

PHYSICAL MATHEMATICS SEMINAR

Influenza incidence, associated mortality, vaccination, and vaccine prioritization in a declining epidemic

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ABSTRACT:

Motivated by the experience from the 2009 H1N1 influenza pandemic, we consider a problem of vaccine prioritization between two population groups: healthy children, who have low fatality rates associated with influenza infection but who serve as drivers of transmission of influenza in the community vs. adults with underlying health conditions. In the process we describe how surveillance data can be used to define proxies for the incidence of the major circulating influenza strains, present a statistical method for estimating influenza-associated mortality, and study the effect of vaccine distribution in a stratified population on the short and long term course of the epidemic.

TUESDAY, FEBRUARY 26, 2013

2:30 PM

Building 56, Room 180

*Reception following in Building 2, Room 290
(Math Dept. Common Room)*

<http://math.mit.edu/pms>



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