Health and Social Precarity Among Americans Receiving Unemployment Benefits During the COVID-19 Outbreak

BACKGROUND
The Coronavirus Aid, Relief, and Economic Security (CARES) Act provided a $600/week supplement to unemployment benefits which expired July 31. Its extension is controversial. We examined health and social vulnerabilities among those receiving unemployment benefits during the COVID-19 outbreak to inform debate on the consequences of allowing the supplement to lapse.

METHODS
We analyzed the COVID Impact Survey, sponsored by the Federal Reserve Bank of Minneapolis and foundations. Surveyors contacted a nationally representative random sample of US households by mail, email, telephone, and field interviews between April 20, 2020, and June 8, 2020. We assessed adults 18–64 receiving (or applying for) unemployment benefits during the past week and those reporting working in the past week.

We first analyzed demographic characteristics and three categories of socio-medical vulnerabilities: food insecurity; lacking health insurance; and financial precarity (being unable to cover an unexpected $400 expense without selling possessions or going into debt).

Finally, to assess possible health risks resulting from unemployment beneficiaries’ prematurely returning to work, we examined self-reported health; rates of seven clinical risk factors for severe COVID-19; and the point prevalence of three major COVID-19 symptoms (fever/chills, cough, and dyspnea).

We used STATA/SE and weights provided by COVID Impact.

RESULTS
A total of 643 (weighted n = 26.9 million) of the 3480 non-elderly adults in our sample were unemployment beneficiaries; they were younger, poorer, less educated, and more often people of color than those at-work (Table 1).

Table 2 displays measures of socio-medical vulnerability for the two groups. Beneficiaries were more likely to report running out of food because they lacked money (39.0% vs. 17.0%, p < 0.001), or using a food pantry (17.3% vs. 5.1%, p < 0.001) in the past month; being uninsured (20.5% vs. 9.2%, p < 0.001); and being unable to afford an unexpected $400 expense (59.6% vs. 38.2%, p < 0.001). However, a larger absolute number of at-work individuals were vulnerable because many more adults were at-work. For instance, 26.0 million of those at-work reported problems affording food, versus 13.4 million unemployment beneficiaries.

Table 1: Characteristics of US Adults 18–64 Years of Age Receiving or Applying for Unemployment Insurance and Those Working, April–June 2020 (n = 3480)

| Characteristic          | Working (%) (n = 2837) | Unemployment insurance beneficiaries (%) (n = 643) |
|-------------------------|------------------------|-----------------------------------------------|
| Age                     |                        |                                               |
| 18–24                   | 14.3%                  | 19.5%                                         |
| 25–34                   | 26.1%                  | 26.5%                                         |
| 35–44                   | 21.5%                  | 22.4%                                         |
| 45–54                   | 20.3%                  | 19.3%                                         |
| 55–64                   | 20.2%                  | 12.1%                                         |
| Gender                  |                        |                                               |
| Male                    | 53.1%                  | 51.0%                                         |
| Female                  | 46.9%                  | 48.9%                                         |
| Race                    |                        |                                               |
| White                   | 63.6%                  | 52.1%                                         |
| Black                   | 10.8%                  | 12.1%                                         |
| Hispanic                | 15.7%                  | 27.3%                                         |
| Other                   | 9.8%                   | 8.3%                                          |
| Income                  |                        |                                               |
| Less than $30,000       | 17.0%                  | 31.5%                                         |
| $30k to less than $60k  | 24.9%                  | 27.7%                                         |
| $60k to less than $125k | 40.7%                  | 33.2%                                         |
| More than $125k         | 17.5%                  | 7.5%                                          |
| Education               |                        |                                               |
| No high school diploma  | 5.5%                   | 18.2%                                         |
| High school graduate or equivalent | 22.9% | 33.79 |
| Some college            | 27.1%                  | 26.2%                                         |
| Bachelor of Arts or above | 44.4%            | 21.6%                                         |

25 individuals in study population were missing data on race/ethnicity
In total, 3.7% of unemployment beneficiaries had all three potential COVID-19 symptoms, versus 1.9% of those at-work ($p = 0.057$); unemployment beneficiaries were more likely to report fair/poor health (14.2% vs. 9.3%; $p = 0.010$), heart disease (4.7% vs. 2.3%; $p = 0.034$), and immunocompromise (8.2% vs. 4.6%; $p = 0.020$), but not other conditions. A total of 9.9 million unemployment beneficiaries had chronic conditions associated with increased risk of severe COVID-19.

### DISCUSSION

Despite the $600/week supplement available to unemployment beneficiaries at the time of the survey, many experienced financial precarity, and two factors were believed to compromise clinical outcomes: food insecurity and lack of health insurance. Although rates of these vulnerabilities were lower among those at-work, the absolute numbers affected were larger.

While critics of the supplementary unemployment benefits have argued that it disincentivized work, a recent study cast doubt on that contention. Even if jobs were available, in the context of ongoing community spread of SARS-CoV-2, forcing individuals back into the workplace under threat of impoverishment may place them, their co-workers, and the community at risk, since nearly 10 million unemployment beneficiaries have chronic conditions, and about one million had a triad of symptoms consistent with respiratory infection.

Our study is limited by the low survey response rate, which could reduce generalizability; however, the

| Table 2 Measures of Sociomedical Vulnerability and Health Among US Adults 18–64 Years of Age Receiving or Applying for Unemployment Insurance and Those Working, April–June 2020 |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| **Social precarity** | **Working** | **Unemployment insurance beneficiaries** | **p value** |
| Cannot afford $400 expense | 40,631 (37,139, 44,124) | 15,983 (13,549, 18,417) | <0.001 |
| Food security | 23,606 (20,575, 26,638) | 12,353 (10,124, 14,583) | <0.001 |
| Worry food will run out | 18,115 (15,461, 20,768) | 16,915 (13,813, 19,815) | <0.001 |
| Food ran out | 4545 (40,21, 6886) | 4642 (34,19, 5865) | <0.001 |
| Used food pantry | 25,978 (22,849, 29,107) | 13,376 (11,103, 15,649) | <0.001 |
| Any food insecurity | 9763 (7991, 11,534) | 5485 (4135, 6835) | <0.001 |
| Possible COVID-19 symptoms | 29,313 (26,303, 32,324) | 7140 (5614, 8667) | 0.79 |
| Fever or chills | 14,977 (12,866, 17,087) | 4737 (34,34, 6040) | 0.12 |
| Cough | 11,523 (9,829, 13,218) | 3138 (22,46, 4030) | 0.62 |
| Dyspnea | 1267 (12,577, 13,14) | 957 (34, 15, 156) | 0.057 |
| Triad of all 3 symptoms | 25,978 (22,849, 29,107) | 5485 (4135, 6835) | <0.001 |
| Self-reported health | 96,906 (92,351, 101,461) | 23,051 (20,224, 25,877) | 0.010 |
| Good or better | 9955 (89,91, 92,1) | 3820 (27,10, 4930) | 0.001 |
| Fair or worse | 9763 (7991, 11,534) | 5485 (4135, 6835) | <0.001 |
| Chronic conditions | 6780 (5490, 8071) | 2217 (1271, 3163) | 0.23 |
| Diabetes | 12,824 (10,854, 14,795) | 2918 (1966, 3870) | 0.62 |
| COPD | 2404 (1631, 3178) | 1212 (475, 1948) | 0.034 |
| Heart disease | 14,701 (12,666, 16,735) | 3896 (2819, 4973) | 0.61 |
| Asthma | 831 (354, 1308) | 352 (89, 616) | 0.29 |
| Liver disease | 22,937 (21,583, 26,292) | 5688 (4289, 7086) | 0.74 |
| Hypertension | 4818 (3761, 5874) | 2097 (1161, 3033) | 0.020 |
| Immunocompromised | 54,875 | 57.1 | 0.97 |
| Number of conditions | (continued on next page)
were categorized as unable to pay the expense, even if they also chose one of the other two responses. N = 20 of 3480 with missing data

Considered able to afford the $400 expense. Those reporting they would use a credit card which they would pay off over time; a bank loan or line of credit; borrow from a family member or friend; use a payday loan, overdraft, or deposit advance; sell something; or would not be able to pay for it were categorized as unable to pay the expense, even if they also chose one of the other two responses. N = 20 of 3480 with missing data

The lapse of the unemployment benefits provided a safety net for the US economy and population well-being. The triad of COVID-19 symptoms is noteworthy. Participants were asked whether "a doctor or other health care provider ever told you that you have any of the following, given that we lacked medical and financial harm on millions of American households. Additional policies, however, are needed to strengthen the social safety net during the pandemic and beyond, both for the unemployed and for those at-work.

| Working | Unemployment insurance beneficiaries |
|---------|--------------------------------------|
| Weighted N, thousands (95% CI) | % (95% CI) | Weighted N, thousands (95% CI) | % (95% CI) |
| 1       | (51,178, 58,572)                     | (53.6, 59.0) | (11,079, 15,310)                     | (51.0, 63.0) |
| 1       | 30,506                               | 31.3         | 7096                                 | 30.7         |
| 1       | (27,725, 33,287)                     | (28.9, 33.8) | (5515, 8678)                         | (25.3, 36.7) |
| 1       | 12,086                               | 12.4         | 2809                                 | 12.2         |
| 1       | (10,337, 13,835)                     | (10.8, 14.2) | (1905, 3712)                         | (8.9, 16.4)  |

*Pearson chi-square

†Individuals were asked “Suppose that you have an unexpected expense that costs $400. Based on your current financial situation, how would you pay for this expense?” 8 non-mutually exclusive response options were provided. We created a binary mutually exclusive indicator. Those who reported that they would cover the expense with a credit card that they would pay off in full, or who would use cash or a checking/savings account, were considered able to afford the $400 expense. Those reporting they would use a credit card which they would pay off over time; a bank loan or line of credit; borrow from a family member or friend; use a payday loan, overdraft, or deposit advance; sell something; or would not be able to pay for it were categorized as unable to pay the expense, even if they also chose one of the other two responses. N = 20 of 3480 with missing data

Individuals were asked whether they were “worried our food would run out before we got money to buy more.” Those who responded with “never true” were categorized as not worried, while those who answered “often true” or “sometimes true” were categorized as worried. N = 8 of 3480 with missing data

§Individuals were asked whether “The food that we bought just didn’t last, and we didn’t have money to get more.” Those who responded with “never true” were categorized to not have run out of food, while those who answered “often true” or “sometimes true” were categorized to have run out. N = 11 of 3480 with missing data

|| Individuals were asked about use (or application for) food pantry benefits in the past 7 days. Those who answered “did not receive nor apply for any” benefits were categorized as not using a pantry, while those who answered “received,” “applied for,” or “tried to apply for” were categorized as using a pantry. N = 19 of 3480 with missing data

‡‡This five-category variable was dichotomized in the typical fashion: poor or fair vs. excellent, very good, or good. None with missing data

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REFERENCES

1. Wozniak A, Willey J, Benz J, Hart N. COVID Impact Survey: Versions 1.3, 2.2, and 3. National Opinion Research Center; 2020.
2. Data Foundation. The COVID Impact Survey: Methodological Approach. Accessed August 11, 2020. https://static1.squarespace.com/static/5e8769b34812765cf8f811f7/t/5ea495a78315084d6c83cd0/1587844524658/Updated_COVID+Impact+Methods+Statement.pdf
3. CDC. Coronavirus Disease 2019 (COVID-19): People with Certain Medical Conditions. Updated June 25, 2020. Centers for Disease Control and Prevention. Published February 11, 2020. Accessed July 10, 2020. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html
4. Karpman M, Acs G. Unemployment Insurance and Economic Impact Payments Associated with Reduced Hardship Following CARES Act. Urban Institute. June 30, 2020. Accessed July 10, 2020. https://www.urban.org/research/publication/unemployment-insurance-and-economic-impact-payments-associated-reduced-hardship-following-cares-act
5. Faberman RJ, Haider Ismail A. How do unemployment benefits relate to job search behavior? Chicago Fed Letter. 2020(441); Accessed July 10, 2020. https://doi.org/10.21033/cfl-2020-441
6. Department of Labor. Unemployment Insurance Weekly Claims. Accessed July 10, 2002. https://www.dol.gov/ui/data.pdf

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