

1125-92-1598

Fred Brauer* (brauer@math.ubc.ca), Department of Mathematics, University of British Columbia, Vancouver, BC V6T 1Z2, Canada. *A Final Size Relation for Epidemic Models of Vector-Transmitted Diseases*. Preliminary report.

We formulate and analyze an age of infection model for epidemics of diseases transmitted by a vector, including the possibility of direct transmission as well. We show how to determine a basic reproduction number. While there is no explicit final size relation as for diseases transmitted directly, we are able to obtain estimates for the final size of the epidemic. (Received September 18, 2016)