

Social Science Perspectives on Communicating Wildfire Smoke Impacts: The Early Stages of a Colorado Pilot Study

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In 2018, Colorado residents have experienced significant smoke events from several large in-state and out-of-state wildfires. As the incidence of wildfires increases, the need to develop effective ways to communicate the health impacts from smoke exposure grows. Yet, our understanding of how individuals respond to wildfire smoke exposure (including information-seeking behavior, perceptions of health risks, knowledge of protective behaviors, and willingness to adopt protective behaviors) is limited.

Just as poorly understood are public health, environmental health, and air-quality professionals at the state, county, and local levels who are tasked with conveying smoke exposure information to the public. First, we have little systematic information about the decision-making process that these professionals use when deciding whether and how to alert their constituents about air-quality issues. Second, we have minimal knowledge of their perceptions of their constituents' relevant knowledge, attitudes, risk perceptions, and willingness to adopt protective health behaviors. Third, we have very limited understanding of the information needs and challenges these professionals face when communicating air-quality information.

Because this study is in its early stages, our presentation will not focus on data or data analysis. Rather, we will discuss our use of social science perspectives and methods in this Colorado study, with an emphasis on the benefits and limitations of those perspectives and methods. The study will ultimately involve a representative survey of Colorado residents; in-depth interviews with public health, environmental health, and air-quality professionals; and some formative usability assessments of a smoke-health forecast tool.