Younger, and male ROI dog wardens are bitten at higher rates during work than older and female colleagues

Factors associated with dog bites to dog wardens in the Republic of Ireland (ROI) Ethan O'Neill¹, Julia Mroczkowska¹, Miguel Barbosa Fleming¹, Jack Fitzgerald¹, Adela Grendarova¹, Bradley Murphy¹, Grace O'Driscoll¹, Lucie Ressot¹, Edmond O'Sullivan², Locksley Messam¹ ¹UCD School of Veterinary Medicine, ²Cork County Council

Background

- ~75 dog wardens in ROI
- Dog bites = Dog warden occupational hazard
- Extent of risk due to age, sex and experience not quantified

Aim

- Identify factors associated with dog bites to dog wardens in the ROI
- Dog bite: "Dog holding onto a part of dog warden's body or clothes with its teeth during work in the last 6 months, whether it broke skin or not."

Methods

- Retrospective cohort study (40 ROI dog wardens)
- Self-administered questionnaire: Dog Control Nat. Seminar (Oct. 2024)
- 6-mth dog bite history, work-days to first bite (ie at risk)
- Demographic data (age, sex, work experience)
- Neg-Binomial Regression Offset = Work-days to first bite vs 6-mth risk period,
- Incidence Rate Ratios (IRR) with Robust Standard Errors (in R)



Results

(27 males, 12 females; 19 aged 50+, 21 aged 20-49; Response Rate = 89%)

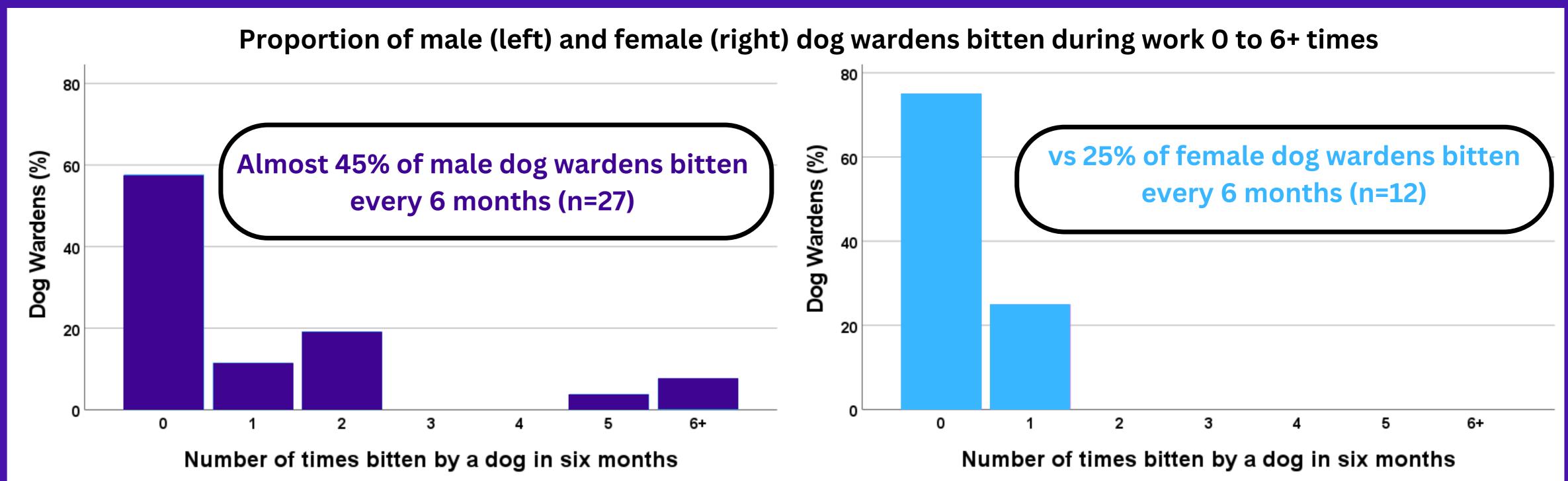


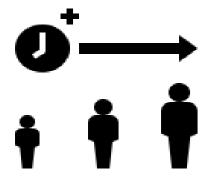


Sex (Males vs. Females)

Offset = Word-days @risk 1RR = 15.1; 95% CI: 4.2 to 55.0

No offset = 6-mth. risk period IRR = 4.6; 95% CI: 1.5 to 14.6

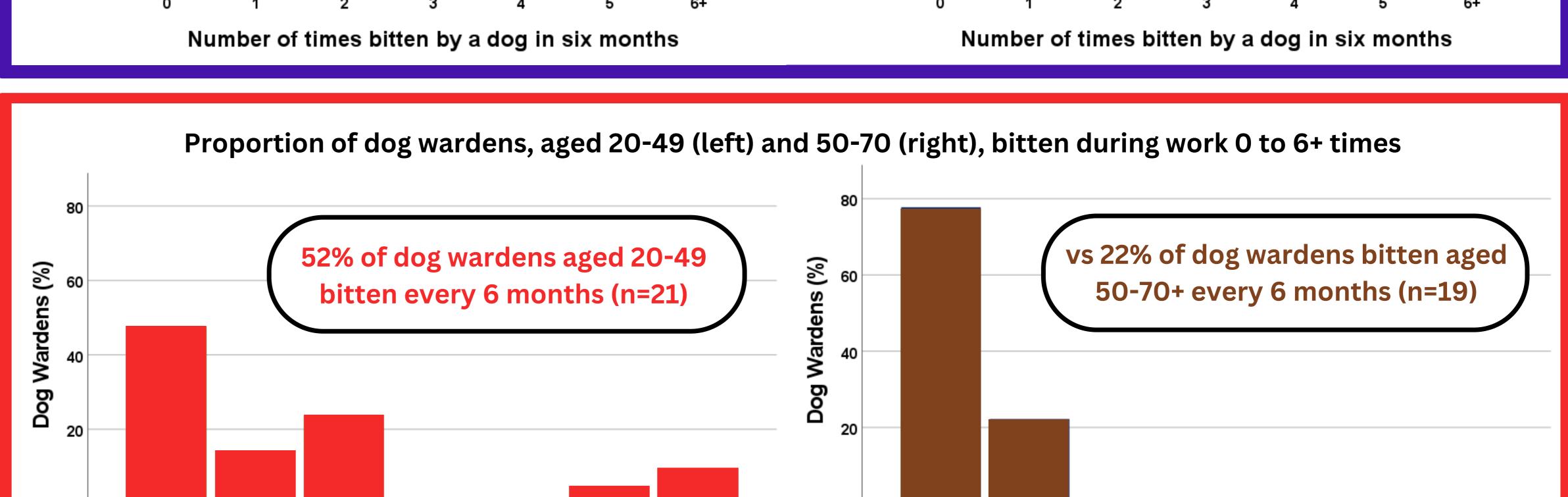




Age (<50 vs. >50)

Offset = Word-days @risk
IRR = 15.6; 95% CI: 4.8 to 52.0

No offset = 6-mth. risk period IRR = 6.4; 95% CI: 2.3 to 18.1

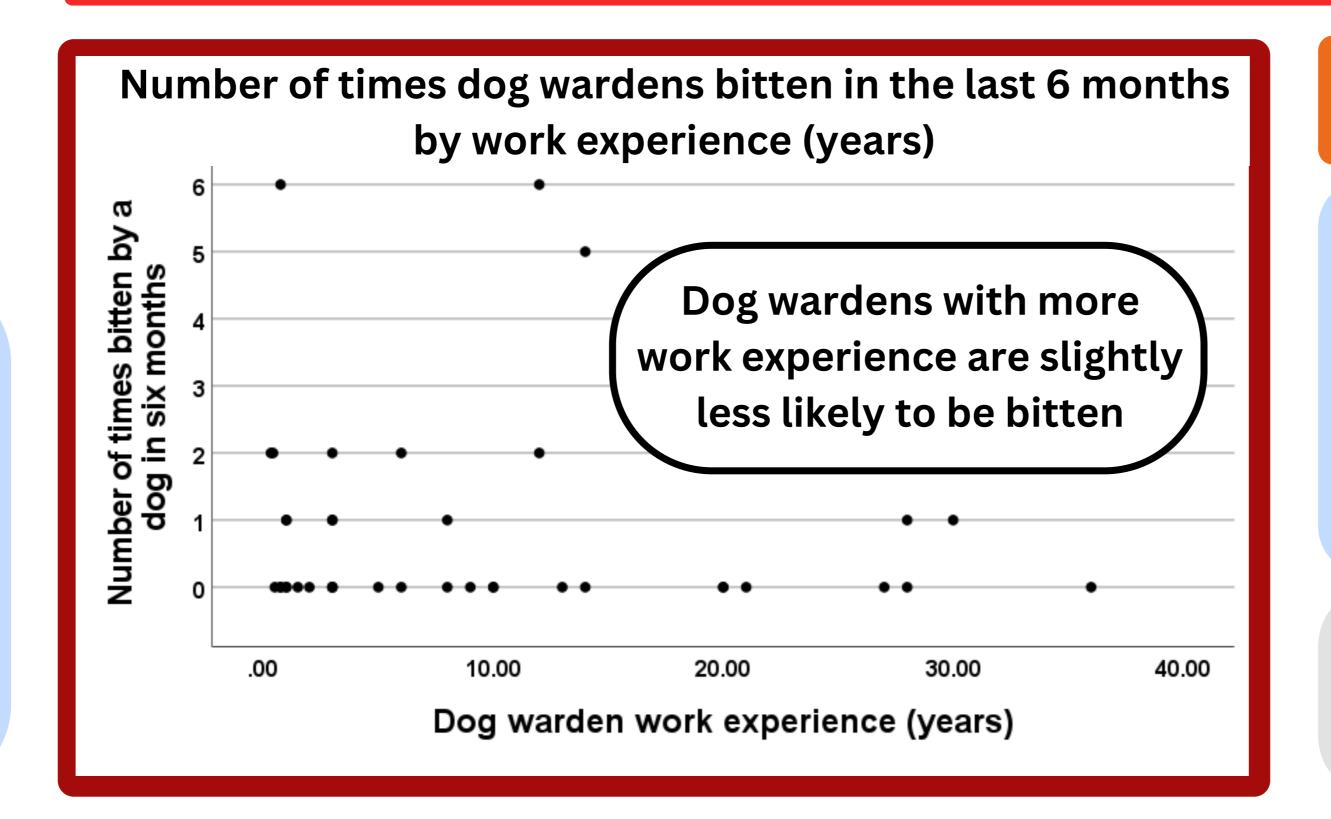




5-year Increase in work experience

Offset = Word-days @risk
IRR = 0.88; 95% CI: 0.72 to 1.11

No offset: = 6-mth. risk period IRR = 0.89; 95% CI: 0.70 to 1.10



Number of times bitten by a dog in six months

Conclusions

Number of times bitten by a dog in six months

- Rates not constant but vary by individual
- Age and sex likely important risk factors but not work experience
- Age and sex possibly correlated with job assignments
- Some non-bites possibly due to structural zeros (i.e job assignment)



