

**S3 Table.** Summary of variables describing sub-population sizes in non-infectious (sub-)states in Germany (GER) and the USA.

Name	Description	Initial value	
		GER	USA
$S^{(Ge)}$	No. susceptibles in Ge	81,799,800	329,176,925
$S^{(St)}$	No. susceptibles in St	500,000	423,000
$S^{(Ri)}$	No. susceptibles in Ri	700,000	1,400,000
$E_k^{(Ge)}$	No. infected Ge in $k$ th latent state ( $1 \leq k \leq n_E$ )		0
$E_k^{(St,-)}$	No. infected undetected St in $k$ th latent state ( $1 \leq k \leq n_E$ )		0
$E_k^{(St,*)}$	No. St in $k$ th latent state, whose test results will be pos. ( $1 \leq k \leq n_E$ )		0
$E_k^{(St,+)}$	No. pos. tested St in $k$ th latent state ( $1 \leq k \leq n_E$ )		0
$E_k^{(Ri)}$	No. Ri in $k$ th latent state ( $1 \leq k \leq n_E$ )		0
$E_{Sum}^{(Ge)}$	Total No. of Ge in latent states		0
$E_{Sum}^{(St,-)}$	Total No. undetected infected St in latent states		0
$E_{Sum}^{(St,*)}$	Total No. of St in latent states, whose test results will be pos.		0
$E_{Sum}^{(St,+)}$	Total No. of pos. tested St in latent states		0
$E_{Sum}^{(Ri)}$	Total No. of Ri in latent states		0
$R^{(Ge)}$	No. recovered in Ge		0
$R^{(St,-)}$	No. recovered in St, whose infections were undetected		0
$R^{(St,*)}$	No. St that recovered, before pos. test result returned		0
$R^{(St,+)}$	No. recovered St that were pos. tested		0
$R^{(Ri)}$	No. recovered in Ri		0
$D^{(Ge)}$	No. dead in Ge		0
$D^{(St,-)}$	No. dead in St, whose infections were undetected		0
$D^{(St,*)}$	No. St that died, before pos. test result returned		0
$D^{(St,+)}$	No. dead St that were pos. tested		0
$D^{(Ri)}$	No. dead in Ri		0

Description of variables and their initial values chosen for the simulations.