

# BEEFING UP WEBSITES: A CONTENT ANALYSIS OF EXTENSION WEBSITES' VACCINATION COMMUNICATION EFFORTS FOR BEEF PRODUCERS

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## INTRODUCTION

- It is crucial to ensure beef producers are providing safe and secure products for consumers.
- **In 2023, 96% of beef cattle operations were family owned with average herds totaling 44 head.**
- **Only 59.4% of small herds were vaccinated**
- The Cooperative Extension Service (CES) provides farmers and ranchers the opportunity utilize agricultural research with the possibility of improving methods to farming

## THEORETICAL FRAMEWORK

- Defining Advertising Goals for Measured Advertising Results (DAGMAR)
- Four stages of "consumer product acceptance"

**Awareness → Comprehension → Conviction → Action**

- **We specifically considered the awareness stage as the initial step for Extension systems to consider when communicating about vaccinations via their websites.**

## PURPOSE

Evaluate vaccination information on Extension websites

## RESEARCH QUESTIONS

1. How do state Extension services communicate about vaccinations for beef producers via websites?
2. What information is provided by Extension websites for small-scale producers?
3. How does vaccination information vary on Extension websites for large versus small-scale beef producing states?

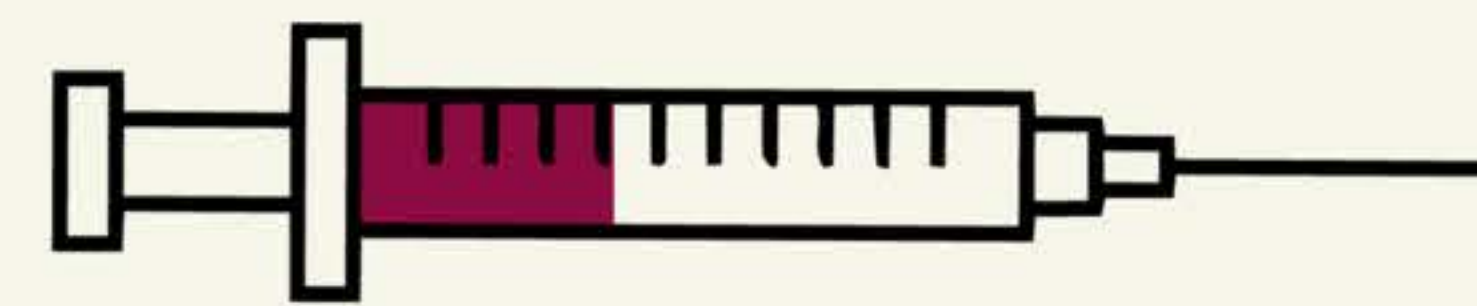
## METHODOLOGY

- Content Analysis
- Sampled 10 websites from the middle third of beef producing states as documented by Data Pandas (2023)

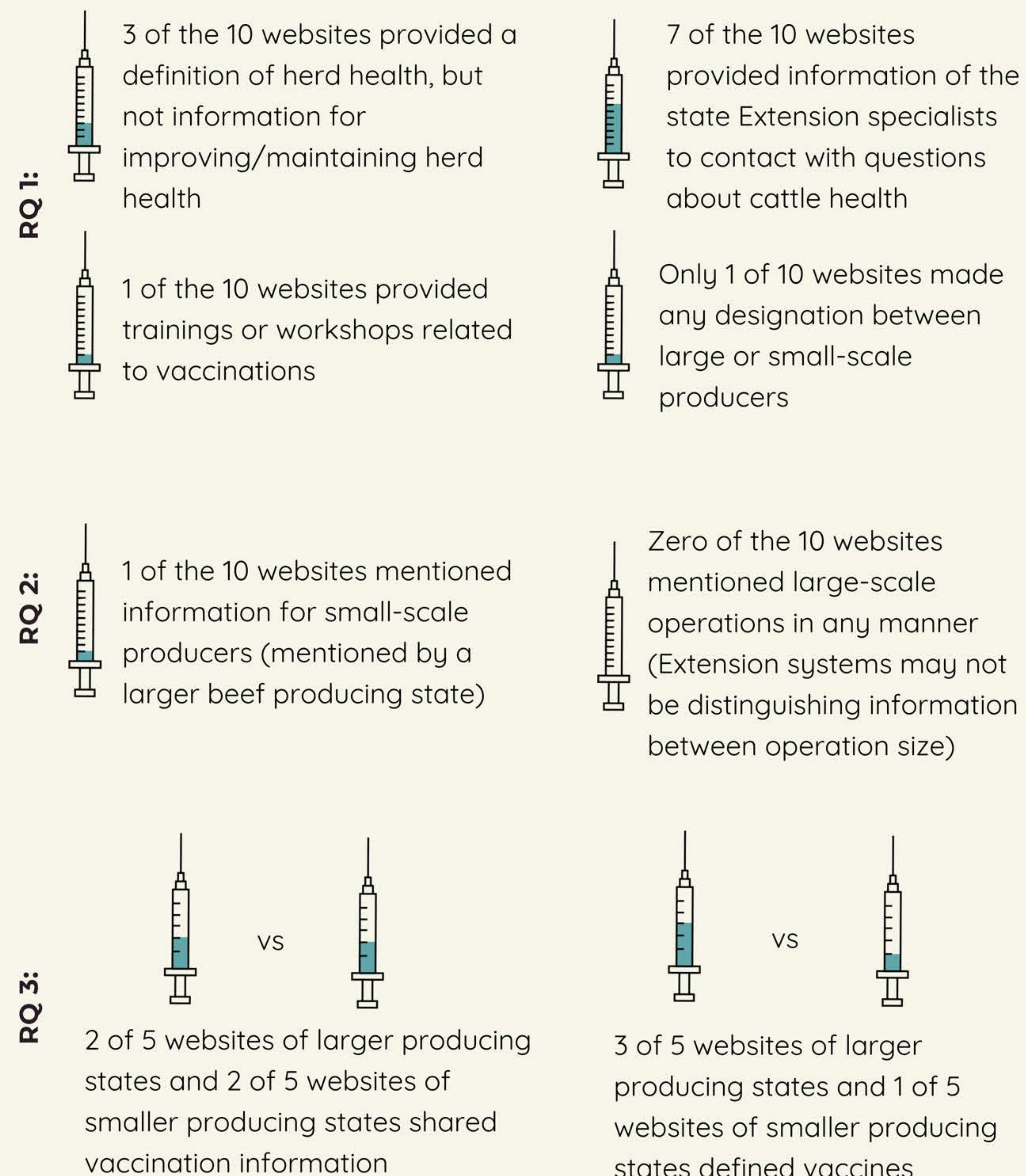
Larger Beef Producers	Smaller Beef Producers
Alabama	Utah
Colorado	Ohio
Virginia	Wisconsin
Oregon	Nevada
Idaho	Washington

- A priori codes using a codebook adapted from Steede et. al, 2019
- 2 coders independently coded 28 variables after coder training
- Intercoder reliability determined with Krippendorff's alpha
- Variables below .667 (n=19) were recoded to improve reliability

## FINDINGS



**ONLY 4 OUT OF THE 10 EXTENSION WEBSITES HAD ANY INFORMATION ON VACCINES FOR BEEF PRODUCERS.**



## CONCLUSIONS

- Sampled Extension websites are not effectively communicating the need for vaccinations for producers
- **Some websites encouraged the website visitors to reach out, but little or no information is provided on vaccinations themselves, limiting people from entering the awareness stage of "consumer product acceptance"**
- Information provided was not designated to operation size, potentially limiting producers from accessing the information if it is not in their perceived needs
  - This further emphasizes the need for awareness and comprehension stages of the DAGMAR theory.
- Overall, there was a lack of information available to **any size** producer about vaccinations

## IMPLICATIONS & RECOMMENDATIONS

- Extension systems should consider vaccination trainings for both large and small beef producers.
  - Communicate and advertise the availability of such trainings
- Extension websites should be updated and adapted for usability.
- **Make herd health information more easily accessible and encourage producers to reach out to Extension specialists**

**FOR MORE PRODUCERS TO ENTER THE AWARENESS STAGE OF VACCINATION NEEDS, EXTENSION RESEARCH PLACED ONLINE CAN BE A VALUABLE RESOURCE.**

