1077-60-648 **Steven C McKelvey*** (mckelvey@stolaf.edu), St. Olaf College, 1520 St. Olaf Ave., Northfield, MN 55057, and **Frank H Koch**, **William D Smith** and **Kelly R Hawley**. *A Bayesian Model Identifying Locations At Risk From Human-Transported Exotic Pathogens.*

A two-phase Bayesian model is presented for updating risk assessments for locations susceptible to infection by exotic pathogens. Human transportation from previously infected regions to uninfected regions is the main dispersal mechanism. Information embedded in patterns within the transportation flow are exploited in the update process. We explore the sensitivity of the model's outputs to changes in inputs. A sample application of the model to sudden oak death, using fictitious infection data, is performed. (Received September 09, 2011)