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**Anna Mummert\*** (mummerta@marshall.edu), Marshall University, Mathematics Department, One John Marshall Drive, Huntington, WV 25755, and **Howard Weiss**. *Get the News Out Loudly and Quickly: Modeling The Influence of the Media on Limiting Infectious Disease Outbreaks*. Preliminary report.

During outbreaks of serious infectious diseases many individuals closely follow media reports of the outbreak and take steps, including self-isolation, to protect themselves from infection and possibly death. Self-isolation can take many forms including restricting local and long-distance travel and using face masks. We use mathematical modeling to show that public health agencies working together with the media can significantly decrease the severity of an outbreak by providing timely and accurate accounts of the numbers of new infections and deaths. Our model also shows that although providing such information beginning as early as possible is best, even starting to provide it well into the course of an outbreak can significantly reduce the severity of the outbreak. We illustrate our results with a simulated outbreak of Ebola Hemorrhagic Fever in a small city with a population of 50,000. For a short-term outbreak, with no demographic turnover, we perform a rigorous sensitivity analysis for the key epidemiological characteristics: the maximum number of infected individuals at one time and the attack rate. (Received August 01, 2011)