



# Research Week 2021

## The influence of work schedule on work-family conflict among firefighters

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### Keywords

emergency workers, occupational health, shift work, work-life balance, mixed-methods

### Abstract

#### Background

Firefighters undergo significant occupational health burdens, such as physical exertion, emotional trauma, and sleep deficiency, all impacting firefighters and their families. During their off hours, firefighters reconcile physical and emotional recovery with family and home responsibilities, creating potential work-family conflict. Firefighters traditionally work on a 24-hours on/48-hours off schedule. However, a 24-hours on/72-hours off/48-hours on/72-hours off shift schedule (termed “1/3/2/3”) has been suggested as a better schedule due to increased consecutive days off, albeit with one 48-hour shift every 9 days. This study aimed to assess work-family conflict among firefighters and their partners based on these different shift schedules.

#### Methods

Focus groups were conducted with full-time firefighters, battalion chiefs, and partners (n=67) in Portland and Eugene, Oregon. Grounded theory was used to code transcripts to reveal reoccurring concepts and themes (NVivo12+). Additionally, a convenience sample of 15 firefighters (from one 24/48 station and one 1/3/2/3 station) and their partners completed the Work-Family Conflict Scale for two-weeks over three study periods, about three months apart. Data were analyzed using a linear mixed model with participant as a random factor (SPSS v27).

#### Results

The focus groups revealed two relevant themes: 1) Longer time off improves familial relationships/home responsibilities; 2) Longer time off subjectively improve sleep and/or recovery, highlighting how firefighters operating the 1/3/2/3 schedule were able to fulfill familial/home responsibilities better than those on the 24-hours on/48-hours off-shift schedule, presumably due to the additional recovery time between shifts. The Work-Family Conflict Scale results reaffirm these themes suggesting that both firefighters and

their partners perceive less work-family and family-work conflict on- and off-shift when working the 1/3/2/3 schedule.

## Conclusion

These initial findings increase our understanding of how alternative work schedules among firefighters can impact work-family relationships. These results need to be confirmed in a larger study.