Systems for Action
National Coordinating Center
Systems and Services Research to Build a Culture of Health

*Strategies to Achieve Alignment, Collaboration, and Synergy across Delivery and Financing Systems*

# Classifying Multi-Sectoral, Multi-Organizational Health Communication Networks

*Research-in-Progress Webinar*
*Wednesday, August 22, 2018*
*12:00-1:00 pm ET/ 9:00 am-10:00 am PT*

*Funded by the Robert Wood Johnson Foundation*

College of Public Health
*Center for Public Health Systems and Services Research*

# Agenda

**Welcome:** **Shana Moore, PhD**
*Director of Dissemination and Research Development*
RWJF Systems for Action National Coordinating Center
University of Kentucky College of Public Health

**Presenters:** **Anna G. Hoover, PhD, MA**
*Co-Director*
RWJF Systems for Action National Coordinating Center
*Assistant Professor*
Preventive Medicine and Environmental Health
University of Kentucky College of Public Health

**Dominique Zephyr, MA**
*Statistician*
RWJF Systems for Action National Coordinating Center
University of Kentucky College of Public Health

**Commentary:** **Danielle M. Varda, PhD**
*CEO and Co-Founder*
Visible Network Labs

**Q & A:** Moderated by **Shana Moore, PhD**

# Presenter

**Anna G. Hoover, PhD, MA**

*Co-Director*

RWJF Systems for Action National Program Office

&

*Assistant Professor*

Preventive Medicine and Environmental Health

University of Kentucky College of Public Health

# Presenter

**Dominique Zephyr, MA**

*Statistician*

RWJF Systems for Action National Program Office

University of Kentucky College of Public Health

# Commentary Speaker

**Danielle Varda, PhD**

*CEO and Co-Founder*

Visible Network Labs

www.visiblenetworklabs.com

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# Classifying Multi-Sectoral, Multi-Organizational Health Communication Networks


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*Assistant Professor, Department of Preventive Medicine and Environmental Health*
University of Kentucky

Dominique Zephyr, MA
*Center for Public Health Systems and Services Research*
University of Kentucky


S4A Research-in-Progress
22 August 2018

College of Public Health
*Center for Public Health Systems and Services Research*

# Agenda

- Background
- Methodology
- Emerging Findings
- Next Steps

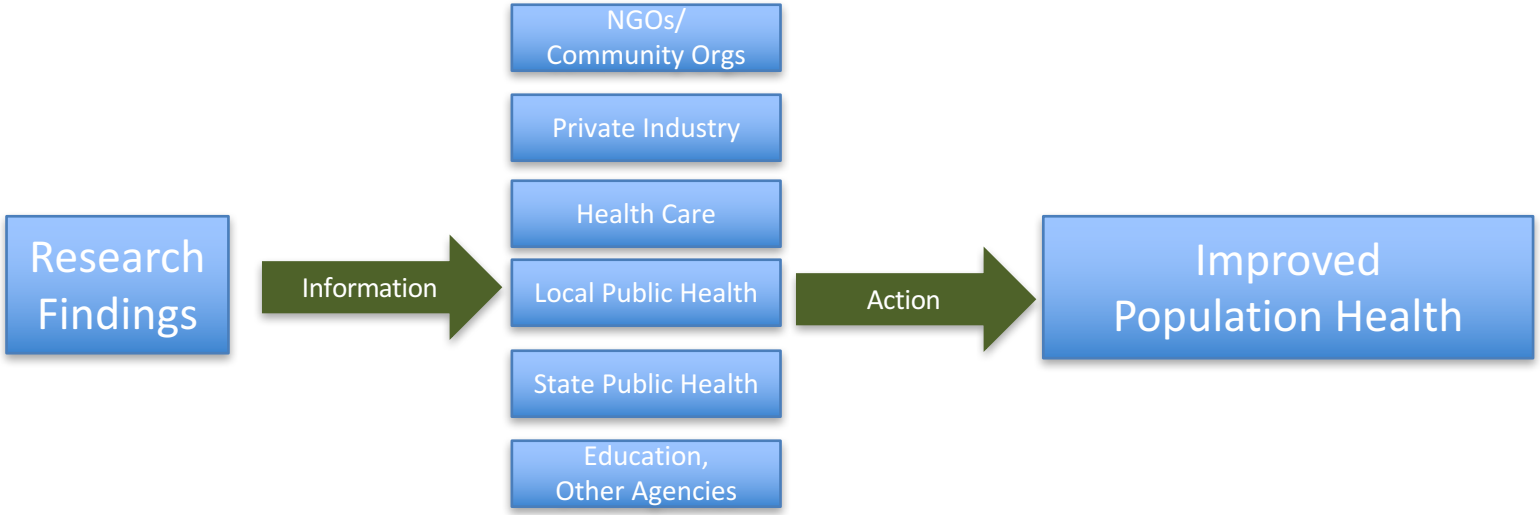
# Background: Research Translation, Dissemination, and Implementation

# Background: The Importance of Multi-Sectoral Communication Networks

- **Health Communication:** the study and use of methods to inform and influence individual and community decisions that enhance health. (*Freimuth & Quinn, 2004)*
- Organizational Sensemaking Capacity
  - *Increased Number and Diversity of Organizations*
  - *Recognize More Communication Opportunities and Challenges*
- Expanded Reach
  - *Amplify, complement, and reinforce messages*
  - *Different Audiences*
  - *Different Channels*
- Varying Levels of Organizational Credibility with Key Stakeholders

# Background: Reality

Many sectors play critical roles in communicating evidence-based health information and deploying related health promotion and prevention programs.

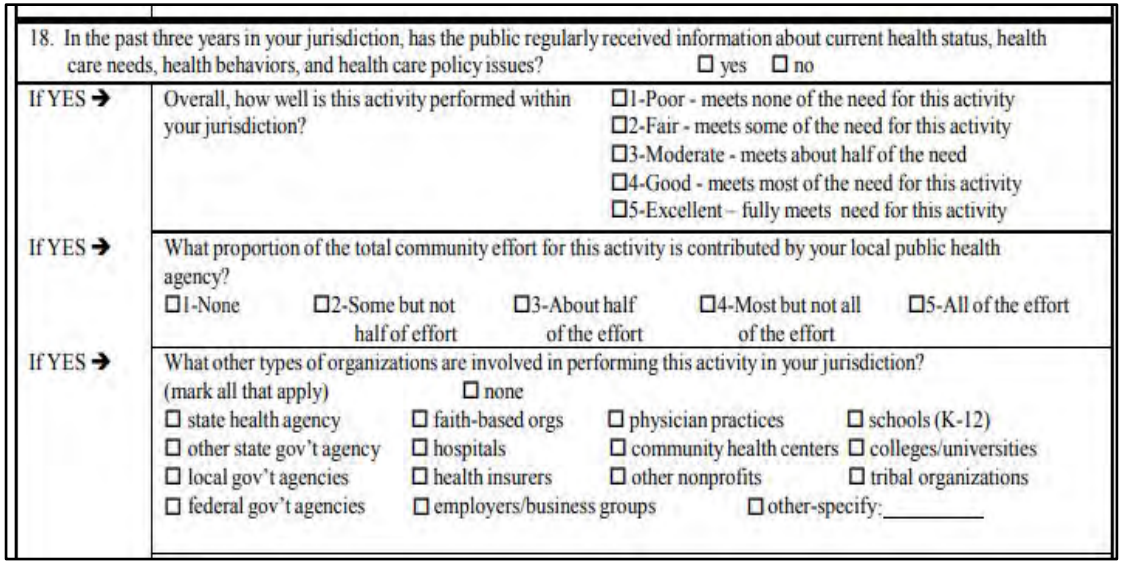



Fragmentation of information flows across and generated by these sectors can inhibit the dissemination and implementation of evidence-informed strategies for improving population health and well-being, while collective efforts could amplify key messages and programs.

# Methodology: Data Source

## National Longitudinal Survey of Public Health Systems

- Cohort of 360 communities with at least 100,000 residents
- Followed over time: 1998, 2006, 2012, 2014**, 2016
- Local public health officials report:
  - ***Scope***: availability of activities
  - ***Network density***: organizations contributing to activity
  - ***Network centrality***:
  - strongest central actor
  - ***Quality***:
  - perceived effectiveness of activity



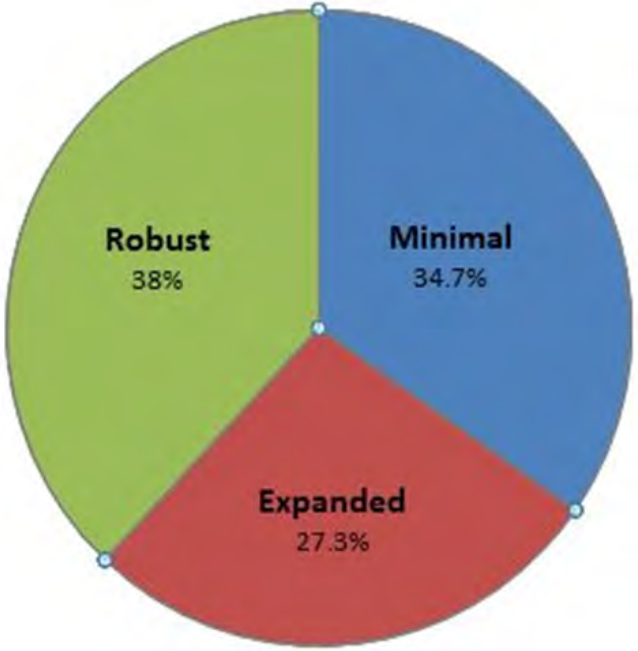
| | |
|---|---|
| 18. In the past three years in your jurisdiction, has the public regularly received information about current health status, health care needs, health behaviors, and health care policy issues? ☐ yes ☐ no | |
| If YES → | Overall, how well is this activity performed within your jurisdiction? ☐1-Poor - meets none of the need for this activity ☐2-Fair - meets some of the need for this activity ☐3-Moderate - meets about half of the need ☐4-Good - meets most of the need for this activity ☐5-Excellent – fully meets need for this activity |
| If YES → | What proportion of the total community effort for this activity is contributed by your local public health agency? ☐1-None ☐2-Some but not half of effort ☐3-About half of the effort ☐4-Most but not all of the effort ☐5-All of the effort |
| If YES → | What other types of organizations are involved in performing this activity in your jurisdiction? (mark all that apply) ☐ none ☐ state health agency ☐ faith-based orgs ☐ physician practices ☐ schools (K-12) ☐ other state gov't agency ☐ hospitals ☐ community health centers ☐ colleges/universities ☐ local gov't agencies ☐ health insurers ☐ other nonprofits ☐ tribal organizations ☐ federal gov't agencies ☐ employers/business groups ☐ other-specify:_____ |

- *** Expanded sample of 500 communities <100,000 added in 2014 wave*

# Methodology: Analytic Strategy

- Health communication networks were classified based on their density, i.e. the proportion of organizations that contribute to these activities in each community.
- Identify how different kinds of organizational health communication networks are associated with the probability of routinely provide community health information to elected officials, lay publics, and mass media.
- Control variables: existence of board of health, unemployment rate, poverty rate, percent uninsured, percent non-white, percent with college education, and percent over 65 years old.

# Emerging Findings: Network Types




**Minimal Networks** *(Network density 0-0.25)*

- Few organizational communicators
- Hospitals, state health agencies, other local agencies

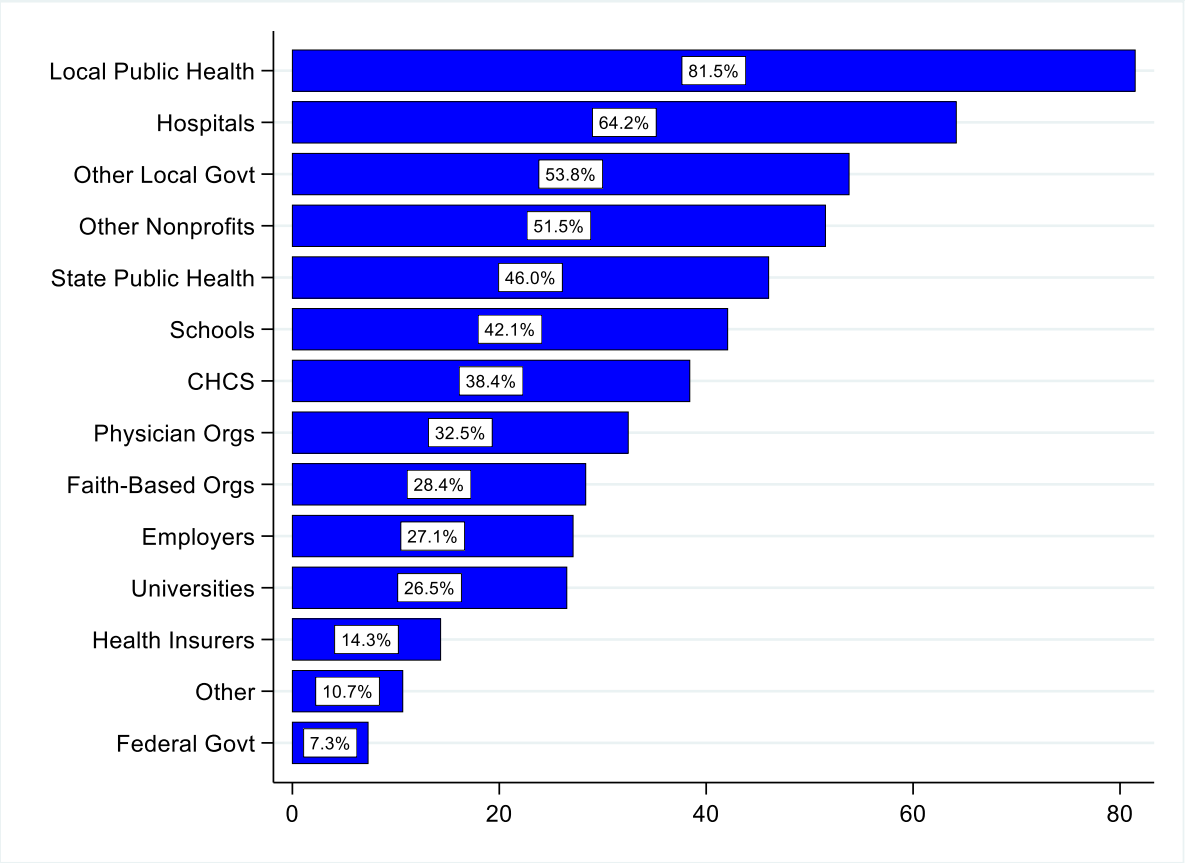
**Expanded Networks** *(Network density 0.25-0.50)*

- Increased number and diversity of organizational communication partners
- Include more non-faith-based nonprofits, community health centers, schools, physician organizations

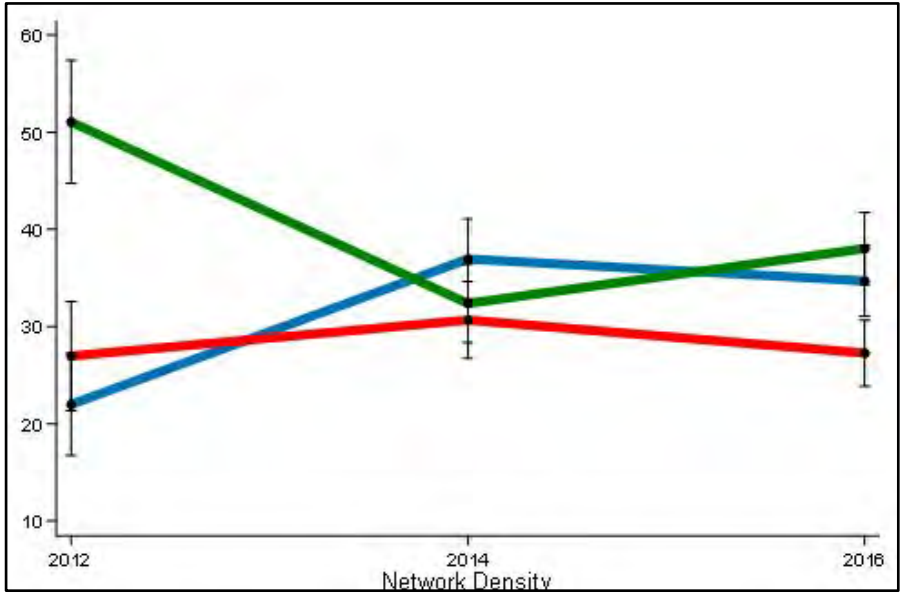
**Robust Networks** *(Network density 0.5-1)*

- Many communication partners across sectors
- Include more employers, faith-based organizations, and universities
- Most common network type, especially in urban areas

# Emerging Findings: Organizations that Contributed to Community Health Communication Activities in 2016



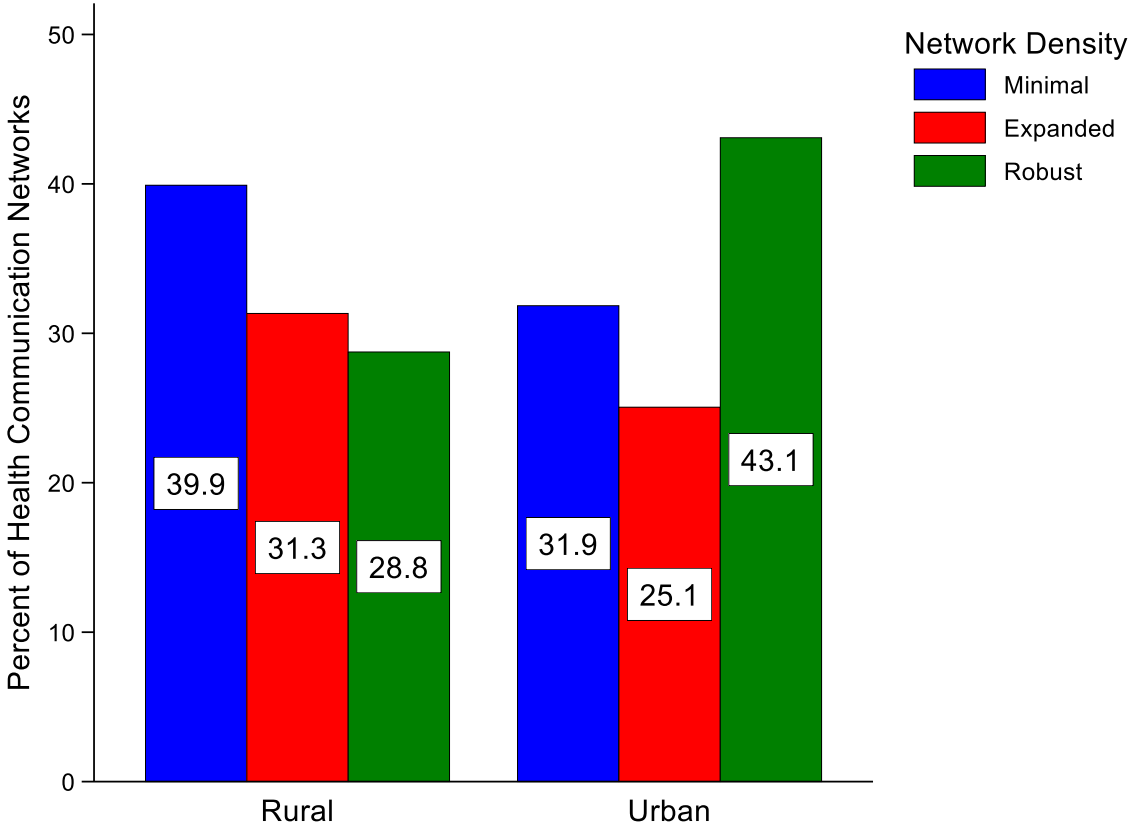
# Emerging Findings: Longitudinal Change in Prevalence of Communication Network Types



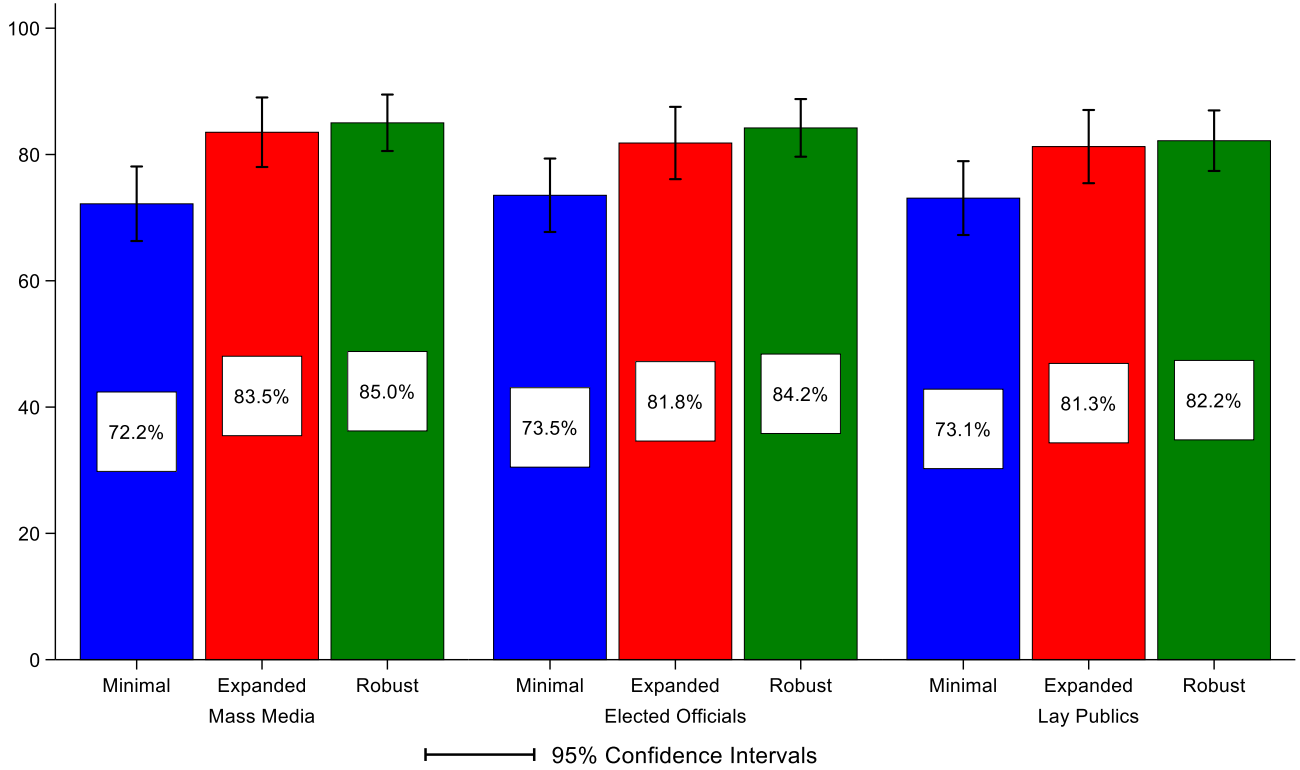

**Legend**

- Minimal
- Expanded
- Robust

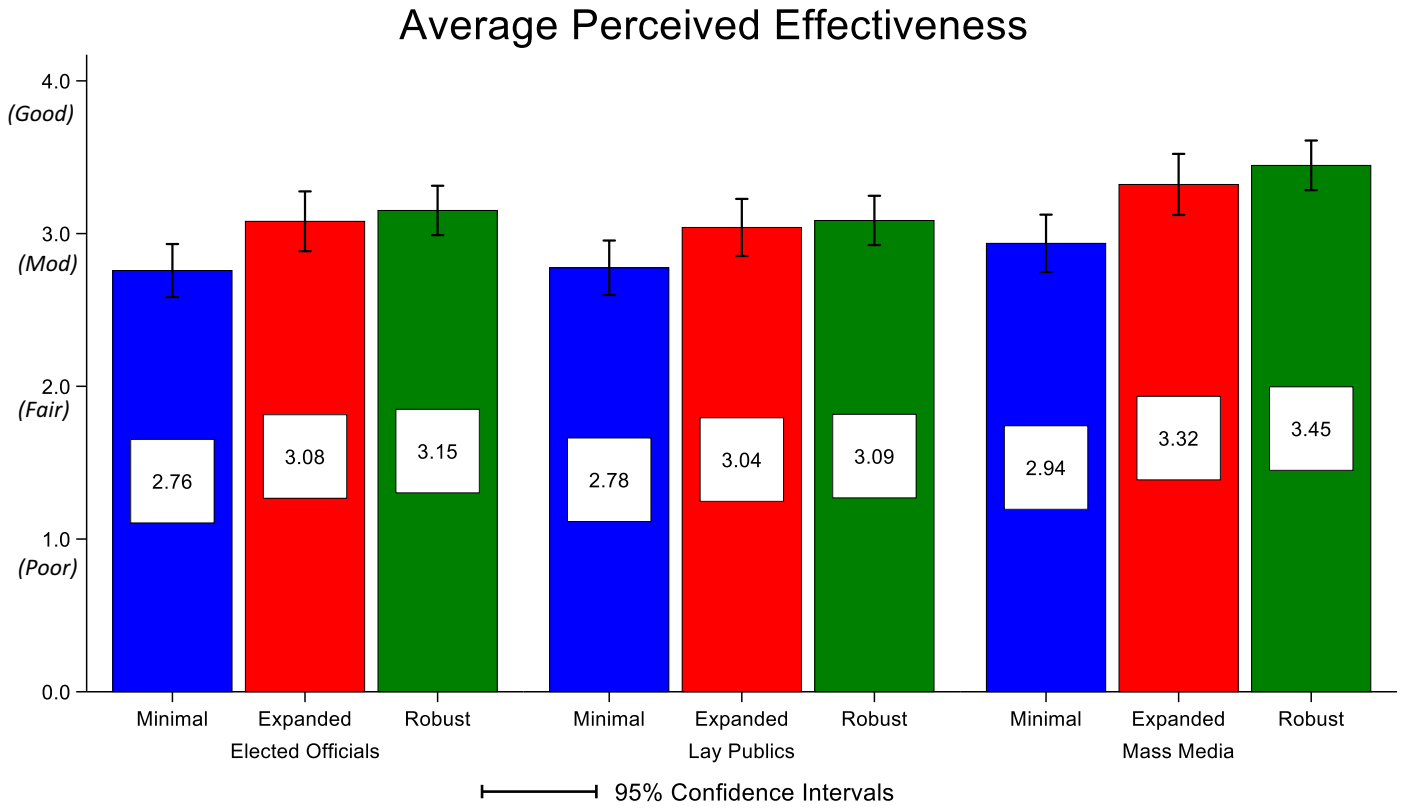
# Emerging Findings: Rural and Urban Variation in Prevalence of Communication Network Types



# Emerging Findings: Network Variation in Communication Activities by Audience



# Emerging Findings: Variation in Perceived Effectiveness of Communication Activities by Audience and Network Type



# Limitations

- Self-report data from a single community organization may not fully capture breadth of organizations' involvement in community health communication activities
- Networks are constructed from participation in key activities
  - Strength and directionality of connections among network members are unclear
  - It is unclear whether organizational communication activities are amplifying, complementing, or competing with each other's messages
- "Perceived Effectiveness" of community health communication activities is subjective but does provide an important barometer of attitudes and beliefs about community communication success

# Next Steps

- Expand longitudinal analysis to incorporate additional survey waves
- Examine variation in *actual* policy and media outcomes for comparison with "perceived effectiveness"
- Move from "what" to "why" and "how"
  - Collaborate with other network researchers to examine strength and directionality of organizational ties across a subset of the three community health communication constellations
  - Conduct qualitative interviews in this subset to examine overlap and variation in the kinds of communication products and activities being generated across the different network types
  - Conduct "member checks" of interpretations of emerging data with key organizational stakeholders
- Dissemination Activities
  - 2018 APHA Annual Meeting Presentation (11/13 from 5-6:30pm)
  - Manuscript Highlighting Descriptive Findings being Finalized

# Questions?

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# Upcoming Webinars

## Archives

http://systemsforaction.org/research-progress-webinars

## Upcoming

**Wednesday, September 19, 2018, 12 p.m., ET**

*Systems for Action Intramural Research Project*

**Rural-Urban Differences in Delivery Systems for Population Health Activities**

*John Poe, PhD, Systems for Action National Program Office, University of Kentucky College of Public Health*

**Wednesday, October 3, 2018, 12 p.m., ET**

*Systems for Action Individual Research Project*

**Testing a New Terminology System for Health and Social Services Integration**

*Miriam Laugesen, PhD, and Sara Abiola, PhD, JD, Columbia University Mailman School of Public Health*

**Wednesday, October 17, 2018, 12 p.m., ET**

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**TBA**

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# Acknowledgements

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