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The objective of our model formulation is to provide a simple, readily modified framework to analyze spatial controls for vaccine distribution as it impacts the spread of rabies among raccoons. The control gives amount and location of the food packets containing vaccine. The goal is to minimize the number of infected raccoons and the cost of distributing the packets. The model has time and space as underlying variables and the spatial location enters in a discrete way. (in collaboration with W. Ding, E. Asano, K. Langston, L. Gross, L. Real) (Received August 30, 2006)