Union Efforts to Reduce Covid-19 Infections among Grocery Store Workers Introduction
Nancy A. Crowell, Alan Hanson, Louisa Boudreau, Robyn Robbins, Rosemary K. Sokas

## Supplemental Figures and Tables




## County and Store COVID-19 Rates in Charlottesville City March-December 2020





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Supplemental Table

Table 4: Mean Percentage of Time Between April and August 2020 that Stores Practiced Specific Safety Behaviors by Whether or Not Store Covid-19 Rate was Above County Rate or Not

| Above County Rate: | September 2020 |  |  | October 2020 |  |  | November 2020 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Above | Below |  | Above | Below | $P$ | Above | Below |  |
|  | \% | $P$ |  | \% | \% |  | \% | \% | $P$ |
|  |  | \% | (d) |  |  | (d) |  |  | $\begin{gathered} (d) \\ F P R \end{gathered}$ |
|  |  |  | $F P R$ |  |  | $F P R$ |  |  |  |
| Social | 82.9 | 89.4 | . 04 | 85.1 | 88.6 | . 27 | 84.4 | 89.3 | . 11 |
| Distancing |  |  | (.25) |  |  | (.13) |  |  | (.19) |
| being Practiced |  |  | . 20 |  |  | . 52 |  |  | . 35 |
| Customer | 71.1 | 71.0 | . 99 | 71.1 | 71.0 | . 99 | 70.4 | 71.4 | . 79 |
| Shopping |  |  | (- |  |  | (-.001) |  |  | (.03) |
| Limits |  |  | .002) |  |  | . 67 |  |  | . 66 |
|  |  |  | . 67 |  |  |  |  |  |  |
| One Entrance | 72.5 | 70.1 | . 55 | 70.4 | 71.0 | . 86 | 71.2 | 70.3 | . 73 |
| Closed or Used |  |  | (-.07) |  |  | (.02) |  |  | (-.04) |
| for Exit Only |  |  | . 63 |  |  | . 66 |  |  | . 65 |
| Social | 95.3 | 96.4 | . 55 | 96.0 | 96.1 | . 96 | 95.0 | 96.7 | . 32 |
| Distancing |  |  | (.07) |  |  | (.01) |  |  | (.12) |
| Floor Signs |  |  | . 63 |  |  | . 67 |  |  | . 55 |
| One-way | 79.9 | 74.5 | . 27 | 79.8 | 74.4 | . 26 | 78.9 | 74.5 | . 34 |
| Aisles |  |  | (-.14) |  |  | (-.14) |  |  | (-.11) |
|  |  |  | . 52 |  |  | . 51 |  |  | . 56 |
| Aisles or | 17.3 | 10.1 | . 02 | 13.1 | 11.8 | . 67 | 11.6 | 12.6 | . 74 |
| Peripheral |  |  | (-.28) |  |  | (-.05) |  |  | (.04) |
| Departments |  |  | . 14 |  |  | . 65 |  |  | . 65 |
| Closed for |  |  |  |  |  |  |  |  |  |
| Restocking |  |  |  |  |  |  |  |  |  |
| Customers | 67.2 | 71.1 | . 35 | 63.5 | 72.9 | . 02 | 66.4 | 72.0 | . 15 |
| Required to |  |  | (.12) |  |  | (.28) |  |  | (.17) |
| Wear Masks |  |  | . 56 |  |  | . 11 |  |  | . 41 |
| Management | 45.4 | 53.2 | . 14 | 42.4 | 54.8 | . 02 | 45.9 | 53.8 | . 11 |
| Enforcing |  |  | (.18) |  |  | (.29) |  |  | (.19) |
| Customer |  |  | . 40 |  |  | . 10 |  |  | . 36 |
| Mask Wearing |  |  |  |  |  |  |  |  |  |


| Above County Rate: | September 2020 |  |  | October 2020 |  |  | November 2020 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Above | Below |  | Above | Below |  | Above | Below |  |
|  | \% | \% | $\begin{gathered} P \\ (d) \\ F P R \end{gathered}$ | \% | \% | $\begin{gathered} P \\ (d) \\ F P R \end{gathered}$ | \% | \% | P <br> (d) <br> FPR |
| Hand Washing | 73.0 | 74.9 | . 67 | 75.5 | 73.8 | . 69 | 76.0 | 73.4 | . 54 |
| Every 30 |  |  | (.05) |  |  | (-.05) |  |  | (-.07) |
| Minutes |  |  | . 65 |  |  | . 65 |  |  | . 62 |
| Hand Sanitizer | 97.5 | 98.3 | . 41 | 98.0 | 98.2 | . 82 | 98.1 | 98.1 | . 95 |
| Available at |  |  | (.10) |  |  | (.03) |  |  | (.01) |
| Work Stations |  |  | . 59 |  |  | . 66 |  |  | . 67 |
| Work Stations | 82.6 | 88.2 | . 08 | 84.0 | 87.8 | . 21 | 84.2 | 88.0 | . 22 |
| Cleaned Every |  |  | (.22) |  |  | (.15) |  |  | (.14) |
| 30 Minutes |  |  | . 29 |  |  | . 48 |  |  | . 48 |
| Breakroom | 72.2 | 72.6 | . 94 | 69.9 | 73.6 | . 38 | 72.3 | 72.6 | . 95 |
| Social |  |  | (.01) |  |  | (.11) |  |  | (.01) |
| Distancing |  |  | . 67 |  |  | . 58 |  |  | .. 67 |
| Employees | 97.0 | 98.0 | . 48 | 97.2 | 98.0 | . 61 | 97.3 | 98.0 | . 61 |
| Required to |  |  | (.09) |  |  | (.06) |  |  | (.06) |
| Wear Masks |  |  | . 61 |  |  | . 64 |  |  | . 64 |
| Masks/Gloves/ | 98.2 | 99.5 | . 09 | 98.3 | 99.4 | . 13 | 98.6 | 99.4 | . 23 |
| Sanitizer (PPE) |  |  | (.21) |  |  | (.18) |  |  | (.14) |
| Provided by |  |  | . 33 |  |  | . 39 |  |  | . 49 |
| Company |  |  |  |  |  |  |  |  |  |
| Frequently | 84.9 | 90.2 | . 07 | 85.5 | 90.2 | . 09 | 86.5 | 90.0 | . 20 |
| Touched |  |  | (.23) |  |  | (.20) |  |  | (.15) |
| Surfaces |  |  | . 27 |  |  | . 32 |  |  | . 47 |
| Cleaned |  |  |  |  |  |  |  |  |  |
| Regularly |  |  |  |  |  |  |  |  |  |
| Training on | 64.3 | 66.4 | . 67 | 66.3 | 65.6 | . 90 | 64.5 | 66.6 | . 65 |
| Proper Putting |  |  | (.05) |  |  | (-.02) |  |  | (.05) |
| on/Taking Off |  |  | . 65 |  |  | . 67 |  |  | . 64 |
| of Masks |  |  |  |  |  |  |  |  |  |
| Operating | 65.7 | 69.2 | . 39 | 65.8 | 69.3 | . 38 | 66.8 | 68.9 | . 58 |
| Every Other |  |  | (.11) |  |  | (.11) |  |  | (.07) |
| Check Stand |  |  | . 72 |  |  | . 58 |  |  | . 63 |
| Social | 93.9 | 95.6 | . 24 | 94.1 | 95.6 | . 29 | 94.1 | 95.7 | . 26 |
| Distancing |  |  | (.15) |  |  | (.13) |  |  | (.13) |
| While Waiting |  |  | . 50 |  |  | . 53 |  |  | . 51 |
| in Line |  |  |  |  |  |  |  |  |  |
| Self Service | 44.7 | 43.6 | . 80 | 45.8 | 43.1 | . 54 | 44.8 | 43.4 | . 74 |
| Checkouts |  |  | (-.03) |  |  | (-.03) |  |  | (-.07) |
| Closed or |  |  | . 66 |  |  | . 64 |  |  | . 66 |
| Operating |  |  |  |  |  |  |  |  |  |

September $2020 \quad$ October $2020 \quad$ November 2020

| Above County Rate: | September 2020 |  |  | October 2020 |  |  | November 2020 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Above <br> \% | Below |  | Above Below |  |  | Above Below |  |  |
|  |  | \% | $\begin{gathered} P \\ (d) \\ F P R \end{gathered}$ | \% | \% | $\begin{gathered} P \\ (d) \\ F P R \\ \hline \end{gathered}$ | \% | \% | $\begin{gathered} P \\ (d) \\ F P R \\ \hline \end{gathered}$ |
| Every Other Station |  |  |  |  |  |  |  |  |  |
| Reusable Bags Banned or | 93.4 | 96.1 | $\begin{array}{r} .08 \\ (.22) \end{array}$ | 92.4 | 96.7 | $\begin{aligned} & .004 \\ & (.35) \end{aligned}$ | 92.7 | 96.8 | $\begin{aligned} & .005 \\ & (.34) \end{aligned}$ |
| Cashiers/Bagg ers Not |  |  | . 29 |  |  | . 03 |  |  | . 04 |
| Required to Handle |  |  |  |  |  |  |  |  |  |

Note: $P$-values are based on independent samples $t$ tests; $d$ is Cohen's $d$, the standardized effect size (negative values mean percent in stores with above county rate were higher than other stores); $F P R$ is False Positive Risk, that is the probability that the results are due solely to chance, calculated using Longstaff and Colquhoun (no date) online calculator. ${ }^{8}$

