Deborah Hughes Hallett* (dhh@math.arizona.edu). Controlling Epidemics: Modeling the Spread of SARS.

Real world problems solved by mathematics are powerful tools for capturing students’ interest. The fact that Calculus II can be used to evaluate strategies to curb the spread of an infectious disease makes an important point about the need for mathematics. In this talk we consider the case of SARS in 2003, when there were widespread fears that the outbreak in Asia would spread. Bird flu has subsequently threatened several communities. We will see how to include in the calculus sequence a model of the spread of SARS using data from Hong Kong. (Received September 13, 2007)