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Behavioral Responses to Epidemics in an Online Experiment

We report the results of a study we conducted using a simple multiplayer online game that simulates the spread of an infectious disease through a population composed of the players. We use our virtual epidemics game to examine how people respond to epidemics. Specifically, we look at the effects of prevalence, infection history, cost of self-protection, as well as other factors on the players' decision to engage in protective behavior during an epidemic. Our results show that player behavior evolves over the course of the game and is sensitive to the prevalence of the disease. There is limited evidence that the cost of self-protection and infection history have an impact on the decision to invest in self-protection.