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P. van den Driessche* (pvdd@math.uvic.ca), Department of Mathematics and Statistics, University of Victoria, Victoria, B.C. V8W3P4, Canada, and **Linda J.S. Allen**. *The Basic Reproduction Number in a Discrete-Time Model for Hantavirus in Rodents.*

The next generation matrix approach for calculating the basic reproduction number \mathcal{R}_0 is summarized for discrete-time epidemic models. This approach is applied to models of hantavirus in rodents. One model includes discrete spatial patches. For each model, \mathcal{R}_0 is calculated in terms of the model parameters. For $\mathcal{R}_0 < 1$, if a small number of infectives is introduced, then the disease dies out in the rodent population. (Received September 11, 2007)