



# THE ROLE OF PUBLIC HEALTH NURSES IN EMERGENCY PREPAREDNESS

*Emily Litt, RN, MS, PHN*

*University of Minnesota, School of Nursing*

*DNP Candidate*

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# Problem Statement

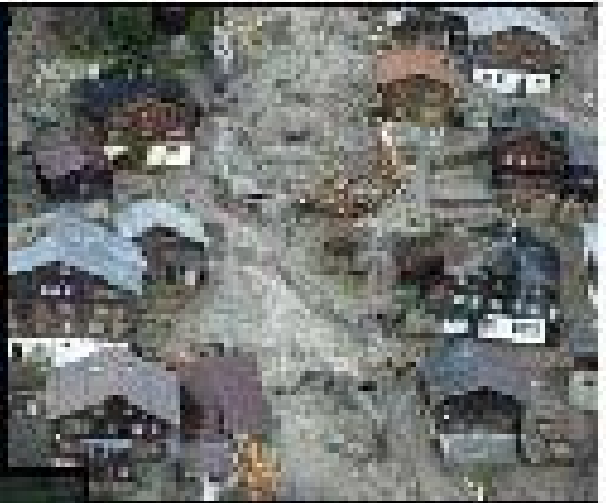
Public health nurses (PHNs) are necessary to the mitigation, planning, response, and recovery aspects of any emergency, the specific roles that PHNs play in emergency preparedness are not well defined or understood.



## Overarching Goal

Describing the role of PHNs ensures that they are appropriately utilized in the mitigation, planning, response, and recovery aspects of any emergency and the specific roles that PHNs play in emergency preparedness are well defined and understood.







# BACKGROUND

- Engaging in all-hazards planning and response
- Adding an increased workload without relief from current responsibilities
- Balancing emergency preparedness (EP) with traditional public health nurse (PHN) roles





## BACKGROUND, CONT.

- Integrating EP into current PHN practice
- Utilizing an incident command system
- Creating uncertainty and a need to demonstrate contributions
- Rethinking professional strategies, Engaging in new learning, and Evaluating progress



# NEEDS ASSESSMENT

## Professional Experience

- Carver County Public Health
- Children's Hospitals and Clinics
- MN Department of Health

## Assessment

- Observations
- Interviews
- Documentation



# NEEDS ASSESSMENT, CONT.


|          | <b>Observations</b>  | <b>Interviews</b>  | <b>Documentation</b>   |
|----------|--|--|--|
| Audience | PHNs participating in the DOC and SEOC.                                      | PHNs who work in preparedness and other PHN staff trained for a response but not currently assigned to daily work in preparedness. | Job descriptions of PHNs who work in emergency preparedness. Evidence-based nursing literature about the role of PHNs. |
| Tasks    | PHNs performing assigned roles in response to actual emergencies and drills. | Informal interviews of key PHN staff.  | Job descriptions and evidence-based literature about the role of PHNs.   |
| Content  | PHNs' real-time emergency and drill responses.                               | Examples of work of PHNs identified during interviews. Interviews with PHN directors and managers.                                 | Emergency response plans to identify designated role of PHNs.  |







# LITERATURE REVIEW

- Inclusion/Exclusion Criteria
  - Ovid Medline, CINAHL, PsychINFO search
  - Initial review – selection of 68 articles
  - Narrowed to 36 articles
  - Reevaluated 13 articles previously excluded
  - Second review – selection of 7 articles
- 

# LITERATURE SYNTHESIS

- Public health nursing preparedness history
- Public health nursing preparedness role
- Public health nursing preparedness competencies
- Public health nursing preparedness training
- Role ambiguity





# PROJECT SCOPE

- To define the role of PHNs and clarify the understanding of their roles in EP
- PHNs from MN
- Included three (3) components:
  - Online Survey
  - Focus Groups
  - Pilot Training for PHNs



# Mission Statement

To describe the specific roles that PHNs play in emergency preparedness. The outcomes of this project defined the role and clarified the understanding of the role of PHN. PHNs also recognize their capacity to utilize their public health nursing skills to perform their role in emergency preparedness.






# OBJECTIVES

## Process

- Established communication with PHNs
- Developed Web-based online survey
- Identified knowledge and perceptions of PHNs

## Impact

- Defined roles and responsibilities
  - Provided analysis and linked to interventions
  - Created training session for PHNs
- 



# THREATS AND BARRIERS

## ○ Intraprofessional

- Education & Training
  - Novice to Expert
- Prioritizing Services
  - Old to New
  - Funding
  - “Picking and Choosing”

## ○ Interprofessional

- New partners – different approach



# THREATS AND BARRIERS, CONT.

- Community/Provider
  - Evidence to support PHN role
  - Funding challenges
- Organizational
  - Decision-makers
  - Incident Management System (IMS)
- Ethical
  - Individual vs. Population
  - Abuse of the system





**September 2007**



**Ideas and concepts of the role from PHNs.**



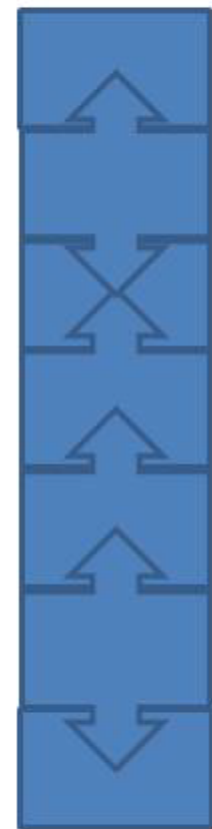
**February 2008**



**Joining of ideas and concepts.**



**August 2008**




**The PHN role in EP defined.**





# MILESTONES

- IRB Approved – December 2007
  - Notified Project to PHNs – December 2007
  - Survey Developed and Released – January 2008
  - Conducted of Focus Group – February 2008
  - Analyzed Data – March & April 2008
  - Conducted Pilot Training – May 2008
- 



# IMPLEMENTATION

## Online Survey

- Reliable, user-friendly
  - Survey Monkey
- Capture perceptions and thoughts of PHNs
- Completed in January 2008

## Focus Groups

- Face-to-Face
- Real-life perspective
- Seven locations across MN



## IMPLEMENTATION, CONT.

### Analysis

- Identified activities, traits, and characteristic of PHNs
- Obtained from online survey & focus groups
- Compared with literature

### Pilot Training

- Based on analysis
- Interactive and informational
- PowerPoint presentations, individual, & group activities



# RESULTS – ONLINE SURVEY

- 201 PHNs completed the survey
- Nominal, ordinal & short narrative questions
  - 7 demographic questions
  - 15 content specific questions
- 53 separate tasks, responsibilities, & traits identified
  - Group by theme
  - Identified 10 most frequently reported

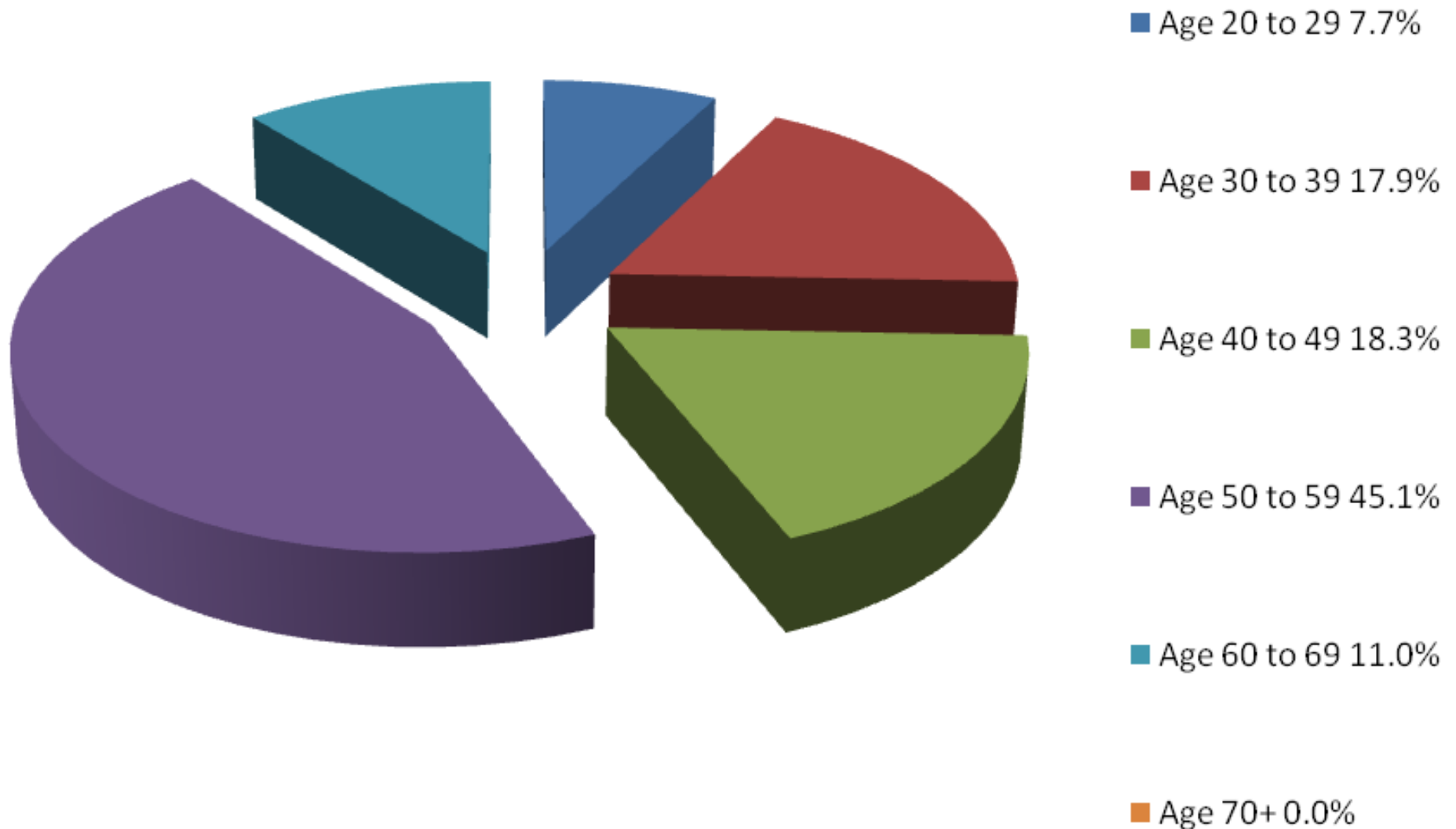


# RESULTS – ONLINE SURVEY, CONT.

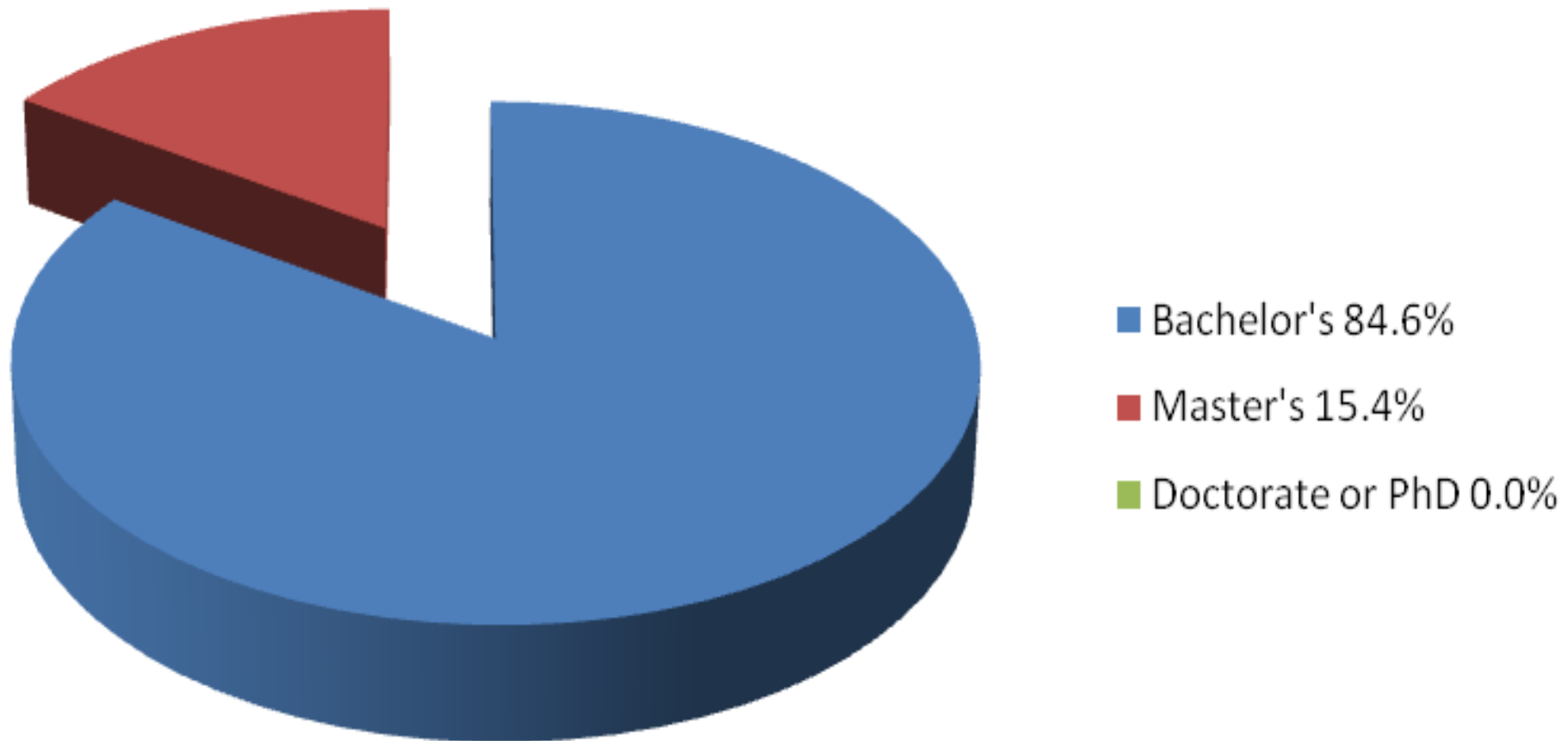
|   | <b>Work in EP</b> | <b>Do not work in EP</b> |
|---|-------------------|--------------------------|
| Who currently work full time (30h/w or more)                          | 65.2%             | 87.7%                    |
| Whose EP roles are reflected in their position description            | 78.3%             | 50.9%                    |
| Whose EP responsibilities are related to DP&C areas of responsibility | 95.7%             | 74.9%                    |
| Who have taken an EP course and/or training                           | 100%              | 83%                      |
| Who are expected to respond to an emergency by their department       | 95.7%             | 94.2%                    |
| Who will respond to an emergency if asked to by their department      | 95.7%             | 89.5%                    |



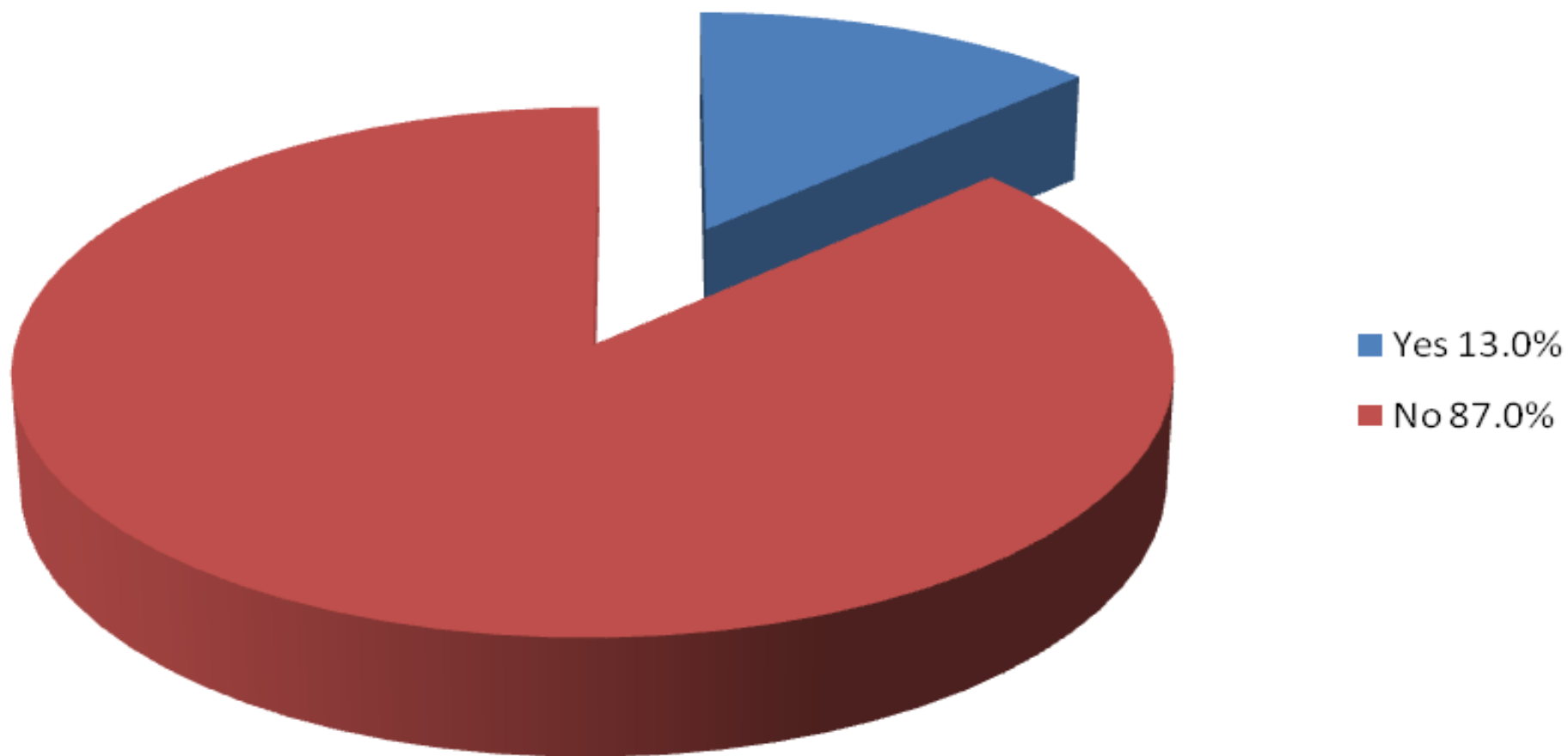
# Age of PHNs Completing Survey



# Level of Nursing Education




# Percent of PHNs that Work Directly in Emergency Preparedness







## RESULTS – ONLINE SURVEY, CONT.

1. Manage stress well (e.g., makes decisions well) (13)
  2. Have good organizational skills (9)
  3. Have good time management (e.g., organized) (9)
  4. Have leadership skills (e.g., empowers others) (8)
  5. Communicate well (8)
  6. See the big picture (5)
  7. Work well with others (e.g. collaborate) (4)
  8. Remain flexible (4)
  9. Stay calm (4)
  10. Trustworthy and caring (e.g., maintains integrity) (3)
- 



## RESULTS – ONLINE SURVEY, CONT.

- Results were congruent with established PHN competencies for EP
- Four sets of competencies
- Public Health Nurse Competencies for Surge Events (Polivka, et al., 2008)



## RESULTS – ONLINE SURVEY, CONT.

*The competencies for PHNs for public health surge [emergency] events are consistent with the public health emergency competencies and with the educational competencies for RNs, but move beyond the generic clinical level into specialty practice to build and sustain effective care delivery with the specialty scope....These competencies specify the knowledge, behaviors, and tasks that a PHN working in any setting (e.g., health department, clinic, school) needs in order to be adequately prepared to function in a public health surge [emergency]. (Polivka, et al., 2008, p. 162)*

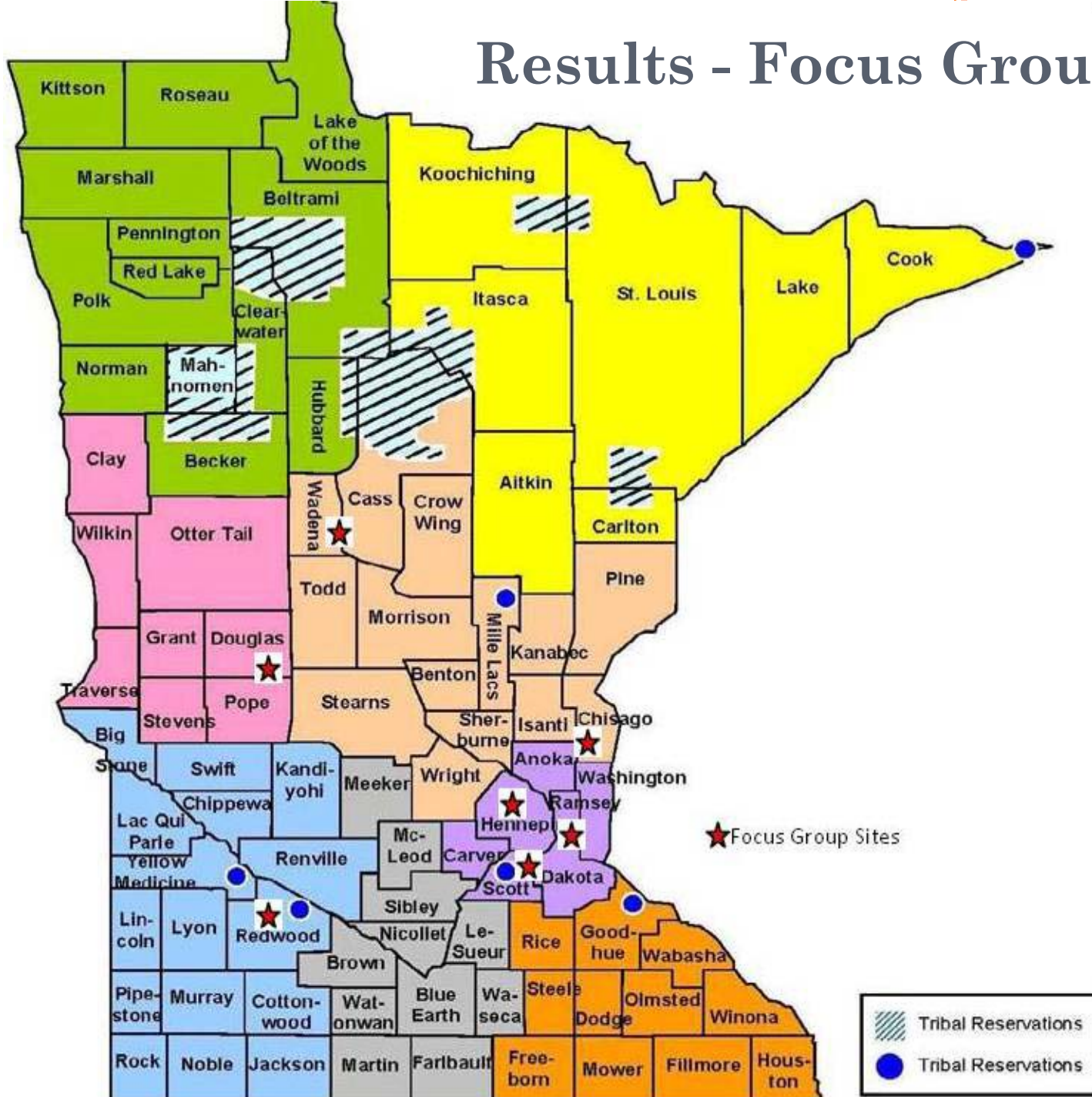


# RESULTS – FOCUS GROUPS

- 7 Locations across MN
- 10 open-ended discussion questions
- Audio taped and transcribed
- Identified key words and themes
  - Compared to online results
  - Results were congruent
    - Except in one area: Public Health Intervention Wheel

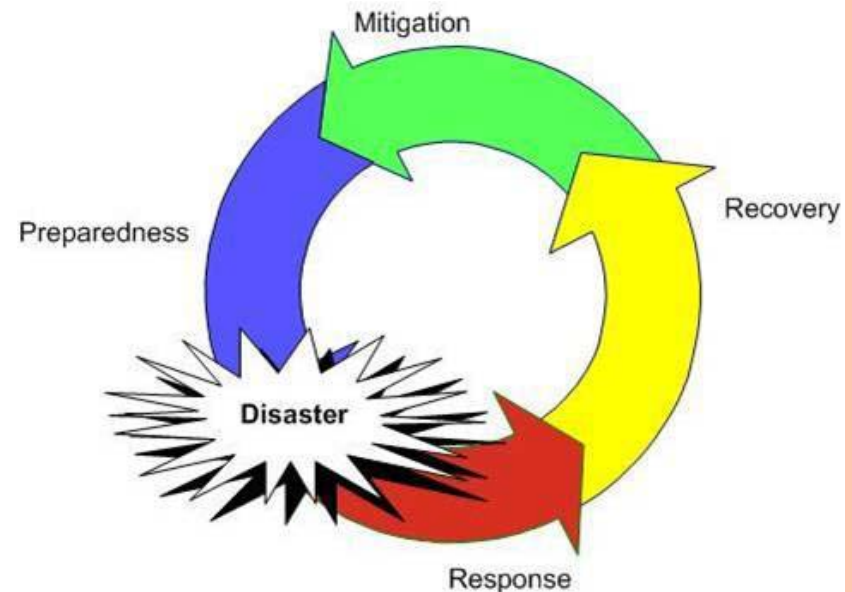


# Results - Focus Groups, cont.



## RESULTS – FOCUS GROUPS, CONT.

*“PHNs come into the situation or crisis with an outline and it seems that first responders or other emergency management seem to come in with just bullet points” (Participant, Bloomington, MN)*



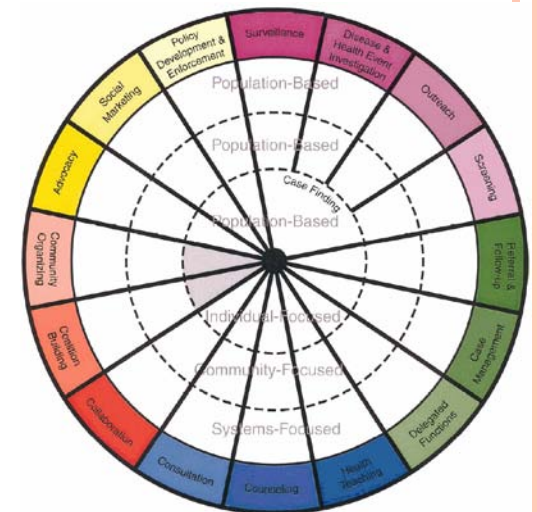
## RESULTS – FOCUS GROUPS, CONT.

*“Public health nurses bring a broad range of knowledge and skills to emergency planning and response. . . Population-focused care is the purview of public health. . .and must remain the purview of public health nursing surge [emergencies] events” (Polivka, et al., 2008, p. 164)*



## RESULTS – FOCUS GROUPS, CONT.

*“Our function as public health nurse in a disaster [role] is really the same as our function in our every day [work]. What do we do every day? How we function, whether it’s a minor thing that’s going on, a planned thing or an unplanned thing...we use the same skills”*  
*(Participant, Douglas County)*





## RESULTS – FOCUS GROUPS, CONT.

*“Public health nursing has the approach on the population-based approach of how it affects the whole community and the system as well as the knowledge of how it affects the individual and family structure as well. Some professionals are more individual oriented than whole community oriented. And even some nurses are more technical and would be happy just to dispense meds...planners can look at the entire emotional response”*  
*(Participant, Wadena, MN)*



# RESULTS – PILOT TRAINING SESSION

- Pre-test, Post-test & Final training evaluation
  - 7 of 10 participants completed
  - 100% of participants correctly answered questions 5, 6, 7, & 8 correct on pre and post-tests
  - Evaluation responses were either “very satisfied” or “satisfied” or “excellent” or “very good”



# RESULTS – PILOT TRAINING SESSION, CONT.

- Areas for improvement
  - More time
    - “more time for afternoon activities”
    - “increase time allowed for small group activities”
    - “slightly more time from breakout activities”
    - “allow more time for discussion”





# RESULTS – PILOT TRAINING SESSION, CONT.

- Application to practice
  - “develop further training on competencies for staff”
  - “relate the information to supervisory staff”
  - “continuing to identify what competencies and interventions are used”
  - “teaching other staff what was learned”
  - “sharing the PHNs long-standing history with others”
  - “having more clarity of the my PHN role”



# LEADERSHIP

- Teamwork
  - Author
  - Project Team
- Stakeholders
- Interprofessional Collaboration
- Change Theory

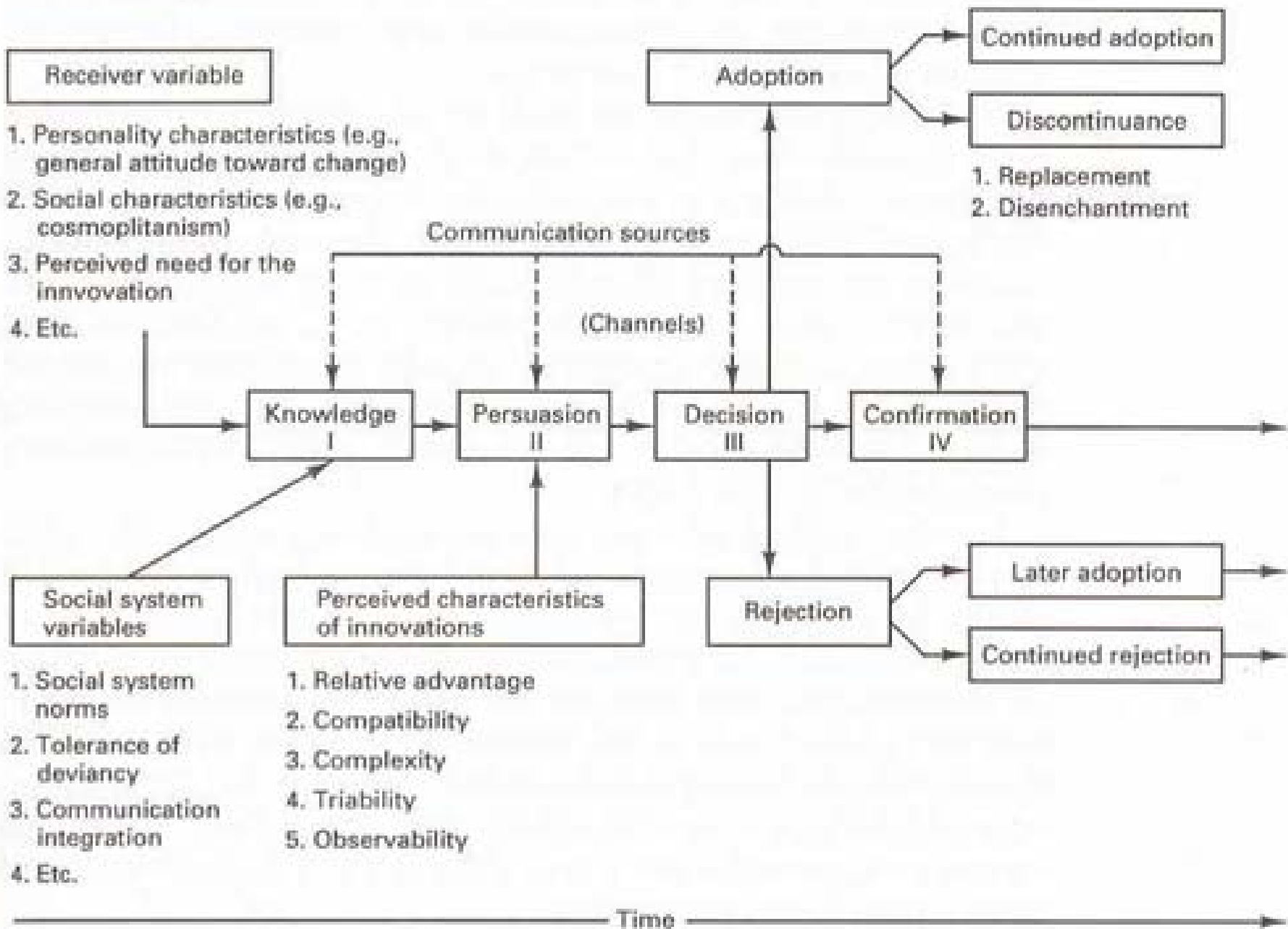




### Antecedents

### Process

### Consequences



# CHALLENGES

- Communication
  - Lacked face-to-face
- Participant Solicitation
  - Competing priorities
  - Distance





# DISCUSSION

- Sustainability
  - Online Module
- Impact/Success
  - Requests for further training
  - Large number of respondents
- Addition to Practice
  - SON Research Day
  - APHA
  - Sophia Award



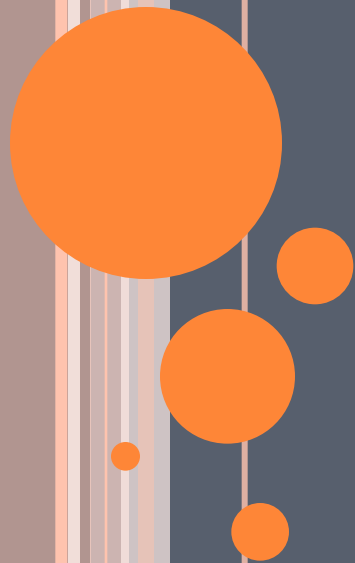




# CONCLUSIONS

- Affect on Health Outcomes
- Health Policy Implications
- Future Direction





QUESTIONS?