studies. The CES-D short form (CES-D-SF) includes questions about the frequency of seven depressive symptoms over the last week. Respondents are asked to indicate how often they felt in the following ways during the prior week using four categories, which are assigned a numeric value (0-3) for scale construction: *Rarely or none of the time (less than 1 day)* is assigned 0, *Some or a little of the time (1-2 days)* is assigned 1, *Occasionally or moderate amount of time (3-4 days)* is assigned 2, and *All of the time (5-7 days)* is assigned 3. Responses to each of the below 7 items are summed to generate a total score ranging from 0 to 21, where a higher score means more signs of being depressed.

1. I did not feel like eating; my appetite was poor.
2. I had trouble keeping my mind on what I was doing.
3. I felt depressed.
4. I felt that everything I did was an effort.
5. My sleep was restless.
6. I was sad.
7. I could not get going.

The CES-D cut-off of 16 has been widely used for identifying depressive symptoms (Weissman et al., 1977), although there has been no diagnostic validation of major clinical depression on the CES-D. In the original development of the short-form measure (CES-D-SF), Levine (2013) found that, using a methodological approach (classification accuracy analysis), there was alignment between scores of 8 or more on the short form (CES-D-SF) and scores of 16 or more on the original form (CES-D). Following this approach (Levine, 2013) respondents on the CES-D-SF with a score above this cut-off (scores of 8-21) are described as “at-risk” of depression in this snapshot. Recent research has similarly implemented this approach of using a cut-off of 8 or higher in studying depression among CCEE workers (Markowitz and Bassok, 2022).

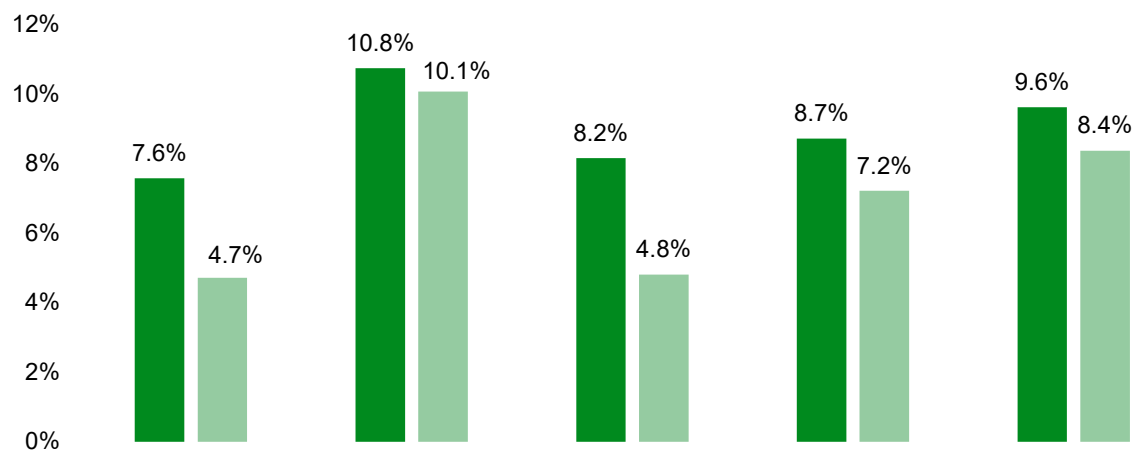
Many studies have analyzed differences in risk of depression, by race/ethnicity, using the CES-D, clinical indicators such as major depressive disorder, and over time measures (Bailey et al., 2019; Walsemann et al., 2009). The studies generally conclude that differences by race/ethnicity are common, but patterns are variable, and differences are not well-understood (Wang et al., 2017).

### References

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Exhibit 2 compares the percentage of workers at risk of depression in 2019, by race and ethnicity, for all center-based CCEE workers in 2019 and for the subset of those workers in the snapshot sample. Although the snapshot sample is similar to the full 2019 sample on race/ethnicity, the snapshot sample shows some indication of fewer individuals at risk of depression in 2019 than in the full 2019 sample.<sup>7</sup> Moreover, for the full center-based CCEE workforce in 2019, there was no statistical difference in the percentage of workers at risk of depression by race/ethnicity. In contrast, in the snapshot sample for 2019, a significantly higher fraction of non-Hispanic White workers (10.1%) was at risk of depression than among Hispanic workers (4.7%) or among non-Hispanic Black workers (4.8%). Given the initial differences in risk of depression among Hispanic and non-Hispanic Black workers, the findings of this snapshot may be more applicable to all non-Hispanic White center-based workers from 2019 than to all workers in the Hispanic and non-Hispanic Black subgroups that year. The findings do apply fully to the 825,000 workers represented by the snapshot sample.

**Exhibit 2. Percentage of Workers at Risk of Depression in 2019, by Race and Ethnicity, for Full Center-based CCEE Workforce from 2019 and Snapshot Sample**



	Hispanic	Non-Hispanic White	Non-Hispanic Black	Other Race/Ethnicity	Total
■ 2019	7.6%	10.6%	8.2%	8.7%	9.6%
■ Snapshot Sample	4.7%	10.1%	4.8%	7.2%	8.4%

Source: National Survey of Early Care and Education Workforce Surveys: 2019, COVID-19 Longitudinal Follow-up Waves 1 and 2. 2019 sampling weight used for 2019 estimates and COVID-19 Longitudinal Follow-up cumulative weight used for snapshot sample.

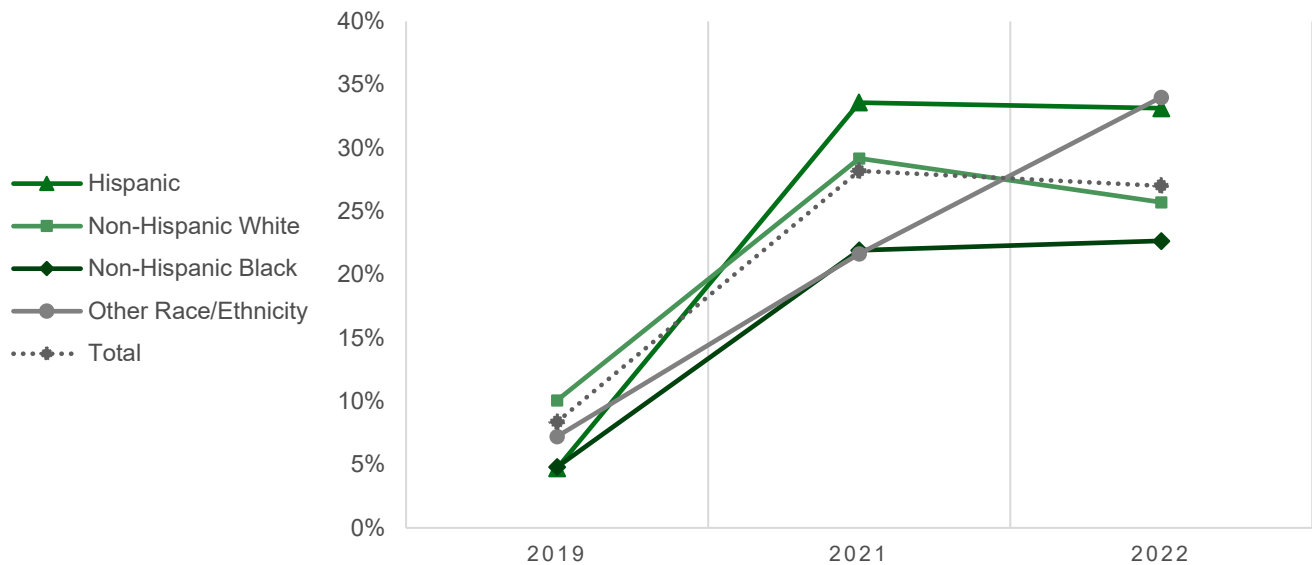
Notes: Risk of depression is defined by a score of 8 or higher on the CES-D-SF

Total represents snapshot sample not disaggregated by race and ethnicity. Any respondent who identified themselves as “Hispanic or Latino” are included in the *Hispanic* group. Respondents who identified themselves as “Not Hispanic or Latino” but identified themselves as “White Only” are captured in the *Non-Hispanic White* group, and respondents who identified themselves as “Not Hispanic or Latino” but identified themselves as “Black or African American only” are captured in the *Non-Hispanic Black group*. All remaining non-Hispanic respondents are included in the *Other* group.

<sup>7</sup> This is a descriptive comparison of the snapshot sample with the full 2019 sample, for which conventional statistical comparisons are not appropriate.

Exhibit 3 examines changes in the percentage of the snapshot sample who were at risk of depression in 2019, 2021, and 2022, by race/ethnicity. The 2019 data collection occurred between March and July of 2019, before the onset of the COVID-19 pandemic. The 2021 data collection (COVID-19 Longitudinal Follow-up Wave 1) occurred between January and March of 2021 and the 2022 data collection (COVID-19 Longitudinal Follow-up Wave 2) took place between November 2021 and February of 2022.

**Exhibit 3. Percentage of a Subset of 2019 Center-based CCEE Workforce Members at Risk of Depression in 2019, 2021 and 2022, by Race and Ethnicity**



	Snapshot sample		
	2019	2021	2022
<b>Hispanic</b>	4.7%	33.6%*	33.1%*
<b>Non-Hispanic White</b>	10.1%	29.2%*	25.7%*
<b>Non-Hispanic Black</b>	4.8%	21.9%*	22.7%*
<b>Other Race/Ethnicity</b>	7.2%	21.6%*	34.0%*
<b>Total</b>	8.4%	28.2%*	27.0%*

Source: National Survey of Early Care and Education Workforce Surveys: 2019, COVID-19 Longitudinal Follow-up Waves 1 (2021) and 2 (2022). \* indicates statistically significant ( $p < 0.05$ ) differences relative to 2019 rates for same racial/ethnic group.

Notes: Risk of depression is defined by a score of 8 or higher on the CES-D-SF

Total represents snapshot sample not disaggregated by race and ethnicity. Any respondents who identified themselves as “Hispanic or Latino” are included in the *Hispanic* group. Respondents who identified themselves as “Not Hispanic or Latino” but identified themselves as “White Only” are captured in the *Non-Hispanic White* group, and respondents who identified themselves as “Not Hispanic or Latino” but identified themselves as “Black or African American only” are captured in the *Non-Hispanic Black* group. All remaining respondents are included in the *Other* group.



## What do the data show?

Among respondents in the snapshot sample representing approximately 825,000 individuals who worked in center-based CCEE in 2019:

- **The percentage of members of the center-based CCEE workforce from 2019 who were at risk of depression increased between 2019 and 2021 and remained at higher levels in 2022 compared to 2019.**
  - About 28.2% and 27.0% of the snapshot sample of center-based CCEE workers from 2019 were at risk of depression in 2021 and 2022, respectively, compared to 8.4% in 2019.
- **Risk of depression was higher in 2021 than in 2019 among members of the center-based CCEE workforce from 2019 for all four racial/ethnic groups examined.**
  - The increased risk of depression was most pronounced for the Hispanic workforce members in this snapshot sample. About one-third (33.6%) of the Hispanic center-based CCEE workers in the snapshot sample were at risk of depression in 2021, compared to 4.7% in 2019. The increased risk for Hispanic center-based CCEE workers is consistent with the public health literature documenting disproportionately worse health outcomes for the Hispanic/Latino populations.
  - While there were no doubt differences in experiences among individuals in different racial/ethnic groups, center-based CCEE workforce, of all racial/ethnic identities, had similar changes in risk of depression over this time period, displaying a higher risk of depression during the pandemic (i.e., 2020 and 2021).
- **In 2022, the percentage of members of the center-based CCEE workforce from 2019 at risk of depression remained at higher levels compared to 2019. This was observed consistently in each racial/ethnic group.**
  - The subgroup classified as ‘Other Race/Ethnicity’ in Exhibit 3 experienced an increased risk of depression between 2021 and 2022 (21.6% vs. 34.0%)<sup>8</sup>. This group includes individuals not reporting Hispanic ethnicity and multiple races, no race, or a race such as Asian, American Indian/Alaska Native, or Native Hawaiian or Pacific Islander. No statistical difference between 2021 and 2022 was observed for any of the three other racial/ethnic groups examined in Exhibit 3.

<sup>8</sup> Increased risk of depression among individuals in the ‘Other’ race and ethnicity from 2021 to 2022 is significant at the  $p < .10$  level, but not at  $p < .05$ , the level used for determining statistical significance of all other comparisons reported in this snapshot.

## Limitations

This snapshot uses data representing 825,000 individuals, 60% of the center-based CCEE workforce from 2019. The NSECE COVID-19 Longitudinal Follow-up describes members of the center-based CCEE workforce from 2019, some of whom were no longer in CCEE in 2021 and 2022. These data do not generalize to the 2021 or 2022 center-based CCEE workforce. Although the racial/ethnic composition of the snapshot sample was similar to the original 2019 center-based CCEE workforce, the snapshot sample could differ from the entire 2019 center-based CCEE workforce on other characteristics not analyzed here. Also, the CES-D-SF asks about depressive symptoms “during the past week.” This means that even among respondents from the same wave, the time period referenced for the survey items will vary by the timing of the survey interview. The period 2019 to 2022 included many significant societal events in addition to the COVID-19 pandemic. The mental health patterns documented in this snapshot likely reflect responses to many of these events, including but not limited to the pandemic. Finally, this snapshot reports on responses to the CES-D-SF items in a non-clinical (survey) setting. Although the CES-D-SF is a widely used tool for screening for risk of depression in community studies, clinical conclusions are not appropriate based on the survey results in this snapshot.

## Conclusion

NSECE survey data indicate that among a subset of the center-based CCEE workforce from 2019, the percentage of individuals at risk of depression increased from 8.4% in 2019, to 28.2% in 2021 and 27.0% in 2022. Increases were observed relative to 2019, at two time points during the COVID-19 pandemic, in each of the four racial/ethnic subgroups of the center-based workforce from 2019. For example, the proportion of the Hispanic CCEE workforce at risk of depression increased from 4.7% in 2019 to 33.6% in early 2021, while the risk increased from 4.8% to 21.9% for non-Hispanic Black CCEE workers. These findings shed light on the challenges facing center-based CCEE workers during the pandemic. However, these findings do not extend to the full 2019 center-based CCEE workforce due to several limitations: this snapshot sample included only a subset of center-based CCEE workers from 2019, and descriptively, the subset of workers studied in this snapshot indicated lower risk of depression in 2019 than all center-based CCEE workers that year. In addition, we examine a single measure; other measures of mental health or well-being could reveal different patterns. Finally, we note that many individuals described in this snapshot were working in center-based CCEE in 2019, but were not working in CCEE in 2021 or 2022. Another analysis of the NSECE Workforce COVID Longitudinal Follow-up data found that in October 2020, 71% of the individuals who had been teachers in 2019 and 59% of the individuals who had been aides/assistants in 2019 were working in CCEE.<sup>9</sup>

<sup>9</sup> Amadon, S., Joshua Borton, Ying-Chun Lin, Rebecca Madill, Jing Tang, Ilana Ventura, Grace Xie (2022). NSECE Snapshot: Employment Experiences of the 2019 Center-based Child Care Workforce during the COVID-19 Pandemic: Key Findings by Race and Ethnicity. OPRE



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#### Disclaimer

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