1046-92-1942 Carlos Castillo-Chavez* (ccchavez@asu.edu), PO BOX 871904, Tempe, AZ 85287-1904, Karen Rios-Soto (karen_rs@math.uprm.edu), Departamento de Matematics and Statistics, Mayaguez, PR, and Kailash Patidar (Kailash.Patidar@asu.edu), PO BOX 871904, Tempe, AZ 85287-1904. Models of Disease Dispersal for populations with overlapping and non-overlapping discrete populations. Preliminary report.

The spatial spread of epidemics in populations with discrete generations is modeled using integro-difference equations. The existence of traveling epidemic wave solutions in growing and non-growing populations is studied in the context of overlapping and non-overlapping generations of infectious individuals. (Received September 16, 2008)