



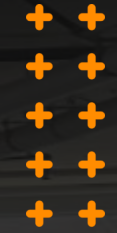
Occupational Health Internship
Program

No Dust Is Good Dust: Controlling Silica Exposure in the Abatement/Construction Industry

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Laborers International Union of North America (LIUNA) and California Department of Public Health (CDPH)





Who is LiUNA?

- Our partner union → Union Reps
- Laborers International Union of North America
- Partnered with two of their local branches here in the Bay Area: Local 67 and Local 270
- Local 67 (Northern Cal) represents abatement workers
- Local 270 (San Jose) represents construction workers
- LiUNA workers are exposed to silica in their job tasks





What Is Silica ?

Silica is a natural compound of silicon and oxygen. It is produced when cutting, grinding, pulverising and mixing products that contain silica. Silica is especially prevalent in cement/rock. It's known as hazard and carcinogen but is rarely acknowledged as so in the industry.



Symptoms and Outcomes:

- Untreatable lung cancer
- Scarring of the lung tissue
- Silicosis
- Tightness of the chest
- Kidney disease
- Shortness of breath





Our Overall Project Goals were to:

01 Survey workers about their knowledge of silica hazards and controls.

02 Learn what types of silica dust controls are being used on sites.

03 Identify barriers and enablers of proper dust controls usage.

04 Assess overall levels of compliance with the Cal OSHA Silica Standard by LiUNA contractors.

05 Compare differences of LiUNA contractor compliance with the Cal OSHA Silica Standard between abatement and construction workers.

06 Make recommendations to LiUNA and contractors on improving compliance with the silica standard.





Methods

Surveys

- English and Spanish
- General laborer
- Foreman
- Safety Supervisor
- Trainer

Total: 138 surveys

Informational Interview

- Superintendents from multiple companies

Tailgate Meetings

- Presented bilingual (Spanish and English) silica hazard safety tailgate meetings to workers on job sites.

Data Analysis

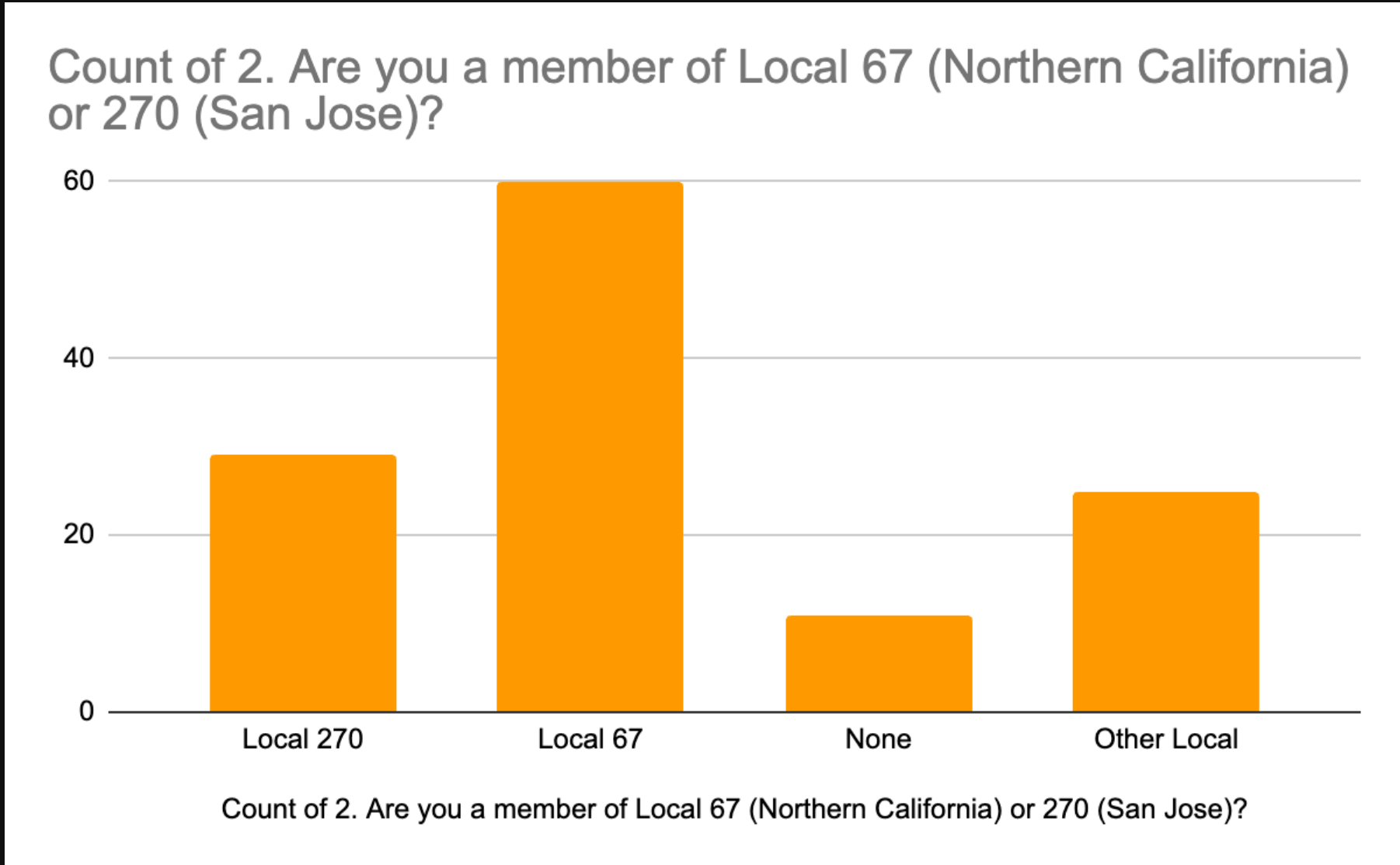
- Organizing and reviewing survey responses to create quantitative and qualitative data





Results - Demographic

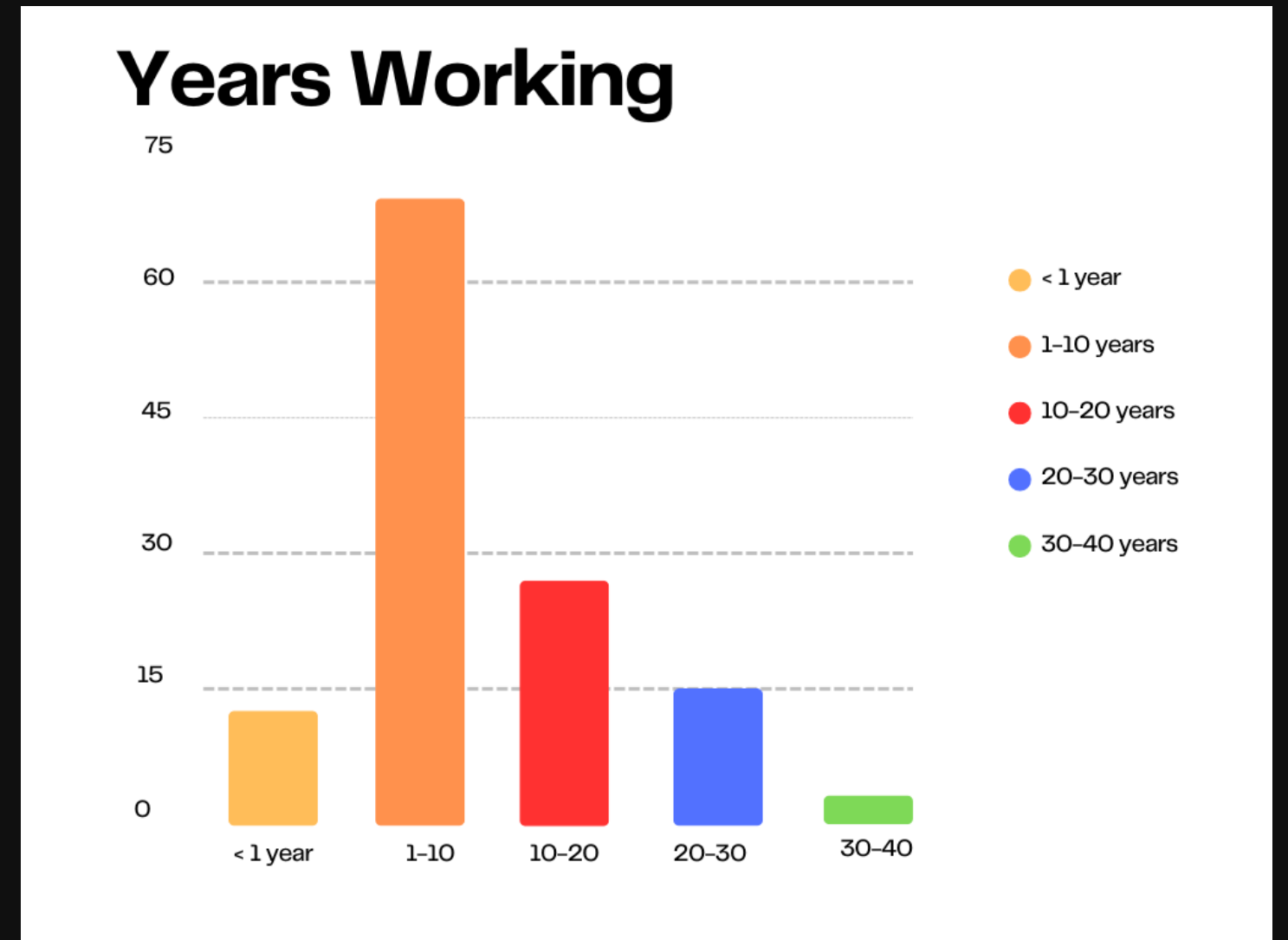
LOCAL #: Construction v Abatement



Gender

Mostly all were men

Time Working



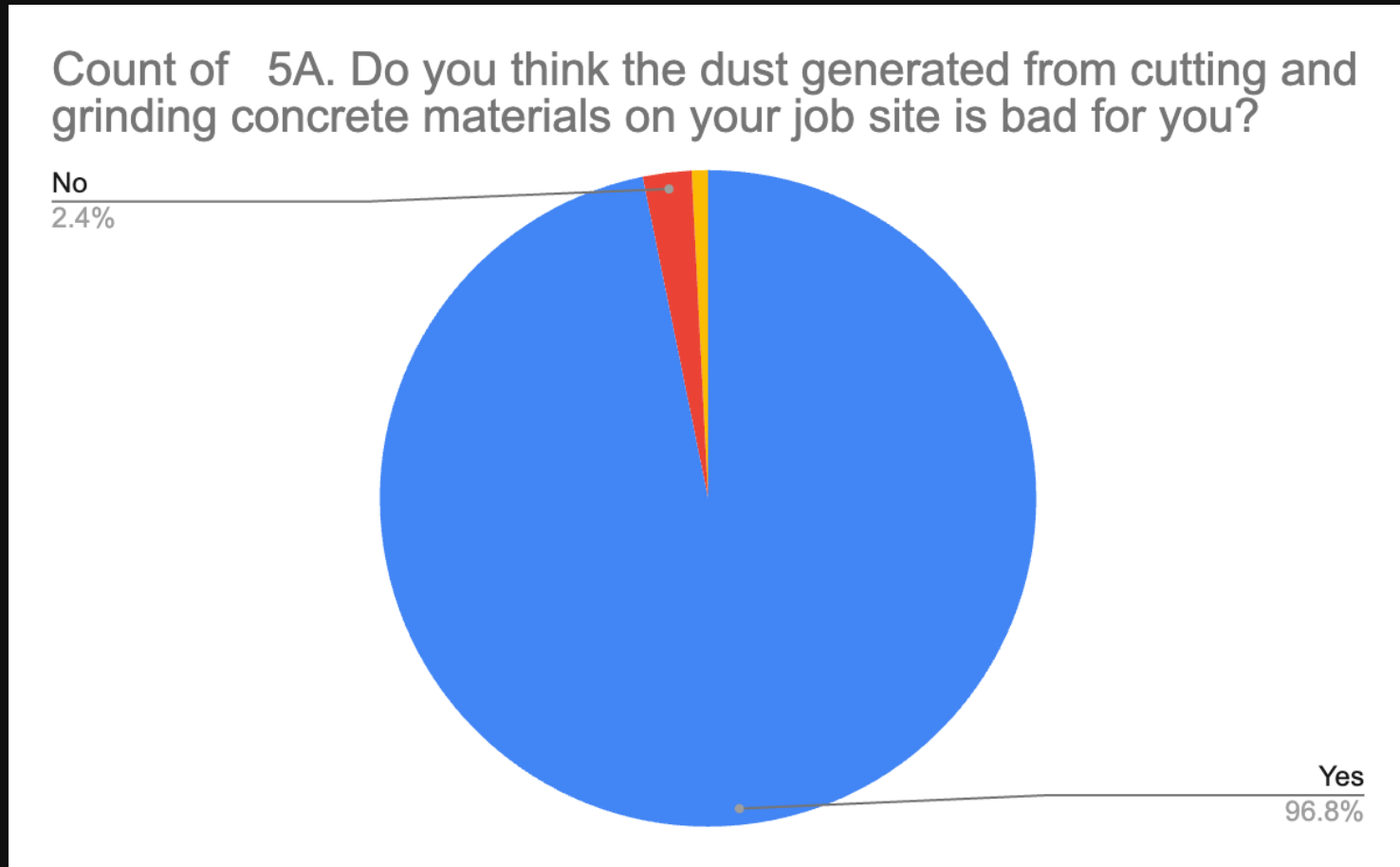
Race/Ethnicity

Latino/Hispanic majority

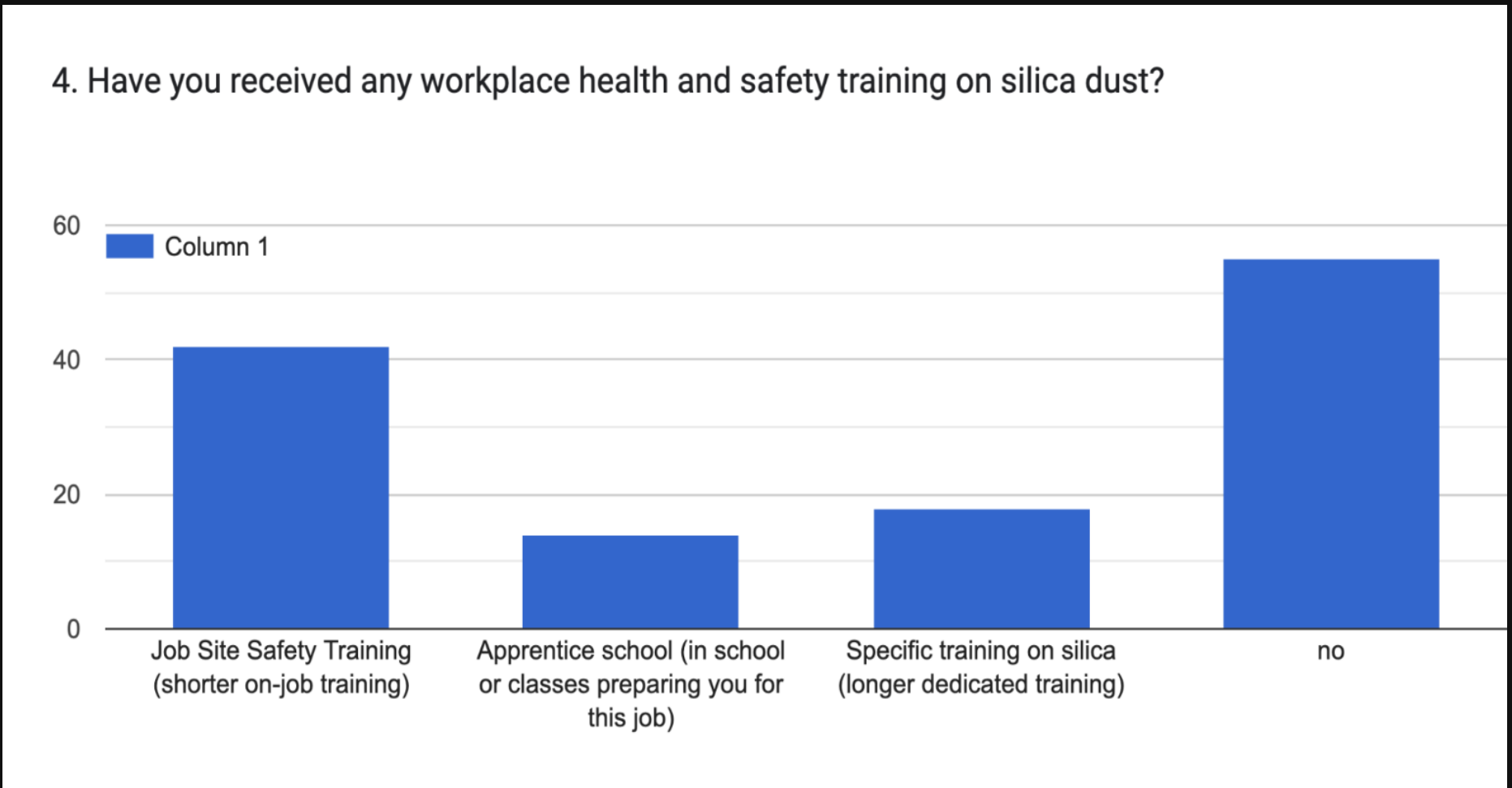


Results - Silica and Hazard Recognition

Do you think exposure to construction dust is bad for your health?



Have you received training on silica?



Top 3 common health concerns

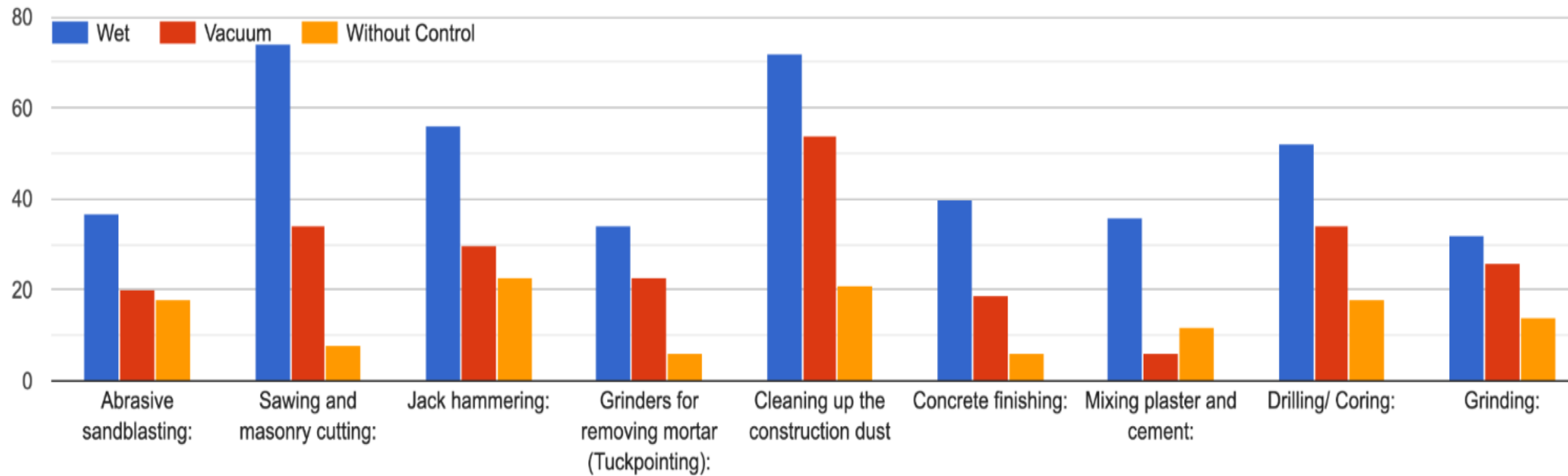
- Lung cancer
- Respiratory issues/disease
- Silicosis



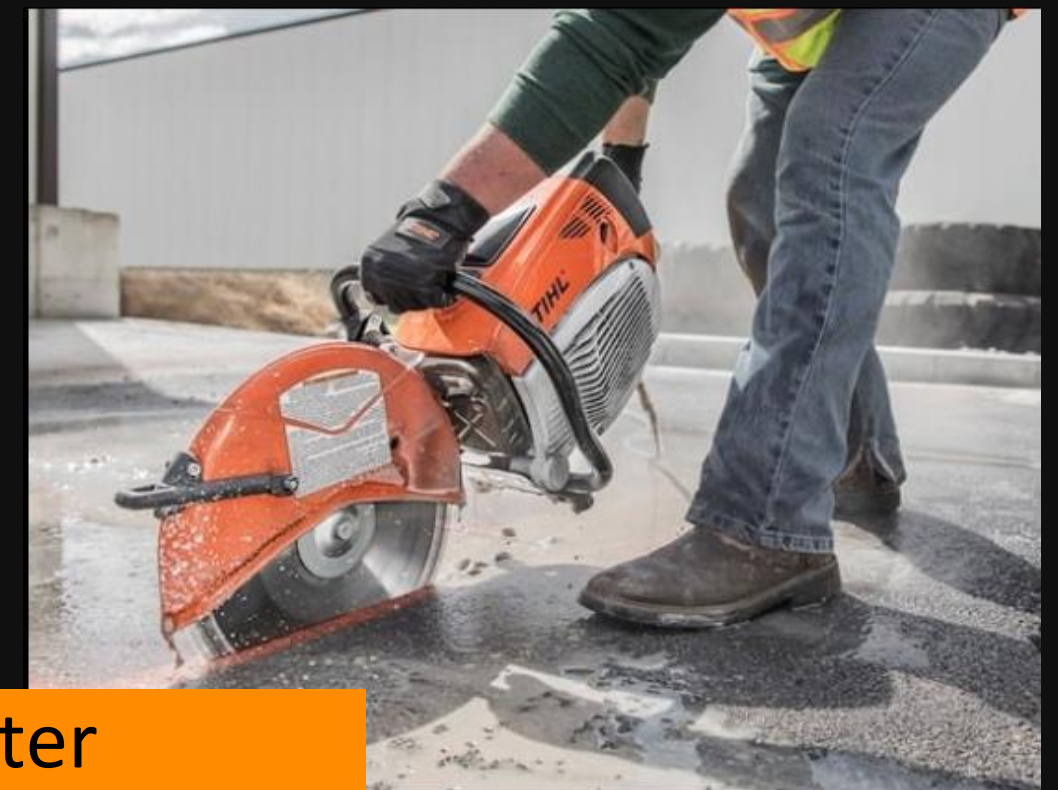
Results - Engineering Controls

Do you do these job tasks and do you use any dust control methods?

6. Do you perform any of these tasks? If so, are you using any wet/dry HEPA vacuum attachments?



Vacuum Attachment



Water Attachment





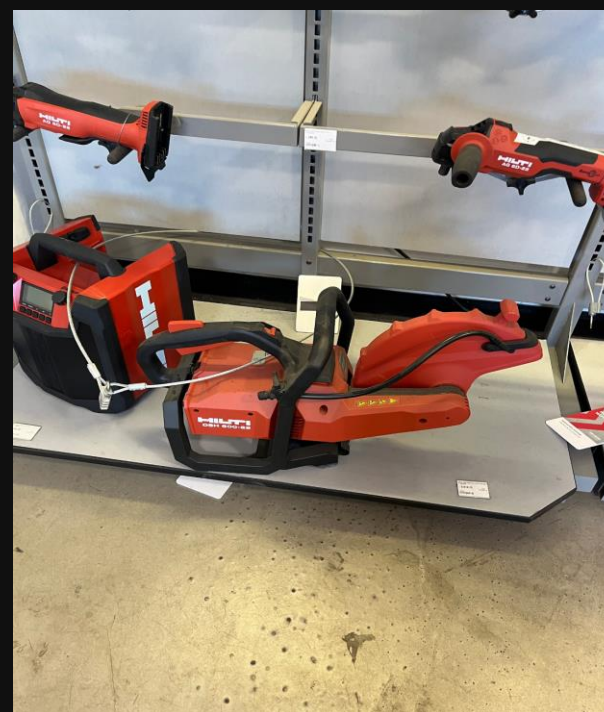
Recommendations

Have more training focusing on Silica through both the local training centers and the construction sites.

2. Ensure laborers understand the information providing it in both English and Spanish.

3. Implement better respiratory protection training

4. Encourage contractors to standardize engineering controls on tools





Give Back Product

2. Silica Safety Hazard Posters

3. Hard Hat Stickers + Shirts

1. Tailgate Safety Meeting



SILICA
NINGUN POLVO ES BUEN POLVO.

LA SILICA SE ENCUENTRA EN ARENA, PIEDRA, ALBAÑILERÍA, CONCRETO, MORTERO Y PINTURAS. AL PERFORAR, CORTAR, ESMERILAR, ARENAR, MARTILLAR O ALTERAR MATERIALES EN CUALQUIER FORMA, USTED ESTÁ EXPUESTO A LA SILICA.

PROBLEMAS DE SALUD
RESPIRAR SILICA:

- CAUSA DIFICULTAD RESPIRATORIAS
- HACE CICATRICES EN LOS PULMONES (SILICOSIS, QUE NO ES CURABLE)
- CAUSA CÁNCER EN LOS PULMONES

PROTECCION
APROPIADO CONTROLES & PPE:

- USE AGUA Y VENTILACION
- USE UNA ASPIRADORA HEPA
- USE UN RESPIRADOR

MÁS INFORMACIÓN:
LIUNA LOCAL 67 SITIO WEB

SILICA
NO DUST IS GOOD DUST

SILICA IS FOUND IN SAND, ROCK, MASONRY, CONCRETE, MORTAR, AND PAINTS. WHEN DRILLING, CUTTING, GRINDING, SANDBLASTING, JACKHAMMERING, OR DISTURBING MATERIALS IN ANY FORM YOU ARE EXPOSED TO SILICA.

HEALTH ISSUES
BREATHING IN SILICA:

- LEADS TO SHORTNESS OF BREATH
- LEADS TO SCARRING IN THE LUNGS (SILICOSIS, WHICH IS NON-CURABLE)
- CAN CAUSE LUNG CANCER

PROTECTION
PROPER CONTROLS & PPE:

- USE WATER AND VENTILATION
- USE A HEPA VACUUM
- WEAR A RESPIRATOR

MORE INFO:
LIUNA-LOCAL 67 WEBSITE





Successes

- Interviewing workers from Local 67 and 270 as well as other unions/non union workers
- The amount of workers we surveyed (Total: 138)
- Access to job sites
- Job site walk throughs
- Interviewing different laborer positions
- Attending two different union local member meetings
- Gained a much deeper understanding of silica hazards





Challenges

- Challenging to find construction sites to interview workers at
- Construction specific language was difficult to interpret at times
- Translating surveys and interviews from English to Spanish
- Completing multiple surveys at once
- Cut questions from surveys





OHIP
2024

Personal Reflection



OHIP 2024





Occupational Health Internship Program



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