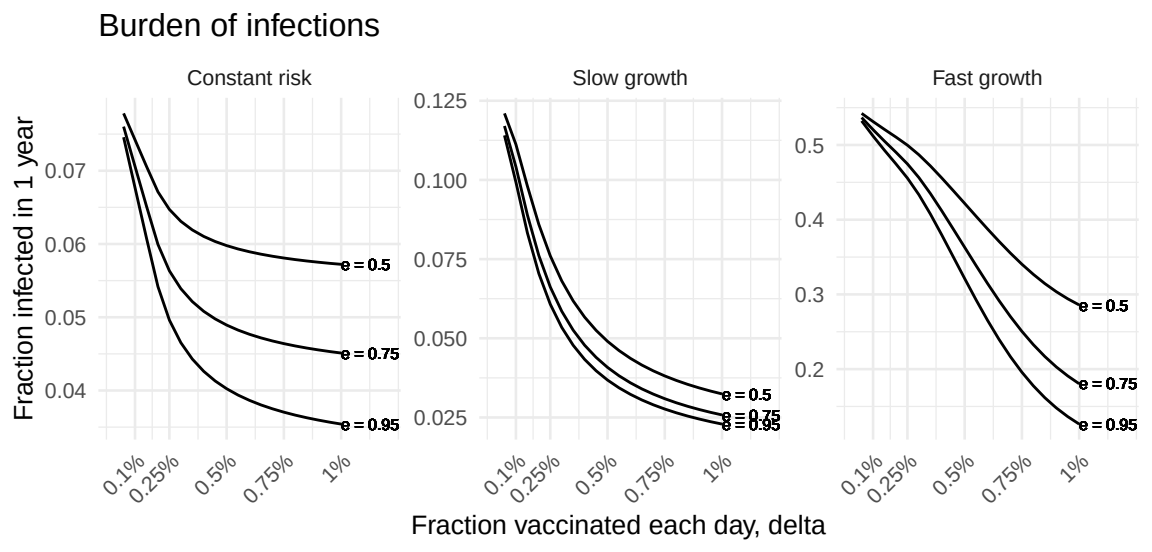
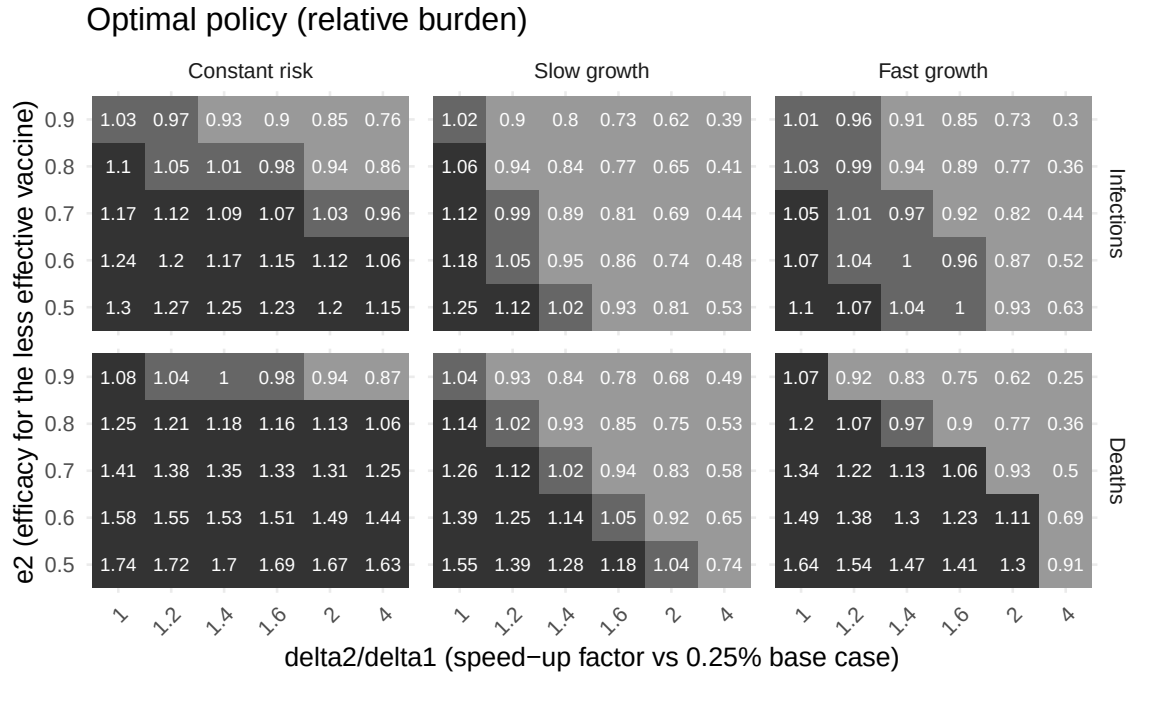

Burden of infections
Constant risk
Slow growth
Fast growth
Fraction infected in 1 year
0.07
0.06
0.05
0.04
0.125
0.100
0.075
0.050
0.025
0.5
0.4
0.3
0.2
e = 0.5
e = 0.75
e = 0.95
0.1%
0.25%
0.5%
0.75%
1%
Fraction vaccinated each day, delta


Optimal policy (relative burden)
Constant risk
Slow growth
Fast growth
e2 (efficacy for the less effective vaccine)
0.9 1.03 0.97 0.93 0.9 0.85 0.76 | 1.02 0.9 0.8 0.73 0.62 0.39 | 1.01 0.96 0.91 0.85 0.73 0.3
0.8 1.1 1.05 1.01 0.98 0.94 0.86 | 1.06 0.94 0.84 0.77 0.65 0.41 | 1.03 0.99 0.94 0.89 0.77 0.36
0.7 1.17 1.12 1.09 1.07 1.03 0.96 | 1.12 0.99 0.89 0.81 0.69 0.44 | 1.05 1.01 0.97 0.92 0.82 0.44
0.6 1.24 1.2 1.17 1.15 1.12 1.06 | 1.18 1.05 0.95 0.86 0.74 0.48 | 1.07 1.04 1 0.96 0.87 0.52
0.5 1.3 1.27 1.25 1.23 1.2 1.15 | 1.25 1.12 1.02 0.93 0.81 0.53 | 1.1 1.07 1.04 1 0.93 0.63
Infections
0.9 1.08 1.04 1 0.98 0.94 0.87 | 1.04 0.93 0.84 0.78 0.68 0.49 | 1.07 0.92 0.83 0.75 0.62 0.25
0.8 1.25 1.21 1.18 1.16 1.13 1.06 | 1.14 1.02 0.93 0.85 0.75 0.53 | 1.2 1.07 0.97 0.9 0.77 0.36
0.7 1.41 1.38 1.35 1.33 1.31 1.25 | 1.26 1.12 1.02 0.94 0.83 0.58 | 1.34 1.22 1.13 1.06 0.93 0.5
0.6 1.58 1.55 1.53 1.51 1.49 1.44 | 1.39 1.25 1.14 1.05 0.92 0.65 | 1.49 1.38 1.3 1.23 1.11 0.69
0.5 1.74 1.72 1.7 1.69 1.67 1.63 | 1.55 1.39 1.28 1.18 1.04 0.74 | 1.64 1.54 1.47 1.41 1.3 0.91
Deaths
1 1.2 1.4 1.6 2 4
delta2/delta1 (speed−up factor vs 0.25% base case)
Less effective better by 5% or more
Comparable (+−5%)
95% effective better by at least 5%