

# Prevalence of Health, Safety, and Environmental Hazards and Work Related Injuries of New York City Car Wash Workers

In Partnership with the  
Retail, Wholesale & Department Store Union

Chris Hasslinger, Brown University, Medical Student  
and

A. Carli Richie-Zavaleta, MASP, MAIPS  
Drexel University, Public Health Doctoral Student.



# Background

- NYC—200 car washes, 5000 employees.
- Organizations:
  - RWSDU
  - Make the Road NY
  - NYCC
- Since 2012...
  - 8 sites unionized
  - 7 ratify contracts.



car wash picket line



# Background

- Common problems:
  - **Wage and tip theft**
  - Health and safety violations
  - Environmental concerns
  - Not paying minimum wage or overtime
  - Lack of job/hour security
  - Lack of respect and dignity



*tips container*



*Improper PPE for their work*



*organizing meeting*

# Objectives

- RWDSU:
  - Assess prevalence of worksite hazards.
  - Assess prevalence of work-related injuries.
  - Document car wash environmental practices.
- Personal Objectives:
  - Explore the field of Occupational Health & Safety, learn from experts in the field, and apply my research skills.



# Car Wash Operations Context

- Carwash Operations:
  - Vacuum
  - Brush (tires) “Brocha”
  - Soap
  - Drying
  - “Detail” (inside car, wax, or polishing)
- Oil Change
  - Fuel Injection
- Sludge
  - Waste water sediment



*Car wash Machinery*

# Type, Sampling & Methods

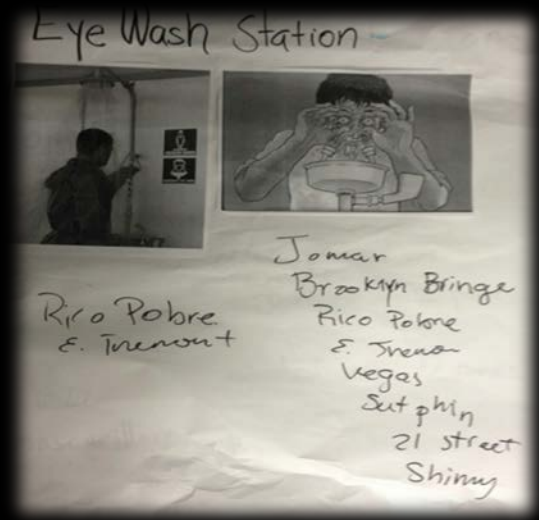
- Exploratory research project
- Purposive sample—unionized and those with a strong relationship with the community organizing partners.
- Focus Groups—4 with a total of 71 participants
- Surveys—21
- Informal Semi-Structured Face to Face Interviews—12
- Work Site Inspections: 7



*leaders meeting*



*worksite inspection*



*focus group notes*

# Injuries Findings

- Cleaning the Vacuum
  - Cuts
  - eye irritation due to dust
- Tire Cleaning “Brocha”
  - skin burns
  - eye irritation
  - nose bleeds
  - cough
  - Chest pain
- *Detail*
  - chemical burns
  - Skin peeling
  - joint pain
  - Eye/respiratory irritation
  - headaches



# Las Voces de los Trabajadores

## Worker's Voices Excerpts

- *Detail*, carwash worker interview:





# Las Voces de los Trabajadores/Worker's Voices Excerpts

- Vacuum Worker:



# Injuries Findings

## Oil Change—Fuel Injection

- palpitations
- respiratory system irritation/nose bleeds /sinus infection
- eye irritation
- headaches
- nausea,
- dizziness

## Sludge

- skin irritation/rash
- skin burns
- nausea/vomiting
- Headaches



# Injuries Findings

## **Machinery Accidents**

- Hands cut in machines
- Face hit by car



## **Repetitive Movement**

- Back pain



# Environmental Hazards Findings

- Sludge disposal
  - Hazardous waste
  - Normal trash
  - City Sewer
- Runoff water treatment
  - City filtration no sufficient



*water collection canal*



*runoff water*



*cistern: confined space*

# OSHA Violations Findings

- Confined Spaces
- PPE
- MSDS
- Eyewash Station
- Training
- Mislabeling of chemicals



# Recommendations

- Removal of Hazard

  - Car Wash Chemicals*

  - Require safer chemicals when available.

- Engineering controls (e.g. other states):

  - Sludge*

  - Install pump to remove contaminated sludge.
  - Or request hazardous waste removal specialist

  - Oil Change*

  - Require filters for fuel injection: channel fumes out of the workers' breathing air.



# Recommendations

- Demand appropriate PPE
  - Splash proof goggles, chemical resistant gloves, rubber boots.
- Change Culture
  - Increase awareness amongst workers, car wash owners, the public, city and state officials about chemical exposure dangers to health and the environmental.



# Impact of Summer Project

- The RWDSU presented our final report to OSHA and requested a site inspection of the car wash establishment that had the most violations i.e. confined space, building structural issues, lack of PPE, etc.
- The Union also is in the process of training the trainers—community leaders—on the right PPE that can provide protection from acids and other detergent agents.

# Acknowledgements

- We give special thanks to all of the following groups that helped us with this project:
  - Car wash workers participants
  - RWDSU, NYCC, and Make the Road organizers
  - RWDSU Health and Safety: Steve Mooser and Julia Getzel.
  - OHIP Staff and site coordinator Matt London
  - Funding agencies: NIOSH, RWDSU, and Steven M. Levin scholarship.





*OHIP 2014*