

**S5 Fig. Robustness of results to different ratios of incubation to infectious period.**

For extremely short incubation periods, the probability of a major outbreak can be estimated more accurately (since variation in the number of presymptomatic infected individuals between simulations is lower). Here, the infectious period is held fixed and the incubation period varied so that the ratio of these is consistent with poliomyelitis (ratio = 0.12), influenza (ratio = 0.8), mumps (ratio = 2.5) and diphtheria (ratio = 5) [4]. True probabilities greater than 0.97 are classified into bins of size 0.01.



