

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

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## 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	B	C
Points	10, 9, 8	7, 6, 5	4 and below

### Injury data

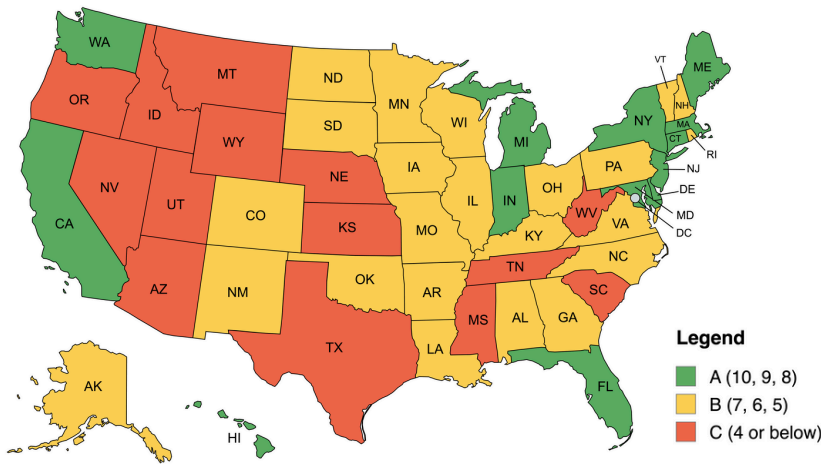
- Used nonfatal occupational injury data provided by the U.S. Bureau of Labor Statistics, focusing on the youngest available age group (16-19) and private industry

### 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

# 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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## Industry

- Leading meatpacking states (by private facility count) generally reported lower injury rates than states with fewer facilities
- There were no top meatpacking states with an A rating
  - Among B and C-rated states, top meatpacking states reported lower injury rates
- Top meatpacking states with a higher percentage of foreign-born children than the U.S. average reported lower injury rates than other state combinations

## Population size

- States with smaller populations reported more injuries