



## **Front-line nursing home staff perspectives during the COVID-19 pandemic: Personal protective equipment (PPE)**

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*This issue brief presents findings from a survey conducted by Brown's Center for Long-Term Care Quality & Innovation (Q&I).*

Current estimates are that long-term care residents account for 45% of COVID-19 deaths in the United States.<sup>1</sup> Yet recently-released federal data indicates that, as of late May 2020, only 60% of nursing homes had a one-week supply of both N95 face masks and gowns on hand.<sup>2</sup> We surveyed front-line staff working in nursing homes and other long-term care settings during the pandemic to document their voices and identify areas for future interventions. This issue brief focuses on nursing homes.

### **Methods**

We distributed an electronic survey via social media and professional networks from mid-May through early June 2020.

### **Respondents**

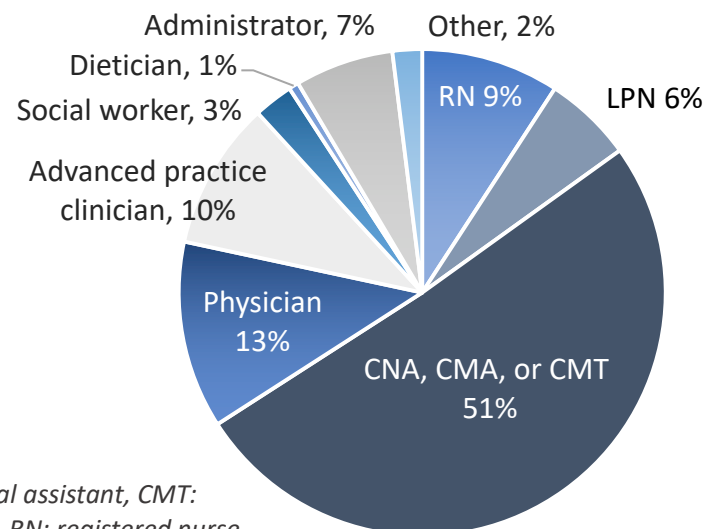
152 nursing home staff from 32 states:

- 51% are CNAs, CMAs, or CMTs (see figure)
- 87% provide direct resident care
- 39% work in supervisory roles
- 74% work in nursing homes that have had resident or staff cases of COVID-19
- 47% cared for one or more residents with COVID-19 in the last month

*Notes: CNA: certified nursing assistant, CMA: certified medical assistant, CMT: certified medication technician, LPN: licensed practical nurse, RN: registered nurse*

### **Key Findings:**

- **Extended reuse of face masks and gowns remains common practice in nursing homes**
- **N95 face mask supply remains limited; those who do have N95 masks report reusing them for multiple days**
- **Homemade PPE, particularly cloth face coverings, often supplement issued PPE**
- **Some staff comments mention improvements in PPE supply over time, while others say supply is still limited**
- **Other staff comments center on fears, including fears for their own health and fears of bringing the virus home to their families**



Survey Responses

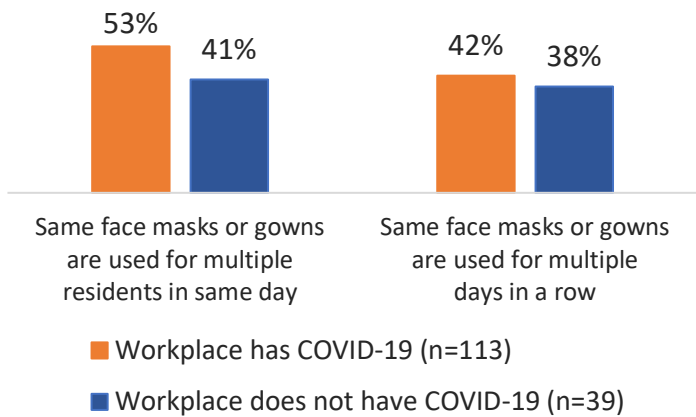
Staff Perspectives

**PPE Reuse**

Survey responses suggest that extended reuse of PPE remained common practice in nursing homes in May and June 2020. Half (50%) of respondents reported that staff in their workplace were reusing face masks or gowns across multiple residents in the same day, and 41% reported that face masks or gowns were reused for multiple days in a row.

A larger percent of respondents working in nursing homes with COVID-19 cases reported extended reuse of PPE compared to respondents working in nursing homes without COVID-19 cases (**Figure 1**).

**Figure 1.** % of respondents reporting that staff are reusing PPE in their workplace (N=152)



**Homemade PPE**

Use of homemade face and body protection appears to be less common than extended reuse of PPE, but is still occurring (**Figure 2**, p.3).

Homemade face protection (such as cloth face coverings or face shields) was more commonly reported by respondents working in nursing homes without vs. with COVID-19 cases.

Homemade body protection (such as rain ponchos or garbage bags) was more commonly reported by respondents working in nursing homes with COVID-19 vs. without COVID-19 cases.

“Having to reuse PPE is not ideal, but **it is the best we can do right now.**”

*Administrator*

*What could be going better?*  
**“Having the supplies you NEED to do your job without having to re-use what we have which is a huge concern as far as infection control goes!”**

*Certified nursing assistant*

**“PPE is only reused for the COVID-positive residents.”**

*Licensed practical nurse*

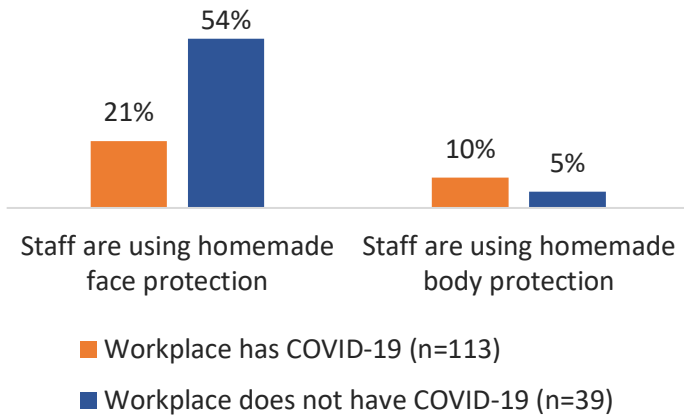
**“We now have enough of everything... Stress occurred when staff had to use garbage bags etc. to protect themselves... using N95s that you knew were not acceptable.”**

*Advanced practice clinician*

Survey Responses

Staff Perspectives

**Figure 2.** % of respondents reporting that staff are using homemade PPE in their workplace (N=152)

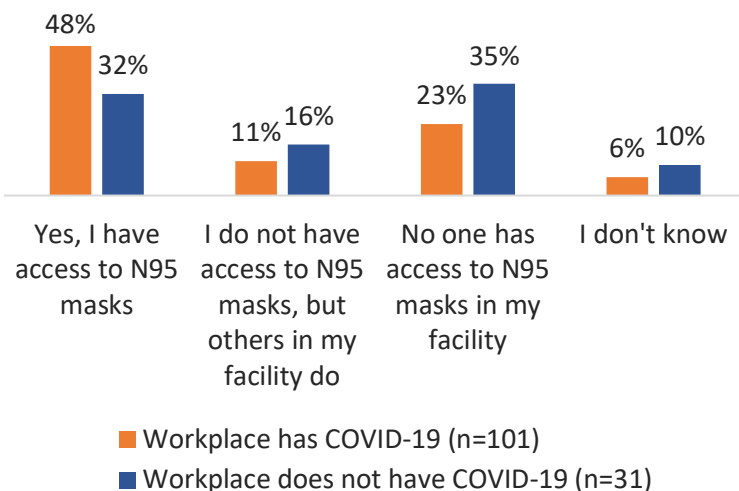


**Availability of N95 Face Masks**

Fewer than half of respondents who provide direct resident care reported that they themselves had access to N95 masks. 48% of respondents working in nursing homes with COVID-19 cases had access to N95 masks vs. only 32% of those in facilities without COVID-19 (Figure 3). Those that had N95 masks reported reusing them for a median of four days.

One in five respondents (23%) employed in nursing homes with COVID-19 reported that no one had N95 masks in their workplaces. One in three respondents (35%) employed in nursing homes without COVID-19 cases reported the same.

**Figure 3.** Among direct care staff: “Are N95 face masks being provided to you in your facility?” (N=132)



**“I am one of the vulnerable population, as I am 64, I have asthma and I am morbidly obese.”**

*Certified nursing assistant*

**“[We need] access to PPE. Enough so we could use it properly, as we were trained, and not the crisis level of acceptable use...”**

*Administrator*

**“I have to work 16 hours on the weekends and I wear a mask all the time [...] and I have a headache most of my shift!**

**“... I feel so drain[ed] when I get off work.”**

*Certified nursing assistant*

## Survey Responses

## Staff Perspectives

## Summary

PPE prevents virus transmission between individuals and protects healthcare workers caring for infected patients.<sup>3</sup> Adequate PPE supply is critical to keep nursing home residents and staff safe from COVID-19, a disease that will continue to devastate nursing homes until a vaccine and effective treatment are available.

Findings from this survey demonstrate that extended reuse of PPE in nursing homes remained common practice as late as June 2020, several months into the pandemic. Respondents reported that N95 mask supplies remained limited, that N95 masks were often reused for multiple days, and that homemade PPE was being used to supplement what was issued.

The selected staff comments poignantly highlight frontline workers' related thoughts and fears. Many staff are in high-risk groups and felt that they were risking their own health and the health of their families by coming to work each day.

While the Centers for Disease Control and Prevention has issued guidance for extended PPE reuse to conserve supplies,<sup>4</sup> recent Centers for Medicare & Medicaid Services guidelines for nursing homes to reopen require adequate access to PPE based on usual standards of use, not crisis standards.<sup>5</sup> These data highlight the ongoing need for state and federal financial support and logistical investment to meet those standards and help to ensure the safety of both residents and staff in this setting.

<sup>1</sup> Kaiser Family Foundation. 2020, June 18. State Reports of Long-Term Care Facility Cases and Deaths Related to COVID-19

<sup>2</sup> Author analysis of NHCN Data as of May 31, 2020

<sup>3</sup> Centers for Disease Control and Prevention. 2020, June 19. Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic

<sup>4</sup> Centers for Disease Control and Prevention. 2020, May 18. Strategies to Optimize the Supply of PPE and Equipment.

<sup>5</sup> Centers for Medicare & Medicaid Services. 2020, May 18. Nursing Home Reopening Recommendations for State and Local Officials.

"I am also a caregiver to my immunocompromised mother so there is a **HUGE fear of contracting the virus** and being unaware, possibly infecting my mom."

*Certified nursing assistant*

*What could be going better?*

"Availability of PPE and **always trying to locate some takes a lot of time.**"

*Registered nurse*

"**Not nearly enough financial assistance** for actual workers or the facilities that had to buy massive supplies..."

*Administrator*

*About the Brown Center for Long-Term Care Quality & Innovation (Q&I): At Q&I, we partner with healthcare providers to identify and test interventions using pragmatic methods. Understanding the real-world context under which providers operate is central to our approach. More: [@BrownLTQI](http://brown.edu/go/innovation)*