

# FROM RESEARCH TO RECOGNITION'

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## CONGRATULATIONS from the American Public Health Association!

We are pleased to inform you that your abstract has been accepted for presentation at the APHA 2024 Annual Meeting and Expo (Oct. 27-30) in Minneapolis. Your abstract was selected from many excellent submissions and was judged to be of high quality and interest.



## Youth Labor Injury Research

### Category: Data in the Workplace)

Presented at the APHA Conference along with researchers from the following institutions:

- Senior Research Area Specialist - University of Michigan
- Associate Professor with Graduate Student - Indiana University of Pennsylvania
- Assistant Director with team of Research Teaching Specialists - Rutgers School of Public Health
- Data Analyst and Unit Supervisor - Wisconsin Department of Health Services
- Instructor of Public Health - MCPHS University

## Investigating reported injury rates in the United States youth labor force

Haley Huh, Sunjin Lee, Yebon Lee, Grant Jonghwee Choi, Jeonghyun Park, Youngjoon Ryu, Minseok (Daniel) Kim, Andrew Huh, Tiffany Rivera-Castruit, Julia Cho, Willie Im, Sejin (Sage) Baek, Isaac Jung, Seung Woo Lee, Elizabeth Noth, PhD, MPH, CIH

APHA 2024 Annual Meeting & Expo | Minneapolis | Oct. 27-30

### Introduction

#### U.S. child labor statistics

- The number of illegally employed children has risen by 88% since 2019 (2)
- 5,800 minors were found to be employed in violation of the law in 2023, resulting in over \$8 million in employer penalties (2)
- According to the National Institute for Occupational Safety and Health, 160,000 children experience work-related injuries annually, with 34.3% needing emergency room treatment (3)

#### Child labor law rollbacks

- 2024: Alabama, Florida, Indiana, Iowa, Kentucky, and West Virginia (5)
- 2023: Iowa, Arkansas, New Jersey, New Hampshire (1)
- Examples
- Iowa now allows minors to work in industrial laundries, demolition, freezers, and meat coolers. It also permits 14 and 15-year-olds to work up to six hours a day on school days (1).
  - Arkansas no longer requires work permits for 14 and 15-year-olds (1)

### Our Focus

- Investigated child labor laws (CLLs) by state and compared youth injury rates across states with different levels of child labor protections
- Examined whether higher or lower child labor protections align with youth injury rates across different industries and subcategories

### Methods

#### Child labor law rating

Rated each state's CLLs based on their level of protectiveness (A, B, C)

Employment Certificates	Age Certification	Employment of minors in the entertainment industry	Employment of minors in the agricultural industry	Max hours of work allowed (minors under 16)	Max hours of work allowed (minors ages 16 and 17)
0 = not mandatory 0.5 = mandatory in certain cases 1 = mandatory	0 = not regulated 1 = regulated	0 = no max hour restrictions 1 = restrictions exist for max hours +1 = restrictions exist specifically for school days +1 = restrictions exist for nightwork			

State Rating	A (10, 9, 8)	B (7, 6, 5)	C (4 and below)
Points	10, 9, 8	7, 6, 5	4 and below

#### Injury data

- Used nonfatal occupational injury data provided by the U.S. Bureau of Labor Statistics, focusing on the youngest available age group (16-19) and private industry

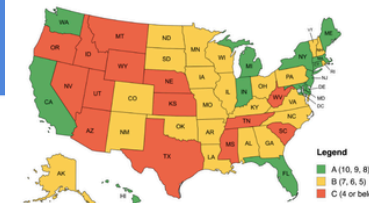
#### Main analyses

- Do injury rates vary significantly among states with different CLL ratings?
- Do injury rates vary across states by industry, population size, population of foreign-born children, and income inequality?
- Used SAS to conduct t-tests and ANOVA

Research Program leader of 2023, Haley Huh (senior at Emory University) proudly presented a co-authored research paper at the APHA (American Public Health Association) 2024 Annual Meeting with their impactful study on youth labor injuries. Guided by Dr. Elizabeth Noth from UC Berkeley, this project equipped a team of research scholars (university and high school students) with invaluable skills in public health and government interventions, and data analysis, contributing meaningful insights to youth labor safety discussions.

## Results

### Child labor law ratings



- Age group 16-19: A-rated states had significantly higher injury rates than B or C-rated states
  - Same trend found when A-rated states were compared to the combined group of B and C-rated states

### Population of foreign-born children

- States with a higher percentage of foreign-born children than the U.S. average reported significantly higher injury rates
  - Among these states, A-rated states reported more injuries than B or C-rated states
  - Less-populated states with higher percentages of foreign-born children reported more injuries

### Income inequality (GINI coefficient)

- States with more equal income distribution reported significantly higher injury rates
- A-rated states reported more injuries than B or C-rated states

## Discussion

The unexpected correlations observed, including between higher CLL ratings and reported injury rates, suggest important unobserved contributing factors. The reality of substantial underreporting of workplace injuries may be exacerbated for youth workers, particularly for migrants and illegally employed children.

- Strengths: This is emerging research, with limited comprehensive research on child labor to date.
- Limitations: Some states do not have comprehensive injury data. Illegal workers are missing from government surveys, and there is extensive injury underreporting across many industries (4).
- Future directions: Refine CLL rating system, examine more socioeconomic factors, expand types of industries, analyze impact of recent policy changes, advocate for more accurate and comprehensive data.

#### References

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5. Mast, N. (2024, June 12). More states have strengthened child labor laws than weakened them in 2024. Economic Policy Institute. <https://www.epi.org/blog/more-states-have-strengthened-child-labor-laws-than-weakened-them-in-2024-this-year-state-advocates-were-better-equipped-to-organize-in-opposition-to-harmful-bills/>

## APHA 2024 Theme

The APHA 2024 Annual Meeting and Expo theme was "Building Trust in Public Health and Science." The following research on youth labor injury rates aligns closely with APHA 2024's theme, "Building Trust in Public Health and Science," by addressing critical issues of public health protection, regulatory effectiveness, and community well-being.

## About the IGNITE Research Program

The IGNITE Research Program is an exclusive 9-month educational journey designed for ambitious students who are eager to make an impact through academic research. With esteemed faculty from UC Berkeley, participants have the opportunity to co-author a research paper, exploring global issues with the support and mentorship of leading experts in public health.

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