

# **Unemployment Rates During the COVID-19 Pandemic: In Brief**

Updated December 7, 2020

**Congressional Research Service** https://crsreports.congress.gov R46554



## Unemployment Rates During the COVID-19 Pandemic: In Brief

The Coronavirus Disease 2019 (COVID-19) pandemic has had a significant effect on unemployment in every state, industry, and major demographic group in the United States. This report provides information on which groups have experienced the largest increases in unemployment rates since the onset of the pandemic in 2020. Young workers, women, workers with low educational attainment, part-time workers, and racial and ethnic minorities had relatively high unemployment rates in April. Many, but not all, of these groups had relatively high rates in November as well. The report also compares the overall unemployment rate during the current recession with the unemployment rate experienced during the Great Recession. This report shows the following:

- The unemployment rate peaked at an unprecedented level, not seen since data collection started in 1948, in April 2020 (14.7%) before declining to a still-elevated level in November (6.7%).
- In April, every state and the District of Columbia reached unemployment rates greater than their highest unemployment rates during the Great Recession.

#### **SUMMARY**

#### R46554

December 7, 2020

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- In the early months of the recession, unemployment was concentrated in industries that provide in-person services. Notably, the leisure and hospitality industry experienced an unemployment rate of 39.3% in April, before declining to 15.0% in November. While rates for service industries remain elevated, other industries with loose attachment to in -person services are now experiencing high rates. For example, the mining industry exhibited an unemployment rate of 19.2% in November, the highest observed among all industries.
- Part-time workers experienced an unemployment rate almost twice that of their full-time counterparts in April (24.5% vs. 12.9%), but this gap has since effectively closed.
- Workers without a college degree experienced worse unemployment rates in April (e.g., 21.2% for workers with no high school degree) than workers with a Bachelor's degree or higher (8.4%). The gap between educated and less-educated workers remained in November.
- Teenaged women experienced an unemployment rate of 36.6% in April, and teenaged men, 28.6%; compared with 13.7% for women and 12.1% for men ages 25-54. The gap between men and women has since narrowed overall, but young workers are still experiencing relatively high rates of unemployment.
- Racial and ethnic minorities had relatively high unemployment rates in April (16.7% for Black workers compared to 14.2% for White workers, and 18.9% for Hispanic workers compared to 13.6% for non-Hispanic workers), and these gaps persisted in November.

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## Introduction

The National Bureau of Economic Research declared the start of the current economic downtum in February 2020, marking the end of the longest period of expansion in U.S. history.<sup>1</sup> This expansion followed the Great Recession (December 2007 to June 2009), a downtum widely considered to be the worst since the Great Depression (August 1929 to March 1933).<sup>2</sup> The unemployment rate rose quickly in March 2020, and by April 2020 it had greatly surpassed its previous peaks observed during and just after the Great Recession. This spike in unemployment coincided with various mandated stay-at-home orders implemented in response to the Coronavirus Disease 2019 (COVID-19) pandemic and other pandemic-related factors affecting U.S. demand.<sup>3</sup> Although unemployment rates have declined since April, the November rate (6.7%) remains almost twice as high as the rate observed during February (3.5%).

This report discusses recent unemployment rate patterns at the national and state levels using Bureau of Labor Statistics (BLS) data. The two primary sources are the Current Population Survey (CPS) and the Local Area Unemployment Statistics (LAUS) program. In addition to the usual caveats about estimates (see "General Data Caveats"), there were additional data challenges caused by the COVID-19 pandemic (see "COVID-19 Related Data Issues"). The pandemic led to lower survey response rates by businesses and households, and BLS detected an error in their categorization procedures that likely underestimated unemployment early in the recession.<sup>4</sup> This report generally finds the following:

- The unemployment rate peaked at a level not seen since data collection started in 1948, in April 2020 before declining to a still-high level in November.
- In April, every state and the District of Columbia reached unemployment rates greater than their highest unemployment rates during the Great Recession.
- Unemployment during the current recession is concentrated among workers who were last employed in industries that provide in-person services and among young workers, women, workers with low educational attainment, part-time workers, and racial and ethnic minorities.

## U.S. Unemployment Rate: Historical Trends

Prior recessions typically developed with gradually increasing economic distress. The current recession was caused by the COVID-19 pandemic, which was an abrupt and exogenous shock to the economy. The pandemic resulted in limiting contact among individuals and in many shutdown orders. Therefore, the trends in the unemployment rate in the current recession differ from those in prior recessions (see **Figure 1**). Rates observed during prior recessions rose relatively gradually over the course of an economic downturn and then peaked. The current recession exhibited an unprecedented sharp increase in the rate (10.3 percentage points) from February to

Expansion % 20 is % 20 the % 20 normal % 20 state, economy % 3B% 20 most % 20 recessions % 20 are % 20 brief.

<sup>&</sup>lt;sup>1</sup> The National Bureau of Economic Research; see https://www.nber.org/cycles.html for their historical series of expansions and contractions. For more on their process for determining expansions and contractions, see https://www.nber.org/cycles/recessions\_faq.html#:~:text=

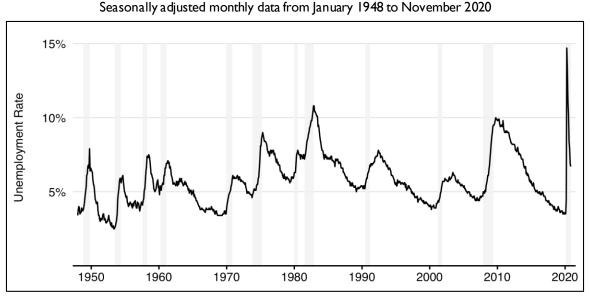
What %20is%20an%20expansion%3F,more%20than%20a%20few%20months.&text=

<sup>&</sup>lt;sup>2</sup> The unemployment rates observed during the Great Recession, however, never surpassed those of the early 1980's.

<sup>&</sup>lt;sup>3</sup> See CRS Insight IN11388, COVID-19: U.S. Economic Effects, by Rena S. Miller and Marc Labonte.

<sup>&</sup>lt;sup>4</sup> See CRS Insight IN11456, COVID-19: Measuring Unemployment, by Lida R. Weinstock.

April 2020.<sup>5</sup> Following April, the rate declined rapidly (8 percentage points from April to November 2020) as temporarily furloughed workers returned to work. Despite these rapid declines, the November unemployment rate persisted at a high level (6.7%). The share of workers on furlough has declined since peaking in April, while the share of permanently laid off workers has steadily increased and has now passed the number furloughed for the first time since March 2020.<sup>6</sup> The Congressional Budget Office (CBO) and the Federal Reserve have projected that elevated unemployment rates over 6% will persist over the next three years.<sup>7</sup>



#### Figure I. Historical Unemployment Rate

**Source:** Created by CRS using data from the Bureau of Labor Statistics (BLS). **Notes:** Shaded regions indicate recessionary periods as identified by the National Bureau of Economic Research.

### Comparing the Great Recession and the COVID-19 Recession

During the Great Recession, the unemployment rate increased from 5% in December 2007 (the start of the recession) to 9.5% in June 2009 (the end of the recession) (see **Figure 2**). The unemployment rate peaked at 10% in October 2009, four months after the recession officially concluded. In the current recession, the unemployment rate increased from 3.5% in February 2020 to 4.4% in March 2020, peaked<sup>8</sup> at 14.7% in April, and then fell to 6.7% in November. The

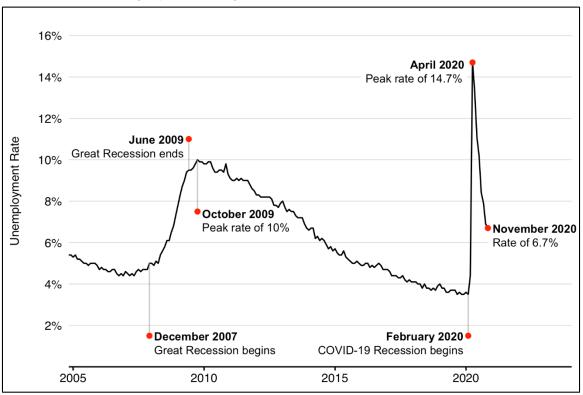
<sup>&</sup>lt;sup>5</sup> For information on the differences between the congressional response to the current recession compared to the congressional response during the Great Recession in the Unemployment Insurance system, see CRS Report R46472, *Comparing the Congressional Response to the Great Recession and the COVID-19-Related Recession: Unemployment Insurance (UI) Provisions*, by Katelin P. Isaacs and Julie M. Whittaker.

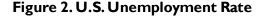
<sup>&</sup>lt;sup>6</sup> CRS analysis of BLS data. Workers on temporary layoff declined from 18.1 million in April to 2.8 million in November as the number of permanent job losers increased from 2 million in April to 4.7 million in November.

<sup>&</sup>lt;sup>7</sup> See CRS Insight IN11460, COVID-19: How Quickly Will Unemployment Recover?, by Lida R. Weinstock.

<sup>&</sup>lt;sup>8</sup> Throughout this report, *peak* refers to the highest level of unemployment between January 2020 and November 2020. It does not account for months outside this range.

peak represents the quickest month-over-month increase in unemployment rates and the highest overall unemployment rate since the CPS data started being collected in 1948.<sup>9</sup>





Seasonally adjusted monthly data from November 2004 to November 2020

Source: Created by CRS using data from the Bureau of Labor Statistics (BLS).

## **COVID-19 Recession: Unemployment Trends**

The COVID-19 pandemic has affected the unemployment rates for every state, industry, and major demographic group. In the early stages of the current recession, unemployment rates disproportionately increased in industries delivering in-person services. Some demographic groups are overrepresented in such industries, contributing to higher rates for those workers.<sup>10</sup>

### Unemployment Rates by State

**Figure 3** displays state-level monthly unemployment rates from January to October 2020 and indicates whether the rate increased or decreased from August to October. The data for November 2020 have not been released as of the cover date of this report. Further, the figure shows that no

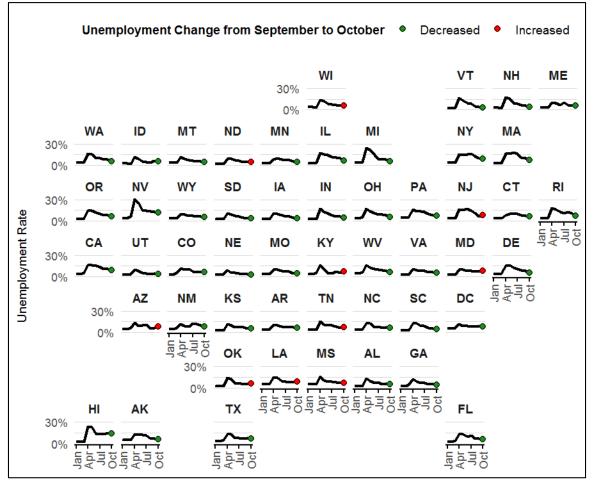
<sup>&</sup>lt;sup>9</sup> There are many differences in labor force statistics observed during the Great Recession, its aftermath, and the COVID-19 recession. For more on this and for information on labor market patterns since 2007, see CRS Report R45330, *Labor Market Patterns Since 2007*, by Sarah A. Donovan and Marc Labonte.

<sup>&</sup>lt;sup>10</sup> Guido Matias Cortes and Eliza Forsythe, "The Heterogeneous Labor Market Impacts of the Covid-19 Pandemic," Upjohn Institute, May 2020; and Robert Fairlie, "The Impact of Covid-19 on Small Business Owners: Evidence of Early-Stage Losses from the April 2020 Current Population Survey," NBER Working Paper No. 27309, June 2020.

state was immune from economic damage early in the pandemic.<sup>11</sup> Since the onset of the current recession, the unemployment rate for every state and the District of Columbia surpassed levels seen during the Great Recession. The variation in economic damage was due to a number of factors, including the proportion of jobs in sectors that provide non-essential services to in-person customers,<sup>12</sup> individual fears of contracting COVID-19 causing declines in personal consumption,<sup>13</sup> and the implementation of stay-at-home orders and business closure policies.<sup>14</sup>

#### Figure 3. Monthly State Unemployment Rates

Seasonally adjusted data, displaying rates from January to October 2020 and change since last month



**Source:** Created by CRS using data from the Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics program.

<sup>&</sup>lt;sup>11</sup> Felipe Lozano-Rojas et al., "Is the Cure Worse than the Problem Itself? Immediate Labor Market Effects of COVID-19 Case Rates and School Closures in the U.S.," NBER Working Paper No. 27127, May 2020; Eliza Forsythe et al., "Labor Demand in the Time of COVID-19: Evidence from Vacancy Postings and UI Claims," NBER Working Paper No. 27061, April 2020.

<sup>&</sup>lt;sup>12</sup> Matthew Dey and Mark Loewenstein, "Howmany workers are employed in sectors directly affected by COVID-19 shutdowns, where do they work, and how much do they earn?" *Monthly Labor Review*, April 2020.

<sup>&</sup>lt;sup>13</sup> Austan Goolsbee and Chad Syverson, "Fear, lockdown, and diversion: comparing drivers of pandemic economic decline 2020," NBER Working Paper No. 27432, June 2020.

<sup>&</sup>lt;sup>14</sup> Sumedha Gupta et al., "Effects of Social Distancing Policy on Labor Market Outcomes," NBER Working Paper No. 2780, May 2020.

**Notes:** The National Bureau of Economic Research identified February of 2020 as the first month of the current recession. The month-over-month changes are point estimates and have not been tested for significance. The data for November 2020 have not been released as of the cover date of this report.

The unemployment rate in most states peaked in April 2020 and has since declined. In September, the five states with the highest unemployment rates were Hawaii (14.3%), Nevada (12.3%), New York (9.6%), Louisiana (9.4%), and California (9.3%). The states with the lowest unemployment rates in October were Nebraska (3.0%), Vermont (3.2%), South Dakota (3.6%), Iowa (3.6%), and Utah (4.1%).

### Unemployment Rates by Industry

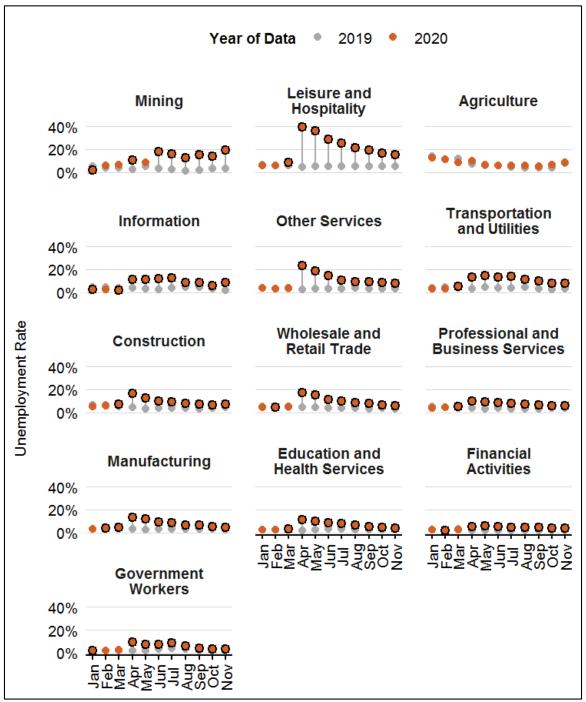
Workers whose last job was in the leisure and hospitality industry experienced a higher peak in unemployment (39.3% in April 2020) than did workers who were previously employed in any other industry; they also had the second highest unemployment rate in November 2020 (15.0%). However, elevated unemployment rates are not constrained to industries providing in-person services. Workers whose last job was in the mining or extraction industry have experienced steadily increasing unemployment since the onset of the recession; in November they exhibited the highest rate among all workers across industries (19.2%). The lowest November rates were among workers whose last job was in the government (3.4%) or financial activities (3.5%) industries. These two industries have had unemployment rates below 15% from January through November.<sup>15</sup> Within industries, some workers were more likely to lose their jobs than others. For example, recent studies suggest that low-wage workers in the leisure and hospitality industry and other services industries experienced disproportionately large employment losses.<sup>16</sup>

**Figure 4** displays the unemployment rate data for industries while indicating whether the change from 2019 to 2020 in a given month is statistically significant.<sup>17</sup> CRS chose to compare 2019 and 2020 because of a lack of seasonally adjusted data. Without seasonal adjustments, it is difficult to determine whether unemployment trends are related to the recession or to seasonal trends. This report attempts to minimize seasonal influences (for non-adjusted data) by comparing year-over-year estimates for each month. For example, the figure shows that over the course of the current recession, the unemployment rate steadily declined for agricultural workers (before increasing as winter approached) and steadily increased for mining and extraction workers. However, the changes in unemployment rates for agricultural workers are not considered statistically significant when tested against the prior year of data, while increases for mining and extraction workers are statistically significant.

<sup>&</sup>lt;sup>15</sup> The third lowest November 2020 unemployment rate was in the education and health services sector (3.7%). These data are not seasonally adjusted and do not account for the likely seasonal variation in employment within the education and health services sector.

<sup>&</sup>lt;sup>16</sup> Alexander Bartik et al., "Measuring the labor market at the onset of the COVID-19 crisis," NBER Working Paper No. 27613, July 2020; and Guido Matias Cortes and Eliza Forsythe, "The Heterogeneous Labor Market Impacts of the Covid-19 Pandemic," Upjohn Institute Working Paper, May 2020.

<sup>&</sup>lt;sup>17</sup> BLS publishes a series of formulas used to produce standard errors for unemployment rates, from which they can calculate confidence intervals to determine whether a year-over-year difference is statistically significant. CRS used these formulas to calculate significance at the 95% confidence level. Bureau of Labor Statistics, "Calculating Approximate Standard Errors and Confidence Intervals for Current Population Survey Estimates," Washington, DC, 2018, p. 10, https://www.bls.gov/cps/calculating-standard-errors-and-confidence-intervals.pdf.



#### Figure 4. Monthly Unemployment Rates by Industry

Non-seasonally adjusted data, displaying differences between 2019 and 2020 for each month, and statistical significance of year-over-year differences from January to November 2020

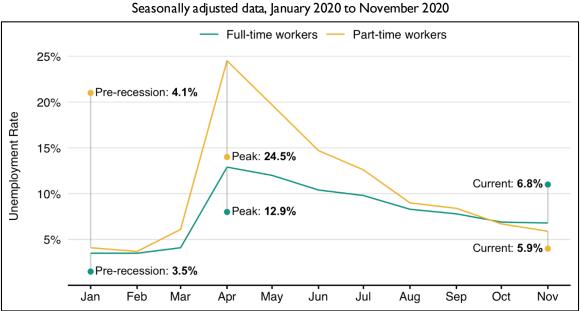
**Source:** Bureau of Labor Statistics (BLS).

**Notes:** Due to the lack of seasonal adjustment for these data, the 2020 unemployment rates for the different industries are compared to their non-seasonally adjusted values from 2019. Statistical significance of year-over-year differences is indicated by a black outline. Industry sectors are defined by the North American Industry Classification System (NAICS) and can be found at https://www.bls.gov/iag/tgs/iag\_index\_naics.htm. The figure shows unemployment rates for wage and salary workers.

### Unemployment Rates for Full- and Part-Time Workers

As shown in **Figure 5**, part-time workers experienced a higher peak unemployment rate (24.5% in April 2020) than full-time workers (12.9% in April). For the first time since the onset of the pandemic, the unemployment rate for part-time workers in November 2020 (5.9%) was less than the unemployment rate for full-time workers (6.8%). Although part-time workers experienced worse impacts early in the recession than full-time workers, this gap has effectively closed.

There are a few reasons why part-time workers' apparent recovery since April may not reflect the economic realities they face. First, the gap between full- and part-time workers may have narrowed because workers with part-time jobs are leaving the labor force. It is unclear whether that is the case, though labor force participation rates have declined since March. Additionally, workers who normally would be working full-time may be working part-time for economic reasons. This could reduce the unemployment rate among part-time workers. BLS has observed that during the current recession, measures of labor underutilization, including workers who are part-time due to economic reasons, have remained elevated.<sup>18</sup>



#### Figure 5. Monthly Unemployment Rates for Full- and Part-Time Workers

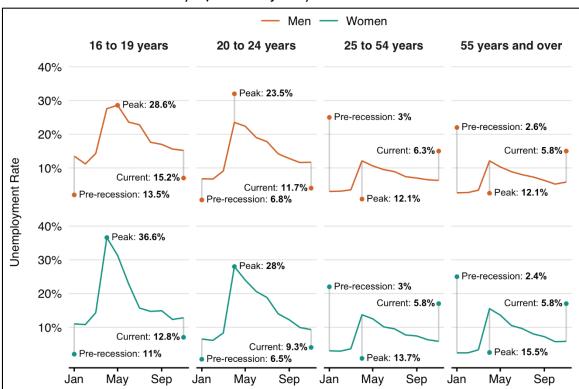
Source: Created by CRS using data from the Bureau of Labor Statistics (BLS).

### Unemployment Rates by Sex and Age

As seen in **Figure 6**, unemployment rates tended to increase more for younger workers and were higher for women early in the recession. Between February and April 2020, the rate for women ages 16-19 increased by 25.8 percentage points to 36.6%; in contrast, the rates for men of the same age increased by 16.4 percentage points to 27.6%. Since then, the gap between men and women has narrowed. Although unemployment rates for younger workers remain relatively high

<sup>&</sup>lt;sup>18</sup> See https://www.bls.gov/news.release/empsit.t15.htm for U-6 unemployment rates, a measure of the total unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percentage of the civilian labor force plus all persons marginally attached to the labor force. For more on this measure, see CRS In Focus IF10443, *Introduction to U.S. Economy: Unemployment*, by Lida R. Weinstock.

compared to older workers, the November rates for men and women across age groups have declined to somewhat similar levels. The unemployment rate for teenaged men (15.2%) was higher than the rate for teenaged women (12.8%) in November. The rate for men ages 20-24 (11.7%) was slightly higher than the rate for women of the same age (9.3%). The large disparities observed in April between younger men and women were not observed in older age groups, although women ages 25-54 and 55 and over had rates 1-3 percentage points high than their male counterparts. This relatively modest gap has since narrowed; the rate in November for women ages 25 to 54 (5.8%) was similar to that of men (6.3%), as was the rate for women ages 55 and over (5.8%) compared to men (5.8%).



#### Figure 6. Monthly Unemployment Rates by Sex and Age

Seasonally adjusted data, January 2020 to November 2020

Source: Created by CRS using data from the Bureau of Labor Statistics (BLS).

### Unemployment Rates by Racial Group and Hispanic Ethnicity

As seen in **Figure 7**, the unemployment rates for Black, Asian, and White<sup>19</sup> workers increased sharply in early 2020. But whereas the unemployment rate for White workers peaked in April, the rate for Black and Asian workers continued to rise through May. The November rates for Black (10.3%), Asian (6.7%), and White (5.9%) workers were all higher than their respective rates in February 2020. The rate for Black workers has declined 6.5 percentage points since peaking in May, compared to a decline of 8.3 percentage points for Asian workers and 6.5 percentage points for White workers across the same period.

<sup>&</sup>lt;sup>19</sup> Asian, Black, and White are the three racial categories used in BLS, Table A2: Employment status of the civilian population by race, sex, and age. See https://www.bls.gov/news.release/empsit.t02.htm.

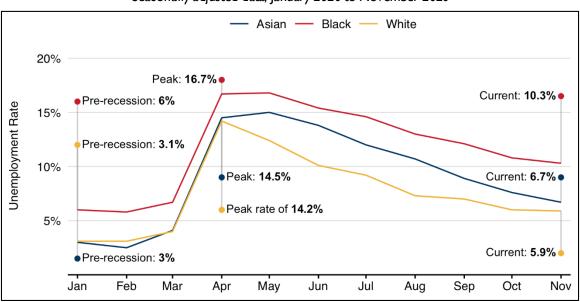


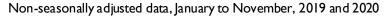
Figure 7. Monthly Unemployment Rates by Racial Group

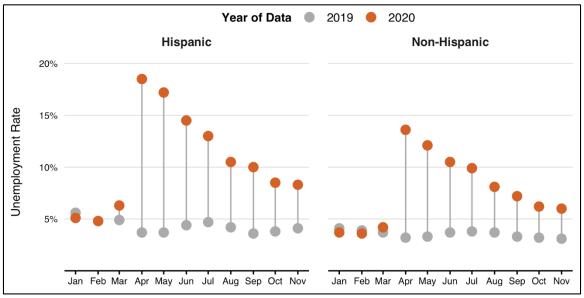
Seasonally adjusted data, January 2020 to November 2020

Source: Created by CRS using data from the Bureau of Labor Statistics (BLS).

People of any race can identify as being either Hispanic or non-Hispanic in the CPS. As seen in **Figure 8**, Hispanic workers, like Black and Asian workers, have experienced strong negative outcomes during the current recession. For Hispanic workers, unemployment increased by 13.7 percentage points to 18.9% from February to April 2020. For non-Hispanic workers the unemployment rate increased by 10 points to 13.6%. These conditions have partially improved, as Hispanic workers experienced an unemployment rate of 8.3% in November, compared to 6% for non-Hispanics.







Source: Created by CRS using data from the Bureau of Labor Statistics (BLS).

**Notes:** Due to the lack of seasonal adjustment for these data, the 2020 unemployment rates for the Hispanic and non-Hispanic groups are compared to their non-seasonally adjusted values from 2019. Statistical significance is not calculated because BLS does not provide formula parameters for non-Hispanic workers.

### Unemployment Rates by Education

In general, workers with lower levels of educational attainment have higher rates of unemployment. This pattern has been amplified during the current recession, as seen in **Figure 9**. The unemployment rate for workers with less than a high school diploma peaked in April 2020 (21.2%), which was higher than the peak for all other education levels. The November rate for workers with less than a high school diploma (9%) was also higher than the rate for all other education levels. Workers with a Bachelor's degree or higher, the highest educational level classified here, had the lowest peak unemployment rate (8.4% in April) and the lowest November rate (4.2%) among all education levels.

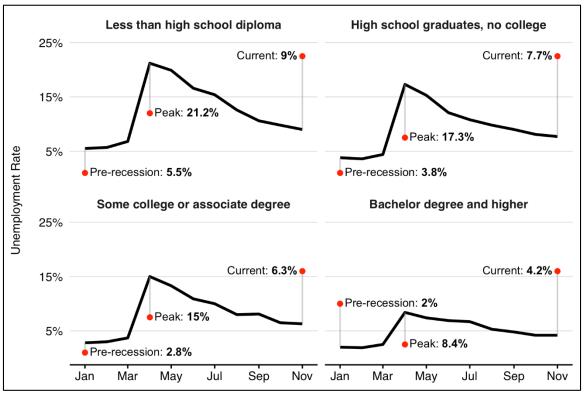


Figure 9. Monthly Unemployment Rates by Education

Seasonally adjusted monthly data, January to November 2020

Source: Created by CRS using data from the Bureau of Labor Statistics (BLS).

## Data Limitations and Caveats

National level data presented in this report are from the CPS and state level data are from the LAUS program. The CPS is a sample survey of about 60,000 households conducted by the

Census Bureau for BLS. LAUS is a BLS program that calculates state-level unemployment rates using multiple data sources, including the CPS.<sup>20</sup>

Both the CPS and LAUS estimates are subject to sampling and non-sampling error.<sup>21</sup> Sampling error occurs when the survey sample is not representative of the underlying population, while non-sampling error describes errors often associated with data collection.<sup>22</sup> Sampling error is a result of statistical theory that underlies any estimate generated through surveys. While the CPS sample is selected to be representative of the nation, the possibility remains that it does not accurately estimate certain nationwide statistics.<sup>23</sup> Non-sampling error refers to all sources of error that are not due to sampling. They can result from incorrect or biased collection and processing of the data. For example, non-sampling error can occur if a surveyor incorrectly records responses or a respondent incorrectly responds to a question.

### **COVID-19 Related Data Issues**

The COVID-19 pandemic increased non-sampling error in the CPS due to a number of factors. For example, BLS reported that the survey experienced lower household response rates.<sup>24</sup> (The bureau has made statements affirming the robustness of its estimates despite these lower response rates.<sup>25</sup>) Furthermore, BLS detected an error in its categorization procedures that likely underestimated unemployment early in the recession.<sup>26</sup> Specifically, large numbers of workers were classified as *employed but not at work* when they should have been recorded as *unemployed on temporary layoff*.

Per agency policy, BLS did not adjust CPS records, but it did provide adjusted estimates of the unemployment rate. BLS estimated that its categorization error underestimated seasonally adjusted unemployment by roughly 0.9 percentage points in March 2020, 4.8 points in April, 3.1 in May, 1.2 in June, 0.9 in July, 0.7 in August, 0.4 in September, 0.3 in October, and 0.4 in November. These estimates evaluate what the impact would be in the worst-case scenario, as the true impact is uncertain. BLS released a statement regarding the underestimate, noting that, "these assumptions probably overstate the size of the misclassification error."<sup>27</sup> In later months, BLS made efforts to correct this classification error during data collection and processing.<sup>28</sup>

LAUS was impacted by both the low response rate and the categorization error due to its connection with the CPS. Considering that LAUS is dependent on a number of other data sources

<sup>&</sup>lt;sup>20</sup> In addition to the CPS, LAUS uses the Current Employment Statistics survey, state Unemployment Insurance claims counts, the Quarterly Census of Employment and Wages program, and data from the Census Bureau's American Community Survey and Population Estimates Program; https://www.bls.gov/lau/laumthd.htm.

<sup>&</sup>lt;sup>21</sup> For further discussion of error, see the "Reliability of the Estimates" section of the Employment Situation report's Technical Note at https://www.bls.gov/news.release/empsit.tn.htm. For a description of LAUS estimation procedures, see https://www.bls.gov/lau/laumthd.htm.

<sup>&</sup>lt;sup>22</sup> For more information, see https://www.bls.gov/opub/hom/topic/error-measurements.htm.

<sup>&</sup>lt;sup>23</sup> For more information, see https://www.bls.gov/opub/hom/topic/sampling.htm.

<sup>&</sup>lt;sup>24</sup> See the FAQ BLS produced on this topic for more on the impact of COVID-19 on data collection by month at https://www.bls.gov/covid19/home.htm.

<sup>&</sup>lt;sup>25</sup> See https://www.bls.gov/covid19/employment-situation-covid19-faq-april-2020.htm.

<sup>&</sup>lt;sup>26</sup> See CRS Insight IN11456, COVID-19: Measuring Unemployment, by Lida R. Weinstock.

<sup>&</sup>lt;sup>27</sup> See https://www.bls.gov/covid19/employment-situation-covid19-faq-november-2020.htm#ques4.

<sup>&</sup>lt;sup>28</sup> Among other protocols, the Census Bureau monitored survey responses in August and marked those they felt could be misclassified. These responses were then re-evaluated. For more on BLS and Census efforts to reduce the misclassification, see https://www.bls.gov/covid19/employment-situation-covid19-faq-august-2020.htm#ques9.

that were impacted by COVID-19 in their own right, the net effect of the pandemic on LAUS estimates is unknown.<sup>29</sup>

### **General Data Caveats**

Other data considerations include the following:

- *Lack of seasonally adjusted data*: Seasonally adjusted data are published by BLS for selected labor force indicators to better account for seasonality in the trends.<sup>30</sup> Without seasonal adjustments, it is difficult to distinguish between trends related to the recession and seasonal trends. Where adjusted data are not available, this report compares year-over-year estimates to minimize seasonal influences.
- *Reference week:* In general, CPS data are collected for the calendar week containing the 12<sup>th</sup> of the month. This could lead to incongruity between actual labor force conditions over the course of a month and the conditions observed.
- *CPS and LAUS comparability*: While the LAUS program uses the same unemployment concepts as the CPS and uses the CPS as an input, LAUS estimates are based on multiple sources (including administrative data). Consequently, CPS and LAUS estimates are not directly comparable.
- *Statistical significance*: CRS used BLS formulas to calculate year-over-year statistical significance in changes in monthly data. As a tool, statistical significance does not guarantee that year-over-year changes were meaningful.

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### Acknowledgments

The four Research Assistants in CRS's Domestic Social Policy Division were responsible for the analysis and writing of this report, under the guidance of Gene Falk, Specialist in Social Policy. Questions from congressional staff should be directed to Mr. Falk.

<sup>&</sup>lt;sup>29</sup> For more on the impacts of COVID-19 on LAUS and its inputs, see https://www.bls.gov/covid19/effects-of-covid-19-pandemic-on-employment-and-unemployment-statistics.htm.

<sup>&</sup>lt;sup>30</sup> See CPS and LAUS documentation for more on seasonal adjustment at https://www.bls.gov/cps/seasonal-adjustment-methodology.htm and https://www.bls.gov/lau/lauseas.htm.

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