

Figure Suppl 1. Distribution of estimates of relative age-specific force of infection for simulated episodic time series assuming that age specific mixing is strongly assortative (i.e. off diagonal elements of the B matrix are small, the diagonal elements are as in the main text). For each simulation, the force of infection is scaled to have a maximum at 1 for presentation. Shaded regions give the central 50% of estimates for outbreaks of size >300 (solid lines, N=416 epidemics), >10,000 (dashed lines, N=99), and >15,000 (dotted lines, N=37). The solid line indicates true relative age-specific force of infection for the simulation. A) Estimates assuming constant incidence history, B) estimates corrected using the epidemic history.

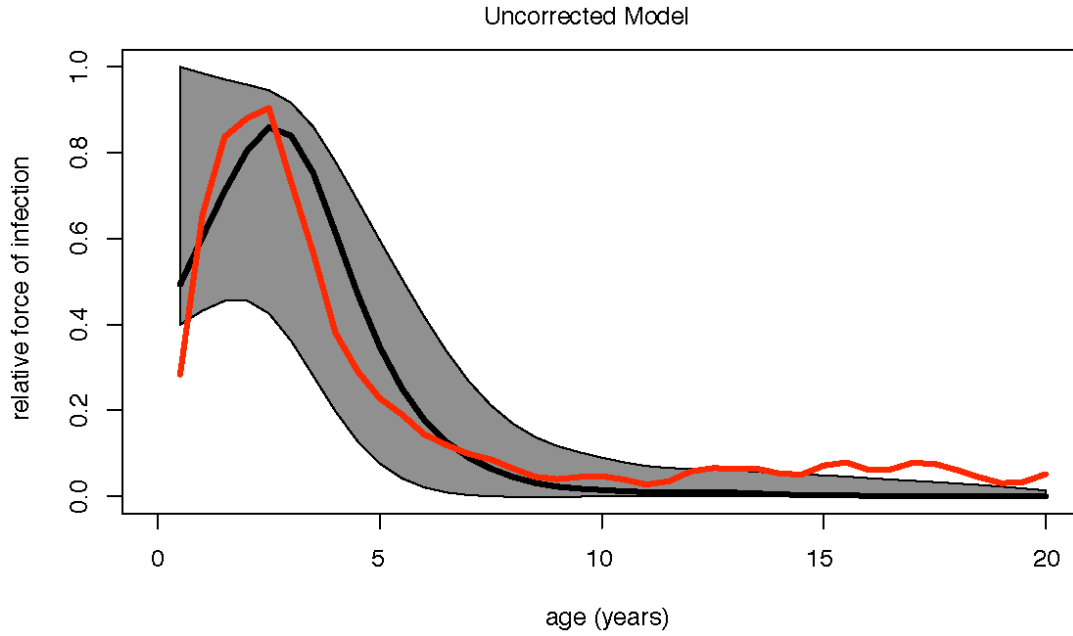


Figure Suppl 2. Estimates of relative age specific force of infection for simulated time series with regular annual outbreaks. For each simulation, the force of infection is scaled to have a maximum at 1 for presentation. Shaded regions give the central 95% of estimates for outbreaks of size >300). The solid black line gives the mean estimate. The red line indicates true relative age specific force of infection for the simulation. A) Estimates assuming constant incidence history, B) estimates corrected using the epidemic history.

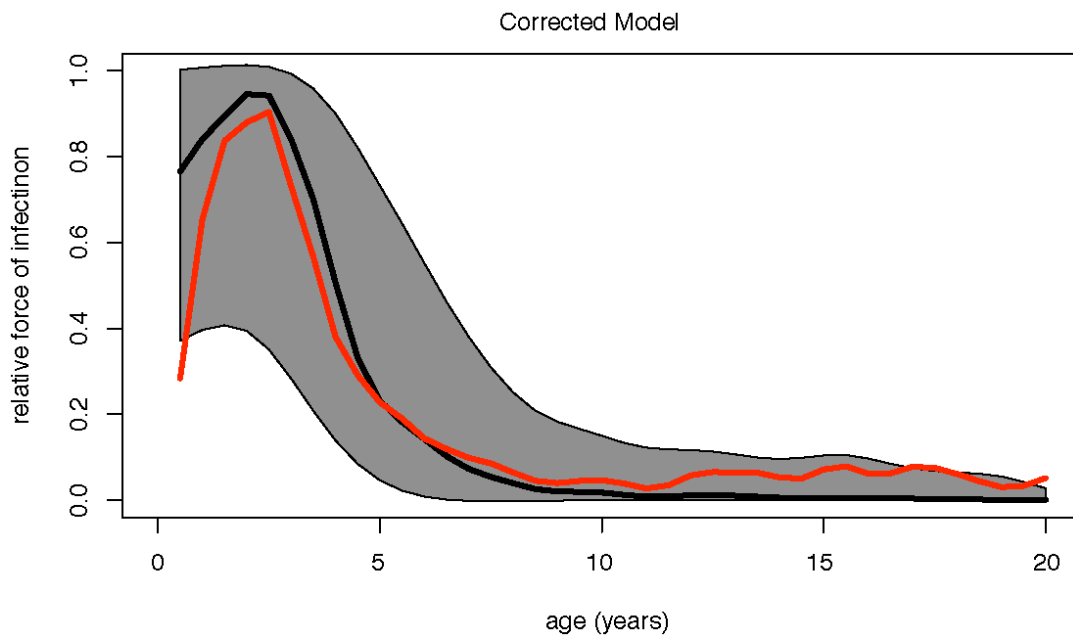


Figure Suppl 3. Estimates of relative age specific force of infection for simulated time series with regular biennial outbreaks. For each simulation, the force of infection is scaled to have a maximum at 1 for presentation. Shaded regions give the central 95% of estimates for outbreaks of size >300). The solid black line gives the mean estimate. The red line indicates true relative age specific force of infection for the simulation. A) Estimates assuming constant incidence history, B) estimates corrected using the epidemic history.