

# “You do what you do to survive”

## Health and Safety Concerns of Women in the Construction Trades

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# Presenter disclosures

Hannah M. Curtis

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

**No relationships to disclose**

# Presentation overview

- Benefits of construction trades
- Women's under-representation in the trades
- Barriers for women
- UW study: SHEWT
- Focus group findings
- Next steps

# Construction benefits to women

High wages and family benefits

Psychological advantages

“As we go about completing our projects we all said, ‘I’ve done that. I can do this.’ And if you find that you can do all these amazing things on a jobsite it helps build your character, even outside your job.”

Journeywoman electrician

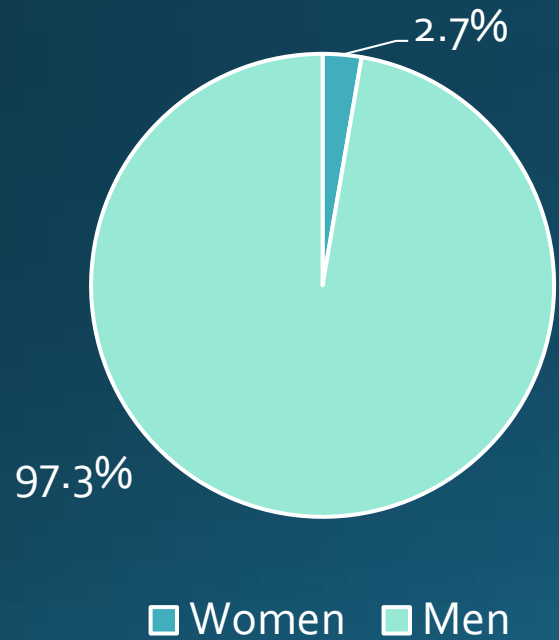
# Women in apprenticeships

- Women represent <3% of construction apprentices
- Women have significantly higher dropout rates compared to men
- Barriers:
  - Lack of exposure to trade skills
  - Discrimination in hands-on training and securing hours
  - Harassment

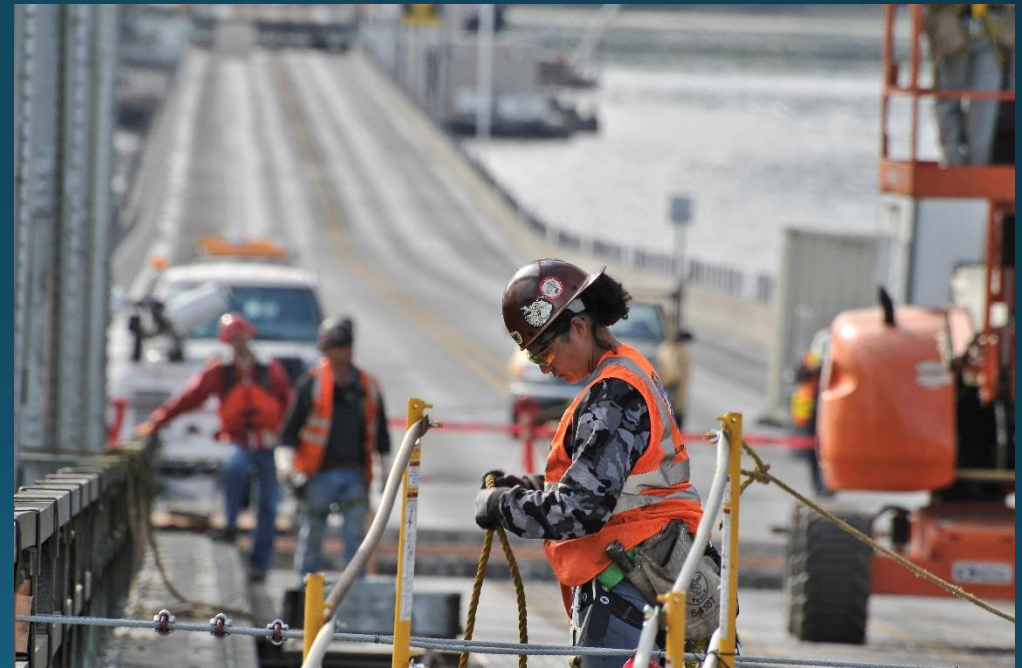
\*Source: DOL, 2016; Helmer & Altstadt, 2013

# Women's under-representation

Skilled Building Trades Workers  
in USA



\*Source: Bureau of Labor Statistics, 2015



\*Washington State Department of Transportation photo

# Text description for women's under-representation graph

- Pie chart showing that women make up only 2.7% of all skilled building trades workers in the USA (data from Bureau of Labor Statistics)

# Barriers for women

- Dangerous work environment
- Lack of personal protective equipment (PPE) for women
- Lack of available/sanitary facilities
- Sexual harassment
- Gender discrimination

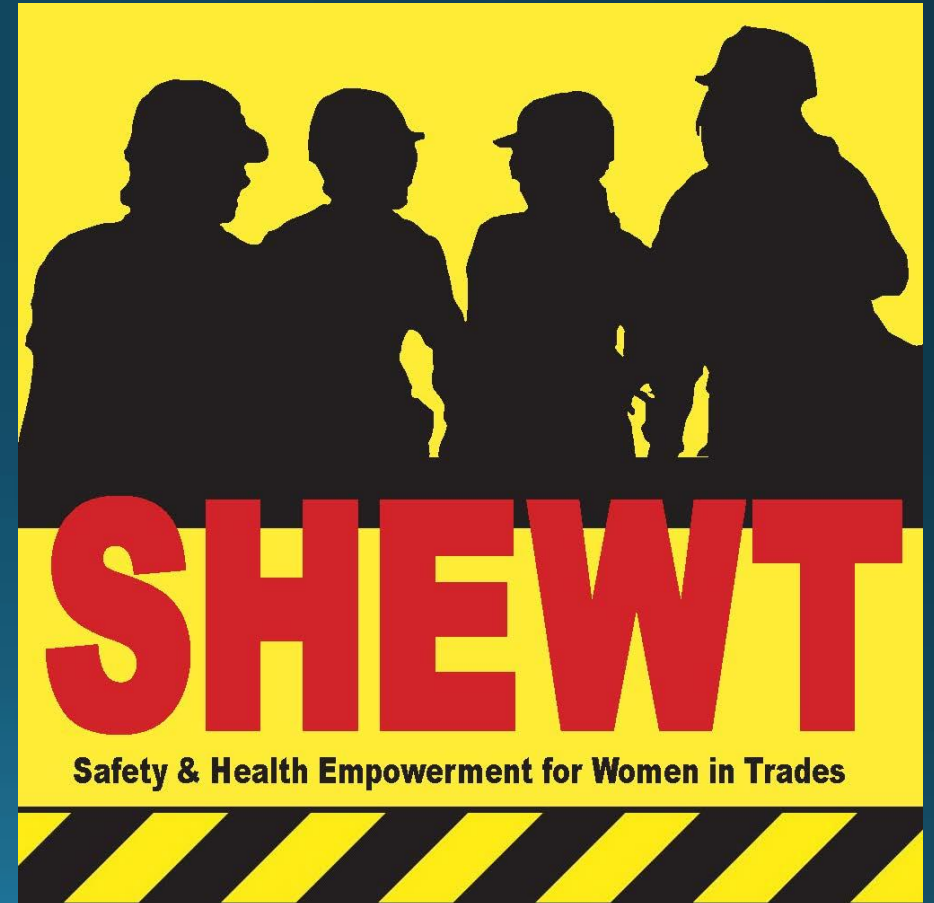
\* Goldenhar & Sweeney, 1996; Goldenhar et al., 1998; LeBreton & Lovey, 1992; Moir et al., 2011; Onyebeke et al., 2016; OSHA, 1999



# Safety & Health Empowerment for Women in Trades (SHEWT) study



DEPARTMENT OF ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES  
UNIVERSITY of WASHINGTON · SCHOOL OF PUBLIC HEALTH



# Study methods

## Focus groups

- Recruitment through community partner networks
- Four groups held with 19 tradeswomen and 6 tradesmen

## Questions asked

- Best part of working in the trades?
- Physical risks?
- Non-physical risks?
- Women-specific risks?
- How can you/ your coworkers/ your supervisor reduce these risks?

# Focus group findings:

- Physical risks for all workers
- Non-physical risks for all workers
- Gender-related risks (physical and non-physical) for tradeswomen

# Focus group themes: Physical risks

- Dangerous work environment
  - Slips/trips/falls
  - Electricity
  - Loud noise
  - Chemical exposure
- Chronic injuries
- Complacency
- Management prioritizing production over safety

“You could die any day if you stick your finger in the wrong place at the wrong time”

Journeywoman electrician

“The normal wear and tear...I mean I’ve only done it for two years, and I can already feel it in my back and my knees.”

Apprentice electrician

# Focus group themes: Non-physical risks

- Job insecurity
- No paid sick leave
- Inadequate bathrooms
- Macho culture
- Hazing

“I just don’t use the bathroom. I mean, I only work like five minutes from my house so it’s like I will hold it all day long. I hate it—I cannot stand Honey Buckets.”

Journeywoman electrician

“It’s always hard to break into a group. And there’s a certain amount of...hazing, just pulling tricks on the new person that happens.”

Journeyman carpenter

# Focus group themes: Women-specific risks

- Inadequate PPE
- Physical limitations
- Sexual harassment
- Gender discrimination
- Overcompensation
- Tokenism
- Poor work/life balance
- Fear of layoff for reporting concerns

“[Women and minorities] are not told all the safety concerns of their trade, or how to do something safely, but left out to fend for themselves because there is a group of people who don’t think they should be there.”

Retired electrician

“It’s like being under a magnifying glass every day you go to work.”

Journeywoman electrician

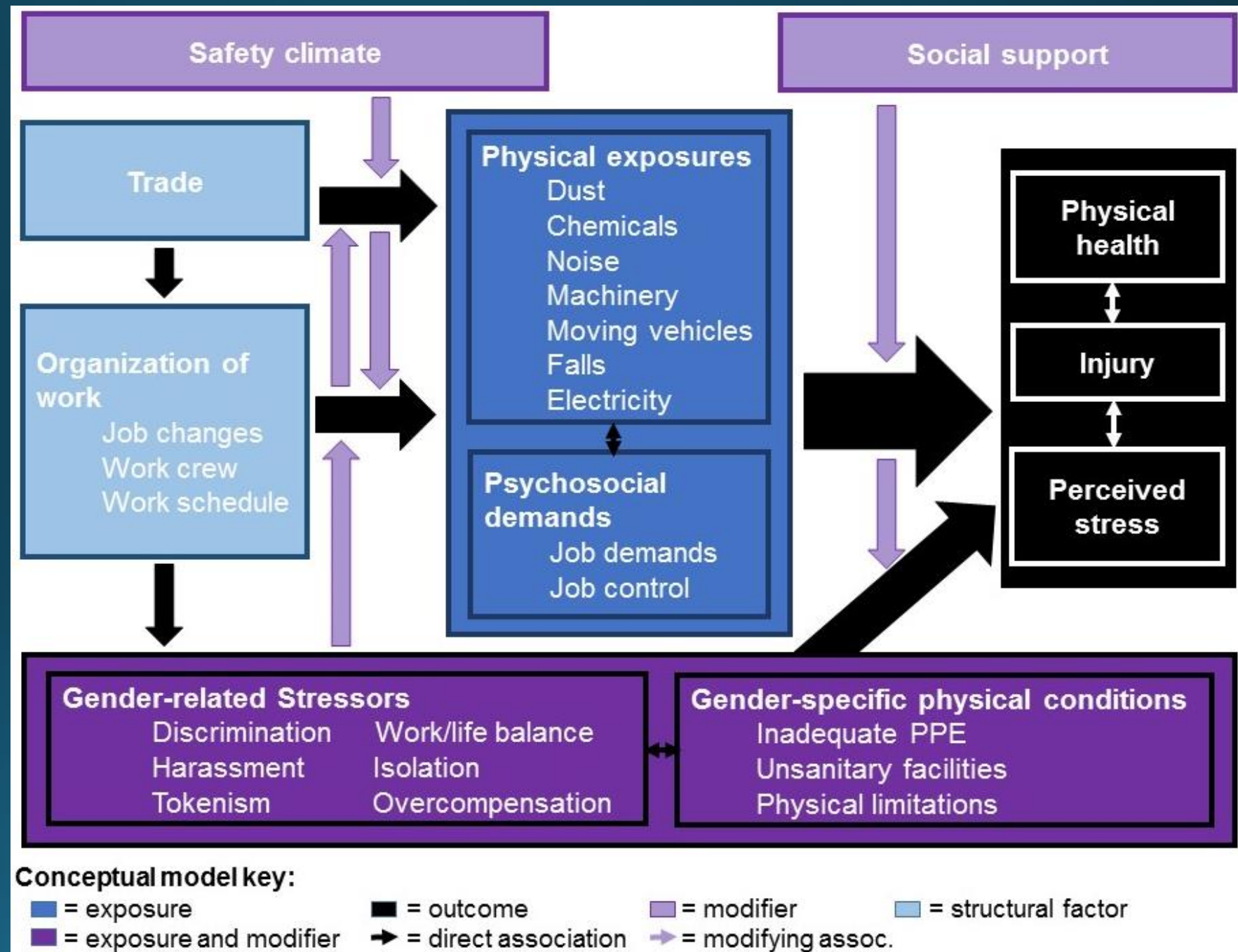
# Conclusions

Some improvements, but same main workplace stressors for tradeswomen as 20 years ago

## Solutions from focus groups

- Mentorship
- Equal training
- Women advocating for selves
- Better PPE available
- Proactive supervisors who set tone

# Conceptual Model of Workplace Stressors Affecting Health and Safety of Women in Trades





# Next steps...

## SHEWT questionnaire

- 291 surveys completed in past year
- Data currently under analysis

## Mentoring program

- Will train journey-level women and men to support female apprentices as they navigate hazards in workplace safety and culture

# Study limitations

- Purposeful sampling
- Non-generalizable data
- Survivor bias
- Might not have identified all stressors



\*Washington State Department of Transportation photo

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- To learn more about this project, please visit:  
<http://deohs.washington.edu/shewt>

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