1035-92-452 **Fred Brauer*** (`brauer@math.ubc.ca`), Department of Mathematics, University of British Columbia, Vancouver, BC V6T 1Z2, Canada. *Heterogeneous mixing in epidemic models.*

We consider a compartmental epidemic model including treatment of infectives in a population divided into groups by activity level, assuming proportionate mixing between groups. We show how to calculate the reproduction number and determine the final size of the epidemic. (Received September 07, 2007)