

# FORO ESPECIAL DEPARTAMENTO DE MATEMÁTICAS

## QUÉ APRENDIMOS DE LAS EPIDEMIAS DE INFLUENZA Y ÉBOLA

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### ABSTRACT

In our recent article we observed that, “It is now just more than a year since the official confirmation of an outbreak of Ebola haemorrhagic fever in West Africa. With new cases occurring at their lowest rate for 2015, and the end of the outbreak in sight for all three countries predominantly affected, now is the time to consider strategies to prevent future outbreaks of this, and other, zoonotic pathogens. The Ebola outbreak, like many other emerging diseases, illustrates the crucial role of the ecological, social, political, and economic context within which diseases emerge.[1]”

Dispersal, mobility and residence times in risky environments can play a significant role on the transmission dynamics of communicable diseases, especially emergent or re-emergent diseases like Influenza or Ebola. In this talk, the challenges associated with the dynamics of influenza as a function of mobility are discussed in terms of the influenza epidemic in Mexico and the most recent Ebola epidemic in West Africa.

[1] **Carlos Castillo-Chavez, Roy Curtiss, Peter Daszak, Simon A. Levin, Oscar Patterson-Lomba, Charles Perrings, George Poste, and Sherry Towers,** *Beyond Ebola: lessons to mitigate future pandemics.* The Lancet Global Health 3 (7), e354-e355.

**LUGAR: SALA DE POSGRADO MATEMÁTICAS, 3194.**

**FECHA Y HORA: MIÉRCOLES 9 DE DICIEMBRE, 2:30PM.**