

Cleaning and disinfection during the COVID-19 pandemic: Determining safe and effective workloads for California Janitors.

*Presented by Carisa Harris, PhD, CPE
Associate Professor, Department of Medicine
University of California, San Francisco
Director, Center of Occupational & Environmental Health
Director, UC Ergonomics Research & Graduate Training Program*



Northern California Center of Occupational & Environmental Health

Protecting Workers and Communities from Occupational and Environmental Health Hazards through Teaching Research and Service



Academic



Research



Outreach

COEH Faculty on Janitor's Project:



Carisa Harris, PhD, CPE
Director, COEH
Director, Ergonomics Program



Laura Stock, MPH
Director, Labor Occupational Health Program



Fadi Fathallah, PhD
Director, Agricultural Safety & Health Program



Study Phases

Survey

- COVID-19 impact
- Exposures
- Mental/Physical Health

Focus Groups

- Work changes
- Productivity Requirements
- Management challenges

Time Motion Study

- Biomechanical exposures/risk
- Compare actual to ISSE production rates

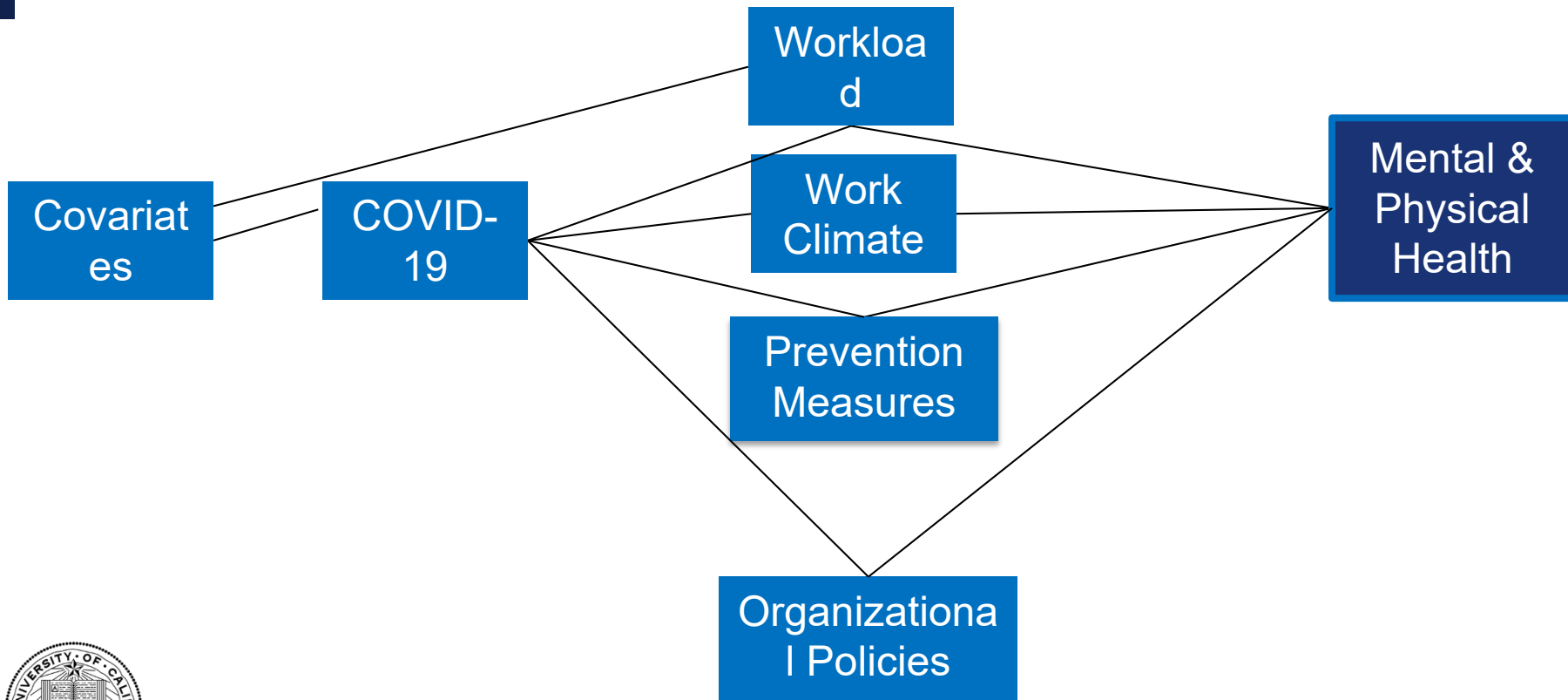


Survey- Research Questions

- 1) Determine the knowledge of worksite CDC Cleaning & Disinfection Recommendations among janitors.
- 2) Determine the types of COVID-19 prevention measures implemented at janitorial workplaces including engineering, administrative, behavioral controls
- 3) Describe the relationship between janitor workload, work climate, prevention measures, organizational policies and health (mental and physical) while working during the COVID-19 pandemic.



Survey



*Directed acyclic graph

Survey Recruitment

JANITOR WORKLOAD STUDY PARTICIPANTS NEEDED

COVID -19 has impacted day-to-day life.

This research study aims to assess workers' experiences with COVID-19 prevention measures at the worksite and determine safe and effective workloads for California Janitors.



Participants will take a 15 minute survey asking about the experiences they face as everyday workers during COVID - 19.

The survey is anonymous and we will not be asking for any personal information such as name or workplace.

Use the QR code to access the survey. For more information, contact ucergonomics@gmail.com



UNIVERSITY
OF
CALIFORNIA

ESTUDIO DE TRABAJADOR DE LIMPIEZA SE NECESITAN PARTICIPANTES

El COVID -19 ha impactado en el día a día.

Este estudio va evaluar las experiencias que trabajadores han tenido con medidas de prevención de COVID-19 en el trabajo y determinar cargas de trabajo seguras y efectivas para los trabajadores de limpieza en California.



Participantes van a tomar una encuesta de 15 a 20 minutos preguntando sobre las experiencias que enfrentan como trabajadores cotidianos durante COVID - 19.

La encuesta es anónima y no solicitaremos ninguna información personal como el nombre o el lugar de trabajo.

Utilice el código QR para acceder a la encuesta. Para más información contacte ucergonomics@gmail.com



UNIVERSITY
OF
CALIFORNIA



Survey Recruitment

Text Messages
(n=4) to
>40,000 members
in December &
January

SEIU-
USWW
Janitors



5% Response
Rate= 2,000

Venue 1
Mall

Venue 2
Airport

Venue 3
Biotechnology

Venue 4
Office Buildings

Site specific
recruitment at
all venues via
meetings,
flyers, text or
email



80% Response
Rate= ~120 to 200



Focus Groups

Capture workers' experiences working during the pandemic and following new cleaning protocols

- Have time, training, and support needed to accomplish tasks
- The impact of the new protocols on the physical and mental health of janitors
- Staffing or scheduling impact
- COVID-19 prevention measures
- Challenges workers have faced in implementing protocols or prevention strategies (including interactions with building occupants or others)



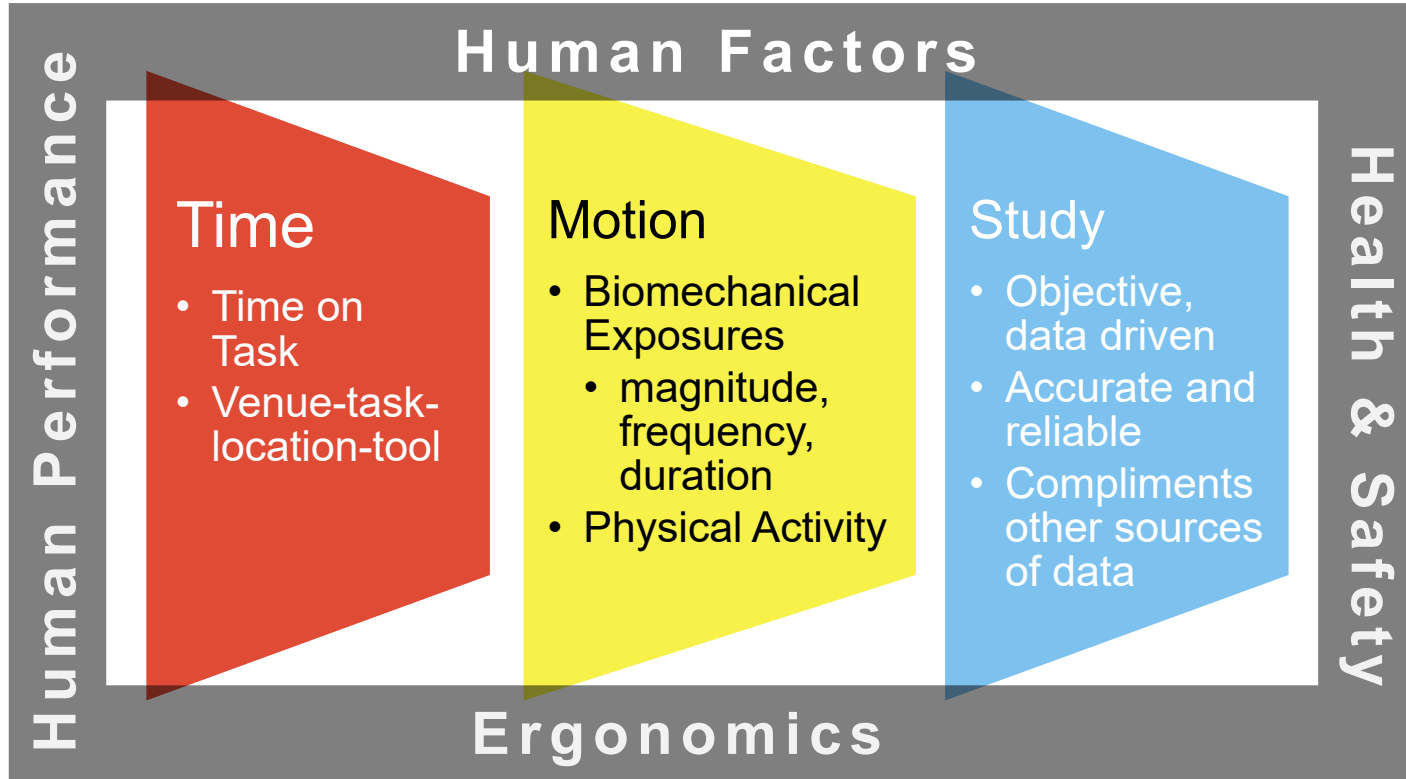
Focus Group- Methods

Qualitative methods would include:

- 3-4 focus groups with workers from each venue
- 4 - 5 individual interviews with workers - to elicit stories
- All groups will be facilitated in Spanish by bilingual facilitators and conducted remotely to account for distancing restrictions.
- Worker key informants could be identified via focus groups or through referral.



Time Motion Study

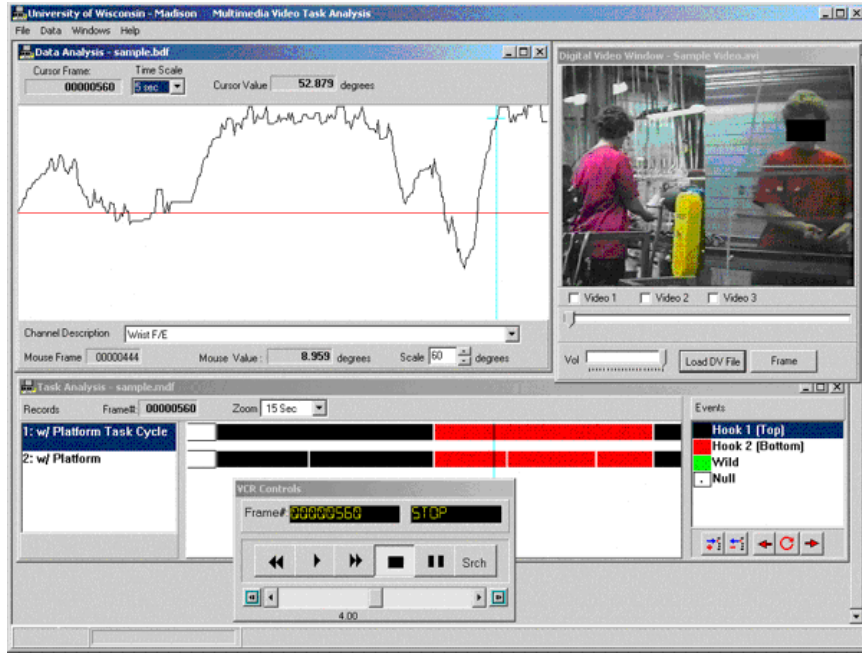


Time Motion Study- Research Questions

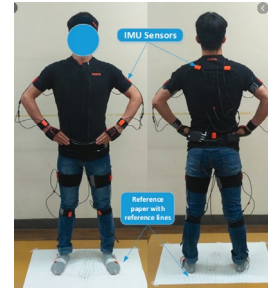
1. What are the tasks, durations, and rates per venue, location, and area?
2. What are the durations, frequency and magnitudes of biomechanical exposures and risk for MSDs?
3. What is the physiological workload and risk for cardiovascular strain?
4. How does the actual work rate compare to the ISSE production rates and COVID-19 production rates?



Methods



Multimedia Video Task Analysis (MVTA)



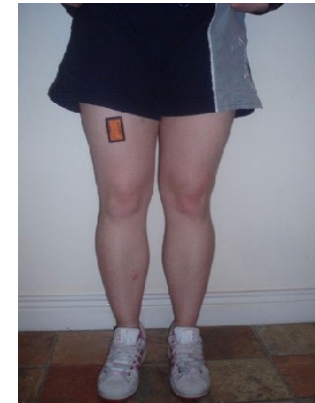
Xsens



Heart Rate Monitor(HR)



Lumbar Motion Monitor



activPAL™



Questions?



THANK YOU!

www.ergo.berkeley.edu
carisaharris@berkeley.edu
Carisa.Harris-Adamson.@ucsf.edu



<https://www.ergo.berkeley.edu/research-projects>

