

CONVERGE COVID-19 Working Groups for Public Health and Social Sciences Research

Research Agenda-Setting Paper

This paper was written to help advance convergence-oriented research in the hazards and disaster field. It highlights areas where additional research could contribute new knowledge to the response to and recovery from the pandemic and other disasters yet to come. Questions about the research topics and ethical and methodological issues highlighted here should be directed to the authors who contributed to this paper.

Working Group Name:

Risk Communication Strategies and the Easing of COVID-19 Restrictions

Working Group Description:

Policy makers in the United States have enacted various risk reduction policies to curb the spread of COVID-19, which are already being lifted to different degrees and at different rates across states. Effective risk communication is critical to ensuring the easing of such policies does not result in a resurgence of COVID-19 cases. By collecting and synthesizing data on pre-COVID-19 structural factors and policies, risk communication information and strategies scraped from state government websites, and survey data on individuals' risk perceptions and behaviors across six states (Massachusetts, Louisiana, Michigan, Iowa, Colorado, and Washington), our Working Group provides timely and usable information to policy makers and public health officials to inform risk communication for the COVID-19 pandemic.

Priority Research Topics and Specific Research Questions:

Priority Research Topics	Potential Research Questions
1. Temporal and Spatial Variation in Risk Perception and Behavior in Response to Changing COVID-19 Restrictions	<ul style="list-style-type: none"> • <u>Research Question 1</u>: To what extent do individual risk perceptions and behaviors regarding COVID-19 vary across time, particularly as COVID-19 risk reduction policies are eased? • <u>Research Question 2</u>: How do risk perceptions and behaviors related to COVID-19 vary across states? • <u>Research Question 3</u>: What factors drive variation in the risk reduction policies developed across states? • <u>Research Question 4</u>: What factors drive variation in the timing and extent of the easing of risk reduction policies?
2. Impact of Structural Factors, Demographics, and Policy on Individual COVID-19 Responses	<ul style="list-style-type: none"> • <u>Research Question 1</u>: What demographic or individual differences (e.g. gender, race, income, education, political affiliation, employment status, etc.) are associated with COVID-19 risk perceptions and behaviors?

	<ul style="list-style-type: none"> • <u>Research Question 2</u>: How do pre-existing structural factors and pre-existing pandemic-related (but not specific to COVID-19) policies vary across states? • <u>Research Question 3</u>: To what extent are differences in individual responses to state-level COVID-19 messages modified by pre-COVID structural factors?
3. Mental Health and COVID-19	<ul style="list-style-type: none"> • <u>Research Question 1</u>: Do mental health-related variables (e.g., overall mental health, distress or worry level, coping behaviors) correlate with COVID-19 risk perception or behaviors? • <u>Research Question 2</u>: Do mental health-related variables mediate the relationship between demographic characteristics (e.g., gender, race) and COVID-19 risk perceptions or behaviors?
4. Impact of Risk Communication on COVID-19 Risk Perceptions and Behaviors	<ul style="list-style-type: none"> • <u>Research Question 1</u>: To what extent are individuals' risk perceptions and risk mitigation behaviors regarding COVID-19 shaped by the differential risk messaging strategies utilized by state officials? • <u>Research Question 2</u>: How do memorable messages about COVID-19 heard by individuals affect their risk perceptions and behaviors? • <u>Research Question 3</u>: Do the sources of information about COVID-19 sought out by individuals influence their risk perceptions or behaviors?
5. Variation in COVID-19 Risk Reduction Behaviors across Race and Class	<ul style="list-style-type: none"> • <u>Research Question 1</u>: How do factors that influence exposure to COVID-19 (e.g., behaviors such as staying home and physical distancing) vary across racial and social class groups? • <u>Research Question 2</u>: How are these disparities related to barriers/factors that limit different individuals' options to avoid exposure (e.g., considered an essential worker, so can't stay at home; believes they will be perceived as threatening if wearing a mask)? • <u>Research Question 3</u>: How are these disparities in risk reduction behaviors related to policy differences across states—both pre-COVID and COVID-specific policies?
6. Variation in Policy Instruments and Designs across U.S. states	<ul style="list-style-type: none"> • <u>Research Question 1</u>: Does an individual's knowledge about their state's COVID-19 policies correlate with their risk perceptions or behaviors? • <u>Research Question 2</u>: Does an individual's approval of policy makers, or their trust in government, correlate with or modify their risk perceptions or behaviors? • <u>Research Question 3</u>: How does the content of state-level COVID-19 risk reduction policies vary according to the state's political and demographic characteristics? • <u>Research Question 4</u>: How do state-level public health and economic outcomes vary according to when states ease their risk reduction policies, such as stay-at-home orders? • <u>Research Question 5</u>: How do state-level and county-level policies differ, and are these differences related to public health outcomes across states?

Ethical / Methodological Considerations:

Because of its nature as a long-duration disaster, the COVID-19 pandemic poses a distinct opportunity to measure changes in individual risk perceptions and behaviors, especially as strategies for communicating about and managing risk change across time and space. The use and efficacy of different policy interventions and risk communications strategies will likely evolve across time and in response to changing public health, social, and even economic conditions. To better understand these dynamics, we use a variety of methodological innovations. Following the designation as a CONVERGE Working Group, we secured additional funding through a National Science Foundation (NSF) RAPID grant to conduct a three-wave panel survey that measures individual risk perceptions and behavior across time in six U.S. states. The first wave of this survey was launched in May 2019. We are concurrently scraping and gathering all information relating to state COVID-19 policies, including state-at-home orders, mask-wearing protocols, and general reopening plans. We believe this approach positions us well to capture evolving risk perceptions and behaviors while informing the work of state public health agencies in near real time. We also acknowledge that COVID-19 does not impact all members of our communities equally. A growing number of studies have documented disparities in COVID-19 outcomes, and examining these issues (e.g., differential perceptions of mask wearing across racial groups) through an equity lens is essential to our work.

Other Frameworks, Considerations for Collaboration, and/or Resources:

Our team has also created a website (<https://www.riskandsocialpolicy.org/>) to share emerging work with public audiences. Information on presentations and popular press articles related to this work, as well as a summary of early survey findings, can be found on the “[Our Work](#)” page. Publications and funding information will be linked to this website as they become available.

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This COVID-19 Working Group effort was supported by the National Science Foundation-funded Social Science Extreme Events Research (SSEER) network and the CONVERGE facility at the Natural Hazards Center at the University of Colorado Boulder (NSF Award #1841338). Any opinions, findings, and

conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the NSF, SSEER, or CONVERGE.