



# Employment Precarity and Increased Risk of Hazardous Occupational Exposures Among Residents of High Socioeconomic Hardship Neighborhoods

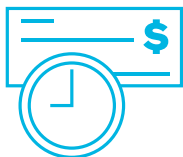
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## What is the issue?

The United States' workforce is experiencing significant disparities in employment quality and risk of exposure to occupational hazards. Low-wage and racial/ethnic minority workers have a higher burden of occupational exposure to recognized hazards than white workers because they are over-represented in hazardous occupations and industries.<sup>1,2</sup> Due to structural drivers that segregate neighborhoods by race and class, workers employed in precarious and high-hazard jobs are likely to be concentrated in community areas.<sup>3</sup>

Many existing measures do not adequately capture a person's employment quality and its social impacts (the features of work that impact a person's individual and family wellbeing). To address this challenge, researchers used multidimensional measures to better understand employment precarity and occupational health hazards in Greater Lawndale. Employment precarity is a complex and multifaceted construct involving the systemic disadvantage of workers. Existing measures for employment precarity, including the measures used in this study, include:



**Wage and hour  
metrics**



**Job security  
and stability**



**Individual control  
over work tasks and  
scheduling**



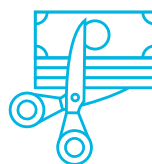
**Protections conferred  
by a particular job  
arrangement**



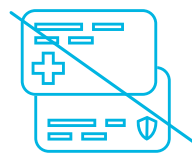
**Irregular or  
unpredictable  
schedules**



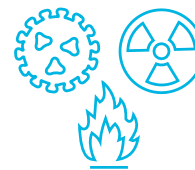
**Temporary or  
seasonal work**



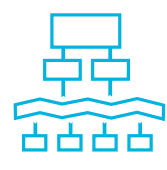
**No living  
wage**



**No paid benefits  
(e.g., health  
insurance)**



**Dangerous  
working  
conditions**



**Little or no  
opportunities for  
advancement**

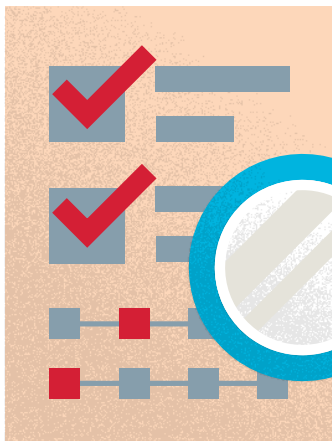
**This study aimed to examine the relationships between employment precarity and self-reported exposures to occupational health hazards among residents of Greater Lawndale, a neighborhood facing high socioeconomic hardship, to better contextualize occupational exposure risks associated with incremental changes in employment quality and security.**

## What was done and how?

Researchers measured the conditions that make work precarious and examined the associations between employment precarity and self-reported exposure to several recognized occupational health hazards. The Greater Lawndale Healthy Work Project (GLHW) team created a survey designed to comprehensively assess Little Village and North Lawndale neighborhoods (together forming the Greater Lawndale [GL] area) residents' work characteristics: experiences seeking and maintaining employment, frequency of exposure to occupational and social hazards, select health behaviors and outcomes. In addition, researchers tracked survey respondents' job type and sociodemographic characteristics to ensure an adequate representation of the GL working population (which is predominately Black and Hispanic/Latinx) in the final sample.

This research was completed as a part of GLHW, which is a community-based participatory research (CBPR) project of the University of Illinois Chicago, Center for Healthy Work, a Center of Excellence for *Total Worker Health*®, in partnership with GL organizations and residents, who served as community researchers (CRs).

## The Survey



The GLHW team created a 192-item survey instrument, which included measures drawn from several existing survey tools and additional items developed specifically for the GLHW project. CRs were trained in trauma-informed survey administration and administered the survey to 489 residents of GL.

**Sociodemographic characteristics** included gender identity, race and ethnicity, country of birth, educational attainment, and marital status.

**Employment precarity** was measured using a modified version of the Employment Precarity Index (EPI), initially developed by the Poverty and Employment Precarity in Southern Ontario (PEPSO) group.<sup>4</sup> EPI is calculated using ten direct and indirect measures of employment security. Some language was modified for individual items to reflect better the employment characteristics of a United States-based study sample.

**Occupational hazards** were self-reported exposures measured via 19 individual Likert scale (i.e., often exposed to never exposed) survey items. Respondents reported how often they were exposed to a given hazard on the job in the previous 12 months – survey measures came from the European Working Conditions Survey<sup>5</sup> and a survey tool previously used to identify hazards encountered by temporary workers in the Chicagoland area.<sup>6</sup> Occupational hazards assessed included:

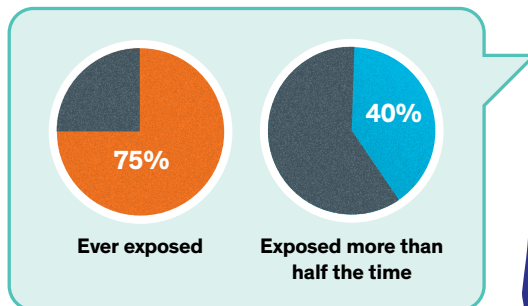
	<b>Chemical Hazards</b> Dust, fumes, or chemicals; secondhand tobacco smoke; and confined spaces		<b>Physical Hazards</b> High noise; vibration from tools or machinery; extreme temperatures; materials that could burn skin; materials that could injure eyes; materials that could cut/scrape; and work outside in bad weather
	<b>Biological Hazards</b> Infectious materials		
	<b>Ergonomic Hazards</b> Repeated lifting, pushing, pulling, or bending; heavy lifting; on feet for long periods; and sitting for long periods		<b>Other Hazards</b> Uneven or slippery surfaces; work at heights 4+ feet; materials that could hit, strike, catch, trap, or crush; and work near traffic or moving vehicles

## What was found?

Survey responses from 479 residents who self-identified as “currently or recently employed in a job situation that they perceived to be precarious” were included in analyses.

Of the 479 respondents, 17.1% identified as Hispanic – Born in the US, 31.7% identified as Hispanic – Born Outside the US, and 38% identified as Black (Non-Hispanic). There was almost equal representation of males (48.2%) and females (45.9%), with the remaining sample self-describing or not disclosing their gender identity. The vast majority of the sample had a high school diploma or less.

According to PEPSO classification criteria, nearly two-thirds of respondents worked in the most precarious jobs.<sup>7</sup> However, there was large variation in the precarity of different working situations. In addition, 75% of respondents reported “ever” exposure (any time at work in the prior 12 months) and more than 40% of respondents reported exposure more than half of the time that they are at work. These findings suggest that respondents work in high-hazard industries, which increases their risk of occupational injury and illness.

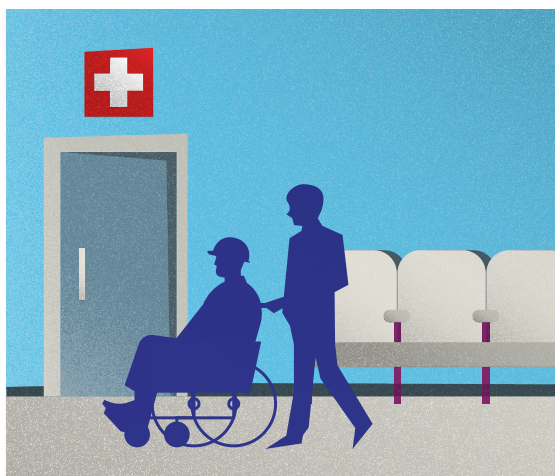


**This was the first study to comprehensively measure employment precarity and its association with a worker’s self-reported risk of exposure to recognized occupational hazards. For all occupational hazards, the more precariously employed a person was, the more likely they were to report exposure to a hazard(s).**

Findings suggest that an individual in the most precarious job situation could experience a **10-fold or higher** likelihood of exposure to occupational hazards relative to an individual in the most stable job situation.

In the United States, there are laws and regulations to protect workers from occupational exposures. If you are worried about an exposure, call the Occupational Safety and Health Administration (OSHA) at **800-321-6742**.

## What does this mean and for whom?



Employment precarity and work in high-hazard environments are both associated with adverse health outcomes; therefore, precariously employed workers frequently exposed to occupational hazards are likely to experience the highest risk of work-related injury or illness. Precariously employed workers may be less likely to report hazards at work, including wage theft, because of their relative job insecurity and fear of retaliation. If they become injured or ill, they may experience difficulties accessing support, including workers’ compensation, due to the complicated nature of their employment arrangements.<sup>8,9</sup> There are existing laws and regulations designed to protect workers from these exposures and workers who are exposed can file complaints through local, state, and federal agencies.

When we focus on measuring the intersections of precarious work by sociodemographic characteristics, job hazards, job quality, etc., we

begin to better understand the degrees of precarity and, in turn, the likelihood of exposure to different hazardous workplace conditions. Small decreases in precarity may have significant positive impacts on worker health.

Additional research is needed to gain a complete understanding of employment precarity to assist in identifying opportunities for interventions to reduce health inequities between workers from high- and low-hardship communities and improve the health of all community members.

## Worker Resources

**The Illinois Department of Labor:** Employees can report unpaid wages, which includes underpayment of minimum wage and overtime, through an online complaint form. Guidance for filing a claim can be found at <https://labor.illinois.gov/faqs/how-to-file-a-claim.html>.

**Chicago's Office of Labor Standards:** Employees can use an online portal at <https://311.chicago.gov/> to submit complaints regarding minimum wage, wage theft, the Fair Workweek Ordinance, and Paid Sick Leave violations.

**Occupational Safety & Health Administration:** Employees have several ways to file a safety and health complaint or whistleblower complaint through OSHA. Guidance and filing options can be found at <https://www.osha.gov/workers/file-complaint>.

Institutional Review Board at the University of Illinois at Chicago approved this GLHW study component (protocol #2013-0128) and community and university researchers from GLHW team obtained informed consent from all participants.

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**For more information:**



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