S2 Table. Summary of model parameters describing disease progression and choices for the simulations.

| Name  | Description                                             | Value     |
|-------|---------------------------------------------------------|-----------|
| $n_E$ | No. of latency Erlang states                           | 16        |
| $n_P$ | No. of prodromal Erlang states                         | 16        |
| $n_I$ | No. of fully contagious Erlang states                  | 16        |
| $n_L$ | No. of late-infectious Erlang states                   | 16        |
| $D_E$ | Average duration of latency period                      | 3.7 days  |
| $D_P$ | Average duration of prodromal period                    | 1 day     |
| $D_I$ | Average duration of fully contagious period             | 5 days    |
| $D_L$ | Average duration of late infectious period              | 5 days    |
| $\varepsilon$ | Transition rate of latent states                     | $n_E/D_E$  |
| $\varphi$ | Transition rate of prodromal states                | $n_P/D_P$  |
| $\gamma$ | Transition rate of early infectious states             | $n_I/D_I$  |
| $\delta$ | Transition rate of late-infectious states              | $n_L/D_L$  |
| $\alpha$ | Transition rate from transient multi-infections to multi-infected states | 3.2/day |
| $f_{Sick}$ | Fraction of symptomatic (sick) infections             | 58%       |
| $f_{Sick}$ | Fraction of sympt. multi-infections in fully contagious & late inf. periods | 64.4% |
| $f_{Iso}$ | Fraction of single-infected (sick) who are isolated (or home isolated) | 48% |
| $f_{Iso}$ | Fraction of multi-infected (sick) who are isolated (or home isolated) | 52.8% |
| $f_{Dead}$ | Fraction of single-infected (sick) who die from the disease | 4% |
| $f_{Dead}$ | Fraction of multi-infected (sick) who die from the disease | 5% |

Summary of parameters describing the number of Erlang states, durations, transition rates, morbidity and mortality, and their default parameter choices.