# Breaking down the numbers:

# What does COVID-19 mean for youth unemployment?

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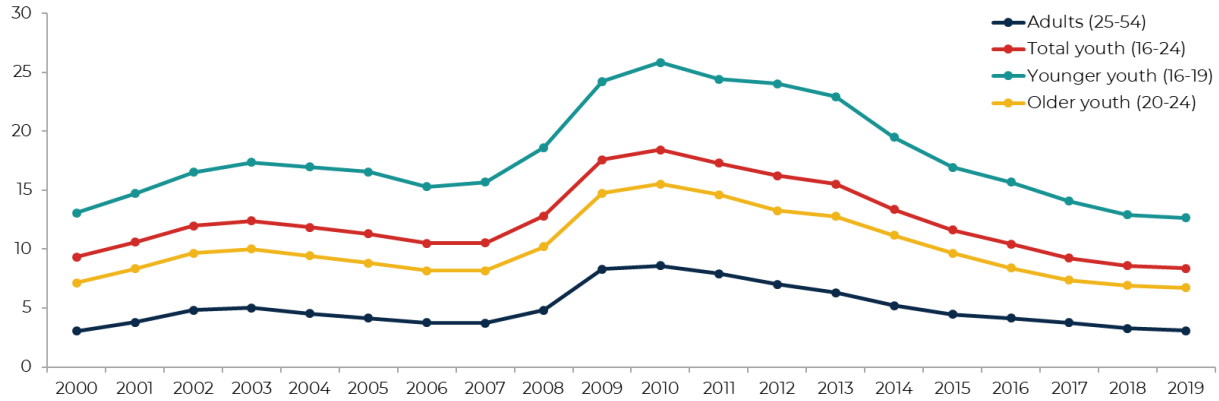
## Breaking down the numbers: What does COVID-19 mean for youth unemployment?

Youth ages 16 to 24 are traditionally more likely than the adult population to be unemployed. Over the past two decades, youth have been two to three times more likely to be unemployed than working-age adults (Figure 1). Economic downturns hit youth particularly hard. After the Great Recession of 2007–2008, youth unemployment increased more rapidly than the overall level of unemployment [1]. In 2010, the peak of the economic downturn, youth unemployment climbed to 18.4 percent. Unemployment was particularly high among younger youth (those ages 16 to 19). More than a quarter (25.9 percent) of younger youth and about 15 percent of older youth (those ages 20 to 24) were unemployed in 2010. Since 2010, unemployment declined steadily for all age groups, reaching a low in 2019.

Though unemployment fell even further to start 2020, the COVID-19 pandemic subsequently led to skyrocketing unemployment [2]. In late March, with the breakout of the COVID-19 pandemic and the subsequent shelter-in-place and stay-at-home orders in most states, job losses soared [3]. By the end of May, more than 40 million Americans had filed unemployment claims [4]. Employment data from the first two months into the pandemic indicate that the youth unemployment rate is above 25 percent [5].

**Figure 1. Trends in unemployment over the past two decades (%), by age group**




Source: Mathematica compilation based on the Bureau of Labor Statistics' monthly Labor Force Statistics from the Current Population Survey. More details are available in the technical notes section of this report.

Extended stretches of unemployment can both be stressful and have long-term adverse economic effects for young people [6, 7]. Youth with prolonged unemployment spells have lower earnings and increased risk of unemployment later in life, which leads to further depreciation of labor market skills [8]. These youth, in turn, face increased risk of poverty and social exclusion [9], and experience barriers to transition into adulthood and family life [10]. Moreover, the economic prospects of youth graduating into a recession might be permanently limited [11].

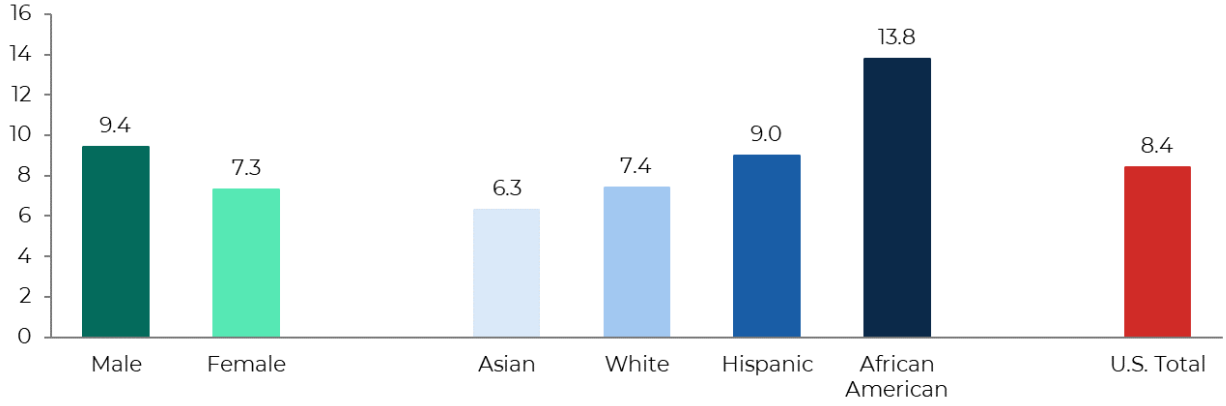
Close monitoring of timely and detailed data on youth unemployment helps organizations that invest in youth identify those in most need, target programmatic resources more efficiently, and track progress. This report, prepared by Mathematica to support the Schultz Family Foundation and other organizations that help connect youth to employers, provides a statistical portrait of youth unemployment in the United States in 2019—before the COVID-19 pandemic—and in the first five months of 2020—when the pandemic began and accelerated. Data compiled from the Bureau of Labor Statistics show that male youth, African American youth, Hispanic youth, and younger youth are disproportionately more likely to be unemployed than other youth. Youth unemployment also significantly varies between states and by metro areas.

## Before the COVID-19 pandemic: Youth unemployment in 2019

In 2019, when the unemployment rate was at its lowest level in 20 years, a total of 3.2 million people were unemployed [12]. Of those, more than 1 million were youth ages 16 to 24. Though youth make up about one-seventh of the total adult working-age population, they make up nearly one-third of total employment [13].

The youth unemployment rate in 2019 was 8.4 percent, though it varied by gender, race, and ethnicity (Figure 2). Male youth, Hispanic youth, and African American youth were more likely to be unemployed than average youth. Asian youth, female youth, and White youth were less likely to be unemployed than average youth.

**Figure 2. Youth unemployment (%), by population subgroups, 2019**



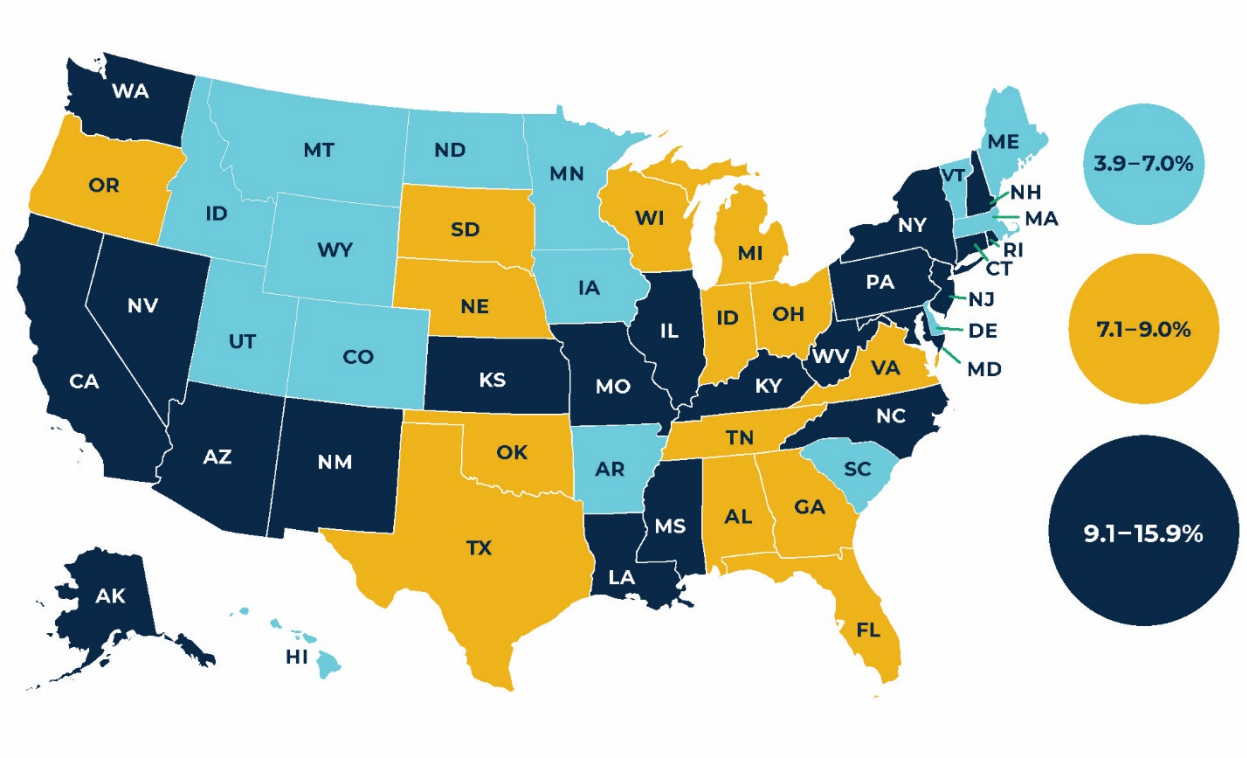

Source: Mathematica compilation based on the Bureau of Labor Statistics' monthly Labor Force Statistics from the Current Population Survey. More details are available in the technical notes section of this report.

These gender and racial disparities result from a combination of factors that might trap male, Hispanic, and African American youth in cycles of poor labor market outcomes and social exclusion. These factors include barriers in accessing high quality education, scarcity of decent jobs in the local community, and, in the case of male African American youth, disproportional incidence of involvement in the criminal justice system [14].

## Youth unemployment across the 50 states

Youth unemployment varied considerably across states in 2019. The youth unemployment rate ranged from 3.9 percent to 15.9 percent, with a standard deviation of 2.4 percentage points (Figure 3). Many states with low youth unemployment rates have larger rural populations. The 10 states with the lowest level of youth unemployment, ranked from lowest to highest, were North Dakota, Vermont, Colorado, Iowa, Utah, Idaho, Hawaii, Minnesota, Massachusetts, and Arkansas. The 10 states with the highest youth unemployment rates, ranked from highest to lowest, were Mississippi, Alaska, Louisiana, West Virginia, Connecticut, New Mexico, North Carolina, Kentucky, and Nevada (see Table A.2 in the appendix for details).

**Figure 3. Total youth unemployment at the state level (%), 2019**




Source: Mathematica estimations using the monthly Current Population Survey, based on the Bureau of Labor Statistics' definition of unemployed and civil labor force. More details are available in the technical notes section of this report.

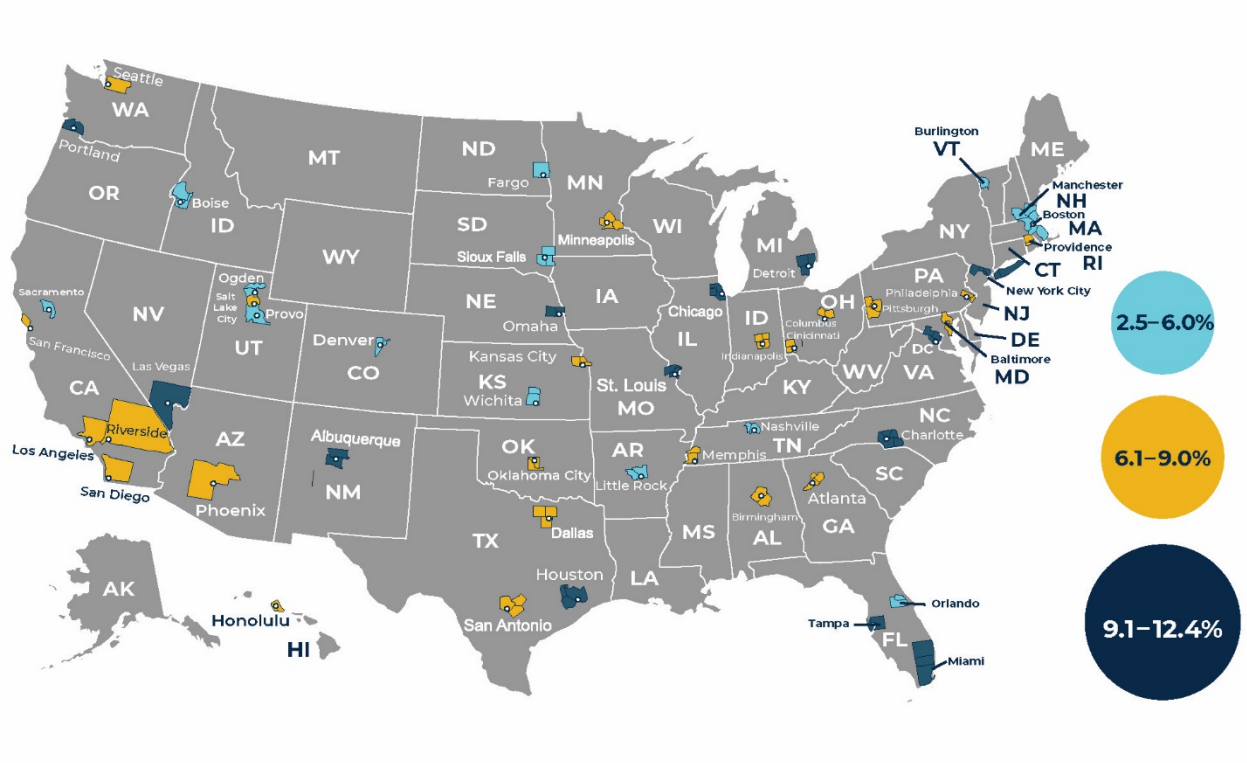
## Youth unemployment in large metropolitan areas

Estimates for selected large metropolitan areas indicate that youth unemployment also varied across metro areas in 2019—from 2.5 percent to 12.4 percent. Figure 4 shows the unemployment rates in metro areas for which reliable estimates can be calculated.[i] The 10 metro areas with the lowest unemployment rates, ranked from lowest to highest, were

[i] See technical notes section in this report for the estimates of youth unemployment in metro areas.

Burlington, Boise City, Orlando, Wichita, Ogden, Nashville, Sacramento, Provo, Sioux Falls, and Denver, all with a youth unemployment rate at or below 5.2 percent. The 10 metro areas with the highest unemployment rates, ranked from highest to lowest, were Tampa, Las Vegas, St. Louis, Detroit, Washington, DC, Chicago, Albuquerque, Portland, Houston, and New York City, all with a youth unemployment rate of 9.3 percent or higher.

**Figure 4. Total youth unemployment in selected metro areas (%), 2019**




Source: Mathematica estimations using the monthly Current Population Survey, based on the Bureau of Labor Statistics' definition of unemployed and civil labor force. More details are available in the technical notes section of this report.

More detailed analysis of youth unemployment shows that the age, gender, and race and ethnicity disparities observed at the national level do not exist in every metro area (Table 1). Even though the unemployment rate was typically higher for younger youth than older youth, several metro areas experienced the opposite. Similarly, some metro areas, such as Atlanta and Charlotte had lower unemployment rates for Hispanic youth and African American youth than for White youth, despite national trends in the other direction.

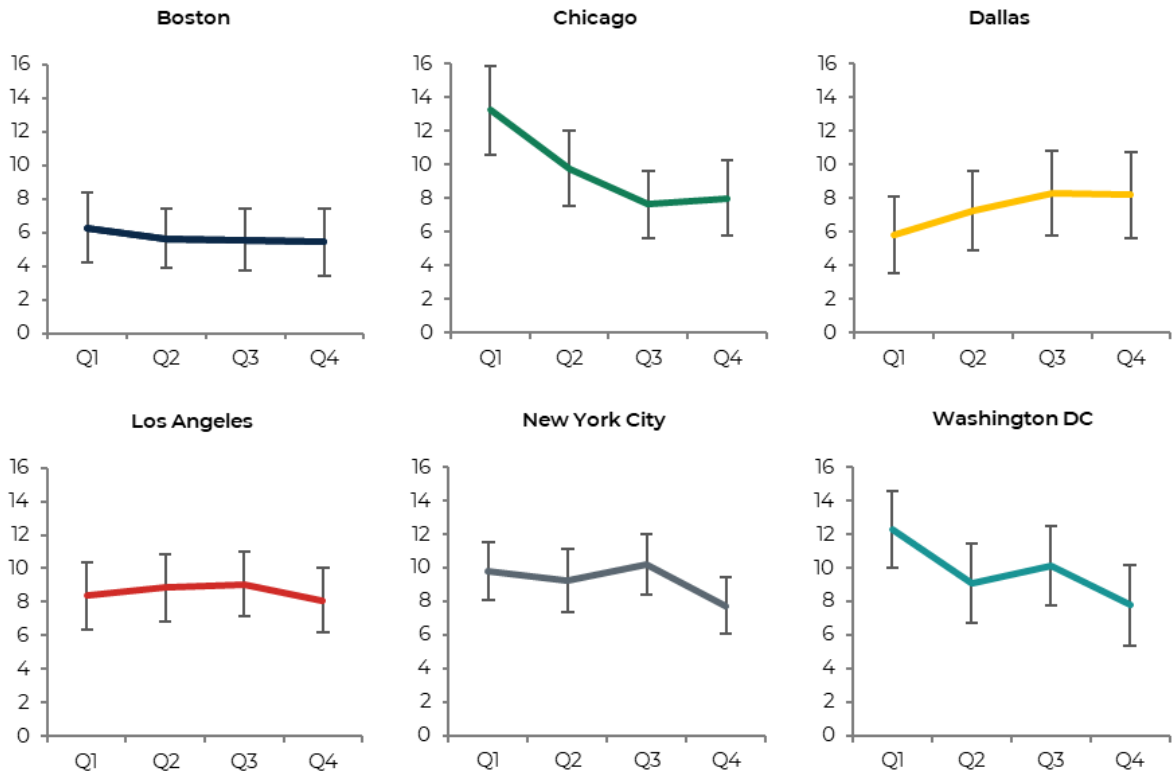
**Table 1. Youth unemployment in selected metro areas by population subgroups (%), 2019**

| METRO AREA | | By age group | | | By gender | | By race and ethnicity | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Ages 16-24 | Ages 20-24 | Ages 16-19 | Male | Female | White | Hispanic | Asian | African American |
| Rank | United States | 8.4 | 6.7 | 13.0 | 9.4 | 7.3 | 7.4 | 9.0 | 6.3 | 13.8 |
| 1 | Burlington | 2.5 | 2.7 | 2.0 | 1.6 | 3.4 | 2.3 | | | |
| 2 | Boise City | 3.8 | 2.1 | | 3.2 | 4.3 | 3.7 | 4.2 | | |
| 3 | Orlando | 3.9 | 3.6 | | 2.3 | 5.5 | 4.2 | 5.0 | | 2.5 |
| 4 | Wichita | 4.2 | 2.7 | | | 1.6 | 3.6 | | | |
| 5 | Ogden | 4.3 | 4.6 | 3.6 | 3.2 | 5.7 | 3.6 | | | |
| 6 | Nashville | 4.5 | 3.9 | | 5.3 | 3.6 | 4.1 | | | |
| 7 | Sacramento | 4.7 | 4.2 | | 3.5 | 6.0 | 5.3 | | 1.4 | |
| 8 | Provo | 4.7 | 2.0 | | 5.2 | 4.1 | 4.9 | | | |
| 9 | Sioux Falls | 4.8 | 3.0 | | 4.4 | 5.1 | 4.5 | | | |
| 10 | Denver | 5.2 | 4.0 | | 2.8 | 7.7 | 5.2 | 6.8 | | |
| 11 | Little Rock | 5.5 | 5.0 | | 5.4 | 5.7 | 5.9 | | | |
| 12 | Fargo | 5.6 | 5.0 | | 5.7 | 5.5 | 4.6 | | | |
| 13 | Boston | 5.7 | 5.0 | 7.7 | 6.7 | 4.7 | 5.0 | | 3.7 | |
| 14 | Manchester | 5.7 | 3.1 | | 7.8 | 3.8 | 5.2 | | | |
| 15 | Cincinnati | 6.1 | 2.0 | | 5.1 | 7.0 | 5.8 | | | |
| 16 | Baltimore | 6.1 | 4.6 | | 6.1 | 6.1 | 6.1 | | 2.7 | |
| 17 | Oklahoma City | 6.1 | 6.1 | | 8.1 | 4.0 | 4.4 | | | |
| 18 | San Antonio | 6.2 | 5.0 | | 6.2 | 6.3 | 6.2 | 6.2 | | |
| 19 | Kansas City | 6.3 | 5.1 | | 5.0 | 7.7 | 5.3 | | | |
| 20 | Salt Lake City | 6.5 | 5.3 | 9.1 | 8.3 | 4.6 | 6.9 | 5.6 | | |
| 21 | Indianapolis | 6.6 | 3.9 | | 7.9 | 5.1 | 5.8 | | | |
| 22 | Urban Honolulu | 6.7 | 5.3 | | 5.6 | 8.0 | 4.9 | | 5.3 | |
| 23 | Minneapolis | 6.7 | 4.8 | | 8.0 | 5.5 | 6.0 | | 2.4 | |
| 24 | San Francisco | 6.8 | 6.7 | | 6.2 | 7.4 | 4.2 | 5.9 | 9.7 | |
| 25 | Riverside | 6.9 | 4.8 | | 7.8 | 6.1 | 6.8 | 7.8 | | |
| 26 | Seattle | 7.2 | 5.1 | | 8.9 | 5.1 | 7.1 | | 5.8 | |
| 27 | Dallas | 7.4 | 5.1 | | 7.7 | 7.1 | 7.3 | 9.0 | 3.4 | |
| 28 | Phoenix | 7.7 | 5.2 | 13.7 | 9.0 | 6.2 | 7.2 | 8.7 | | |
| 29 | Columbus | 8.2 | 4.6 | | | | 6.6 | | | |
| 30 | Providence | 8.2 | 4.2 | | 8.7 | 7.6 | 8.7 | | | |
| 31 | Birmingham | 8.3 | 5.8 | | 7.8 | | 4.1 | | | |
| 32 | Atlanta | 8.3 | 8.0 | 9.2 | 10.2 | 6.6 | 5.1 | 4.2 | | |
| 33 | Memphis | 8.5 | 8.9 | | | 5.3 | 4.7 | | | |
| 34 | Los Angeles | 8.6 | 7.4 | 12.4 | 10.1 | 6.9 | 8.5 | 8.9 | 8.8 | |
| 35 | Pittsburgh | 8.7 | 4.3 | | | 8.4 | 7.7 | | | |
| 36 | San Diego | 8.9 | 6.5 | | | 6.4 | 8.5 | | | |
| 37 | Omaha | 9.1 | 5.4 | | 10.6 | 7.4 | 7.3 | 3.7 | | |
| 38 | Philadelphia | 9.1 | 7.4 | 13.3 | 7.8 | 10.2 | 6.4 | 7.6 | | |
| 39 | Charlotte | 9.2 | 8.3 | | 10.4 | | 10.2 | | | 2.1 |
| 40 | Miami | 9.2 | 8.2 | | 12.4 | 5.6 | 6.8 | 8.4 | | |
| 41 | New York | 9.3 | 8.7 | 11.3 | 10.3 | 8.3 | 7.6 | 10.3 | 5.5 | 15.9 |
| 42 | Houston | 9.3 | 8.1 | | 9.8 | 8.7 | 8.8 | 9.4 | | |
| 43 | Portland, OR | 9.4 | 6.3 | | 11.2 | 7.5 | 7.4 | 9.1 | | |
| 44 | Albuquerque | 9.5 | 8.8 | | 10.7 | 8.3 | 8.3 | 9.7 | | |
| 45 | Chicago | 9.6 | 7.3 | 14.8 | 10.9 | 8.3 | 6.9 | 9.2 | 6.9 | |
| 46 | Washington DC | 9.7 | 7.9 | | 12.2 | 7.2 | 7.4 | 7.8 | 6.2 | |
| 47 | Detroit | 10 | 8.7 | 12.6 | 12.5 | 7.7 | 8.6 | | 2.2 | |
| 48 | St. Louis | 10.9 | 8.1 | | | | 9.1 | | | |
| 49 | Las Vegas | 11.3 | 9.5 | | | 8.7 | 10.0 | 8.6 | | |
| 50 | Tampa | 12.4 | 10.7 | | | | 9.8 | | | |

Source: Mathematica estimations using the monthly Current Population Survey, based on the Bureau of Labor Statistics' definition of unemployed and civil labor force. More details are available in the technical notes and the appendix section of this report. People who define their ethnicity as Hispanic or Latino may be of any race. Figures presented in the African American column include Black or African American youth.

Metro areas also varied in terms of trends in youth unemployment (Figure 5). In Boston and Los Angeles, youth unemployment was stable throughout the year at around 6 percent and 8 percent, respectively. In Chicago and Washington DC, youth unemployment generally decreased across the year, whereas in Dallas, youth unemployment increased. In New York City, youth unemployment declined in the last quarter of 2019, after a relatively stable trend during the first three quarters.

**Figure 5. Quarterly youth unemployment in selected large metro areas (%), 2019**




Source: Mathematica estimations using the monthly Current Population Survey, based on the Bureau of Labor Statistics' definition of unemployed and civil labor force. More details are available in the technical notes section of this report.

Note that these metro area estimates should be interpreted cautiously. Due to small sample sizes of youth in metro areas, the presented estimates have a margin of error of up to 3 percentage points. This means that the actual unemployment rate might be as much as 3 percentage points higher or lower than the estimates presented.

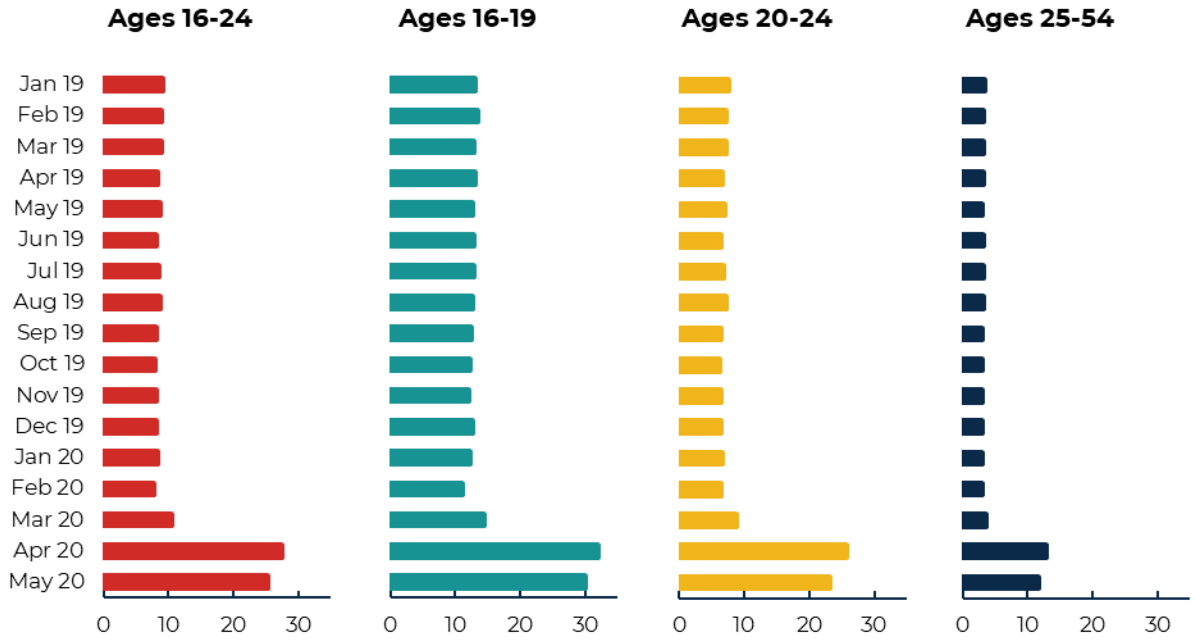
## Early effects of the COVID-19 pandemic on youth unemployment

The COVID-19 pandemic caused a stark shift in youth unemployment in early 2020. From January 2019 to December 2019, the youth unemployment rate declined from 9 percent to 8.1 percent, and the downward trend continued in the first two months of 2020, reaching 7.7 percent in February. In February 2020, the unemployment rate was 11 percent among younger youth, 6.4 percent among older youth, and 3 percent among working-age adults.

However, in March, as states began ordering stay-at-home and shelter-in-place orders, unemployment began to rise again. With the adoption of social distancing measures, unemployment rates across all age groups increased starting in April 2020 (Figure 6). In April 2020, more than a quarter of youth were unemployed: 31.9 percent of youth ages 16 to 19 and 25.7 percent of youth ages 20 to 24. In May, the unemployment rate decreased slightly, but a quarter of youth ages 16 to 24 were still unemployed.

These figures might be an understatement of the actual unemployment rate, though, because the Current Population Survey classified some of the people who did not work due to efforts to contain the coronavirus as employed. The Bureau of Labor Statistics suggests that if these people were classified as unemployed, the unemployment rate would have been several percentage points higher than reported (see technical notes section in this report for details).

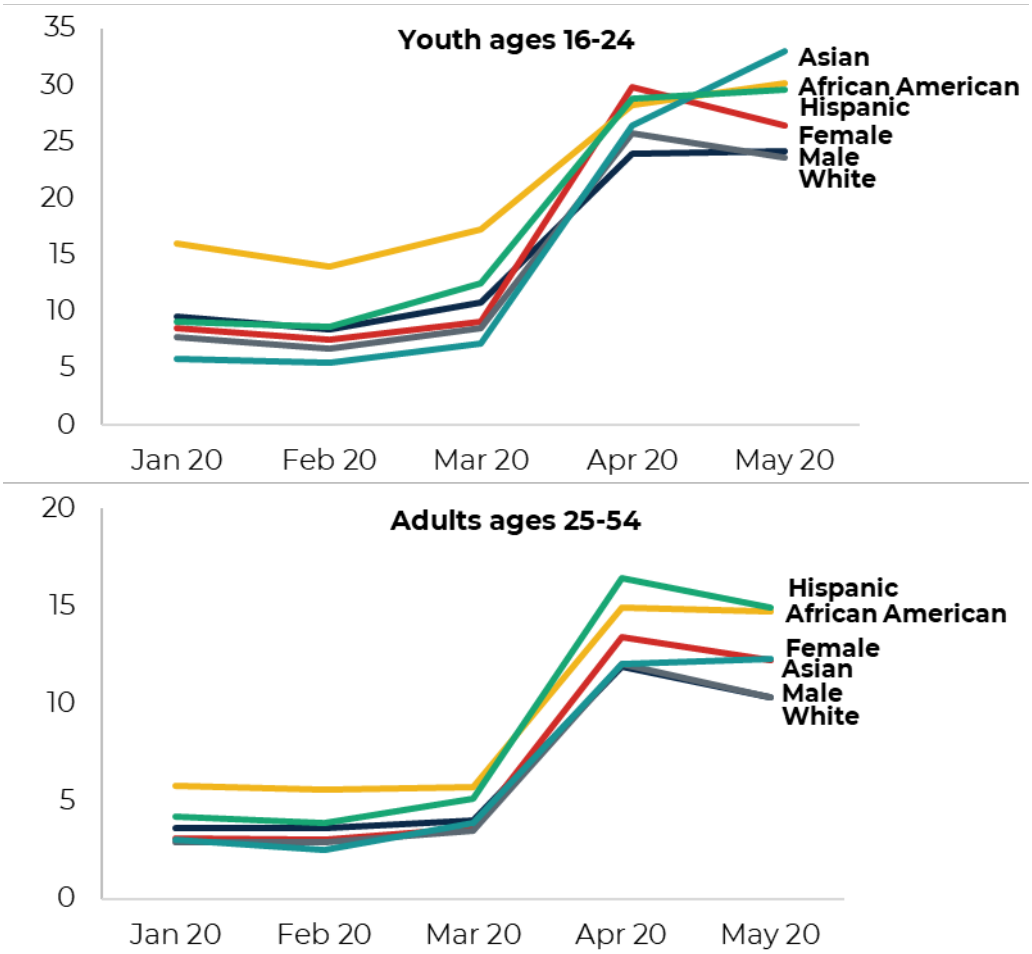
**Figure 6. Youth unemployment before and after COVID-19 outbreak (%), 2019–2020**




Source: Mathematica compilation based on the Bureau of Labor Statistics' monthly Labor Force Statistics from the Current Population Survey. More details are available in the technical notes section of this report.

Pre- and post-outbreak data by gender, race, and ethnicity show that all groups of youth were hit hard by the pandemic—not just African American or Hispanic youth who have been historically more likely to be unemployed. In May 2020, though the unemployment rate among White youth declined, the rate for Hispanic, African American, and particularly Asian youth continued to grow (Figure 7). Among adults ages 25 to 54, pre- and post-outbreak unemployment patterns are more similar across groups than they are among youth.

**Figure 7. Youth unemployment before and after COVID-19 outbreak by subgroups (%), 2020**




Source: Mathematica compilation based on the Bureau of Labor Statistics' monthly Labor Force Statistics from the Current Population Survey. More details are available in the technical notes section of this report.

## Are youth economically more vulnerable during the pandemic?

The COVID-19 pandemic poses several challenges that might exacerbate youth's economic vulnerability in the coming years. Even during positive business cycles, youth are economically more vulnerable because they tend to work in seasonal, casual, temporary, or part-time jobs, often without paid leave and benefits [15]. Because the pandemic impacts the education system and certain types of jobs and industries, youth are particularly vulnerable.

1. **The industries in which youth predominantly work—retail and hospitality—are hit hardest by the social distancing measures.** Retail and hospitality make up the largest share of occupations in which workers face the highest risk of unemployment [16]. Nearly half of all workers ages 16 to 24 are employed in these service sector jobs, where they make up a quarter of all employment in these industries [17]. Retail

and hospitality industries are heavily dependent on consumer spending. Sudden drops in spending, an extreme case of which is taking place due to the pandemic, can heavily affect workers in these industries [18]. The eschewing of public places and activities can also affect the availability of and stability of jobs in retail, and food and beverage sales [19].

2. **Most jobs that youth do cannot be done from home.** A recent study estimates that only 14 percent of jobs in retail and 4 percent of jobs in hospitality can be done from home [20]. In contrast, in industries where very few youth work, such as finance and insurance; professional, scientific, and technical services; and management of companies and enterprises, more than 75 percent of jobs are "teleworkable." Moreover, those who continue to work in these "non-teleworkable" jobs face health risks because they cannot practice social distancing [21].
3. **Unlike other recessions, the pandemic is also causing a major disruption in the education system due to social distancing measures.** The shift to online teaching is likely to cause interruptions in learning, particularly for disadvantaged students. These youth might experience challenges in accessing or making the most out of online-only instruction, because they lack access to reliable Internet connections, a personal computer, or a living arrangement that allows space and privacy for learning. Disruptions to the education system might also increase drop-out and enrollment rates. Unless higher education becomes more affordable, which could become the case if teaching continues online, millions of high school seniors, college students, and postgraduates will be unable to afford to, or simply choose not to, continue or enroll in higher education. Because unemployment rates are substantially higher among those without a college degree [22, 23], these shifts and disruptions in the education system could contribute to a permanent reduction in employment prospects for today's youth.
4. **Many youth do not have access to unemployment insurance.** Young people traditionally do not qualify for unemployment insurance programs because they do not meet work eligibility requirements. Therefore, youth often do not have a formal safety net to rely on. The Coronavirus Aid, Relief, and Economic Security (CARES) Act, passed by the U.S. Congress in March 2020, expanded unemployment benefits to workers affected by COVID-19 through the Pandemic Unemployment Assistance (PUA) program. PUA is designed to cover far more students than would otherwise qualify for unemployment insurance benefits. However, in its early form, PUA coverage had two major gaps: students who leave school and look for work for the first time, and students who leave school but cannot find work due to the economic downturn for reasons that are not directly related to COVID-19 [24]. Consequently, many youth are still ineligible for unemployment insurance programs.

## Timely data on youth unemployment can help avoid a 'lockdown generation'

Data presented in this report show that youth unemployment is a divergent, location-specific, and dynamic situation. Youth in the Unites States have higher unemployment rates than adults, with substantial age, gender, and racial and ethnic disparities. Unemployment rates among youth vary greatly by state and by metro area. All these differences suggest that efforts that help youth move out of unemployment require detailed, timely, and location-based data on the nature and scale of youth unemployment by population subgroups and local areas.

The United Nation's labor agency—the International Labour Organization—declared that young people around the world are the major victims of social and economic consequences of the pandemic. The agency warned that if steps are not taken to ease the crisis, there is a risk that they will be scarred throughout their working lives, leading to the emergence of a "lockdown generation" [25]. A close monitoring of youth unemployment is of particular importance during the pandemic and the economic recovery. Mathematica will continue providing and producing timely and detailed estimates on youth unemployment by population subgroups and geographic location that will support efforts to alleviate the economic and social impact of the COVID-19 pandemic on youth.

## Technical notes

**Figures 1, 2, 6, and 7:**

Mathematica compilation based on the Bureau of Labor Statistics' monthly Labor Force Statistics from the Current Population Survey (https://www.bls.gov/cps/data.htm). Notes: Estimates are based on household data. Except for annual data (Figures 1 and 2), estimates do not account for potential seasonal patterns. The unemployment rate is calculated as the percentage of people who are unemployed as a share of the labor force. The Bureau of Labor Statistics defines unemployed workers as people who were either looking for work (job seekers) or had been temporarily separated from work (people on layoff). The total labor force includes people who are employed and people who are unemployed. People who are not employed but do not meet the criteria to be considered unemployed, such as discouraged workers, are considered out of the labor force and therefore do not contribute to the unemployment rate. People who define their ethnicity as Hispanic or Latino may be of any race.

**Figures 3, 4, and 5 and Table 1:**

These estimates for States and Metropolitan Statistical Areas (MSAs) were calculated by Mathematica using the monthly Current Population Survey and are based on the Bureau of Labor Statistics' definition of unemployed and civil labor force. Margins of error are based on a 90 percent confidence interval. Estimates do not account for potential seasonal patterns. MSAs where youth unemployment estimates have a margin of error 3 percentage points or more are excluded.

**Interpreting unemployment data during the COVID-19 pandemic:**

Unemployment rates presented for the COVID-19 period are likely to underestimate the actual unemployment rate and do not cover all people who would have been classified as unemployed in a typical recession.

First, COVID-related business and school closures, as well as stay-at-home orders, cause a change in people's job-seeking behavior, which, in turn, affects who is classified as unemployed and as out of the labor force. In a typical recession, people who lose their jobs transition into unemployment because they start looking for a job. In the COVID context, however, where many non-essential businesses, schools, and daycares are closed and stay-at-home orders are put in place, people who leave employment are less likely to look for a job than would be typically the case. Many of those people who would have otherwise been looking for a job and classified as unemployed now transition into being out of the labor force [26]. For example, from February to April alone, labor force participation fell from 63.4 percent to 60.2 percent [27]. Therefore, looking at both unemployment rates and the share of people who move out of the labor force will provide a fuller picture about the economic consequences of the pandemic.

Second, the way that the Bureau of Labor Statistics classifies people with a job but were not at work for the entire reference week of the Current Population Survey due to reasons such as illness or vacation is likely to underestimate people who are laid off. Specifically, some of these people are classified as unemployed or temporarily laid off, but others are classified as "employed but not at work." The Bureau of Labor Statistics' analysis of underlying data suggests that, if people in this latter group were classified as unemployed or temporarily laid off, the unemployment rate in March would have been 5.4 percent (not seasonally adjusted), compared with the official estimate of 4.5 percent (not seasonally adjusted) [28]. The unemployment rate in April 2020 would have been 19.2 percent (not seasonally adjusted), compared with the official estimate of 14.4 percent (not seasonally adjusted) [29].

From May 2020 onward, the Bureau of Labor Statistics will be measuring the extent to which work activities are being affected by the COVID-19 pandemic with a new set of questions added at the end of the Current Population Survey [30]. These questions will help gauge the level of unemployment more accurately.

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**Related blog post:**

Inanc, H. "Trends in youth unemployment during COVID-19". Mathematica blog, June 29, 2020. Available at https://www.mathematica.org/commentary/trends-in-youth-unemployment-during-covid-19.

Inanc, H. "Helping Connect Youth to Jobs, Apprenticeships, and Internships with More Timely and Detailed Data". Mathematica blog, December 4, 2019. Available at https://www.mathematica.org/commentary/helping-connect-youth-to-jobs-apprenticeships-and-internships-with-more-timely-and-detailed-data.

## Appendix: Data tables

**Table A.1. Trends in unemployment over the past decade (%), by age group**

| | Adults (ages 25-54) | Total youth (ages 16–24) | Younger youth (ages 16–19) | Older youth (ages 20–24) |
|---|---|---|---|---|
| 2010 | 8.6 | 18.4 | 25.9 | 15.5 |
| 2011 | 7.9 | 17.3 | 24.4 | 14.6 |
| 2012 | 7.0 | 16.2 | 24.0 | 13.3 |
| 2013 | 6.3 | 15.5 | 22.9 | 12.8 |
| 2014 | 5.2 | 13.4 | 19.5 | 11.2 |
| 2015 | 4.5 | 11.6 | 16.9 | 9.7 |
| 2016 | 4.2 | 10.4 | 15.7 | 8.4 |
| 2017 | 3.7 | 9.2 | 14.1 | 7.4 |
| 2018 | 3.3 | 8.6 | 12.9 | 6.9 |
| 2019 | 3.1 | 8.4 | 12.7 | 6.7 |

Source: Mathematica compilation based on the Bureau of Labor Statistics' monthly Labor Force Statistics from the Current Population Survey (https://www.bls.gov/cps/data.htm).

**Table A.2. State-level youth unemployment, 2019**

| State | Youth unemployment (percentage) | Margin of error (percentage points) | State | Youth unemployment (percentage) | Margin of error (percentage points) |
|---|---|---|---|---|---|
| Alabama | 8.2 | 1.1 | Montana | 6.4 | 1.1 |
| Alaska | 13.0 | 1.6 | Nebraska | 8.1 | 1.2 |
| Arizona | 9.2 | 1.2 | Nevada | 10.1 | 1.6 |
| Arkansas | 6.3 | 1.0 | New Hampshire | 7.3 | 1.2 |
| California | 9.1 | 0.6 | New Jersey | 9.3 | 1.3 |
| Colorado | 4.7 | 1.0 | New Mexico | 10.7 | 1.3 |
| Connecticut | 10.8 | 1.9 | New York | 10.1 | 0.9 |
| Delaware | 6.7 | 1.5 | North Carolina | 10.6 | 1.2 |
| Florida | 8.2 | 0.8 | North Dakota | 3.9 | 0.8 |
| Georgia | 7.4 | 1.1 | Ohio | 7.6 | 0.9 |
| Hawaii | 6.0 | 1.3 | Oklahoma | 7.1 | 1.2 |
| Idaho | 5.9 | 1.0 | Oregon | 9.0 | 1.3 |
| Illinois | 9.9 | 1.0 | Pennsylvania | 9.1 | 1.0 |
| Indiana | 7.2 | 1.1 | Rhode Island | 6.9 | 1.6 |
| Iowa | 4.9 | 1.0 | South Carolina | 6.3 | 1.2 |
| Kansas | 7.6 | 1.2 | South Dakota | 8.7 | 1.5 |
| Kentucky | 10.1 | 1.6 | Tennessee | 8.1 | 1.1 |
| Louisiana | 11.3 | 1.2 | Texas | 8.1 | 0.6 |
| Maine | 7.0 | 1.7 | Utah | 4.9 | 0.8 |
| Maryland | 8.3 | 1.5 | Vermont | 4.2 | 1.1 |
| Massachusetts | 6.1 | 1.0 | Virginia | 7.3 | 1.1 |
| Michigan | 8.4 | 1.0 | Washington | 9.7 | 1.2 |
| Minnesota | 6.1 | 1.1 | West Virginia | 10.9 | 1.4 |
| Mississippi | 15.9 | 1.7 | Wisconsin | 7.2 | 1.3 |
| Missouri | 8.3 | 1.4 | Wyoming | 6.9 | 1.2 |

Source: Estimates using the monthly Current Population Survey based on the Bureau of Labor Statistics' definition of unemployed and civil labor force.

Note: Margins of error are based on a 90 percent confidence interval. Estimates do not account for potential seasonal patterns.

## Table A.3. Youth unemployment in 50 selected metro areas (%), by age, gender, and race and ethnicity, 2019

| | Metro area | By age group | | | By gender | | By race and ethnicity | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Ages 16–24 | Ages 20–24 | Ages 16–19 | Male | Female | White | Hisp-anic | Asian | African Amer-ican |
| | United States | 8.4 | 6.7 | 13.0 | 9.4 | 7.3 | 7.4 | 9.0 | 6.3 | 13.8 |
| 1 | Burlington-South Burlington, VT | 2.5 | 2.7 | 2.0 | 1.6 | 3.4 | 2.3 | | | |
| 2 | Boise City-Nampa, ID | 3.8 | 2.1 | | 3.2 | 4.3 | 3.7 | 4.2 | | |
| 3 | Orlando, FL | 3.9 | 3.6 | | 2.3 | 5.5 | 4.2 | 5.0 | | 2.5 |
| 4 | Wichita, KS | 4.2 | 2.7 | | | 1.6 | 3.6 | | | |
| 5 | Ogden-Clearfield, UT | 4.3 | 4.6 | 3.6 | 3.2 | 5.7 | 3.6 | | | |
| 6 | Nashville-Davidson-Murfreesboro, TN | 4.5 | 3.9 | | 5.3 | 3.6 | 4.1 | | | |
| 7 | Sacramento-Roseville-Arden-Arcade, CA | 4.7 | 4.2 | | 3.5 | 6.0 | 5.3 | | 1.4 | |
| 8 | Provo-Orem, UT | 4.7 | 2.0 | | 5.2 | 4.1 | 4.9 | | | |
| 9 | Sioux Falls, SD | 4.8 | 3.0 | | 4.4 | 5.1 | 4.5 | | | |
| 10 | Denver-Aurora, CO | 5.2 | 4.0 | | 2.8 | 7.7 | 5.2 | 6.8 | | |
| 11 | Little Rock-North Little Rock, AR | 5.5 | 5.0 | | 5.4 | 5.7 | 5.9 | | | |
| 12 | Fargo, ND-MN | 5.6 | 5.0 | | 5.7 | 5.5 | 4.6 | | | |
| 13 | Boston-Cambridge-Newton, MA-NH | 5.7 | 5.0 | 7.7 | 6.7 | 4.7 | 5.0 | | 3.7 | |
| 14 | Manchester-Nashua, NH | 5.7 | 3.1 | | 7.8 | 3.8 | 5.2 | | | |
| 15 | Cincinnati-Middleton, OH-KY-IN | 6.1 | 2.0 | | 5.1 | 7.0 | 5.8 | | | |
| 16 | Baltimore-Columbia-Towson, MD | 6.1 | 4.6 | | 6.1 | 6.1 | 6.1 | | 2.7 | |
| 17 | Oklahoma City, OK | 6.1 | 6.1 | | 8.1 | 4.0 | 4.4 | | | |
| 18 | San Antonio, TX | 6.2 | 5.0 | | 6.2 | 6.3 | 6.2 | 6.2 | | |
| 19 | Kansas City, MO-KS | 6.3 | 5.1 | | 5.0 | 7.7 | 5.3 | | | |
| 20 | Salt Lake City, UT | 6.5 | 5.3 | 9.1 | 8.3 | 4.6 | 6.9 | 5.6 | | |
| 21 | Indianapolis, IN | 6.6 | 3.9 | | 7.9 | 5.1 | 5.8 | | | |
| 22 | Urban Honolulu, HI | 6.7 | 5.3 | | 5.6 | 8.0 | 4.9 | | 5.3 | |
| 23 | Minneapolis-St. Paul-Bloomington, MN-WI | 6.7 | 4.8 | | 8.0 | 5.5 | 6.0 | | 2.4 | |
| 24 | San Francisco-Oakland-Fremont, CA | 6.8 | 6.7 | | 6.2 | 7.4 | 4.2 | 5.9 | 9.7 | |
| 25 | Riverside-San Bernardino, CA | 6.9 | 4.8 | | 7.8 | 6.1 | 6.8 | 7.8 | | |
| 26 | Seattle-Tacoma-Bellevue, WA | 7.2 | 5.1 | | 8.9 | 5.1 | 7.1 | | 5.8 | |
| 27 | Dallas-Fort Worth-Arlington, TX | 7.4 | 5.1 | | 7.7 | 7.1 | 7.3 | 9.0 | 3.4 | |
| 28 | Phoenix-Mesa-Scottsdale, AZ | 7.7 | 5.2 | 13.7 | 9.0 | 6.2 | 7.2 | 8.7 | | |
| 29 | Columbus, OH | 8.2 | 4.6 | | | | 6.6 | | | |
| 30 | Providence-Warwick, RI-MA | 8.2 | 4.2 | | 8.7 | 7.6 | 8.7 | | | |
| 31 | Birmingham-Hoover, AL | 8.3 | 5.8 | | 7.8 | | 4.1 | | | |
| 32 | Atlanta-Sandy Springs-Marietta, GA | 8.3 | 8.0 | 9.2 | 10.2 | 6.6 | 5.1 | 4.2 | | |
| 33 | Memphis, TN-MS-AR | 8.5 | 8.9 | | | 5.3 | 4.7 | | | |
| 34 | Los Angeles-Long Beach-Anaheim, CA | 8.6 | 7.4 | 12.4 | 10.1 | 6.9 | 8.5 | 8.9 | 8.8 | |
| 35 | Pittsburgh, PA | 8.7 | 4.3 | | | 8.4 | 7.7 | | | |
| 36 | San Diego-Carlsbad-San Marcos, CA | 8.9 | 6.5 | | | 6.4 | 8.5 | | | |
| 37 | Omaha-Council Bluffs, NE-IA | 9.1 | 5.4 | | 10.6 | 7.4 | 7.3 | 3.7 | | |
| 38 | Philadelphia-Camden-Wilmington, PA-NJ-DE | 9.1 | 7.4 | 13.3 | 7.8 | 10.2 | 6.4 | 7.6 | | |
| 39 | Charlotte-Concord-Gastonia, NC-SC | 9.2 | 8.3 | | 10.4 | | 10.2 | | | 2.1 |
| 40 | Miami-Fort Lauderdale-Miami Beach, FL | 9.2 | 8.2 | | 12.4 | 5.6 | 6.8 | 8.4 | | |
| 41 | New York-Newark-Jersey City, NY-NJ-PA | 9.3 | 8.7 | 11.3 | 10.3 | 8.3 | 7.6 | 10.3 | 5.5 | 15.9 |
| 42 | Houston-Baytown-Sugar Land, TX | 9.3 | 8.1 | | 9.8 | 8.7 | 8.8 | 9.4 | | |

| Metro area | | By age group | | | By gender | | By race and ethnicity | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Ages 16–24 | Ages 20–24 | Ages 16–19 | Male | Female | White | Hisp-anic | Asian | African Amer-ican |
| 43 | Portland-Vancouver-Beaverton, OR-WA | 9.4 | 6.3 | | 11.2 | 7.5 | 7.4 | | | |
| 44 | Albuquerque, NM | 9.5 | 8.8 | | 10.7 | 8.3 | 8.3 | 9.7 | | |
| 45 | Chicago-Naperville-Joliet, IL-IN-WI | 9.6 | 7.3 | 14.8 | 10.9 | 8.3 | 6.9 | 9.2 | 6.9 | |
| 46 | Washington, DC, MD-VA | 9.7 | 7.9 | | 12.2 | 7.2 | 7.4 | 7.8 | 6.2 | |
| 47 | Detroit-Warren-Livonia, MI | 10.0 | 8.7 | 12.6 | 12.5 | 7.7 | 8.6 | | 2.2 | |
| 48 | St. Louis, MO-IL | 10.9 | 8.1 | | | | 9.1 | | | |
| 49 | Las Vegas-Paradise, NV | 11.3 | 9.5 | | | 8.7 | 10.0 | 8.6 | | |
| 50 | Tampa-St. Petersburg-Clearwater, FL | 12.4 | 10.7 | | | | 9.8 | | | |

Source: Estimates using the monthly Current Population Survey based on the Bureau of Labor Statistics' definition of unemployed and civil labor force.

Note: The table presents metro area and subgroup estimates for which the margin of error was below 3 percentage points (using a 90 percent confidence interval). Estimates do not account for potential seasonal patterns. People who define their ethnicity as Hispanic or Latino may be of any race. Figures presented in the African American column include Black or African American youth. A blank cell indicates that the margin of error was above 3 percentage points, and therefore the estimate is not presented.

**Table A.4. Quarterly youth unemployment in selected metro areas, 2019**

| Metro area | Quarter 1 | | Quarter 2 | | Quarter 3 | | Quarter 4 | |
|---|---|---|---|---|---|---|---|---|
| | % | m.e. | % | m.e. | % | m.e. | % | m.e. |
| Boston-Cambridge-Newton, MA-NH | 6.3 | 2.1 | 5.6 | 1.8 | 5.6 | 1.9 | 5.4 | 2.0 |
| Chicago-Naperville-Elgin, IL-IN-WI | 13.2 | 2.6 | 9.8 | 2.2 | 7.6 | 2.0 | 8.0 | 2.2 |
| Dallas-Fort Worth-Arlington, TX | 5.8 | 2.3 | 7.3 | 2.4 | 8.3 | 2.5 | 8.2 | 2.6 |
| Los Angeles-Long Beach-Anaheim, CA | 8.4 | 2.0 | 8.8 | 2.0 | 9.0 | 1.9 | 8.1 | 1.9 |
| New York-Newark-Jersey City, NY-NJ-PA | 9.8 | 1.7 | 9.2 | 1.9 | 10.2 | 1.8 | 7.8 | 1.7 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 12.3 | 2.3 | 9.1 | 2.3 | 10.1 | 2.4 | 7.8 | 2.4 |

Source: Estimates using the monthly Current Population Survey based on the Bureau of Labor Statistics' definition of unemployed and civil labor force.

Note: The table presents metro area estimates for which the margin of error was below 3 percentage points (based on a 90 percent confidence interval). Estimates do not account for potential seasonal patterns.

m.e. = margin of error (reported in percentage points).

**Table A.5. Monthly unemployment (%), by age groups, January 2019 through May 2020**

| | Adults (ages 25–54) | Total youth (ages 16–24) | Younger youth (ages 16–19) | Older youth (ages 20–24) |
|---|---|---|---|---|
| January 2019 | 3.3 | 9.0 | 12.9 | 7.5 |
| February 2019 | 3.2 | 8.9 | 13.3 | 7.2 |
| March 2019 | 3.2 | 8.8 | 12.7 | 7.2 |
| April 2019 | 3.0 | 8.3 | 12.9 | 6.5 |
| May 2019 | 2.9 | 8.5 | 12.6 | 7.0 |
| June 2019 | 3.0 | 8.1 | 12.7 | 6.3 |
| July 2019 | 3.1 | 8.4 | 12.7 | 6.7 |
| August 2019 | 3.1 | 8.6 | 12.5 | 7.1 |
| September 2019 | 3.0 | 8.0 | 12.5 | 6.3 |
| October 2019 | 3.0 | 7.9 | 12.3 | 6.2 |
| November 2019 | 3.0 | 8.0 | 12.0 | 6.4 |
| December 2019 | 3.0 | 8.1 | 12.6 | 6.3 |
| January 2020 | 3.0 | 8.2 | 12.2 | 6.6 |
| February 2020 | 3.0 | 7.7 | 11.0 | 6.4 |
| March 2020 | 3.6 | 10.3 | 14.3 | 8.7 |
| April 2020 | 12.8 | 27.4 | 31.9 | 25.7 |
| May 2020 | 11.5 | 25.2 | 29.9 | 23.2 |

Source: Mathematica compilation based on the Bureau of Labor Statistics' monthly Labor Force Statistics from the Current Population Survey (https://www.bls.gov/cps/data.htm).

**Table A.6. Monthly unemployment (%), by gender, race and ethnicity, January 2020 through May 2020**

| | Male | Female | White | Hispanic | Asian | African American |
|---|---|---|---|---|---|---|
| **Youth ages 16–24** | | | | | | |
| January | 9.6 | 8.6 | 7.8 | 9.1 | 5.9 | 16.0 |
| February | 8.5 | 7.5 | 6.7 | 8.7 | 5.5 | 14.0 |
| March | 10.8 | 9.1 | 8.6 | 12.5 | 7.2 | 17.3 |
| April | 24.0 | 29.8 | 25.8 | 28.8 | 26.5 | 28.3 |
| May | 24.2 | 26.5 | 23.6 | 29.6 | 33.0 | 30.2 |
| **Adults ages 25–54** | | | | | | |
| January | 3.6 | 3.1 | 2.9 | 4.2 | 3.0 | 5.8 |
| February | 3.6 | 3.0 | 2.9 | 3.9 | 2.5 | 5.6 |
| March | 4.0 | 3.6 | 3.5 | 5.1 | 3.9 | 5.7 |
| April | 11.9 | 13.4 | 12.0 | 16.4 | 12.0 | 14.9 |
| May | 10.3 | 12.2 | 10.3 | 14.9 | 12.3 | 14.7 |

Source: Mathematica compilation based on the Bureau of Labor Statistics' monthly Labor Force Statistics from the Current Population Survey (https://www.bls.gov/cps/data.htm).