Frequently asked questions: The impact of the coronavirus (COVID-19) pandemic on The Employment Situation for March 2020

The labor market data from the establishment and household surveys for March broadly reflect the impact of the coronavirus (COVID-19) pandemic. The material below addresses some questions about the impact of the pandemic on The Employment Situation for March 2020, which presents national-level estimates from the establishment (Current Employment Statistics, or CES) and household (Current Population Survey, or CPS) surveys. Additional detail at the state and local area level will be available in forthcoming releases with data from the CES State and Metro Area and the Local Area Unemployment Statistics (LAUS) programs.

We cannot precisely quantify the effects of the pandemic on the job market in March. However, it is clear that the decrease in employment and hours and the increase in unemployment can be ascribed to the effects of the illness and efforts to contain the virus. It is important to keep in mind that the March survey reference periods for both surveys predated many coronavirus-related business and school closures in the second half of the month.

1. Household and establishment surveys: What is the reference period for the two surveys?

The household survey reference period is generally the calendar week that contains the 12th day of the month, in this case March 8th through March 14th. In the household survey, individuals are classified as employed, unemployed, or not in the labor force based on their answers to a series of questions about their activities during the survey reference week (March 8–14).

In the establishment survey, workers who are paid by their employer for all or any part of the pay period including the 12th of the month are counted as employed, even if they were not actually at their jobs. Workers who are temporarily or permanently absent from their jobs and who are not being paid are not counted as employed, even if they continue to receive benefits. The length of the reference period does vary across respondents in the establishment survey; one-third of respondents have a weekly pay period, slightly over 40 percent a bi-weekly, about 20 percent semi-monthly, and a small amount monthly.

2. Establishment survey: Was there an impact on data collection in the establishment survey?

Yes. In the establishment survey, about one-fifth of the data is generally collected by telephone at four regional data collection centers. Although these centers were closed during the collection period, efforts were made to collect data electronically. The establishment survey depends on the availability of survey respondents. Collection was adversely impacted due to the inability to reach some respondents. The collection rate for the establishment survey, at 66 percent, was about 9 percentage points lower than average. Although the collection rate was adversely affected by pandemic-related issues, BLS was still able to obtain estimates that met our standards for accuracy and reliability.
3. Establishment survey: Was there an impact on data estimation in the establishment survey?

No. In anticipation of issues due to the pandemic, the establishment survey carefully reviewed all estimation and methodological procedures, which included the review of data, estimation processes, the application of the birth/death model, and seasonal adjustment. No changes were made, and the March 2020 establishment survey followed standard protocol. Outlier detection is a usual part of the seasonal adjustment process. All outliers for seasonal adjustment are identified in the establishment survey seasonal adjustment documentation.

Should any changes to the establishment survey methodology be necessary in the future, they will be made clear to the public and detailed upon release of the data. These changes are typically explained in a box note within The Employment Situation news release.

4. Establishment survey: How did the pandemic response impact March employment and hours estimates?

In the establishment survey, workers who are paid by their employer for all or any part of the pay period including the 12th of the month are counted as employed, even if they were not actually at their jobs. Workers who are temporarily or permanently absent from their jobs and who are not being paid are not counted as employed, even if they continue to receive benefits. The length of the reference period does vary across respondents in the establishment survey; one-third of respondents have a weekly pay period, slightly over 40 percent a bi-weekly, about 20 percent semi-monthly, and a small amount monthly.

As highlighted in The Employment Situation news release, total nonfarm payroll employment fell sharply in March (-701,000), reflecting the effects of the coronavirus and efforts to contain it. About two-thirds of the drop occurred in leisure and hospitality, mainly in food services and drinking places. Notable employment declines also occurred in health care and social assistance, professional and business services, retail trade, and construction. The average workweek fell by 0.2 hour to 34.2 hours in March. The decline in the workweek was most pronounced in leisure and hospitality, where average weekly hours dropped by 1.4 hours.

5. Household survey: Was there an impact on data collection in the household survey?

The household survey is conducted by the U.S. Census Bureau and normally includes both in-person and telephone interviews, with the majority of interviews collected by telephone. Interviewing for the household survey began on March 15, 2020.

Households are in the survey’s sample for a total of 8 months, meaning that interviewers attempt to interview someone in the household each of those 8 months. Generally, households entering the sample for their first month are interviewed through a personal visit, and households in their fifth month also often receive a personal visit. Interviews for other months are generally conducted by telephone.

For the safety of both interviewers and respondents, the Census Bureau suspended in-person interviews on March 20, 2020. Additionally, the two Census Bureau call centers that assist with telephone
interviewing were closed. The Census Bureau continued to conduct the household survey by telephone and made efforts to collect telephone interviews for households that would normally have been interviewed in person.

The response rate for the household survey was 73 percent in March 2020, about 10 percentage points lower than in preceding months.

Response rates for households normally more likely to be interviewed in person were particularly low. The response rate for households entering the sample for their first month was over 20 percentage points lower than in recent months, and the rate for those in the fifth month was over 10 percentage points lower.

Although the response rate was adversely affected by pandemic-related issues, BLS was still able to obtain estimates that met our standards for accuracy and reliability.

6. Household survey: Were there modifications to the seasonal adjustment methodology for the household survey?

After careful evaluation, BLS staff determined that an unusually large number of household survey data series had outliers in March. Outlier detection is a usual part of the seasonal adjustment process. After manually designating these March estimates as outliers, BLS reran the seasonal adjustment models. For some data series, including unemployed people on temporary layoff, this had a substantive effect on March estimates. However, the effect on the national unemployment rate was minimal (+0.1 percentage point). More information about seasonal adjustment is available in the household survey documentation.

7. Household survey: Were interviewers provided with any special guidance?

Due to the unusual circumstances related to the pandemic, additional guidance was provided to Census Bureau interviewers prior to collecting data in March. If someone who usually works full time (35 hours or more per week) reports working 1 to 34 hours during the survey reference week, there is a question that asks the main reason they worked less than 35 hours. For this question, people who indicated they were under quarantine or self-isolating due to health concerns were to be entered as “own illness, injury, or medical problem.” People who were not ill or quarantined but said that their hours were reduced “because of the coronavirus” were to be entered as “slack work or business conditions.” An example would be “the store cut back hours during the coronavirus.”

For those who did not work at all during the survey reference week of March 8–14, people who indicated they were under quarantine or self-isolating due to health concerns were to be classified under “own illness, injury, or medical problem.” People who were not ill or quarantined but said that they did not work last week “because of the coronavirus” were to be entered as “on layoff (temporary or indefinite).” This scenario would include people who reported “I work at a sports arena and everything is postponed” or “the restaurant closed for now because of the coronavirus.”
To be classified as unemployed on temporary layoff, a person must expect to be recalled to their job within 6 months. Additional guidance was also provided to household survey interviewers regarding the question “Have you been given any indication that you will be recalled to work within the next 6 months?” If, because of the coronavirus, a person was uncertain of when they will be able to return to work and thus was unsure of how to answer the question, the interviewer was instructed to enter a response of “yes,” rather than “don’t know.” This would allow the individual to be included among the unemployed on temporary layoff. In light of the uncertainty of circumstances related to the pandemic, this unusual step was taken to ensure that people who were effectively laid off due to pandemic-related closures were counted among the unemployed on temporary layoff.

8. Household survey: How did the pandemic response impact March estimates?

It is important to remember that the March 2020 survey reference week for the household survey was the week of March 8–14, a period that preceded many of the coronavirus-related business and school closures and other public health efforts to contain the spread of the coronavirus.

Household survey total employment fell, and unemployment rose in March. These changes were widespread and indicate a labor market response to efforts to contain the spread of the coronavirus. (See details in item 9 below.)

The household survey can identify people who were not at work during the survey reference week for reasons such as their own illness, vacation, or taking care of a family member. Under the guidance provided to the household survey interviewers, workers who indicate that they were not working during the entire reference week due to efforts to contain the spread of the coronavirus should be classified as unemployed on temporary layoff, whether or not they are paid for the time they were off work. (See details in item 7 above.)

The bulk of the increase in unemployment occurred among people on temporary layoff in March. However, some workers who were not at work during the entire reference week were not classified as unemployed on temporary layoff in March 2020. Rather, they were classified as employed but absent from work. BLS analysis of the underlying data suggests that most of these workers were misclassified; they should have been classified as unemployed on temporary layoff. (See details in item 12 below.)

The number of hours some people worked were affected by efforts to contain the pandemic. Employed people who usually work full time (35 hours or more per week) but indicate that they had worked fewer than 35 hours in the reference week because of slack work or business conditions, including those due to pandemic-related closures, are classified as employed part time for economic reasons. (See details in item 14 below.) Other effects can be seen in the number of people at work part time for noneconomic reasons, like illness. (See details in item 15 below.)

(Continues on next page.)
9. Household survey: How did the pandemic response impact unemployment and employment measures from the household survey?

As highlighted in The Employment Situation news release, the unemployment rate increased by 0.9 percentage point to 4.4 percent, and the number of unemployed people rose by 1.4 million to 7.1 million in March. Jobless rates rose among all major worker groups. The sharp increases in unemployment reflect the effects of the coronavirus and efforts to contain it. Note that measures from the household survey pertain to the week of March 8–14.

The number of unemployed people who reported being on temporary layoff more than doubled in March to 1.8 million. This 1.0 million gain represented the bulk of the increase in unemployment. The number of permanent job losers increased by 177,000 to 1.5 million.

The number of unemployed people who were jobless less than 5 weeks increased by 1.5 million in March to 3.5 million, accounting for almost half of the unemployed.

Employment, as measured by the household survey, fell sharply in March, declining by 3.0 million to 155.8 million. The employment-population ratio, at 60.0 percent, dropped by 1.1 percentage points over the month. Employment declines were widespread among the major worker groups.

10. Household survey: How are people who are absent from their jobs counted in the household survey?

The monthly household survey has two measures that show the number of people who missed work. One addresses people who did not work at all in the survey reference week, and the other addresses people who usually work full time but were at work part time (1 to 34 hours) during the reference week.

First, the survey collects data on the number of people who had a job but were not at work for the entire reference week due to reasons like vacation or their own illness. These people are counted as employed regardless of whether they were paid for the time off. People who have a job but were not at work for other reasons may be classified as employed or unemployed depending on the reason they missed work. For example, people who missed work due to vacation, parental leave, or bad weather are classified as employed. People who were temporarily laid off and expecting recall are classified among the unemployed on temporary layoff. (See details in item 11 below.)

Second, the household survey provides a measure of the number of people who usually work full time (35 hours or more per week) but were at work part time (1 to 34 hours) during the survey reference week. Depending on the reason provided, these workers are then grouped into those at work part time for economic or noneconomic reasons. Economic reasons include working reduced hours due to slack work or business conditions, seasonal work, or starting or ending a job during the week. Noneconomic reasons include illness, vacation, holidays, schooling, childcare problems, labor dispute, bad weather, and other reasons. (See details in items 14 and 15 below.)

People who report in the survey that they do not have a job, including those who permanently lost their job, are classified as unemployed if they are both available for work and actively looking for employment. (People on temporary layoff do not need to look for work to be unemployed.)
11. Household survey: How many employed people were not at work during the reference week?

In March, 6.4 million workers were classified as employed with a job but not at work during the survey reference week (not seasonally adjusted). This is much larger than the number of employed people with a job not at work typical at this time of the year and largely reflects the impact of efforts to contain the coronavirus pandemic.

Table A. Employed people with a job but not at work, February and March, selected years, not seasonally adjusted
(Numbers in thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>February</th>
<th>March</th>
<th>Difference* (March - February)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total employed</td>
<td>With a job not at work</td>
<td>Total employed</td>
</tr>
<tr>
<td>2016</td>
<td>150,060</td>
<td>4,039</td>
<td>150,738</td>
</tr>
<tr>
<td>2017</td>
<td>151,594</td>
<td>4,389</td>
<td>152,628</td>
</tr>
<tr>
<td>2018</td>
<td>154,403</td>
<td>4,430</td>
<td>154,877</td>
</tr>
<tr>
<td>2019</td>
<td>156,167</td>
<td>4,440</td>
<td>156,441</td>
</tr>
<tr>
<td>2020</td>
<td>158,017</td>
<td>4,158</td>
<td>155,167</td>
</tr>
</tbody>
</table>

* Users are generally cautioned against over-the-month comparisons of not seasonally adjusted data, as the change could be affected by some seasonal component.

There were many reasons why employed people were not at work for the entire survey reference week. BLS tabulates data on employed people not at work whose main reason for being absent was vacation, own illness, childcare problems, other family or personal obligations, labor dispute, bad weather, maternity or paternity leave, school or training, civic or military duty, and other reasons. Vacation and a person’s own illness are typically the most common reasons people are not at work. (See table B below.)

Of the 6.4 million employed people not at work during the survey reference week in March 2020, 1.3 million people were included in the “own illness, injury, or medical problems” category (not seasonally adjusted). This is higher than the 1.0 million that is typical for March in recent years. People who were not at work to care for a sick family member should be counted in the “other family or personal obligations” category. This measure was somewhat lower than the usual range in March of recent years.

In March 2020, 2.1 million people were included in the “other reasons” category—about a third of the 6.4 million employed people not at work during the survey reference week (not seasonally adjusted). This is the highest value in the “other reasons” series, which dates back to 1994, and is much higher than the average of 697,000 for March 2016–2019. BLS analysis of the underlying data suggests that this group included workers affected by the pandemic response who should have been classified as unemployed on temporary layoff. Such a misclassification is an example of nonsampling error and can occur when respondents misunderstand questions or interviewers record answers incorrectly.

(Continues on next page.)
Table B. Employed people with a job but not at work, March 2016–2020, not seasonally adjusted (Numbers in thousands)

<table>
<thead>
<tr>
<th>March</th>
<th>Total not at work</th>
<th>Vacation</th>
<th>Own illness, injury, or medical problems</th>
<th>Childcare problems</th>
<th>Other family or personal obligations</th>
<th>Labor dispute</th>
<th>Bad weather</th>
<th>Maternity or paternity leave</th>
<th>School or training</th>
<th>Civic or military duty</th>
<th>Other reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>4,496</td>
<td>1,845</td>
<td>1,020</td>
<td>27</td>
<td>278</td>
<td>8</td>
<td>224</td>
<td>280</td>
<td>90</td>
<td>11</td>
<td>714</td>
</tr>
<tr>
<td>2017</td>
<td>5,573</td>
<td>2,827</td>
<td>1,065</td>
<td>41</td>
<td>273</td>
<td>1</td>
<td>195</td>
<td>324</td>
<td>134</td>
<td>13</td>
<td>701</td>
</tr>
<tr>
<td>2018</td>
<td>5,612</td>
<td>2,776</td>
<td>1,098</td>
<td>47</td>
<td>321</td>
<td>4</td>
<td>190</td>
<td>338</td>
<td>114</td>
<td>3</td>
<td>721</td>
</tr>
<tr>
<td>2019</td>
<td>5,108</td>
<td>2,505</td>
<td>978</td>
<td>32</td>
<td>303</td>
<td>-</td>
<td>163</td>
<td>333</td>
<td>142</td>
<td>2</td>
<td>650</td>
</tr>
<tr>
<td>2020</td>
<td>6,439</td>
<td>2,074</td>
<td>1,340</td>
<td>48</td>
<td>257</td>
<td>6</td>
<td>156</td>
<td>325</td>
<td>94</td>
<td>12</td>
<td>2,126</td>
</tr>
</tbody>
</table>

Note: Dash indicates no data.

12. Household survey: How many workers were misclassified in March?

Other than those who were themselves ill, under quarantine, or self-isolating due to health concerns, people who did not work during the survey reference week (March 8–14) due to efforts to contain the spread of coronavirus (COVID-19) should have been classified as “unemployed on temporary layoff.” However, some people who were not at work during the entire reference week were not included in this category. Instead, they were misclassified as employed but not at work. A similar misclassification occurred with federal workers in both the 2013 and 2019 partial federal government shutdowns.

Of the 6.4 million employed people not at work during the survey reference week in March 2020, 2.1 million people were included in the “other reasons” category, much higher than the average of 697,000 for March 2016–2019 (not seasonally adjusted). BLS analysis of the underlying data suggests that this group included workers affected by the pandemic response who should have been classified as unemployed on temporary layoff. Such a misclassification is an example of nonsampling error and can occur when respondents misunderstand questions or interviewers record answers incorrectly.

According to usual practice, the data from the household survey are accepted as recorded. To maintain data integrity, no ad hoc actions are taken to reassign survey responses.

13. Household survey: What would the unemployment rate be if these misclassified workers were included among the unemployed?

If the workers who were recorded as employed but not at work the entire survey reference week had been classified as “unemployed on temporary layoff,” the overall unemployment rate would have been higher than reported. This kind of exercise requires some assumptions. For example, first one needs to determine how many workers might be misclassified. The 2.1 million workers with a job but not at work who were included in the “other reasons” category is about 1.4 million higher than the average of recent March estimates. (While this category contains misclassified workers, not every person in this category
was necessarily misclassified. The average for 2016–2019 was 697,000 employed people with a job not at work for “other reasons.”)

One assumption might be that these additional 1.4 million workers who were included in the “other reasons” category should have been classified as unemployed on temporary layoff. If these 1.4 million people were to be considered unemployed on temporary layoff, the number of unemployed people in March (on a not seasonally adjusted basis) would increase by 1.4 million from 7.4 million to 8.8 million. The number of people in the labor force would remain at 162.5 million in March (not seasonally adjusted) as people move from employed to unemployed but stay in the labor force. The resulting unemployment rate for March would be 5.4 percent (not seasonally adjusted), compared with the official estimate of 4.5 percent (not seasonally adjusted). Estimates of people with a job but not at work are not available on a seasonally adjusted basis, so seasonally adjusted data, such as the unemployment rate mentioned in The Employment Situation news release, are not used in this exercise. (Repeating this exercise, but combining the not adjusted data on people with a job but not at work with the seasonally adjusted estimates reported in The Employment Situation news release yields a similar 0.9 percentage point increase in the unemployment rate for March—or 5.3 percent, compared with the official seasonally adjusted rate of 4.4 percent.)

14. Household survey: How many people were at work part time for economic reasons in March?

The pandemic may have affected the number of hours some people worked during the survey reference week (March 8–14). For example, some people may have worked for some part of the reference week, but not as many hours as they usually work. Some people may have worked more hours than usual.

In March 2020, there were 5.8 million workers who worked part time for economic reasons (seasonally adjusted). These individuals, who would have preferred full-time employment, were working part time because their hours had been reduced or they were unable to find full-time jobs. This was 1.4 million more than the previous month, clearly reflecting slack work or business conditions due to the pandemic response.

The over-the-month increase in people working part time for economic reasons was particularly large in the accommodation and food services component of the leisure and hospitality industry and among the self-employed.

15. Household survey: What else do we know about why people were at work part time in March?

Employed people who usually work full time (35 hours or more per week) but indicated that they had worked fewer than 35 hours in the reference week are asked the reason they worked part time that week. Depending on the reason provided, these workers are then grouped into those at work part time for economic or noneconomic reasons. Economic reasons include working reduced hours due to slack work or business conditions, seasonal work, or starting or ending a job during the week. (See item 14 for a discussion of people at work part time for economic reasons.) Noneconomic reasons include illness, vacation, holidays, schooling, childcare problems, labor dispute, bad weather, and other reasons.
Among people who usually work full time (35 hours or more per week), 2.2 million reported working 1 to 34 hours in March 2020 because of their own illness, injury, or medical appointment (not seasonally adjusted). This figure is slightly below that from the month or year before.

Among full-time workers, 147,000 were at work part time because of childcare problems and 684,000 for other family or personal obligations. (People taking time off to care for a sick family member should be counted in the other family or personal obligations category.) Both of these measures were in the usual range in March.

However, there were 1.7 million workers who usually work full time but worked less than 35 hours in March due to “other reasons” (not seasonally adjusted). In February and March, this category typically has about half a million people. The large increase in this category in March 2020 likely reflects the impact of the pandemic.

It is important to note that these data do not reflect all cases of people who worked fewer hours in March. They refer to work missed only during the survey reference week, March 8–14. They are restricted to cases where people who usually work full time (35 hours or more per week) worked 1 to 34 hours. Thus, a person who usually works 50 hours per week but missed 8 hours would not be included in this measure since they still worked more than 35 hours. Also, the data do not reflect how many people who usually work part time miss work.

16. Do the household and establishment surveys measure telework?

No, the surveys do not regularly measure telework or work from home.

17. How many working people had to take care of children that could not go to school?

BLS does not have monthly estimates of employed parents, nor do we have data that reflect school closures.

The household survey estimates show that the number of employed people with a job but not at work in March due to childcare problems was within normal ranges. Likewise, the measure of full-time workers at work part time because of childcare problems was also within normal ranges. It could be that working parents of children whose schools were closed were included in the “other reasons” categories for those measures, which were both larger than usual.

18. Why are these data so different from the unemployment insurance (UI) claims data?

The reference periods for the household and establishment surveys preceded many of the coronavirus-related business and school closures and other public health efforts to contain the spread of the coronavirus. For both surveys, the data for a given month relate to a particular week or pay period. In the household survey, the reference period is generally the calendar week that contains the 12th day of the month, in this case March 8–14. In the establishment survey, the reference period is the pay period that
includes the 12th of the month, regardless of the length of the pay period. (The length of the reference period does vary across respondents in the establishment survey; one-third of respondents have a weekly pay period, slightly over 40 percent a bi-weekly, about 20 percent semi-monthly, and a small amount monthly.)

Every week, the Department of Labor’s Employment and Training Administration (ETA) reports the number of people filing initial and continuing claims for UI benefits. Because the UI claims data are a weekly series, they can capture the impact of shocks more quickly than the BLS monthly household and establishment surveys, particularly when these shocks hit between survey reference periods.

Data users must be cautious about trying to compare or reconcile the UI claims data with the official unemployment figures gathered through the household survey. The unemployment data derived from the household survey in no way depend upon the eligibility for or receipt of unemployment insurance benefits. Learn more about how the government measures unemployment.