

S3 Table: Parameter estimates for models fit to subset of data with detected viral peaks. Median marginal posterior parameter estimates are reported, with 95 % posterior credible intervals for each parameter in parentheses. Units are the same as in Table 4 in the main text. $V_0 = 10^{-3.2}$ copies/cell.

Model	IP_g	$\beta(\times 10^{-10})$	κ	$q(\times 10^{-4})$	$q_T(\times 10^{-6})$	$\log \sigma_I$
1	5.8 (5.0, 6.8)	4.0(3.5, 4.7)	4.7 (4.3, 5.4)	6.2(4.9, 8.1)	.97 (.82, 1.2)	.15 (.12, .19)
ADE	5.6 (4.8, 6.5)	DF: 4.0 (3.5, 4.7) DHF: 4.5 (3.8, 5.5)	4.7 (4.3, 5.4)	6.5 (5.2, 8.6)	.95 (.81, 1.2)	.15 (.12, .18)
SS_β	5.6 (4.9, 6.5)	β_1 : 3.9 (3.4, 4.6) β_2 : 4.9 (4.0, 6.0) β_3 : 4.7 (3.8, 5.9)	4.8 (4.3, 5.4)	6.5 (5.1, 8.5)	1.0 (.08, 1.2)	.14 (.11, .18)
SS_{q_T}	5.8 (5.0, 6.7)	4.0 (3.4, 4.6)	4.9 (4.5, 5.5)	6.7 (5.3, 8.8)	q_{T_1} : .94 (.80, 1.2) q_{T_2} : 2.5 (1.3, 6.2) q_{T_3} : 4.1 (1.3, 12)	.14 (.12, .18)
$SS_{\beta_{ADE}}$	5.3 (4.5, 6.1)	$\beta_{1_{DF}}$: 4.1 (3.6, 4.8) $\beta_{2_{DF}}$: 4.9 (4.1, 5.9) $\beta_{3_{DF}}$: 4.8 (3.9, 6.4) $\beta_{1_{DHF}}$: 4.4 (3.7, 5.4) $\beta_{2_{DHF}}$: 5.7 (4.6, 7.4) $\beta_{3_{DHF}}$: 5.7 (4.4, 7.8)	4.6 (4.2, 5.3)	6.7 (5.3, 8.7)	.09 (.08, 1.1)	.15 (.12, .19)