

1067-92-1105

Anna Mummert* (mummerta@marshall.edu), Marshall University, Mathematics Department, One John Marshall Drive, Huntington, WV 25755, and **Thembinkosi Mkhathshwa**. *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, using face masks, and choosing to receive a vaccine.

In this talk, I will 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. This 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. I will illustrate these results with a simulated outbreak of Ebola Hemorrhagic Fever in Huntington, WV (population 50,000). (Received September 18, 2010)