

**Public Testimony  
Future of Work Commission  
March 12, 2020**

We would like to offer the following testimony on behalf of the Labor Occupational Health Program, which is part of the School of Public Health at the University of California in Berkeley. LOHP's mission is to promote safe, healthy, and just workplaces and build the capacity of workers and worker organizations to take action for improved working conditions. To accomplish this work, we partner with unions, worker centers, employers, policy makers and others across the state and nation.

In reviewing your previous discussions, we appreciate the attention paid to "job quality." However, this has mostly referred to decent wages and benefits. We would like to add a vital missing element. We can't talk about job quality without addressing the impact of work on workers' mental and physical health and well being. Wages are important, but even good wages are not enough to compensate for poor working conditions, broken bodies, and unhealthy communities. We want to highlight three areas of concern for workers' health in the future of work, potential public health impacts, and a few recommendations.

First, we need to identify hazards related to new and emerging industries such as app-based driving and food delivery, "green jobs" such as wind turbine and solar installation, manufacturing of electric cars, work involving nano-particles, and the cannabis production chain from cultivation to retail. We also have to contend with new realities such as climate change which results in more wildfire smoke exposure and clean up, and bio-hazards such as the Coronavirus and Valley Fever.

Second, we need to examine how technology and new tools intensify old problems such excessive workload and workpace, worker surveillance, on-demand schedules, de-skilling, lack of worker control over their work and the fear and reality of retaliation that impedes workers' ability to speak up about their concerns in the workplace. It's been well documented that these issues can have devastating physical and mental health effects. These include greater numbers of injuries, as well as high rates of stress which contributes directly to coronary heart disease and other chronic illnesses. Currently, over

20,000 deaths in the U.S. are attributed to how workplaces manage their workers.<sup>1</sup> Factors such as low job control and high demands even affect lifespan.<sup>2</sup> Further, many of the fastest growing industries include unhealthy, dangerous jobs with few protections, including home health care, domestic work, hospitality, retail, transportation, and warehousing. For example, Amazon warehouse workers are more likely to be injured than police officers or coal miners.<sup>3</sup> The sheer number of new workers in these industries will shape the rates and nature of workplace illnesses and injuries in the future.

Third, we need to confront the impact on workers of increasingly fissured workplaces due to growth in sub-contracting, franchises, staffing agencies, independent contractors, and the “gig” economy. Who is responsible for these workers’ breaks, sick leave, workers’ compensation, unemployment, and disability benefits? Who trains these workers about how to identify hazards and ensures they are protected so they are not harassed, injured or made ill on the job? Who records their illnesses and injuries, and who pays for them? Are these workers encouraged to speak up about concerns without fear of reprisal? These questions apply equally to groups of workers who have long been excluded from the social safety net, such as day laborers and domestic workers.

We’re seeing how the lack of benefits such as workers’ compensation and paid sick leave, is particularly critical in cases like the current coronavirus pandemic. We are now witnessing the devastating impact of lack of paid sick leave, job security, and other protections on low wage, gig, and misclassified workers. Many of these workers are not able to stay home if they are sick or need to care for sick family members or children when schools have closed. Further, we are seeing how these workers have inadequate training on how to protect themselves and others from contagious disease, inconsistent access to personal protective equipment, such as gloves and respirators, insufficient information about the potential health effects of being exposed to disinfectant products and procedures, and no recourse if they are retaliated against for requesting accommodation.

These problems don’t only impact individual workers and employers. The public health impact is massive. Stressed workers have more injuries, mental illness, cardio-vascular disease, obesity, diabetes, as well as alcohol and drug use, including opioids. Fatigued

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<sup>1</sup> Goh J, Pfeffer J, Zenios SA. The Relationship Between Workplace Stressors and Mortality and Health Costs in the United States. *Management Science*. 2015;March:1-12.

<sup>2</sup> Goh J, Pfeffer J, Zenios S. Across Different Demographic Groups Exposure To Harmful Workplace Practices Could Account For Inequality In Life Spans. *Health Affairs*. 2015;34(10):1761-1768.

<sup>3</sup> Packaging Pain: Workplace Injuries in Amazon’s Empire  
[https://2cc07e6d-5f6d-4eca-8f4f-7c1165780818.filesusr.com/ugd/a25838\\_1646a965daf04d3e8b626a4df8d1fcc4.pdf](https://2cc07e6d-5f6d-4eca-8f4f-7c1165780818.filesusr.com/ugd/a25838_1646a965daf04d3e8b626a4df8d1fcc4.pdf)

and contagious workers may pose a public health hazard and are not able to care for themselves or their dependents. When a significant amount of workers are not insured or covered by workers' compensation, costs are shifted from employers to the state and taxpayers or workers pay out of pocket, which can drive families into poverty. In addition, there is the question of social justice. How do these issues disproportionately impact certain demographics, such as youth, workers of color, women, immigrants, older workers? How do we direct attention and resources to the workers who are most affected, especially when we know most of them are already facing gross inequities?

In 1996, the National Occupational Research Agenda, developed through a NIOSH-led stakeholder engaged process, identified changing employment relationships and organization of work as a high priority for new research and surveillance. They issued a series of recommendations for future research and improved prevention that are still relevant today and we hope you will consider as you prepare your final report. These include: (1) improved surveillance to better track how the organization of work is changing, (2) accelerated research on safety and health implications of the changing organization of work, (3) increased research focus on organizational interventions to protect safety and health, and (4) steps to formalize and nurture organization of work as a distinctive field in occupational safety and health [CDC/NIOSH 2002].

In addition, we urge the Commission to consider the following additional recommendations:

1. Support the development of a California Occupational Health Research Agenda that would fund the following research priorities:
  - a. What is the impact of fissured workplaces and misclassification on the cost of health care when workers lack workers compensation and use general health benefits for treating workplace injuries and illnesses?
  - b. What is the impact on families, communities and the overall economy when workers are injured or suffer high rates of stress and chronic disease?
  - c. How are the changing nature of work and new methods of determining work pace and workload impacting workers' experiences in key industries? How does this experience vary in different industries, from "blue" collar to "white" collar?
  - d. How do we define and measure a "quality job"? What key elements should be included, in addition to wages and benefits? For example, these may include safe working conditions, opportunities for workers to report hazards and injuries without retaliation, reasonable workloads, and freedom from harassment. How should such elements be measured and weighted?
2. Develop policies that prioritize California's commitment to ensuring workers' physical and mental well being, such as:

- a. Requiring a “health impact analysis” that specifically assesses health and safety hazards and the public health impact before new industries or new ways of doing business are supported by state resources.
  - b. Using a Job Quality Index that includes workplace health and safety indicators as a tool to assess and promote quality jobs.
3. Expand outreach and education efforts by:
  - a. Providing resources to community based organizations, unions and others to provide outreach and education to impacted workers about their rights
  - b. Developing tools to support improved health and safety training for workers in impacted workplaces.
4. Include worker voice and expertise of workers advocates in any implementation efforts that grow out of the recommendations of the California Future of Work Commission. For example, a new Agency for Better Jobs could have a labor/community advisory committee to provide essential input on a range of strategies to ensure that all workers have workplaces that are healthy, safe, and just.

Thank you for your work on this critical issue. We look forward to working with you all as you move towards implementing recommendations to ensure that all workers have access to high quality jobs with living wages and healthy working conditions, and that their employment rights are strengthened and protected.

For your reference, we have included a list of resources directly relevant to the points made in this testimony.

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# Selected References for the Future of Worker Health and Safety

## News articles

### Algorithmic Workspace and Scheduling

- ***Ruthless Quotas at Amazon are Maiming Employees***, by Will Evans, The Atlantic  
<https://www.theatlantic.com/technology/archive/2019/11/amazon-warehouse-reports-show-worker-injuries/602530/>
- ***Here's What Happens When an Algorithm Determines Your Schedule***, by Kaye Loggins, Vice  
[https://www.vice.com/en\\_us/article/g5xwby/heres-what-happens-when-an-algorithm-determines-your-work-schedule](https://www.vice.com/en_us/article/g5xwby/heres-what-happens-when-an-algorithm-determines-your-work-schedule)

### Mental Health Effects of Workplace Stress

- ***Working at Amazon: 189 Suicide Attempts, Mental Health Episodes, Reportedly Took Place Over Five Years*** by Daniel Moritz Rabson, Newsweek  
<https://www.newsweek.com/amazon-warehouse-189-suicide-attempts-mental-health-crises-1358162>
- ***Colony of Hell: 911 Calls From Inside Amazon Warehouses***, by Max Zahn and Sharif Paget, Daily Beast  
<https://www.thedailybeast.com/amazon-the-shocking-911-calls-from-inside-its-warehouses>
- ***The Trauma Floor: The Secret Lives of Facebook Moderators in America***, by Casey Newton, The Verge  
<https://www.theverge.com/2019/2/25/18229714/cognizant-facebook-content-moderator-interviews-trauma-working-conditions-arizona>

### Surveillance

- ***The Inequalities of Workplace Surveillance***, by Joelle Gamble, The Nation  
<https://www.thenation.com/article/archive/worker-surveillance-big-data/>
- ***The Datafication of Employment: How Surveillance and Capitalism Are Shaping Workers' Future Without Their Knowledge***, by Sam Adler-Bell and Michelle Miller, The Century Foundation  
<https://tcf.org/content/report/datafication-employment-surveillance-capitalism-shaping-workers-futures-without-knowledge/?session=1>

- **How Amazon automatically tracks and fires warehouse workers for “productivity”**, by Colin Lecher, The Verge

<https://www.theverge.com/2019/4/25/18516004/amazon-warehouse-fulfillment-centers-productivity-firing-terminations>

## **Emerging Industries**

- **How Tesla and Its Doctor Made Sure Injured Workers Didn't Get Workers' Comp**, by Will Evans, Reveal  
<https://www.revealnews.org/article/how-tesla-and-its-doctor-made-sure-injured-employees-didnt-get-workers-comp/>
- **Inside Tesla's Factory, a Medical Clinic Designed to Ignore Injured Workers**, by Will Evans, Reveal  
<https://www.revealnews.org/article/inside-teslas-factory-a-medical-clinic-designed-to-ignore-injured-workers/>
- **As Solar Installations Surge, Worker Safety Concern Also Rises**, by Bruce Rolfsen, Bloomberg  
<https://news.bloombergenvironment.com/safety/as-solar-installations-surge-worker-safety-concern-also-rises-corrected>
- **Is Nanotechnology Safe in the Workplace?** by Duncan Graham Rowe, The Guardian  
<https://www.theguardian.com/nanotechnology-world/is-nanotechnology-safe-in-the-workplace>
- **In Secretive Marijuana Industry, Whispers of Abuse and Trafficking**, by Shoshana Walter, Reveal  
<https://www.revealnews.org/article/in-secretive-marijuana-industry-whispers-of-abuse-and-trafficking/>

## **Impacts of Climate Change and New Diseases**

- **As California's Wildfires Get Worse, Domestic Workers Fight for Protection**, by Teresa Cotsirilos, KALW  
<https://www.kalw.org/post/california-s-wildfires-get-worse-domestic-workers-fight-protection?fbclid=IwAR3ane5hpsrnuWISUPfm0UTyqazCRGU4NiGbKu - xaGQ5i5aHVNCFGzabJs#stream/0>
- **Gig Workers Face the Spread of the New Corona Virus with No Safety Net** by Nitasha Tikku, Washington Post  
[https://www.washingtonpost.com/technology/2020/02/29/gig-workers-face-spread-new-coronavirus-with-no-safety-net/?can\\_id=13406244fe6d5ed177c05a38464aea7d&email\\_referrer=email\\_737889&email\\_subject=todays-headlines-jobs-with-justice-](https://www.washingtonpost.com/technology/2020/02/29/gig-workers-face-spread-new-coronavirus-with-no-safety-net/?can_id=13406244fe6d5ed177c05a38464aea7d&email_referrer=email_737889&email_subject=todays-headlines-jobs-with-justice-)

[3220&fbclid=IwAR1UpdK1tzGHLkkt9OG-E29GWvoviNwuXOkAIJ9xbk\\_khcpIfmrLPW54GjE&link\\_id=3&source=email-todays-headlines-jobs-with-justice-22820-2](https://www.washingtonpost.com/business/2020/03/03/our-lack-paid-sick-leave-will-make-coronavirus-worse/)

- ***Airport Workers Fear They're Unprotected from the Corona Virus***, by Martha Ann Overland, NPR  
[https://www.npr.org/2020/03/01/810873413/airport-workers-fear-theyre-unprotected-from-the-coronavirus?link\\_id=12&can\\_id=13406244fe6d5ed177c05a38464aea7d&source=email-todays-headlines-jobs-with-justice-22820-2&email\\_referrer=email\\_737889&email\\_subject=todays-headlines-jobs-with-justice-3220&fbclid=IwAR15FMtyoXaWG2bOH0wgjpfMfcRAU5is3kGdzHcu62YKgpuVe5-Q4bFoAgM](https://www.npr.org/2020/03/01/810873413/airport-workers-fear-theyre-unprotected-from-the-coronavirus?link_id=12&can_id=13406244fe6d5ed177c05a38464aea7d&source=email-todays-headlines-jobs-with-justice-22820-2&email_referrer=email_737889&email_subject=todays-headlines-jobs-with-justice-3220&fbclid=IwAR15FMtyoXaWG2bOH0wgjpfMfcRAU5is3kGdzHcu62YKgpuVe5-Q4bFoAgM)
- ***Lack of Universal Paid Sick Leave May Make U.S Coronavirus Outbreak Worse***, by Christopher Ingraham, The Washington Post  
<https://www.washingtonpost.com/business/2020/03/03/our-lack-paid-sick-leave-will-make-coronavirus-worse/>
- ***Potentially Deadly Valley Fever is Hitting California Farmworkers Hard, Worrying Researchers***, by Twilight Greenaway, NBC News  
<https://www.nbcnews.com/news/us-news/potentially-deadly-valley-fever-hitting-california-farmworkers-hard-worrying-researchers-n1017806>

### **Fissured Workplace**

- ***The Expendables: How the Temps Who Power Corporate Giants Are Getting Crushed***, by Michael Grabell, Pro-Publica  
<https://www.propublica.org/article/the-expendables-how-the-temps-who-power-corporate-giants-are-getting-crushed>
- ***Temporary Work, Lasting Harm: Temp Workers are Thrown Into Dangerous Work with Little Training and Suffer Injuries Far More Often Than Permanent Employees***, by Michael Grabell, Pro Publica  
<https://www.propublica.org/article/temporary-work-lasting-harm>
- ***McDonalds Workers Allege Injuries, Unsafe Conditions***, by Alejandra Cancino and Jessica Wohl, Chicago Tribune  
<https://www.chicagotribune.com/business/ct-mcdonalds-osha-complaints-0317-biz-20150316-story.html>

### **Books**

- ***Unhealthy Work: Causes, Consequences, Cures***, Edited by Peter L. Schnall, Marnie Dobson, and Ellen Roskam.

Includes studies on the health and economic costs of “unhealthy” work and descriptions of successful interventions.

- ***Dying for a Paycheck: How Modern Management Harms Employee Health and Company Performance- and What We Can Do About It***, by Jefferey Pfeffer, Stanford Graduate School of Business.

Includes data showing there are negative health effects associated with: shift work, long work hours, low fairness, high job demands, and low job control, among other things.

- ***On the Clock: What Low-Wage Work Did to Me and How It Drives America Insane***, by Emily Guendelsberger.

Chronicles the author’s experience working in an Amazon warehouse, call center, and McDonalds and includes discussion of the physical and mental health effects of excessive workload and workplace, de-skilling, surveillance, harassment, and stress.

## Reports

- ***The Changing Structure of Work: Implications for Workplace Health and Safety in the US*** by Leslie I. Boden, Emily A. Spieler, Gregory R. Wagner. Paper prepared for the Future of Work Symposium. U.S. Department of Labor, December 9-11, 2015
- ***The Changing Organization of Work and Safety and Health of Working People: Knowledge Gaps and Research Directions*** by CDC, NIOSH, 2002.  
<https://www.cdc.gov/niosh/docs/2002-116/default.html>
- ***Packaging Pain: Workplace Injuries in Amazon’s Empire***  
[https://2cc07e6d-5f6d-4eca-8f4f-7c1165780818.filesusr.com/ugd/a25838\\_1646a965daf04d3e8b626a4df8d1fcc4.pdf](https://2cc07e6d-5f6d-4eca-8f4f-7c1165780818.filesusr.com/ugd/a25838_1646a965daf04d3e8b626a4df8d1fcc4.pdf)
- ***Temporary Work, Permanent Abuse: How Big Business Destroys Good Jobs***, by NESRI  
<https://dignityandrights.org/resources/temporary-work-permanent-abuse-how-big-business-destroys-good-jobs/>

## Academic Articles

- ***Cost of Occupational Injuries and Illnesses***, by Paul Leigh, Steven Marcowitz, Marianne Fahs, and Phillip Landrigan, University of Michigan Press.

Cites that injured or ill workers and their families absorbed about 44% of the costs of worker injuries. Medicare, Medicaid, Social Security and other government accounts contributed 18%, or roughly \$28.5 billion.

- ***Exposure To Harmful Workplace Practices Could Account For Inequality In Life Spans Across Different Demographic Groups*** by J Goh, J Pfeffer, S. Zenios, Health Affairs, 2015.

Links job insecurity, low job control, high job demands, and low social support at work to a significant proportion of observed inequality in life spans in different demographic groups in the US.

- **Office of Disease Prevention and Health Promotion**

<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/employment>

Cites academic studies for how high demand- low control work causes stress, and how workplace stress puts people at risk for mortality, depression, and substance abuse.

- **Healthy Work Campaign**

<https://healthywork.org/resources/research/>

Cites academic research articles making the link between work stress and health outcomes including depression, cardiovascular disease, burnout, blood pressure, and mortality. Cites academic articles on the health effect of precarious (gig) work, emotional labor, effort-reward imbalance, sick leave, workplace climate, shift work, long hours, and wages.

- ***Can work make you sick? A meta-analysis of the relationships between job stressors and physical symptoms*** by Nixon, A. E., Mazzola, J. J., Bauer, J., Krueger, J. R., & Spector, P. E., *Work & Stress*, 2011.

Links loss of control in the workplace has been associated with back pain, headaches, gastro-intestinal distress, and sleep disturbance.

- ***Work stress and health in a globalized economy: The model of effort-reward imbalance*** by Bellingrath, S., & Kudielka, 2016, [https://doi.org/10.1007/978-3-319-32937-6\\_7](https://doi.org/10.1007/978-3-319-32937-6_7)

Links psychosocial stress at work with cardiovascular disease, metabolic derangements, and mental illness.

- ***Social Class and Cardio-Vascular Disease: The Contribution of Work***, by Michael Marmott and Tores Theorell, *International Journal of Health Services*, 1988.  
<https://journals.sagepub.com/doi/abs/10.2190/KTC1-N5LK-J1PM-9GRQ>

Links lack of skill discretion, authority over decisions, and social support at work to coronary heart disease.

