

The Skeeter Meter: Evaluating Public Behavior Change in Response to West Nile Virus Risk Alerts

Iyana Malik, M3, BSN; Randall Nett, MD; Kristin Christensen; Nicole Kelp, PhD

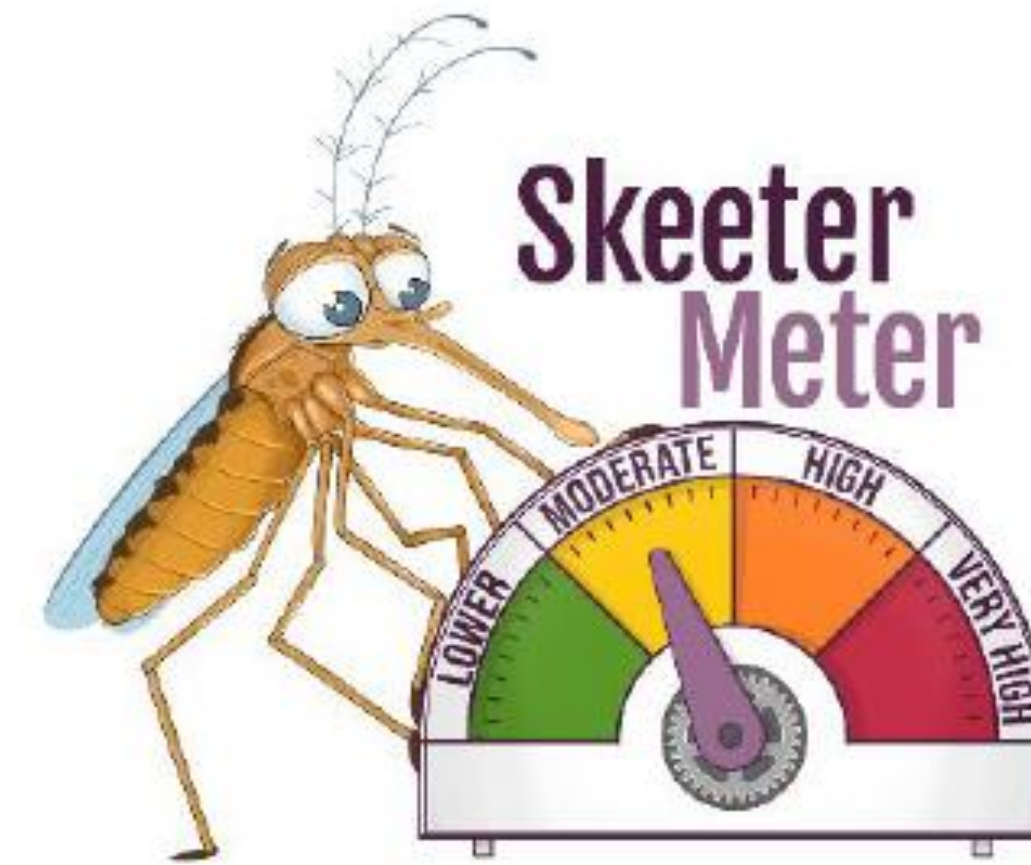
Background

- West Nile Virus (WNV) is a significant public health concern in Northern Colorado.
- The Skeeter Meter uses color-coded alerts (Yellow, Orange, Red) to show mosquito risk levels.
- This study examines how Skeeter Meter levels influence people's intended mosquito-prevention behaviors.

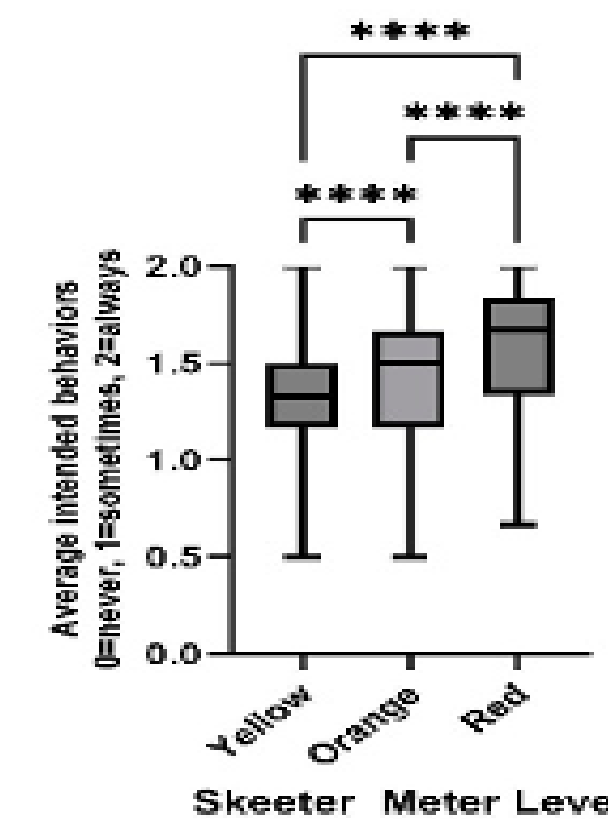
Methods

- Surveyed 130 adults living in Northern Colorado.
- Participants rated intended mosquito-prevention behaviors at three Skeeter Meter levels (Yellow, Orange, Red).
- Behaviors measured on a 0–2 scale (0 = never, 1 = sometimes, 2 = always).
- Collected demographics: age, race, and number of children/elderly in household.
- Data analyzed using a one-way repeated-measures ANOVA to compare mean intentions across levels.

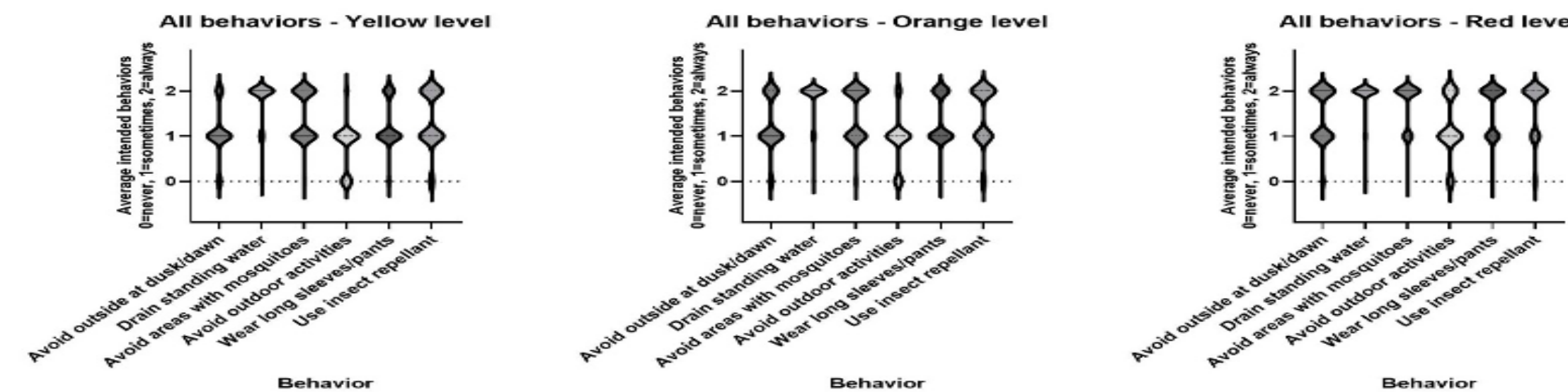
Results



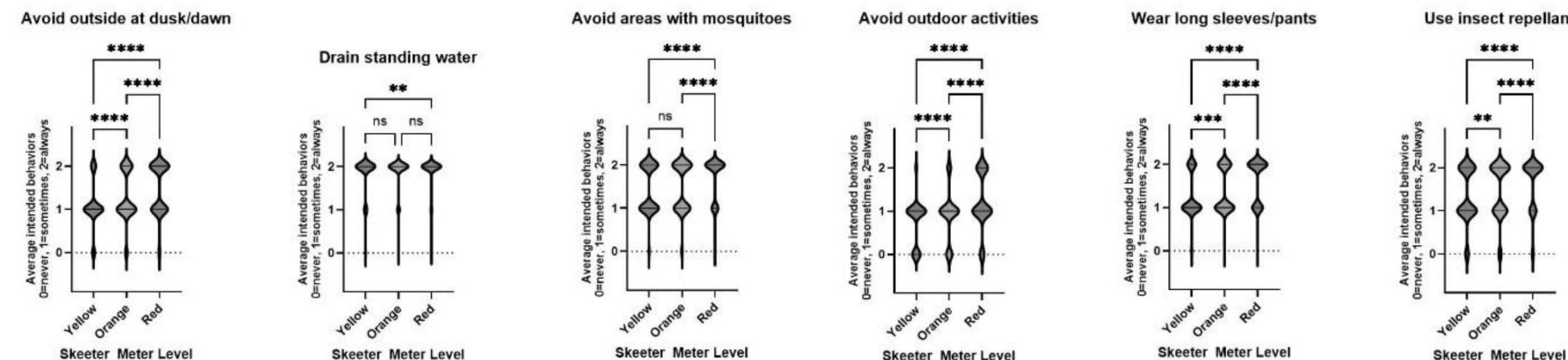
Average of all protective behaviors



Within a Skeeter Meter level, what behaviors are individuals choosing?



How does Skeeter Meter level impact each behavior individually?



Conclusions

- Higher Skeeter Meter levels increased intended protective behaviors.
- A majority of the risk levels showed significant differences in behavior intentions.
- Visible risk messaging effectively motivates mosquito-prevention actions.
- Clear, color-coded alerts can strengthen community response to WNV risk.
- Public messaging should focus on WNV-transmitting *Culex* mosquitoes and emphasize high-impact protective habits.

Implications

- Risk-based tools like the Skeeter Meter can guide timely public action.
- Clear messaging strengthens community engagement in mosquito prevention.
- Education should highlight effective behaviors against WNV-carrying mosquitoes.
- Findings can inform future public health campaigns and risk communication

Disclosures

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