



# The Impact of Poor Staffing on Health & Safety for Healthcare Workers

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Healthcare workers know from their own experience that inadequate staffing leads to occupational injuries and stress. A great deal of research has focused on the impact of poor staffing on patient safety, but the impact of poor staffing on healthcare workers' injuries and illnesses needs more attention.

One study conducted after California passed the staffing ratio law found that **registered nurses in California hospitals suffered 31.6% fewer injuries and illnesses** per 10,000 RNs compared to RNs in all other states. **Licensed practical nurses had 38.2% fewer injuries and illnesses** compared to LPNs in other states.<sup>1</sup>

Much more research is needed to provide evidence that better staffing will reduce healthcare workers' injuries and illnesses.

Even without extensive research, leaders can make the case that poor staffing puts healthcare workers at risk of injury and illness.

Unions can insist on conducting root cause analysis of incidents in labor-management committees (for example, the health and safety or staffing committee). Information on staffing levels and staffing mix should be included in the analysis. Showing that staffing was inadequate and a contributing factor in an incident pushes back on blaming the worker for their injury.

Unions can also compare injury and illness data with staffing records to identify whether injuries are higher when units are poorly staffed.

## Workplace Violence

Violence against healthcare workers is serious and rising while staffing continues to get worse. Healthcare and social services workers experience 76% of all reported workplace violence injuries in the American labor force. The number of actual assaults is likely to be much higher.

Over the 15 years between 2006 and 2020, the rate of reported assaults grew by:

- 173% in private hospitals
- 95% in private psychiatric hospitals and substance use facilities
- 63% in home health agencies<sup>2</sup>

COVID-19 added fuel to the flames—the rate of reported assaults climbed 25% in one year alone from 2019 to 2020.<sup>3</sup>

The Occupational Safety and Health Administration and National Institute for Occupational Safety and Health have identified understaffing as a risk factor for workplace violence.<sup>4 5</sup> Long wait times and inadequate attention can lead to escalating behavior in some patients and visitors.<sup>6 7</sup> In some cases, workers are too busy to notice or respond to patients and visitors growing increasingly irate.

Poor staffing also increases the risk of serious injury when too few workers are available to

safely restrain violent patients or when staff work in isolation.

OSHA and NIOSH strongly recommend training frontline staff and managers to report all incidents of workplace violence and all “near-misses” in order to develop evidence-based prevention strategies.<sup>8</sup>

Unfortunately, healthcare workers often do not report incidents of workplace violence, because they find themselves blamed for their assault.

Unions can insist on a labor-management process to conduct root cause analysis after every workplace violence incident and near miss, including information on staffing conditions leading up to the assault.

## Musculoskeletal Injuries from Patient Lifting and Transferring

Healthcare workers continue to suffer high rates of musculoskeletal injuries due to the cumulative impact of manual lifting and transferring of patients. The rate of injuries in hospitals was 15.1 and 18.9 in nursing and residential care facilities, compared to 8.1 for all other industries in 2020.<sup>9</sup> The solution—adequate access and training to use safe patient handling equipment—has been well-established.

Many advocates for safe patient handling and movement equipment continue to focus on changing healthcare workers’ behavior, blaming continued high rates of injury on workers’ stubborn refusal to use the equipment consistently.

However, one study found that time constraints were a barrier to use of assistive devices.

**Staffing levels was cited as a barrier by 79**

**percent of the nursing staff surveyed.** Workload and availability of equipment were reported by 78 percent of the respondents and having to respond quickly to emergent patient needs was cited by 73 percent.<sup>10</sup> Even so, the authors of the study continued to recommend training and a supportive culture as a solution, rather than naming understaffing as a key reason healthcare workers find themselves without enough time to use assistive devices. Healthcare workers find themselves blamed for their injuries, when inadequate staffing plays a role in actions that lead to injuries.

Labor-management committees can use surveys and root cause analysis to identify and address hurdles to using safe patient lifting equipment consistently, including time constraints related to staffing.

## Needlestick and Sharps Injuries

Researchers found that shifts with fewer nursing care hours per shift, lower RN skill mix, and a lower percentage of experienced staff were associated with higher rates of needlestick injury.<sup>11</sup>

Health and safety committees can look at trends in the needlestick injury log or in the OSHA 300 log to see which units and which times or shifts have the highest frequency of needlestick injuries. Although OSHA requires names to be redacted from the 300 log for needlestick injuries, the job title must be listed, telling us which workers are at highest risk. This data can be compared to staffing information to see if low staffing results in more needlestick injuries.

## Fatigue

Research on fatigue among nurses has focused on the impacts of shift work, including extended shifts and overtime, night shifts and rotating shifts, and inadequate recovery time between shifts. All these factors have been shown to lead to chronic sleep deprivation. In the short term, sleep deprivation causes fatigue, reduced cognitive function, increased risk of errors, such as needlestick injuries, unsafe driving, and patient safety errors. Over the longer term, chronic sleep deprivation can cause cardiac, gastrointestinal, and metabolic illnesses. Chronic lack of sleep has been shown to foster proinflammatory activity and immunodeficiency, putting workers at higher risk for infection.<sup>12</sup>

When facilities are understaffed, nurses and other healthcare workers are under pressure to work overtime and accept additional shifts without adequate rest periods between shifts.

One study of hospital nurses working successive 12-hour shifts

found that the majority slept less than six hours between shifts.<sup>13</sup> Other research has found that people working rotating shifts sleep up to four hours less when they work at night.<sup>14</sup>

The relationship between understaffing and fatigue is cyclical. Poor staffing and mandatory overtime lead to fatigue, which can lead to burnout and more healthcare workers choosing to leave the bedside to protect their health and mental well-being. This leads to more understaffing. In the past, research on the impacts of mandatory overtime and extended work shifts helped to win passage of state laws prohibiting mandatory overtime. More research is needed to show how patterns of understaffing lead to more demand for overtime and additional shifts and the long-term physical and mental health impacts of fatigue and overwork.

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<sup>1</sup> Leigh JP, et al., “California’s nurse-to-patient ratio law and occupational injury,” *Int Arch Occup Environ Health*, 2015 May;88(4):477-84. doi: 10.1007/s00420-014-0977-y. Epub 2014 Sep 13. Erratum in: *Int Arch Occup Environ Health*. 2015 May;88(4):485-6.

<sup>2</sup> BLS SOII, Table R8.

<sup>3</sup> BLS SOII, Table R8.

<sup>4</sup> Centers for Disease Prevention and Prevention, National Institute for Occupational Safety and Health, “Violence,” *Occupational Hazards in Hospitals*, 2002. [Violence\\_10-03 \(cdc.gov\)](#).

<sup>5</sup> U.S. Department of Labor, Occupational Safety and Health Administration, 2015, [Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers \(osha.gov\)](#).

<sup>6</sup> Lipscomb, Jane, “Violence in the health care industry: greater recognition prompting occupational health and safety interventions.” In: Charney W, ed. *Essentials of modern hospital safety*. Vol. 3. Boca Raton, FL: Lewis Publishers, 1994, pp. 29–104.

<sup>7</sup> Lipscomb, Jane. “Violence in the workplace: a growing crisis among health care workers.” In: Charney W, Fragala G, eds.

*The epidemic of health care worker injury*, 1999, Boca Raton, FL: CRC Press, pp.163–165.

<sup>8</sup> Arnetz J.E., et al. “Preventing patient-to-worker violence in hospitals: Outcome of a randomized controlled intervention. *Journal of Occupational and Environmental Medicine*. 2017 Jan;59(1):18-27.

<sup>9</sup> BLS, SOII, 2020, Table R8.

<sup>10</sup> Noble, N., Sweeney, N.. “Barriers to the use of assistive devices in patient handling,” *Workplace Health and Safety*, 2018 Jan; 66(1):41-48.

<sup>11</sup> West, G., et al. “Staffing matters—every shift: data from the Military Nursing Outcomes Database can be used to demonstrate that the right number and mix of nurses prevent errors,” *American Journal of Nursing*, 2012 Dec; 112(12):22-27.

<sup>12</sup> Trinkoff, A. M. et al. Nurses are more exhausted than ever: What should we do about it?” *American Journal of Nursing*, 2021 Dec; 121(12):18-28.

<sup>13</sup> Geiger-Brown, J. et al. “Sleep, sleepiness, fatigue, and performance of 12-hour shift nurses. *Chronobiology International*, 2012; 29(2):211-9.

<sup>14</sup> Trinkoff, A. M. et al. Nurses are more exhausted than ever: What should we do about it?” *American Journal of Nursing*, 2021 Dec; 121(12):18-28.