

**S2 Table.** Summary of model parameters and their choices for numerical simulations for Germany (GER) and USA.

Parameter	Description	Value	
$n_E$	Number of latent phase Erlang states	16	
$n_P$	Number of prodromal Erlang states	16	
$n_I$	Number of fully infectious Erlang states	16	
$n_L$	Number 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 infectious 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 fully infectious states	$n_I/D_I$	
$\delta$	Transition rate of late infectious states	$n_L/D_L$	
$1/\alpha$	Waiting time for test results in days	1/2, 1, 2, 3, 4	
$1/\xi$	Average frequency of testing in days	1, 2, 5, 7, 14	
		GER	USA
$f_{\text{Sick}}$	Fraction of symptomatic (sick) infections in Ge and St	58%	58%
$f_{\text{Sick}}^{(\text{Ri})}$	Fraction of symptomatic (sick) infections in Ri	60%	43%
$f_{\text{Dead}}$	Fraction of sick ind. in Ge and St, who die from the disease	1.6%	4%
$f_{\text{Dead}}^{(\text{Ri})}$	Fraction of sick ind. in Ri, who die from the disease	20%	11%
$f_{\text{Iso}}$	Fraction of sick ind. who go to isolation	58%	48%

General sub-population (Ge), LTCF employees (St), risk group (Ri).