

PARTICIPATORY ERGONOMICS

EARLY IDENTIFICATION AND REDUCTION OF RISK



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BACKGROUND / Custodians’ injuries are the third leading cause of work-related compensation claims and costs at the University of Washington (UW). The work of custodians is often physically demanding, repetitive and may be performed in awkward positions, all of which are risks for musculoskeletal injury. Studies suggest early musculoskeletal discomfort may predict future injury.

CONSIDERATIONS /

- Physical job with aging workforce
- Receptive/collaborative/progressive leadership (award-winning and practicing LEAN)
- Unionized
- Previous work in department by DEOHS
- Safety & Health Investment Projects (SHIP) Grant-availability of funds

OBJECTIVE / During the 15-month study period through May 2016, the project seeks to assess and then decrease the reported level of discomfort among UW custodians by identifying tasks that cause a higher level of discomfort and using a participatory approach to identify, test and implement ergonomic solutions.

METHODS /

1. Pre-Intervention Survey
2. Task Identification and Evaluation
3. Small Group Brainstorm and Testing of Modifications/Prototypes
4. Intervention Training
5. Post-Intervention Survey

The project is participatory in nature and involves custodians, managers, ergonomists, occupational health, medical and environmental health and safety personnel working together to identify and change work activities that may cause future injuries.

SMALL GROUP FINDINGS / THE FOUR WORKING GROUPS (IN PROGRESS)

TASK	LONG RANGE	SHORT TERM/Implementable
Toilets	Higher placement Non pedestal design Non porous walls	Tool modification Greater use of machine cleaner where walls suitable Replace floor screws/bolts with non-rusting stall door holder
Trash Dumpster	Auto lift dumping	Lift device for dumpster lid (internal/external) Cart dividers by trash type Avoid overfilling carts
Scraping Floor	Auto scraper	Longer handled tools, different grip
Vacuum Backpack		Fitting pack and harness to worker Wall storage for ease on/off

SURVEY RESULTS /

133 COMPLETED SURVEYS
Out of 222 total custodians (60% response rate)



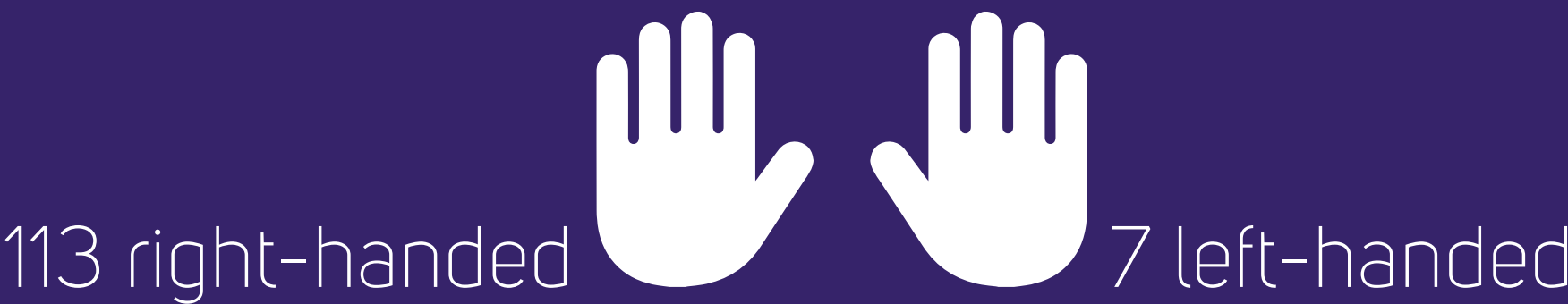
50-59 YEARS (40%)
Most common age range

13.3 YEARS
Average time working as a custodian at UW

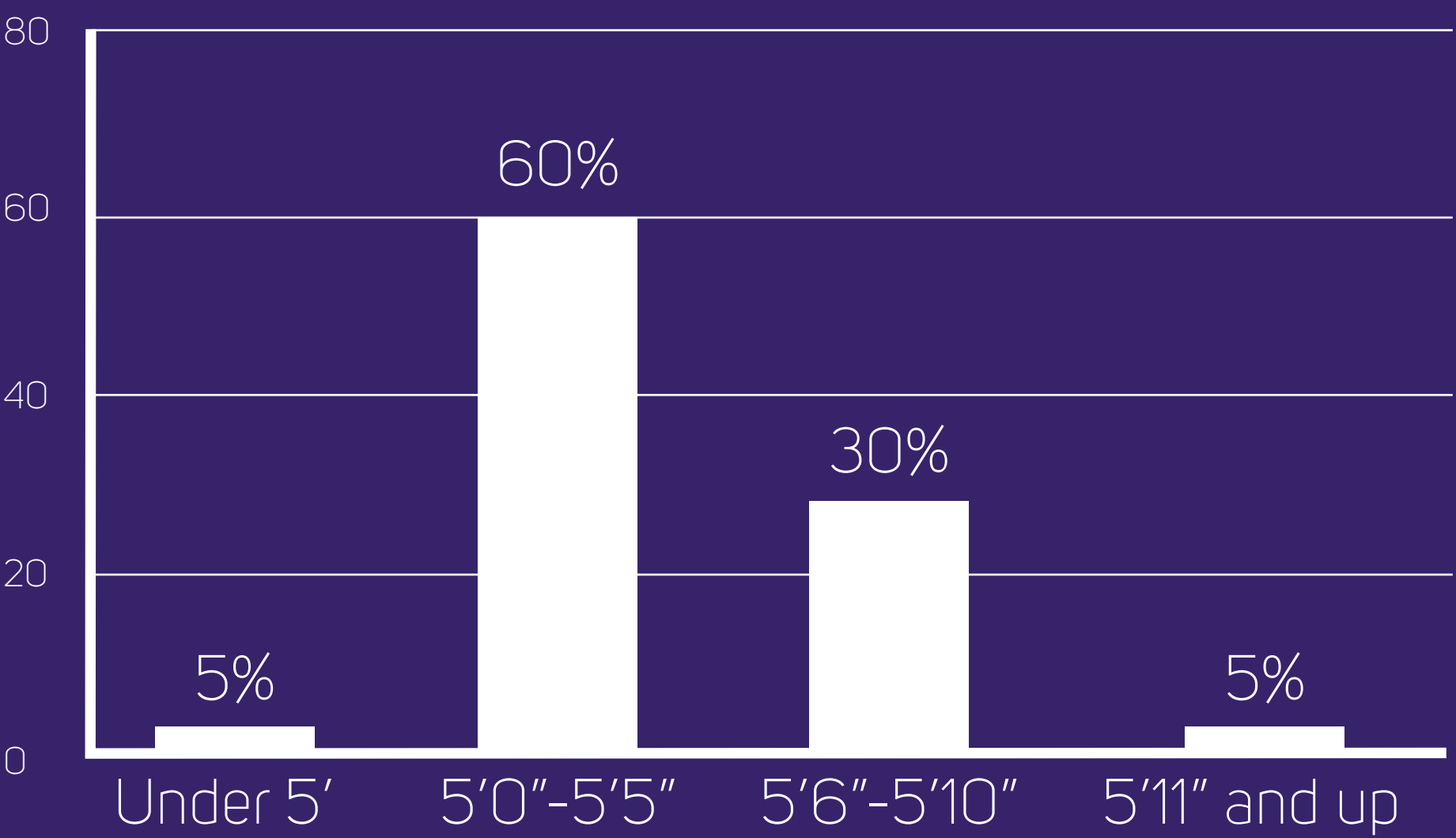
LESS THAN ONE YEAR TO 34 YEARS
Range of years working at UW

58%
Feel most relaxed listening to English

35%
Feel most relaxed listening to another language



HEIGHT BREAKDOWN



1 UW Department of Environmental Health & Safety
2 Facilities Services - Building Services Department
3 Performance Ergonomics, LLC
4 Occupational and Environmental Medicine Division of General Internal Medicine, Harborview Medical Center
5 DEOHS UW

