



HEAT ILLNESS PREVENTION

**AMONG LIUNA LOCAL 67 ABATEMENT
LABORERS**

PROJECT **INTERNS**



BETSY BARBA



**EMMALY
TRUJILLO**



LiUNA Local 67

Laborers Local 67 represents members throughout 46 counties in Northern California who perform work in abatement for the following areas:

- ❖ Asbestos
- ❖ Lead
- ❖ Mold

As well as Allied Industries

“Our job poses a danger to life and health, and our training and safe work practices prepare us and make us qualified to meet those demands, while safely going home to our families every night.”

- Victor Parra
Business Manager/ Secretary Treasurer

LiUNA! LOCAL UNION 67
Feel the Power



Project Background

- ❖ In April 2023, the Cal/OSHA Standards Board proposed a heat illness prevention standard for *indoor* workplaces aimed to provide comparable protections for both outdoor and indoor workers.
- ❖ The study will focus on construction workers in collaboration with a local construction laborers' union to understand how the new regulations are *affecting* their work conditions, including breaks, water intake, and access to shade.



Left to right: Fabian, Emmally, Brian, Betsy



Objectives

- ❖ Gain an in-depth understanding of the challenges faced by abatement laborers in relation to heat illness.
- ❖ We aim to illuminate the nuanced realities of their daily work environment, the physical demands they encounter, and specific hurdles they confront regarding heat-related illnesses.
- ❖ Ultimate goal is to deliver insights to workers and contribute to efforts aimed at reducing the incidence of HRI in the construction industry.



Bayview Construction Co. working on a job at an Apple INC. facility in Cupertino.

PRELIMINARY METHODS



On site with Coastwide Environmental & Demo, where they were completing abatement on the roof for a hospital in San Jose.



Meet with mentors, and union representatives to review project work plan and schedule worksite visits.



Review 2015 Heat Illness Project to develop our own worker and supervisor survey. Administer the surveys while visiting worksites.



After visiting worksites, analyze survey data and interpret for report analysis.



Left to right: Emmally, Betsy, PALS Supervisor

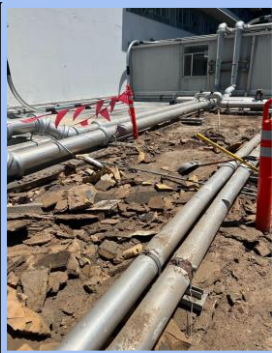
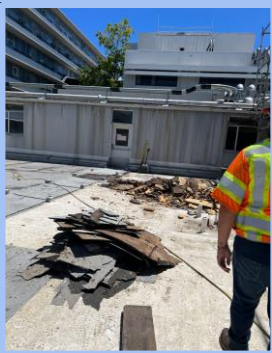


This was our first site visit in Sacramento with PALS. They were completing an asbestos abatement job at an elementary school. They were in the early stages of preparing for containment.

JOB SITE LOCATIONS



JOB SITE LOCATIONS



Top: Coastwide Environmental & Demo, where they were completing abatement on the roof for a hospital in San Jose.



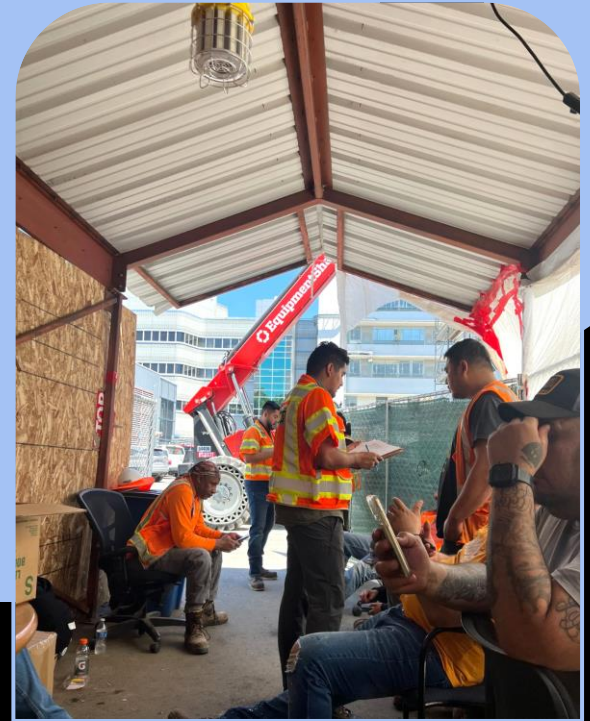
Bottom left 2: Bayview roof abatement and their containment area



Bottom right 2: PALS floor abatement at St. Rose Hospital

PROJECT RESULTS

- ❖ Visited 9 different job sites
(8 union sites, 1 non-union site)
- ❖ Completed 45 worker surveys
- ❖ Completed 13 supervisor surveys
- ❖ Attended 2 union member meetings
- ❖ 95.7% of laborers are Spanish speaking



Glimpse of laborers taking their break after working on roof.

DATA RESULTS



Encuesta de trabajadores con enfermedades causadas por el calor

Fecha	
Sitio	
Nombre de la Unión	
Entrevistador	
Identificación del participante	

Parte 1: Salud y seguridad generales

Estas primeras preguntas se refieren al tipo de trabajo que realiza y qué equipo de protección usa.

1. ¿Cuánto tiempo ha estado trabajando en su actual lugar de trabajo/ industria?
2. En los últimos tres meses, ¿qué tipo de trabajo ha realizado?
Marque todo lo que corresponda.
 - Trabajo interior de remover plomo, asbestos, o hongos
 - Trabajo exterior de remover plomo, asbestos, o hongos
 - Trabajo en los techos
 - Trabajo en espacios reducidos (por ejemplo: calderas)
 - Trabajo exterior de desechos peligrosos
 - Otro: _____
3. En los últimos tres meses, ¿qué tipo de equipo de protección personal ha usado? Marque todo lo que corresponda.
 - Trajes Tyvek
 - Traje resistente a productos químicos más pesado/ Tychem (amarillo)
 - Respirador/ máscara con filtro¿Qué tipo ? : _____

Ahora voy a preguntarle sobre cuestiones generales de salud y seguridad relacionadas con el trabajo que realiza.

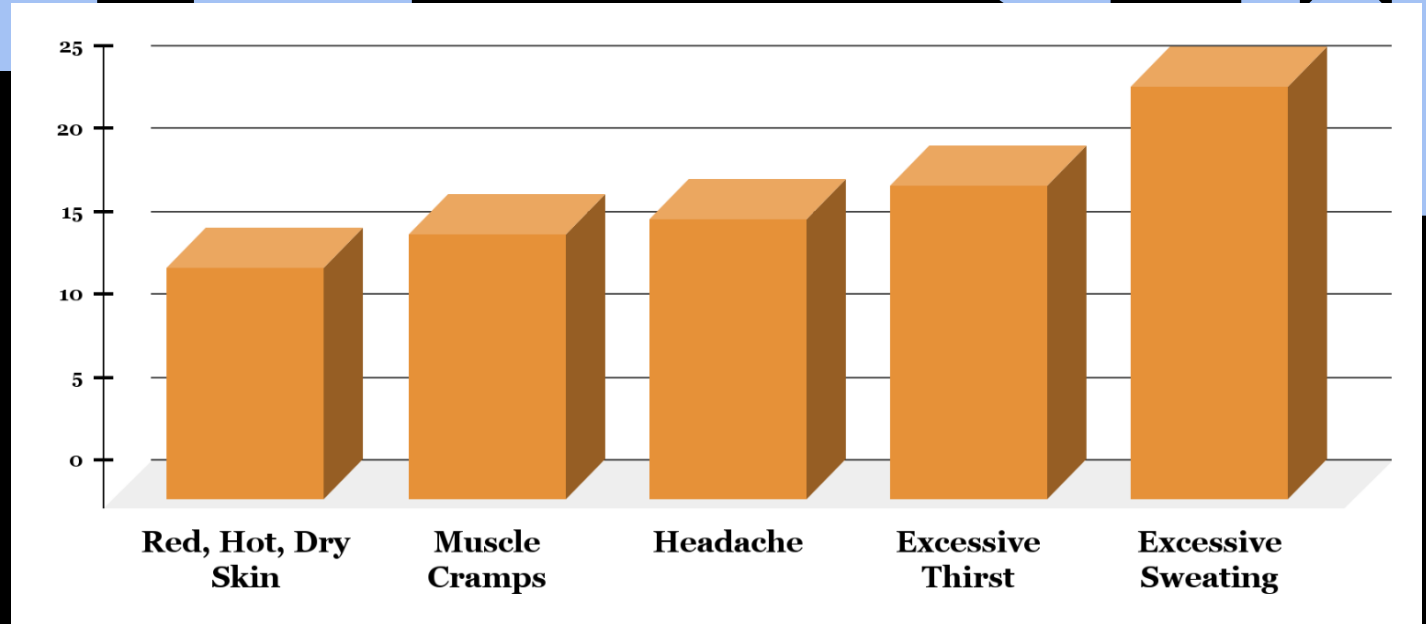
Parte 2: Actitudes, conocimiento y experiencia relacionados con el calor y el trabajo

Las siguientes preguntas se refieren a cómo le ha hecho sentir trabajar en condiciones de calor. Cuando responda, piense en todo el trabajo que hace y no solo en este sitio de trabajo.

4. ¿Cree que trabajar a altas temperaturas es un grave peligro para la salud y la seguridad en su línea de trabajo?
 - Sí
 - Neutral/Sin opinión
 - No
5. ¿Cuáles son tres síntomas o problemas de salud causados por trabajar a altas temperaturas?
 -
 -
 -

- ❖ 84.4% of laborers agree that working at high temperatures is a safety hazard.
- ❖ Almost all laborers said there is always shade and water provided at the job site.
- ❖ Laborers feel discouraged to drink water due to issues with PPE and having to go through decontamination
- ❖ Some laborers aren't comfortable taking needed breaks due to stigma of being "lazy".
- ❖ Majority of laborers have only received on site safety talks before their shift but not official emergency or preventative training on heat illness.
- ❖ Half of the laborers surveyed said they were not CPR certified

COMMON SYMPTOMS FELT AMONG LABORERS

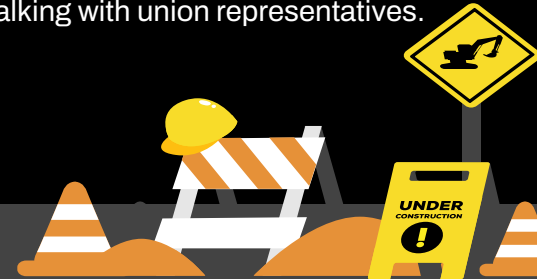


COMMON THEMES

- ❖ Sufficient water and shade for laborers
- ❖ Shared sense of being able to communicate with supervisor
- ❖ Common belief that Heat Illness is a great risk in abatement industry
- ❖ Lack of emergency training amongst laborers
- ❖ Lack of knowledge of heat regulations amongst supervisors

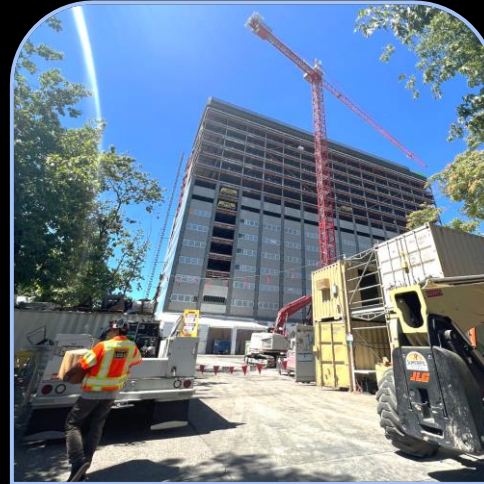


Workers enjoying lunch provided by local 67, while talking with union representatives.



LIMITATIONS

- ❖ Not able to pilot the survey
- ❖ Unable to conduct tailgate training as intended due to timing
- ❖ Job site visits were based on union representatives contacts
- ❖ For 2 locations job site observations were not allowed
- ❖ Were only able to visit 1 non-union worksite thanks to the union's relationship



Sacramento



Cupertino

These images are from the worksites we were not able to physically observe due to unconfirmed clearance.

SUCCESSSES

- ❖ Surpassed the number of expected surveys : 58 surveys
- ❖ More laborers can identify more symptoms compared to 2015 data
- ❖ Able to connect with the laborers and observed their willingness to learn more about heat illness prevention
- ❖ Found through our data there is room for improvement



Betsy and Emmally conducting surveys at job site visits

EXPERIENCES IN THE WORKPLACE



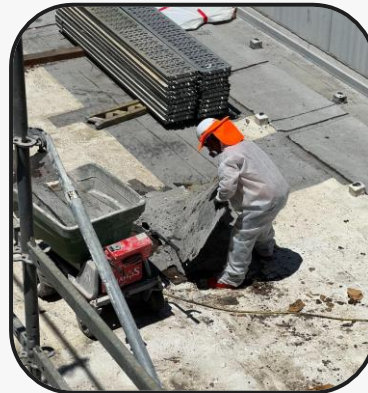
“Sometimes some guys won’t speak up and would rather push themselves to finish the job on time”



“I just started working in abatement after being in the painting industry, and I started at the same speed of everyone else. ”



“Sometimes it gets so hot and sweaty, that our respirators will fill up with sweat and obstruct our breathing ”



RECOMMENDATIONS

Training

Frequent heat illness emergency and prevention training is suggested. Laborers should also be CPR certified.

Include Breaks in Project Planning

Extend project times to take worker heat related safety into account, and give them time to take necessary precautionary measures such as breaks.



Acclimatization

Adopt some sort of heat acclimatization program for new & current workers when seasons change.

More Helpful Resources for Workers

Laborers have suggested that electrolyte drinks would benefit their health as opposed to drinking energy drinks. Providing cooler resting areas and cooling vests or fans for warmer months and for roofing projects would also help.

GIVEBACK PRODUCTS



HEAT ILLNESS PREVENTION AND SAFETY IN ABATEMENT



HEAT ILLNESS IS A COMMON RISK IN THE ABATEMENT INDUSTRY THAT IMPACTS MANY WORKERS. WITH THE RIGHT PREVENTATIVE AND EMERGENCY MEASURES, YOU CAN MAKE SURE TO STAY SAFE AND HEALTHY ON AND OFF THE JOB!

ACCLIMATIZATION

1. RISKS OF NOT BEING ACCLIMATED

Heat stress can be heavy on the body. Risks of heat illness can include:

- Heat stroke,
- Organ failure
- Death

2. HOW TO ACCLIMATE WORKERS

If you are new or coming back to work after time off, remember to:

- Listen to your body
- Take more frequent breaks
- Ease into the heavy work

3. NURTURE YOUR BODY

REMEMBER TO:

- Drink lots of water
- Get sufficient sleep
- Avoid alcohol, sugary drinks, or heavy meals before bed
- Your body will thank you!

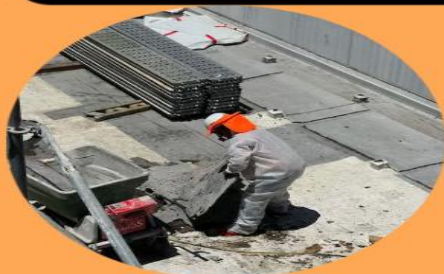
4. TAKE YOUR BREAKS

If you feel unwell, take a full rest and water break outside of containment.

- Never take a water or cooling break inside of containment
- Get into a clean area to remove your respirator, drink some water, and breathe in clean air

SYMPTOMS TO LOOK OUT FOR

1 THROBBING HEADACHE	1 HIGH BODY TEMP
1 NAUSEA OR VOMITTING	1 MUSCLE CRAMPS
1 DIZZINESS	1 RAPID PULSE
1 RED, HOT, DRY SKIN	1 LOSS OF CONSCIOUSNESS



Betsy and Emmally conducting a training at the monthly union member meeting on heat illness preventative measures

WHAT TO DO: HEAT ILLNESS EMERGENCY

#1	REMOVE WORKER FROM WORK AREA	Move into shaded and cool area
#2	NEVER LEAVE WORKER ALONE!	Heat illness can get worse in the blink of an eye. It is best to stay until some of the following actions are taken.
#3	ADVISE A SUPERVISOR	About the incident by sending someone else to let them know.
#4	REMOVE LAYERS	Once it is safe to do so and worker is outside of containment. Remove respirator, suit, and any other layers.
#5	COOL WORKER RAPIDLY	By applying ice or water compresses to head, neck, and armpits.

GIVEBACK PRODUCTS



REFLECTION

We are very grateful for LiUNA Local 67 & their willingness to help us with this very important project. This has been a great learning experience for us which we will carry on throughout our future career paths. We hope that through this project our efforts are able to help ensure that laborers continue to be safe & healthy while working in high temperatures. We gained a deep insight of the work they do, and know that it doesn't go unnoticed.

Thank you!

Left to right: Fabian, Emmally, Betsy, Brian





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Victor Parra, Brian Parra, Fabian Plascencia, & Local 67 staff & participating companies.



Occupational Health Branch:
Stella Beckman & Robert Harrison



David Harrington & David Hornung



**Thanks to our program
hosts and mentors!**



OHIP & LOHP mentors & advisors





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