Supporting Information S2: dynamics of transmission and virulence This section presents alternate versions of the figures from the main text showing time dynamics and summary statistics in terms of $\log_{10}$ SPVL and per-year transmission probability rather than expected progression time to AIDS.
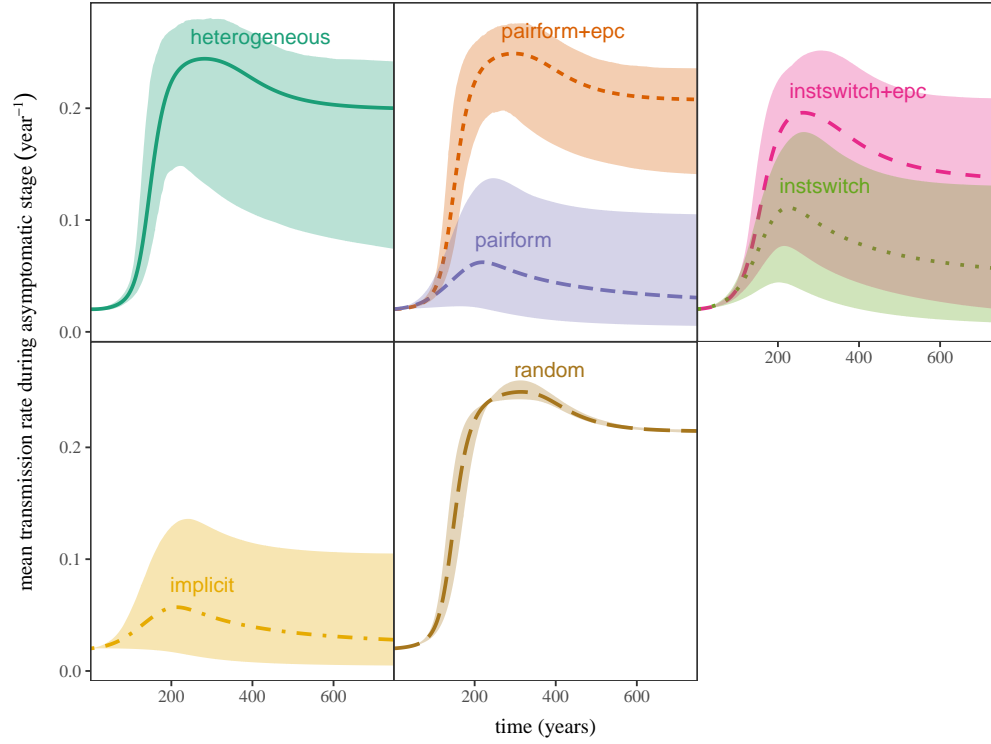

Fig S1. Envelopes of transmission trajectories under all models. This figure matches Fig 2 in main text, but displays the envelope of population-mean transmission probabilities rather than expected progression time to AIDS over time for each model.
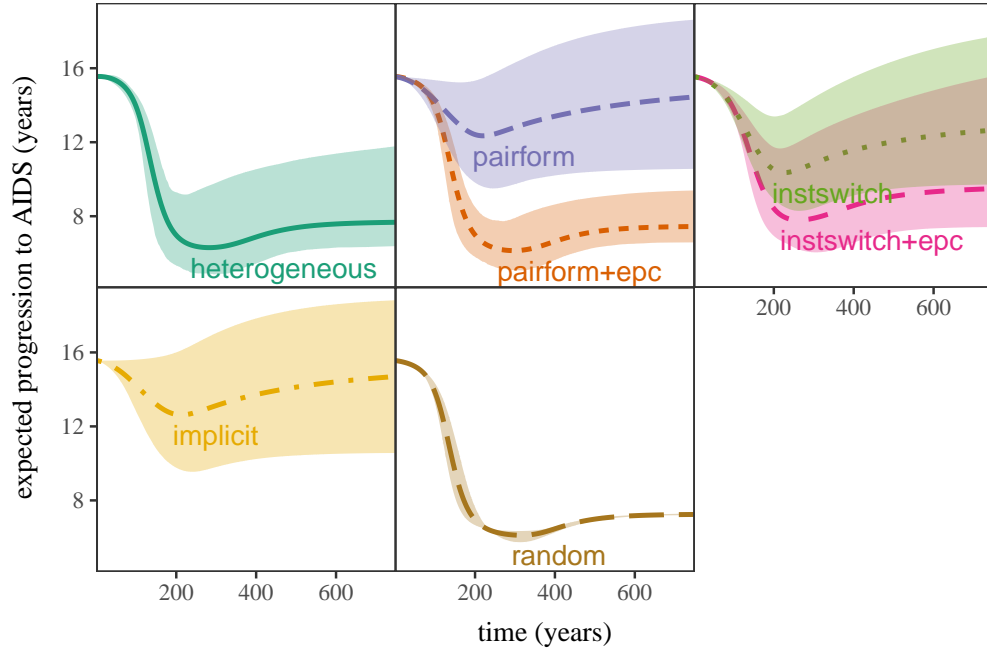
Fig S2. Envelopes of SPVL trajectories under all models. This figure matches Fig 2 in main text, but displays the envelope of $\log_{10}$ SPVL rather than expected progression time to AIDS over time for each model.
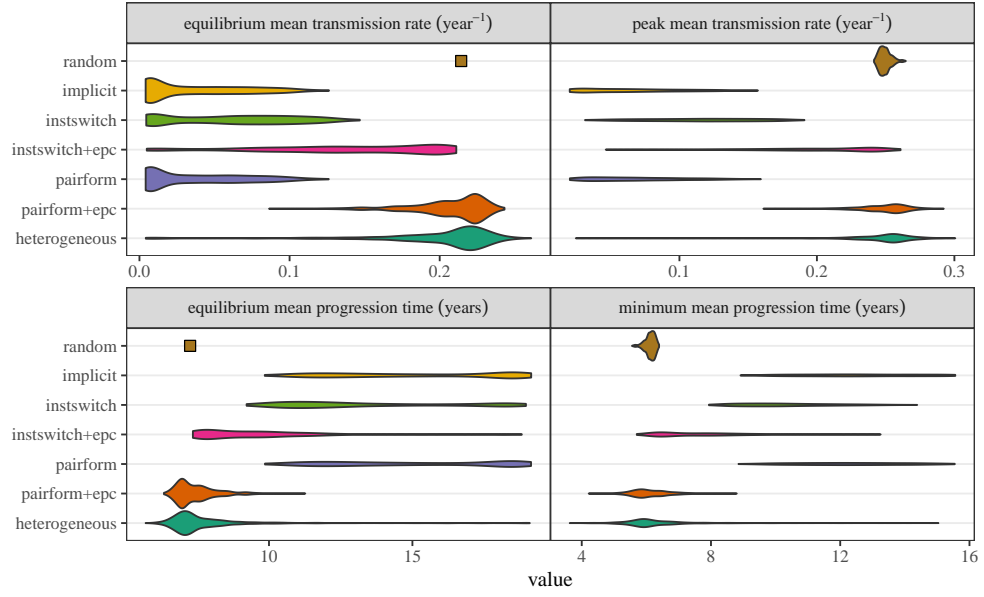
Fig S3. Univariate distributions of transmission probabilities and SPVL.
This figure matches Fig 3 in main text, but displays the univariate distributions for the transmission probability and $\log_{10}$ SPVL time at the virulence peak and at the epidemiological equilibrium, rather than the distributions of progression time to AIDS.
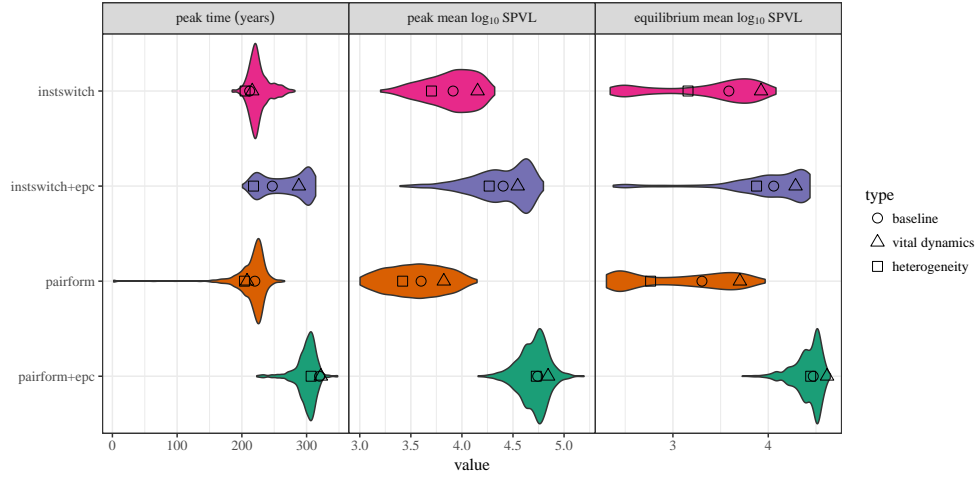
Fig S4. Effects of contact heterogeneity and vital dynamics. This figure matches Fig 3 in main text, but displays the summary statistics of the modified explicit model (models with contact heterogeneity and vital dynamics). Summary statistics of an each model is represented by shapes and all models were simulated using the baseline parameters.