A model to study the impact of self-imposed prevention measures and short-term government intervention on mitigating and delaying a COVID-19 epidemic

Clearing memory

In[1]:=
```
ClearSystemCache[]
ClearAll["Global`*"]
Clear["Subscript"]
Clear["Superscript"]
Clear["Subsuperscript"]
```

Model equations

In[6]:=
```
eq[Intervention_][1] :=
 S'[t] == -λ[Intervention][t] S[t] - k λawareness[t] S[t] + μ1 Sa[t]
eq[Intervention_][2] :=
 EE'[t] == λ[Intervention][t] S[t] - α EE[t] - k λawareness[t] EE[t] + μ1 EEa[t]
eq[Intervention_][3] := IM'[t] == p α EE[t] - γ1 IM[t] - k λawareness[t] IM[t] + μ1 IMa[t]
eq[Intervention_][4] :=
 IS'[t] == (1 - p) α EE[t] - ν IS[t] - λawareness[t] IS[t] + μ2 ISa[t]
eq[Intervention_][5] := IQ'[t] == ν IS[t] - γ2 IQ[t] - η IQ[t]
eq[Intervention_][6] := IQa'[t] == ν^a ISa[t] - γ3 IQa[t] - ηa IQa[t]
eq[Intervention_][7] := R'[t] == γ1 IM[t] + γ1 IMa[t] + γ2 IQ[t] + γ3 IQa[t]
eq[Intervention_][8] := RQ'[t] == γ2 IQ[t] + γ3 IQa[t]
eq[Intervention_][9] :=
 Sa'[t] == -λa[Intervention][t] Sa[t] + k λawareness[t] S[t] - μ1 Sa[t]
eq[Intervention_][10] :=
 EEa'[t] == λa[Intervention][t] Sa[t] - α EEa[t] + k λawareness[t] EE[t] - μ1 EEa[t]
eq[Intervention_][11] :=
 IMa'[t] == p α EEa[t] - γ1 IMa[t] + k λawareness[t] IM[t] - μ1 IMa[t]
eq[Intervention_][12] :=
 ISa'[t] == (1 - p) α EEa[t] - ν^a ISa[t] + λawareness[t] IS[t] - μ2 ISa[t]
eq[Intervention_][13] := DD'[t] == η IQ[t] + ηa IQa[t]
eq[Intervention_][14] := DDQ'[t] == η IQ[t]
eq[Intervention_][15] := DDQa'[t] == ηa IQa[t]
eq[Intervention_][16] := RM'[t] == γ1 IM[t] - k λawareness[t] RM[t] + μ1 RMa[t]
eq[Intervention_][17] := RMa'[t] == γ1 IMa[t] + k λawareness[t] RM[t] - μ1 RMa[t]
```

Numer of variables in the model (including deceased individuals)

In[23]:=
```
numvar = 17
eqs[Intervention_] := Table[eq[Intervention][i], {i, 1, numvar}]
lhs[Intervention_] := eqs[Intervention][[All, 1]];
rhs[Intervention_] := eqs[Intervention][[All, 2]];
TableForm[eqs[Intervention]]
```

Out[23]= 17

Out[27]//TableForm=

$$S'[t] == Sa[t]\,\mu_1 - k\,S[t]\,\lambda_{awareness}[t] - S[t]\,\lambda[Intervention][t]$$
$$EE'[t] == -\alpha\,EE[t] + EEa[t]\,\mu_1 - k\,EE[t]\,\lambda_{awareness}[t] + S[t]\,\lambda[Intervention][t]$$
$$IM'[t] == p\,\alpha\,EE[t] - IM[t]\,\gamma_1 + IMa[t]\,\mu_1 - k\,IM[t]\,\lambda_{awareness}[t]$$
$$IS'[t] == (1-p)\,\alpha\,EE[t] - \nu\,IS[t] + ISa[t]\,\mu_2 - IS[t]\,\lambda_{awareness}[t]$$
$$IQ'[t] == -\eta\,IQ[t] + \nu\,IS[t] - IQ[t]\,\gamma_2$$
$$IQa'[t] == \nu^a\,ISa[t] - IQa[t]\,\gamma_3 - IQa[t]\,\eta_a$$
$$R'[t] == IM[t]\,\gamma_1 + IMa[t]\,\gamma_1 + IQ[t]\,\gamma_2 + IQa[t]\,\gamma_3$$
$$RQ'[t] == IQ[t]\,\gamma_2 + IQa[t]\,\gamma_3$$
$$Sa'[t] == -Sa[t]\,\mu_1 + k\,S[t]\,\lambda_{awareness}[t] - Sa[t]\,\lambda_a[Intervention][t]$$
$$EEa'[t] == -\alpha\,EEa[t] - EEa[t]\,\mu_1 + k\,EE[t]\,\lambda_{awareness}[t] + Sa[t]\,\lambda_a[Intervention][t]$$
$$IMa'[t] == p\,\alpha\,EEa[t] - IMa[t]\,\gamma_1 - IMa[t]\,\mu_1 + k\,IM[t]\,\lambda_{awareness}[t]$$
$$ISa'[t] == (1-p)\,\alpha\,EEa[t] - \nu^a\,ISa[t] - ISa[t]\,\mu_2 + IS[t]\,\lambda_{awareness}[t]$$
$$DD'[t] == \eta\,IQ[t] + IQa[t]\,\eta_a$$
$$DDQ'[t] == \eta\,IQ[t]$$
$$DDQa'[t] == IQa[t]\,\eta_a$$
$$RM'[t] == IM[t]\,\gamma_1 + RMa[t]\,\mu_1 - k\,RM[t]\,\lambda_{awareness}[t]$$
$$RMa'[t] == IMa[t]\,\gamma_1 - RMa[t]\,\mu_1 + k\,RM[t]\,\lambda_{awareness}[t]$$

Model variables

In[28]:=
```
vars = {S[t], EE[t], IM[t], IS[t], IQ[t], IQa[t], R[t], RQ[t],
   Sa[t], EEa[t], IMa[t], ISa[t], DD[t], DDQ[t], DDQa[t], RM[t], RMa[t]}
```

Out[28]= {S[t], EE[t], IM[t], IS[t], IQ[t], IQa[t], R[t], RQ[t], Sa[t], EEa[t], IMa[t], ISa[t], DD[t], DDQ[t], DDQa[t], RM[t], RMa[t]}

Total population size N(t) is not constant due to disease-related mortality

In[29]:=
```
NN[t] = S[t] + EE[t] + IM[t] + IS[t] +
   IQ[t] + IQa[t] + R[t] + Sa[t] + EEa[t] + IMa[t] + ISa[t]
```

Out[29]= EE[t] + EEa[t] + IM[t] + IMa[t] + IQ[t] + IQa[t] + IS[t] + ISa[t] + R[t] + S[t] + Sa[t]

Awareness acquisition rate $\lambda_{awareness}(t)$

In[30]:=
```
λawareness[t] = δ (IQ[t] + IQa[t])
```

Out[30]= δ (IQ[t] + IQa[t])

Vector of infectious individuals

In[31]:=
```
VecInf = {IM[t], IS[t], IMa[t], ISa[t]}
```

Out[31]= {IM[t], IS[t], IMa[t], ISa[t]}

Transmission matrix for self-imposed measures and government intervention

Model with disease-awareness and without interventions

```
In[32]:= TrMatrix[Intervention_ /; Intervention == "Baseline"] :=
          β / (NN[t] - IQ[t] - IQa[t]) {{σ, 1, σ, 1}, {σ, 1, σ, 1}}
```

Model with disease-awareness and mask-wearing

```
In[33]:= TrMatrix[Intervention_ /; Intervention == "Mask"] :=
          β / (NN[t] - IQ[t] - IQa[t]) {{σ, 1, r1 σ, r1}, {σ, 1, r1 σ, r1}}
```

Model with disease-awareness and handwashing

```
In[34]:= TrMatrix[Intervention_ /; Intervention == "Hand"] :=
          β / (NN[t] - IQ[t] - IQa[t]) {{σ, 1, σ, 1}, {r2 σ, r2, r2 σ, r2}}
```

Model with disease-awareness and self-imposed social distancing

```
In[35]:= TrMatrix[Intervention_ /; Intervention == "ContactReductionIndividuals"] :=
          β / (S[t] + EE[t] + IM[t] + IS[t] + RQ[t] +
               RM[t] + r3 (Sa[t] + EEa[t] + IMa[t] + ISa[t] + RMa[t]))
           {{σ, 1, r3 σ, r3}, {r3 σ, r3, (r3)^2 σ, (r3)^2}}
```

Model with disease-awareness and government-imposed social distancing

```
In[36]:= TrMatrix[Intervention_ /; Intervention == "ContactReductionGovernment"] :=
          ((β If[t ≥ StartTime && t ≤ (StopTime + StartTime), r4, 1]) / (NN[t] - IQ[t] - IQa[t]))
           {{σ, 1, σ, 1}, {σ, 1, σ, 1}}
```

Model with disease-awareness, government-imposed social distancing and handwashing

```
In[37]:= TrMatrix[Intervention_ /; Intervention == "GovernmentAndHand"] :=
          ((β If[t ≥ StartTime && t ≤ (StopTime + StartTime), r4, 1]) / (NN[t] - IQ[t] - IQa[t]))
           {{σ, 1, σ, 1}, {r2 σ, r2, r2 σ, r2}}
```

Force of infection for unaware $\lambda(t)$

```
In[38]:= λ[Intervention_][t] := (TrMatrix[Intervention].VecInf)[[1]]
```

Force of infection for disease-aware $\lambda_a(t)$

```
In[39]:= λa[Intervention_][t] := (TrMatrix[Intervention].VecInf)[[2]]
```

Epidemiological parameters of the model

Average contact rate (unique persons), 1/year

In[40]:= **AverageContactRate = c → 13.85 × 365**

Out[40]= c → 5055.25

Relative infectivity of mildly infected

In[41]:= **RelativeInfectivity = σ → 0.5**

Out[41]= σ → 0.5

1/latent period, 1/year

In[42]:= **RateInfectiousnessOnset = α → 365 / 4**

Out[42]= $\alpha \to \frac{365}{4}$

Proportion of mildly infected

In[43]:= **ProportionMildSymptoms = p → 0.82**

Out[43]= p → 0.82

1/recovery period of mildly infected, 1/year

In[44]:= **RecoveryRateMildSymptoms = γ1 → 365 / 7**

Out[44]= $\gamma_1 \to \frac{365}{7}$

1/delay from onset of infectiousness to diagnosis for individuals with severe symptoms, 1/year

In[45]:= **DiagnosisRate = ν → 365 / 5**

Out[45]= ν → 73

1/delay from diagnosis to recovery for diagnosed unaware, 1/year

In[46]:= **RecoveryRateSevereSymptomsUnaware = γ2 → 365 / 14**

Out[46]= $\gamma_2 \to \frac{365}{14}$

Case fatality rate of unaware diagnosed

In[47]:= **FatalityRateUnaware = f → 0.016**

Out[47]= f → 0.016

Disease-associated death rate of unaware diagnosed, 1/year

In[48]:=
```
DeathRateDiagnosedUnaware =
  η → γ2 f / (1 - f) /. {RecoveryRateSevereSymptomsUnaware, FatalityRateUnaware}
```

Out[48]= $\eta \to 0.423926$

Basic reproduction number

In[49]:=
```
BasicReproductionNumber = R0 → 2.5
```

Out[49]= $R_0 \to 2.5$

Probability of transmission per contact with infectious with severe symptoms

In[50]:=
```
TransmissionProbability = Solve[R0 == p β σ / γ1 + (1 - p) β / ν /. β → c ϵ, ϵ][[1, 1]] /.
  {ProportionMildSymptoms, AverageContactRate, RelativeInfectivity,
   RecoveryRateMildSymptoms, DiagnosisRate, BasicReproductionNumber}
```

Out[50]= $\epsilon \to 0.0478794$

Transmission rate of infection via contact with infectious with severe symptoms, 1/year

In[51]:=
```
TransmissionRate = β → c ϵ /. {AverageContactRate, TransmissionProbability}
```

Out[51]= $\beta \to 242.042$

Disease-awareness parameters of the model

Rate of awareness acquisition, 1/year

In[52]:=
```
AcquisitionRateAwarenessBaseline = 1 (*5 10^(-5)*) (* δ *)
```

Out[52]= 1

Relative susceptibility to awareness acquisition for susceptible, exposed, infectious with mild symptoms and recovered after a mild infection

In[53]:=
```
RelativeSusceptibilityAwarenessBaseline = 0.5 (* k *)
```

Out[53]= 0.5

Rate of awareness fading for individuals who are susceptible, exposed, infectious with mild symptoms and recovered after a mild infection, 1/year

In[54]:=
```
RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline = 365 / 30 (* μ1 *)
```

Out[54]= $\frac{73}{6}$

Rate of awareness fading for individuals with severe symptoms, 1/year

In[55]:=
```
RateAwarenessFadingSevereSymptomsBaseline = 365 / 60 (* μ2 *)
```

Out[55]=
$$\frac{73}{12}$$

1/delay from onset of infectiousness to diagnosis for disease-aware with severe symptoms, 1/year

In[56]:=
```
DiagnosisRateAwareBaseline = 365 / 3 (* ν^a *)
```

Out[56]=
$$\frac{365}{3}$$

1/delay from diagnosis to recovery of diagnosed aware, 1/year

In[57]:=
```
RecoveryRateSevereSymptomsAware = γ3 → 365 / 12
```

Out[57]=
$$\gamma_3 \to \frac{365}{12}$$

Case fatality rate of aware diagnosed

In[58]:=
```
FatalityRateAware = fa → 0.01
```

Out[58]=
$$f_a \to 0.01$$

Disease-associated death rate of aware diagnosed, 1/year

In[59]:=
```
DeathRateDiagnosedAware =
  ηa → γ3 fa / (1 - fa) /. {RecoveryRateSevereSymptomsAware, FatalityRateAware}
```

Out[59]=
$$\eta_a \to 0.307239$$

Prevention measures parameters of the model

Duration of government intervention, years

In[60]:=
```
StopTime = 3 / 12;
```

Threshold for initiation of government intervention (10 diagnosed individuals in this notebook) Please note that if the threshold for initiation of government intervention is larger than 10 individuals, StartTime can be different for fast and slow spread of awareness (Check it!)

In[61]:=
```
StartTimeBaseline = 0.1037;
```

Parameters of the model

In[62]:=
```
Parameters[RelativeSusceptibilityAwareness_,
  RateAwarenessFadingSusceptibleExposedMildSymptoms_,
  RateAwarenessFadingSevereSymptoms_, TransmissionRateAwareness_,
  DiagnosisRateAware_, StartTimeValue_] :=
 {AverageContactRate, RelativeInfectivity, RateInfectiousnessOnset,
  ProportionMildSymptoms, RecoveryRateMildSymptoms, DiagnosisRate,
  RecoveryRateSevereSymptomsUnaware, RecoveryRateSevereSymptomsAware,
  FatalityRateUnaware, FatalityRateAware, DeathRateDiagnosedUnaware,
  DeathRateDiagnosedAware, BasicReproductionNumber, TransmissionProbability,
  TransmissionRate, k → RelativeSusceptibilityAwareness,
  μ1 → RateAwarenessFadingSusceptibleExposedMildSymptoms,
  μ2 → RateAwarenessFadingSevereSymptoms, δ → TransmissionRateAwareness,
  ν^a → DiagnosisRateAware, StartTime → StartTimeValue}
```

Solving differential equations

Start time, year

In[63]:=
```
t_start = 0
```

Out[63]= 0

End time, year

In[64]:=
```
t_end = 2.5;
```

Total population size at the beginning of an outbreak

In[65]:=
```
Ntot = 17 × 10^6
```

Out[65]= 17 000 000

Initial number of infected individuals

In[66]:=
```
InfInit = 1
```

Out[66]= 1

Number of points per day for discretization of the solution

In[67]:=
```
spacing = 20;
```

Initial conditions

In[68]:=
```
ics = Table[ic[i], {i, 1, numvar}];

ic[1] = (Ntot - InfInit) == vars[[1]] /. {t → t_start}
ic[2] = 0 == vars[[2]] /. {t → t_start}
ic[3] = 0 == vars[[3]] /. {t → t_start}
ic[4] = InfInit == vars[[4]] /. {t → t_start}
ic[5] = 0 == vars[[5]] /. {t → t_start}
ic[6] = 0 == vars[[6]] /. {t → t_start}
ic[7] = 0 == vars[[7]] /. {t → t_start}
ic[8] = 0 == vars[[8]] /. {t → t_start}
ic[9] = 0 == vars[[9]] /. {t → t_start}
ic[10] = 0 == vars[[10]] /. {t → t_start}
ic[11] = 0 == vars[[11]] /. {t → t_start}
ic[12] = 0 == vars[[12]] /. {t → t_start}
ic[13] = 0 == vars[[13]] /. {t → t_start}
ic[14] = 0 == vars[[14]] /. {t → t_start}
ic[15] = 0 == vars[[15]] /. {t → t_start}
ic[16] = 0 == vars[[16]] /. {t → t_start}
ic[17] = 0 == vars[[17]] /. {t → t_start}
```

Out[69]= $16\,999\,999 == S[0]$

Out[70]= $0 == EE[0]$

Out[71]= $0 == IM[0]$

Out[72]= $1 == IS[0]$

Out[73]= $0 == IQ[0]$

Out[74]= $0 == IQa[0]$

Out[75]= $0 == R[0]$

Out[76]= $0 == RQ[0]$

Out[77]= $0 == Sa[0]$

Out[78]= $0 == EEa[0]$

Out[79]= $0 == IMa[0]$

Out[80]= $0 == ISa[0]$

Out[81]= $0 == DD[0]$

Out[82]= $0 == DDQ[0]$

Out[83]= $0 == DDQa[0]$

Out[84]= $0 == RM[0]$

Out[85]= $0 == RMa[0]$

Solution

In[86]:=
```
solution[Intervention_, Parameters_] :=
  NDSolve[Join[eqs[Intervention], ics] /. Parameters, vars, {t, t_start, t_end}];
```

Computing peak number of diagnoses per 1000 persons

```
In[87]:= Peak[Intervention_, Parameters_] :=
          Max[Flatten[Table[Evaluate[(1000 (IQ[t] + IQa[t]) / NN[t]) /. First@solution[
                  Intervention, Parameters]], {t, t_start, t_end, 1 / (t_end 364 spacing)}]]]
```

Model without disease-awareness

```
In[88]:= PeakBaseline = Peak["Baseline", Parameters[0, 0, 0, 0, 0, 0]]
Out[88]= 45.7976
```

Model with disease-awareness, no measures

```
In[89]:= PeakAwareness =
          Peak["Baseline", Parameters[RelativeSusceptibilityAwarenessBaseline,
            RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
            RateAwarenessFadingSevereSymptomsBaseline, AcquisitionRateAwarenessBaseline,
            DiagnosisRateAwareBaseline, StartTimeBaseline]]
Out[89]= 37.0119
```

Model with disease-awareness and handwashing with 30% efficacy

```
In[90]:= PeakHand = Peak["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
              RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
              RateAwarenessFadingSevereSymptomsBaseline,
              AcquisitionRateAwarenessBaseline,
              DiagnosisRateAwareBaseline, StartTimeBaseline], {r_2 → 0.7}]]
Out[90]= 15.884
```

Computing time until the peak number of diagnoses since the first case (days)

```
In[91]:= PeakTiming[Intervention_, Parameters_] :=
          365 × 1 / ((t_end 364  spacing) + 1) ReplaceAll[
            Ordering[Flatten[Table[Evaluate[(1000 (IQ[t] + IQa[t]) / NN[t]) /. First@
                    solution[Intervention, Parameters]],
                {t, t_start, t_end, 1 / (t_end 364 spacing)}]], -1][[1]],
            (x_ /; x == Length[Table[t, {t, t_start, t_end, 1 / (t_end 364 spacing)}]]) → 0] // N
```

Model without disease-awareness

```
In[92]:= PeakTimingBaseline = PeakTiming["Baseline", Parameters[0, 0, 0, 0, 0, 0]]
Out[92]= 155.417
```

Model with disease-awareness, no measures

In[93]:=
```
PeakTimingAwareness =
 PeakTiming["Baseline", Parameters[RelativeSusceptibilityAwarenessBaseline,
   RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
   RateAwarenessFadingSevereSymptomsBaseline, AcquisitionRateAwarenessBaseline,
   DiagnosisRateAwareBaseline, StartTimeBaseline]]
```

Out[93]= 162.797

Model with disease-awareness and handwashing with 30% efficacy

In[94]:=
```
PeakTimingHand =
 PeakTiming["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline,
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r₂ → 0.7}]]
```

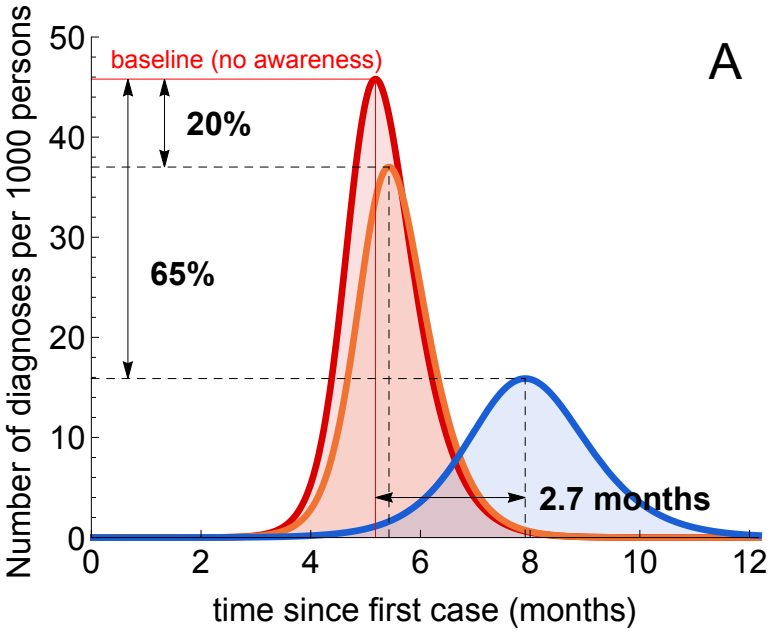
Out[94]= 237.297

Plotting Figure 3 A (main text)

In[95]:=
```
imagePadding = {{47.5, 5}, {60, 22.5}};

ymax = 50;
tmax = 1;

PlotFigure3A[vars_, ylabs_, scenario_] :=
 Table[Show[Plot[{Evaluate[vars[[i]] /. solution["Baseline",
          Parameters[0, 0, 0, 0, 0, 0]]], Evaluate[vars[[i]] /.
         solution[scenario, Parameters[RelativeSusceptibilityAwarenessBaseline,
           RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
           RateAwarenessFadingSevereSymptomsBaseline,
           AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
           StartTimeBaseline]]], Evaluate[vars[[i]] /. solution["Hand",
          Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
            RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
            RateAwarenessFadingSevereSymptomsBaseline,
            AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
            StartTimeBaseline], {r₂ → 0.7}]]]},
      {t, t_start, tmax}, AspectRatio → 0.75, ImageSize → 400,
      PlotRangePadding → None,
      Filling → Axis,
      PlotRange → {{0, All}, {0, ymax}},
      AxesOrigin → {0, 0},
      Frame → {{True, False}, {True, False}},
      FrameStyle → Directive[Black, 17],
      PlotStyle → {{Thickness[0.01], RGBColor[217 / 255, 0, 0]},
        {Thickness[0.01], RGBColor[241 / 255, 115 / 255, 51 / 255]},
        {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]}},
      FillingStyle -> Directive[Opacity[0.125]],
      ImagePadding → imagePadding,
      (*PlotLegends→Placed[{Table[Style[Row[{label}],Black,13,"Text"],{label,
           {"Model without awareness","Model with awareness, no measures",
            "Model with awareness and handwashing with 30% efficacy"}}]},
        Bottom],*)FrameLabel → {{ylabs[[i]], None},
        {"time since first case (months)", None}},
      FrameTicks → {{Automatic, None}, {{{0, "0"}, {60 / 365, "2"},
```

```
        {120 / 365, "4"}, {180 / 365, "6"}, {240 / 365, "8"},
        {300 / 365, "10"}, {360 / 365, "12"}}, None}}],
    Graphics[{Red, Line[{{PeakTimingBaseline / 365, 0},
       {PeakTimingBaseline / 365, PeakBaseline}}]}], Graphics[
     {Red, Line[{{0, PeakBaseline}, {PeakTimingBaseline / 365, PeakBaseline}}]}],
    Graphics[{Black, Dashed, Line[{{PeakTimingAwareness / 365, 0},
       {PeakTimingAwareness / 365, PeakAwareness}}]}], Graphics[{Black, Dashed,
      Line[{{0, PeakAwareness}, {PeakTimingAwareness / 365, PeakAwareness}}]}],
    Graphics[{Black, Dashed, Line[{{PeakTimingHand / 365, 0},
       {PeakTimingHand / 365, PeakHand}}]}], Graphics[
     {Black, Dashed, Line[{{0, PeakHand}, {PeakTimingHand / 365, PeakHand}}]}],
    Graphics[Text[StyleForm["A", FontSize → 26], {1 * 0.95, ymax * 0.95}]],
    Graphics[{Black, Arrowheads[{-.025, .025}],
      Arrow[{{40 / 365, PeakBaseline}, {40 / 365, PeakAwareness}}]}],
    Graphics[{Black, Arrowheads[{-.025, .025}],
      Arrow[{{20 / 365, PeakBaseline}, {20 / 365, PeakHand}}]}],
    Graphics[{Black, Arrowheads[{-.025, .025}],
      Arrow[{{PeakTimingBaseline / 365, 4}, {PeakTimingHand / 365, 4}}]}],
    Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
       FontColor → Red], {85 / 365, PeakBaseline + 2}]],
    Graphics[Text[StyleForm["20%", FontSize → 17, FontWeight -> "Bold"],
      {70 / 365, (PeakBaseline - PeakAwareness) / 2 + PeakAwareness}]],
    Graphics[Text[StyleForm["65%", FontSize → 17, FontWeight -> "Bold"],
      {50 / 365, (PeakAwareness - PeakHand) / 2 + PeakHand}]],
    Graphics[Text[StyleForm["2.7 months", FontSize → 17, FontWeight -> "Bold"],
      {0.8, 4}]]], {i, 1, Length[vars]}][[1]]

fig3A = PlotFigure3A[{1000 (IQ[t] + IQa[t]) / NN[t]},
  {"Number of diagnoses per 1000 persons"}, "Baseline"]

(*Export[StringJoin[
  "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//Figure3A",".eps"],fig3A];
Export[StringJoin[
  "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//Figure3A",".eps"],fig3A];*)
```

Out[99]=



Computing the deaths at baseline (%)

In[100]:=
```
Deaths[Intervention_, Parameters_] :=
 Max[Flatten[Table[Evaluate[DD[t] /. First@solution[Intervention, Parameters]],
    {t, tstart, tend, 1 / (tend 364 spacing)}]]]
```

```
DeathsBaseline = Deaths["Baseline", Parameters[0, 0, 0, 0, 0, 0]]
```

Out[101]= 44 205.2

Computing the attack rate (%)

In[102]:=
```
AttackRate[Intervention_, Parameters_] :=
 Max[Flatten[Table[Evaluate[((RQ[t] + DD[t]) / Ntot 100) /. First@solution[
        Intervention, Parameters]], {t, tstart, tend, 1 / (tend 364 spacing)}]]]
```

Model without disease-awareness

In[103]:=
```
AttackRateBaseline = AttackRate["Baseline", Parameters[0, 0, 0, 0, 0, 0]]
```

Out[103]= 16.2519

Model with disease-awareness, no measures

In[104]:=
```
AttackRateAwareness =
 AttackRate["Baseline", Parameters[RelativeSusceptibilityAwarenessBaseline,
   RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
   RateAwarenessFadingSevereSymptomsBaseline, AcquisitionRateAwarenessBaseline,
   DiagnosisRateAwareBaseline, StartTimeBaseline]]
```

Out[104]= 15.5895

Model with disease-awareness and handwashing with 30% efficacy

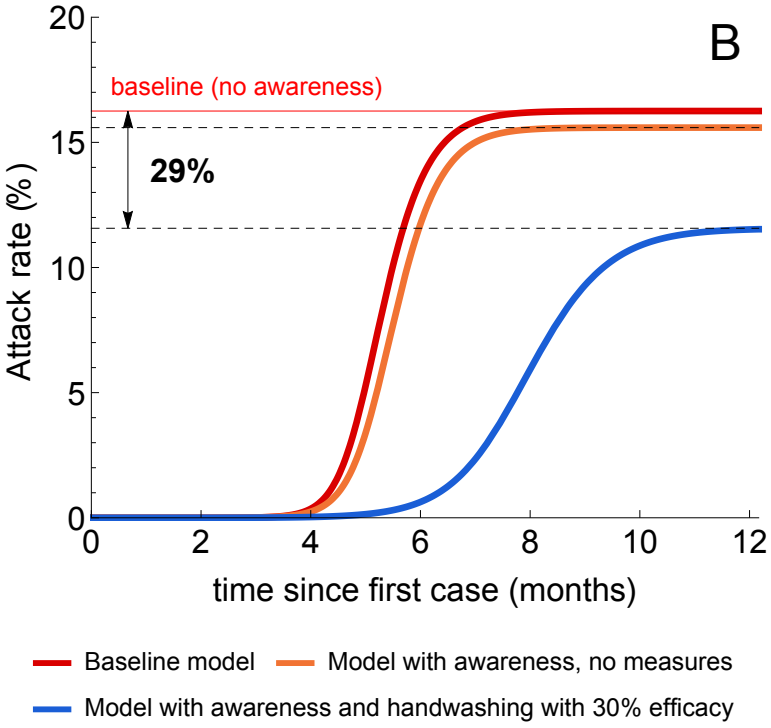
In[105]:=
```
AttackRateHand =
 AttackRate["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline,
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r₂ → 0.7}]]
```

Out[105]= 11.5675

Plotting Figure 3 B (main text)

In[106]:=
```
imagePadding = {{47.5, 5}, {60, 22.5}};

PlotFigure3B[vars_, ylabs_, scenario_] :=
 Table[Show[Plot[{Evaluate[vars[[i]] /. solution["Baseline",
          Parameters[0, 0, 0, 0, 0, 0]]], Evaluate[vars[[i]] /.
         solution[scenario, Parameters[RelativeSusceptibilityAwarenessBaseline,
           RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
           RateAwarenessFadingSevereSymptomsBaseline,
           AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
           StartTimeBaseline]]], Evaluate[vars[[i]] /. solution["Hand",
          Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
            RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
            RateAwarenessFadingSevereSymptomsBaseline,
            AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
            StartTimeBaseline], {r2 → 0.7}]]]},
      {t, tstart, tmax}, AspectRatio → 0.75, ImageSize → 400,
      ImagePadding → imagePadding,
      PlotRangePadding → None,
      PlotRange → {{0, All}, {0, 20}},
      AxesOrigin → {0, 0},
      Frame → {{True, False}, {True, False}},
      PlotLegends → Placed[{Table[Style[Row[{label}], Black, 13, "Text"],
          {label, {"Baseline model", "Model with awareness, no measures",
            "Model with awareness and handwashing with 30% efficacy"}}]},
        Bottom], FrameStyle → Directive[Black, 17],
      PlotStyle → {{Thickness[0.01], RGBColor[217 / 255, 0, 0]},
        {Thickness[0.01], RGBColor[241 / 255, 115 / 255, 51 / 255]},
        {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]}},
      FrameLabel → {{ylabs[[i]], None}, {"time since first case (months)", None}},
      FrameTicks → {{Automatic, None}, {{{0, "0"}, {60 / 365, "2"},
          {120 / 365, "4"}, {180 / 365, "6"}, {240 / 365, "8"}, {300 / 365, "10"},
          {360 / 365, "12"}, {420 / 365, "14"}, {480 / 365, "16"}, {540 / 365, "18"},
          {600 / 365, "20"}, {660 / 365, "22"}, {720 / 365, "24"}}, None}}],
     Graphics[Text[StyleForm["B", FontSize → 26], {1 * 0.95, 20 * 0.95}]],
     Graphics[{Red, Line[{{0, AttackRateBaseline}, {1, AttackRateBaseline}}]}],
     Graphics[{Black, Dashed,
       Line[{{0, AttackRateAwareness}, {1, AttackRateAwareness}}]}],
     Graphics[{Black, Dashed, Line[{{0, AttackRateHand}, {1, AttackRateHand}}]}],
     Graphics[{Black, Arrowheads[{-.025, .025}],
       Arrow[{{20 / 365, AttackRateHand}, {20 / 365, AttackRateBaseline}}]}],
     Graphics[Text[StyleForm["29%", FontSize → 17, FontWeight -> "Bold"],
       {50 / 365, (AttackRateBaseline - AttackRateHand) / 2 + AttackRateHand}]],
     Graphics[Text[StyleForm["baseline (no awareness)",
        FontSize → 13, FontColor → Red],
       {85 / 365, AttackRateBaseline + 1}]]], {i, 1, Length[vars]}][[1]]

fig3B = PlotFigure3B[{(RQ[t] + DD[t]) / Ntot 100}, {"Attack rate (%)"}, "Baseline"]

(*Export[StringJoin[
  "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//Figure3B",".eps"],fig3B];
Export[StringJoin[
  "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//Figure3B",".eps"],fig3B];*)
```

Out[108]=



Combined intervention: government-imposed social distancing and handwashing (fast spread of awareness)

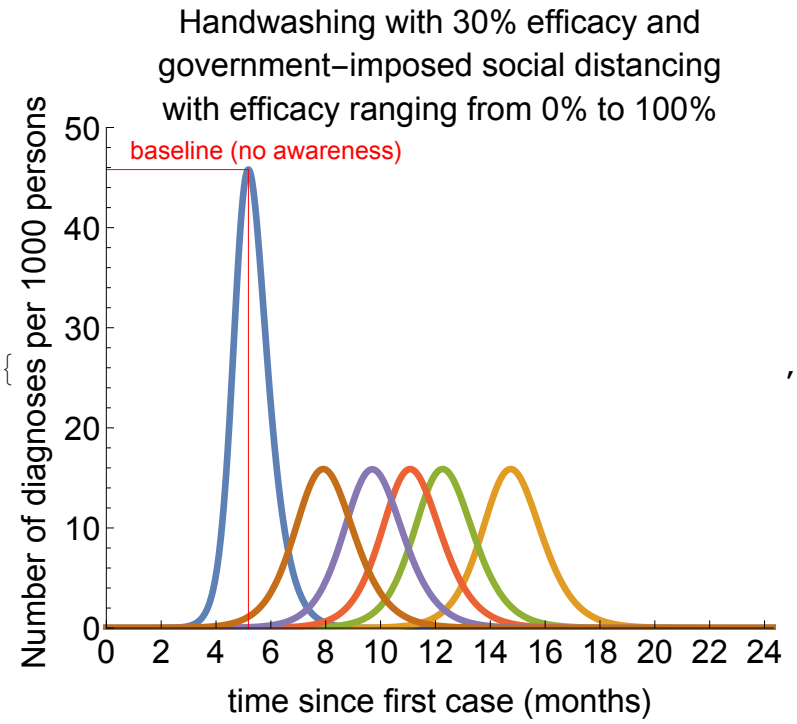
Time when government-imposed social distancing has to start (10 diagnoses)

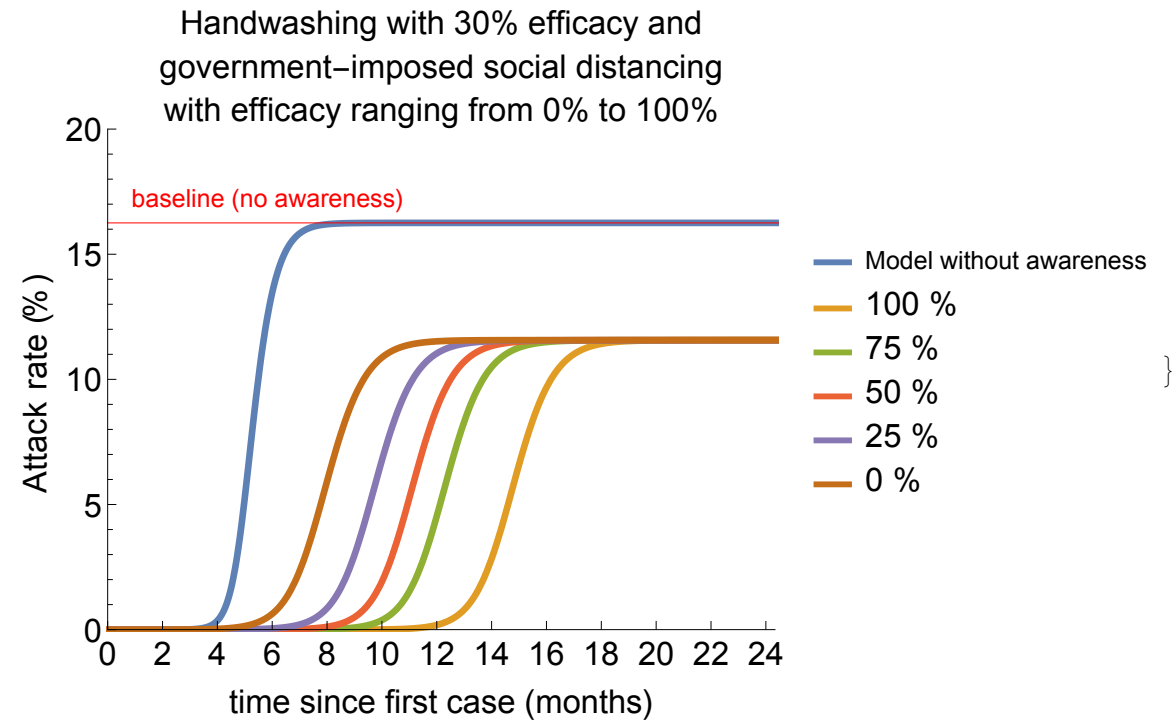
```
(IQ[t] + IQa[t]) /.
  solution["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
     RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
     RateAwarenessFadingSevereSymptomsBaseline,
     AcquisitionRateAwarenessBaseline,
     DiagnosisRateAwareBaseline, 0], {r2 → 0.7}]] /. t → 0.10437
```

```
{10.0016}
```

Impact of government-imposed social distancing with efficacy ranging from 0% ($r_4 = 1$) to 100% ($r_4 = 0$) and handwashing with 30% efficacy ($r_2 = 0.7$)

```
imagePadding = {{47.5, 5}, {60, 0}};
relvars = {1000 (IQ[t] + IQa[t]) / NN[t], (RQ[t] + DD[t]) / Ntot 100};
relyalabs = {"Number of diagnoses per 1000 persons", "Attack rate (%)"};
relylim = {50, 20};
ReductionFactor = Table[i, {i, 0, 1, 0.25}];

PlotCombinedIntervention[vars_, ylabs_, ylim_,
  scenario_, title_, parameters_, range_, legend_] := Table[Show[
   Plot[{Evaluate[vars[[i]] /. solution["Baseline", Parameters[0, 0, 0, 0, 0, 0]]],
     Evaluate[Table[vars[[i]] /. solution[scenario, parameters], range]]},
    {t, tstart, tend}, AspectRatio → 0.75, ImageSize → 400, PlotRangePadding → None,
    PlotRange → {{0, 2}, {0, ylim[[i]]}}, AxesOrigin → {0, 0},
    Frame → {{True, False}, {True, False}}, FrameStyle → Directive[Black, 17],
    PlotStyle → Thickness[0.01], PlotLabel → Style[title, 17, Black],
    FrameLabel → {{ylabs[[i]], None}, {"time since first case (months)", None}},
    ImagePadding → imagePadding,
    FrameTicks → {{Automatic, None}, {{{0, "0"}, {60 / 365, "2"}, {120 / 365, "4"},
        {180 / 365, "6"}, {240 / 365, "8"}, {300 / 365, "10"}, {360 / 365, "12"},
        {420 / 365, "14"}, {480 / 365, "16"}, {540 / 365, "18"}, {600 / 365, "20"},
        {660 / 365, "22"}, {720 / 365, "24"}}, None}}, PlotLegends →
    If[i == 2, Prepend[Table[Style[Row[legend], Black, 17, "Text"], range],
      "Model without awareness"], None]], If[i == 2, {Graphics[
     {Red, Line[{{0, AttackRateBaseline}, {tend, AttackRateBaseline}}]}],
    Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
       FontColor → Red], {175 / 365, AttackRateBaseline + 1}]]},
   {Graphics[{Red, Line[{{PeakTimingBaseline / 365, 0},
       {PeakTimingBaseline / 365, PeakBaseline}}]}], Graphics[{Red,
     Line[{{0, PeakBaseline}, {PeakTimingBaseline / 365, PeakBaseline}}]}],
    Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
       FontColor → Red], {175 / 365, PeakBaseline + 2}]]}]], {i, 1, Length[vars]}]

PlotCombinedIntervention[relvars, relyalabs, relylim, "GovernmentAndHand",
 "Handwashing with 30% efficacy and\ngovernment-imposed
   social distancing\nwith efficacy ranging from 0% to 100%",
 Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
   RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
   RateAwarenessFadingSevereSymptomsBaseline, AcquisitionRateAwarenessBaseline,
   DiagnosisRateAwareBaseline, 0.10437], {r2 → 0.7}, {r4 → factor}],
 {factor, ReductionFactor}, {IntegerPart[(1 - factor) 100], " %"}]
```


Handwashing with 30% efficacy and
government−imposed social distancing
with efficacy ranging from 0% to 100%
baseline (no awareness)
Number of diagnoses per 1000 persons
time since first case (months)
0
10
20
30
40
50
0 2 4 6 8 10 12 14 16 18 20 22 24


Handwashing with 30% efficacy and
government−imposed social distancing
with efficacy ranging from 0% to 100%
baseline (no awareness)
Attack rate (%)
time since first case (months)
0
5
10
15
20
0 2 4 6 8 10 12 14 16 18 20 22 24
Model without awareness
100 %
75 %
50 %
25 %
0 %

Computing the relative reduction in peak number of diagnoses per 1000 persons (%) for an efficacy of prevention measure ranging from 0% to 100%

In[109]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.01}];

PeakRange[Intervention_, Parameters_] := Table[{100 (1 - factor),
    100 (PeakBaseline - Max[Flatten[Table[Evaluate[(1000 (IQ[t] + IQa[t]) / NN[t]) /.
              First@solution[Intervention, Parameters]], {t, tstart, tend,
            1 / (tend 364 spacing)}]]]) / PeakBaseline}, {factor, ReductionFactor}]
```

Model with disease-awareness and mask-wearing

```
PeakMaskRange =
 PeakRange["Mask", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]
```

```
{{100., 99.9897}, {99., 99.9895}, {98., 99.9894}, {97., 99.9892}, {96., 99.9891},
 {95., 99.9889}, {94., 99.9887}, {93., 99.9886}, {92., 99.9884}, {91., 99.9882},
 {90., 99.988}, {89., 99.9878}, {88., 99.9876}, {87., 99.9874}, {86., 99.9872},
 {85., 99.987}, {84., 99.9867}, {83., 99.9865}, {82., 99.9862}, {81., 99.986},
 {80., 99.9857}, {79., 99.9854}, {78., 99.9851}, {77., 99.9847}, {76., 99.9844},
 {75., 99.984}, {74., 99.9837}, {73., 99.9832}, {72., 99.9828}, {71., 99.9823},
 {70., 99.9818}, {69., 99.9812}, {68., 99.9806}, {67., 99.9799}, {66., 99.9792},
 {65., 99.9783}, {64., 99.9772}, {63., 99.9758}, {62., 99.9733}, {61., 99.9687},
 {60., 99.9621}, {59., 99.9522}, {58., 99.9356}, {57., 99.9046}, {56., 99.8396},
 {55., 99.6973}, {54., 99.4204}, {53., 98.9754}, {52., 98.3611}, {51., 97.5905},
 {50., 96.6796}, {49., 95.6439}, {48., 94.4978}, {47., 93.2544}, {46., 91.9255},
 {45., 90.5218}, {44., 89.053}, {43., 87.5278}, {42., 85.9542}, {41., 84.3393},
 {40., 82.6896}, {39., 81.011}, {38., 79.3088}, {37., 77.5876}, {36., 75.8518},
 {35., 74.1053}, {34., 72.3514}, {33., 70.5933}, {32., 68.8339}, {31., 67.0755},
 {30., 65.3205}, {29., 63.5709}, {28., 61.8284}, {27., 60.0946},
 {26., 58.3709}, {25., 56.6586}, {24., 54.9588}, {23., 53.2724},
 {22., 51.6003}, {21., 49.9432}, {20., 48.3019}, {19., 46.6767},
 {18., 45.0683}, {17., 43.4769}, {16., 41.903}, {15., 40.3467}, {14., 38.8084},
 {13., 37.2881}, {12., 35.7861}, {11., 34.3024}, {10., 32.8369},
 {9., 31.3899}, {8., 29.9612}, {7., 28.5509}, {6., 27.1588}, {5., 25.7848},
 {4., 24.4289}, {3., 23.091}, {2., 21.771}, {1., 20.4686}, {0., 19.1837}}
```

Model with disease-awareness and handwashing

```
PeakHandRange =
 PeakRange["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r₂ → factor}]]
```

```
{{100., 99.989}, {99., 99.9889}, {98., 99.9887}, {97., 99.9885}, {96., 99.9884},
 {95., 99.9882}, {94., 99.988}, {93., 99.9879}, {92., 99.9877}, {91., 99.9875},
 {90., 99.9873}, {89., 99.9871}, {88., 99.9868}, {87., 99.9866}, {86., 99.9864},
 {85., 99.9861}, {84., 99.9859}, {83., 99.9856}, {82., 99.9853}, {81., 99.9851},
 {80., 99.9848}, {79., 99.9845}, {78., 99.9841}, {77., 99.9838}, {76., 99.9834},
 {75., 99.983}, {74., 99.9826}, {73., 99.9822}, {72., 99.9817}, {71., 99.9812},
 {70., 99.9807}, {69., 99.9801}, {68., 99.9794}, {67., 99.9787}, {66., 99.9779},
 {65., 99.9769}, {64., 99.9758}, {63., 99.9742}, {62., 99.9711}, {61., 99.9661},
 {60., 99.9588}, {59., 99.9478}, {58., 99.9295}, {57., 99.8958}, {56., 99.8267},
 {55., 99.6802}, {54., 99.401}, {53., 98.956}, {52., 98.3429}, {51., 97.5737},
 {50., 96.6642}, {49., 95.6299}, {48., 94.485}, {47., 93.2426}, {46., 91.9146},
 {45., 90.5117}, {44., 89.0436}, {43., 87.5191}, {42., 85.9461}, {41., 84.3318},
 {40., 82.6826}, {39., 81.0045}, {38., 79.3027}, {37., 77.5819},
 {36., 75.8465}, {35., 74.1003}, {34., 72.3467}, {33., 70.589}, {32., 68.8298},
 {31., 67.0717}, {30., 65.3169}, {29., 63.5675}, {28., 61.8252},
 {27., 60.0916}, {26., 58.3681}, {25., 56.656}, {24., 54.9564}, {23., 53.2701},
 {22., 51.5982}, {21., 49.9413}, {20., 48.3001}, {19., 46.675}, {18., 45.0667},
 {17., 43.4755}, {16., 41.9017}, {15., 40.3455}, {14., 38.8073},
 {13., 37.2871}, {12., 35.7852}, {11., 34.3015}, {10., 32.8362},
 {9., 31.3893}, {8., 29.9607}, {7., 28.5504}, {6., 27.1584}, {5., 25.7845},
 {4., 24.4287}, {3., 23.0909}, {2., 21.7709}, {1., 20.4685}, {0., 19.1837}}
```

Model with disease-awareness and self-imposed social distancing

```
PeakSelfImposedDistancingRange = PeakRange["ContactReductionIndividuals",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r3 → factor}]]
```

```
{{100., 99.9815}, {99., 99.9815}, {98., 99.9814}, {97., 99.9814}, {96., 99.9813},
 {95., 99.9813}, {94., 99.9812}, {93., 99.9811}, {92., 99.981}, {91., 99.9809},
 {90., 99.9808}, {89., 99.9807}, {88., 99.9805}, {87., 99.9804}, {86., 99.9802},
 {85., 99.9801}, {84., 99.9799}, {83., 99.9797}, {82., 99.9795}, {81., 99.9793},
 {80., 99.9791}, {79., 99.9788}, {78., 99.9785}, {77., 99.9782}, {76., 99.9779},
 {75., 99.9776}, {74., 99.9773}, {73., 99.9769}, {72., 99.9764}, {71., 99.976},
 {70., 99.9755}, {69., 99.9749}, {68., 99.9743}, {67., 99.9737}, {66., 99.9729},
 {65., 99.972}, {64., 99.9709}, {63., 99.9696}, {62., 99.9678}, {61., 99.9641},
 {60., 99.9578}, {59., 99.9482}, {58., 99.9325}, {57., 99.9037}, {56., 99.8448},
 {55., 99.7205}, {54., 99.4833}, {53., 99.1012}, {52., 98.5672}, {51., 97.8875},
 {50., 97.0726}, {49., 96.1339}, {48., 95.0826}, {47., 93.9295}, {46., 92.6848},
 {45., 91.3579}, {44., 89.958}, {43., 88.4934}, {42., 86.9718}, {41., 85.4006},
 {40., 83.7864}, {39., 82.1354}, {38., 80.4531}, {37., 78.745}, {36., 77.0156},
 {35., 75.2695}, {34., 73.5104}, {33., 71.7421}, {32., 69.9678},
 {31., 68.1905}, {30., 66.4129}, {29., 64.6373}, {28., 62.8661},
 {27., 61.1011}, {26., 59.3441}, {25., 57.5966}, {24., 55.8601},
 {23., 54.1358}, {22., 52.4247}, {21., 50.728}, {20., 49.0463}, {19., 47.3805},
 {18., 45.7311}, {17., 44.0988}, {16., 42.4839}, {15., 40.887}, {14., 39.3082},
 {13., 37.7479}, {12., 36.2063}, {11., 34.6835}, {10., 33.1797},
 {9., 31.6948}, {8., 30.2291}, {7., 28.7824}, {6., 27.3547}, {5., 25.946},
 {4., 24.5562}, {3., 23.1852}, {2., 21.8329}, {1., 20.4991}, {0., 19.1837}}
```

Model with disease-awareness and government-imposed social distancing

```
PeakGovernmentImposedDistancingRange = PeakRange["ContactReductionGovernment",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]
```

```
{{100., 19.1862}, {99., 19.1863}, {98., 19.1863}, {97., 19.1863}, {96., 19.1864},
 {95., 19.1864}, {94., 19.1865}, {93., 19.1865}, {92., 19.1866}, {91., 19.1867},
 {90., 19.1867}, {89., 19.1868}, {88., 19.1868}, {87., 19.1869}, {86., 19.187},
 {85., 19.1871}, {84., 19.1872}, {83., 19.1873}, {82., 19.1874}, {81., 19.1875},
 {80., 19.1876}, {79., 19.1878}, {78., 19.1879}, {77., 19.1881}, {76., 19.1883},
 {75., 19.1885}, {74., 19.1887}, {73., 19.1889}, {72., 19.1892}, {71., 19.1895},
 {70., 19.1898}, {69., 19.1901}, {68., 19.1905}, {67., 19.1909}, {66., 19.1914},
 {65., 19.1919}, {64., 19.1925}, {63., 19.1931}, {62., 19.1938}, {61., 19.1946},
 {60., 19.1954}, {59., 19.1964}, {58., 19.1974}, {57., 19.1986}, {56., 19.1999},
 {55., 19.2013}, {54., 19.2028}, {53., 19.2045}, {52., 19.2064}, {51., 19.2085},
 {50., 19.2108}, {49., 19.2133}, {48., 19.2161}, {47., 19.2191}, {46., 19.2225},
 {45., 19.2263}, {44., 19.2304}, {43., 19.2349}, {42., 19.2399}, {41., 19.2454},
 {40., 19.2514}, {39., 19.2581}, {38., 19.2654}, {37., 19.2734}, {36., 19.2822},
 {35., 19.2918}, {34., 19.3023}, {33., 19.3137}, {32., 19.3262}, {31., 19.3398},
 {30., 19.3545}, {29., 19.3705}, {28., 19.3877}, {27., 19.4063}, {26., 19.4262},
 {25., 19.4475}, {24., 19.4702}, {23., 19.4943}, {22., 19.5197},
 {21., 19.5464}, {20., 19.5743}, {19., 19.6032}, {18., 19.6328},
 {17., 19.6628}, {16., 19.6929}, {15., 19.7226}, {14., 19.7511},
 {13., 19.7779}, {12., 19.8019}, {11., 19.8219}, {10., 19.8368},
 {9., 19.8448}, {8., 19.8441}, {7., 19.8326}, {6., 19.8076}, {5., 19.7664},
 {4., 19.7055}, {3., 19.6212}, {2., 19.5093}, {1., 19.3652}, {0., 19.1837}}
```

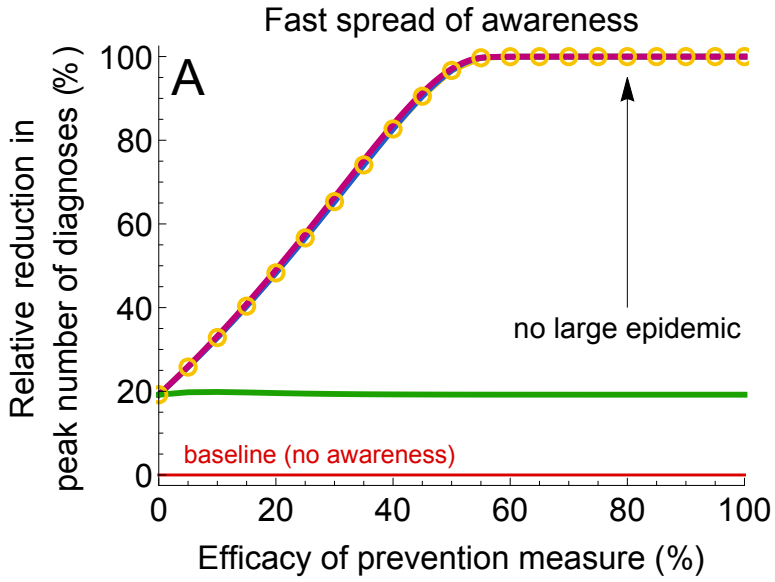
Model with disease-awareness and combined intervention (government-imposed social distancing and handwashing with 30% efficacy)

```
PeakCombinedRange = PeakRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    0.10437], {r2 → 0.7}, {r4 → factor}]]
```

```
{{100., 65.3188}, {99., 65.3188}, {98., 65.3188}, {97., 65.3189}, {96., 65.3189},
 {95., 65.3189}, {94., 65.319}, {93., 65.319}, {92., 65.319}, {91., 65.3191},
 {90., 65.3191}, {89., 65.3192}, {88., 65.3192}, {87., 65.3193}, {86., 65.3193},
 {85., 65.3194}, {84., 65.3195}, {83., 65.3195}, {82., 65.3196}, {81., 65.3197},
 {80., 65.3198}, {79., 65.3199}, {78., 65.32}, {77., 65.3201}, {76., 65.3202},
 {75., 65.3204}, {74., 65.3205}, {73., 65.3207}, {72., 65.3208}, {71., 65.321},
 {70., 65.3212}, {69., 65.3215}, {68., 65.3217}, {67., 65.322}, {66., 65.3223},
 {65., 65.3226}, {64., 65.3229}, {63., 65.3233}, {62., 65.3237}, {61., 65.3241},
 {60., 65.3246}, {59., 65.3251}, {58., 65.3256}, {57., 65.3262}, {56., 65.3268},
 {55., 65.3274}, {54., 65.3281}, {53., 65.3289}, {52., 65.3296}, {51., 65.3304},
 {50., 65.3313}, {49., 65.3322}, {48., 65.3331}, {47., 65.3341}, {46., 65.3352},
 {45., 65.3363}, {44., 65.3374}, {43., 65.3386}, {42., 65.3399}, {41., 65.3412},
 {40., 65.3426}, {39., 65.344}, {38., 65.3455}, {37., 65.3471}, {36., 65.3487},
 {35., 65.3503}, {34., 65.3521}, {33., 65.3538}, {32., 65.3557},
 {31., 65.3576}, {30., 65.3595}, {29., 65.3615}, {28., 65.3636},
 {27., 65.3656}, {26., 65.3677}, {25., 65.3699}, {24., 65.372}, {23., 65.3741},
 {22., 65.3763}, {21., 65.3783}, {20., 65.3804}, {19., 65.3823},
 {18., 65.3841}, {17., 65.3858}, {16., 65.3873}, {15., 65.3885},
 {14., 65.3895}, {13., 65.3901}, {12., 65.3903}, {11., 65.39}, {10., 65.3891},
 {9., 65.3876}, {8., 65.3852}, {7., 65.3819}, {6., 65.3774}, {5., 65.3718},
 {4., 65.3646}, {3., 65.3559}, {2., 65.3452}, {1., 65.3323}, {0., 65.3169}}
```

Plotting Figure 5 A (main text) (fast spread of awareness)

```
imagePadding = {{80, 15}, {50, 5}};

fig5A = Show[ListLinePlot[
    {PeakMaskRange[[ ;; ;; 5]], PeakHandRange, PeakSelfImposedDistancingRange,
     PeakGovernmentImposedDistancingRange[[ ;; ;; 5]](*,PeakCombinedRange*)},
    AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-2.5, 102.5}},
    AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
    FrameStyle → Directive[Black, 17],
    PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
      {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
      {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
      {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]}(*,{Thickness[0.01],
       RGBColor[185/255,76/255,225/255]}*)}, PlotRangePadding → None,
    PlotMarkers → {Graphics[{RGBColor[248 / 255, 196 / 255, 0], Thick, Circle[]},
       ImageSize → 10], "", "", "", ""},
    PlotLabel → Style[Row[{"Fast spread of awareness"}], 17, Black],
    ImagePadding → imagePadding,
    FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
      {"Efficacy of prevention measure (%)", None}}],
  Graphics[Text[StyleForm["A", FontSize → 26], {100 * 0.05, 100 * 0.95}]],
  Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
     FontColor → RGBColor[217 / 255, 0, 0]], {27.5, 5}]], Graphics[
   {RGBColor[217 / 255, 0, 0], Thickness[0.005], Line[{{0, 0}, {100, 0}}]}],
  Graphics[{Black, Arrow[{{80, 40}, {80, 95}}]}],
  Graphics[Text[StyleForm["no large epidemic",
     FontSize → 15, FontColor → Black], {80, 35}]]]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//Figure5A", ".eps"], fig5A];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//Figure5A", ".eps"], fig5A];
```



Computing the attack rate (%) for an efficacy of prevention

measure ranging from 0% to 100%

In[111]:=
```
AttackRateRange[Intervention_, Parameters_] :=
 Table[{(1 - factor) 100, Max[Flatten[Table[Evaluate[
       ((RQ[t] + DD[t]) / Ntot 100) /. First@solution[Intervention, Parameters]],
      {t, t_start, t_end, 1 / (t_end 364 spacing)}]]]}, {factor, ReductionFactor}]
```

Model with disease-awareness and mask-wearing

```
AttackRateMaskRange = AttackRateRange["Mask",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r_1 → factor}]]
```

```
{{100., 0.0139929}, {99., 0.0143083}, {98., 0.0146382}, {97., 0.0149835},
 {96., 0.0153453}, {95., 0.0157249}, {94., 0.0161236}, {93., 0.0165428},
 {92., 0.0169843}, {91., 0.0174499}, {90., 0.0179415}, {89., 0.0184615},
 {88., 0.0190124}, {87., 0.0195969}, {86., 0.0202184}, {85., 0.0208804},
 {84., 0.0215871}, {83., 0.0223432}, {82., 0.0231541}, {81., 0.024026},
 {80., 0.024966}, {79., 0.0259827}, {78., 0.0270857}, {77., 0.0282867},
 {76., 0.0295994}, {75., 0.0310405}, {74., 0.0326297}, {73., 0.0343915},
 {72., 0.0363557}, {71., 0.0385599}, {70., 0.0410512}, {69., 0.0438904},
 {68., 0.0471564}, {67., 0.0509542}, {66., 0.0554265}, {65., 0.0607718},
 {64., 0.0672748}, {63., 0.0753581}, {62., 0.0856753}, {61., 0.09929},
 {60., 0.118038}, {59., 0.145326}, {58., 0.18798}, {57., 0.260716},
 {56., 0.396241}, {55., 0.661302}, {54., 1.14896}, {53., 1.87324},
 {52., 2.67945}, {51., 3.4173}, {50., 4.06489}, {49., 4.65068}, {48., 5.19629},
 {47., 5.71174}, {46., 6.20132}, {45., 6.66722}, {44., 7.11091}, {43., 7.53366},
 {42., 7.93661}, {41., 8.32086}, {40., 8.68743}, {39., 9.03728},
 {38., 9.37132}, {37., 9.6904}, {36., 9.99534}, {35., 10.2869}, {34., 10.5658},
 {33., 10.8326}, {32., 11.0881}, {31., 11.3328}, {30., 11.5672},
 {29., 11.7919}, {28., 12.0072}, {27., 12.2137}, {26., 12.4119}, {25., 12.602},
 {24., 12.7845}, {23., 12.9598}, {22., 13.1282}, {21., 13.29}, {20., 13.4455},
 {19., 13.595}, {18., 13.7388}, {17., 13.8772}, {16., 14.0103}, {15., 14.1385},
 {14., 14.2619}, {13., 14.3808}, {12., 14.4953}, {11., 14.6056}, {10., 14.7119},
 {9., 14.8145}, {8., 14.9133}, {7., 15.0087}, {6., 15.1007}, {5., 15.1895},
 {4., 15.2752}, {3., 15.3579}, {2., 15.4378}, {1., 15.5149}, {0., 15.5895}}
```

Model with disease-awareness and handwashing

```
AttackRateHandRange = AttackRateRange["Hand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r₂ → factor}]]
```

```
{{100., 0.0140407}, {99., 0.0143743}, {98., 0.0147234}, {97., 0.0150892},
 {96., 0.0154729}, {95., 0.0158757}, {94., 0.0162993}, {93., 0.0167452},
 {92., 0.0172151}, {91., 0.0177111}, {90., 0.0182355}, {89., 0.0187905},
 {88., 0.0193791}, {87., 0.0200044}, {86., 0.0206697}, {85., 0.0213792},
 {84., 0.0221373}, {83., 0.0229492}, {82., 0.0238208}, {81., 0.0247589},
 {80., 0.0257713}, {79., 0.0268674}, {78., 0.0280578}, {77., 0.0293553},
 {76., 0.030775}, {75., 0.0323351}, {74., 0.0340576}, {73., 0.0359691},
 {72., 0.0381028}, {71., 0.0404998}, {70., 0.0432124}, {69., 0.0463074},
 {68., 0.0498723}, {67., 0.054023}, {66., 0.0589172}, {65., 0.0647747},
 {64., 0.0719103}, {63., 0.0807912}, {62., 0.0921395}, {61., 0.107127},
 {60., 0.127769}, {59., 0.157776}, {58., 0.204509}, {57., 0.283557},
 {56., 0.428699}, {55., 0.706238}, {54., 1.20244}, {53., 1.92033},
 {52., 2.70967}, {51., 3.43419}, {50., 4.075}, {49., 4.65767}, {48., 5.20165},
 {47., 5.71606}, {46., 6.20487}, {45., 6.67016}, {44., 7.11336}, {43., 7.53571},
 {42., 7.93835}, {41., 8.32233}, {40., 8.68868}, {39., 9.03835}, {38., 9.37224},
 {37., 9.6912}, {36., 9.99603}, {35., 10.2875}, {34., 10.5663}, {33., 10.8331},
 {32., 11.0885}, {31., 11.3332}, {30., 11.5675}, {29., 11.7921},
 {28., 12.0075}, {27., 12.214}, {26., 12.4121}, {25., 12.6022}, {24., 12.7847},
 {23., 12.96}, {22., 13.1283}, {21., 13.2901}, {20., 13.4456}, {19., 13.5951},
 {18., 13.7389}, {17., 13.8773}, {16., 14.0104}, {15., 14.1386},
 {14., 14.262}, {13., 14.3808}, {12., 14.4953}, {11., 14.6056}, {10., 14.712},
 {9., 14.8145}, {8., 14.9134}, {7., 15.0087}, {6., 15.1007}, {5., 15.1895},
 {4., 15.2752}, {3., 15.3579}, {2., 15.4378}, {1., 15.5149}, {0., 15.5895}}
```

Model with disease-awareness and self-imposed social distancing

```
AttackRateSelfImposedDistancingRange =
 AttackRateRange["ContactReductionIndividuals",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r3 → factor}]]
```

```
{{100., 0.0389164}, {99., 0.0383051}, {98., 0.0378212}, {97., 0.0374449},
 {96., 0.0371617}, {95., 0.0369607}, {94., 0.036834}, {93., 0.0367758},
 {92., 0.0367817}, {91., 0.0368486}, {90., 0.0369746}, {89., 0.0371585},
 {88., 0.0374002}, {87., 0.0377}, {86., 0.0380591}, {85., 0.0384794},
 {84., 0.0389636}, {83., 0.039515}, {82., 0.0401379}, {81., 0.0408375},
 {80., 0.0416201}, {79., 0.0424935}, {78., 0.0434666}, {77., 0.0445505},
 {76., 0.0457582}, {75., 0.0471058}, {74., 0.0486125}, {73., 0.0503019},
 {72., 0.0522034}, {71., 0.0543533}, {70., 0.0567976}, {69., 0.0595955},
 {68., 0.0628236}, {67., 0.066584}, {66., 0.0710146}, {65., 0.0763075},
 {64., 0.0827377}, {63., 0.0907127}, {62., 0.100864}, {61., 0.114217},
 {60., 0.132549}, {59., 0.159166}, {58., 0.200704}, {57., 0.271327},
 {56., 0.401359}, {55., 0.647841}, {54., 1.07891}, {53., 1.68977},
 {52., 2.36316}, {51., 2.99944}, {50., 3.58276}, {49., 4.12858}, {48., 4.64895},
 {47., 5.14917}, {46., 5.63109}, {45., 6.09536}, {44., 6.54232}, {43., 6.97235},
 {42., 7.38584}, {41., 7.78324}, {40., 8.16503}, {39., 8.53172}, {38., 8.88381},
 {37., 9.22182}, {36., 9.54628}, {35., 9.8577}, {34., 10.1566}, {33., 10.4435},
 {32., 10.7189}, {31., 10.9832}, {30., 11.2369}, {29., 11.4805}, {28., 11.7143},
 {27., 11.9387}, {26., 12.1542}, {25., 12.3611}, {24., 12.5598},
 {23., 12.7506}, {22., 12.9339}, {21., 13.11}, {20., 13.2791}, {19., 13.4417},
 {18., 13.598}, {17., 13.7482}, {16., 13.8927}, {15., 14.0316}, {14., 14.1652},
 {13., 14.2938}, {12., 14.4175}, {11., 14.5365}, {10., 14.6511},
 {9., 14.7615}, {8., 14.8677}, {7., 14.97}, {6., 15.0686}, {5., 15.1636},
 {4., 15.2551}, {3., 15.3433}, {2., 15.4284}, {1., 15.5104}, {0., 15.5895}}
```

Model with disease-awareness and government-imposed social distancing

```
AttackRateGovernmentImposedDistancingRange =
 AttackRateRange["ContactReductionGovernment",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]
```

```
{{100., 15.5894}, {99., 15.5894}, {98., 15.5894}, {97., 15.5894}, {96., 15.5894},
 {95., 15.5894}, {94., 15.5894}, {93., 15.5894}, {92., 15.5894}, {91., 15.5894},
 {90., 15.5894}, {89., 15.5894}, {88., 15.5894}, {87., 15.5894}, {86., 15.5894},
 {85., 15.5894}, {84., 15.5894}, {83., 15.5894}, {82., 15.5894}, {81., 15.5894},
 {80., 15.5894}, {79., 15.5894}, {78., 15.5894}, {77., 15.5894}, {76., 15.5894},
 {75., 15.5894}, {74., 15.5893}, {73., 15.5893}, {72., 15.5893}, {71., 15.5893},
 {70., 15.5893}, {69., 15.5893}, {68., 15.5893}, {67., 15.5893}, {66., 15.5893},
 {65., 15.5893}, {64., 15.5893}, {63., 15.5892}, {62., 15.5892}, {61., 15.5892},
 {60., 15.5892}, {59., 15.5892}, {58., 15.5891}, {57., 15.5891}, {56., 15.5891},
 {55., 15.589}, {54., 15.589}, {53., 15.589}, {52., 15.5889}, {51., 15.5889},
 {50., 15.5888}, {49., 15.5888}, {48., 15.5887}, {47., 15.5886}, {46., 15.5885},
 {45., 15.5884}, {44., 15.5883}, {43., 15.5882}, {42., 15.5881}, {41., 15.588},
 {40., 15.5878}, {39., 15.5877}, {38., 15.5875}, {37., 15.5873},
 {36., 15.5871}, {35., 15.5869}, {34., 15.5866}, {33., 15.5863}, {32., 15.586},
 {31., 15.5857}, {30., 15.5853}, {29., 15.5849}, {28., 15.5845},
 {27., 15.5841}, {26., 15.5836}, {25., 15.5831}, {24., 15.5825},
 {23., 15.5819}, {22., 15.5813}, {21., 15.5807}, {20., 15.58}, {19., 15.5793},
 {18., 15.5786}, {17., 15.5778}, {16., 15.5771}, {15., 15.5764},
 {14., 15.5757}, {13., 15.575}, {12., 15.5744}, {11., 15.5739}, {10., 15.5735},
 {9., 15.5733}, {8., 15.5733}, {7., 15.5736}, {6., 15.5742}, {5., 15.5752},
 {4., 15.5767}, {3., 15.5787}, {2., 15.5815}, {1., 15.585}, {0., 15.5895}}
```

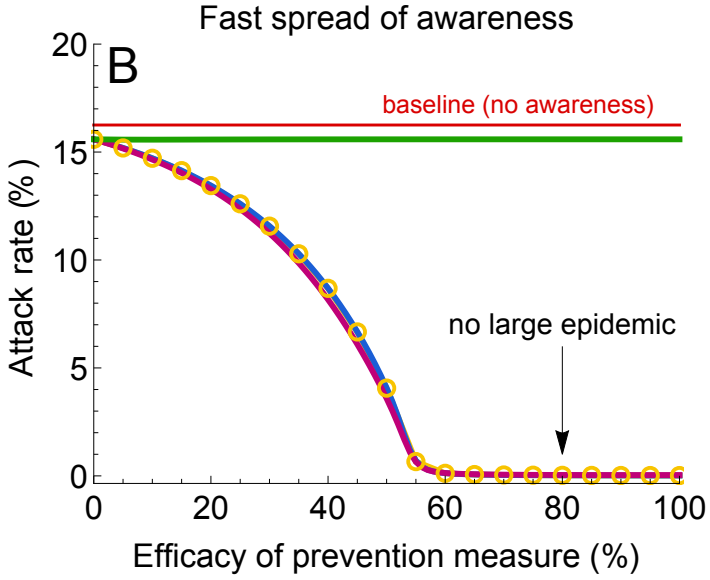
Model with disease-awareness and combined intervention (government-imposed social distancing and handwashing with 30% efficacy)

```
AttackRateCombinedRange = AttackRateRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    0.10437], {r2 → 0.7}, {r4 → factor}]]
```

```
{{100., 11.5674}, {99., 11.5674}, {98., 11.5674}, {97., 11.5674}, {96., 11.5674},
 {95., 11.5674}, {94., 11.5674}, {93., 11.5674}, {92., 11.5674}, {91., 11.5674},
 {90., 11.5674}, {89., 11.5674}, {88., 11.5674}, {87., 11.5674}, {86., 11.5674},
 {85., 11.5674}, {84., 11.5674}, {83., 11.5674}, {82., 11.5674}, {81., 11.5674},
 {80., 11.5673}, {79., 11.5673}, {78., 11.5673}, {77., 11.5673}, {76., 11.5673},
 {75., 11.5673}, {74., 11.5673}, {73., 11.5673}, {72., 11.5673}, {71., 11.5673},
 {70., 11.5673}, {69., 11.5672}, {68., 11.5672}, {67., 11.5672},
 {66., 11.5672}, {65., 11.5672}, {64., 11.5672}, {63., 11.5671},
 {62., 11.5671}, {61., 11.5671}, {60., 11.5671}, {59., 11.567}, {58., 11.567},
 {57., 11.567}, {56., 11.5669}, {55., 11.5669}, {54., 11.5668}, {53., 11.5668},
 {52., 11.5667}, {51., 11.5667}, {50., 11.5666}, {49., 11.5666}, {48., 11.5665},
 {47., 11.5665}, {46., 11.5664}, {45., 11.5663}, {44., 11.5663}, {43., 11.5662},
 {42., 11.5661}, {41., 11.566}, {40., 11.5659}, {39., 11.5659}, {38., 11.5658},
 {37., 11.5657}, {36., 11.5656}, {35., 11.5655}, {34., 11.5654}, {33., 11.5652},
 {32., 11.5651}, {31., 11.565}, {30., 11.5649}, {29., 11.5648}, {28., 11.5646},
 {27., 11.5645}, {26., 11.5644}, {25., 11.5643}, {24., 11.5641}, {23., 11.564},
 {22., 11.5639}, {21., 11.5637}, {20., 11.5636}, {19., 11.5635},
 {18., 11.5634}, {17., 11.5633}, {16., 11.5632}, {15., 11.5631},
 {14., 11.563}, {13., 11.563}, {12., 11.563}, {11., 11.563}, {10., 11.5631},
 {9., 11.5632}, {8., 11.5633}, {7., 11.5635}, {6., 11.5638}, {5., 11.5641},
 {4., 11.5646}, {3., 11.5651}, {2., 11.5658}, {1., 11.5666}, {0., 11.5675}}
```

Plotting Figure 5 B (main text) (fast spread of awareness)

```
imagePadding = {{80, 15}, {50, 5}};

fig5B = Show[ListLinePlot[{AttackRateMaskRange[[ ;; ;; 5]],
     AttackRateHandRange, AttackRateSelfImposedDistancingRange,
     AttackRateGovernmentImposedDistancingRange[[ ;; ;; 5]](*,
     AttackRateCombinedRange*)}, AspectRatio → 0.75, ImageSize → 400,
    PlotRange → {{0, 100}, {-0.35, 20}}, AxesOrigin → {0, 0},
    Frame → {{True, False}, {True, False}}, FrameStyle → Directive[Black, 17],
    PlotMarkers → {Graphics[{RGBColor[248 / 255, 196 / 255, 0], Thick, Circle[]},
       ImageSize → 10], "", "", "", ""},
    PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
      {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
      {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
      {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]}(*,
      {Thickness[0.01],RGBColor[185/255,76/255,225/255]}*)},
    FrameLabel → {{"Attack rate (%)", None},
      {"Efficacy of prevention measure (%)", None}}, PlotRangePadding → None,
    PlotLabel → Style[Row[{"Fast spread of awareness"}], 17, Black],
    ImagePadding → imagePadding], Graphics[{RGBColor[217 / 255, 0, 0]
, Thickness[0.005], Line[{{0, AttackRateBaseline}, {100, AttackRateBaseline}}]}],
  Graphics[Text[StyleForm["B", FontSize → 26], {100 * 0.05, 20 * 0.95}]],
  Graphics[Text[StyleForm["baseline (no awareness)",
     FontSize → 13, FontColor → RGBColor[217 / 255, 0, 0]
], {72.5, 17.25}]], Graphics[{Black, Arrow[{{80, 6}, {80, 1}}]}],
Graphics[Text[
    StyleForm["no large epidemic", FontSize → 15, FontColor → Black], {80, 7}]]]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//Figure5B", ".eps"], fig5B];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//Figure5B", ".eps"], fig5B];
```



Computing time until the peak number of diagnoses since the first case for an efficacy of prevention measure ranging from 0%

to 100%

```
In[112]:= PeakTimingRange[Intervention_, Parameters_] :=
 Table[{(1 - factor) 100, 365 × 1 / ((t_end 364 spacing) + 1)
    ReplaceAll[Ordering[Flatten[Table[Evaluate[(1000 (IQ[t] + IQa[t]) / NN[t]) /.
           First@solution[Intervention, Parameters]],
         {t, t_start, t_end, 1 / (t_end 364 spacing)}]], -1][[1]],
     (x_ /; x == Length[Table[t, {t, t_start, t_end, 1 / (t_end 364 spacing)}]]) → 0]},
  {factor, ReductionFactor}]
```

Model with disease-awareness and mask-wearing

```
PeakTimingMaskRange = PeakTimingRange["Mask",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r_1 → factor}]]
```

```
{{100., 71.893}, {99., 72.0936}, {98., 72.3142}, {97., 72.5348}, {96., 72.7553},
 {95., 72.996}, {94., 73.2366}, {93., 73.4773}, {92., 73.738}, {91., 73.9987},
 {90., 74.2794}, {89., 74.5802}, {88., 74.8811}, {87., 75.1819}, {86., 75.5228},
 {85., 75.8637}, {84., 76.2247}, {83., 76.6057}, {82., 77.0068}, {81., 77.4479},
 {80., 77.8891}, {79., 78.3905}, {78., 78.8918}, {77., 79.4533}, {76., 80.075},
 {75., 80.7167}, {74., 81.4587}, {73., 82.2609}, {72., 83.1432}, {71., 84.166},
 {70., 85.3291}, {69., 86.7128}, {68., 88.3572}, {67., 90.4027}, {66., 93.0699},
 {65., 96.7798}, {64., 102.676}, {63., 115.129}, {62., 266.155}, {61., 367.647},
 {60., 439.801}, {59., 513.178}, {58., 593.814}, {57., 679.344}, {56., 751.137},
 {55., 773.376}, {54., 737.46}, {53., 675.855}, {52., 614.289}, {51., 560.866},
 {50., 516.166}, {49., 478.886}, {48., 447.542}, {47., 420.93}, {46., 398.089},
 {45., 378.276}, {44., 360.909}, {43., 345.588}, {42., 331.931}, {41., 319.698},
 {40., 308.669}, {39., 298.682}, {38., 289.557}, {37., 281.215}, {36., 273.554},
 {35., 266.475}, {34., 259.938}, {33., 253.842}, {32., 248.166},
 {31., 242.872}, {30., 237.919}, {29., 233.266}, {28., 228.875},
 {27., 224.743}, {26., 220.853}, {25., 217.163}, {24., 213.654},
 {23., 210.325}, {22., 207.176}, {21., 204.168}, {20., 201.3}, {19., 198.573},
 {18., 195.946}, {17., 193.439}, {16., 191.053}, {15., 188.747},
 {14., 186.541}, {13., 184.415}, {12., 182.37}, {11., 180.404}, {10., 178.519},
 {9., 176.694}, {8., 174.93}, {7., 173.245}, {6., 171.601}, {5., 170.016},
 {4., 168.472}, {3., 166.988}, {2., 165.544}, {1., 164.141}, {0., 162.797}}
```

Model with disease-awareness and handwashing

```
PeakTimingHandRange = PeakTimingRange["Hand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r₂ → factor}]]
```

```
{{100., 72.8356}, {99., 73.0361}, {98., 73.2567}, {97., 73.4572}, {96., 73.6778},
 {95., 73.8984}, {94., 74.1391}, {93., 74.3797}, {92., 74.6404}, {91., 74.9011},
 {90., 75.1618}, {89., 75.4426}, {88., 75.7434}, {87., 76.0442}, {86., 76.365},
 {85., 76.706}, {84., 77.0469}, {83., 77.4279}, {82., 77.8089}, {81., 78.23},
 {80., 78.6712}, {79., 79.1325}, {78., 79.6338}, {77., 80.1753}, {76., 80.7769},
 {75., 81.4186}, {74., 82.1205}, {73., 82.9026}, {72., 83.7649}, {71., 84.7676},
 {70., 85.9107}, {69., 87.2543}, {68., 88.8987}, {67., 90.9241}, {66., 93.6113},
 {65., 97.4416}, {64., 103.718}, {63., 118.979}, {62., 295.173}, {61., 378.396},
 {60., 445.817}, {59., 515.223}, {58., 590.766}, {57., 669.257}, {56., 733.349},
 {55., 752.52}, {54., 719.712}, {53., 662.619}, {52., 604.503}, {51., 553.406},
 {50., 510.27}, {49., 474.093}, {48., 443.551}, {47., 417.561}, {46., 395.181},
 {45., 375.729}, {44., 358.683}, {43., 343.603}, {42., 330.166}, {41., 318.114},
 {40., 307.225}, {39., 297.358}, {38., 288.374}, {37., 280.132},
 {36., 272.552}, {35., 265.553}, {34., 259.076}, {33., 253.059},
 {32., 247.444}, {31., 242.21}, {30., 237.297}, {29., 232.685}, {28., 228.353},
 {27., 224.262}, {26., 220.392}, {25., 216.742}, {24., 213.273},
 {23., 209.964}, {22., 206.835}, {21., 203.867}, {20., 201.02}, {19., 198.292},
 {18., 195.705}, {17., 193.219}, {16., 190.832}, {15., 188.566}, {14., 186.36},
 {13., 184.255}, {12., 182.229}, {11., 180.284}, {10., 178.419},
 {9., 176.594}, {8., 174.849}, {7., 173.165}, {6., 171.541}, {5., 169.956},
 {4., 168.432}, {3., 166.948}, {2., 165.524}, {1., 164.141}, {0., 162.797}}
```

Model with disease-awareness and self-imposed social distancing

```
PeakTimingSelfImposedDistancingRange =
 PeakTimingRange["ContactReductionIndividuals",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r3 → factor}]]
```

```
{{100., 77.3677}, {99., 77.3477}, {98., 77.3477}, {97., 77.3677}, {96., 77.4078},
 {95., 77.468}, {94., 77.5482}, {93., 77.6284}, {92., 77.7287}, {91., 77.849},
 {90., 77.9894}, {89., 78.1498}, {88., 78.3103}, {87., 78.4907}, {86., 78.6913},
 {85., 78.9119}, {84., 79.1525}, {83., 79.4132}, {82., 79.714}, {81., 80.0148},
 {80., 80.3557}, {79., 80.7167}, {78., 81.1178}, {77., 81.5389}, {76., 82.0202},
 {75., 82.5617}, {74., 83.1432}, {73., 83.805}, {72., 84.547}, {71., 85.3893},
 {70., 86.3518}, {69., 87.4949}, {68., 88.8385}, {67., 90.503}, {66., 92.6086},
 {65., 95.4362}, {64., 99.5272}, {63., 106.346}, {62., 123.291}, {61., 272.712},
 {60., 357.56}, {59., 432.281}, {58., 512.496}, {57., 597.805}, {56., 671.744},
 {55., 703.248}, {54., 682.653}, {53., 634.925}, {52., 583.246}, {51., 536.581},
 {50., 496.593}, {49., 462.762}, {48., 434.025}, {47., 409.439}, {46., 388.202},
 {45., 369.693}, {44., 353.429}, {43., 338.99}, {42., 326.116}, {41., 314.545},
 {40., 304.096}, {39., 294.591}, {38., 285.908}, {37., 277.946}, {36., 270.607},
 {35., 263.828}, {34., 257.531}, {33., 251.696}, {32., 246.221},
 {31., 241.127}, {30., 236.335}, {29., 231.842}, {28., 227.591},
 {27., 223.58}, {26., 219.81}, {25., 216.221}, {24., 212.811}, {23., 209.583},
 {22., 206.494}, {21., 203.567}, {20., 200.759}, {19., 198.072},
 {18., 195.525}, {17., 193.058}, {16., 190.712}, {15., 188.446}, {14., 186.28},
 {13., 184.195}, {12., 182.189}, {11., 180.244}, {10., 178.379},
 {9., 176.574}, {8., 174.849}, {7., 173.165}, {6., 171.541}, {5., 169.956},
 {4., 168.432}, {3., 166.968}, {2., 165.524}, {1., 164.141}, {0., 162.797}}
```

Model with disease-awareness and government-imposed social distancing

```
PeakTimingGovernmentImposedDistancingRange =
 PeakTimingRange["ContactReductionGovernment",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]
```

```
{{100., 366.865}, {99., 361.952}, {98., 357.319}, {97., 352.968}, {96., 348.817},
 {95., 344.866}, {94., 341.096}, {93., 337.466}, {92., 333.977}, {91., 330.608},
 {90., 327.359}, {89., 324.21}, {88., 321.162}, {87., 318.194}, {86., 315.307},
 {85., 312.499}, {84., 309.752}, {83., 307.085}, {82., 304.478}, {81., 301.931},
 {80., 299.424}, {79., 296.977}, {78., 294.591}, {77., 292.265}, {76., 289.959},
 {75., 287.712}, {74., 285.507}, {73., 283.341}, {72., 281.215}, {71., 279.129},
 {70., 277.084}, {69., 275.079}, {68., 273.093}, {67., 271.148}, {66., 269.243},
 {65., 267.358}, {64., 265.493}, {63., 263.648}, {62., 261.843}, {61., 260.038},
 {60., 258.253}, {59., 256.489}, {58., 254.744}, {57., 252.999}, {56., 251.255},
 {55., 249.51}, {54., 247.785}, {53., 246.061}, {52., 244.316}, {51., 242.591},
 {50., 240.867}, {49., 239.142}, {48., 237.417}, {47., 235.693}, {46., 233.968},
 {45., 232.264}, {44., 230.539}, {43., 228.834}, {42., 227.13}, {41., 225.445},
 {40., 223.761}, {39., 222.076}, {38., 220.412}, {37., 218.747}, {36., 217.103},
 {35., 215.458}, {34., 213.814}, {33., 212.19}, {32., 210.565}, {31., 208.961},
 {30., 207.357}, {29., 205.772}, {28., 204.188}, {27., 202.624}, {26., 201.06},
 {25., 199.496}, {24., 197.951}, {23., 196.407}, {22., 194.883},
 {21., 193.359}, {20., 191.835}, {19., 190.331}, {18., 188.847},
 {17., 187.343}, {16., 185.859}, {15., 184.395}, {14., 182.911},
 {13., 181.447}, {12., 179.983}, {11., 178.539}, {10., 177.095},
 {9., 175.652}, {8., 174.208}, {7., 172.764}, {6., 171.34}, {5., 169.896},
 {4., 168.472}, {3., 167.049}, {2., 165.625}, {1., 164.221}, {0., 162.797}}
```

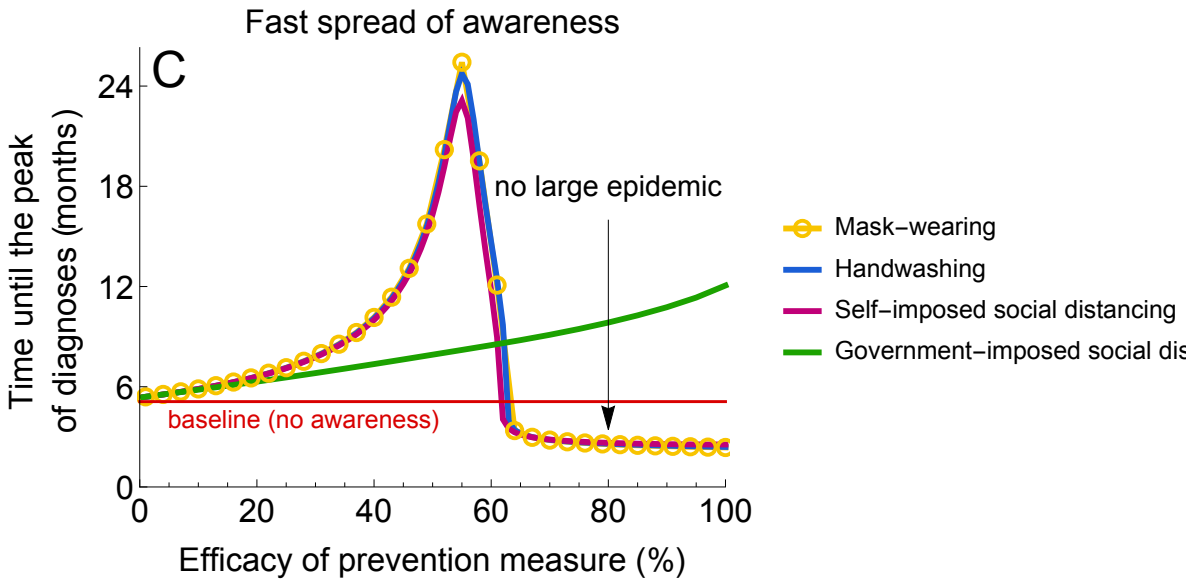
Model with disease-awareness and combined intervention (government-imposed social distancing and handwashing with 30% efficacy)

```
PeakTimingCombinedRange = PeakTimingRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    0.10437], {r2 → 0.7}, {r4 → factor}]]
```

```
{{100., 442.247}, {99., 437.575}, {98., 433.163}, {97., 428.992}, {96., 425.041},
 {95., 421.251}, {94., 417.641}, {93., 414.192}, {92., 410.863}, {91., 407.655},
 {90., 404.566}, {89., 401.578}, {88., 398.67}, {87., 395.883}, {86., 393.156},
 {85., 390.508}, {84., 387.962}, {83., 385.455}, {82., 383.028}, {81., 380.682},
 {80., 378.396}, {79., 376.15}, {78., 373.984}, {77., 371.878}, {76., 369.833},
 {75., 367.828}, {74., 365.902}, {73., 364.017}, {72., 362.192}, {71., 360.428},
 {70., 358.703}, {69., 357.039}, {68., 355.434}, {67., 353.87}, {66., 352.346},
 {65., 350.882}, {64., 349.478}, {63., 348.095}, {62., 346.751}, {61., 345.468},
 {60., 344.204}, {59., 342.961}, {58., 341.758}, {57., 340.574}, {56., 339.391},
 {55., 338.228}, {54., 337.065}, {53., 335.902}, {52., 334.739}, {51., 333.556},
 {50., 332.372}, {49., 331.149}, {48., 329.906}, {47., 328.642}, {46., 327.339},
 {45., 325.995}, {44., 324.612}, {43., 323.188}, {42., 321.724}, {41., 320.22},
 {40., 318.656}, {39., 317.071}, {38., 315.427}, {37., 313.742}, {36., 312.018},
 {35., 310.253}, {34., 308.468}, {33., 306.623}, {32., 304.758},
 {31., 302.853}, {30., 300.928}, {29., 298.963}, {28., 296.977},
 {27., 294.972}, {26., 292.947}, {25., 290.901}, {24., 288.836}, {23., 286.75},
 {22., 284.664}, {21., 282.559}, {20., 280.433}, {19., 278.307},
 {18., 276.182}, {17., 274.036}, {16., 271.89}, {15., 269.744}, {14., 267.578},
 {13., 265.413}, {12., 263.267}, {11., 261.101}, {10., 258.935},
 {9., 256.769}, {8., 254.604}, {7., 252.438}, {6., 250.272}, {5., 248.106},
 {4., 245.94}, {3., 243.775}, {2., 241.609}, {1., 239.463}, {0., 237.297}}
```

Plotting Figure 5 C (main text) (fast spread of awareness)

```
fig5C = Show[ListLinePlot[{PeakTimingMaskRange[[ ;; ;; 3]],
     PeakTimingHandRange, PeakTimingSelfImposedDistancingRange,
     PeakTimingGovernmentImposedDistancingRange[[ ;; ;; 5]]
     (*,PeakTimingCombinedRange*)}, AspectRatio → 0.75,
    ImageSize → 400, PlotRange → {All, {0, 800}}, AxesOrigin → {0, 0},
    Frame → {{True, False}, {True, False}}, FrameStyle → Directive[Black, 17],
    PlotMarkers → {Graphics[{RGBColor[248 / 255, 196 / 255, 0], Thick, Circle[]},
       ImageSize → 10], "", "", "", ""},
    PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
      {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
      {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
      {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]}(*,
      {Thickness[0.01],RGBColor[185/255,76/255,225/255]}*)},
    FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
      {"Efficacy of prevention measure (%)", None}},
    PlotRangePadding → None, ImagePadding → imagePadding,
    PlotLabel → Style[Row[{"Fast spread of awareness"}], 17, Black],
    PlotLegends → Table[Style[Row[{label}], Black, 13, "Text"],
      {label, {"Mask-wearing", "Handwashing", "Self-imposed social distancing",
        "Government-imposed social distancing"(*,"Government-imposed social
          distancing\nand handwashing with 30% efficacy"*)}}],
    FrameTicks → {{{{0, "0"}, {365 × 18 / 12, "18"}, {365 / 2, "6"}, {365, "12"},
        {365 × 2, "24"}, {365 × 3, "36"}, {365 × 4, "48"}, {365 × 5, "60"}, {365 × 6,
         "72"}}, None}, {Automatic, None}}], Graphics[{RGBColor[217 / 255, 0, 0]
, Thickness[0.005], Line[{{0, PeakTimingBaseline}, {100, PeakTimingBaseline}}]}],
  Graphics[Text[StyleForm["C", FontSize → 26], {100 * 0.05, 800 * 0.95}]],
  Graphics[Text[StyleForm["baseline (no awareness)",
     FontSize → 13, FontColor → RGBColor[217 / 255, 0, 0]
], {28, 125}]], Graphics[{Black, Arrow[{{80, 365 × 16 / 12}, {80, 365 / 3.5}}]}],
  Graphics[Text[StyleForm["no large epidemic",
     FontSize → 15, FontColor → Black], {80, 365 × 18 / 12}]]]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//Figure5C", ".eps"], fig5C];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//Figure5C", ".eps"], fig5C];
```



Combined intervention: government-imposed social distancing and handwashing (slow spread of awareness)

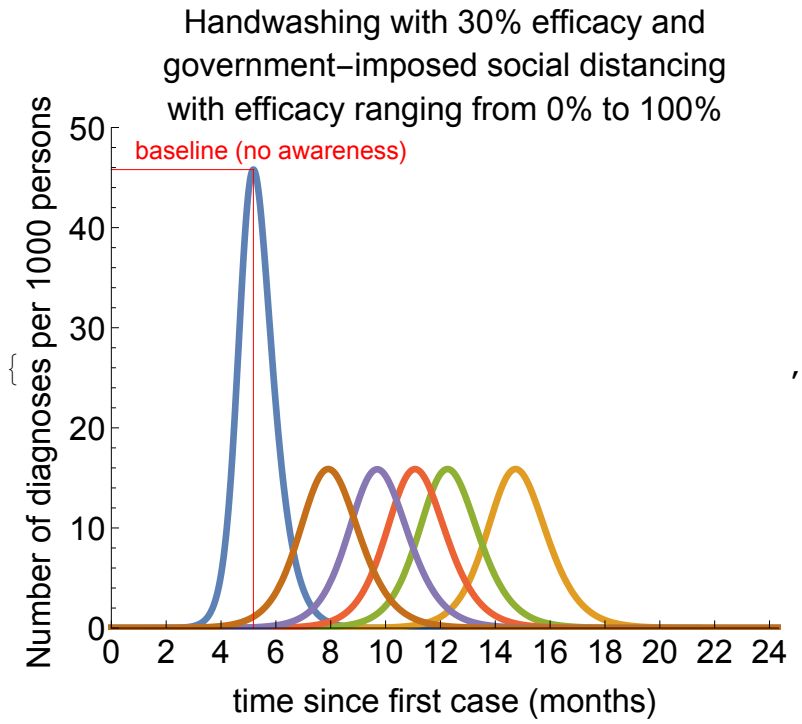
Time when government-imposed social distancing has to start (10 diagnoses)

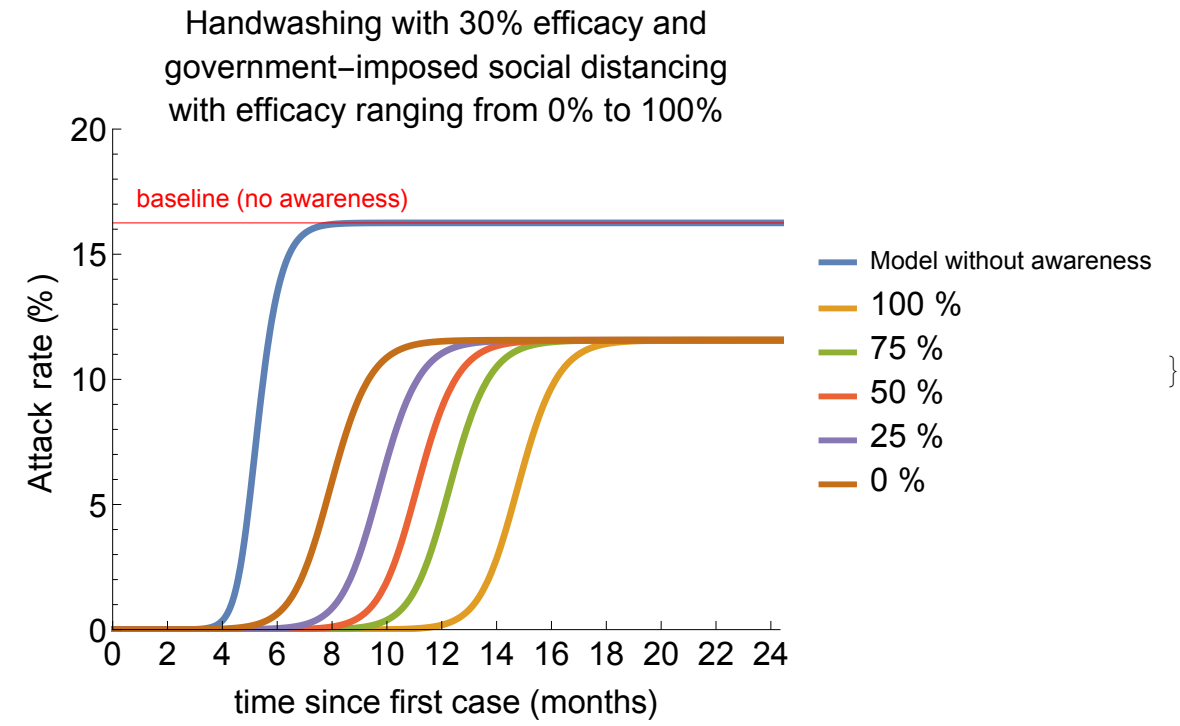
```
(IQ[t] + IQa[t]) /.
  solution["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
     RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
     RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
     DiagnosisRateAwareBaseline, 0], {r2 → 0.7}]] /. t → 0.10393
```

```
{10.0025}
```

Impact of government-imposed social distancing with efficacy ranging from 0% ($r_4 = 1$) to 100% ($r_4 = 0$) and handwashing with 30% efficacy ($r_2 = 0.7$)

```
imagePadding = {{47.5, 5}, {60, 0}};
relvars = {1000 (IQ[t] + IQa[t]) / NN[t], (RQ[t] + DD[t]) / Ntot 100};
relyalabs = {"Number of diagnoses per 1000 persons", "Attack rate (%)"};
relylim = {50, 20};
ReductionFactor = Table[i, {i, 0, 1, 0.25}];

PlotCombinedIntervention[vars_, ylabs_, ylim_,
  scenario_, title_, parameters_, range_, legend_] := Table[Show[
   Plot[{Evaluate[vars[[i]] /. solution["Baseline", Parameters[0, 0, 0, 0, 0, 0]]],
     Evaluate[Table[vars[[i]] /. solution[scenario, parameters], range]]},
    {t, tstart, tend}, AspectRatio → 0.75, ImageSize → 400, PlotRangePadding → None,
    PlotRange → {{0, 2}, {0, ylim[[i]]}}, AxesOrigin → {0, 0},
    Frame → {{True, False}, {True, False}}, FrameStyle → Directive[Black, 17],
    PlotStyle → Thickness[0.01], PlotLabel → Style[title, 17, Black],
    FrameLabel → {{ylabs[[i]], None}, {"time since first case (months)", None}},
    ImagePadding → imagePadding,
    FrameTicks → {{Automatic, None}, {{{0, "0"}, {60 / 365, "2"}, {120 / 365, "4"},
        {180 / 365, "6"}, {240 / 365, "8"}, {300 / 365, "10"}, {360 / 365, "12"},
        {420 / 365, "14"}, {480 / 365, "16"}, {540 / 365, "18"}, {600 / 365, "20"},
        {660 / 365, "22"}, {720 / 365, "24"}}, None}}, PlotLegends →
    If[i == 2, Prepend[Table[Style[Row[legend], Black, 17, "Text"], range],
      "Model without awareness"], None]], If[i == 2, {Graphics[
     {Red, Line[{{0, AttackRateBaseline}, {tend, AttackRateBaseline}}]}],
    Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
       FontColor → Red], {175 / 365, AttackRateBaseline + 1}]]},
   {Graphics[{Red, Line[{{PeakTimingBaseline / 365, 0},
       {PeakTimingBaseline / 365, PeakBaseline}}]}], Graphics[{Red,
     Line[{{0, PeakBaseline}, {PeakTimingBaseline / 365, PeakBaseline}}]}],
    Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
       FontColor → Red], {175 / 365, PeakBaseline + 2}]]}]], {i, 1, Length[vars]}]

PlotCombinedIntervention[relvars, relyalabs, relylim, "GovernmentAndHand",
 "Handwashing with 30% efficacy and\ngovernment-imposed
   social distancing\nwith efficacy ranging from 0% to 100%",
 Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
   RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
   RateAwarenessFadingSevereSymptomsBaseline, AcquisitionRateAwarenessBaseline,
   DiagnosisRateAwareBaseline, 0.10393], {r2 → 0.7}, {r4 → factor}],
 {factor, ReductionFactor}, {IntegerPart[(1 - factor) 100], " %"}]
```


Handwashing with 30% efficacy and
government−imposed social distancing
with efficacy ranging from 0% to 100%
baseline (no awareness)
Number of diagnoses per 1000 persons
time since first case (months)


Handwashing with 30% efficacy and
government−imposed social distancing
with efficacy ranging from 0% to 100%
baseline (no awareness)
Attack rate (%)
time since first case (months)
Model without awareness
100 %
75 %
50 %
25 %
0 %

Plotting Figure 4 A, B and C (main text) (slow spread of awareness)

```
ReductionFactor = Table[i, {i, 0, 1, 0.01}];

PeakMaskRange =
 PeakRange["Mask", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r1 → factor}]]
```

```
{{100., 27.0069}, {99., 26.7787}, {98., 26.55}, {97., 26.3206}, {96., 26.0906},
 {95., 25.8601}, {94., 25.6289}, {93., 25.3972}, {92., 25.1649}, {91., 24.9321},
 {90., 24.6987}, {89., 24.4647}, {88., 24.2302}, {87., 23.9952}, {86., 23.7597},
 {85., 23.5237}, {84., 23.2871}, {83., 23.0501}, {82., 22.8126}, {81., 22.5746},
 {80., 22.3361}, {79., 22.0972}, {78., 21.8579}, {77., 21.6181}, {76., 21.3779},
 {75., 21.1372}, {74., 20.8962}, {73., 20.6548}, {72., 20.4129},
 {71., 20.1707}, {70., 19.9282}, {69., 19.6853}, {68., 19.442}, {67., 19.1984},
 {66., 18.9545}, {65., 18.7103}, {64., 18.4658}, {63., 18.2209},
 {62., 17.9758}, {61., 17.7305}, {60., 17.4848}, {59., 17.239}, {58., 16.9929},
 {57., 16.7466}, {56., 16.5}, {55., 16.2533}, {54., 16.0064}, {53., 15.7593},
 {52., 15.512}, {51., 15.2646}, {50., 15.0171}, {49., 14.7694}, {48., 14.5216},
 {47., 14.2737}, {46., 14.0257}, {45., 13.7776}, {44., 13.5294}, {43., 13.2812},
 {42., 13.0329}, {41., 12.7846}, {40., 12.5363}, {39., 12.2879}, {38., 12.0396},
 {37., 11.7912}, {36., 11.5429}, {35., 11.2946}, {34., 11.0464}, {33., 10.7982},
 {32., 10.5501}, {31., 10.302}, {30., 10.054}, {29., 9.80618}, {28., 9.55843},
 {27., 9.31079}, {26., 9.0633}, {25., 8.81593}, {24., 8.56872}, {23., 8.32168},
 {22., 8.07481}, {21., 7.82812}, {20., 7.58163}, {19., 7.33535}, {18., 7.08928},
 {17., 6.84342}, {16., 6.59781}, {15., 6.35245}, {14., 6.10735},
 {13., 5.86251}, {12., 5.61793}, {11., 5.37363}, {10., 5.12964},
 {9., 4.88594}, {8., 4.64256}, {7., 4.39949}, {6., 4.15676}, {5., 3.91437},
 {4., 3.67232}, {3., 3.43062}, {2., 3.18929}, {1., 2.94834}, {0., 2.70776}}
```

```
PeakHandRange =
 PeakRange["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r₂ → factor}]]
```

```
{{100., 30.0847}, {99., 29.8002}, {98., 29.515}, {97., 29.2293}, {96., 28.943},
 {95., 28.6561}, {94., 28.3688}, {93., 28.0809}, {92., 27.7925}, {91., 27.5037},
 {90., 27.2144}, {89., 26.9248}, {88., 26.6348}, {87., 26.3444}, {86., 26.0537},
 {85., 25.7627}, {84., 25.4715}, {83., 25.18}, {82., 24.8883}, {81., 24.5964},
 {80., 24.3044}, {79., 24.0122}, {78., 23.72}, {77., 23.4276}, {76., 23.1353},
 {75., 22.8429}, {74., 22.5506}, {73., 22.2582}, {72., 21.966}, {71., 21.6739},
 {70., 21.3819}, {69., 21.09}, {68., 20.7984}, {67., 20.507}, {66., 20.2158},
 {65., 19.9249}, {64., 19.6343}, {63., 19.344}, {62., 19.0541}, {61., 18.7646},
 {60., 18.4755}, {59., 18.1868}, {58., 17.8986}, {57., 17.6109}, {56., 17.3237},
 {55., 17.0371}, {54., 16.7511}, {53., 16.4656}, {52., 16.1808}, {51., 15.8966},
 {50., 15.6131}, {49., 15.3303}, {48., 15.0482}, {47., 14.7669}, {46., 14.4863},
 {45., 14.2065}, {44., 13.9276}, {43., 13.6494}, {42., 13.3721}, {41., 13.0957},
 {40., 12.8202}, {39., 12.5457}, {38., 12.272}, {37., 11.9993}, {36., 11.7276},
 {35., 11.4568}, {34., 11.1871}, {33., 10.9184}, {32., 10.6507},
 {31., 10.3841}, {30., 10.1186}, {29., 9.85413}, {28., 9.59079},
 {27., 9.32855}, {26., 9.06745}, {25., 8.80749}, {24., 8.54867},
 {23., 8.29104}, {22., 8.03457}, {21., 7.77929}, {20., 7.52521},
 {19., 7.27235}, {18., 7.0207}, {17., 6.77027}, {16., 6.52109}, {15., 6.27315},
 {14., 6.02647}, {13., 5.78105}, {12., 5.53689}, {11., 5.29401}, {10., 5.0524},
 {9., 4.81208}, {8., 4.57305}, {7., 4.33531}, {6., 4.09888}, {5., 3.86375},
 {4., 3.62992}, {3., 3.3974}, {2., 3.1662}, {1., 2.93632}, {0., 2.70776}}
```

```
PeakSelfImposedDistancingRange = PeakRange["ContactReductionIndividuals",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r₃ → factor}]]
```

```
{{100., 23.0653}, {99., 22.9132}, {98., 22.7603}, {97., 22.6065}, {96., 22.4519},
 {95., 22.2964}, {94., 22.1399}, {93., 21.9824}, {92., 21.8239}, {91., 21.6644},
 {90., 21.5039}, {89., 21.3423}, {88., 21.1796}, {87., 21.0158}, {86., 20.8508},
 {85., 20.6848}, {84., 20.5176}, {83., 20.3492}, {82., 20.1796}, {81., 20.0089},
 {80., 19.8369}, {79., 19.6637}, {78., 19.4894}, {77., 19.3137}, {76., 19.1369},
 {75., 18.9588}, {74., 18.7795}, {73., 18.5989}, {72., 18.417}, {71., 18.2339},
 {70., 18.0496}, {69., 17.864}, {68., 17.6771}, {67., 17.489}, {66., 17.2996},
 {65., 17.109}, {64., 16.9171}, {63., 16.724}, {62., 16.5297}, {61., 16.3341},
 {60., 16.1373}, {59., 15.9393}, {58., 15.7401}, {57., 15.5397}, {56., 15.3381},
 {55., 15.1353}, {54., 14.9314}, {53., 14.7263}, {52., 14.5201},
 {51., 14.3127}, {50., 14.1042}, {49., 13.8947}, {48., 13.684}, {47., 13.4723},
 {46., 13.2595}, {45., 13.0457}, {44., 12.8309}, {43., 12.6151},
 {42., 12.3983}, {41., 12.1805}, {40., 11.9618}, {39., 11.7422},
 {38., 11.5217}, {37., 11.3003}, {36., 11.078}, {35., 10.8549}, {34., 10.631},
 {33., 10.4063}, {32., 10.1808}, {31., 9.9546}, {30., 9.72767}, {29., 9.50001},
 {28., 9.2717}, {27., 9.04274}, {26., 8.81314}, {25., 8.58295}, {24., 8.35217},
 {23., 8.12086}, {22., 7.889}, {21., 7.65666}, {20., 7.42383}, {19., 7.19056},
 {18., 6.95688}, {17., 6.72278}, {16., 6.48833}, {15., 6.25354},
 {14., 6.0184}, {13., 5.78299}, {12., 5.54731}, {11., 5.3114}, {10., 5.07526},
 {9., 4.83893}, {8., 4.60244}, {7., 4.36582}, {6., 4.12908}, {5., 3.89226},
 {4., 3.65538}, {3., 3.41847}, {2., 3.18154}, {1., 2.94463}, {0., 2.70776}}
```

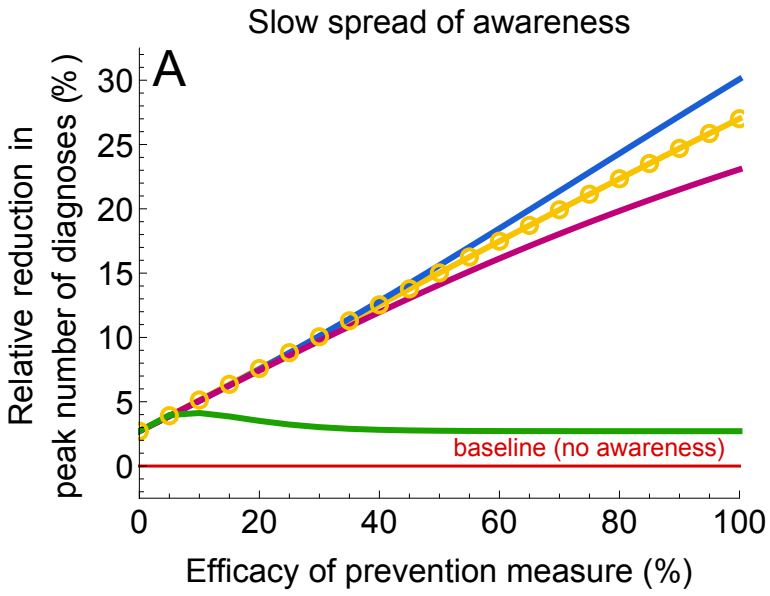
```
PeakGovernmentImposedDistancingRange = PeakRange["ContactReductionGovernment",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r4 → factor}]]
```

```
{{100., 2.71047}, {99., 2.71052}, {98., 2.71054}, {97., 2.7106}, {96., 2.71065},
 {95., 2.71069}, {94., 2.71075}, {93., 2.71081}, {92., 2.71088}, {91., 2.71093},
 {90., 2.711}, {89., 2.71107}, {88., 2.71115}, {87., 2.71124}, {86., 2.71134},
 {85., 2.71144}, {84., 2.71153}, {83., 2.71165}, {82., 2.71178}, {81., 2.7119},
 {80., 2.71205}, {79., 2.71221}, {78., 2.71238}, {77., 2.71259}, {76., 2.71278},
 {75., 2.71302}, {74., 2.71326}, {73., 2.71354}, {72., 2.71385}, {71., 2.71419},
 {70., 2.71456}, {69., 2.71498}, {68., 2.71545}, {67., 2.71597}, {66., 2.71655},
 {65., 2.7172}, {64., 2.71793}, {63., 2.71875}, {62., 2.71966}, {61., 2.72067},
 {60., 2.72181}, {59., 2.72309}, {58., 2.72453}, {57., 2.72616}, {56., 2.72796},
 {55., 2.73}, {54., 2.7323}, {53., 2.73488}, {52., 2.73779}, {51., 2.74105},
 {50., 2.7447}, {49., 2.7488}, {48., 2.75342}, {47., 2.75859}, {46., 2.76439},
 {45., 2.7709}, {44., 2.77816}, {43., 2.78629}, {42., 2.79538}, {41., 2.80552},
 {40., 2.81685}, {39., 2.82944}, {38., 2.84347}, {37., 2.85903}, {36., 2.8763},
 {35., 2.89544}, {34., 2.91659}, {33., 2.93992}, {32., 2.96562},
 {31., 2.99385}, {30., 3.02481}, {29., 3.05866}, {28., 3.09556},
 {27., 3.13568}, {26., 3.17912}, {25., 3.22603}, {24., 3.27641},
 {23., 3.33033}, {22., 3.38766}, {21., 3.44829}, {20., 3.51197}, {19., 3.5783},
 {18., 3.64672}, {17., 3.71652}, {16., 3.78675}, {15., 3.85615},
 {14., 3.92322}, {13., 3.98609}, {12., 4.0425}, {11., 4.08972}, {10., 4.12458},
 {9., 4.14339}, {8., 4.14187}, {7., 4.11519}, {6., 4.05792}, {5., 3.96412},
 {4., 3.82727}, {3., 3.64049}, {2., 3.39654}, {1., 3.08806}, {0., 2.70776}}
```

```
PeakCombinedRange = PeakRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, 0.10393], {r2 → 0.7}, {r4 → factor}]]
```

```
{{100., 10.1212}, {99., 10.1212}, {98., 10.1213}, {97., 10.1213}, {96., 10.1213},
 {95., 10.1214}, {94., 10.1214}, {93., 10.1215}, {92., 10.1215}, {91., 10.1216},
 {90., 10.1217}, {89., 10.1218}, {88., 10.1218}, {87., 10.1219}, {86., 10.122},
 {85., 10.1221}, {84., 10.1222}, {83., 10.1223}, {82., 10.1224}, {81., 10.1225},
 {80., 10.1227}, {79., 10.1228}, {78., 10.123}, {77., 10.1232}, {76., 10.1234},
 {75., 10.1236}, {74., 10.1239}, {73., 10.1241}, {72., 10.1244},
 {71., 10.1248}, {70., 10.1251}, {69., 10.1255}, {68., 10.126}, {67., 10.1265},
 {66., 10.127}, {65., 10.1277}, {64., 10.1284}, {63., 10.1291}, {62., 10.13},
 {61., 10.131}, {60., 10.1322}, {59., 10.1334}, {58., 10.1348}, {57., 10.1364},
 {56., 10.1382}, {55., 10.1402}, {54., 10.1425}, {53., 10.145}, {52., 10.1479},
 {51., 10.1511}, {50., 10.1548}, {49., 10.1589}, {48., 10.1635}, {47., 10.1687},
 {46., 10.1746}, {45., 10.1811}, {44., 10.1885}, {43., 10.1968},
 {42., 10.2061}, {41., 10.2165}, {40., 10.2281}, {39., 10.2412},
 {38., 10.2557}, {37., 10.2719}, {36., 10.29}, {35., 10.31}, {34., 10.3323},
 {33., 10.357}, {32., 10.3843}, {31., 10.4145}, {30., 10.4476}, {29., 10.484},
 {28., 10.5239}, {27., 10.5674}, {26., 10.6148}, {25., 10.666}, {24., 10.7214},
 {23., 10.7808}, {22., 10.8442}, {21., 10.9115}, {20., 10.9825},
 {19., 11.0566}, {18., 11.1333}, {17., 11.2118}, {16., 11.291}, {15., 11.3695},
 {14., 11.4455}, {13., 11.517}, {12., 11.5813}, {11., 11.6353}, {10., 11.6755},
 {9., 11.6976}, {8., 11.6969}, {7., 11.668}, {6., 11.6048}, {5., 11.501},
 {4., 11.3494}, {3., 11.1428}, {2., 10.8737}, {1., 10.5347}, {0., 10.1186}}
```

```
imagePadding = {{72.5, 15}, {50, 5}};
fig4A = Show[ListLinePlot[
    {PeakMaskRange[[ ;; ;; 5]], PeakHandRange, PeakSelfImposedDistancingRange,
     PeakGovernmentImposedDistancingRange[[ ;; ;; 5]](*,PeakCombinedRange*)},
    AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-2.5, 32.5}},
    AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
    FrameStyle → Directive[Black, 17],
    PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
      {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
      {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
      {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]}(*,{Thickness[0.01],
       RGBColor[185/255,76/255,225/255]}*)}, PlotRangePadding → None,
    PlotMarkers → {Graphics[{RGBColor[248 / 255, 196 / 255, 0], Thick, Circle[]},
       ImageSize → 10], "", "", "", ""},
    PlotLabel → Style[Row[{"Slow spread of awareness"}], 17, Black],
    ImagePadding → imagePadding,
    FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
      {"Efficacy of prevention measure (%)", None}}],
  Graphics[Text[StyleForm["A", FontSize → 26], {100 * 0.05, 32.5 * 0.95}]],
  Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
     FontColor → RGBColor[217 / 255, 0, 0]], {75, 1.5}]], Graphics[
   {RGBColor[217 / 255, 0, 0], Thickness[0.005], Line[{{0, 0}, {100, 0}}]}]]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//Figure4A", ".eps"], fig4A];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//Figure4A", ".eps"], fig4A];
```



```
AttackRateMaskRange = AttackRateRange["Mask",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r₁ → factor}]]
```

```
{{100., 12.8943}, {99., 12.9324}, {98., 12.9705}, {97., 13.0086}, {96., 13.0467},
 {95., 13.0847}, {94., 13.1227}, {93., 13.1606}, {92., 13.1985},
 {91., 13.2363}, {90., 13.274}, {89., 13.3117}, {88., 13.3493}, {87., 13.3869},
 {86., 13.4243}, {85., 13.4616}, {84., 13.4989}, {83., 13.536}, {82., 13.5731},
 {81., 13.61}, {80., 13.6468}, {79., 13.6835}, {78., 13.7201}, {77., 13.7565},
 {76., 13.7929}, {75., 13.829}, {74., 13.8651}, {73., 13.901}, {72., 13.9367},
 {71., 13.9723}, {70., 14.0078}, {69., 14.0431}, {68., 14.0782}, {67., 14.1132},
 {66., 14.148}, {65., 14.1826}, {64., 14.2171}, {63., 14.2514}, {62., 14.2855},
 {61., 14.3194}, {60., 14.3532}, {59., 14.3868}, {58., 14.4202}, {57., 14.4534},
 {56., 14.4864}, {55., 14.5192}, {54., 14.5518}, {53., 14.5842}, {52., 14.6165},
 {51., 14.6485}, {50., 14.6803}, {49., 14.712}, {48., 14.7434}, {47., 14.7746},
 {46., 14.8056}, {45., 14.8364}, {44., 14.867}, {43., 14.8974}, {42., 14.9276},
 {41., 14.9575}, {40., 14.9873}, {39., 15.0168}, {38., 15.0461}, {37., 15.0752},
 {36., 15.1041}, {35., 15.1328}, {34., 15.1613}, {33., 15.1895}, {32., 15.2175},
 {31., 15.2453}, {30., 15.2729}, {29., 15.3003}, {28., 15.3274},
 {27., 15.3544}, {26., 15.3811}, {25., 15.4076}, {24., 15.4338},
 {23., 15.4599}, {22., 15.4857}, {21., 15.5114}, {20., 15.5368},
 {19., 15.562}, {18., 15.587}, {17., 15.6117}, {16., 15.6363}, {15., 15.6606},
 {14., 15.6847}, {13., 15.7086}, {12., 15.7323}, {11., 15.7558}, {10., 15.779},
 {9., 15.8021}, {8., 15.8249}, {7., 15.8476}, {6., 15.87}, {5., 15.8922},
 {4., 15.9142}, {3., 15.936}, {2., 15.9577}, {1., 15.9791}, {0., 16.0003}}
```

```
AttackRateHandRange = AttackRateRange["Hand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r₂ → factor}]]
```

```
{{100., 12.2032}, {99., 12.253}, {98., 12.303}, {97., 12.3533}, {96., 12.4037},
 {95., 12.4543}, {94., 12.5049}, {93., 12.5556}, {92., 12.6063}, {91., 12.6571},
 {90., 12.7078}, {89., 12.7584}, {88., 12.809}, {87., 12.8594}, {86., 12.9098},
 {85., 12.96}, {84., 13.0101}, {83., 13.0599}, {82., 13.1096}, {81., 13.1591},
 {80., 13.2084}, {79., 13.2575}, {78., 13.3063}, {77., 13.3549}, {76., 13.4032},
 {75., 13.4512}, {74., 13.4989}, {73., 13.5463}, {72., 13.5935}, {71., 13.6403},
 {70., 13.6868}, {69., 13.733}, {68., 13.7788}, {67., 13.8243}, {66., 13.8694},
 {65., 13.9142}, {64., 13.9587}, {63., 14.0027}, {62., 14.0464}, {61., 14.0897},
 {60., 14.1327}, {59., 14.1752}, {58., 14.2174}, {57., 14.2592}, {56., 14.3005},
 {55., 14.3415}, {54., 14.3821}, {53., 14.4223}, {52., 14.4621}, {51., 14.5015},
 {50., 14.5405}, {49., 14.579}, {48., 14.6172}, {47., 14.655}, {46., 14.6923},
 {45., 14.7293}, {44., 14.7658}, {43., 14.802}, {42., 14.8377}, {41., 14.873},
 {40., 14.908}, {39., 14.9425}, {38., 14.9766}, {37., 15.0103}, {36., 15.0437},
 {35., 15.0766}, {34., 15.1091}, {33., 15.1413}, {32., 15.173}, {31., 15.2044},
 {30., 15.2354}, {29., 15.266}, {28., 15.2962}, {27., 15.3261}, {26., 15.3555},
 {25., 15.3846}, {24., 15.4133}, {23., 15.4417}, {22., 15.4697},
 {21., 15.4973}, {20., 15.5246}, {19., 15.5515}, {18., 15.5781},
 {17., 15.6043}, {16., 15.6302}, {15., 15.6557}, {14., 15.6809},
 {13., 15.7058}, {12., 15.7303}, {11., 15.7545}, {10., 15.7784},
 {9., 15.802}, {8., 15.8252}, {7., 15.8482}, {6., 15.8708}, {5., 15.8931},
 {4., 15.9151}, {3., 15.9368}, {2., 15.9583}, {1., 15.9794}, {0., 16.0003}}
```

```
AttackRateSelfImposedDistancingRange =
 AttackRateRange["ContactReductionIndividuals",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r3 → factor}]]
```

```
{{100., 13.1526}, {99., 13.1776}, {98., 13.2029}, {97., 13.2284}, {96., 13.2542},
 {95., 13.2803}, {94., 13.3067}, {93., 13.3333}, {92., 13.3601}, {91., 13.3872},
 {90., 13.4145}, {89., 13.4421}, {88., 13.4699}, {87., 13.4979}, {86., 13.5261},
 {85., 13.5546}, {84., 13.5832}, {83., 13.6121}, {82., 13.6411}, {81., 13.6703},
 {80., 13.6997}, {79., 13.7292}, {78., 13.7589}, {77., 13.7888}, {76., 13.8188},
 {75., 13.8489}, {74., 13.8792}, {73., 13.9096}, {72., 13.9401}, {71., 13.9707},
 {70., 14.0015}, {69., 14.0323}, {68., 14.0632}, {67., 14.0942}, {66., 14.1253},
 {65., 14.1564}, {64., 14.1876}, {63., 14.2188}, {62., 14.2501}, {61., 14.2814},
 {60., 14.3128}, {59., 14.3441}, {58., 14.3755}, {57., 14.4068}, {56., 14.4382},
 {55., 14.4696}, {54., 14.5009}, {53., 14.5322}, {52., 14.5635}, {51., 14.5947},
 {50., 14.6259}, {49., 14.6571}, {48., 14.6881}, {47., 14.7191}, {46., 14.7501},
 {45., 14.7809}, {44., 14.8117}, {43., 14.8423}, {42., 14.8729}, {41., 14.9033},
 {40., 14.9336}, {39., 14.9639}, {38., 14.9939}, {37., 15.0239}, {36., 15.0537},
 {35., 15.0834}, {34., 15.1129}, {33., 15.1423}, {32., 15.1715},
 {31., 15.2005}, {30., 15.2294}, {29., 15.2581}, {28., 15.2866}, {27., 15.315},
 {26., 15.3431}, {25., 15.3711}, {24., 15.3989}, {23., 15.4265},
 {22., 15.4538}, {21., 15.481}, {20., 15.508}, {19., 15.5347}, {18., 15.5613},
 {17., 15.5876}, {16., 15.6137}, {15., 15.6396}, {14., 15.6652},
 {13., 15.6907}, {12., 15.7159}, {11., 15.7409}, {10., 15.7656},
 {9., 15.7901}, {8., 15.8144}, {7., 15.8385}, {6., 15.8623}, {5., 15.8859},
 {4., 15.9092}, {3., 15.9323}, {2., 15.9552}, {1., 15.9779}, {0., 16.0003}}
```

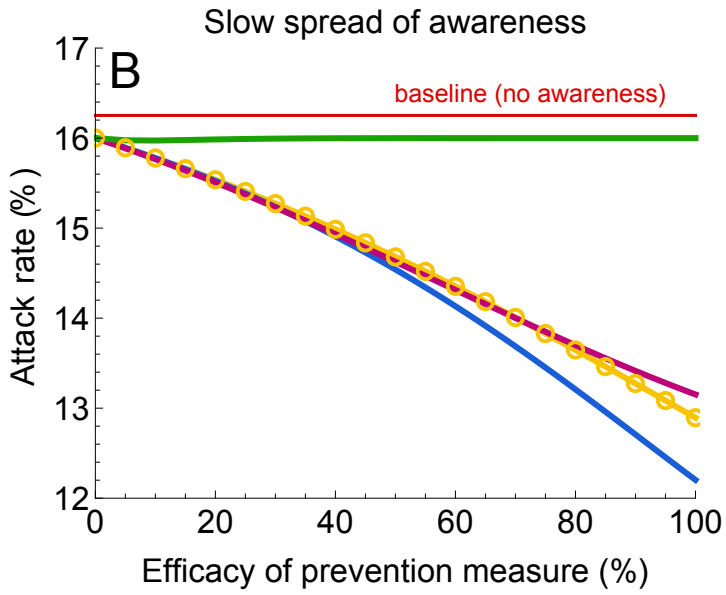
```
AttackRateGovernmentImposedDistancingRange =
 AttackRateRange["ContactReductionGovernment",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r4 → factor}]]
```

```
{{100., 16.0002}, {99., 16.0002}, {98., 16.0002}, {97., 16.0002}, {96., 16.0002},
 {95., 16.0002}, {94., 16.0002}, {93., 16.0002}, {92., 16.0002}, {91., 16.0002},
 {90., 16.0002}, {89., 16.0002}, {88., 16.0002}, {87., 16.0002}, {86., 16.0002},
 {85., 16.0002}, {84., 16.0002}, {83., 16.0002}, {82., 16.0002}, {81., 16.0002},
 {80., 16.0002}, {79., 16.0002}, {78., 16.0002}, {77., 16.0002}, {76., 16.0002},
 {75., 16.0002}, {74., 16.0002}, {73., 16.0001}, {72., 16.0001}, {71., 16.0001},
 {70., 16.0001}, {69., 16.0001}, {68., 16.0001}, {67., 16.0001}, {66., 16.0001},
 {65., 16.0001}, {64., 16.0001}, {63., 16.}, {62., 16.}, {61., 16.}, {60., 16.},
 {59., 16.}, {58., 15.9999}, {57., 15.9999}, {56., 15.9999}, {55., 15.9998},
 {54., 15.9998}, {53., 15.9997}, {52., 15.9997}, {51., 15.9996}, {50., 15.9996},
 {49., 15.9995}, {48., 15.9994}, {47., 15.9993}, {46., 15.9992}, {45., 15.9991},
 {44., 15.9989}, {43., 15.9988}, {42., 15.9986}, {41., 15.9984}, {40., 15.9982},
 {39., 15.998}, {38., 15.9977}, {37., 15.9974}, {36., 15.9971}, {35., 15.9968},
 {34., 15.9964}, {33., 15.9959}, {32., 15.9954}, {31., 15.9949}, {30., 15.9943},
 {29., 15.9937}, {28., 15.993}, {27., 15.9923}, {26., 15.9914}, {25., 15.9906},
 {24., 15.9896}, {23., 15.9886}, {22., 15.9875}, {21., 15.9864}, {20., 15.9851},
 {19., 15.9839}, {18., 15.9826}, {17., 15.9812}, {16., 15.9799}, {15., 15.9785},
 {14., 15.9772}, {13., 15.976}, {12., 15.9748}, {11., 15.9738}, {10., 15.9731},
 {9., 15.9726}, {8., 15.9726}, {7., 15.973}, {6., 15.974}, {5., 15.9757},
 {4., 15.9783}, {3., 15.9818}, {2., 15.9866}, {1., 15.9926}, {0., 16.0003}}
```

```
AttackRateCombinedRange = AttackRateRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, 0.10393], {r2 → 0.7}, {r4 → factor}]]
```

```
{{100., 15.2353}, {99., 15.2353}, {98., 15.2353}, {97., 15.2353}, {96., 15.2353},
 {95., 15.2353}, {94., 15.2353}, {93., 15.2353}, {92., 15.2353}, {91., 15.2353},
 {90., 15.2353}, {89., 15.2353}, {88., 15.2353}, {87., 15.2353}, {86., 15.2353},
 {85., 15.2353}, {84., 15.2353}, {83., 15.2353}, {82., 15.2353}, {81., 15.2353},
 {80., 15.2353}, {79., 15.2353}, {78., 15.2353}, {77., 15.2353}, {76., 15.2353},
 {75., 15.2353}, {74., 15.2353}, {73., 15.2353}, {72., 15.2353}, {71., 15.2353},
 {70., 15.2353}, {69., 15.2353}, {68., 15.2353}, {67., 15.2352}, {66., 15.2352},
 {65., 15.2352}, {64., 15.2352}, {63., 15.2352}, {62., 15.2352}, {61., 15.2352},
 {60., 15.2351}, {59., 15.2351}, {58., 15.2351}, {57., 15.235}, {56., 15.235},
 {55., 15.235}, {54., 15.2349}, {53., 15.2349}, {52., 15.2348}, {51., 15.2347},
 {50., 15.2347}, {49., 15.2346}, {48., 15.2345}, {47., 15.2344}, {46., 15.2343},
 {45., 15.2341}, {44., 15.234}, {43., 15.2338}, {42., 15.2336}, {41., 15.2334},
 {40., 15.2332}, {39., 15.2329}, {38., 15.2326}, {37., 15.2323},
 {36., 15.2319}, {35., 15.2315}, {34., 15.231}, {33., 15.2305}, {32., 15.2299},
 {31., 15.2292}, {30., 15.2285}, {29., 15.2278}, {28., 15.2269},
 {27., 15.2259}, {26., 15.2249}, {25., 15.2238}, {24., 15.2226},
 {23., 15.2212}, {22., 15.2198}, {21., 15.2183}, {20., 15.2167}, {19., 15.215},
 {18., 15.2132}, {17., 15.2114}, {16., 15.2095}, {15., 15.2077},
 {14., 15.2058}, {13., 15.204}, {12., 15.2024}, {11., 15.201}, {10., 15.1999},
 {9., 15.1992}, {8., 15.1989}, {7., 15.1994}, {6., 15.2006}, {5., 15.2028},
 {4., 15.2062}, {3., 15.2109}, {2., 15.2172}, {1., 15.2253}, {0., 15.2354}}
```

```
fig4B = Show[ListLinePlot[{AttackRateMaskRange[[ ;; ;; 5]],
     AttackRateHandRange, AttackRateSelfImposedDistancingRange,
     AttackRateGovernmentImposedDistancingRange[[ ;; ;; 5]]
     (*,AttackRateCombinedRange*)}, AspectRatio → 0.75,
    ImageSize → 400, PlotRange → {{0, 100}, {12, 17}}, AxesOrigin → {0, 0},
    Frame → {{True, False}, {True, False}}, FrameStyle → Directive[Black, 17],
    PlotMarkers → {Graphics[{RGBColor[248 / 255, 196 / 255, 0], Thick, Circle[]},
       ImageSize → 10], "", "", "", ""},
    PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
      {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
      {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
      {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]}(*,
      {Thickness[0.01],RGBColor[185/255,76/255,225/255]}*)},
    FrameLabel → {{"Attack rate (%)", None},
      {"Efficacy of prevention measure (%)", None}}, PlotRangePadding → None,
    PlotLabel → Style[Row[{"Slow spread of awareness"}], 17, Black],
    ImagePadding → imagePadding],
   Graphics[{RGBColor[217 / 255, 0, 0], Thickness[0.005],
     Line[{{0, AttackRateBaseline}, {100, AttackRateBaseline}}]}],
   Graphics[Text[StyleForm["B", FontSize → 26], {100 * 0.05, 12 + (17 - 12) * 0.95}]],
   Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
      FontColor → RGBColor[217 / 255, 0, 0]], {72.5, 16.5}]]]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//Figure4B", ".eps"], fig4B];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//Figure4B", ".eps"], fig4B];
```



```
PeakTimingMaskRange = PeakTimingRange["Mask",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r₁ → factor}]]
```

```
{{100., 152.309}, {99., 152.349}, {98., 152.369}, {97., 152.409}, {96., 152.429},
 {95., 152.469}, {94., 152.489}, {93., 152.53}, {92., 152.55}, {91., 152.59},
 {90., 152.61}, {89., 152.65}, {88., 152.67}, {87., 152.69}, {86., 152.73},
 {85., 152.75}, {84., 152.77}, {83., 152.81}, {82., 152.83}, {81., 152.85},
 {80., 152.891}, {79., 152.911}, {78., 152.931}, {77., 152.971}, {76., 152.991},
 {75., 153.011}, {74., 153.031}, {73., 153.051}, {72., 153.091}, {71., 153.111},
 {70., 153.131}, {69., 153.151}, {68., 153.171}, {67., 153.191}, {66., 153.211},
 {65., 153.251}, {64., 153.272}, {63., 153.292}, {62., 153.312}, {61., 153.332},
 {60., 153.352}, {59., 153.372}, {58., 153.392}, {57., 153.392}, {56., 153.412},
 {55., 153.432}, {54., 153.452}, {53., 153.472}, {52., 153.492}, {51., 153.512},
 {50., 153.532}, {49., 153.532}, {48., 153.552}, {47., 153.572}, {46., 153.592},
 {45., 153.592}, {44., 153.612}, {43., 153.632}, {42., 153.632}, {41., 153.653},
 {40., 153.673}, {39., 153.673}, {38., 153.693}, {37., 153.693}, {36., 153.713},
 {35., 153.713}, {34., 153.733}, {33., 153.733}, {32., 153.753}, {31., 153.753},
 {30., 153.773}, {29., 153.773}, {28., 153.793}, {27., 153.793}, {26., 153.793},
 {25., 153.813}, {24., 153.813}, {23., 153.813}, {22., 153.833},
 {21., 153.833}, {20., 153.833}, {19., 153.833}, {18., 153.853},
 {17., 153.853}, {16., 153.853}, {15., 153.853}, {14., 153.853},
 {13., 153.873}, {12., 153.873}, {11., 153.873}, {10., 153.873},
 {9., 153.873}, {8., 153.873}, {7., 153.873}, {6., 153.873}, {5., 153.873},
 {4., 153.873}, {3., 153.873}, {2., 153.873}, {1., 153.873}, {0., 153.873}}
```

```
PeakTimingHandRange = PeakTimingRange["Hand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r₂ → factor}]]
```

```
{{100., 151.567}, {99., 151.607}, {98., 151.667}, {97., 151.707}, {96., 151.767},
 {95., 151.808}, {94., 151.868}, {93., 151.908}, {92., 151.948}, {91., 152.008},
 {90., 152.048}, {89., 152.088}, {88., 152.149}, {87., 152.189}, {86., 152.229},
 {85., 152.269}, {84., 152.329}, {83., 152.369}, {82., 152.409},
 {81., 152.449}, {80., 152.489}, {79., 152.53}, {78., 152.57}, {77., 152.61},
 {76., 152.65}, {75., 152.69}, {74., 152.73}, {73., 152.77}, {72., 152.81},
 {71., 152.83}, {70., 152.87}, {69., 152.911}, {68., 152.951}, {67., 152.971},
 {66., 153.011}, {65., 153.051}, {64., 153.071}, {63., 153.111}, {62., 153.131},
 {61., 153.171}, {60., 153.191}, {59., 153.231}, {58., 153.251}, {57., 153.292},
 {56., 153.312}, {55., 153.332}, {54., 153.352}, {53., 153.392}, {52., 153.412},
 {51., 153.432}, {50., 153.452}, {49., 153.472}, {48., 153.492}, {47., 153.512},
 {46., 153.532}, {45., 153.552}, {44., 153.572}, {43., 153.592}, {42., 153.612},
 {41., 153.632}, {40., 153.653}, {39., 153.673}, {38., 153.673}, {37., 153.693},
 {36., 153.713}, {35., 153.713}, {34., 153.733}, {33., 153.753}, {32., 153.753},
 {31., 153.773}, {30., 153.773}, {29., 153.793}, {28., 153.793}, {27., 153.813},
 {26., 153.813}, {25., 153.833}, {24., 153.833}, {23., 153.833}, {22., 153.853},
 {21., 153.853}, {20., 153.853}, {19., 153.853}, {18., 153.873},
 {17., 153.873}, {16., 153.873}, {15., 153.873}, {14., 153.873},
 {13., 153.873}, {12., 153.873}, {11., 153.893}, {10., 153.893},
 {9., 153.893}, {8., 153.893}, {7., 153.893}, {6., 153.873}, {5., 153.873},
 {4., 153.873}, {3., 153.873}, {2., 153.873}, {1., 153.873}, {0., 153.873}}
```

```
PeakTimingSelfImposedDistancingRange =
 PeakTimingRange["ContactReductionIndividuals",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r3 → factor}]]
```

```
{{100., 151.908}, {99., 151.928}, {98., 151.968}, {97., 152.008}, {96., 152.048},
 {95., 152.068}, {94., 152.108}, {93., 152.149}, {92., 152.189}, {91., 152.209},
 {90., 152.249}, {89., 152.289}, {88., 152.309}, {87., 152.349}, {86., 152.369},
 {85., 152.409}, {84., 152.449}, {83., 152.469}, {82., 152.509}, {81., 152.53},
 {80., 152.57}, {79., 152.59}, {78., 152.63}, {77., 152.65}, {76., 152.69},
 {75., 152.71}, {74., 152.73}, {73., 152.77}, {72., 152.79}, {71., 152.83},
 {70., 152.85}, {69., 152.891}, {68., 152.911}, {67., 152.931}, {66., 152.971},
 {65., 152.991}, {64., 153.011}, {63., 153.031}, {62., 153.071}, {61., 153.091},
 {60., 153.111}, {59., 153.151}, {58., 153.171}, {57., 153.191}, {56., 153.211},
 {55., 153.231}, {54., 153.251}, {53., 153.292}, {52., 153.312}, {51., 153.332},
 {50., 153.352}, {49., 153.372}, {48., 153.392}, {47., 153.412}, {46., 153.432},
 {45., 153.452}, {44., 153.472}, {43., 153.492}, {42., 153.512}, {41., 153.532},
 {40., 153.552}, {39., 153.572}, {38., 153.572}, {37., 153.592}, {36., 153.612},
 {35., 153.632}, {34., 153.653}, {33., 153.653}, {32., 153.673}, {31., 153.693},
 {30., 153.693}, {29., 153.713}, {28., 153.733}, {27., 153.733}, {26., 153.753},
 {25., 153.753}, {24., 153.773}, {23., 153.773}, {22., 153.793},
 {21., 153.793}, {20., 153.813}, {19., 153.813}, {18., 153.833},
 {17., 153.833}, {16., 153.833}, {15., 153.853}, {14., 153.853},
 {13., 153.853}, {12., 153.853}, {11., 153.853}, {10., 153.873},
 {9., 153.873}, {8., 153.873}, {7., 153.873}, {6., 153.873}, {5., 153.873},
 {4., 153.873}, {3., 153.873}, {2., 153.873}, {1., 153.873}, {0., 153.873}}
```

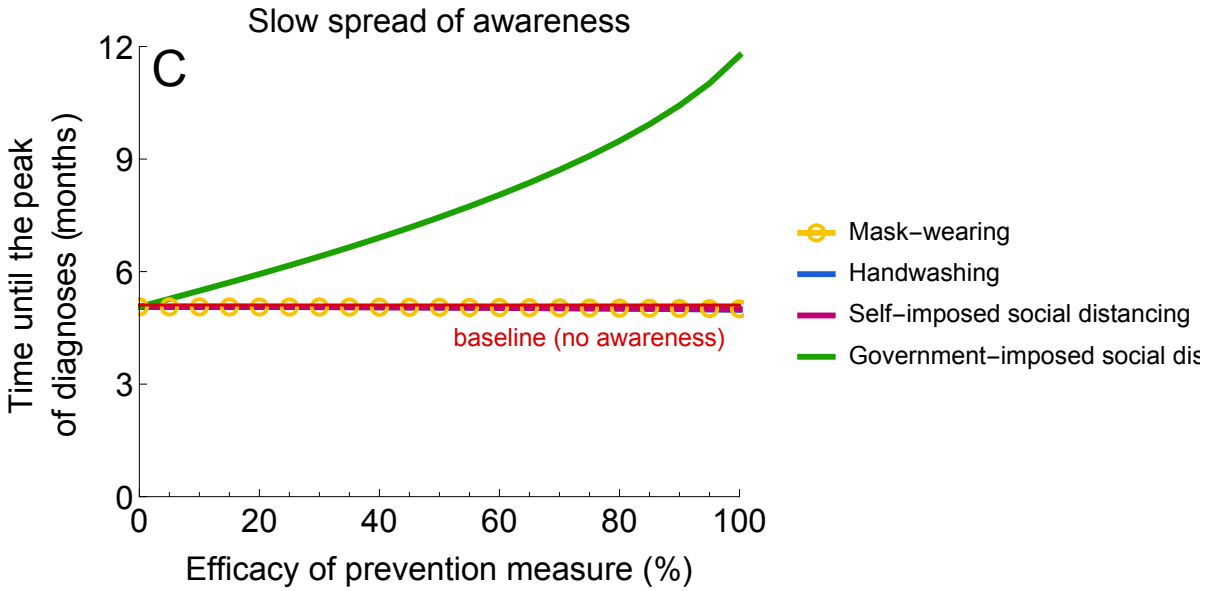
```
PeakTimingGovernmentImposedDistancingRange =
 PeakTimingRange["ContactReductionGovernment",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, StartTimeBaseline], {r4 → factor}]]
```

```
{{100., 357.68}, {99., 352.627}, {98., 347.894}, {97., 343.402}, {96., 339.151},
 {95., 335.12}, {94., 331.249}, {93., 327.539}, {92., 323.97}, {91., 320.521},
 {90., 317.192}, {89., 313.963}, {88., 310.835}, {87., 307.786}, {86., 304.818},
 {85., 301.931}, {84., 299.123}, {83., 296.376}, {82., 293.668}, {81., 291.041},
 {80., 288.454}, {79., 285.928}, {78., 283.441}, {77., 280.994}, {76., 278.608},
 {75., 276.242}, {74., 273.935}, {73., 271.649}, {72., 269.403}, {71., 267.197},
 {70., 265.012}, {69., 262.866}, {68., 260.74}, {67., 258.654}, {66., 256.589},
 {65., 254.543}, {64., 252.538}, {63., 250.553}, {62., 248.567}, {61., 246.642},
 {60., 244.717}, {59., 242.812}, {58., 240.927}, {57., 239.082}, {56., 237.237},
 {55., 235.412}, {54., 233.607}, {53., 231.822}, {52., 230.058}, {51., 228.293},
 {50., 226.568}, {49., 224.844}, {48., 223.139}, {47., 221.455}, {46., 219.77},
 {45., 218.106}, {44., 216.461}, {43., 214.837}, {42., 213.212}, {41., 211.608},
 {40., 210.024}, {39., 208.44}, {38., 206.875}, {37., 205.311}, {36., 203.767},
 {35., 202.243}, {34., 200.719}, {33., 199.195}, {32., 197.711},
 {31., 196.207}, {30., 194.743}, {29., 193.259}, {28., 191.815},
 {27., 190.371}, {26., 188.927}, {25., 187.503}, {24., 186.08}, {23., 184.676},
 {22., 183.272}, {21., 181.868}, {20., 180.485}, {19., 179.101},
 {18., 177.737}, {17., 176.374}, {16., 175.01}, {15., 173.666}, {14., 172.323},
 {13., 170.979}, {12., 169.656}, {11., 168.312}, {10., 166.988},
 {9., 165.665}, {8., 164.341}, {7., 163.018}, {6., 161.714}, {5., 160.391},
 {4., 159.087}, {3., 157.784}, {2., 156.46}, {1., 155.157}, {0., 153.873}}
```

```
PeakTimingCombinedRange = PeakTimingRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, 5 × 10^(-5),
    DiagnosisRateAwareBaseline, 0.10393], {r2 → 0.7}, {r4 → factor}]]
```

```
{{100., 357.6}, {99., 352.547}, {98., 347.814}, {97., 343.322}, {96., 339.07},
 {95., 335.02}, {94., 331.149}, {93., 327.439}, {92., 323.87}, {91., 320.42},
 {90., 317.091}, {89., 313.883}, {88., 310.734}, {87., 307.706}, {86., 304.738},
 {85., 301.85}, {84., 299.043}, {83., 296.275}, {82., 293.588}, {81., 290.961},
 {80., 288.374}, {79., 285.847}, {78., 283.361}, {77., 280.914}, {76., 278.528},
 {75., 276.161}, {74., 273.855}, {73., 271.569}, {72., 269.323}, {71., 267.097},
 {70., 264.931}, {69., 262.786}, {68., 260.66}, {67., 258.554}, {66., 256.509},
 {65., 254.463}, {64., 252.438}, {63., 250.452}, {62., 248.487}, {61., 246.542},
 {60., 244.637}, {59., 242.732}, {58., 240.847}, {57., 238.982}, {56., 237.157},
 {55., 235.332}, {54., 233.527}, {53., 231.742}, {52., 229.977}, {51., 228.213},
 {50., 226.488}, {49., 224.763}, {48., 223.059}, {47., 221.374}, {46., 219.69},
 {45., 218.025}, {44., 216.381}, {43., 214.757}, {42., 213.132}, {41., 211.528},
 {40., 209.944}, {39., 208.359}, {38., 206.795}, {37., 205.231}, {36., 203.707},
 {35., 202.163}, {34., 200.639}, {33., 199.135}, {32., 197.651},
 {31., 196.167}, {30., 194.683}, {29., 193.219}, {28., 191.755},
 {27., 190.311}, {26., 188.887}, {25., 187.463}, {24., 186.04}, {23., 184.636},
 {22., 183.232}, {21., 181.848}, {20., 180.465}, {19., 179.101},
 {18., 177.737}, {17., 176.374}, {16., 175.01}, {15., 173.666}, {14., 172.323},
 {13., 170.979}, {12., 169.656}, {11., 168.312}, {10., 166.988},
 {9., 165.665}, {8., 164.341}, {7., 163.018}, {6., 161.694}, {5., 160.371},
 {4., 159.047}, {3., 157.723}, {2., 156.4}, {1., 155.096}, {0., 153.773}}
```

```
fig4C = Show[ListLinePlot[{PeakTimingMaskRange[[ ;; ;; 5]],
     PeakTimingHandRange, PeakTimingSelfImposedDistancingRange,
     PeakTimingGovernmentImposedDistancingRange[[ ;; ;; 5]]
     (*,PeakTimingCombinedRange*)}, AspectRatio → 0.75,
    ImageSize → 400, PlotRange → {All, {0, 365}}, AxesOrigin → {0, 0},
    Frame → {{True, False}, {True, False}}, FrameStyle → Directive[Black, 17],
    PlotMarkers → {Graphics[{RGBColor[248 / 255, 196 / 255, 0], Thick, Circle[]},
       ImageSize → 10], "", "", "", ""},
    PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
      {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
      {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
      {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]}(*,
      {Thickness[0.01],RGBColor[185/255,76/255,225/255]}*)},
    FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
      {"Efficacy of prevention measure (%)", None}},
    ImagePadding → imagePadding, PlotRangePadding → None,
    PlotLabel → Style[Row[{"Slow spread of awareness"}], 17, Black],
    PlotLegends → Table[Style[Row[{label}], Black, 13, "Text"],
      {label, {"Mask-wearing", "Handwashing", "Self-imposed social distancing",
        "Government-imposed social distancing"(*,"Government-imposed social
          distancing\nand handwashing with 30% efficacy"*)}}],
    FrameTicks → {{{{0, "0"}, {365 × 3 / 12, "3"}, {365 × 9 / 12, "9"},
        {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"}, {365 × 3, "36"}, {365 × 4, "48"},
        {365 × 5, "60"}, {365 × 6, "72"}}, None}, {Automatic, None}}],
  Graphics[{RGBColor[217 / 255, 0, 0], Thickness[0.005],
    Line[{{0, PeakTimingBaseline}, {100, PeakTimingBaseline}}]}],
  Graphics[Text[StyleForm["C", FontSize → 26], {100 * 0.05, 365 * 0.95}]],
  Graphics[Text[StyleForm["baseline (no awareness)",
     FontSize → 13, FontColor → RGBColor[217 / 255, 0, 0]], {75, 130}]]]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//Figure4C", ".eps"], fig4C];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//Figure4C", ".eps"], fig4C];
```



Combined intervention: government-imposed social distancing and handwashing with efficacies of 30%, 45% and 60% for slow and fast spread of awareness

```
EffVal1 = 0.7;
EffVal2 = 0.4;
EffVal3 = 0.55;

DeltaSlow = 5 × 10^(-5);

Time30Fast = 0.10437;
Time60Fast = 0.10505;
Time45Fast = 0.10472;

Time30Slow = 0.10393;
Time60Slow = Time30Slow;
Time45Slow = Time30Slow;
```

Time when government-imposed social distancing has to start (10 diagnoses)

```
(IQ[t] + IQa[t]) /.
  solution["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
      RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
      RateAwarenessFadingSevereSymptomsBaseline,
      AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline, 0],
     {r2 → EffVal1}]] /. t → Time30Fast

(IQ[t] + IQa[t]) /.
  solution["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
      RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
      RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
      DiagnosisRateAwareBaseline, 0], {r2 → EffVal1}]] /. t → Time30Slow

(IQ[t] + IQa[t]) /.
  solution["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
      RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
      RateAwarenessFadingSevereSymptomsBaseline,
      AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline, 0],
     {r2 → EffVal2}]] /. t → Time60Fast

(IQ[t] + IQa[t]) /.
  solution["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
      RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
      RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
      DiagnosisRateAwareBaseline, 0], {r2 → EffVal2}]] /. t → Time60Slow

(IQ[t] + IQa[t]) /.
  solution["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
      RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
      RateAwarenessFadingSevereSymptomsBaseline,
      AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline, 0],
     {r2 → EffVal3}]] /. t → Time45Fast

(IQ[t] + IQa[t]) /.
  solution["Hand", Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
      RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
      RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
      DiagnosisRateAwareBaseline, 0], {r2 → EffVal3}]] /. t → Time45Slow
{10.0016}

{10.0025}

{10.0007}

{10.0025}

{10.0065}

{10.0025}
```

Peak height

Handwashing efficacy 30%

```
PeakFast30 = PeakRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time30Fast], {r2 → EffVal1}, {r4 → factor}]]
```

```
{{100., 65.3188}, {99., 65.3188}, {98., 65.3188}, {97., 65.3189}, {96., 65.3189},
 {95., 65.3189}, {94., 65.319}, {93., 65.319}, {92., 65.319}, {91., 65.3191},
 {90., 65.3191}, {89., 65.3192}, {88., 65.3192}, {87., 65.3193}, {86., 65.3193},
 {85., 65.3194}, {84., 65.3195}, {83., 65.3195}, {82., 65.3196}, {81., 65.3197},
 {80., 65.3198}, {79., 65.3199}, {78., 65.32}, {77., 65.3201}, {76., 65.3202},
 {75., 65.3204}, {74., 65.3205}, {73., 65.3207}, {72., 65.3208}, {71., 65.321},
 {70., 65.3212}, {69., 65.3215}, {68., 65.3217}, {67., 65.322}, {66., 65.3223},
 {65., 65.3226}, {64., 65.3229}, {63., 65.3233}, {62., 65.3237}, {61., 65.3241},
 {60., 65.3246}, {59., 65.3251}, {58., 65.3256}, {57., 65.3262}, {56., 65.3268},
 {55., 65.3274}, {54., 65.3281}, {53., 65.3289}, {52., 65.3296}, {51., 65.3304},
 {50., 65.3313}, {49., 65.3322}, {48., 65.3331}, {47., 65.3341}, {46., 65.3352},
 {45., 65.3363}, {44., 65.3374}, {43., 65.3386}, {42., 65.3399}, {41., 65.3412},
 {40., 65.3426}, {39., 65.344}, {38., 65.3455}, {37., 65.3471}, {36., 65.3487},
 {35., 65.3503}, {34., 65.3521}, {33., 65.3538}, {32., 65.3557},
 {31., 65.3576}, {30., 65.3595}, {29., 65.3615}, {28., 65.3636},
 {27., 65.3656}, {26., 65.3677}, {25., 65.3699}, {24., 65.372}, {23., 65.3741},
 {22., 65.3763}, {21., 65.3783}, {20., 65.3804}, {19., 65.3823},
 {18., 65.3841}, {17., 65.3858}, {16., 65.3873}, {15., 65.3885},
 {14., 65.3895}, {13., 65.3901}, {12., 65.3903}, {11., 65.39}, {10., 65.3891},
 {9., 65.3876}, {8., 65.3852}, {7., 65.3819}, {6., 65.3774}, {5., 65.3718},
 {4., 65.3646}, {3., 65.3559}, {2., 65.3452}, {1., 65.3323}, {0., 65.3169}}
```

```
PeakSlow30 = PeakRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time30Slow], {r2 → EffVal1}, {r4 → factor}]]
```

```
{{100., 10.1212}, {99., 10.1212}, {98., 10.1213}, {97., 10.1213}, {96., 10.1213},
 {95., 10.1214}, {94., 10.1214}, {93., 10.1215}, {92., 10.1215}, {91., 10.1216},
 {90., 10.1217}, {89., 10.1218}, {88., 10.1218}, {87., 10.1219}, {86., 10.122},
 {85., 10.1221}, {84., 10.1222}, {83., 10.1223}, {82., 10.1224}, {81., 10.1225},
 {80., 10.1227}, {79., 10.1228}, {78., 10.123}, {77., 10.1232}, {76., 10.1234},
 {75., 10.1236}, {74., 10.1239}, {73., 10.1241}, {72., 10.1244},
 {71., 10.1248}, {70., 10.1251}, {69., 10.1255}, {68., 10.126}, {67., 10.1265},
 {66., 10.127}, {65., 10.1277}, {64., 10.1284}, {63., 10.1291}, {62., 10.13},
 {61., 10.131}, {60., 10.1322}, {59., 10.1334}, {58., 10.1348}, {57., 10.1364},
 {56., 10.1382}, {55., 10.1402}, {54., 10.1425}, {53., 10.145}, {52., 10.1479},
 {51., 10.1511}, {50., 10.1548}, {49., 10.1589}, {48., 10.1635}, {47., 10.1687},
 {46., 10.1746}, {45., 10.1811}, {44., 10.1885}, {43., 10.1968},
 {42., 10.2061}, {41., 10.2165}, {40., 10.2281}, {39., 10.2412},
 {38., 10.2557}, {37., 10.2719}, {36., 10.29}, {35., 10.31}, {34., 10.3323},
 {33., 10.357}, {32., 10.3843}, {31., 10.4145}, {30., 10.4476}, {29., 10.484},
 {28., 10.5239}, {27., 10.5674}, {26., 10.6148}, {25., 10.666}, {24., 10.7214},
 {23., 10.7808}, {22., 10.8442}, {21., 10.9115}, {20., 10.9825},
 {19., 11.0566}, {18., 11.1333}, {17., 11.2118}, {16., 11.291}, {15., 11.3695},
 {14., 11.4455}, {13., 11.517}, {12., 11.5813}, {11., 11.6353}, {10., 11.6755},
 {9., 11.6976}, {8., 11.6969}, {7., 11.668}, {6., 11.6048}, {5., 11.501},
 {4., 11.3494}, {3., 11.1428}, {2., 10.8737}, {1., 10.5347}, {0., 10.1186}}
```

Handwashing efficacy 60%

```
PeakFast60 = PeakRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time60Fast], {r2 → EffVal2}, {r4 → factor}]]
```

```
{{100., 99.9588}, {99., 99.9588}, {98., 99.9588}, {97., 99.9588}, {96., 99.9588},
 {95., 99.9588}, {94., 99.9588}, {93., 99.9588}, {92., 99.9588}, {91., 99.9588},
 {90., 99.9588}, {89., 99.9588}, {88., 99.9588}, {87., 99.9588}, {86., 99.9588},
 {85., 99.9588}, {84., 99.9588}, {83., 99.9588}, {82., 99.9588}, {81., 99.9588},
 {80., 99.9588}, {79., 99.9588}, {78., 99.9588}, {77., 99.9588}, {76., 99.9588},
 {75., 99.9588}, {74., 99.9588}, {73., 99.9588}, {72., 99.9588}, {71., 99.9588},
 {70., 99.9588}, {69., 99.9588}, {68., 99.9588}, {67., 99.9588}, {66., 99.9588},
 {65., 99.9588}, {64., 99.9588}, {63., 99.9588}, {62., 99.9588}, {61., 99.9588},
 {60., 99.9588}, {59., 99.9588}, {58., 99.9589}, {57., 99.9589}, {56., 99.9589},
 {55., 99.9589}, {54., 99.9589}, {53., 99.9589}, {52., 99.9589}, {51., 99.9589},
 {50., 99.9589}, {49., 99.9589}, {48., 99.9589}, {47., 99.9589}, {46., 99.9589},
 {45., 99.9589}, {44., 99.9589}, {43., 99.9589}, {42., 99.9589},
 {41., 99.9589}, {40., 99.9589}, {39., 99.9589}, {38., 99.9589},
 {37., 99.9589}, {36., 99.9589}, {35., 99.9589}, {34., 99.9589},
 {33., 99.9589}, {32., 99.9589}, {31., 99.9589}, {30., 99.9589},
 {29., 99.9589}, {28., 99.9589}, {27., 99.9589}, {26., 99.959}, {25., 99.959},
 {24., 99.959}, {23., 99.959}, {22., 99.959}, {21., 99.959}, {20., 99.959},
 {19., 99.959}, {18., 99.959}, {17., 99.959}, {16., 99.959}, {15., 99.959},
 {14., 99.959}, {13., 99.959}, {12., 99.959}, {11., 99.959}, {10., 99.959},
 {9., 99.959}, {8., 99.959}, {7., 99.959}, {6., 99.959}, {5., 99.959},
 {4., 99.9589}, {3., 99.9589}, {2., 99.9589}, {1., 99.9589}, {0., 99.9588}}
```

```
PeakSlow60 = PeakRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time60Slow], {r2 → EffVal2}, {r4 → factor}]]
```

```
{{100., 18.4778}, {99., 18.4779}, {98., 18.4779}, {97., 18.478}, {96., 18.478},
 {95., 18.4781}, {94., 18.4781}, {93., 18.4782}, {92., 18.4782}, {91., 18.4783},
 {90., 18.4783}, {89., 18.4784}, {88., 18.4785}, {87., 18.4785}, {86., 18.4786},
 {85., 18.4787}, {84., 18.4788}, {83., 18.4789}, {82., 18.479}, {81., 18.4791},
 {80., 18.4793}, {79., 18.4794}, {78., 18.4796}, {77., 18.4797}, {76., 18.4799},
 {75., 18.4801}, {74., 18.4803}, {73., 18.4806}, {72., 18.4809}, {71., 18.4812},
 {70., 18.4815}, {69., 18.4819}, {68., 18.4823}, {67., 18.4828}, {66., 18.4833},
 {65., 18.4839}, {64., 18.4845}, {63., 18.4853}, {62., 18.4861}, {61., 18.487},
 {60., 18.4881}, {59., 18.4893}, {58., 18.4906}, {57., 18.4921}, {56., 18.4939},
 {55., 18.4958}, {54., 18.498}, {53., 18.5004}, {52., 18.5032}, {51., 18.5064},
 {50., 18.5099}, {49., 18.5139}, {48., 18.5185}, {47., 18.5236},
 {46., 18.5294}, {45., 18.5359}, {44., 18.5433}, {43., 18.5516}, {42., 18.561},
 {41., 18.5715}, {40., 18.5833}, {39., 18.5966}, {38., 18.6115},
 {37., 18.6283}, {36., 18.647}, {35., 18.6679}, {34., 18.6912}, {33., 18.7172},
 {32., 18.746}, {31., 18.778}, {30., 18.8134}, {29., 18.8524}, {28., 18.8953},
 {27., 18.9424}, {26., 18.9938}, {25., 19.0498}, {24., 19.1104},
 {23., 19.1757}, {22., 19.2457}, {21., 19.3202}, {20., 19.399}, {19., 19.4816},
 {18., 19.5674}, {17., 19.6553}, {16., 19.7442}, {15., 19.8324}, {14., 19.918},
 {13., 19.9986}, {12., 20.0711}, {11., 20.1322}, {10., 20.1777},
 {9., 20.2028}, {8., 20.2024}, {7., 20.1703}, {6., 20.1003}, {5., 19.9852},
 {4., 19.8178}, {3., 19.5904}, {2., 19.2957}, {1., 18.9262}, {0., 18.4755}}
```

Handwashing efficacy 90%

```
PeakFast45 = PeakRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time90Fast], {r2 → EffVal3}, {r4 → factor}]]
```

```
{{100., 90.5128}, {99., 90.5128}, {98., 90.5128}, {97., 90.5128}, {96., 90.5129},
 {95., 90.5129}, {94., 90.5129}, {93., 90.5129}, {92., 90.513}, {91., 90.513},
 {90., 90.513}, {89., 90.513}, {88., 90.5131}, {87., 90.5131}, {86., 90.5131},
 {85., 90.5132}, {84., 90.5132}, {83., 90.5133}, {82., 90.5133}, {81., 90.5134},
 {80., 90.5134}, {79., 90.5135}, {78., 90.5135}, {77., 90.5136}, {76., 90.5137},
 {75., 90.5138}, {74., 90.5139}, {73., 90.514}, {72., 90.5141}, {71., 90.5142},
 {70., 90.5143}, {69., 90.5145}, {68., 90.5146}, {67., 90.5148}, {66., 90.515},
 {65., 90.5152}, {64., 90.5154}, {63., 90.5156}, {62., 90.5158}, {61., 90.5161},
 {60., 90.5163}, {59., 90.5166}, {58., 90.5169}, {57., 90.5172}, {56., 90.5176},
 {55., 90.5179}, {54., 90.5183}, {53., 90.5187}, {52., 90.519}, {51., 90.5195},
 {50., 90.5199}, {49., 90.5203}, {48., 90.5208}, {47., 90.5212},
 {46., 90.5217}, {45., 90.5222}, {44., 90.5227}, {43., 90.5233},
 {42., 90.5238}, {41., 90.5244}, {40., 90.5249}, {39., 90.5255},
 {38., 90.5261}, {37., 90.5268}, {36., 90.5274}, {35., 90.528}, {34., 90.5287},
 {33., 90.5294}, {32., 90.53}, {31., 90.5307}, {30., 90.5314}, {29., 90.5321},
 {28., 90.5328}, {27., 90.5335}, {26., 90.5341}, {25., 90.5348},
 {24., 90.5354}, {23., 90.536}, {22., 90.5366}, {21., 90.5372}, {20., 90.5377},
 {19., 90.5381}, {18., 90.5385}, {17., 90.5388}, {16., 90.539}, {15., 90.5391},
 {14., 90.539}, {13., 90.5389}, {12., 90.5385}, {11., 90.538}, {10., 90.5373},
 {9., 90.5363}, {8., 90.5351}, {7., 90.5336}, {6., 90.5318}, {5., 90.5296},
 {4., 90.527}, {3., 90.524}, {2., 90.5205}, {1., 90.5164}, {0., 90.5117}}
```

```
PeakSlow45 = PeakRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time90Slow], {r2 → EffVal3}, {r4 → factor}]]
```

```
{{100., 14.209}, {99., 14.209}, {98., 14.2091}, {97., 14.2091}, {96., 14.2092},
 {95., 14.2092}, {94., 14.2093}, {93., 14.2093}, {92., 14.2094}, {91., 14.2095},
 {90., 14.2095}, {89., 14.2096}, {88., 14.2097}, {87., 14.2097}, {86., 14.2098},
 {85., 14.2099}, {84., 14.21}, {83., 14.2101}, {82., 14.2102}, {81., 14.2104},
 {80., 14.2105}, {79., 14.2106}, {78., 14.2108}, {77., 14.211}, {76., 14.2112},
 {75., 14.2114}, {74., 14.2116}, {73., 14.2119}, {72., 14.2121}, {71., 14.2125},
 {70., 14.2128}, {69., 14.2132}, {68., 14.2136}, {67., 14.2141}, {66., 14.2147},
 {65., 14.2153}, {64., 14.216}, {63., 14.2167}, {62., 14.2176}, {61., 14.2186},
 {60., 14.2197}, {59., 14.2209}, {58., 14.2223}, {57., 14.2238}, {56., 14.2256},
 {55., 14.2275}, {54., 14.2298}, {53., 14.2323}, {52., 14.2351}, {51., 14.2383},
 {50., 14.2419}, {49., 14.246}, {48., 14.2506}, {47., 14.2557}, {46., 14.2616},
 {45., 14.2681}, {44., 14.2755}, {43., 14.2838}, {42., 14.2932}, {41., 14.3036},
 {40., 14.3154}, {39., 14.3285}, {38., 14.3433}, {37., 14.3597}, {36., 14.3781},
 {35., 14.3986}, {34., 14.4214}, {33., 14.4467}, {32., 14.4748},
 {31., 14.5058}, {30., 14.54}, {29., 14.5777}, {28., 14.6191}, {27., 14.6643},
 {26., 14.7136}, {25., 14.7672}, {24., 14.8251}, {23., 14.8873},
 {22., 14.9539}, {21., 15.0248}, {20., 15.0995}, {19., 15.1778},
 {18., 15.2589}, {17., 15.342}, {16., 15.4259}, {15., 15.5092}, {14., 15.5899},
 {13., 15.6659}, {12., 15.7342}, {11., 15.7918}, {10., 15.8347},
 {9., 15.8584}, {8., 15.858}, {7., 15.8277}, {6., 15.7613}, {5., 15.6521},
 {4., 15.4928}, {3., 15.2761}, {2., 14.9943}, {1., 14.6401}, {0., 14.2065}}
```

Attack rate

Handwashing efficacy 30%

```
AttackRateFast30 = AttackRateRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time30Fast], {r2 → EffVal1}, {r4 → factor}]]
```

```
{{100., 11.5674}, {99., 11.5674}, {98., 11.5674}, {97., 11.5674}, {96., 11.5674},
 {95., 11.5674}, {94., 11.5674}, {93., 11.5674}, {92., 11.5674}, {91., 11.5674},
 {90., 11.5674}, {89., 11.5674}, {88., 11.5674}, {87., 11.5674}, {86., 11.5674},
 {85., 11.5674}, {84., 11.5674}, {83., 11.5674}, {82., 11.5674}, {81., 11.5674},
 {80., 11.5673}, {79., 11.5673}, {78., 11.5673}, {77., 11.5673}, {76., 11.5673},
 {75., 11.5673}, {74., 11.5673}, {73., 11.5673}, {72., 11.5673}, {71., 11.5673},
 {70., 11.5673}, {69., 11.5672}, {68., 11.5672}, {67., 11.5672},
 {66., 11.5672}, {65., 11.5672}, {64., 11.5672}, {63., 11.5671},
 {62., 11.5671}, {61., 11.5671}, {60., 11.5671}, {59., 11.567}, {58., 11.567},
 {57., 11.567}, {56., 11.5669}, {55., 11.5669}, {54., 11.5668}, {53., 11.5668},
 {52., 11.5667}, {51., 11.5667}, {50., 11.5666}, {49., 11.5666}, {48., 11.5665},
 {47., 11.5665}, {46., 11.5664}, {45., 11.5663}, {44., 11.5663}, {43., 11.5662},
 {42., 11.5661}, {41., 11.566}, {40., 11.5659}, {39., 11.5659}, {38., 11.5658},
 {37., 11.5657}, {36., 11.5656}, {35., 11.5655}, {34., 11.5654}, {33., 11.5652},
 {32., 11.5651}, {31., 11.565}, {30., 11.5649}, {29., 11.5648}, {28., 11.5646},
 {27., 11.5645}, {26., 11.5644}, {25., 11.5643}, {24., 11.5641}, {23., 11.564},
 {22., 11.5639}, {21., 11.5637}, {20., 11.5636}, {19., 11.5635},
 {18., 11.5634}, {17., 11.5633}, {16., 11.5632}, {15., 11.5631},
 {14., 11.563}, {13., 11.563}, {12., 11.563}, {11., 11.563}, {10., 11.5631},
 {9., 11.5632}, {8., 11.5633}, {7., 11.5635}, {6., 11.5638}, {5., 11.5641},
 {4., 11.5646}, {3., 11.5651}, {2., 11.5658}, {1., 11.5666}, {0., 11.5675}}
```

```
AttackRateSlow30 = AttackRateRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time30Slow], {r2 → EffVal1}, {r4 → factor}]]
```

```
{{100., 15.2353}, {99., 15.2353}, {98., 15.2353}, {97., 15.2353}, {96., 15.2353},
 {95., 15.2353}, {94., 15.2353}, {93., 15.2353}, {92., 15.2353}, {91., 15.2353},
 {90., 15.2353}, {89., 15.2353}, {88., 15.2353}, {87., 15.2353}, {86., 15.2353},
 {85., 15.2353}, {84., 15.2353}, {83., 15.2353}, {82., 15.2353}, {81., 15.2353},
 {80., 15.2353}, {79., 15.2353}, {78., 15.2353}, {77., 15.2353}, {76., 15.2353},
 {75., 15.2353}, {74., 15.2353}, {73., 15.2353}, {72., 15.2353}, {71., 15.2353},
 {70., 15.2353}, {69., 15.2353}, {68., 15.2353}, {67., 15.2352}, {66., 15.2352},
 {65., 15.2352}, {64., 15.2352}, {63., 15.2352}, {62., 15.2352}, {61., 15.2352},
 {60., 15.2351}, {59., 15.2351}, {58., 15.2351}, {57., 15.235}, {56., 15.235},
 {55., 15.235}, {54., 15.2349}, {53., 15.2349}, {52., 15.2348}, {51., 15.2347},
 {50., 15.2347}, {49., 15.2346}, {48., 15.2345}, {47., 15.2344}, {46., 15.2343},
 {45., 15.2341}, {44., 15.234}, {43., 15.2338}, {42., 15.2336}, {41., 15.2334},
 {40., 15.2332}, {39., 15.2329}, {38., 15.2326}, {37., 15.2323},
 {36., 15.2319}, {35., 15.2315}, {34., 15.231}, {33., 15.2305}, {32., 15.2299},
 {31., 15.2292}, {30., 15.2285}, {29., 15.2278}, {28., 15.2269},
 {27., 15.2259}, {26., 15.2249}, {25., 15.2238}, {24., 15.2226},
 {23., 15.2212}, {22., 15.2198}, {21., 15.2183}, {20., 15.2167}, {19., 15.215},
 {18., 15.2132}, {17., 15.2114}, {16., 15.2095}, {15., 15.2077},
 {14., 15.2058}, {13., 15.204}, {12., 15.2024}, {11., 15.201}, {10., 15.1999},
 {9., 15.1992}, {8., 15.1989}, {7., 15.1994}, {6., 15.2006}, {5., 15.2028},
 {4., 15.2062}, {3., 15.2109}, {2., 15.2172}, {1., 15.2253}, {0., 15.2354}}
```

Handwashing efficacy 60%

```
AttackRateFast60 = AttackRateRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time60Fast], {r2 → EffVal2}, {r4 → factor}]]
```

```
{{100., 0.0962569}, {99., 0.0969509}, {98., 0.0976054}, {97., 0.0982251},
 {96., 0.0988138}, {95., 0.0993747}, {94., 0.0999109}, {93., 0.100424},
 {92., 0.100918}, {91., 0.101392}, {90., 0.101849}, {89., 0.102289},
 {88., 0.102714}, {87., 0.103125}, {86., 0.103522}, {85., 0.103907},
 {84., 0.104278}, {83., 0.104638}, {82., 0.104985}, {81., 0.105321},
 {80., 0.105646}, {79., 0.105959}, {78., 0.106261}, {77., 0.106552},
 {76., 0.106832}, {75., 0.1071}, {74., 0.107357}, {73., 0.107603}, {72., 0.107837},
 {71., 0.108059}, {70., 0.10827}, {69., 0.108469}, {68., 0.108656},
 {67., 0.108831}, {66., 0.108994}, {65., 0.109146}, {64., 0.109286},
 {63., 0.109415}, {62., 0.109534}, {61., 0.109642}, {60., 0.10974}, {59., 0.10983},
 {58., 0.109911}, {57., 0.109985}, {56., 0.110052}, {55., 0.110114},
 {54., 0.110172}, {53., 0.110225}, {52., 0.110277}, {51., 0.110326},
 {50., 0.110375}, {49., 0.110425}, {48., 0.110476}, {47., 0.110529},
 {46., 0.110585}, {45., 0.110644}, {44., 0.110708}, {43., 0.110777},
 {42., 0.110852}, {41., 0.110933}, {40., 0.111021}, {39., 0.111116},
 {38., 0.111219}, {37., 0.11133}, {36., 0.11145}, {35., 0.111579}, {34., 0.111717},
 {33., 0.111866}, {32., 0.112025}, {31., 0.112195}, {30., 0.112376},
 {29., 0.11257}, {28., 0.112776}, {27., 0.112996}, {26., 0.113229},
 {25., 0.113477}, {24., 0.11374}, {23., 0.114019}, {22., 0.114315},
 {21., 0.114629}, {20., 0.114962}, {19., 0.115314}, {18., 0.115688},
 {17., 0.116083}, {16., 0.116502}, {15., 0.116945}, {14., 0.117414},
 {13., 0.117911}, {12., 0.118437}, {11., 0.118993}, {10., 0.119583},
 {9., 0.120207}, {8., 0.120867}, {7., 0.121567}, {6., 0.122307}, {5., 0.123092},
 {4., 0.123922}, {3., 0.124802}, {2., 0.125735}, {1., 0.126722}, {0., 0.127769}}
```

```
AttackRateSlow60 = AttackRateRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time60Slow], {r₂ → EffVal2}, {r₄ → factor}]]
```

```
{{100., 14.1326}, {99., 14.1326}, {98., 14.1326}, {97., 14.1326}, {96., 14.1326},
 {95., 14.1326}, {94., 14.1326}, {93., 14.1326}, {92., 14.1326}, {91., 14.1326},
 {90., 14.1326}, {89., 14.1326}, {88., 14.1326}, {87., 14.1326}, {86., 14.1326},
 {85., 14.1326}, {84., 14.1326}, {83., 14.1326}, {82., 14.1326}, {81., 14.1326},
 {80., 14.1326}, {79., 14.1326}, {78., 14.1326}, {77., 14.1326}, {76., 14.1326},
 {75., 14.1326}, {74., 14.1326}, {73., 14.1326}, {72., 14.1326}, {71., 14.1326},
 {70., 14.1326}, {69., 14.1326}, {68., 14.1326}, {67., 14.1325}, {66., 14.1325},
 {65., 14.1325}, {64., 14.1325}, {63., 14.1325}, {62., 14.1325}, {61., 14.1325},
 {60., 14.1325}, {59., 14.1324}, {58., 14.1324}, {57., 14.1324}, {56., 14.1324},
 {55., 14.1323}, {54., 14.1323}, {53., 14.1322}, {52., 14.1322}, {51., 14.1321},
 {50., 14.1321}, {49., 14.132}, {48., 14.1319}, {47., 14.1318}, {46., 14.1317},
 {45., 14.1316}, {44., 14.1314}, {43., 14.1313}, {42., 14.1311},
 {41., 14.1309}, {40., 14.1306}, {39., 14.1303}, {38., 14.13}, {37., 14.1297},
 {36., 14.1293}, {35., 14.1288}, {34., 14.1283}, {33., 14.1277},
 {32., 14.1271}, {31., 14.1264}, {30., 14.1256}, {29., 14.1247},
 {28., 14.1237}, {27., 14.1226}, {26., 14.1213}, {25., 14.12}, {24., 14.1185},
 {23., 14.1169}, {22., 14.1151}, {21., 14.1132}, {20., 14.1112},
 {19., 14.109}, {18., 14.1068}, {17., 14.1044}, {16., 14.102}, {15., 14.0995},
 {14., 14.0971}, {13., 14.0947}, {12., 14.0925}, {11., 14.0906}, {10., 14.089},
 {9., 14.0879}, {8., 14.0875}, {7., 14.0879}, {6., 14.0893}, {5., 14.0919},
 {4., 14.0961}, {3., 14.1019}, {2., 14.1098}, {1., 14.12}, {0., 14.1327}}
```

Handwashing efficacy 90%

```
AttackRateFast45 = AttackRateRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time90Fast], {r₂ → EffVal3}, {r₄ → factor}]]
```

```
{{100., 6.65956}, {99., 6.66015}, {98., 6.66066}, {97., 6.66111}, {96., 6.66152},
 {95., 6.66188}, {94., 6.66221}, {93., 6.6625}, {92., 6.66277}, {91., 6.66302},
 {90., 6.66325}, {89., 6.66346}, {88., 6.66365}, {87., 6.66383}, {86., 6.664},
 {85., 6.66416}, {84., 6.66431}, {83., 6.66444}, {82., 6.66457}, {81., 6.66469},
 {80., 6.66481}, {79., 6.66491}, {78., 6.66501}, {77., 6.6651}, {76., 6.66519},
 {75., 6.66527}, {74., 6.66534}, {73., 6.66541}, {72., 6.66547}, {71., 6.66553},
 {70., 6.66558}, {69., 6.66562}, {68., 6.66566}, {67., 6.6657}, {66., 6.66573},
 {65., 6.66575}, {64., 6.66577}, {63., 6.66578}, {62., 6.66579}, {61., 6.66579},
 {60., 6.66579}, {59., 6.66578}, {58., 6.66577}, {57., 6.66575}, {56., 6.66573},
 {55., 6.66571}, {54., 6.66569}, {53., 6.66565}, {52., 6.66562}, {51., 6.66559},
 {50., 6.66555}, {49., 6.66551}, {48., 6.66547}, {47., 6.66542}, {46., 6.66538},
 {45., 6.66533}, {44., 6.66528}, {43., 6.66523}, {42., 6.66518}, {41., 6.66513},
 {40., 6.66508}, {39., 6.66502}, {38., 6.66497}, {37., 6.66492},
 {36., 6.66486}, {35., 6.66481}, {34., 6.66476}, {33., 6.66471},
 {32., 6.66466}, {31., 6.66461}, {30., 6.66456}, {29., 6.66451},
 {28., 6.66447}, {27., 6.66442}, {26., 6.66439}, {25., 6.66435},
 {24., 6.66433}, {23., 6.6643}, {22., 6.66429}, {21., 6.66428}, {20., 6.66428},
 {19., 6.6643}, {18., 6.66432}, {17., 6.66436}, {16., 6.66442}, {15., 6.66449},
 {14., 6.66458}, {13., 6.6647}, {12., 6.66484}, {11., 6.66502}, {10., 6.66522},
 {9., 6.66546}, {8., 6.66575}, {7., 6.66608}, {6., 6.66646}, {5., 6.66689},
 {4., 6.66739}, {3., 6.66796}, {2., 6.6686}, {1., 6.66933}, {0., 6.67016}}
```

```
AttackRateSlow45 = AttackRateRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time90Slow], {r₂ → EffVal3}, {r₄ → factor}]]
```

```
{{100., 14.7292}, {99., 14.7292}, {98., 14.7292}, {97., 14.7292}, {96., 14.7292},
 {95., 14.7292}, {94., 14.7292}, {93., 14.7292}, {92., 14.7292}, {91., 14.7292},
 {90., 14.7292}, {89., 14.7292}, {88., 14.7292}, {87., 14.7292}, {86., 14.7292},
 {85., 14.7292}, {84., 14.7292}, {83., 14.7292}, {82., 14.7292}, {81., 14.7292},
 {80., 14.7292}, {79., 14.7292}, {78., 14.7292}, {77., 14.7292}, {76., 14.7292},
 {75., 14.7292}, {74., 14.7292}, {73., 14.7292}, {72., 14.7292}, {71., 14.7292},
 {70., 14.7292}, {69., 14.7292}, {68., 14.7291}, {67., 14.7291},
 {66., 14.7291}, {65., 14.7291}, {64., 14.7291}, {63., 14.7291},
 {62., 14.7291}, {61., 14.7291}, {60., 14.729}, {59., 14.729}, {58., 14.729},
 {57., 14.729}, {56., 14.7289}, {55., 14.7289}, {54., 14.7288}, {53., 14.7288},
 {52., 14.7287}, {51., 14.7287}, {50., 14.7286}, {49., 14.7285}, {48., 14.7284},
 {47., 14.7283}, {46., 14.7282}, {45., 14.7281}, {44., 14.7279}, {43., 14.7277},
 {42., 14.7275}, {41., 14.7273}, {40., 14.7271}, {39., 14.7268}, {38., 14.7265},
 {37., 14.7261}, {36., 14.7257}, {35., 14.7253}, {34., 14.7248}, {33., 14.7243},
 {32., 14.7236}, {31., 14.7229}, {30., 14.7222}, {29., 14.7213}, {28., 14.7204},
 {27., 14.7193}, {26., 14.7182}, {25., 14.7169}, {24., 14.7156},
 {23., 14.7141}, {22., 14.7125}, {21., 14.7108}, {20., 14.709}, {19., 14.707},
 {18., 14.705}, {17., 14.7029}, {16., 14.7008}, {15., 14.6986}, {14., 14.6964},
 {13., 14.6944}, {12., 14.6925}, {11., 14.6908}, {10., 14.6894},
 {9., 14.6885}, {8., 14.6882}, {7., 14.6886}, {6., 14.69}, {5., 14.6924},
 {4., 14.6962}, {3., 14.7015}, {2., 14.7086}, {1., 14.7178}, {0., 14.7293}}
```

Peak timing

Handwashing efficacy 30%

```
PeakTimingFast30 = PeakTimingRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time30Fast], {r2 → EffVal1}, {r4 → factor}]]
```

```
{{100., 442.247}, {99., 437.575}, {98., 433.163}, {97., 428.992}, {96., 425.041},
 {95., 421.251}, {94., 417.641}, {93., 414.192}, {92., 410.863}, {91., 407.655},
 {90., 404.566}, {89., 401.578}, {88., 398.67}, {87., 395.883}, {86., 393.156},
 {85., 390.508}, {84., 387.962}, {83., 385.455}, {82., 383.028}, {81., 380.682},
 {80., 378.396}, {79., 376.15}, {78., 373.984}, {77., 371.878}, {76., 369.833},
 {75., 367.828}, {74., 365.902}, {73., 364.017}, {72., 362.192}, {71., 360.428},
 {70., 358.703}, {69., 357.039}, {68., 355.434}, {67., 353.87}, {66., 352.346},
 {65., 350.882}, {64., 349.478}, {63., 348.095}, {62., 346.751}, {61., 345.468},
 {60., 344.204}, {59., 342.961}, {58., 341.758}, {57., 340.574}, {56., 339.391},
 {55., 338.228}, {54., 337.065}, {53., 335.902}, {52., 334.739}, {51., 333.556},
 {50., 332.372}, {49., 331.149}, {48., 329.906}, {47., 328.642}, {46., 327.339},
 {45., 325.995}, {44., 324.612}, {43., 323.188}, {42., 321.724}, {41., 320.22},
 {40., 318.656}, {39., 317.071}, {38., 315.427}, {37., 313.742}, {36., 312.018},
 {35., 310.253}, {34., 308.468}, {33., 306.623}, {32., 304.758},
 {31., 302.853}, {30., 300.928}, {29., 298.963}, {28., 296.977},
 {27., 294.972}, {26., 292.947}, {25., 290.901}, {24., 288.836}, {23., 286.75},
 {22., 284.664}, {21., 282.559}, {20., 280.433}, {19., 278.307},
 {18., 276.182}, {17., 274.036}, {16., 271.89}, {15., 269.744}, {14., 267.578},
 {13., 265.413}, {12., 263.267}, {11., 261.101}, {10., 258.935},
 {9., 256.769}, {8., 254.604}, {7., 252.438}, {6., 250.272}, {5., 248.106},
 {4., 245.94}, {3., 243.775}, {2., 241.609}, {1., 239.463}, {0., 237.297}}
```

```
PeakTimingSlow30 = PeakTimingRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time30Slow], {r2 → EffVal1}, {r4 → factor}]]
```

```
{{100., 357.6}, {99., 352.547}, {98., 347.814}, {97., 343.322}, {96., 339.07},
 {95., 335.02}, {94., 331.149}, {93., 327.439}, {92., 323.87}, {91., 320.42},
 {90., 317.091}, {89., 313.883}, {88., 310.734}, {87., 307.706}, {86., 304.738},
 {85., 301.85}, {84., 299.043}, {83., 296.275}, {82., 293.588}, {81., 290.961},
 {80., 288.374}, {79., 285.847}, {78., 283.361}, {77., 280.914}, {76., 278.528},
 {75., 276.161}, {74., 273.855}, {73., 271.569}, {72., 269.323}, {71., 267.097},
 {70., 264.931}, {69., 262.786}, {68., 260.66}, {67., 258.554}, {66., 256.509},
 {65., 254.463}, {64., 252.438}, {63., 250.452}, {62., 248.487}, {61., 246.542},
 {60., 244.637}, {59., 242.732}, {58., 240.847}, {57., 238.982}, {56., 237.157},
 {55., 235.332}, {54., 233.527}, {53., 231.742}, {52., 229.977}, {51., 228.213},
 {50., 226.488}, {49., 224.763}, {48., 223.059}, {47., 221.374}, {46., 219.69},
 {45., 218.025}, {44., 216.381}, {43., 214.757}, {42., 213.132}, {41., 211.528},
 {40., 209.944}, {39., 208.359}, {38., 206.795}, {37., 205.231}, {36., 203.707},
 {35., 202.163}, {34., 200.639}, {33., 199.135}, {32., 197.651},
 {31., 196.167}, {30., 194.683}, {29., 193.219}, {28., 191.755},
 {27., 190.311}, {26., 188.887}, {25., 187.463}, {24., 186.04}, {23., 184.636},
 {22., 183.232}, {21., 181.848}, {20., 180.465}, {19., 179.101},
 {18., 177.737}, {17., 176.374}, {16., 175.01}, {15., 173.666}, {14., 172.323},
 {13., 170.979}, {12., 169.656}, {11., 168.312}, {10., 166.988},
 {9., 165.665}, {8., 164.341}, {7., 163.018}, {6., 161.694}, {5., 160.371},
 {4., 159.047}, {3., 157.723}, {2., 156.4}, {1., 155.096}, {0., 153.773}}
```

Handwashing efficacy 60%

```
PeakTimingFast60 = PeakTimingRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time60Fast], {r2 → EffVal2}, {r4 → factor}]]
```

```
{{100., 651.048}, {99., 646.636}, {98., 642.465}, {97., 638.494}, {96., 634.764},
 {95., 631.195}, {94., 627.786}, {93., 624.517}, {92., 621.408}, {91., 618.4},
 {90., 615.533}, {89., 612.765}, {88., 610.098}, {87., 607.531}, {86., 605.065},
 {85., 602.698}, {84., 600.412}, {83., 598.226}, {82., 596.121}, {81., 594.115},
 {80., 592.19}, {79., 590.345}, {78., 588.6}, {77., 586.956}, {76., 585.412},
 {75., 583.948}, {74., 582.584}, {73., 581.341}, {72., 580.198}, {71., 579.155},
 {70., 578.233}, {69., 577.43}, {68., 576.728}, {67., 576.147}, {66., 575.666},
 {65., 575.305}, {64., 575.044}, {63., 574.904}, {62., 574.863}, {61., 574.924},
 {60., 575.044}, {59., 575.265}, {58., 575.565}, {57., 575.906}, {56., 576.327},
 {55., 576.769}, {54., 577.25}, {53., 577.771}, {52., 578.293}, {51., 578.814},
 {50., 579.335}, {49., 579.857}, {48., 580.358}, {47., 580.84}, {46., 581.301},
 {45., 581.722}, {44., 582.103}, {43., 582.444}, {42., 582.745}, {41., 583.005},
 {40., 583.206}, {39., 583.366}, {38., 583.467}, {37., 583.527}, {36., 583.507},
 {35., 583.447}, {34., 583.326}, {33., 583.126}, {32., 582.885},
 {31., 582.544}, {30., 582.143}, {29., 581.682}, {28., 581.12}, {27., 580.479},
 {26., 579.757}, {25., 578.934}, {24., 577.992}, {23., 576.949},
 {22., 575.786}, {21., 574.502}, {20., 573.059}, {19., 571.474}, {18., 569.71},
 {17., 567.764}, {16., 565.599}, {15., 563.212}, {14., 560.565},
 {13., 557.617}, {12., 554.328}, {11., 550.679}, {10., 546.588},
 {9., 541.975}, {8., 536.781}, {7., 530.865}, {6., 524.087}, {5., 516.266},
 {4., 507.122}, {3., 496.272}, {2., 483.157}, {1., 466.874}, {0., 445.817}}
```

```
PeakTimingSlow60 = PeakTimingRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time60Slow], {r₂ → EffVal2}, {r₄ → factor}]]
```

```
{{100., 357.019}, {99., 351.965}, {98., 347.212}, {97., 342.74}, {96., 338.489},
 {95., 334.438}, {94., 330.568}, {93., 326.858}, {92., 323.288}, {91., 319.839},
 {90., 316.51}, {89., 313.281}, {88., 310.153}, {87., 307.125}, {86., 304.157},
 {85., 301.269}, {84., 298.461}, {83., 295.694}, {82., 293.007}, {81., 290.38},
 {80., 287.793}, {79., 285.266}, {78., 282.779}, {77., 280.333}, {76., 277.946},
 {75., 275.58}, {74., 273.274}, {73., 270.988}, {72., 268.742}, {71., 266.516},
 {70., 264.35}, {69., 262.184}, {68., 260.078}, {67., 257.973}, {66., 255.907},
 {65., 253.882}, {64., 251.856}, {63., 249.871}, {62., 247.906}, {61., 245.96},
 {60., 244.035}, {59., 242.15}, {58., 240.265}, {57., 238.4}, {56., 236.575},
 {55., 234.75}, {54., 232.945}, {53., 231.161}, {52., 229.396}, {51., 227.631},
 {50., 225.907}, {49., 224.182}, {48., 222.477}, {47., 220.793}, {46., 219.108},
 {45., 217.464}, {44., 215.819}, {43., 214.175}, {42., 212.571}, {41., 210.966},
 {40., 209.362}, {39., 207.798}, {38., 206.234}, {37., 204.67}, {36., 203.125},
 {35., 201.601}, {34., 200.097}, {33., 198.573}, {32., 197.089}, {31., 195.605},
 {30., 194.141}, {29., 192.677}, {28., 191.213}, {27., 189.77}, {26., 188.346},
 {25., 186.922}, {24., 185.518}, {23., 184.114}, {22., 182.711},
 {21., 181.327}, {20., 179.963}, {19., 178.579}, {18., 177.216},
 {17., 175.872}, {16., 174.509}, {15., 173.165}, {14., 171.821},
 {13., 170.478}, {12., 169.154}, {11., 167.811}, {10., 166.487},
 {9., 165.143}, {8., 163.82}, {7., 162.496}, {6., 161.153}, {5., 159.829},
 {4., 158.486}, {3., 157.162}, {2., 155.838}, {1., 154.515}, {0., 153.191}}
```

Handwashing efficacy 90%

```
PeakTimingFast45 = PeakTimingRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    Time90Fast], {r₂ → EffVal3}, {r₄ → factor}]]
```

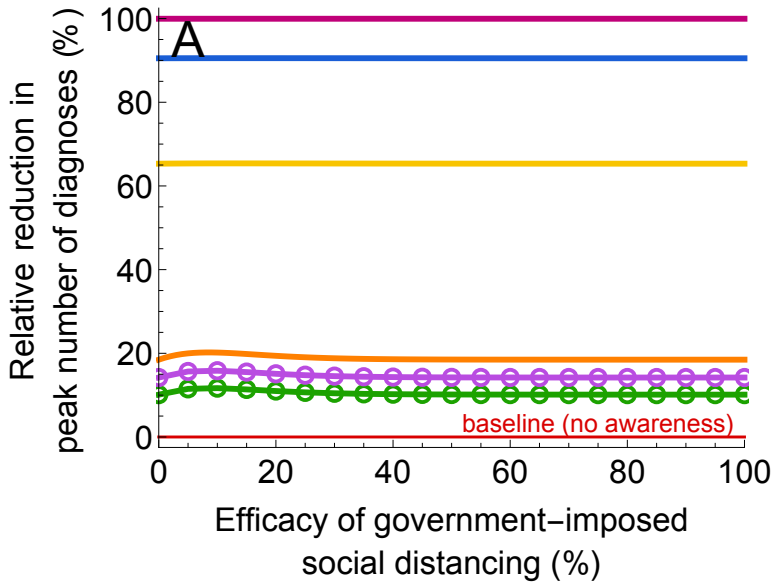
```
{{100., 581.16}, {99., 576.608}, {98., 572.337}, {97., 568.266}, {96., 564.415},
 {95., 560.746}, {94., 557.216}, {93., 553.847}, {92., 550.618}, {91., 547.51},
 {90., 544.502}, {89., 541.614}, {88., 538.807}, {87., 536.099}, {86., 533.472},
 {85., 530.925}, {84., 528.459}, {83., 526.072}, {82., 523.746}, {81., 521.5},
 {80., 519.334}, {79., 517.209}, {78., 515.163}, {77., 513.198}, {76., 511.273},
 {75., 509.428}, {74., 507.643}, {73., 505.918}, {72., 504.254}, {71., 502.65},
 {70., 501.125}, {69., 499.662}, {68., 498.258}, {67., 496.914}, {66., 495.631},
 {65., 494.428}, {64., 493.264}, {63., 492.161}, {62., 491.119}, {61., 490.116},
 {60., 489.193}, {59., 488.291}, {58., 487.429}, {57., 486.627}, {56., 485.844},
 {55., 485.082}, {54., 484.36}, {53., 483.639}, {52., 482.937}, {51., 482.235},
 {50., 481.553}, {49., 480.851}, {48., 480.129}, {47., 479.387}, {46., 478.645},
 {45., 477.863}, {44., 477.041}, {43., 476.199}, {42., 475.296},
 {41., 474.354}, {40., 473.371}, {39., 472.328}, {38., 471.225},
 {37., 470.062}, {36., 468.839}, {35., 467.555}, {34., 466.192},
 {33., 464.768}, {32., 463.264}, {31., 461.68}, {30., 460.015}, {29., 458.29},
 {28., 456.466}, {27., 454.56}, {26., 452.575}, {25., 450.51}, {24., 448.364},
 {23., 446.138}, {22., 443.812}, {21., 441.425}, {20., 438.939},
 {19., 436.372}, {18., 433.745}, {17., 431.037}, {16., 428.25}, {15., 425.402},
 {14., 422.474}, {13., 419.486}, {12., 416.418}, {11., 413.31}, {10., 410.141},
 {9., 406.913}, {8., 403.624}, {7., 400.295}, {6., 396.906}, {5., 393.476},
 {4., 390.007}, {3., 386.498}, {2., 382.948}, {1., 379.359}, {0., 375.729}}
```

```
PeakTimingSlow45 = PeakTimingRange["GovernmentAndHand",
  Join[Parameters[RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline, DeltaSlow,
    DiagnosisRateAwareBaseline, Time90Slow], {r2 → EffVal3}, {r4 → factor}]]
```

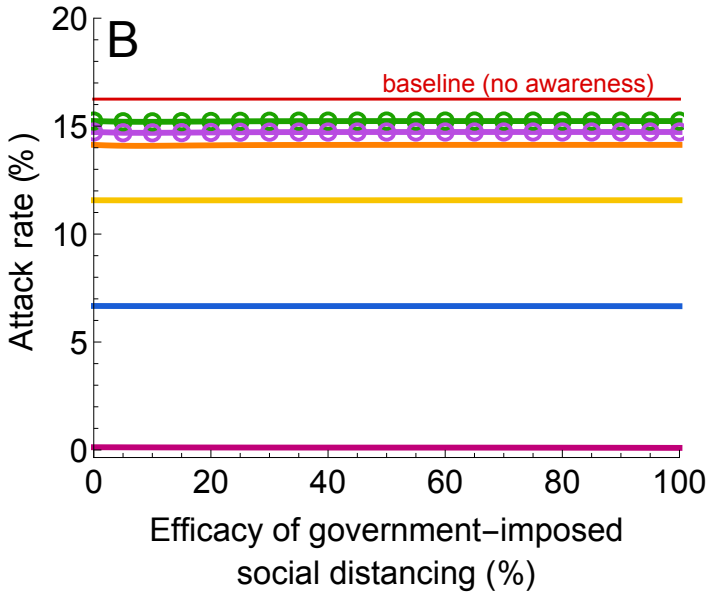
```
{{100., 357.38}, {99., 352.326}, {98., 347.573}, {97., 343.101}, {96., 338.85},
 {95., 334.799}, {94., 330.929}, {93., 327.219}, {92., 323.649}, {91., 320.2},
 {90., 316.871}, {89., 313.662}, {88., 310.514}, {87., 307.486}, {86., 304.518},
 {85., 301.63}, {84., 298.822}, {83., 296.055}, {82., 293.368}, {81., 290.741},
 {80., 288.154}, {79., 285.627}, {78., 283.14}, {77., 280.694}, {76., 278.307},
 {75., 275.941}, {74., 273.635}, {73., 271.349}, {72., 269.103}, {71., 266.877},
 {70., 264.711}, {69., 262.565}, {68., 260.439}, {67., 258.334}, {66., 256.288},
 {65., 254.243}, {64., 252.217}, {63., 250.232}, {62., 248.267}, {61., 246.321},
 {60., 244.416}, {59., 242.511}, {58., 240.626}, {57., 238.761}, {56., 236.936},
 {55., 235.111}, {54., 233.306}, {53., 231.522}, {52., 229.757}, {51., 227.992},
 {50., 226.268}, {49., 224.543}, {48., 222.838}, {47., 221.154},
 {46., 219.469}, {45., 217.825}, {44., 216.18}, {43., 214.536}, {42., 212.932},
 {41., 211.327}, {40., 209.723}, {39., 208.139}, {38., 206.575}, {37., 205.03},
 {36., 203.486}, {35., 201.962}, {34., 200.438}, {33., 198.934}, {32., 197.43},
 {31., 195.946}, {30., 194.482}, {29., 193.018}, {28., 191.554}, {27., 190.11},
 {26., 188.687}, {25., 187.263}, {24., 185.859}, {23., 184.455},
 {22., 183.051}, {21., 181.668}, {20., 180.284}, {19., 178.92}, {18., 177.557},
 {17., 176.193}, {16., 174.829}, {15., 173.486}, {14., 172.142},
 {13., 170.799}, {12., 169.475}, {11., 168.131}, {10., 166.808},
 {9., 165.484}, {8., 164.161}, {7., 162.817}, {6., 161.494}, {5., 160.17},
 {4., 158.846}, {3., 157.523}, {2., 156.199}, {1., 154.876}, {0., 153.552}}
```

Plotting Figure 6 A, B and C (main text) (combination of government-imposed social distancing and handwashing)

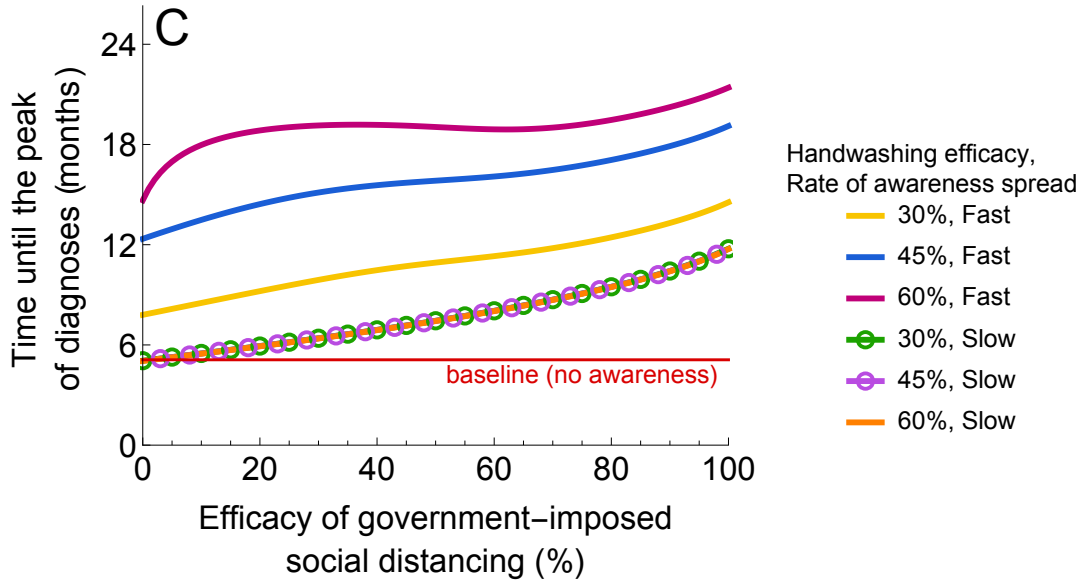
```
imagePadding = {{80, 15}, {73, 7.5}};
fig6A = Show[ListLinePlot[{PeakFast30, PeakFast45,
     PeakFast60, PeakSlow30[[ ;; ;; 5]], PeakSlow45[[ ;; ;; 5]], PeakSlow60},
    AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-2.5, 102.5}},
    AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
    FrameStyle → Directive[Black, 17], PlotRangePadding → None,
    PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
      {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
      {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
      {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]},
      {Thickness[0.01], RGBColor[185 / 255, 76 / 255, 225 / 255]},
      {Thickness[0.01], Orange}}, PlotMarkers → {"", "", "",
      Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
      Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
       ImageSize → 10], ""}, ImagePadding → imagePadding,
    FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
      {"Efficacy of government-imposed\nsocial distancing (%)", None}}],
  Graphics[Text[StyleForm["A", FontSize → 26], {100 * 0.05, 100 * 0.95}]],
  Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
     FontColor → RGBColor[217 / 255, 0, 0]], {75, 3.5}]], Graphics[
   {RGBColor[217 / 255, 0, 0], Thickness[0.005], Line[{{0, 0}, {100, 0}}]}]]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//Figure6A", ".pdf"], fig6A];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//Figure6A", ".eps"], fig6A];
```



```
fig6B = Show[ListLinePlot[{AttackRateFast30, AttackRateFast45, AttackRateFast60,
    AttackRateSlow30[[ ;; ;; 5]], AttackRateSlow45[[ ;; ;; 5]], AttackRateSlow60},
   AspectRatio → 0.75, ImageSize → 400, PlotRange → {{0, 100}, {-0.35, 20}},
   AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
   FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
     Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
     Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
      ImageSize → 10], ""},
   PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
     {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
     {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
     {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]},
     {Thickness[0.01], RGBColor[185 / 255, 76 / 255, 225 / 255]},
     {Thickness[0.01], Orange}}, FrameLabel → {{"Attack rate (%)", None},
     {"Efficacy of government-imposed\nsocial distancing (%)", None}},
   PlotRangePadding → None(*,PlotLabel→
    Style[Row[{"Slow spread of awareness"}],17,Black]*),
   ImagePadding → imagePadding],
  Graphics[{RGBColor[217 / 255, 0, 0], Thickness[0.005],
    Line[{{0, AttackRateBaseline}, {100, AttackRateBaseline}}]}],
  Graphics[Text[StyleForm["B", FontSize → 26], {100 * 0.05, 20 * 0.95}]],
  Graphics[Text[StyleForm["baseline (no awareness)", FontSize → 13,
     FontColor → RGBColor[217 / 255, 0, 0]], {72.5, 17}]]]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//Figure6B", ".pdf"], fig6B];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//Figure6B", ".eps"], fig6B];
```



```
fig6C = Show[ListLinePlot[{PeakTimingFast30, PeakTimingFast45, PeakTimingFast60,
    PeakTimingSlow30[[ ;;  ;; 5]], PeakTimingSlow45[[3 ;;  ;; 5]], PeakTimingSlow60},
   AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 800}},
   AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
   FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
     Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
     Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
      ImageSize → 10], ""},
   PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
     {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
     {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]},
     {Thickness[0.01], RGBColor[28 / 255, 162 / 255, 0]}, {Thickness[0.01],
      RGBColor[185 / 255, 76 / 255, 225 / 255]}, {Thickness[0.01], Orange}},
   FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
     {"Efficacy of government-imposed\nsocial distancing (%)", None}},
   ImagePadding → imagePadding, PlotRangePadding → None,
   (*PlotLabel→Style[Row[{"Slow spread of awareness"}],17,Black],*)
   PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
      {label, {"30%, Fast", "45%, Fast", "60%, Fast", "30%, Slow",
        "45%, Slow", "60%, Slow"}}], LegendLabel → Style[
      "Handwashing efficacy,\nRate of awareness spread", Black, 13, "Text"]],
   FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
       {365 × 3 / 2, "18"}}, None}, {Automatic, None}}],
  Graphics[{RGBColor[217 / 255, 0, 0], Thickness[0.005],
    Line[{{0, PeakTimingBaseline}, {100, PeakTimingBaseline}}]}],
  Graphics[Text[StyleForm["C", FontSize → 26], {100 * 0.05, 800 * 0.95}]],
  Graphics[Text[StyleForm["baseline (no awareness)",
     FontSize → 13, FontColor → RGBColor[217 / 255, 0, 0]], {75, 130}]]]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//Figure6C", ".pdf"], fig6C];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//Figure6C", ".eps"], fig6C];
```



Sensitivity analyses of the baseline transmission model

Parameter ranges in the sensitivity analyses

Relative infectivity of mildly infected

In[201]:=
```
RelativeInfectivityBaseline = 0.5
RelativeInfectivityMin = 0.25
RelativeInfectivityMax = 0.75
```

Out[201]= 0.5

Out[202]= 0.25

Out[203]= 0.75

Proportion of mildly infected

In[338]:=
```
ProportionMildSymptomsBaseline = 0.82
ProportionMildSymptomsMin = 0.86
ProportionMildSymptomsMax = 0.9
```

Out[338]= 0.82

Out[339]= 0.86

Out[340]= 0.9

1/recovery period of mildly infected, 1/year

In[207]:=
```
RecoveryRateMildSymptomsBaseline = 365 / 7
RecoveryRateMildSymptomsMin = 365 / 9
RecoveryRateMildSymptomsMax = 365 / 5
```

Out[207]= $\frac{365}{7}$

Out[208]= $\frac{365}{9}$

Out[209]= 73

1/delay from onset of infectiousness to diagnosis for individuals with severe symptoms, 1/year

In[210]:=
```
DiagnosisRateBaseline = 365 / 5
DiagnosisRateMin = 365 / 7
DiagnosisRateMax = 365 / 3
```

Out[210]= 73

Out[211]= $\frac{365}{7}$

Out[212]= $\frac{365}{3}$

Basic reproduction number

In[652]:=
```
BasicReproductionNumberBaseline = 2.5
BasicReproductionNumberMin = 2
BasicReproductionNumberMax = 3
```

Out[652]= 2.5

Out[653]= 2

Out[654]= 3

Reduction factor (number of points in calculations)

In[216]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.01}];
```

Parameters for sensitivity analyses

In[341]:=
```
ParametersSensitivityAnalyses[RelativeInfectivity_,
  ProportionMildSymptoms_, RecoveryRateMildSymptoms_, DiagnosisRate_,
  BasicReproductionNumber_, RelativeSusceptibilityAwareness_,
  RateAwarenessFadingSusceptibleExposedMildSymptoms_,
  RateAwarenessFadingSevereSymptoms_, TransmissionRateAwareness_,
  DiagnosisRateAware_, StartTimeValue_] :=
 {AverageContactRate, σ → RelativeInfectivity, RateInfectiousnessOnset,
  p → ProportionMildSymptoms, γ1 → RecoveryRateMildSymptoms, ν → DiagnosisRate,
  RecoveryRateSevereSymptomsUnaware, RecoveryRateSevereSymptomsAware,
  FatalityRateUnaware, FatalityRateAware, DeathRateDiagnosedUnaware,
  DeathRateDiagnosedAware, R0 → BasicReproductionNumber,
  Solve[R0 == p β σ / γ1 + (1 - p) β / ν /. β → c ϵ, ϵ][[1, 1]] /. {p → ProportionMildSymptoms,
    AverageContactRate, σ → RelativeInfectivity, γ1 → RecoveryRateMildSymptoms,
    ν → DiagnosisRate, R0 → BasicReproductionNumber},
  β → c ϵ /. {AverageContactRate, Solve[R0 == p β σ / γ1 + (1 - p) β / ν /. β → c ϵ, ϵ][[1, 1]] /.
     {p → ProportionMildSymptoms, AverageContactRate, σ → RelativeInfectivity,
      γ1 → RecoveryRateMildSymptoms, ν → DiagnosisRate,
      R0 → BasicReproductionNumber}}, k → RelativeSusceptibilityAwareness,
  μ1 → RateAwarenessFadingSusceptibleExposedMildSymptoms,
  μ2 → RateAwarenessFadingSevereSymptoms, δ → TransmissionRateAwareness,
  ν^a → DiagnosisRateAware, StartTime → StartTimeValue}

ReductionFactor = Table[i, {i, 0, 1, 0.01}];
```

```
PeakMaskBaseline = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMin =
 PeakRange["Mask", Join[ParametersSensitivityAnalyses[RelativeInfectivityMin,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMax =
 PeakRange["Mask", Join[ParametersSensitivityAnalyses[RelativeInfectivityMax,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskBaseline =
 AttackRateRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMin = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityMin,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMax = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityMax,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskBaseline =
 PeakTimingRange["Mask", Join[ParametersSensitivityAnalyses[
```

```
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMin = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityMin,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMax = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityMax,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]
```

Out[218]=
```
{{100., 99.9897}, {99., 99.9895}, {98., 99.9894}, {97., 99.9892}, {96., 99.9891},
 {95., 99.9889}, {94., 99.9887}, {93., 99.9886}, {92., 99.9884}, {91., 99.9882},
 {90., 99.988}, {89., 99.9878}, {88., 99.9876}, {87., 99.9874}, {86., 99.9872},
 {85., 99.987}, {84., 99.9867}, {83., 99.9865}, {82., 99.9862}, {81., 99.986},
 {80., 99.9857}, {79., 99.9854}, {78., 99.9851}, {77., 99.9847}, {76., 99.9844},
 {75., 99.984}, {74., 99.9837}, {73., 99.9832}, {72., 99.9828}, {71., 99.9823},
 {70., 99.9818}, {69., 99.9812}, {68., 99.9806}, {67., 99.9799}, {66., 99.9792},
 {65., 99.9783}, {64., 99.9772}, {63., 99.9758}, {62., 99.9733}, {61., 99.9687},
 {60., 99.9621}, {59., 99.9522}, {58., 99.9356}, {57., 99.9046}, {56., 99.8396},
 {55., 99.6973}, {54., 99.4204}, {53., 98.9754}, {52., 98.3611}, {51., 97.5905},
 {50., 96.6796}, {49., 95.6439}, {48., 94.4978}, {47., 93.2544}, {46., 91.9255},
 {45., 90.5218}, {44., 89.053}, {43., 87.5278}, {42., 85.9542}, {41., 84.3393},
 {40., 82.6896}, {39., 81.011}, {38., 79.3088}, {37., 77.5876}, {36., 75.8518},
 {35., 74.1053}, {34., 72.3514}, {33., 70.5933}, {32., 68.8339}, {31., 67.0755},
 {30., 65.3205}, {29., 63.5709}, {28., 61.8284}, {27., 60.0946},
 {26., 58.3709}, {25., 56.6586}, {24., 54.9588}, {23., 53.2724},
 {22., 51.6003}, {21., 49.9432}, {20., 48.3019}, {19., 46.6767},
 {18., 45.0683}, {17., 43.4769}, {16., 41.903}, {15., 40.3467}, {14., 38.8084},
 {13., 37.2881}, {12., 35.7861}, {11., 34.3024}, {10., 32.8369},
 {9., 31.3899}, {8., 29.9612}, {7., 28.5509}, {6., 27.1588}, {5., 25.7848},
 {4., 24.4289}, {3., 23.091}, {2., 21.771}, {1., 20.4686}, {0., 19.1837}}
```

Out[219]= {{100., 99.9898}, {99., 99.9897}, {98., 99.9895}, {97., 99.9894}, {96., 99.9892},
{95., 99.9891}, {94., 99.9889}, {93., 99.9888}, {92., 99.9886}, {91., 99.9885},
{90., 99.9883}, {89., 99.9881}, {88., 99.9879}, {87., 99.9877}, {86., 99.9875},
{85., 99.9873}, {84., 99.9871}, {83., 99.9869}, {82., 99.9867}, {81., 99.9864},
{80., 99.9862}, {79., 99.9859}, {78., 99.9857}, {77., 99.9854}, {76., 99.9851},
{75., 99.9848}, {74., 99.9845}, {73., 99.9841}, {72., 99.9838}, {71., 99.9834},
{70., 99.983}, {69., 99.9825}, {68., 99.9821}, {67., 99.9816}, {66., 99.981},
{65., 99.9805}, {64., 99.9798}, {63., 99.9791}, {62., 99.9783}, {61., 99.9773},
{60., 99.9761}, {59., 99.9746}, {58., 99.9713}, {57., 99.9656}, {56., 99.957},
{55., 99.9429}, {54., 99.9167}, {53., 99.8616}, {52., 99.7392}, {51., 99.4951},
{50., 99.0951}, {49., 98.5363}, {48., 97.8296}, {47., 96.9892}, {46., 96.0289},
{45., 94.9618}, {44., 93.7995}, {43., 92.5529}, {42., 91.232}, {41., 89.8455},
{40., 88.4017}, {39., 86.908}, {38., 85.3713}, {37., 83.7975}, {36., 82.1925},
{35., 80.5611}, {34., 78.9081}, {33., 77.2375}, {32., 75.5533}, {31., 73.8588},
{30., 72.1571}, {29., 70.4511}, {28., 68.7433}, {27., 67.0359}, {26., 65.3309},
{25., 63.6304}, {24., 61.9358}, {23., 60.2488}, {22., 58.5705},
{21., 56.9023}, {20., 55.2451}, {19., 53.5999}, {18., 51.9676},
{17., 50.3487}, {16., 48.7441}, {15., 47.1542}, {14., 45.5795},
{13., 44.0204}, {12., 42.4773}, {11., 40.9505}, {10., 39.4403},
{9., 37.9467}, {8., 36.47}, {7., 35.0103}, {6., 33.5677}, {5., 32.1423},
{4., 30.734}, {3., 29.3428}, {2., 27.9688}, {1., 26.6119}, {0., 25.272}}

Out[220]= {{100., 99.9896}, {99., 99.9894}, {98., 99.9893}, {97., 99.9891}, {96., 99.989},
{95., 99.9888}, {94., 99.9886}, {93., 99.9884}, {92., 99.9883}, {91., 99.9881},
{90., 99.9879}, {89., 99.9877}, {88., 99.9875}, {87., 99.9872}, {86., 99.987},
{85., 99.9868}, {84., 99.9865}, {83., 99.9863}, {82., 99.986}, {81., 99.9857},
{80., 99.9854}, {79., 99.9851}, {78., 99.9848}, {77., 99.9844}, {76., 99.984},
{75., 99.9836}, {74., 99.9832}, {73., 99.9828}, {72., 99.9823}, {71., 99.9817},
{70., 99.9811}, {69., 99.9805}, {68., 99.9798}, {67., 99.9789}, {66., 99.978},
{65., 99.9768}, {64., 99.975}, {63., 99.9714}, {62., 99.9661}, {61., 99.9585},
{60., 99.9467}, {59., 99.9266}, {58., 99.8878}, {57., 99.8049}, {56., 99.6268},
{55., 99.2974}, {54., 98.7918}, {53., 98.1145}, {52., 97.2808}, {51., 96.3074},
{50., 95.2107}, {49., 94.0051}, {48., 92.7041}, {47., 91.3197},
{46., 89.8627}, {45., 88.3429}, {44., 86.7692}, {43., 85.1494},
{42., 83.4909}, {41., 81.8001}, {40., 80.0827}, {39., 78.344}, {38., 76.5887},
{37., 74.821}, {36., 73.0447}, {35., 71.2633}, {34., 69.4797}, {33., 67.6966},
{32., 65.9165}, {31., 64.1416}, {30., 62.3737}, {29., 60.6146}, {28., 58.8657},
{27., 57.1285}, {26., 55.4041}, {25., 53.6934}, {24., 51.9975}, {23., 50.3171},
{22., 48.6529}, {21., 47.0054}, {20., 45.3752}, {19., 43.7626},
{18., 42.168}, {17., 40.5918}, {16., 39.034}, {15., 37.4949}, {14., 35.9746},
{13., 34.4732}, {12., 32.9907}, {11., 31.5272}, {10., 30.0826},
{9., 28.6569}, {8., 27.2499}, {7., 25.8617}, {6., 24.4922}, {5., 23.1411},
{4., 21.8083}, {3., 20.4937}, {2., 19.1971}, {1., 17.9184}, {0., 16.6574}}

Out[221]= {{100., 0.0139929}, {99., 0.0143083}, {98., 0.0146382}, {97., 0.0149835},
{96., 0.0153453}, {95., 0.0157249}, {94., 0.0161236}, {93., 0.0165428},
{92., 0.0169843}, {91., 0.0174499}, {90., 0.0179415}, {89., 0.0184615},
{88., 0.0190124}, {87., 0.0195969}, {86., 0.0202184}, {85., 0.0208804},
{84., 0.0215871}, {83., 0.0223432}, {82., 0.0231541}, {81., 0.024026},
{80., 0.024966}, {79., 0.0259827}, {78., 0.0270857}, {77., 0.0282867},
{76., 0.0295994}, {75., 0.0310405}, {74., 0.0326297}, {73., 0.0343915},
{72., 0.0363557}, {71., 0.0385599}, {70., 0.0410512}, {69., 0.0438904},
{68., 0.0471564}, {67., 0.0509542}, {66., 0.0554265}, {65., 0.0607718},
{64., 0.0672748}, {63., 0.0753581}, {62., 0.0856753}, {61., 0.09929},
{60., 0.118038}, {59., 0.145326}, {58., 0.18798}, {57., 0.260716},
{56., 0.396241}, {55., 0.661302}, {54., 1.14896}, {53., 1.87324},
{52., 2.67945}, {51., 3.4173}, {50., 4.06489}, {49., 4.65068}, {48., 5.19629},
{47., 5.71174}, {46., 6.20132}, {45., 6.66722}, {44., 7.11091}, {43., 7.53366},
{42., 7.93661}, {41., 8.32086}, {40., 8.68743}, {39., 9.03728},
{38., 9.37132}, {37., 9.6904}, {36., 9.99534}, {35., 10.2869}, {34., 10.5658},
{33., 10.8326}, {32., 11.0881}, {31., 11.3328}, {30., 11.5672},
{29., 11.7919}, {28., 12.0072}, {27., 12.2137}, {26., 12.4119}, {25., 12.602},
{24., 12.7845}, {23., 12.9598}, {22., 13.1282}, {21., 13.29}, {20., 13.4455},
{19., 13.595}, {18., 13.7388}, {17., 13.8772}, {16., 14.0103}, {15., 14.1385},
{14., 14.2619}, {13., 14.3808}, {12., 14.4953}, {11., 14.6056}, {10., 14.7119},
{9., 14.8145}, {8., 14.9133}, {7., 15.0087}, {6., 15.1007}, {5., 15.1895},
{4., 15.2752}, {3., 15.3579}, {2., 15.4378}, {1., 15.5149}, {0., 15.5895}}

Out[222]= {{100., 0.0132139}, {99., 0.0134855}, {98., 0.0137685}, {97., 0.0140635},
{96., 0.0143714}, {95., 0.014693}, {94., 0.0150294}, {93., 0.0153815},
{92., 0.0157506}, {91., 0.0161377}, {90., 0.0165444}, {89., 0.0169721},
{88., 0.0174226}, {87., 0.0178978}, {86., 0.0183996}, {85., 0.0189306},
{84., 0.0194933}, {83., 0.0200906}, {82., 0.020726}, {81., 0.0214032},
{80., 0.0221266}, {79., 0.022901}, {78., 0.0237323}, {77., 0.0246269},
{76., 0.0255925}, {75., 0.0266381}, {74., 0.0277742}, {73., 0.0290133},
{72., 0.0303704}, {71., 0.0318633}, {70., 0.0335141}, {69., 0.0353496},
{68., 0.0374034}, {67., 0.0397176}, {66., 0.0423464}, {65., 0.0453599},
{64., 0.048851}, {63., 0.0529456}, {62., 0.0578184}, {61., 0.0637188},
{60., 0.0710156}, {59., 0.0802776}, {58., 0.0924261}, {57., 0.109047},
{56., 0.133074}, {55., 0.170388}, {54., 0.233706}, {53., 0.351548},
{52., 0.583531}, {51., 1.0188}, {50., 1.68685}, {49., 2.45444}, {48., 3.16757},
{47., 3.79393}, {46., 4.35933}, {45., 4.88592}, {44., 5.38425}, {43., 5.85875},
{42., 6.31151}, {41., 6.74387}, {40., 7.15692}, {39., 7.55166}, {38., 7.92904},
{37., 8.28996}, {36., 8.63528}, {35., 8.96578}, {34., 9.28224}, {33., 9.58536},
{32., 9.87583}, {31., 10.1543}, {30., 10.4213}, {29., 10.6775}, {28., 10.9234},
{27., 11.1595}, {26., 11.3863}, {25., 11.6041}, {24., 11.8134}, {23., 12.0146},
{22., 12.2081}, {21., 12.3942}, {20., 12.5732}, {19., 12.7455},
{18., 12.9114}, {17., 13.0711}, {16., 13.225}, {15., 13.3732}, {14., 13.5161},
{13., 13.6538}, {12., 13.7866}, {11., 13.9146}, {10., 14.0382},
{9., 14.1574}, {8., 14.2725}, {7., 14.3836}, {6., 14.4909}, {5., 14.5945},
{4., 14.6946}, {3., 14.7913}, {2., 14.8848}, {1., 14.9752}, {0., 15.0626}}

Out[223]= {{100., 0.0143486}, {99., 0.0146855}, {98., 0.0150384}, {97., 0.0154085},
{96., 0.015797}, {95., 0.0162054}, {94., 0.0166352}, {93., 0.0170882},
{92., 0.0175662}, {91., 0.0180715}, {90., 0.0186064}, {89., 0.0191736},
{88., 0.0197762}, {87., 0.0204174}, {86., 0.0211013}, {85., 0.0218322},
{84., 0.0226151}, {83., 0.0234558}, {82., 0.024361}, {81., 0.0253383},
{80., 0.0263969}, {79., 0.0275473}, {78., 0.0288021}, {77., 0.0301762},
{76., 0.0316875}, {75., 0.0333577}, {74., 0.0352136}, {73., 0.0372879},
{72., 0.039622}, {71., 0.042268}, {70., 0.0452934}, {69., 0.0487865},
{68., 0.0528652}, {67., 0.0576907}, {66., 0.0634892}, {65., 0.0705877},
{64., 0.0794763}, {63., 0.0909225}, {62., 0.106192}, {61., 0.127504},
{60., 0.159054}, {59., 0.209398}, {58., 0.29719}, {57., 0.463522},
{56., 0.787243}, {55., 1.35705}, {54., 2.14014}, {53., 2.95416},
{52., 3.68059}, {51., 4.32101}, {50., 4.90517}, {49., 5.45142}, {48., 5.96788},
{47., 6.45815}, {46., 6.92424}, {45., 7.36764}, {44., 7.78964}, {43., 8.19147},
{42., 8.57424}, {41., 8.93902}, {40., 9.28683}, {39., 9.6186}, {38., 9.93523},
{37., 10.2375}, {36., 10.5263}, {35., 10.8023}, {34., 11.0662}, {33., 11.3186},
{32., 11.5601}, {31., 11.7913}, {30., 12.0126}, {29., 12.2247}, {28., 12.4278},
{27., 12.6226}, {26., 12.8093}, {25., 12.9885}, {24., 13.1604}, {23., 13.3254},
{22., 13.4838}, {21., 13.636}, {20., 13.7822}, {19., 13.9227}, {18., 14.0578},
{17., 14.1877}, {16., 14.3127}, {15., 14.4329}, {14., 14.5487},
{13., 14.6601}, {12., 14.7674}, {11., 14.8707}, {10., 14.9703},
{9., 15.0663}, {8., 15.1588}, {7., 15.2479}, {6., 15.3339}, {5., 15.4169},
{4., 15.4969}, {3., 15.5742}, {2., 15.6487}, {1., 15.7207}, {0., 15.7902}}

Out[224]= {{100., 71.893}, {99., 72.0936}, {98., 72.3142}, {97., 72.5348}, {96., 72.7553},
{95., 72.996}, {94., 73.2366}, {93., 73.4773}, {92., 73.738}, {91., 73.9987},
{90., 74.2794}, {89., 74.5802}, {88., 74.8811}, {87., 75.1819}, {86., 75.5228},
{85., 75.8637}, {84., 76.2247}, {83., 76.6057}, {82., 77.0068}, {81., 77.4479},
{80., 77.8891}, {79., 78.3905}, {78., 78.8918}, {77., 79.4533}, {76., 80.075},
{75., 80.7167}, {74., 81.4587}, {73., 82.2609}, {72., 83.1432}, {71., 84.166},
{70., 85.3291}, {69., 86.7128}, {68., 88.3572}, {67., 90.4027}, {66., 93.0699},
{65., 96.7798}, {64., 102.676}, {63., 115.129}, {62., 266.155}, {61., 367.647},
{60., 439.801}, {59., 513.178}, {58., 593.814}, {57., 679.344}, {56., 751.137},
{55., 773.376}, {54., 737.46}, {53., 675.855}, {52., 614.289}, {51., 560.866},
{50., 516.166}, {49., 478.886}, {48., 447.542}, {47., 420.93}, {46., 398.089},
{45., 378.276}, {44., 360.909}, {43., 345.588}, {42., 331.931}, {41., 319.698},
{40., 308.669}, {39., 298.682}, {38., 289.557}, {37., 281.215}, {36., 273.554},
{35., 266.475}, {34., 259.938}, {33., 253.842}, {32., 248.166},
{31., 242.872}, {30., 237.919}, {29., 233.266}, {28., 228.875},
{27., 224.743}, {26., 220.853}, {25., 217.163}, {24., 213.654},
{23., 210.325}, {22., 207.176}, {21., 204.168}, {20., 201.3}, {19., 198.573},
{18., 195.946}, {17., 193.439}, {16., 191.053}, {15., 188.747},
{14., 186.541}, {13., 184.415}, {12., 182.37}, {11., 180.404}, {10., 178.519},
{9., 176.694}, {8., 174.93}, {7., 173.245}, {6., 171.601}, {5., 170.016},
{4., 168.472}, {3., 166.988}, {2., 165.544}, {1., 164.141}, {0., 162.797}}

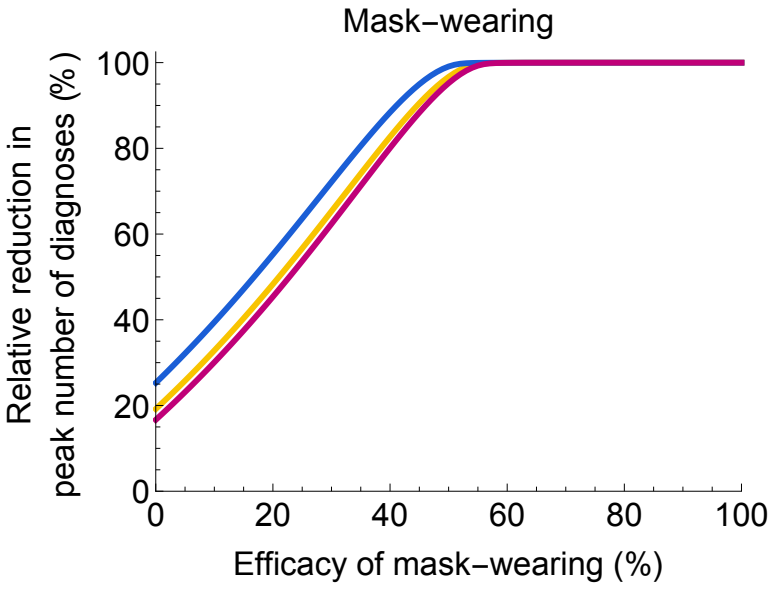
Out[225]= {{100., 65.556}, {99., 65.7365}, {98., 65.917}, {97., 66.1175}, {96., 66.3181},
{95., 66.5186}, {94., 66.7392}, {93., 66.9598}, {92., 67.1804}, {91., 67.421},
{90., 67.6617}, {89., 67.9023}, {88., 68.163}, {87., 68.4237}, {86., 68.7045},
{85., 69.0053}, {84., 69.3061}, {83., 69.6269}, {82., 69.9478}, {81., 70.2887},
{80., 70.6497}, {79., 71.0508}, {78., 71.4518}, {77., 71.873}, {76., 72.3342},
{75., 72.8155}, {74., 73.357}, {73., 73.9185}, {72., 74.5201}, {71., 75.2019},
{70., 75.9239}, {69., 76.7461}, {68., 77.6485}, {67., 78.6913}, {66., 79.8945},
{65., 81.2983}, {64., 83.0029}, {63., 85.1286}, {62., 87.9361}, {61., 91.9469},
{60., 98.5245}, {59., 114.608}, {58., 304.437}, {57., 401.197}, {56., 482.997},
{55., 569.69}, {54., 662.579}, {53., 744.699}, {52., 777.227}, {51., 745.562},
{50., 683.355}, {49., 619.904}, {48., 564.636}, {47., 518.432},
{46., 479.969}, {45., 447.722}, {44., 420.369}, {43., 396.926},
{42., 376.611}, {41., 358.843}, {40., 343.161}, {39., 329.224}, {38., 316.75},
{37., 305.5}, {36., 295.293}, {35., 286.028}, {34., 277.525}, {33., 269.724},
{32., 262.525}, {31., 255.867}, {30., 249.69}, {29., 243.935}, {28., 238.54},
{27., 233.507}, {26., 228.794}, {25., 224.342}, {24., 220.151},
{23., 216.2}, {22., 212.45}, {21., 208.921}, {20., 205.552}, {19., 202.343},
{18., 199.295}, {17., 196.407}, {16., 193.64}, {15., 190.993}, {14., 188.446},
{13., 186.019}, {12., 183.693}, {11., 181.467}, {10., 179.321},
{9., 177.256}, {8., 175.271}, {7., 173.365}, {6., 171.521}, {5., 169.756},
{4., 168.031}, {3., 166.367}, {2., 164.762}, {1., 163.218}, {0., 161.714}}

Out[226]= {{100., 75.8236}, {99., 76.0442}, {98., 76.2648}, {97., 76.4854},
{96., 76.726}, {95., 76.9867}, {94., 77.2274}, {93., 77.4881}, {92., 77.7688},
{91., 78.0496}, {90., 78.3504}, {89., 78.6712}, {88., 78.9921}, {87., 79.333},
{86., 79.6739}, {85., 80.0549}, {84., 80.456}, {83., 80.8771}, {82., 81.3183},
{81., 81.7796}, {80., 82.301}, {79., 82.8424}, {78., 83.424}, {77., 84.0657},
{76., 84.7475}, {75., 85.5296}, {74., 86.3719}, {73., 87.3545}, {72., 88.4374},
{71., 89.7209}, {70., 91.245}, {69., 93.0899}, {68., 95.4563}, {67., 98.6449},
{66., 103.358}, {65., 111.78}, {64., 142.262}, {63., 327.259}, {62., 400.896},
{61., 468.478}, {60., 540.872}, {59., 620.867}, {58., 702.747}, {57., 762.628},
{56., 767.42}, {55., 721.658}, {54., 659.15}, {53., 599.971}, {52., 549.335},
{51., 507.041}, {50., 471.706}, {49., 441.947}, {48., 416.578}, {47., 394.72},
{46., 375.729}, {45., 359.044}, {44., 344.264}, {43., 331.109}, {42., 319.277},
{41., 308.609}, {40., 298.903}, {39., 290.059}, {38., 281.957},
{37., 274.477}, {36., 267.598}, {35., 261.201}, {34., 255.265},
{33., 249.731}, {32., 244.557}, {31., 239.704}, {30., 235.151}, {29., 230.86},
{28., 226.809}, {27., 222.979}, {26., 219.369}, {25., 215.94}, {24., 212.671},
{23., 209.563}, {22., 206.615}, {21., 203.787}, {20., 201.1}, {19., 198.533},
{18., 196.066}, {17., 193.7}, {16., 191.434}, {15., 189.268}, {14., 187.183},
{13., 185.157}, {12., 183.232}, {11., 181.367}, {10., 179.562},
{9., 177.817}, {8., 176.153}, {7., 174.529}, {6., 172.964}, {5., 171.44},
{4., 169.976}, {3., 168.553}, {2., 167.169}, {1., 165.845}, {0., 164.542}}

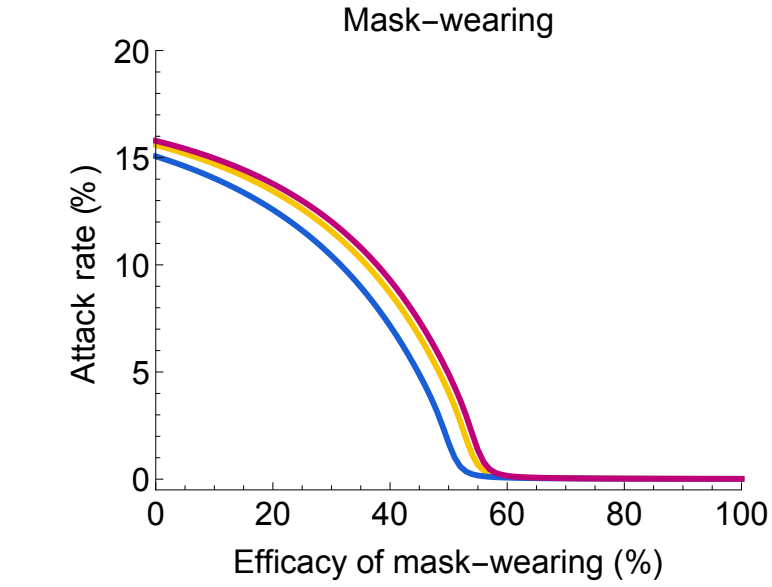
In[246]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS1 = ListLinePlot[{PeakMaskBaseline, PeakMaskMin, PeakMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS1", ".pdf"], SS1];
Export[StringJoin[
```

```
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS1", ".eps"], SS1];

SS2 =
 ListLinePlot[{AttackRateMaskBaseline, AttackRateMaskMin, AttackRateMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel →
   {{"Attack rate (%)", None}, {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS2", ".pdf"], SS2];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS2", ".eps"], SS2];

SS3 =
 ListLinePlot[{PeakTimingMaskBaseline, PeakTimingMaskMin, PeakTimingMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 800}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of mask-wearing (%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
     {label, {"0.5", "0.25", "0.75"}}], LegendLabel →
     Style["Relative infectivity\nof infectious\nwith mild disease", Black,
      13, "Text"]], FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"},
      {365 × 2, "24"}, {365 × 3 / 2, "18"}}, None}, {Automatic, None}}]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS3", ".pdf"], SS3];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS3", ".eps"], SS3];
```

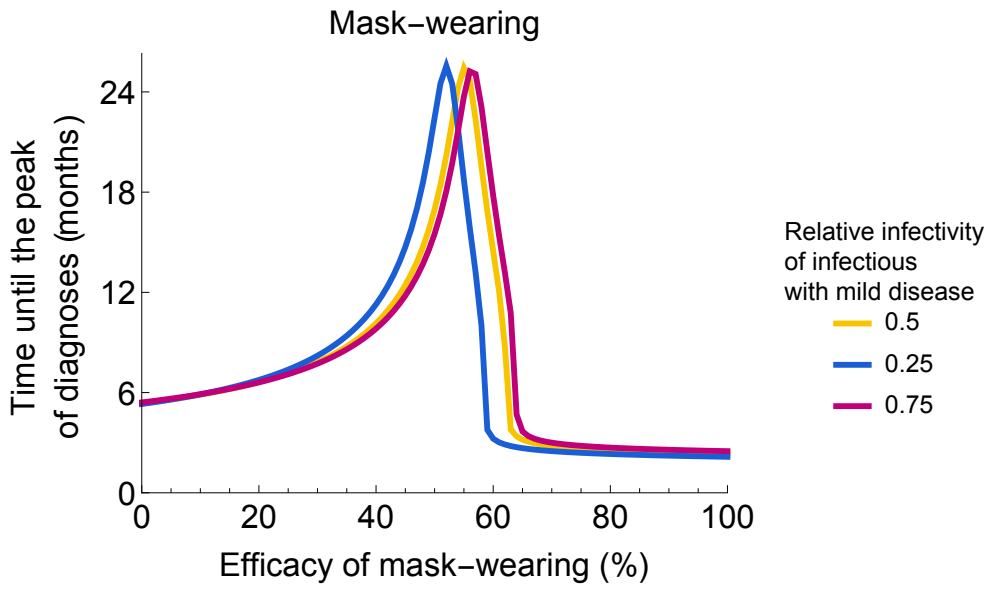
Out[247]=



Out[250]=



Out[253]=



In[265]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.1}];

PeakGovBaseline =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMin =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityMin, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMax =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityMax, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovBaseline = AttackRateRange[
   "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
```

```
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMin = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityMin, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMax = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityMax, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovBaseline = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMin = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityMin, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMax = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityMax, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]
```

Out[266]=
```
{{100., 19.1862}, {90., 19.1867}, {80., 19.1876},
 {70., 19.1898}, {60., 19.1954}, {50., 19.2108}, {40., 19.2514},
 {30., 19.3545}, {20., 19.5743}, {10., 19.8368}, {0., 19.1837}}
```

Out[267]=
```
{{100., 25.2764}, {90., 25.2772}, {80., 25.2787},
 {70., 25.282}, {60., 25.2904}, {50., 25.3115}, {40., 25.3654},
 {30., 25.5011}, {20., 25.7913}, {10., 26.1403}, {0., 25.272}}
```

Out[268]= {{100., 16.6591}, {90., 16.6594}, {80., 16.6601},
{70., 16.6616}, {60., 16.6658}, {50., 16.6774}, {40., 16.7089},
{30., 16.7891}, {20., 16.9598}, {10., 17.1643}, {0., 16.6574}}

Out[269]= {{100., 15.5894}, {90., 15.5894}, {80., 15.5894},
{70., 15.5893}, {60., 15.5892}, {50., 15.5888}, {40., 15.5878},
{30., 15.5853}, {20., 15.58}, {10., 15.5735}, {0., 15.5895}}

Out[270]= {{100., 15.0624}, {90., 15.0624}, {80., 15.0624},
{70., 15.0623}, {60., 15.062}, {50., 15.0615}, {40., 15.0599},
{30., 15.0562}, {20., 15.048}, {10., 15.0381}, {0., 15.0626}}

Out[271]= {{100., 15.7902}, {90., 15.7902}, {80., 15.7901},
{70., 15.7901}, {60., 15.79}, {50., 15.7898}, {40., 15.789},
{30., 15.7872}, {20., 15.7833}, {10., 15.7786}, {0., 15.7902}}

Out[272]= {{100., 366.865}, {90., 327.359}, {80., 299.424},
{70., 277.084}, {60., 258.253}, {50., 240.867}, {40., 223.761},
{30., 207.357}, {20., 191.835}, {10., 177.095}, {0., 162.797}}

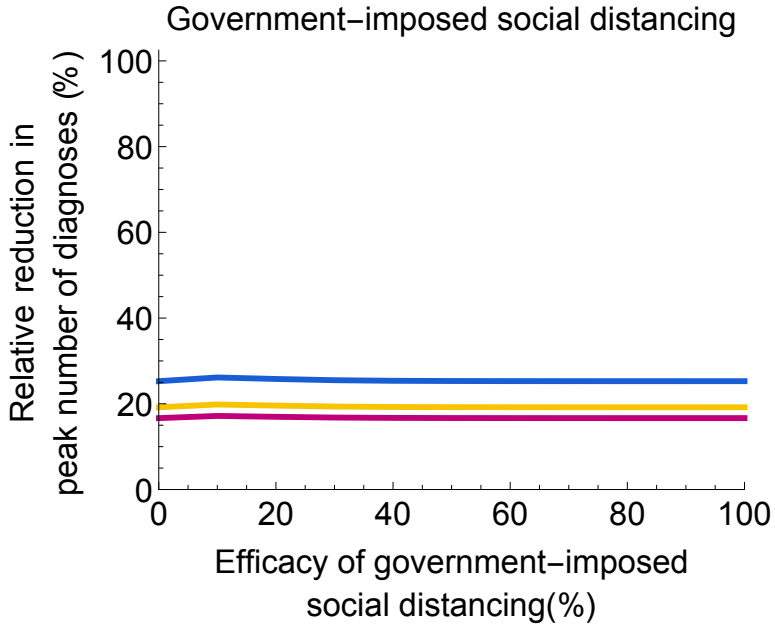
Out[273]= {{100., 364.88}, {90., 328.101}, {80., 301.189},
{70., 279.932}, {60., 262.204}, {50., 244.998}, {40., 227.09},
{30., 209.603}, {20., 192.998}, {10., 177.156}, {0., 161.714}}

Out[274]= {{100., 369.191}, {90., 328.582}, {80., 300.246},
{70., 277.465}, {60., 258.133}, {50., 240.626}, {40., 223.821},
{30., 207.838}, {20., 192.717}, {10., 178.379}, {0., 164.542}}

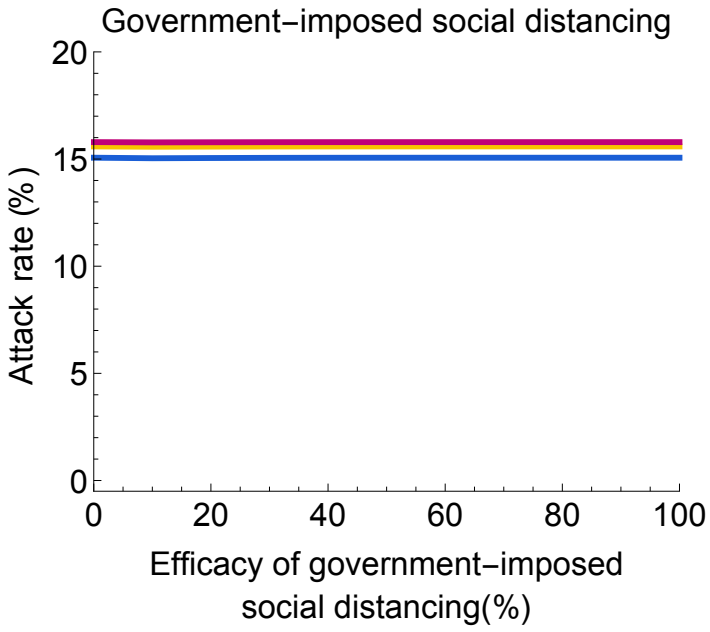
In[191]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS4 = ListLinePlot[{PeakGovBaseline, PeakGovMin, PeakGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS4", ".pdf"], SS4];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS4", ".eps"], SS4];


SS5 = ListLinePlot[{AttackRateGovBaseline, AttackRateGovMin, AttackRateGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel → {{"Attack rate (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS5", ".pdf"], SS5];
```

```
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS5", ".eps"], SS5];

SS6 = ListLinePlot[{PeakTimingGovBaseline, PeakTimingGovMin, PeakTimingGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 800}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
     {label, {"0.5", "0.25", "0.75"}}], LegendLabel →
     Style["Relative infectivity\nof infectious\nwith mild disease", Black,
      13, "Text"]], FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"},
      {365 × 2, "24"}, {365 × 3 / 2, "18"}}, None}, {Automatic, None}}]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS6", ".pdf"], SS6];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS6", ".eps"], SS6];
```

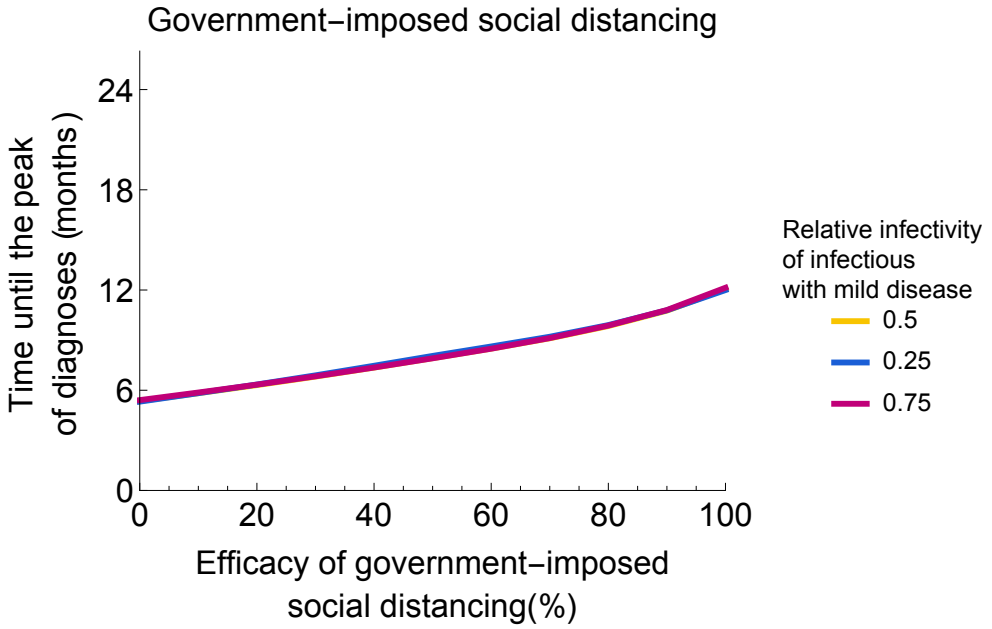
Out[192]=



Out[195]=



Out[198]=



In[362]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.01}];

PeakMaskBaseline = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMin = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsMin, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
```

```
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMax = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsMax, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskBaseline =
 AttackRateRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMin = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsMin, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMax = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsMax, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskBaseline =
 PeakTimingRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMin = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsMin, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
```

```
        StartTimeBaseline], {r1 → factor}]]

    PeakTimingMaskMax = PeakTimingRange["Mask",
      Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
        ProportionMildSymptomsMax, RecoveryRateMildSymptomsBaseline,
        DiagnosisRateBaseline, BasicReproductionNumberBaseline,
        RelativeSusceptibilityAwarenessBaseline,
        RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
        RateAwarenessFadingSevereSymptomsBaseline,
        AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
        StartTimeBaseline], {r1 → factor}]]
```

Out[363]=
```
{{100., 99.9897}, {99., 99.9895}, {98., 99.9894}, {97., 99.9892}, {96., 99.9891},
 {95., 99.9889}, {94., 99.9887}, {93., 99.9886}, {92., 99.9884}, {91., 99.9882},
 {90., 99.988}, {89., 99.9878}, {88., 99.9876}, {87., 99.9874}, {86., 99.9872},
 {85., 99.987}, {84., 99.9867}, {83., 99.9865}, {82., 99.9862}, {81., 99.986},
 {80., 99.9857}, {79., 99.9854}, {78., 99.9851}, {77., 99.9847}, {76., 99.9844},
 {75., 99.984}, {74., 99.9837}, {73., 99.9832}, {72., 99.9828}, {71., 99.9823},
 {70., 99.9818}, {69., 99.9812}, {68., 99.9806}, {67., 99.9799}, {66., 99.9792},
 {65., 99.9783}, {64., 99.9772}, {63., 99.9758}, {62., 99.9733}, {61., 99.9687},
 {60., 99.9621}, {59., 99.9522}, {58., 99.9356}, {57., 99.9046}, {56., 99.8396},
 {55., 99.6973}, {54., 99.4204}, {53., 98.9754}, {52., 98.3611}, {51., 97.5905},
 {50., 96.6796}, {49., 95.6439}, {48., 94.4978}, {47., 93.2544}, {46., 91.9255},
 {45., 90.5218}, {44., 89.053}, {43., 87.5278}, {42., 85.9542}, {41., 84.3393},
 {40., 82.6896}, {39., 81.011}, {38., 79.3088}, {37., 77.5876}, {36., 75.8518},
 {35., 74.1053}, {34., 72.3514}, {33., 70.5933}, {32., 68.8339}, {31., 67.0755},
 {30., 65.3205}, {29., 63.5709}, {28., 61.8284}, {27., 60.0946},
 {26., 58.3709}, {25., 56.6586}, {24., 54.9588}, {23., 53.2724},
 {22., 51.6003}, {21., 49.9432}, {20., 48.3019}, {19., 46.6767},
 {18., 45.0683}, {17., 43.4769}, {16., 41.903}, {15., 40.3467}, {14., 38.8084},
 {13., 37.2881}, {12., 35.7861}, {11., 34.3024}, {10., 32.8369},
 {9., 31.3899}, {8., 29.9612}, {7., 28.5509}, {6., 27.1588}, {5., 25.7848},
 {4., 24.4289}, {3., 23.091}, {2., 21.771}, {1., 20.4686}, {0., 19.1837}}
```

Out[364]=
```
{{100., 99.9896}, {99., 99.9894}, {98., 99.9893}, {97., 99.9891},
 {96., 99.989}, {95., 99.9888}, {94., 99.9887}, {93., 99.9885}, {92., 99.9883},
 {91., 99.9881}, {90., 99.9879}, {89., 99.9877}, {88., 99.9875}, {87., 99.9873},
 {86., 99.9871}, {85., 99.9868}, {84., 99.9866}, {83., 99.9863}, {82., 99.9861},
 {81., 99.9858}, {80., 99.9855}, {79., 99.9852}, {78., 99.9848}, {77., 99.9845},
 {76., 99.9841}, {75., 99.9837}, {74., 99.9833}, {73., 99.9829}, {72., 99.9824},
 {71., 99.9819}, {70., 99.9813}, {69., 99.9807}, {68., 99.98}, {67., 99.9792},
 {66., 99.9783}, {65., 99.9772}, {64., 99.9757}, {63., 99.9729}, {62., 99.9682},
 {61., 99.9617}, {60., 99.9518}, {59., 99.9356}, {58., 99.9067}, {57., 99.8492},
 {56., 99.7315}, {55., 99.5118}, {54., 99.1631}, {53., 98.6821},
 {52., 98.0779}, {51., 97.3628}, {50., 96.5493}, {49., 95.649}, {48., 94.6724},
 {47., 93.629}, {46., 92.5275}, {45., 91.3756}, {44., 90.1802}, {43., 88.9476},
 {42., 87.6836}, {41., 86.3931}, {40., 85.0808}, {39., 83.7508}, {38., 82.4068},
 {37., 81.0521}, {36., 79.6897}, {35., 78.3224}, {34., 76.9524}, {33., 75.582},
 {32., 74.2131}, {31., 72.8473}, {30., 71.4862}, {29., 70.1312}, {28., 68.7835},
 {27., 67.444}, {26., 66.1139}, {25., 64.7938}, {24., 63.4845}, {23., 62.1867},
 {22., 60.9008}, {21., 59.6274}, {20., 58.3669}, {19., 57.1196},
 {18., 55.8858}, {17., 54.6658}, {16., 53.4596}, {15., 52.2676},
 {14., 51.0897}, {13., 49.9261}, {12., 48.7769}, {11., 47.642}, {10., 46.5214},
 {9., 45.4152}, {8., 44.3232}, {7., 43.2455}, {6., 42.182}, {5., 41.1326},
 {4., 40.0971}, {3., 39.0755}, {2., 38.0676}, {1., 37.0734}, {0., 36.0926}}
```

Out[365]= {{100., 99.9895}, {99., 99.9894}, {98., 99.9892}, {97., 99.9891}, {96., 99.9889},
{95., 99.9887}, {94., 99.9886}, {93., 99.9884}, {92., 99.9882}, {91., 99.988},
{90., 99.9878}, {89., 99.9876}, {88., 99.9874}, {87., 99.9871}, {86., 99.9869},
{85., 99.9867}, {84., 99.9864}, {83., 99.9861}, {82., 99.9859}, {81., 99.9856},
{80., 99.9852}, {79., 99.9849}, {78., 99.9846}, {77., 99.9842}, {76., 99.9838},
{75., 99.9834}, {74., 99.9829}, {73., 99.9825}, {72., 99.9819}, {71., 99.9814},
{70., 99.9807}, {69., 99.98}, {68., 99.9792}, {67., 99.9783}, {66., 99.9771},
{65., 99.9756}, {64., 99.9726}, {63., 99.9679}, {62., 99.9614}, {61., 99.9518},
{60., 99.9365}, {59., 99.9104}, {58., 99.862}, {57., 99.7707}, {56., 99.6092},
{55., 99.3584}, {54., 99.0137}, {53., 98.5801}, {52., 98.0662}, {51., 97.4808},
{50., 96.8326}, {49., 96.1293}, {48., 95.378}, {47., 94.585}, {46., 93.7559},
{45., 92.896}, {44., 92.0098}, {43., 91.1014}, {42., 90.1745}, {41., 89.2325},
{40., 88.2782}, {39., 87.3144}, {38., 86.3435}, {37., 85.3675}, {36., 84.3884},
{35., 83.4079}, {34., 82.4275}, {33., 81.4486}, {32., 80.4723},
{31., 79.4997}, {30., 78.5318}, {29., 77.5695}, {28., 76.6133},
{27., 75.6641}, {26., 74.7224}, {25., 73.7886}, {24., 72.8632},
{23., 71.9466}, {22., 71.0392}, {21., 70.141}, {20., 69.2525}, {19., 68.3738},
{18., 67.505}, {17., 66.6463}, {16., 65.7977}, {15., 64.9594}, {14., 64.1314},
{13., 63.3137}, {12., 62.5063}, {11., 61.7092}, {10., 60.9223},
{9., 60.1458}, {8., 59.3794}, {7., 58.6232}, {6., 57.877}, {5., 57.1409},
{4., 56.4146}, {3., 55.6982}, {2., 54.9915}, {1., 54.2945}, {0., 53.607}}

Out[366]= {{100., 0.0139929}, {99., 0.0143083}, {98., 0.0146382}, {97., 0.0149835},
{96., 0.0153453}, {95., 0.0157249}, {94., 0.0161236}, {93., 0.0165428},
{92., 0.0169843}, {91., 0.0174499}, {90., 0.0179415}, {89., 0.0184615},
{88., 0.0190124}, {87., 0.0195969}, {86., 0.0202184}, {85., 0.0208804},
{84., 0.0215871}, {83., 0.0223432}, {82., 0.0231541}, {81., 0.024026},
{80., 0.024966}, {79., 0.0259827}, {78., 0.0270857}, {77., 0.0282867},
{76., 0.0295994}, {75., 0.0310405}, {74., 0.0326297}, {73., 0.0343915},
{72., 0.0363557}, {71., 0.0385599}, {70., 0.0410512}, {69., 0.0438904},
{68., 0.0471564}, {67., 0.0509542}, {66., 0.0554265}, {65., 0.0607718},
{64., 0.0672748}, {63., 0.0753581}, {62., 0.0856753}, {61., 0.09929},
{60., 0.118038}, {59., 0.145326}, {58., 0.18798}, {57., 0.260716},
{56., 0.396241}, {55., 0.661302}, {54., 1.14896}, {53., 1.87324},
{52., 2.67945}, {51., 3.4173}, {50., 4.06489}, {49., 4.65068}, {48., 5.19629},
{47., 5.71174}, {46., 6.20132}, {45., 6.66722}, {44., 7.11091}, {43., 7.53366},
{42., 7.93661}, {41., 8.32086}, {40., 8.68743}, {39., 9.03728},
{38., 9.37132}, {37., 9.6904}, {36., 9.99534}, {35., 10.2869}, {34., 10.5658},
{33., 10.8326}, {32., 11.0881}, {31., 11.3328}, {30., 11.5672},
{29., 11.7919}, {28., 12.0072}, {27., 12.2137}, {26., 12.4119}, {25., 12.602},
{24., 12.7845}, {23., 12.9598}, {22., 13.1282}, {21., 13.29}, {20., 13.4455},
{19., 13.595}, {18., 13.7388}, {17., 13.8772}, {16., 14.0103}, {15., 14.1385},
{14., 14.2619}, {13., 14.3808}, {12., 14.4953}, {11., 14.6056}, {10., 14.7119},
{9., 14.8145}, {8., 14.9133}, {7., 15.0087}, {6., 15.1007}, {5., 15.1895},
{4., 15.2752}, {3., 15.3579}, {2., 15.4378}, {1., 15.5149}, {0., 15.5895}}

Out[367]= {{100., 0.0142608}, {99., 0.0145923}, {98., 0.0149394}, {97., 0.0153033},
{96., 0.015685}, {95., 0.0160861}, {94., 0.0165081}, {93., 0.0169525},
{92., 0.0174212}, {91., 0.0179164}, {90., 0.0184403}, {89., 0.0189954},
{88., 0.0195847}, {87., 0.0202114}, {86., 0.0208792}, {85., 0.0215923},
{84., 0.0223554}, {83., 0.0231742}, {82., 0.0240548}, {81., 0.0250046},
{80., 0.0260321}, {79., 0.0271473}, {78., 0.0283619}, {77., 0.02969},
{76., 0.0311483}, {75., 0.032757}, {74., 0.0345409}, {73., 0.0365303},
{72., 0.038763}, {71., 0.0412871}, {70., 0.0441637}, {69., 0.0474726},
{68., 0.0513196}, {67., 0.0558481}, {66., 0.061257}, {65., 0.0678305},
{64., 0.0759881}, {63., 0.0863748}, {62., 0.10003}, {61., 0.118724},
{60., 0.145685}, {59., 0.187217}, {58., 0.256399}, {57., 0.380691},
{56., 0.611234}, {55., 1.00809}, {54., 1.56291}, {53., 2.16399},
{52., 2.71904}, {51., 3.21585}, {50., 3.67096}, {49., 4.09702}, {48., 4.50009},
{47., 4.88291}, {46., 5.24701}, {45., 5.59352}, {44., 5.92344}, {43., 6.23767},
{42., 6.53709}, {41., 6.82253}, {40., 7.09475}, {39., 7.3545}, {38., 7.60246},
{37., 7.83928}, {36., 8.06557}, {35., 8.28191}, {34., 8.48882}, {33., 8.68682},
{32., 8.87634}, {31., 9.05782}, {30., 9.23165}, {29., 9.39822},
{28., 9.55789}, {27., 9.711}, {26., 9.85787}, {25., 9.99881}, {24., 10.1341},
{23., 10.264}, {22., 10.3888}, {21., 10.5087}, {20., 10.6239}, {19., 10.7348},
{18., 10.8413}, {17., 10.9439}, {16., 11.0425}, {15., 11.1375},
{14., 11.2289}, {13., 11.317}, {12., 11.4019}, {11., 11.4836}, {10., 11.5624},
{9., 11.6384}, {8., 11.7117}, {7., 11.7824}, {6., 11.8506}, {5., 11.9164},
{4., 11.9799}, {3., 12.0412}, {2., 12.1004}, {1., 12.1576}, {0., 12.2129}}

Out[368]= {{100., 0.0145315}, {99., 0.01488}, {98., 0.0152454}, {97., 0.0156288},
{96., 0.0160318}, {95., 0.0164558}, {94., 0.0169025}, {93., 0.0173739},
{92., 0.0178718}, {91., 0.0183988}, {90., 0.0189574}, {89., 0.0195505},
{88., 0.0201814}, {87., 0.0208539}, {86., 0.0215722}, {85., 0.0223411},
{84., 0.0231662}, {83., 0.0240538}, {82., 0.0250115}, {81., 0.0260477},
{80., 0.0271726}, {79., 0.028398}, {78., 0.0297381}, {77., 0.0312098},
{76., 0.0328335}, {75., 0.034634}, {74., 0.0366419}, {73., 0.0388952},
{72., 0.0414419}, {71., 0.0443432}, {70., 0.0476788}, {69., 0.0515538},
{68., 0.0561102}, {67., 0.0615438}, {66., 0.0681328}, {65., 0.0762843},
{64., 0.0866175}, {63., 0.100115}, {62., 0.118419}, {61., 0.144435},
{60., 0.183615}, {59., 0.24661}, {58., 0.353873}, {57., 0.538521},
{56., 0.83019}, {55., 1.21112}, {54., 1.61495}, {53., 1.99424}, {52., 2.342},
{51., 2.66525}, {50., 2.96974}, {49., 3.25839}, {48., 3.53267}, {47., 3.7935},
{46., 4.04164}, {45., 4.27777}, {44., 4.50255}, {43., 4.71661}, {42., 4.92055},
{41., 5.11494}, {40., 5.30031}, {39., 5.47718}, {38., 5.646}, {37., 5.80725},
{36., 5.96133}, {35., 6.10865}, {34., 6.24955}, {33., 6.38437}, {32., 6.5134},
{31., 6.63694}, {30., 6.75527}, {29., 6.86864}, {28., 6.97731}, {27., 7.08151},
{26., 7.18146}, {25., 7.27737}, {24., 7.36943}, {23., 7.45783},
{22., 7.54274}, {21., 7.62432}, {20., 7.70274}, {19., 7.77814},
{18., 7.85065}, {17., 7.92042}, {16., 7.98755}, {15., 8.05218}, {14., 8.1144},
{13., 8.17433}, {12., 8.23207}, {11., 8.28771}, {10., 8.34134},
{9., 8.39304}, {8., 8.44291}, {7., 8.49101}, {6., 8.53741}, {5., 8.58219},
{4., 8.62542}, {3., 8.66715}, {2., 8.70745}, {1., 8.74638}, {0., 8.78398}}

Out[369]= {{100., 71.893}, {99., 72.0936}, {98., 72.3142}, {97., 72.5348}, {96., 72.7553},
{95., 72.996}, {94., 73.2366}, {93., 73.4773}, {92., 73.738}, {91., 73.9987},
{90., 74.2794}, {89., 74.5802}, {88., 74.8811}, {87., 75.1819}, {86., 75.5228},
{85., 75.8637}, {84., 76.2247}, {83., 76.6057}, {82., 77.0068}, {81., 77.4479},
{80., 77.8891}, {79., 78.3905}, {78., 78.8918}, {77., 79.4533}, {76., 80.075},
{75., 80.7167}, {74., 81.4587}, {73., 82.2609}, {72., 83.1432}, {71., 84.166},
{70., 85.3291}, {69., 86.7128}, {68., 88.3572}, {67., 90.4027}, {66., 93.0699},
{65., 96.7798}, {64., 102.676}, {63., 115.129}, {62., 266.155}, {61., 367.647},
{60., 439.801}, {59., 513.178}, {58., 593.814}, {57., 679.344}, {56., 751.137},
{55., 773.376}, {54., 737.46}, {53., 675.855}, {52., 614.289}, {51., 560.866},
{50., 516.166}, {49., 478.886}, {48., 447.542}, {47., 420.93}, {46., 398.089},
{45., 378.276}, {44., 360.909}, {43., 345.588}, {42., 331.931}, {41., 319.698},
{40., 308.669}, {39., 298.682}, {38., 289.557}, {37., 281.215}, {36., 273.554},
{35., 266.475}, {34., 259.938}, {33., 253.842}, {32., 248.166},
{31., 242.872}, {30., 237.919}, {29., 233.266}, {28., 228.875},
{27., 224.743}, {26., 220.853}, {25., 217.163}, {24., 213.654},
{23., 210.325}, {22., 207.176}, {21., 204.168}, {20., 201.3}, {19., 198.573},
{18., 195.946}, {17., 193.439}, {16., 191.053}, {15., 188.747},
{14., 186.541}, {13., 184.415}, {12., 182.37}, {11., 180.404}, {10., 178.519},
{9., 176.694}, {8., 174.93}, {7., 173.245}, {6., 171.601}, {5., 170.016},
{4., 168.472}, {3., 166.988}, {2., 165.544}, {1., 164.141}, {0., 162.797}}

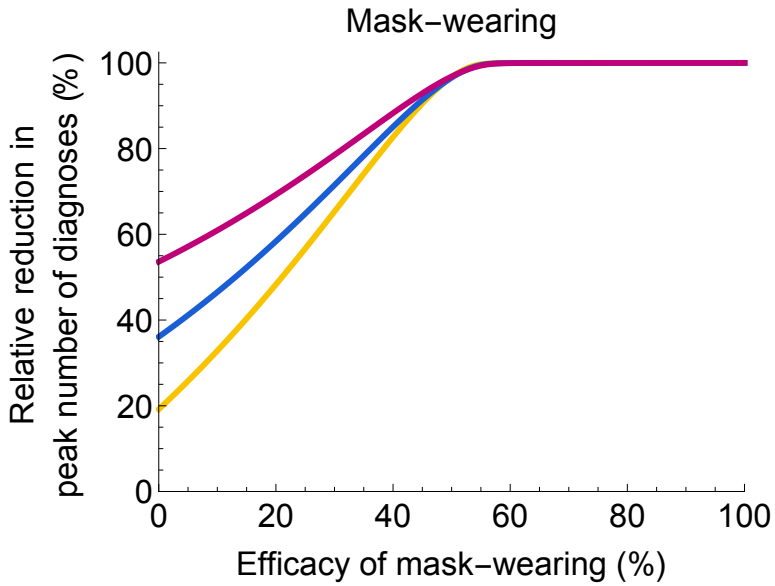
Out[370]= {{100., 74.7808}, {99., 75.0014}, {98., 75.222}, {97., 75.4426}, {96., 75.6832},
{95., 75.9239}, {94., 76.1645}, {93., 76.4453}, {92., 76.706}, {91., 76.9867},
{90., 77.2875}, {89., 77.5883}, {88., 77.9092}, {87., 78.23}, {86., 78.591},
{85., 78.952}, {84., 79.333}, {83., 79.7541}, {82., 80.1753}, {81., 80.6365},
{80., 81.1378}, {79., 81.6592}, {78., 82.2408}, {77., 82.8424}, {76., 83.5243},
{75., 84.2662}, {74., 85.0885}, {73., 86.0109}, {72., 87.0537}, {71., 88.257},
{70., 89.6808}, {69., 91.3854}, {68., 93.5311}, {67., 96.3587}, {66., 100.39},
{65., 106.967}, {64., 122.369}, {63., 276.362}, {62., 358.904}, {61., 423.056},
{60., 488.01}, {59., 557.778}, {58., 629.691}, {57., 689.21}, {56., 710.849},
{55., 686.383}, {54., 637.391}, {53., 584.991}, {52., 537.764}, {51., 497.315},
{50., 463.083}, {49., 434.025}, {48., 409.179}, {47., 387.741}, {46., 369.051},
{45., 352.647}, {44., 338.128}, {43., 325.173}, {42., 313.542}, {41., 303.034},
{40., 293.488}, {39., 284.785}, {38., 276.823}, {37., 269.484}, {36., 262.705},
{35., 256.428}, {34., 250.593}, {33., 245.138}, {32., 240.065},
{31., 235.292}, {30., 230.82}, {29., 226.608}, {28., 222.638}, {27., 218.888},
{26., 215.318}, {25., 211.949}, {24., 208.761}, {23., 205.712},
{22., 202.805}, {21., 200.037}, {20., 197.41}, {19., 194.883}, {18., 192.457},
{17., 190.151}, {16., 187.925}, {15., 185.799}, {14., 183.733},
{13., 181.768}, {12., 179.863}, {11., 178.038}, {10., 176.273},
{9., 174.569}, {8., 172.924}, {7., 171.34}, {6., 169.796}, {5., 168.312},
{4., 166.888}, {3., 165.484}, {2., 164.141}, {1., 162.817}, {0., 161.554}}

Out[371]=
```
{{100., 78.5308}, {99., 78.7514}, {98., 78.972}, {97., 79.2127}, {96., 79.4533},
 {95., 79.714}, {94., 79.9747}, {93., 80.2555}, {92., 80.5362}, {91., 80.817},
 {90., 81.1378}, {89., 81.4587}, {88., 81.7996}, {87., 82.1405}, {86., 82.5216},
 {85., 82.9026}, {84., 83.3237}, {83., 83.7649}, {82., 84.2261}, {81., 84.7275},
 {80., 85.2689}, {79., 85.8505}, {78., 86.4722}, {77., 87.154}, {76., 87.916},
 {75., 88.7583}, {74., 89.7008}, {73., 90.7637}, {72., 92.007}, {71., 93.491},
 {70., 95.2758}, {69., 97.5218}, {68., 100.51}, {67., 104.841}, {66., 112.161},
 {65., 131.553}, {64., 274.357}, {63., 343.282}, {62., 398.951}, {61., 454.36},
 {60., 512.095}, {59., 569.489}, {58., 616.315}, {57., 636.288}, {56., 622.792},
 {55., 587.798}, {54., 546.588}, {53., 507.242}, {52., 472.368}, {51., 442.167},
 {50., 416.137}, {49., 393.637}, {48., 374.064}, {47., 356.918},
 {46., 341.778}, {45., 328.301}, {44., 316.249}, {43., 305.42}, {42., 295.594},
 {41., 286.67}, {40., 278.508}, {39., 271.008}, {38., 264.109}, {37., 257.732},
 {36., 251.796}, {35., 246.301}, {34., 241.147}, {33., 236.355}, {32., 231.842},
 {31., 227.591}, {30., 223.6}, {29., 219.83}, {28., 216.281}, {27., 212.892},
 {26., 209.703}, {25., 206.655}, {24., 203.767}, {23., 201.}, {22., 198.373},
 {21., 195.846}, {20., 193.439}, {19., 191.133}, {18., 188.927},
 {17., 186.822}, {16., 184.776}, {15., 182.831}, {14., 180.946},
 {13., 179.121}, {12., 177.376}, {11., 175.692}, {10., 174.067},
 {9., 172.483}, {8., 170.979}, {7., 169.495}, {6., 168.071}, {5., 166.708},
 {4., 165.364}, {3., 164.06}, {2., 162.817}, {1., 161.594}, {0., 160.411}}
```

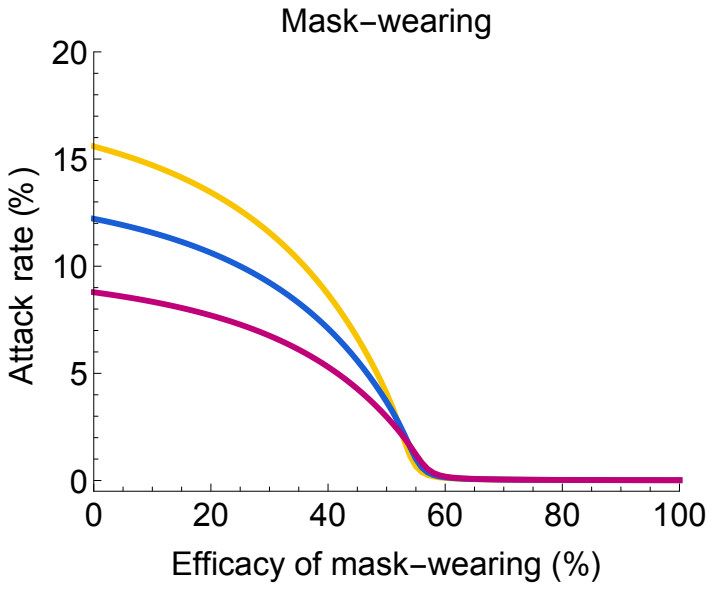
In[372]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS7 = ListLinePlot[{PeakMaskBaseline, PeakMaskMin, PeakMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS7", ".pdf"], SS7];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS7", ".eps"], SS7];

SS8 =
 ListLinePlot[{AttackRateMaskBaseline, AttackRateMaskMin, AttackRateMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel →
   {{"Attack rate (%)", None}, {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS8", ".pdf"], SS8];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS8", ".eps"], SS8];
```

```
SS9 =
 ListLinePlot[{PeakTimingMaskBaseline, PeakTimingMaskMin, PeakTimingMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 800}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of mask-wearing (%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
     {label, {"0.82", "0.86", "0.9"}}], LegendLabel →
     Style["Proportion of infectious\nwith mild disease", Black, 13, "Text"]],
  FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
      {365 × 3 / 2, "18"}}, None}, {Automatic, None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS9", ".pdf"], SS9];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS9", ".eps"], SS9];
```

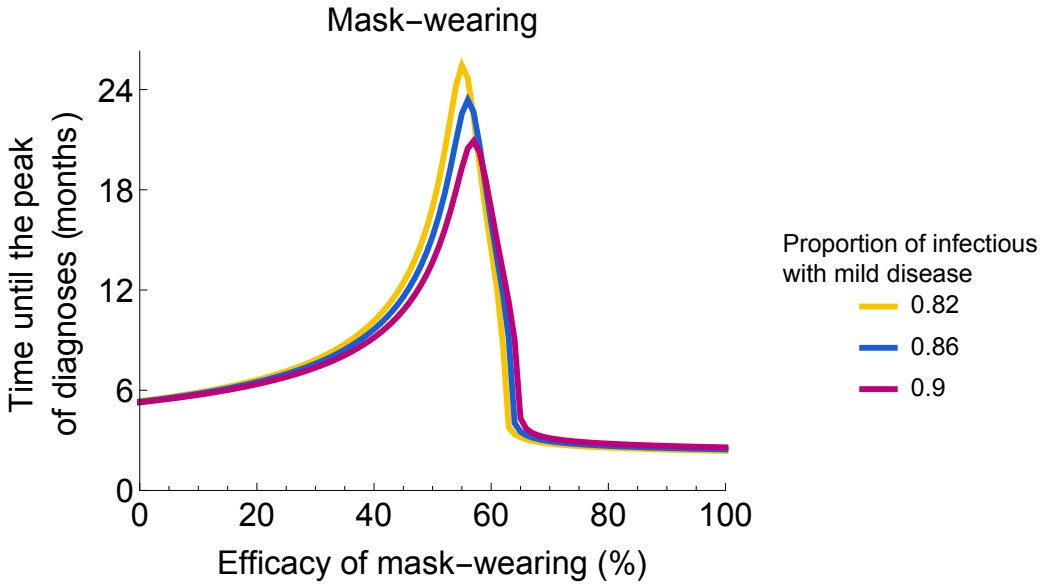
Out[373]=



Out[376]=



Out[379]=



In[382]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.1}];

PeakGovBaseline =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMin =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsMin,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
```

```
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMax =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsMax,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovBaseline = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMin = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsMin,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMax = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsMax,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovBaseline = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMin = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsMin,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
```

```
      StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMax = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsMax,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]
```

Out[383]= {{100., 19.1862}, {90., 19.1867}, {80., 19.1876},
{70., 19.1898}, {60., 19.1954}, {50., 19.2108}, {40., 19.2514},
{30., 19.3545}, {20., 19.5743}, {10., 19.8368}, {0., 19.1837}}

Out[384]= {{100., 36.0945}, {90., 36.0949}, {80., 36.0956},
{70., 36.0973}, {60., 36.1018}, {50., 36.1143}, {40., 36.1479},
{30., 36.2332}, {20., 36.4146}, {10., 36.6292}, {0., 36.0926}}

Out[385]= {{100., 53.6083}, {90., 53.6085}, {80., 53.609},
{70., 53.6102}, {60., 53.6135}, {50., 53.6227}, {40., 53.648},
{30., 53.7123}, {20., 53.8488}, {10., 54.0088}, {0., 53.6069}}

Out[386]= {{100., 15.5894}, {90., 15.5894}, {80., 15.5894},
{70., 15.5893}, {60., 15.5892}, {50., 15.5888}, {40., 15.5878},
{30., 15.5853}, {20., 15.58}, {10., 15.5735}, {0., 15.5895}}

Out[387]= {{100., 12.2128}, {90., 12.2128}, {80., 12.2128},
{70., 12.2127}, {60., 12.2126}, {50., 12.2124}, {40., 12.2116},
{30., 12.2096}, {20., 12.2054}, {10., 12.2004}, {0., 12.2129}}

Out[388]= {{100., 8.78395}, {90., 8.78394}, {80., 8.78393},
{70., 8.78391}, {60., 8.78383}, {50., 8.78363}, {40., 8.78308},
{30., 8.78166}, {20., 8.77864}, {10., 8.77505}, {0., 8.78398}}

Out[389]= {{100., 366.865}, {90., 327.359}, {80., 299.424},
{70., 277.084}, {60., 258.253}, {50., 240.867}, {40., 223.761},
{30., 207.357}, {20., 191.835}, {10., 177.095}, {0., 162.797}}

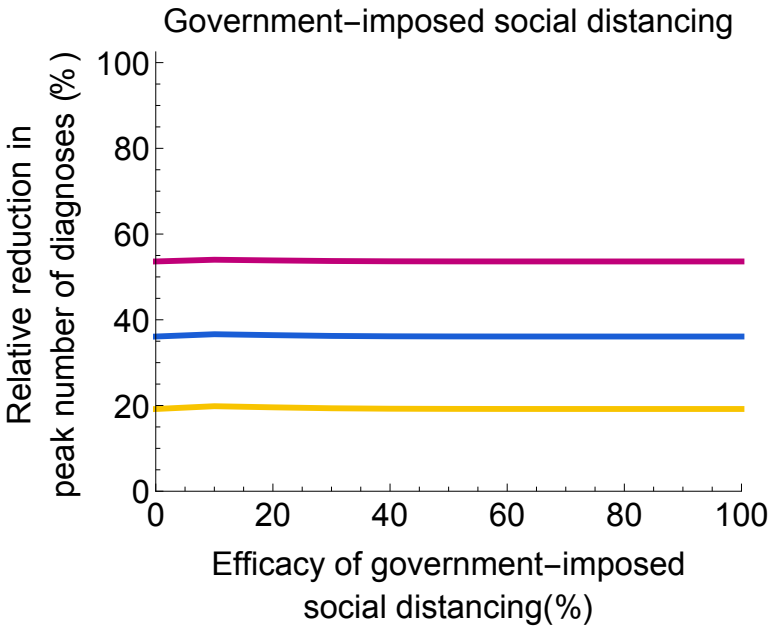
Out[390]= {{100., 366.043}, {90., 325.694}, {80., 297.459},
{70., 274.778}, {60., 255.566}, {50., 238.099}, {40., 221.234},
{30., 205.151}, {20., 189.97}, {10., 175.531}, {0., 161.554}}

Out[391]= {{100., 365.421}, {90., 324.251}, {80., 295.734},
{70., 272.712}, {60., 253.12}, {50., 235.532}, {40., 218.888},
{30., 203.105}, {20., 188.225}, {10., 174.087}, {0., 160.411}}

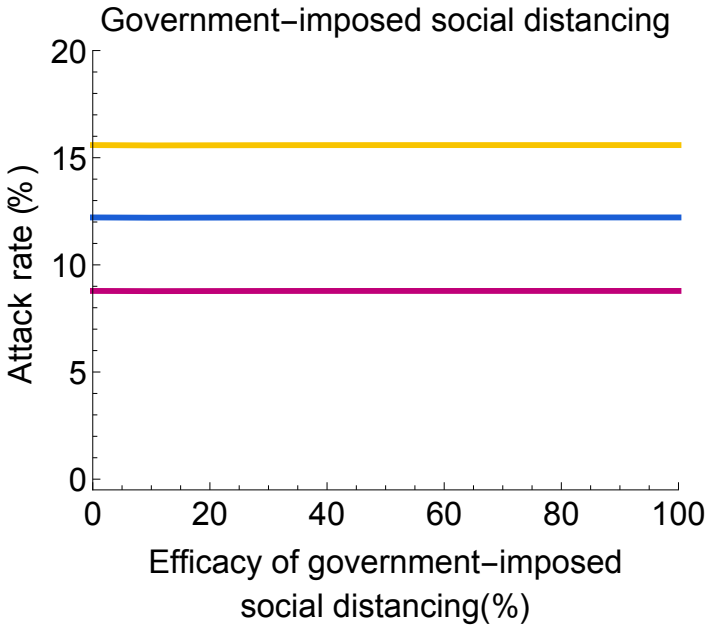
In[392]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS10 = ListLinePlot[{PeakGovBaseline, PeakGovMin, PeakGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS10", ".pdf"], SS10];
```

```
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS10", ".eps"], SS10];


SS11 = ListLinePlot[{AttackRateGovBaseline, AttackRateGovMin, AttackRateGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel → {{"Attack rate (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS11", ".pdf"], SS11];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS11", ".eps"], SS11];

SS12 = ListLinePlot[{PeakTimingGovBaseline, PeakTimingGovMin, PeakTimingGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 800}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
     {label, {"0.82", "0.86", "0.9"}}], LegendLabel →
     Style["Proportion of infectious\nwith mild disease", Black, 13, "Text"]],
  FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
      {365 × 3 / 2, "18"}}, None}, {Automatic, None}}]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS12", ".pdf"], SS12];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS12", ".eps"], SS12];
```

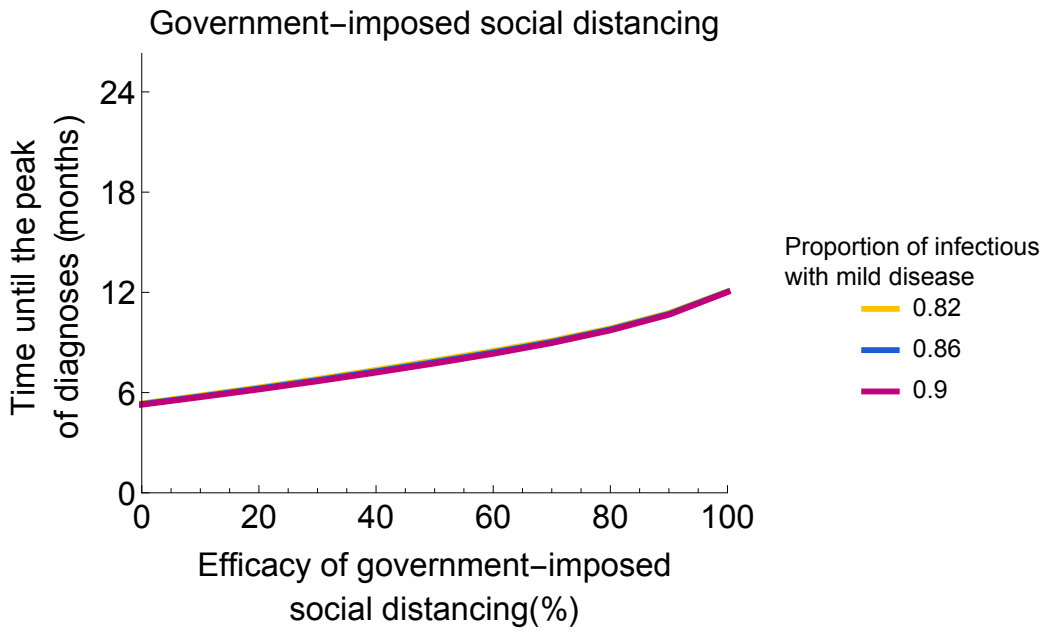
Out[393]=



Out[396]=



Out[399]=



In[422]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.01}];

PeakMaskBaseline = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMin = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsMin,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMax = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsMax,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskBaseline =
 AttackRateRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
```

```
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMin = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsMin,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMax = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsMax,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskBaseline =
 PeakTimingRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMin = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsMin,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMax = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsMax,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]
```

Out[423]= {{100., 99.9897}, {99., 99.9895}, {98., 99.9894}, {97., 99.9892}, {96., 99.9891},
{95., 99.9889}, {94., 99.9887}, {93., 99.9886}, {92., 99.9884}, {91., 99.9882},
{90., 99.988}, {89., 99.9878}, {88., 99.9876}, {87., 99.9874}, {86., 99.9872},
{85., 99.987}, {84., 99.9867}, {83., 99.9865}, {82., 99.9862}, {81., 99.986},
{80., 99.9857}, {79., 99.9854}, {78., 99.9851}, {77., 99.9847}, {76., 99.9844},
{75., 99.984}, {74., 99.9837}, {73., 99.9832}, {72., 99.9828}, {71., 99.9823},
{70., 99.9818}, {69., 99.9812}, {68., 99.9806}, {67., 99.9799}, {66., 99.9792},
{65., 99.9783}, {64., 99.9772}, {63., 99.9758}, {62., 99.9733}, {61., 99.9687},
{60., 99.9621}, {59., 99.9522}, {58., 99.9356}, {57., 99.9046}, {56., 99.8396},
{55., 99.6973}, {54., 99.4204}, {53., 98.9754}, {52., 98.3611}, {51., 97.5905},
{50., 96.6796}, {49., 95.6439}, {48., 94.4978}, {47., 93.2544}, {46., 91.9255},
{45., 90.5218}, {44., 89.053}, {43., 87.5278}, {42., 85.9542}, {41., 84.3393},
{40., 82.6896}, {39., 81.011}, {38., 79.3088}, {37., 77.5876}, {36., 75.8518},
{35., 74.1053}, {34., 72.3514}, {33., 70.5933}, {32., 68.8339}, {31., 67.0755},
{30., 65.3205}, {29., 63.5709}, {28., 61.8284}, {27., 60.0946},
{26., 58.3709}, {25., 56.6586}, {24., 54.9588}, {23., 53.2724},
{22., 51.6003}, {21., 49.9432}, {20., 48.3019}, {19., 46.6767},
{18., 45.0683}, {17., 43.4769}, {16., 41.903}, {15., 40.3467}, {14., 38.8084},
{13., 37.2881}, {12., 35.7861}, {11., 34.3024}, {10., 32.8369},
{9., 31.3899}, {8., 29.9612}, {7., 28.5509}, {6., 27.1588}, {5., 25.7848},
{4., 24.4289}, {3., 23.091}, {2., 21.771}, {1., 20.4686}, {0., 19.1837}}

Out[424]= {{100., 99.9913}, {99., 99.9912}, {98., 99.991}, {97., 99.9909}, {96., 99.9908},
{95., 99.9906}, {94., 99.9905}, {93., 99.9904}, {92., 99.9902}, {91., 99.9901},
{90., 99.9899}, {89., 99.9897}, {88., 99.9896}, {87., 99.9894}, {86., 99.9892},
{85., 99.989}, {84., 99.9888}, {83., 99.9886}, {82., 99.9884}, {81., 99.9881},
{80., 99.9879}, {79., 99.9876}, {78., 99.9874}, {77., 99.9871}, {76., 99.9868},
{75., 99.9864}, {74., 99.9861}, {73., 99.9857}, {72., 99.9853}, {71., 99.9849},
{70., 99.9844}, {69., 99.9839}, {68., 99.9833}, {67., 99.9825}, {66., 99.9815},
{65., 99.9795}, {64., 99.9769}, {63., 99.9736}, {62., 99.9692}, {61., 99.9629},
{60., 99.9536}, {59., 99.9385}, {58., 99.9116}, {57., 99.8577}, {56., 99.7444},
{55., 99.524}, {54., 99.162}, {53., 98.652}, {52., 98.0031}, {51., 97.2286},
{50., 96.3422}, {49., 95.3563}, {48., 94.2823}, {47., 93.1305}, {46., 91.9103},
{45., 90.6299}, {44., 89.2971}, {43., 87.9186}, {42., 86.5006}, {41., 85.0489},
{40., 83.5683}, {39., 82.0636}, {38., 80.5389}, {37., 78.9979}, {36., 77.4441},
{35., 75.8804}, {34., 74.3097}, {33., 72.7344}, {32., 71.1569}, {31., 69.579},
{30., 68.0027}, {29., 66.4297}, {28., 64.8613}, {27., 63.2989},
{26., 61.7437}, {25., 60.1967}, {24., 58.659}, {23., 57.1312}, {22., 55.6143},
{21., 54.1087}, {20., 52.6152}, {19., 51.1342}, {18., 49.6662},
{17., 48.2115}, {16., 46.7705}, {15., 45.3435}, {14., 43.9307},
{13., 42.5322}, {12., 41.1483}, {11., 39.7791}, {10., 38.4247},
{9., 37.0851}, {8., 35.7604}, {7., 34.4506}, {6., 33.1557}, {5., 31.8757},
{4., 30.6105}, {3., 29.3602}, {2., 28.1245}, {1., 26.9036}, {0., 25.6972}}

Out[425]= {{100., 99.9875}, {99., 99.9873}, {98., 99.9871}, {97., 99.9869}, {96., 99.9867},
{95., 99.9866}, {94., 99.9864}, {93., 99.9862}, {92., 99.9859}, {91., 99.9857},
{90., 99.9855}, {89., 99.9853}, {88., 99.985}, {87., 99.9848}, {86., 99.9845},
{85., 99.9842}, {84., 99.984}, {83., 99.9837}, {82., 99.9834}, {81., 99.9831},
{80., 99.9827}, {79., 99.9824}, {78., 99.982}, {77., 99.9816}, {76., 99.9812},
{75., 99.9808}, {74., 99.9804}, {73., 99.9799}, {72., 99.9794}, {71., 99.9788},
{70., 99.9783}, {69., 99.9776}, {68., 99.977}, {67., 99.9763}, {66., 99.9755},
{65., 99.9746}, {64., 99.9736}, {63., 99.9725}, {62., 99.9711}, {61., 99.9696},
{60., 99.9676}, {59., 99.9647}, {58., 99.9572}, {57., 99.9438}, {56., 99.9192},
{55., 99.8677}, {54., 99.7488}, {53., 99.4942}, {52., 99.0508}, {51., 98.409},
{50., 97.5817}, {49., 96.5876}, {48., 95.4451}, {47., 94.1714}, {46., 92.7825},
{45., 91.2927}, {44., 89.7151}, {43., 88.0616}, {42., 86.3428}, {41., 84.5685},
{40., 82.7474}, {39., 80.8876}, {38., 78.996}, {37., 77.0791}, {36., 75.1428},
{35., 73.192}, {34., 71.2315}, {33., 69.2654}, {32., 67.2974}, {31., 65.3308},
{30., 63.3685}, {29., 61.4131}, {28., 59.4669}, {27., 57.532}, {26., 55.6101},
{25., 53.7029}, {24., 51.8117}, {23., 49.9376}, {22., 48.0818},
{21., 46.2452}, {20., 44.4284}, {19., 42.6321}, {18., 40.8569},
{17., 39.1033}, {16., 37.3715}, {15., 35.6618}, {14., 33.9745},
{13., 32.3098}, {12., 30.6676}, {11., 29.0481}, {10., 27.4513},
{9., 25.877}, {8., 24.3254}, {7., 22.7961}, {6., 21.2892}, {5., 19.8045},
{4., 18.3417}, {3., 16.9008}, {2., 15.4814}, {1., 14.0834}, {0., 12.7065}}

Out[426]= {{100., 0.0139929}, {99., 0.0143083}, {98., 0.0146382}, {97., 0.0149835},
{96., 0.0153453}, {95., 0.0157249}, {94., 0.0161236}, {93., 0.0165428},
{92., 0.0169843}, {91., 0.0174499}, {90., 0.0179415}, {89., 0.0184615},
{88., 0.0190124}, {87., 0.0195969}, {86., 0.0202184}, {85., 0.0208804},
{84., 0.0215871}, {83., 0.0223432}, {82., 0.0231541}, {81., 0.024026},
{80., 0.024966}, {79., 0.0259827}, {78., 0.0270857}, {77., 0.0282867},
{76., 0.0295994}, {75., 0.0310405}, {74., 0.0326297}, {73., 0.0343915},
{72., 0.0363557}, {71., 0.0385599}, {70., 0.0410512}, {69., 0.0438904},
{68., 0.0471564}, {67., 0.0509542}, {66., 0.0554265}, {65., 0.0607718},
{64., 0.0672748}, {63., 0.0753581}, {62., 0.0856753}, {61., 0.09929},
{60., 0.118038}, {59., 0.145326}, {58., 0.18798}, {57., 0.260716},
{56., 0.396241}, {55., 0.661302}, {54., 1.14896}, {53., 1.87324},
{52., 2.67945}, {51., 3.4173}, {50., 4.06489}, {49., 4.65068}, {48., 5.19629},
{47., 5.71174}, {46., 6.20132}, {45., 6.66722}, {44., 7.11091}, {43., 7.53366},
{42., 7.93661}, {41., 8.32086}, {40., 8.68743}, {39., 9.03728},
{38., 9.37132}, {37., 9.6904}, {36., 9.99534}, {35., 10.2869}, {34., 10.5658},
{33., 10.8326}, {32., 11.0881}, {31., 11.3328}, {30., 11.5672},
{29., 11.7919}, {28., 12.0072}, {27., 12.2137}, {26., 12.4119}, {25., 12.602},
{24., 12.7845}, {23., 12.9598}, {22., 13.1282}, {21., 13.29}, {20., 13.4455},
{19., 13.595}, {18., 13.7388}, {17., 13.8772}, {16., 14.0103}, {15., 14.1385},
{14., 14.2619}, {13., 14.3808}, {12., 14.4953}, {11., 14.6056}, {10., 14.7119},
{9., 14.8145}, {8., 14.9133}, {7., 15.0087}, {6., 15.1007}, {5., 15.1895},
{4., 15.2752}, {3., 15.3579}, {2., 15.4378}, {1., 15.5149}, {0., 15.5895}}

Out[427]= {{100., 0.0140259}, {99., 0.0143494}, {98., 0.0146881}, {97., 0.0150429},
{96., 0.0154151}, {95., 0.015806}, {94., 0.0162171}, {93., 0.0166499},
{92., 0.0171061}, {91., 0.0175879}, {90., 0.0180974}, {89., 0.0186369},
{88., 0.0192094}, {87., 0.0198179}, {86., 0.0204659}, {85., 0.0211574},
{84., 0.021897}, {83., 0.0226899}, {82., 0.023542}, {81., 0.0244604},
{80., 0.025453}, {79., 0.0265293}, {78., 0.0277005}, {77., 0.0289796},
{76., 0.0303825}, {75., 0.0319281}, {74., 0.0336395}, {73., 0.0355452},
{72., 0.0376805}, {71., 0.0400897}, {70., 0.0428295}, {69., 0.0459736},
{68., 0.049619}, {67., 0.0538967}, {66., 0.0589873}, {65., 0.0651471},
{64., 0.0727516}, {63., 0.0823717}, {62., 0.0949153}, {61., 0.111904},
{60., 0.13604}, {59., 0.172443}, {58., 0.231389}, {57., 0.334237},
{56., 0.524232}, {55., 0.875706}, {54., 1.46484}, {53., 2.26715},
{52., 3.12277}, {51., 3.895}, {50., 4.56092}, {49., 5.14943}, {48., 5.68759},
{47., 6.19053}, {46., 6.66558}, {45., 7.1164}, {44., 7.54511}, {43., 7.95323},
{42., 8.34202}, {41., 8.7126}, {40., 9.06599}, {39., 9.40316}, {38., 9.725},
{37., 10.0324}, {36., 10.326}, {35., 10.6068}, {34., 10.8752}, {33., 11.132},
{32., 11.3779}, {31., 11.6133}, {30., 11.8387}, {29., 12.0548}, {28., 12.2619},
{27., 12.4604}, {26., 12.6509}, {25., 12.8337}, {24., 13.0092}, {23., 13.1776},
{22., 13.3395}, {21., 13.4949}, {20., 13.6444}, {19., 13.7881}, {18., 13.9262},
{17., 14.0592}, {16., 14.1871}, {15., 14.3102}, {14., 14.4287},
{13., 14.5429}, {12., 14.6528}, {11., 14.7588}, {10., 14.8609},
{9., 14.9594}, {8., 15.0543}, {7., 15.1458}, {6., 15.2342}, {5., 15.3194},
{4., 15.4016}, {3., 15.481}, {2., 15.5577}, {1., 15.6317}, {0., 15.7032}}

Out[428]= {{100., 0.013861}, {99., 0.0141608}, {98., 0.0144737}, {97., 0.0148007},
{96., 0.0151428}, {95., 0.0155011}, {94., 0.0158768}, {93., 0.0162711},
{92., 0.0166855}, {91., 0.0171215}, {90., 0.0175809}, {89., 0.0180657},
{88., 0.0185781}, {87., 0.0191204}, {86., 0.0196954}, {85., 0.0203061},
{84., 0.0209561}, {83., 0.0216492}, {82., 0.02239}, {81., 0.0231836},
{80., 0.0240358}, {79., 0.0249535}, {78., 0.0259446}, {77., 0.0270184},
{76., 0.0281857}, {75., 0.0294596}, {74., 0.0308555}, {73., 0.032392},
{72., 0.0340918}, {71., 0.0359827}, {70., 0.0380993}, {69., 0.0404852},
{68., 0.0431961}, {67., 0.0463043}, {66., 0.0499053}, {65., 0.054128},
{64., 0.0591511}, {63., 0.0652288}, {62., 0.0727354}, {61., 0.0822455},
{60., 0.0946849}, {59., 0.11164}, {58., 0.13604}, {57., 0.173807},
{56., 0.238139}, {55., 0.360424}, {54., 0.610509}, {53., 1.08804},
{52., 1.78415}, {51., 2.52048}, {50., 3.18924}, {49., 3.79752}, {48., 4.36692},
{47., 4.90729}, {46., 5.42212}, {45., 5.913}, {44., 6.3811}, {43., 6.82755},
{42., 7.25344}, {41., 7.65986}, {40., 8.04781}, {39., 8.41828}, {38., 8.77218},
{37., 9.11038}, {36., 9.43371}, {35., 9.74294}, {34., 10.0388}, {33., 10.322},
{32., 10.5933}, {31., 10.8531}, {30., 11.1022}, {29., 11.341}, {28., 11.5699},
{27., 11.7896}, {26., 12.0003}, {25., 12.2026}, {24., 12.3968}, {23., 12.5834},
{22., 12.7626}, {21., 12.9349}, {20., 13.1005}, {19., 13.2598}, {18., 13.413},
{17., 13.5604}, {16., 13.7023}, {15., 13.8389}, {14., 13.9704},
{13., 14.0972}, {12., 14.2193}, {11., 14.3369}, {10., 14.4504},
{9., 14.5598}, {8., 14.6653}, {7., 14.7671}, {6., 14.8653}, {5., 14.9601},
{4., 15.0517}, {3., 15.1401}, {2., 15.2254}, {1., 15.3079}, {0., 15.3875}}

Out[429]= {{100., 71.893}, {99., 72.0936}, {98., 72.3142}, {97., 72.5348}, {96., 72.7553},
{95., 72.996}, {94., 73.2366}, {93., 73.4773}, {92., 73.738}, {91., 73.9987},
{90., 74.2794}, {89., 74.5802}, {88., 74.8811}, {87., 75.1819}, {86., 75.5228},
{85., 75.8637}, {84., 76.2247}, {83., 76.6057}, {82., 77.0068}, {81., 77.4479},
{80., 77.8891}, {79., 78.3905}, {78., 78.8918}, {77., 79.4533}, {76., 80.075},
{75., 80.7167}, {74., 81.4587}, {73., 82.2609}, {72., 83.1432}, {71., 84.166},
{70., 85.3291}, {69., 86.7128}, {68., 88.3572}, {67., 90.4027}, {66., 93.0699},
{65., 96.7798}, {64., 102.676}, {63., 115.129}, {62., 266.155}, {61., 367.647},
{60., 439.801}, {59., 513.178}, {58., 593.814}, {57., 679.344}, {56., 751.137},
{55., 773.376}, {54., 737.46}, {53., 675.855}, {52., 614.289}, {51., 560.866},
{50., 516.166}, {49., 478.886}, {48., 447.542}, {47., 420.93}, {46., 398.089},
{45., 378.276}, {44., 360.909}, {43., 345.588}, {42., 331.931}, {41., 319.698},
{40., 308.669}, {39., 298.682}, {38., 289.557}, {37., 281.215}, {36., 273.554},
{35., 266.475}, {34., 259.938}, {33., 253.842}, {32., 248.166},
{31., 242.872}, {30., 237.919}, {29., 233.266}, {28., 228.875},
{27., 224.743}, {26., 220.853}, {25., 217.163}, {24., 213.654},
{23., 210.325}, {22., 207.176}, {21., 204.168}, {20., 201.3}, {19., 198.573},
{18., 195.946}, {17., 193.439}, {16., 191.053}, {15., 188.747},
{14., 186.541}, {13., 184.415}, {12., 182.37}, {11., 180.404}, {10., 178.519},
{9., 176.694}, {8., 174.93}, {7., 173.245}, {6., 171.601}, {5., 170.016},
{4., 168.472}, {3., 166.988}, {2., 165.544}, {1., 164.141}, {0., 162.797}}

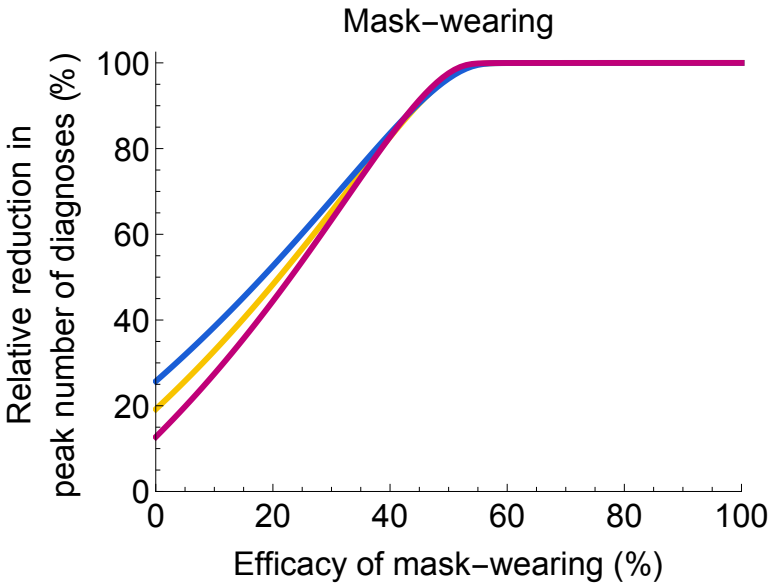
Out[430]= {{100., 81.5389}, {99., 81.7996}, {98., 82.0403}, {97., 82.301}, {96., 82.5817},
{95., 82.8424}, {94., 83.1432}, {93., 83.444}, {92., 83.7448}, {91., 84.0657},
{90., 84.4066}, {89., 84.7475}, {88., 85.1286}, {87., 85.5096}, {86., 85.9107},
{85., 86.3318}, {84., 86.773}, {83., 87.2543}, {82., 87.7556}, {81., 88.2971},
{80., 88.8786}, {79., 89.5204}, {78., 90.2022}, {77., 90.9442}, {76., 91.7664},
{75., 92.6889}, {74., 93.7116}, {73., 94.8948}, {72., 96.2986}, {71., 97.963},
{70., 100.049}, {69., 102.796}, {68., 106.807}, {67., 113.886}, {66., 150.725},
{65., 323.87}, {64., 380.08}, {63., 430.837}, {62., 483.719}, {61., 542.276},
{60., 609.135}, {59., 685.681}, {58., 768.764}, {57., 842.241}, {56., 873.084},
{55., 844.427}, {54., 781.639}, {53., 713.857}, {52., 652.993}, {51., 601.214},
{50., 557.677}, {49., 520.919}, {48., 489.635}, {47., 462.722}, {46., 439.34},
{45., 418.865}, {44., 400.776}, {43., 384.673}, {42., 370.234},
{41., 357.239}, {40., 345.427}, {39., 334.699}, {38., 324.852},
{37., 315.808}, {36., 307.486}, {35., 299.765}, {34., 292.586},
{33., 285.908}, {32., 279.691}, {31., 273.855}, {30., 268.361},
{29., 263.227}, {28., 258.354}, {27., 253.781}, {26., 249.43}, {25., 245.339},
{24., 241.428}, {23., 237.718}, {22., 234.189}, {21., 230.82}, {20., 227.611},
{19., 224.543}, {18., 221.615}, {17., 218.807}, {16., 216.1}, {15., 213.513},
{14., 211.027}, {13., 208.64}, {12., 206.354}, {11., 204.128}, {10., 202.002},
{9., 199.937}, {8., 197.951}, {7., 196.026}, {6., 194.181}, {5., 192.377},
{4., 190.652}, {3., 188.967}, {2., 187.323}, {1., 185.759}, {0., 184.215}}

Out[431]=
```
{{100., 62.568}, {99., 62.7485}, {98., 62.929}, {97., 63.1094}, {96., 63.2899},
 {95., 63.4905}, {94., 63.691}, {93., 63.8915}, {92., 64.1121}, {91., 64.3327},
 {90., 64.5734}, {89., 64.814}, {88., 65.0547}, {87., 65.3154}, {86., 65.5761},
 {85., 65.8568}, {84., 66.1576}, {83., 66.4584}, {82., 66.7793}, {81., 67.1202},
 {80., 67.4812}, {79., 67.8622}, {78., 68.2633}, {77., 68.6844}, {76., 69.1457},
 {75., 69.6269}, {74., 70.1684}, {73., 70.75}, {72., 71.3716}, {71., 72.0535},
 {70., 72.8155}, {69., 73.6778}, {68., 74.6404}, {67., 75.7634}, {66., 77.0469},
 {65., 78.591}, {64., 80.4961}, {63., 82.8825}, {62., 86.1112}, {61., 90.8239},
 {60., 98.9657}, {59., 124.695}, {58., 339.792}, {57., 443.27}, {56., 538.245},
 {55., 625.519}, {54., 673.408}, {53., 657.064}, {52., 603.821}, {51., 546.307},
 {50., 496.052}, {49., 454.32}, {48., 419.867}, {47., 391.21}, {46., 367.066},
 {45., 346.49}, {44., 328.763}, {43., 313.301}, {42., 299.705}, {41., 287.652},
 {40., 276.883}, {39., 267.217}, {38., 258.454}, {37., 250.493}, {36., 243.213},
 {35., 236.555}, {34., 230.399}, {33., 224.703}, {32., 219.429}, {31., 214.536},
 {30., 209.944}, {29., 205.652}, {28., 201.641}, {27., 197.851}, {26., 194.302},
 {25., 190.933}, {24., 187.744}, {23., 184.736}, {22., 181.888},
 {21., 179.161}, {20., 176.574}, {19., 174.128}, {18., 171.761},
 {17., 169.515}, {16., 167.369}, {15., 165.304}, {14., 163.339},
 {13., 161.453}, {12., 159.629}, {11., 157.884}, {10., 156.199},
 {9., 154.575}, {8., 153.011}, {7., 151.507}, {6., 150.043}, {5., 148.639},
 {4., 147.275}, {3., 145.972}, {2., 144.688}, {1., 143.465}, {0., 142.262}}
```

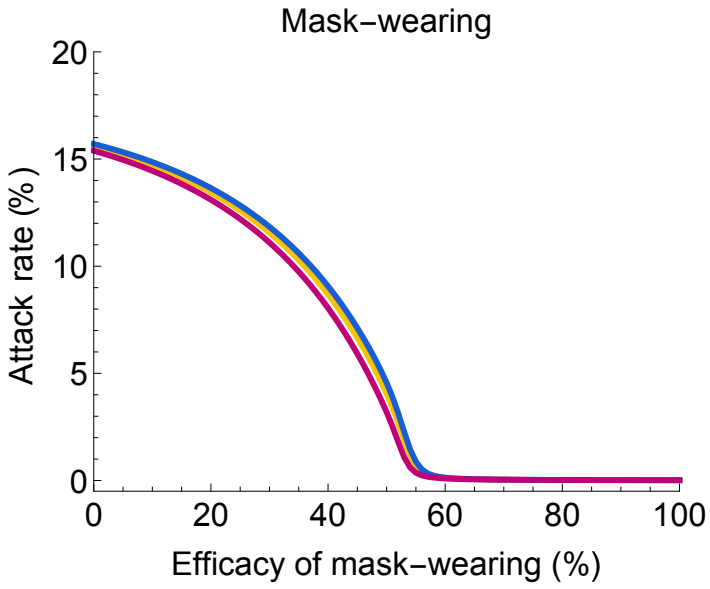
In[462]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS13 = ListLinePlot[{PeakMaskBaseline, PeakMaskMin, PeakMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS13", ".pdf"], SS13];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS13", ".eps"], SS13];

SS14 =
 ListLinePlot[{AttackRateMaskBaseline, AttackRateMaskMin, AttackRateMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel →
   {{"Attack rate (%)", None}, {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS14", ".pdf"], SS14];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS14", ".eps"], SS14];
```

```
SS15 =
 ListLinePlot[{PeakTimingMaskBaseline, PeakTimingMaskMin, PeakTimingMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 365 × 5 / 2 + 20}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of mask-wearing (%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
     {label, {"7 days", "9 days", "5 days"}}], LegendLabel → Style[
      "Recovery period\nof infectious\nwith mild disease", Black, 13, "Text"]],
  FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
      {365 × 3 / 2, "18"}, {365 × 5 / 2, "30"}}, None}, {Automatic, None}}]
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS15", ".pdf"], SS15];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS15", ".eps"], SS15];
```

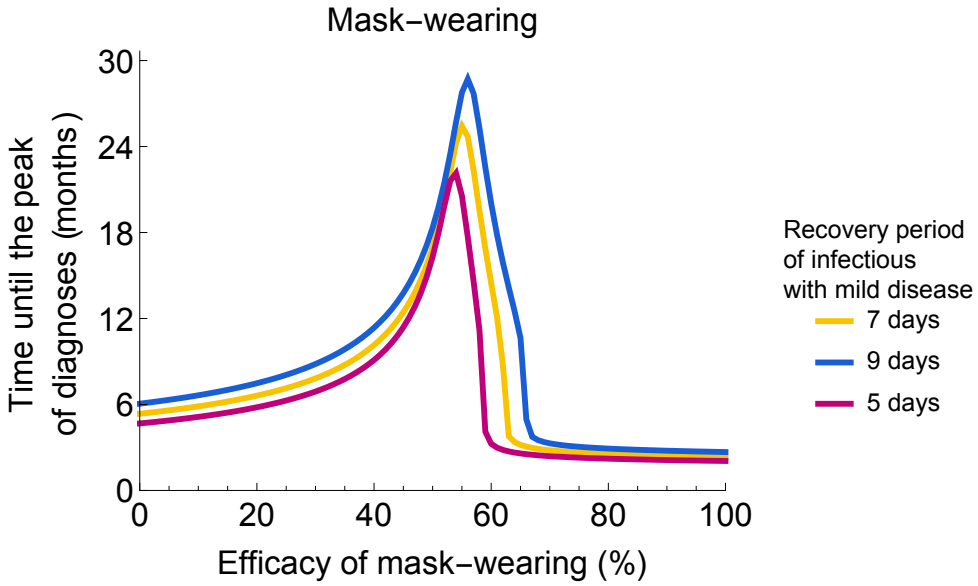
Out[463]=



Out[466]=



Out[469]=



In[492]:=

```
ReductionFactor = Table[i, {i, 0, 1, 0.05}];

PeakGovBaseline =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMin =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsMin, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
```

```
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMax =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsMax, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovBaseline = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMin = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsMin, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMax = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsMax, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovBaseline = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMin = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsMin, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
```

```
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMax = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsMax, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]
```

Out[493]= {{100., 19.1862}, {95., 19.1864}, {90., 19.1867}, {85., 19.1871}, {80., 19.1876}, {75., 19.1885}, {70., 19.1898}, {65., 19.1919}, {60., 19.1954}, {55., 19.2013}, {50., 19.2108}, {45., 19.2263}, {40., 19.2514}, {35., 19.2918}, {30., 19.3545}, {25., 19.4475}, {20., 19.5743}, {15., 19.7226}, {10., 19.8368}, {5., 19.7664}, {0., 19.1837}}

Out[494]= {{100., 25.6984}, {95., 25.6985}, {90., 25.6986}, {85., 25.6988}, {80., 25.6991}, {75., 25.6994}, {70., 25.7}, {65., 25.701}, {60., 25.7024}, {55., 25.7047}, {50., 25.7081}, {45., 25.7133}, {40., 25.7209}, {35., 25.7319}, {30., 25.7474}, {25., 25.7679}, {20., 25.7931}, {15., 25.8191}, {10., 25.8343}, {5., 25.8123}, {0., 25.6972}}

Out[495]= {{100., 12.7126}, {95., 12.7131}, {90., 12.7138}, {85., 12.7146}, {80., 12.7159}, {75., 12.7178}, {70., 12.7208}, {65., 12.7259}, {60., 12.7348}, {55., 12.7505}, {50., 12.779}, {45., 12.8315}, {40., 12.929}, {35., 13.1071}, {30., 13.4213}, {25., 13.9444}, {20., 14.7345}, {15., 15.7258}, {10., 16.4882}, {5., 15.9513}, {0., 12.7065}}

Out[496]= {{100., 15.5894}, {95., 15.5894}, {90., 15.5894}, {85., 15.5894}, {80., 15.5894}, {75., 15.5894}, {70., 15.5893}, {65., 15.5893}, {60., 15.5892}, {55., 15.589}, {50., 15.5888}, {45., 15.5884}, {40., 15.5878}, {35., 15.5869}, {30., 15.5853}, {25., 15.5831}, {20., 15.58}, {15., 15.5764}, {10., 15.5735}, {5., 15.5752}, {0., 15.5895}}

Out[497]= {{100., 15.7032}, {95., 15.7032}, {90., 15.7032}, {85., 15.7032}, {80., 15.7032}, {75., 15.7031}, {70., 15.7031}, {65., 15.7031}, {60., 15.7031}, {55., 15.703}, {50., 15.7029}, {45., 15.7028}, {40., 15.7026}, {35., 15.7023}, {30., 15.702}, {25., 15.7014}, {20., 15.7008}, {15., 15.7002}, {10., 15.6998}, {5., 15.7003}, {0., 15.7032}}

Out[498]= {{100., 15.3874}, {95., 15.3874}, {90., 15.3874}, {85., 15.3873}, {80., 15.3873}, {75., 15.3873}, {70., 15.3872}, {65., 15.3871}, {60., 15.3869}, {55., 15.3865}, {50., 15.3858}, {45., 15.3845}, {40., 15.3822}, {35., 15.3779}, {30., 15.3703}, {25., 15.3575}, {20., 15.3379}, {15., 15.3124}, {10., 15.2911}, {5., 15.3016}, {0., 15.3875}}

Out[499]= {{100., 366.865}, {95., 344.866}, {90., 327.359}, {85., 312.499}, {80., 299.424}, {75., 287.712}, {70., 277.084}, {65., 267.358}, {60., 258.253}, {55., 249.51}, {50., 240.867}, {45., 232.264}, {40., 223.761}, {35., 215.458}, {30., 207.357}, {25., 199.496}, {20., 191.835}, {15., 184.395}, {10., 177.095}, {5., 169.896}, {0., 162.797}}

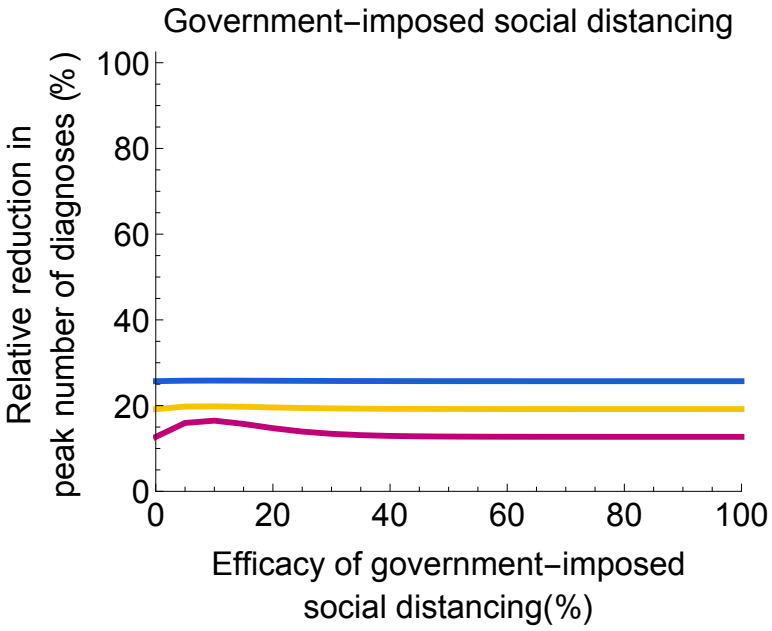
Out[500]= {{100., 376.25}, {95., 359.044}, {90., 343.923}, {85., 330.407}, {80., 318.134}, {75., 306.844}, {70., 296.396}, {65., 286.67}, {60., 277.525}, {55., 268.842}, {50., 260.439}, {45., 252.157}, {40., 243.995}, {35., 235.954}, {30., 228.052}, {25., 220.352}, {20., 212.811}, {15., 205.452}, {10., 198.232}, {5., 191.173}, {0., 184.215}}

Out[501]=
```
{{100., 366.163}, {95., 333.395}, {90., 313.}, {85., 296.837}, {80., 283.12},
 {75., 271.108}, {70., 260.419}, {65., 250.753}, {60., 241.649},
 {55., 232.584}, {50., 223.36}, {45., 214.195}, {40., 205.251},
 {35., 196.608}, {30., 188.265}, {25., 180.224}, {20., 172.423},
 {15., 164.802}, {10., 157.262}, {5., 149.662}, {0., 142.262}}
```

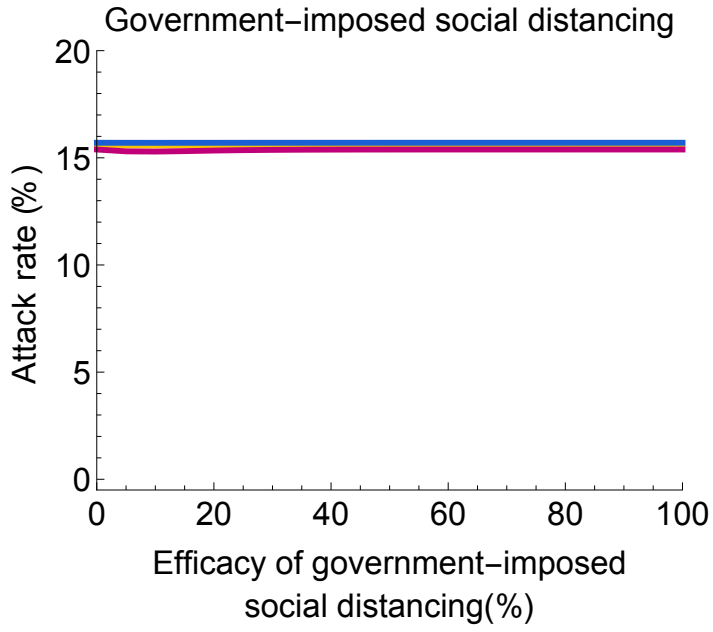
In[502]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS16 = ListLinePlot[{PeakGovBaseline, PeakGovMin, PeakGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS16", ".pdf"], SS16];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS16", ".eps"], SS16];


SS17 = ListLinePlot[{AttackRateGovBaseline, AttackRateGovMin, AttackRateGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel → {{"Attack rate (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS17", ".pdf"], SS17];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS17", ".eps"], SS17];

SS18 = ListLinePlot[{PeakTimingGovBaseline, PeakTimingGovMin, PeakTimingGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 800}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
     {label, {"7 days", "9 days", "5 days"}}], LegendLabel → Style[
```

```
      "Recovery period\nof infectious\nwith mild disease", Black, 13, "Text"]],
  FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
      {365 × 3 / 2, "18"}}, None}, {Automatic, None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS18", ".pdf"], SS18];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS18", ".eps"], SS18];
```

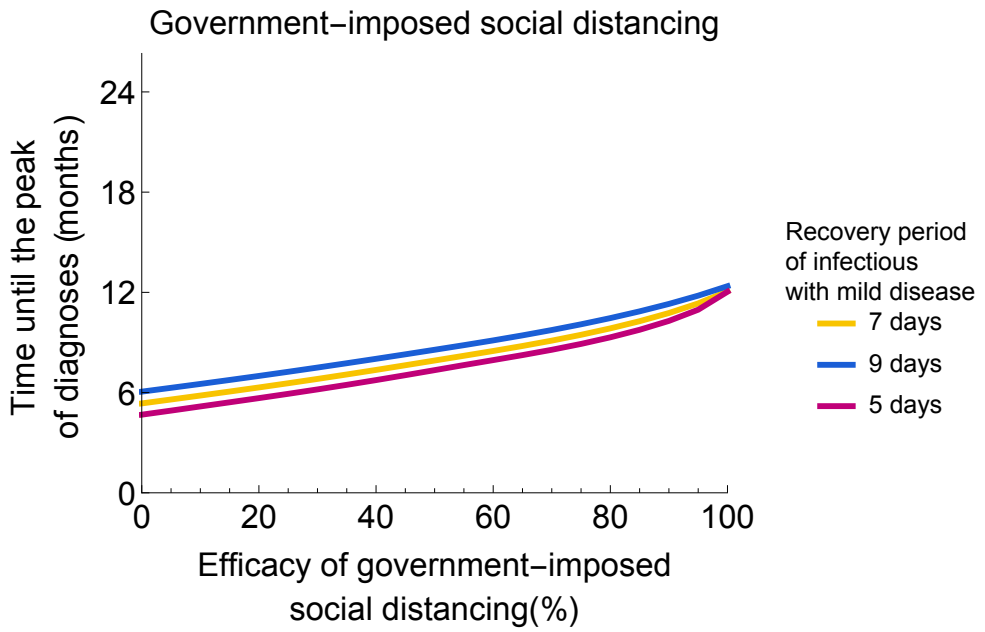
Out[503]=



Out[506]=



Out[509]=



In[532]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.01}];

PeakMaskBaseline = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMin = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateMin, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMax = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateMax, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskBaseline =
 AttackRateRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
```

```
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMin = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateMin, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMax = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateMax, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskBaseline =
 PeakTimingRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMin = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateMin, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMax = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateMax, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]
```

Out[533]= {{100., 99.9897}, {99., 99.9895}, {98., 99.9894}, {97., 99.9892}, {96., 99.9891},
{95., 99.9889}, {94., 99.9887}, {93., 99.9886}, {92., 99.9884}, {91., 99.9882},
{90., 99.988}, {89., 99.9878}, {88., 99.9876}, {87., 99.9874}, {86., 99.9872},
{85., 99.987}, {84., 99.9867}, {83., 99.9865}, {82., 99.9862}, {81., 99.986},
{80., 99.9857}, {79., 99.9854}, {78., 99.9851}, {77., 99.9847}, {76., 99.9844},
{75., 99.984}, {74., 99.9837}, {73., 99.9832}, {72., 99.9828}, {71., 99.9823},
{70., 99.9818}, {69., 99.9812}, {68., 99.9806}, {67., 99.9799}, {66., 99.9792},
{65., 99.9783}, {64., 99.9772}, {63., 99.9758}, {62., 99.9733}, {61., 99.9687},
{60., 99.9621}, {59., 99.9522}, {58., 99.9356}, {57., 99.9046}, {56., 99.8396},
{55., 99.6973}, {54., 99.4204}, {53., 98.9754}, {52., 98.3611}, {51., 97.5905},
{50., 96.6796}, {49., 95.6439}, {48., 94.4978}, {47., 93.2544}, {46., 91.9255},
{45., 90.5218}, {44., 89.053}, {43., 87.5278}, {42., 85.9542}, {41., 84.3393},
{40., 82.6896}, {39., 81.011}, {38., 79.3088}, {37., 77.5876}, {36., 75.8518},
{35., 74.1053}, {34., 72.3514}, {33., 70.5933}, {32., 68.8339}, {31., 67.0755},
{30., 65.3205}, {29., 63.5709}, {28., 61.8284}, {27., 60.0946},
{26., 58.3709}, {25., 56.6586}, {24., 54.9588}, {23., 53.2724},
{22., 51.6003}, {21., 49.9432}, {20., 48.3019}, {19., 46.6767},
{18., 45.0683}, {17., 43.4769}, {16., 41.903}, {15., 40.3467}, {14., 38.8084},
{13., 37.2881}, {12., 35.7861}, {11., 34.3024}, {10., 32.8369},
{9., 31.3899}, {8., 29.9612}, {7., 28.5509}, {6., 27.1588}, {5., 25.7848},
{4., 24.4289}, {3., 23.091}, {2., 21.771}, {1., 20.4686}, {0., 19.1837}}

Out[534]= {{100., 99.9899}, {99., 99.9898}, {98., 99.9896}, {97., 99.9895}, {96., 99.9894},
{95., 99.9892}, {94., 99.9891}, {93., 99.989}, {92., 99.9888}, {91., 99.9887},
{90., 99.9885}, {89., 99.9883}, {88., 99.9882}, {87., 99.988}, {86., 99.9878},
{85., 99.9876}, {84., 99.9874}, {83., 99.9872}, {82., 99.987}, {81., 99.9868},
{80., 99.9866}, {79., 99.9864}, {78., 99.9861}, {77., 99.9859}, {76., 99.9856},
{75., 99.9854}, {74., 99.9851}, {73., 99.9848}, {72., 99.9845}, {71., 99.9841},
{70., 99.9838}, {69., 99.9834}, {68., 99.983}, {67., 99.9826}, {66., 99.9821},
{65., 99.9816}, {64., 99.9811}, {63., 99.9805}, {62., 99.9798}, {61., 99.9791},
{60., 99.9782}, {59., 99.977}, {58., 99.9752}, {57., 99.9712}, {56., 99.9656},
{55., 99.9573}, {54., 99.9438}, {53., 99.9196}, {52., 99.8712},
{51., 99.7676}, {50., 99.5622}, {49., 99.22}, {48., 98.7328}, {47., 98.1082},
{46., 97.3583}, {45., 96.4956}, {44., 95.5315}, {43., 94.477}, {42., 93.3418},
{41., 92.135}, {40., 90.8648}, {39., 89.5386}, {38., 88.1633}, {37., 86.7451},
{36., 85.2897}, {35., 83.8024}, {34., 82.2878}, {33., 80.7503}, {32., 79.1937},
{31., 77.6217}, {30., 76.0375}, {29., 74.4441}, {28., 72.8441}, {27., 71.2399},
{26., 69.6337}, {25., 68.0276}, {24., 66.4233}, {23., 64.8225},
{22., 63.2265}, {21., 61.6368}, {20., 60.0546}, {19., 58.4808},
{18., 56.9164}, {17., 55.3623}, {16., 53.8193}, {15., 52.288}, {14., 50.7689},
{13., 49.2627}, {12., 47.7697}, {11., 46.2904}, {10., 44.8251},
{9., 43.3741}, {8., 41.9376}, {7., 40.5159}, {6., 39.1091}, {5., 37.7173},
{4., 36.3407}, {3., 34.9793}, {2., 33.6332}, {1., 32.3024}, {0., 30.9869}}

Out[535]= {{100., 99.9898}, {99., 99.9897}, {98., 99.9895}, {97., 99.9893}, {96., 99.9892},
{95., 99.989}, {94., 99.9888}, {93., 99.9886}, {92., 99.9884}, {91., 99.9882},
{90., 99.9879}, {89., 99.9877}, {88., 99.9875}, {87., 99.9872}, {86., 99.9869},
{85., 99.9867}, {84., 99.9864}, {83., 99.986}, {82., 99.9857}, {81., 99.9854},
{80., 99.985}, {79., 99.9846}, {78., 99.9842}, {77., 99.9837}, {76., 99.9833},
{75., 99.9827}, {74., 99.9822}, {73., 99.9815}, {72., 99.9808}, {71., 99.98},
{70., 99.9791}, {69., 99.9781}, {68., 99.9768}, {67., 99.975}, {66., 99.9716},
{65., 99.9664}, {64., 99.9587}, {63., 99.9468}, {62., 99.9263}, {61., 99.8862},
{60., 99.7973}, {59., 99.5986}, {58., 99.2216}, {57., 98.6383}, {56., 97.8568},
{55., 96.8969}, {54., 95.7797}, {53., 94.525}, {52., 93.1504}, {51., 91.672},
{50., 90.1042}, {49., 88.4597}, {48., 86.75}, {47., 84.9855}, {46., 83.1752},
{45., 81.3274}, {44., 79.4494}, {43., 77.5478}, {42., 75.6283}, {41., 73.6961},
{40., 71.7559}, {39., 69.8117}, {38., 67.8672}, {37., 65.9255}, {36., 63.9895},
{35., 62.0617}, {34., 60.1442}, {33., 58.2391}, {32., 56.3479}, {31., 54.4722},
{30., 52.6133}, {29., 50.7721}, {28., 48.9498}, {27., 47.1469}, {26., 45.3644},
{25., 43.6026}, {24., 41.8621}, {23., 40.1432}, {22., 38.4462},
{21., 36.7713}, {20., 35.1188}, {19., 33.4886}, {18., 31.8809},
{17., 30.2956}, {16., 28.7327}, {15., 27.1921}, {14., 25.6738},
{13., 24.1775}, {12., 22.7031}, {11., 21.2505}, {10., 19.8194},
{9., 18.4096}, {8., 17.021}, {7., 15.6532}, {6., 14.306}, {5., 12.9792},
{4., 11.6724}, {3., 10.3855}, {2., 9.11815}, {1., 7.87001}, {0., 6.64088}}

Out[536]= {{100., 0.0139929}, {99., 0.0143083}, {98., 0.0146382}, {97., 0.0149835},
{96., 0.0153453}, {95., 0.0157249}, {94., 0.0161236}, {93., 0.0165428},
{92., 0.0169843}, {91., 0.0174499}, {90., 0.0179415}, {89., 0.0184615},
{88., 0.0190124}, {87., 0.0195969}, {86., 0.0202184}, {85., 0.0208804},
{84., 0.0215871}, {83., 0.0223432}, {82., 0.0231541}, {81., 0.024026},
{80., 0.024966}, {79., 0.0259827}, {78., 0.0270857}, {77., 0.0282867},
{76., 0.0295994}, {75., 0.0310405}, {74., 0.0326297}, {73., 0.0343915},
{72., 0.0363557}, {71., 0.0385599}, {70., 0.0410512}, {69., 0.0438904},
{68., 0.0471564}, {67., 0.0509542}, {66., 0.0554265}, {65., 0.0607718},
{64., 0.0672748}, {63., 0.0753581}, {62., 0.0856753}, {61., 0.09929},
{60., 0.118038}, {59., 0.145326}, {58., 0.18798}, {57., 0.260716},
{56., 0.396241}, {55., 0.661302}, {54., 1.14896}, {53., 1.87324},
{52., 2.67945}, {51., 3.4173}, {50., 4.06489}, {49., 4.65068}, {48., 5.19629},
{47., 5.71174}, {46., 6.20132}, {45., 6.66722}, {44., 7.11091}, {43., 7.53366},
{42., 7.93661}, {41., 8.32086}, {40., 8.68743}, {39., 9.03728},
{38., 9.37132}, {37., 9.6904}, {36., 9.99534}, {35., 10.2869}, {34., 10.5658},
{33., 10.8326}, {32., 11.0881}, {31., 11.3328}, {30., 11.5672},
{29., 11.7919}, {28., 12.0072}, {27., 12.2137}, {26., 12.4119}, {25., 12.602},
{24., 12.7845}, {23., 12.9598}, {22., 13.1282}, {21., 13.29}, {20., 13.4455},
{19., 13.595}, {18., 13.7388}, {17., 13.8772}, {16., 14.0103}, {15., 14.1385},
{14., 14.2619}, {13., 14.3808}, {12., 14.4953}, {11., 14.6056}, {10., 14.7119},
{9., 14.8145}, {8., 14.9133}, {7., 15.0087}, {6., 15.1007}, {5., 15.1895},
{4., 15.2752}, {3., 15.3579}, {2., 15.4378}, {1., 15.5149}, {0., 15.5895}}

Out[537]= {{100., 0.0130921}, {99., 0.0133529}, {98., 0.0136242}, {97., 0.0139069},
{96., 0.0142015}, {95., 0.014509}, {94., 0.0148301}, {93., 0.0151659},
{92., 0.0155173}, {91., 0.0158855}, {90., 0.0162718}, {89., 0.0166774},
{88., 0.0171039}, {87., 0.0175531}, {86., 0.0180267}, {85., 0.0185269},
{84., 0.019056}, {83., 0.0196166}, {82., 0.0202117}, {81., 0.0208445},
{80., 0.0215188}, {79., 0.022239}, {78., 0.0230099}, {77., 0.0238372},
{76., 0.0247275}, {75., 0.0256883}, {74., 0.0267285}, {73., 0.0278585},
{72., 0.0290907}, {71., 0.03044}, {70., 0.0319241}, {69., 0.0335648},
{68., 0.0353886}, {67., 0.0374287}, {66., 0.0397266}, {65., 0.0423356},
{64., 0.0453246}, {63., 0.0487847}, {62., 0.0528386}, {61., 0.0576559},
{60., 0.0634775}, {59., 0.0706567}, {58., 0.0797327}, {57., 0.0915668},
{56., 0.107613}, {55., 0.130488}, {54., 0.165242}, {53., 0.222272},
{52., 0.323787}, {51., 0.515355}, {50., 0.872052}, {49., 1.45253},
{48., 2.19286}, {47., 2.93521}, {46., 3.59448}, {45., 4.17664}, {44., 4.70797},
{43., 5.20557}, {42., 5.67754}, {41., 6.12753}, {40., 6.55741}, {39., 6.96842},
{38., 7.36158}, {37., 7.7378}, {36., 8.09793}, {35., 8.4428}, {34., 8.77317},
{33., 9.08976}, {32., 9.39327}, {31., 9.68434}, {30., 9.96359}, {29., 10.2316},
{28., 10.4889}, {27., 10.7361}, {26., 10.9736}, {25., 11.2018}, {24., 11.4212},
{23., 11.6323}, {22., 11.8353}, {21., 12.0306}, {20., 12.2186}, {19., 12.3996},
{18., 12.574}, {17., 12.7419}, {16., 12.9038}, {15., 13.0598}, {14., 13.2101},
{13., 13.3552}, {12., 13.4951}, {11., 13.6301}, {10., 13.7604},
{9., 13.8861}, {8., 14.0076}, {7., 14.1249}, {6., 14.2382}, {5., 14.3476},
{4., 14.4534}, {3., 14.5557}, {2., 14.6546}, {1., 14.7502}, {0., 14.8427}}

Out[538]= {{100., 0.0147718}, {99., 0.0151517}, {98., 0.0155512}, {97., 0.015972},
{96., 0.0164158}, {95., 0.0168845}, {94., 0.0173803}, {93., 0.0179056},
{92., 0.018463}, {91., 0.0190556}, {90., 0.0196868}, {89., 0.0203605},
{88., 0.0210811}, {87., 0.0218537}, {86., 0.0226841}, {85., 0.023579},
{84., 0.0245462}, {83., 0.0255948}, {82., 0.0267354}, {81., 0.0279808},
{80., 0.0293459}, {79., 0.0308489}, {78., 0.0325118}, {77., 0.0343615},
{76., 0.0364311}, {75., 0.0387625}, {74., 0.0414085}, {73., 0.0444373},
{72., 0.0479385}, {71., 0.0520316}, {70., 0.0568803}, {69., 0.0627144},
{68., 0.0698669}, {67., 0.0788381}, {66., 0.0904138}, {65., 0.105897},
{64., 0.127595}, {63., 0.159931}, {62., 0.212169}, {61., 0.305341},
{60., 0.488174}, {59., 0.856911}, {58., 1.50757}, {57., 2.35863},
{56., 3.19303}, {55., 3.92537}, {54., 4.57957}, {53., 5.18406}, {52., 5.75211},
{51., 6.28909}, {50., 6.79765}, {49., 7.27968}, {48., 7.73677}, {47., 8.17043},
{46., 8.58205}, {45., 8.97296}, {44., 9.34438}, {43., 9.69749}, {42., 10.0333},
{41., 10.353}, {40., 10.6573}, {39., 10.9473}, {38., 11.2237}, {37., 11.4873},
{36., 11.7387}, {35., 11.9787}, {34., 12.2078}, {33., 12.4266}, {32., 12.6357},
{31., 12.8355}, {30., 13.0267}, {29., 13.2095}, {28., 13.3845}, {27., 13.5521},
{26., 13.7126}, {25., 13.8663}, {24., 14.0136}, {23., 14.1549}, {22., 14.2904},
{21., 14.4204}, {20., 14.5451}, {19., 14.6649}, {18., 14.7799},
{17., 14.8903}, {16., 14.9965}, {15., 15.0985}, {14., 15.1965},
{13., 15.2908}, {12., 15.3815}, {11., 15.4688}, {10., 15.5527},
{9., 15.6336}, {8., 15.7114}, {7., 15.7863}, {6., 15.8585}, {5., 15.9281},
{4., 15.9951}, {3., 16.0597}, {2., 16.122}, {1., 16.1821}, {0., 16.24}}

Out[539]= {{100., 71.893}, {99., 72.0936}, {98., 72.3142}, {97., 72.5348}, {96., 72.7553},
{95., 72.996}, {94., 73.2366}, {93., 73.4773}, {92., 73.738}, {91., 73.9987},
{90., 74.2794}, {89., 74.5802}, {88., 74.8811}, {87., 75.1819}, {86., 75.5228},
{85., 75.8637}, {84., 76.2247}, {83., 76.6057}, {82., 77.0068}, {81., 77.4479},
{80., 77.8891}, {79., 78.3905}, {78., 78.8918}, {77., 79.4533}, {76., 80.075},
{75., 80.7167}, {74., 81.4587}, {73., 82.2609}, {72., 83.1432}, {71., 84.166},
{70., 85.3291}, {69., 86.7128}, {68., 88.3572}, {67., 90.4027}, {66., 93.0699},
{65., 96.7798}, {64., 102.676}, {63., 115.129}, {62., 266.155}, {61., 367.647},
{60., 439.801}, {59., 513.178}, {58., 593.814}, {57., 679.344}, {56., 751.137},
{55., 773.376}, {54., 737.46}, {53., 675.855}, {52., 614.289}, {51., 560.866},
{50., 516.166}, {49., 478.886}, {48., 447.542}, {47., 420.93}, {46., 398.089},
{45., 378.276}, {44., 360.909}, {43., 345.588}, {42., 331.931}, {41., 319.698},
{40., 308.669}, {39., 298.682}, {38., 289.557}, {37., 281.215}, {36., 273.554},
{35., 266.475}, {34., 259.938}, {33., 253.842}, {32., 248.166},
{31., 242.872}, {30., 237.919}, {29., 233.266}, {28., 228.875},
{27., 224.743}, {26., 220.853}, {25., 217.163}, {24., 213.654},
{23., 210.325}, {22., 207.176}, {21., 204.168}, {20., 201.3}, {19., 198.573},
{18., 195.946}, {17., 193.439}, {16., 191.053}, {15., 188.747},
{14., 186.541}, {13., 184.415}, {12., 182.37}, {11., 180.404}, {10., 178.519},
{9., 176.694}, {8., 174.93}, {7., 173.245}, {6., 171.601}, {5., 170.016},
{4., 168.472}, {3., 166.988}, {2., 165.544}, {1., 164.141}, {0., 162.797}}

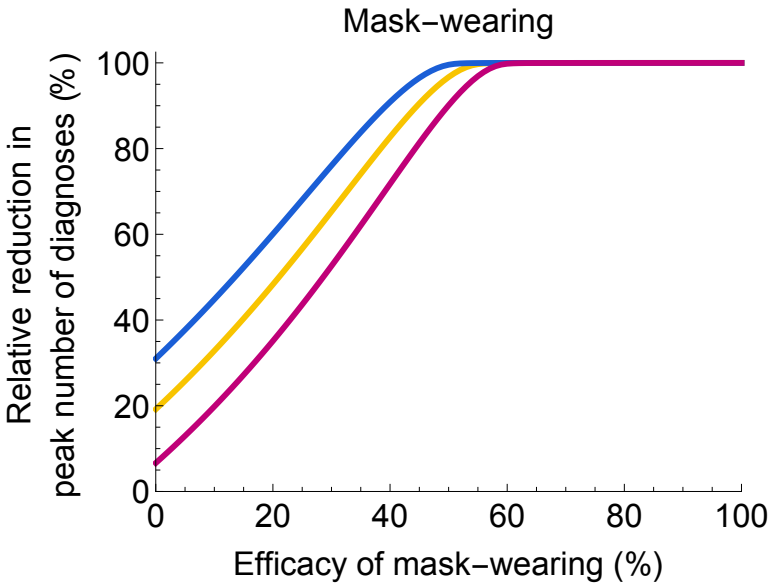
Out[540]= {{100., 72.8957}, {99., 73.0762}, {98., 73.2567}, {97., 73.4372}, {96., 73.6177},
{95., 73.8182}, {94., 74.0187}, {93., 74.2193}, {92., 74.4198}, {91., 74.6404},
{90., 74.861}, {89., 75.1016}, {88., 75.3423}, {87., 75.5829}, {86., 75.8436},
{85., 76.1043}, {84., 76.3851}, {83., 76.6859}, {82., 76.9867}, {81., 77.3076},
{80., 77.6485}, {79., 77.9894}, {78., 78.3704}, {77., 78.7715}, {76., 79.1726},
{75., 79.6338}, {74., 80.095}, {73., 80.6164}, {72., 81.178}, {71., 81.7796},
{70., 82.4413}, {69., 83.1633}, {68., 83.9855}, {67., 84.908}, {66., 85.9708},
{65., 87.1941}, {64., 88.6781}, {63., 90.4829}, {62., 92.8292}, {61., 96.078},
{60., 101.051}, {59., 110.898}, {58., 233.226}, {57., 367.306},
{56., 444.253}, {55., 519.635}, {54., 601.415}, {53., 689.17}, {52., 768.704},
{51., 807.167}, {50., 785.248}, {49., 727.594}, {48., 664.003},
{47., 606.729}, {46., 558.078}, {45., 517.249}, {44., 482.836},
{43., 453.598}, {42., 428.49}, {41., 406.712}, {40., 387.661}, {39., 370.856},
{38., 355.896}, {37., 342.5}, {36., 330.427}, {35., 319.498}, {34., 309.531},
{33., 300.427}, {32., 292.044}, {31., 284.343}, {30., 277.184},
{29., 270.566}, {28., 264.39}, {27., 258.614}, {26., 253.22}, {25., 248.146},
{24., 243.393}, {23., 238.901}, {22., 234.67}, {21., 230.659}, {20., 226.849},
{19., 223.239}, {18., 219.81}, {17., 216.561}, {16., 213.453}, {15., 210.485},
{14., 207.637}, {13., 204.93}, {12., 202.323}, {11., 199.837}, {10., 197.45},
{9., 195.144}, {8., 192.938}, {7., 190.812}, {6., 188.767}, {5., 186.802},
{4., 184.896}, {3., 183.072}, {2., 181.287}, {1., 179.582}, {0., 177.918}}

Out[541]=
```
{{100., 73.1564}, {99., 73.4171}, {98., 73.6979}, {97., 73.9586}, {96., 74.2594},
 {95., 74.5602}, {94., 74.861}, {93., 75.2019}, {92., 75.5428}, {91., 75.8837},
 {90., 76.2648}, {89., 76.6458}, {88., 77.0469}, {87., 77.4881}, {86., 77.9493},
 {85., 78.4306}, {84., 78.9319}, {83., 79.4934}, {82., 80.075}, {81., 80.7167},
 {80., 81.3985}, {79., 82.1606}, {78., 82.9828}, {77., 83.9053}, {76., 84.928},
 {75., 86.1112}, {74., 87.4548}, {73., 89.0591}, {72., 90.9843}, {71., 93.3907},
 {70., 96.5994}, {69., 101.172}, {68., 108.792}, {67., 128.304}, {66., 295.915},
 {65., 373.924}, {64., 440.924}, {63., 512.155}, {62., 591.608},
 {61., 674.631}, {60., 736.818}, {59., 741.13}, {58., 692.64}, {57., 628.728},
 {56., 569.75}, {55., 520.096}, {54., 479.086}, {53., 445.075}, {52., 416.558},
 {51., 392.373}, {50., 371.598}, {49., 353.569}, {48., 337.767}, {47., 323.789},
 {46., 311.356}, {45., 300.186}, {44., 290.119}, {43., 280.994}, {42., 272.652},
 {41., 265.032}, {40., 258.013}, {39., 251.535}, {38., 245.519}, {37., 239.944},
 {36., 234.75}, {35., 229.877}, {34., 225.325}, {33., 221.054}, {32., 217.023},
 {31., 213.233}, {30., 209.643}, {29., 206.234}, {28., 203.025}, {27., 199.957},
 {26., 197.049}, {25., 194.282}, {24., 191.635}, {23., 189.108}, {22., 186.701},
 {21., 184.395}, {20., 182.169}, {19., 180.043}, {18., 178.018},
 {17., 176.053}, {16., 174.168}, {15., 172.343}, {14., 170.598},
 {13., 168.914}, {12., 167.289}, {11., 165.725}, {10., 164.201},
 {9., 162.737}, {8., 161.313}, {7., 159.929}, {6., 158.586}, {5., 157.302},
 {4., 156.039}, {3., 154.836}, {2., 153.653}, {1., 152.489}, {0., 151.386}}
```

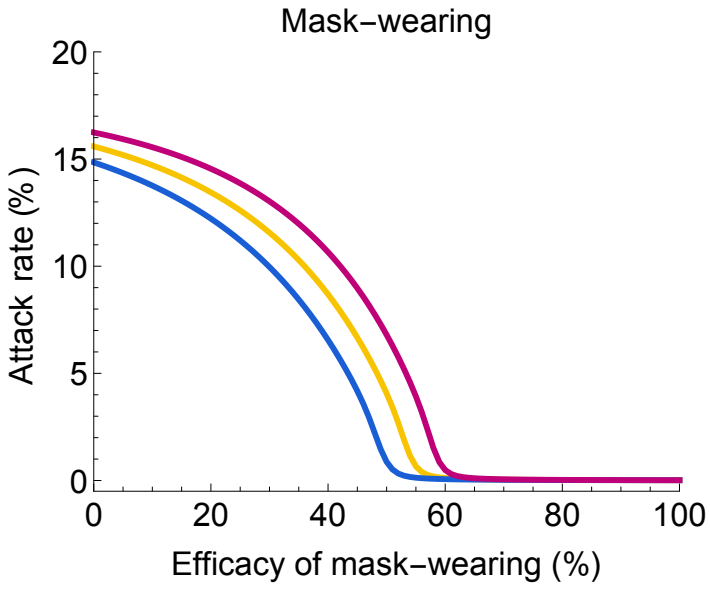
In[542]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS19 = ListLinePlot[{PeakMaskBaseline, PeakMaskMin, PeakMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS19", ".pdf"], SS19];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS19", ".eps"], SS19];

SS20 =
 ListLinePlot[{AttackRateMaskBaseline, AttackRateMaskMin, AttackRateMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel →
   {{"Attack rate (%)", None}, {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS20", ".pdf"], SS20];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS20", ".eps"], SS20];
```

```
SS21 =
 ListLinePlot[{PeakTimingMaskBaseline, PeakTimingMaskMin, PeakTimingMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 365 × 5 / 2 + 20}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of mask-wearing (%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
     {label, {"5 days", "7 days", "3 days"}}], LegendLabel → Style[
      "Delay from onset\nof infectiousness\nto diagnosis", Black, 13, "Text"]],
  FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
      {365 × 3 / 2, "18"}, {365 × 5 / 2, "30"}}, None}, {Automatic, None}}]
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS21", ".pdf"], SS21];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS21", ".eps"], SS21];
```

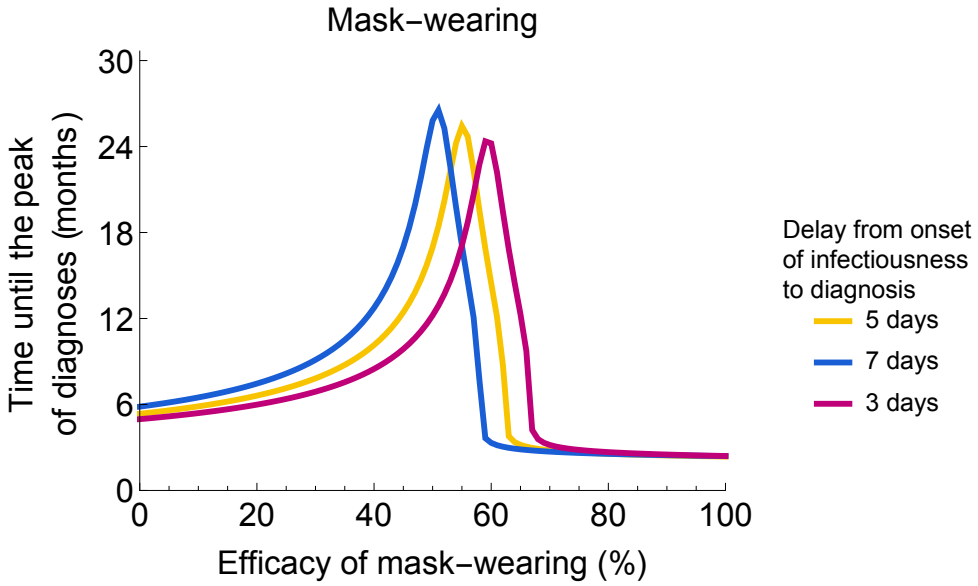
Out[543]=



Out[546]=



Out[549]=



In[552]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.1}];

PeakGovBaseline =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMin =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateMin,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
```

```
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMax =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateMax,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovBaseline = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMin = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateMin,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMax = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateMax,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovBaseline = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMin = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateMin,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
```

```
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMax = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateMax,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]
```

Out[553]= {{100., 19.1862}, {90., 19.1867}, {80., 19.1876},
{70., 19.1898}, {60., 19.1954}, {50., 19.2108}, {40., 19.2514},
{30., 19.3545}, {20., 19.5743}, {10., 19.8368}, {0., 19.1837}}

Out[554]= {{100., 30.9891}, {90., 30.9895}, {80., 30.9903},
{70., 30.9921}, {60., 30.9964}, {50., 31.0068}, {40., 31.03},
{30., 31.0806}, {20., 31.1758}, {10., 31.2745}, {0., 30.9869}}

Out[555]= {{100., 6.64312}, {90., 6.64356}, {80., 6.64445},
{70., 6.64655}, {60., 6.6527}, {50., 6.67259}, {40., 6.73684},
{30., 6.9267}, {20., 7.38368}, {10., 7.98765}, {0., 6.64089}}

Out[556]= {{100., 15.5894}, {90., 15.5894}, {80., 15.5894},
{70., 15.5893}, {60., 15.5892}, {50., 15.5888}, {40., 15.5878},
{30., 15.5853}, {20., 15.58}, {10., 15.5735}, {0., 15.5895}}

Out[557]= {{100., 14.8426}, {90., 14.8426}, {80., 14.8426},
{70., 14.8425}, {60., 14.8424}, {50., 14.8421}, {40., 14.8414},
{30., 14.8398}, {20., 14.8369}, {10., 14.8339}, {0., 14.8427}}

Out[558]= {{100., 16.24}, {90., 16.24}, {80., 16.2399},
{70., 16.2399}, {60., 16.2398}, {50., 16.2394}, {40., 16.2382},
{30., 16.2346}, {20., 16.2259}, {10., 16.214}, {0., 16.24}}

Out[559]= {{100., 366.865}, {90., 327.359}, {80., 299.424},
{70., 277.084}, {60., 258.253}, {50., 240.867}, {40., 223.761},
{30., 207.357}, {20., 191.835}, {10., 177.095}, {0., 162.797}}

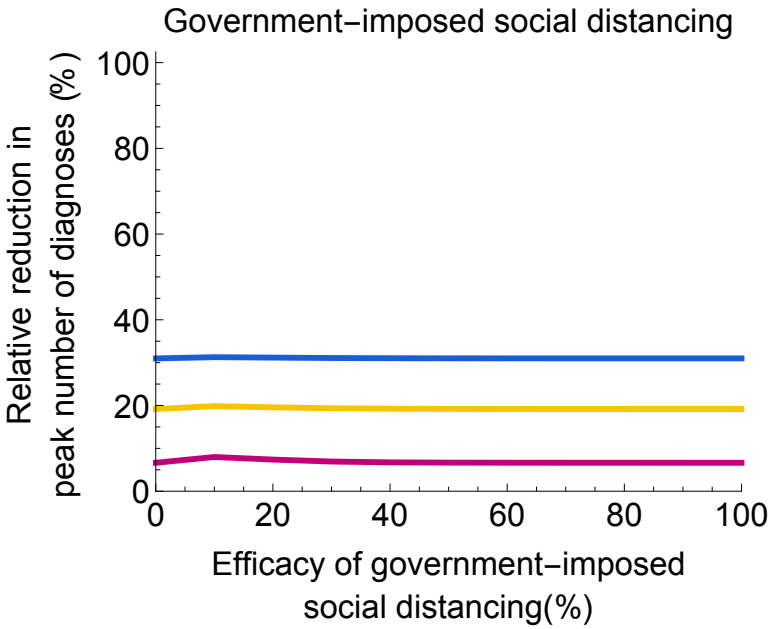
Out[560]= {{100., 386.778}, {90., 344.886}, {80., 316.951},
{70., 295.152}, {60., 277.345}, {50., 261.001}, {40., 243.775},
{30., 226.348}, {20., 209.543}, {10., 193.459}, {0., 177.918}}

Out[561]= {{100., 351.464}, {90., 313.}, {80., 285.266},
{70., 262.304}, {60., 242.25}, {50., 224.222}, {40., 207.718},
{30., 192.417}, {20., 178.118}, {10., 164.562}, {0., 151.386}}

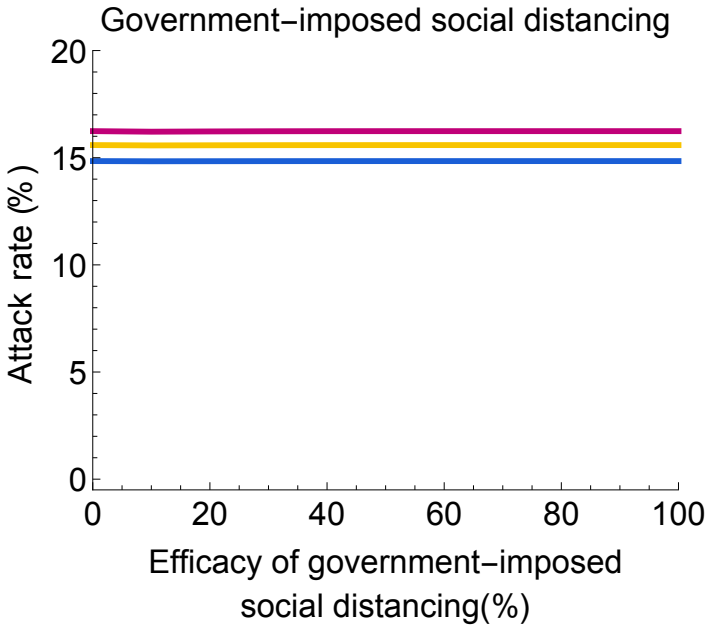
In[562]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS22 = ListLinePlot[{PeakGovBaseline, PeakGovMin, PeakGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
  "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS22", ".pdf"], SS22];
```

```
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS22", ".eps"], SS22];


SS23 = ListLinePlot[{AttackRateGovBaseline, AttackRateGovMin, AttackRateGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel → {{"Attack rate (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS23", ".pdf"], SS23];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS23", ".eps"], SS23];

SS24 = ListLinePlot[{PeakTimingGovBaseline, PeakTimingGovMin, PeakTimingGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 800}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  PlotLegends → LineLegend[Table[Style[Row[{label}], Black, 13, "Text"],
     {label, {"5 days", "7 days", "3 days"}}], LegendLabel → Style[
      "Delay from onset\nof infectiousness\nto diagnosis", Black, 13, "Text"]],
  FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
      {365 × 3 / 2, "18"}}, None}, {Automatic, None}}]

Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS24", ".pdf"], SS24];
Export[StringJoin[
    "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
      Resubmission//FinalFigures//SS24", ".eps"], SS24];
```

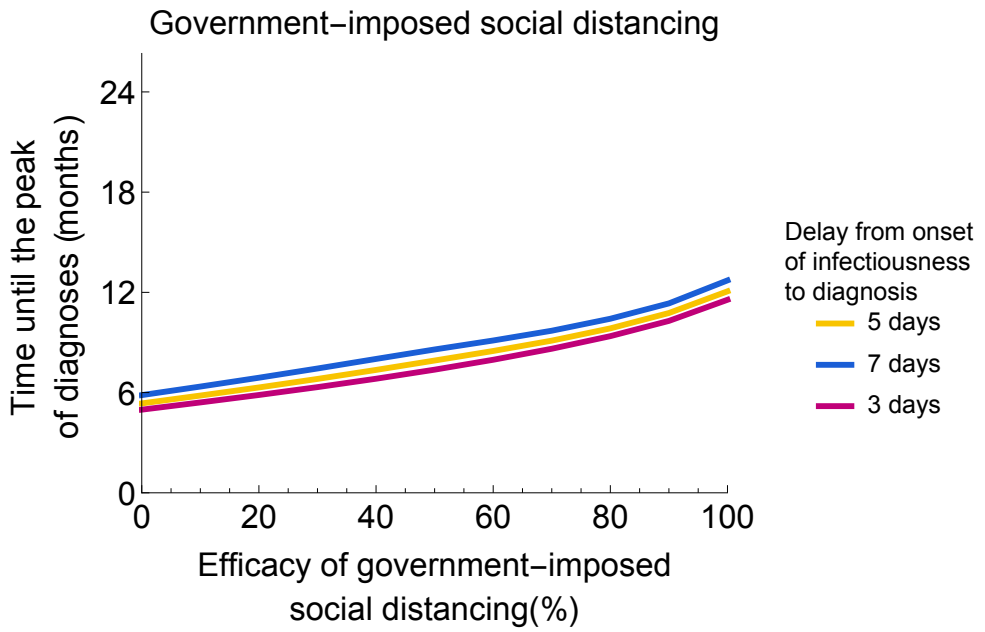
Out[563]=



Out[566]=



Out[569]=



In[655]:=
```
ReductionFactor = Table[i, {i, 0, 1, 0.01}];
tend = 3;

PeakMaskBaseline = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberBaseline,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMin = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberMin,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakMaskMax = PeakRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberMax,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskBaseline =
 AttackRateRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
```

```
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMin = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberMin,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

AttackRateMaskMax = AttackRateRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberMax,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskBaseline =
 PeakTimingRange["Mask", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMin = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberMin,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]

PeakTimingMaskMax = PeakTimingRange["Mask",
  Join[ParametersSensitivityAnalyses[RelativeInfectivityBaseline,
    ProportionMildSymptomsBaseline, RecoveryRateMildSymptomsBaseline,
    DiagnosisRateBaseline, BasicReproductionNumberMax,
    RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r1 → factor}]]
```

Out[657]= {{100., 99.9897}, {99., 99.9895}, {98., 99.9894}, {97., 99.9892}, {96., 99.9891},
{95., 99.9889}, {94., 99.9887}, {93., 99.9886}, {92., 99.9884}, {91., 99.9882},
{90., 99.988}, {89., 99.9878}, {88., 99.9876}, {87., 99.9874}, {86., 99.9872},
{85., 99.987}, {84., 99.9867}, {83., 99.9865}, {82., 99.9862}, {81., 99.986},
{80., 99.9857}, {79., 99.9854}, {78., 99.9851}, {77., 99.9847}, {76., 99.9844},
{75., 99.984}, {74., 99.9837}, {73., 99.9832}, {72., 99.9828}, {71., 99.9823},
{70., 99.9818}, {69., 99.9812}, {68., 99.9806}, {67., 99.9799}, {66., 99.9792},
{65., 99.9783}, {64., 99.9772}, {63., 99.9758}, {62., 99.9733}, {61., 99.9687},
{60., 99.9621}, {59., 99.9522}, {58., 99.9356}, {57., 99.9046}, {56., 99.8396},
{55., 99.6973}, {54., 99.4204}, {53., 98.9754}, {52., 98.3611}, {51., 97.5905},
{50., 96.6796}, {49., 95.6439}, {48., 94.4978}, {47., 93.2544}, {46., 91.9255},
{45., 90.5218}, {44., 89.053}, {43., 87.5278}, {42., 85.9542}, {41., 84.3393},
{40., 82.6896}, {39., 81.011}, {38., 79.3088}, {37., 77.5876}, {36., 75.8518},
{35., 74.1053}, {34., 72.3514}, {33., 70.5933}, {32., 68.8339}, {31., 67.0755},
{30., 65.3205}, {29., 63.5709}, {28., 61.8284}, {27., 60.0946},
{26., 58.3709}, {25., 56.6586}, {24., 54.9588}, {23., 53.2724},
{22., 51.6003}, {21., 49.9432}, {20., 48.3019}, {19., 46.6767},
{18., 45.0683}, {17., 43.4769}, {16., 41.9029}, {15., 40.3467},
{14., 38.8084}, {13., 37.2881}, {12., 35.7861}, {11., 34.3024}, {10., 32.837},
{9., 31.3899}, {8., 29.9612}, {7., 28.5509}, {6., 27.1587}, {5., 25.7848},
{4., 24.4289}, {3., 23.091}, {2., 21.771}, {1., 20.4686}, {0., 19.1837}}

Out[658]= {{100., 99.9944}, {99., 99.9943}, {98., 99.9942}, {97., 99.9942}, {96., 99.9941},
{95., 99.994}, {94., 99.9939}, {93., 99.9939}, {92., 99.9938}, {91., 99.9937},
{90., 99.9936}, {89., 99.9935}, {88., 99.9934}, {87., 99.9933}, {86., 99.9932},
{85., 99.9931}, {84., 99.993}, {83., 99.9929}, {82., 99.9928}, {81., 99.9927},
{80., 99.9925}, {79., 99.9924}, {78., 99.9923}, {77., 99.9921}, {76., 99.992},
{75., 99.9919}, {74., 99.9917}, {73., 99.9915}, {72., 99.9914}, {71., 99.9912},
{70., 99.991}, {69., 99.9908}, {68., 99.9906}, {67., 99.9904}, {66., 99.9902},
{65., 99.9899}, {64., 99.9896}, {63., 99.9894}, {62., 99.9891}, {61., 99.9887},
{60., 99.9884}, {59., 99.988}, {58., 99.9876}, {57., 99.9871}, {56., 99.9865},
{55., 99.9858}, {54., 99.9848}, {53., 99.9831}, {52., 99.981}, {51., 99.9783},
{50., 99.9746}, {49., 99.9695}, {48., 99.9618}, {47., 99.9493}, {46., 99.927},
{45., 99.8823}, {44., 99.7897}, {43., 99.6134}, {42., 99.3286}, {41., 98.9298},
{40., 98.4222}, {39., 97.8141}, {38., 97.1142}, {37., 96.3309}, {36., 95.4717},
{35., 94.544}, {34., 93.5542}, {33., 92.5084}, {32., 91.4123}, {31., 90.2711},
{30., 89.0895}, {29., 87.872}, {28., 86.6227}, {27., 85.3453}, {26., 84.0433},
{25., 82.7199}, {24., 81.3781}, {23., 80.0205}, {22., 78.6498},
{21., 77.2681}, {20., 75.8776}, {19., 74.4803}, {18., 73.0779},
{17., 71.6721}, {16., 70.2645}, {15., 68.8563}, {14., 67.4488},
{13., 66.0432}, {12., 64.6406}, {11., 63.2419}, {10., 61.8481},
{9., 60.4598}, {8., 59.0778}, {7., 57.7029}, {6., 56.3355}, {5., 54.9763},
{4., 53.6257}, {3., 52.2842}, {2., 50.9521}, {1., 49.6298}, {0., 48.3176}}

Out[659]=
```
{{100., 99.984}, {99., 99.9838}, {98., 99.9835}, {97., 99.9833}, {96., 99.983},
 {95., 99.9827}, {94., 99.9825}, {93., 99.9822}, {92., 99.9819}, {91., 99.9815},
 {90., 99.9812}, {89., 99.9809}, {88., 99.9805}, {87., 99.9801}, {86., 99.9797},
 {85., 99.9793}, {84., 99.9789}, {83., 99.9784}, {82., 99.9779}, {81., 99.9774},
 {80., 99.9768}, {79., 99.9763}, {78., 99.9756}, {77., 99.975}, {76., 99.9742},
 {75., 99.9734}, {74., 99.9725}, {73., 99.9715}, {72., 99.9704}, {71., 99.9691},
 {70., 99.9675}, {69., 99.9654}, {68., 99.9621}, {67., 99.9536}, {66., 99.9398},
 {65., 99.9154}, {64., 99.8657}, {63., 99.7518}, {62., 99.4952}, {61., 99.0201},
 {60., 98.3052}, {59., 97.3668}, {58., 96.2311}, {57., 94.9238}, {56., 93.4685},
 {55., 91.8864}, {54., 90.1962}, {53., 88.4146}, {52., 86.5562}, {51., 84.6342},
 {50., 82.6602}, {49., 80.6443}, {48., 78.5956}, {47., 76.5221}, {46., 74.4308},
 {45., 72.3279}, {44., 70.2189}, {43., 68.1086}, {42., 66.0011}, {41., 63.9002},
 {40., 61.809}, {39., 59.7303}, {38., 57.6664}, {37., 55.6196}, {36., 53.5916},
 {35., 51.5839}, {34., 49.5978}, {33., 47.6344}, {32., 45.6946},
 {31., 43.7792}, {30., 41.8888}, {29., 40.0239}, {28., 38.1847},
 {27., 36.3717}, {26., 34.585}, {25., 32.8246}, {24., 31.0907}, {23., 29.3832},
 {22., 27.702}, {21., 26.047}, {20., 24.4181}, {19., 22.815}, {18., 21.2375},
 {17., 19.6854}, {16., 18.1584}, {15., 16.6563}, {14., 15.1786},
 {13., 13.7251}, {12., 12.2954}, {11., 10.8893}, {10., 9.50623}, {9., 8.14601},
 {8., 6.80819}, {7., 5.49246}, {6., 4.19844}, {5., 2.92574}, {4., 1.674},
 {3., 0.442887}, {2., -0.767985}, {1., -1.95898}, {0., -3.13045}}
```

Out[660]=
```
{{100., 0.0168099}, {99., 0.0171898}, {98., 0.0175871}, {97., 0.018003},
 {96., 0.0184389}, {95., 0.0188963}, {94., 0.0193767}, {93., 0.019882},
 {92., 0.0204141}, {91., 0.0209753}, {90., 0.0215679}, {89., 0.0221949},
 {88., 0.0228591}, {87., 0.0235641}, {86., 0.0243137}, {85., 0.0251123},
 {84., 0.025965}, {83., 0.0268774}, {82., 0.0278562}, {81., 0.0289087},
 {80., 0.0300438}, {79., 0.0312716}, {78., 0.0326041}, {77., 0.0340553},
 {76., 0.035642}, {75., 0.0373843}, {74., 0.0393064}, {73., 0.0414379},
 {72., 0.0438154}, {71., 0.0464845}, {70., 0.0495029}, {69., 0.0529447},
 {68., 0.0569064}, {67., 0.0615168}, {66., 0.0669506}, {65., 0.0734517},
 {64., 0.0813705}, {63., 0.0912283}, {62., 0.103834}, {61., 0.120511},
 {60., 0.143556}, {59., 0.177284}, {58., 0.230529}, {57., 0.322928},
 {56., 0.499075}, {55., 0.843161}, {54., 1.42405}, {53., 2.15048},
 {52., 2.85943}, {51., 3.50493}, {50., 4.10362}, {49., 4.66922}, {48., 5.20709},
 {47., 5.71932}, {46., 6.20723}, {45., 6.67203}, {44., 7.11488}, {43., 7.53694},
 {42., 7.93932}, {41., 8.32307}, {40., 8.68921}, {39., 9.03869},
 {38., 9.37241}, {37., 9.69121}, {36., 9.9959}, {35., 10.2872}, {34., 10.5659},
 {33., 10.8327}, {32., 11.0881}, {31., 11.3328}, {30., 11.5672},
 {29., 11.7919}, {28., 12.0072}, {27., 12.2137}, {26., 12.4119}, {25., 12.602},
 {24., 12.7845}, {23., 12.9598}, {22., 13.1282}, {21., 13.29}, {20., 13.4455},
 {19., 13.595}, {18., 13.7388}, {17., 13.8772}, {16., 14.0103}, {15., 14.1385},
 {14., 14.2619}, {13., 14.3808}, {12., 14.4953}, {11., 14.6056}, {10., 14.7119},
 {9., 14.8145}, {8., 14.9133}, {7., 15.0087}, {6., 15.1007}, {5., 15.1895},
 {4., 15.2752}, {3., 15.3579}, {2., 15.4378}, {1., 15.5149}, {0., 15.5895}}
```

Out[661]= {{100., 0.0109715}, {99., 0.0111698}, {98., 0.0113752}, {97., 0.0115883},
{96., 0.0118094}, {95., 0.0120391}, {94., 0.0122778}, {93., 0.012526},
{92., 0.0127844}, {91., 0.0130536}, {90., 0.0133343}, {89., 0.0136272},
{88., 0.0139332}, {87., 0.0142531}, {86., 0.0145879}, {85., 0.0149386},
{84., 0.0153066}, {83., 0.0156929}, {82., 0.0160992}, {81., 0.0165268},
{80., 0.0169776}, {79., 0.0174536}, {78., 0.0179568}, {77., 0.0184898},
{76., 0.0190551}, {75., 0.019656}, {74., 0.0202957}, {73., 0.0209784},
{72., 0.0217084}, {71., 0.0224908}, {70., 0.0233316}, {69., 0.0242375},
{68., 0.0252166}, {67., 0.026278}, {66., 0.0274327}, {65., 0.0286937},
{64., 0.0300765}, {63., 0.0315998}, {62., 0.0332862}, {61., 0.0351638},
{60., 0.0372674}, {59., 0.0396407}, {58., 0.0423399}, {57., 0.0454376},
{56., 0.0490302}, {55., 0.0532476}, {54., 0.0582699}, {53., 0.0643535},
{52., 0.0718757}, {51., 0.0814145}, {50., 0.0938978}, {49., 0.1109},
{48., 0.135273}, {47., 0.17255}, {46., 0.234166}, {45., 0.344322},
{44., 0.550521}, {43., 0.920536}, {42., 1.47974}, {41., 2.13485}, {40., 2.76142},
{39., 3.32054}, {38., 3.82787}, {37., 4.302}, {36., 4.7528}, {35., 5.18446},
{34., 5.59885}, {33., 5.99701}, {32., 6.37973}, {31., 6.74769}, {30., 7.10157},
{29., 7.44198}, {28., 7.76954}, {27., 8.08481}, {26., 8.38835}, {25., 8.68069},
{24., 8.96234}, {23., 9.23377}, {22., 9.49542}, {21., 9.74771}, {20., 9.99103},
{19., 10.2257}, {18., 10.4522}, {17., 10.6708}, {16., 10.8818}, {15., 11.0856},
{14., 11.2824}, {13., 11.4725}, {12., 11.6563}, {11., 11.8338}, {10., 12.0055},
{9., 12.1715}, {8., 12.3321}, {7., 12.4875}, {6., 12.6378}, {5., 12.7833},
{4., 12.9242}, {3., 13.0606}, {2., 13.1927}, {1., 13.3206}, {0., 13.4446}}

Out[662]= {{100., 0.0226962}, {99., 0.023311}, {98., 0.0239599}, {97., 0.0246457},
{96., 0.0253718}, {95., 0.0261418}, {94., 0.0269599}, {93., 0.0278306},
{92., 0.0287593}, {91., 0.0297519}, {90., 0.0308155}, {89., 0.0319578},
{88., 0.0331881}, {87., 0.0345169}, {86., 0.0359567}, {85., 0.0375222},
{84., 0.0392305}, {83., 0.0411025}, {82., 0.043163}, {81., 0.0454422},
{80., 0.0479773}, {79., 0.0508142}, {78., 0.0540109}, {77., 0.0576411},
{76., 0.0618001}, {75., 0.0666138}, {74., 0.0722511}, {73., 0.0789448},
{72., 0.0870242}, {71., 0.0969706}, {70., 0.109515}, {69., 0.125823},
{68., 0.147857}, {67., 0.179179}, {66., 0.226842}, {65., 0.30636},
{64., 0.455035}, {63., 0.758498}, {62., 1.33182}, {61., 2.12288}, {60., 2.92546},
{59., 3.6685}, {58., 4.36347}, {57., 5.0194}, {56., 5.63923}, {55., 6.22465},
{54., 6.77741}, {53., 7.29936}, {52., 7.79234}, {51., 8.25814}, {50., 8.69849},
{49., 9.11499}, {48., 9.50915}, {47., 9.88239}, {46., 10.236}, {45., 10.5713},
{44., 10.8893}, {43., 11.1911}, {42., 11.4778}, {41., 11.7501}, {40., 12.0092},
{39., 12.2557}, {38., 12.4903}, {37., 12.7137}, {36., 12.9265}, {35., 13.1293},
{34., 13.3226}, {33., 13.5069}, {32., 13.6828}, {31., 13.8507}, {30., 14.0111},
{29., 14.1642}, {28., 14.3106}, {27., 14.4506}, {26., 14.5844}, {25., 14.7125},
{24., 14.835}, {23., 14.9523}, {22., 15.0647}, {21., 15.1724}, {20., 15.2756},
{19., 15.3745}, {18., 15.4693}, {17., 15.5603}, {16., 15.6476}, {15., 15.7313},
{14., 15.8118}, {13., 15.889}, {12., 15.9632}, {11., 16.0344}, {10., 16.1029},
{9., 16.1687}, {8., 16.232}, {7., 16.2929}, {6., 16.3514}, {5., 16.4078},
{4., 16.462}, {3., 16.5141}, {2., 16.5644}, {1., 16.6127}, {0., 16.6593}}

Out[663]= $$\left\{\left\{100., \frac{1\,570\,230}{21\,841}\right\}, \left\{99., \frac{1\,574\,610}{21\,841}\right\}, \left\{98., \frac{1\,579\,355}{21\,841}\right\}, \left\{97., \frac{1\,584\,100}{21\,841}\right\}, \left\{96., \frac{1\,588\,845}{21\,841}\right\}, \left\{95., \frac{1\,593\,955}{21\,841}\right\}, \left\{94., \frac{1\,599\,430}{21\,841}\right\}, \left\{93., \frac{1\,604\,905}{21\,841}\right\}, \left\{92., \frac{1\,610\,380}{21\,841}\right\}, \left\{91., \frac{1\,616\,220}{21\,841}\right\}, \left\{90., \frac{1\,622\,425}{21\,841}\right\}, \left\{89., \frac{1\,628\,630}{21\,841}\right\}, \left\{88., \frac{1\,635\,200}{21\,841}\right\}, \left\{87., \frac{1\,642\,135}{21\,841}\right\}, \left\{86., \frac{1\,649\,435}{21\,841}\right\}, \left\{85., \frac{1\,657\,100}{21\,841}\right\}, \left\{84., \frac{1\,664\,765}{21\,841}\right\}, \left\{83., \frac{1\,673\,160}{21\,841}\right\}, \left\{82., \frac{1\,681\,920}{21\,841}\right\}, \left\{81., \frac{1\,691\,410}{21\,841}\right\}, \left\{80., \frac{1\,701\,265}{21\,841}\right\}, \left\{79., \frac{1\,711\,850}{21\,841}\right\}, \left\{78., \frac{1\,723\,165}{21\,841}\right\}, \left\{77., \frac{1\,735\,575}{21\,841}\right\}, \left\{76., \frac{1\,748\,715}{21\,841}\right\}, \left\{75., \frac{1\,762\,950}{21\,841}\right\}, \left\{74., \frac{1\,779\,010}{21\,841}\right\}, \left\{73., \frac{1\,796\,530}{21\,841}\right\}, \left\{72., \frac{1\,815\,875}{21\,841}\right\}, \left\{71., \frac{1\,838\,140}{21\,841}\right\}, \left\{70., \frac{1\,863\,690}{21\,841}\right\}, \left\{69., \frac{1\,893\,620}{21\,841}\right\}, \left\{68., \frac{1\,929\,755}{21\,841}\right\}, \left\{67., \frac{1\,974\,285}{21\,841}\right\}, \left\{66., \frac{2\,032\,685}{21\,841}\right\}, \left\{65., \frac{2\,113\,715}{21\,841}\right\}, \left\{64., \frac{2\,242\,560}{21\,841}\right\}, \left\{63., \frac{2\,514\,485}{21\,841}\right\}, \left\{62., \frac{5\,813\,355}{21\,841}\right\}, \left\{61., \frac{8\,030\,000}{21\,841}\right\}, \left\{60., \frac{9\,605\,705}{21\,841}\right\}, \left\{59., \frac{11\,208\,420}{21\,841}\right\}, \left\{58., \frac{12\,969\,180}{21\,841}\right\}, \left\{57., \frac{14\,837\,615}{21\,841}\right\}, \left\{56., \frac{16\,405\,655}{21\,841}\right\}, \left\{55., \frac{16\,891\,470}{21\,841}\right\}, \left\{54., \frac{16\,106\,720}{21\,841}\right\}, \left\{53., \frac{14\,761\,330}{21\,841}\right\}, \left\{52., \frac{13\,416\,670}{21\,841}\right\}, \left\{51., \frac{12\,249\,765}{21\,841}\right\}, \left\{50., \frac{11\,273\,390}{21\,841}\right\}, \left\{49., \frac{10\,459\,075}{21\,841}\right\}, \left\{48., \frac{9\,774\,700}{21\,841}\right\}, \left\{47., \frac{9\,193\,620}{21\,841}\right\}, \left\{46., \frac{8\,694\,665}{21\,841}\right\}, \left\{45., \frac{8\,261\,775}{21\,841}\right\}, \left\{44., \frac{7\,882\,540}{21\,841}\right\}, \left\{43., \frac{7\,547\,835}{21\,841}\right\}, \left\{42., \frac{7\,249\,630}{21\,841}\right\}, \left\{41., \frac{6\,982\,450}{21\,841}\right\}, \left\{40., \frac{6\,741\,915}{21\,841}\right\}, \left\{39., \frac{6\,523\,280}{21\,841}\right\}, \left\{38., \frac{6\,324\,355}{21\,841}\right\}, \left\{37., \frac{6\,142\,220}{21\,841}\right\}, \left\{36., \frac{5\,974\,685}{21\,841}\right\}, \left\{35., \frac{5\,820\,290}{21\,841}\right\}, \left\{34., \frac{5\,677\,210}{21\,841}\right\}, \left\{33., \frac{5\,543\,985}{21\,841}\right\}, \left\{32., \frac{5\,420\,250}{21\,841}\right\}, \left\{31., \frac{5\,304\,545}{21\,841}\right\}, \left\{30., \frac{5\,196\,140}{21\,841}\right\}, \left\{29., \frac{5\,094\,670}{21\,841}\right\}, \left\{28., \frac{4\,999\,040}{21\,841}\right\}, \left\{27., \frac{4\,908\,520}{21\,841}\right\}, \left\{26., \frac{4\,823\,475}{21\,841}\right\}, \left\{25., \frac{4\,742\,810}{21\,841}\right\}, \left\{24., \frac{4\,666\,525}{21\,841}\right\}, \left\{23., \frac{4\,593\,890}{21\,841}\right\}, \left\{22., \frac{4\,524\,905}{21\,841}\right\}, \left\{21., \frac{4\,459\,205}{21\,841}\right\}, \left\{20., \frac{4\,396\,425}{21\,841}\right\}, \left\{19., \frac{4\,336\,930}{21\,841}\right\}, \left\{18., \frac{4\,279\,625}{21\,841}\right\}, \left\{17., \frac{4\,224\,875}{21\,841}\right\}, \left\{16., \frac{4\,172\,680}{21\,841}\right\}, \left\{15., \frac{4\,122\,310}{21\,841}\right\}, \left\{14., \frac{4\,074\,130}{21\,841}\right\}, \left\{13., \frac{4\,027\,775}{21\,841}\right\}, \left\{12., \frac{3\,983\,245}{21\,841}\right\}, \left\{11., \frac{3\,940\,175}{21\,841}\right\}, \left\{10., \frac{3\,898\,930}{21\,841}\right\}, \left\{9., \frac{3\,859\,145}{21\,841}\right\}, \left\{8., \frac{3\,820\,820}{21\,841}\right\}, \left\{7., \frac{3\,783\,590}{21\,841}\right\}, \left\{6., \frac{3\,747\,820}{21\,841}\right\}, \left\{5., \frac{3\,713\,145}{21\,841}\right\}, \left\{4., \frac{3\,679\,565}{21\,841}\right\}, \left\{3., \frac{3\,647\,080}{21\,841}\right\}, \left\{2., \frac{3\,615\,690}{21\,841}\right\}, \left\{1., \frac{3\,585\,030}{21\,841}\right\}, \left\{0., \frac{3\,555\,465}{21\,841}\right\}\right\}$$

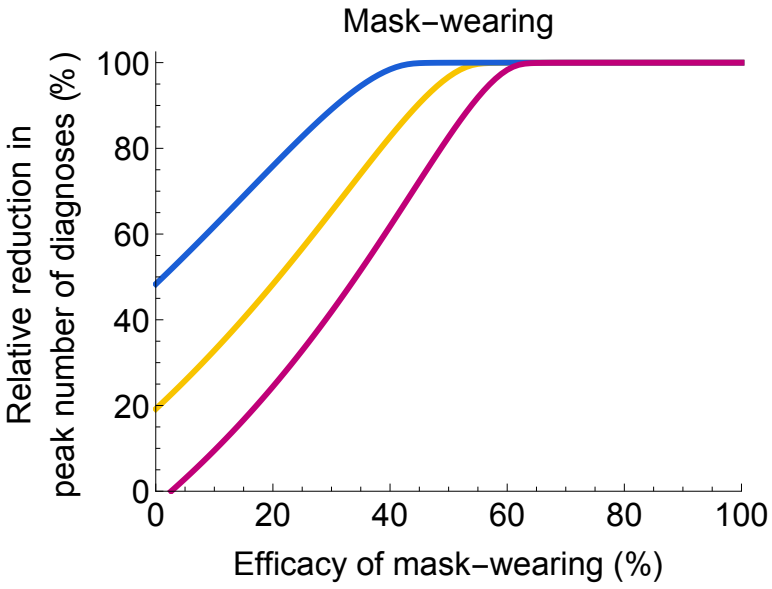
Out[664]= $\left\{\left\{100., \frac{1\,988\,520}{21\,841}\right\}, \left\{99., \frac{1\,993\,630}{21\,841}\right\}, \left\{98., \frac{1\,998\,740}{21\,841}\right\}, \left\{97., \frac{2\,003\,850}{21\,841}\right\},\right.$
$\left\{96., \frac{2\,009\,325}{21\,841}\right\}, \left\{95., \frac{2\,015\,165}{21\,841}\right\}, \left\{94., \frac{2\,020\,640}{21\,841}\right\}, \left\{93., \frac{2\,026\,480}{21\,841}\right\},$
$\left\{92., \frac{2\,032\,685}{21\,841}\right\}, \left\{91., \frac{2\,038\,890}{21\,841}\right\}, \left\{90., \frac{2\,045\,095}{21\,841}\right\}, \left\{89., \frac{2\,051\,665}{21\,841}\right\},$
$\left\{88., \frac{2\,058\,600}{21\,841}\right\}, \left\{87., \frac{2\,065\,535}{21\,841}\right\}, \left\{86., \frac{2\,072\,470}{21\,841}\right\}, \left\{85., \frac{2\,080\,135}{21\,841}\right\},$
$\left\{84., \frac{2\,087\,800}{21\,841}\right\}, \left\{83., \frac{2\,095\,465}{21\,841}\right\}, \left\{82., \frac{2\,103\,860}{21\,841}\right\}, \left\{81., \frac{2\,112\,255}{21\,841}\right\},$
$\left\{80., \frac{2\,121\,015}{21\,841}\right\}, \left\{79., \frac{2\,130\,505}{21\,841}\right\}, \left\{78., \frac{2\,139\,995}{21\,841}\right\}, \left\{77., \frac{2\,150\,215}{21\,841}\right\},$
$\left\{76., \frac{2\,160\,800}{21\,841}\right\}, \left\{75., \frac{2\,171\,750}{21\,841}\right\}, \left\{74., \frac{2\,183\,430}{21\,841}\right\}, \left\{73., \frac{2\,195\,840}{21\,841}\right\},$
$\left\{72., \frac{2\,208\,615}{21\,841}\right\}, \left\{71., \frac{2\,222\,485}{21\,841}\right\}, \left\{70., \frac{2\,237\,450}{21\,841}\right\}, \left\{69., \frac{2\,253\,145}{21\,841}\right\},$
$\left\{68., \frac{2\,270\,300}{21\,841}\right\}, \left\{67., \frac{2\,288\,550}{21\,841}\right\}, \left\{66., \frac{2\,308\,990}{21\,841}\right\}, \left\{65., \frac{2\,330\,890}{21\,841}\right\},$
$\left\{64., \frac{2\,355\,345}{21\,841}\right\}, \left\{63., \frac{2\,382\,720}{21\,841}\right\}, \left\{62., \frac{2\,414\,110}{21\,841}\right\}, \left\{61., \frac{2\,450\,245}{21\,841}\right\},$
$\left\{60., \frac{2\,492\,585}{21\,841}\right\}, \left\{59., \frac{2\,544\,415}{21\,841}\right\}, \left\{58., \frac{2\,610\,115}{21\,841}\right\}, \left\{57., \frac{2\,698\,445}{21\,841}\right\},$
$\left\{56., \frac{2\,831\,670}{21\,841}\right\}, \left\{55., \frac{3\,086\,805}{21\,841}\right\}, \left\{54., \frac{5\,606\,765}{21\,841}\right\}, \left\{53., \frac{7\,751\,140}{21\,841}\right\},$
$\left\{52., \frac{8\,981\,555}{21\,841}\right\}, \left\{51., \frac{10\,133\,495}{21\,841}\right\}, \left\{50., \frac{11\,348\,215}{21\,841}\right\}, \left\{49., \frac{12\,700\,175}{21\,841}\right\},$
$\left\{48., \frac{14\,246\,315}{21\,841}\right\}, \left\{47., \frac{16\,011\,820}{21\,841}\right\}, \left\{46., \frac{17\,905\,805}{21\,841}\right\}, \left\{45., \frac{19\,527\,500}{21\,841}\right\},$
$\left\{44., \frac{20\,135\,955}{21\,841}\right\}, \left\{43., \frac{19\,440\,265}{21\,841}\right\}, \left\{42., \frac{18\,033\,555}{21\,841}\right\}, \left\{41., \frac{16\,528\,660}{21\,841}\right\},$
$\left\{40., \frac{15\,173\,780}{21\,841}\right\}, \left\{39., \frac{14\,015\,270}{21\,841}\right\}, \left\{38., \frac{13\,035\,610}{21\,841}\right\}, \left\{37., \frac{12\,205\,235}{21\,841}\right\},$
$\left\{36., \frac{11\,495\,310}{21\,841}\right\}, \left\{35., \frac{10\,882\,475}{21\,841}\right\}, \left\{34., \frac{10\,349\,210}{21\,841}\right\}, \left\{33., \frac{9\,880\,550}{21\,841}\right\},$
$\left\{32., \frac{9\,465\,545}{21\,841}\right\}, \left\{31., \frac{9\,095\,435}{21\,841}\right\}, \left\{30., \frac{8\,763\,285}{21\,841}\right\}, \left\{29., \frac{8\,463\,255}{21\,841}\right\},$
$\left\{28., \frac{8\,190\,965}{21\,841}\right\}, \left\{27., \frac{7\,942\,035}{21\,841}\right\}, \left\{26., \frac{7\,714\,275}{21\,841}\right\}, \left\{25., \frac{7\,504\,765}{21\,841}\right\},$
$\left\{24., \frac{7\,311\,315}{21\,841}\right\}, \left\{23., \frac{7\,131\,735}{21\,841}\right\}, \left\{22., \frac{6\,964\,930}{21\,841}\right\}, \left\{21., \frac{6\,809\,440}{21\,841}\right\},$
$\left\{20., \frac{6\,664\,170}{21\,841}\right\}, \left\{19., \frac{6\,528\,025}{21\,841}\right\}, \left\{18., \frac{6\,399\,910}{21\,841}\right\}, \left\{17., \frac{6\,279\,460}{21\,841}\right\},$
$\left\{16., \frac{6\,165\,945}{21\,841}\right\}, \left\{15., \frac{6\,058\,270}{21\,841}\right\}, \left\{14., \frac{5\,956\,800}{21\,841}\right\}, \left\{13., \frac{5\,860\,440}{21\,841}\right\},$
$\left\{12., \frac{5\,768\,825}{21\,841}\right\}, \left\{11., \frac{5\,681\,590}{21\,841}\right\}, \left\{10., \frac{5\,598\,735}{21\,841}\right\}, \left\{9., \frac{5\,519\,530}{21\,841}\right\},$
$\left\{8., \frac{5\,443\,975}{21\,841}\right\}, \left\{7., \frac{5\,371\,705}{21\,841}\right\}, \left\{6., \frac{5\,302\,720}{21\,841}\right\}, \left\{5., \frac{5\,236\,290}{21\,841}\right\}, \left\{4., \frac{5\,172\,780}{21\,841}\right\},$
$\left\{3., \frac{5\,111\,825}{21\,841}\right\}, \left\{2., \frac{5\,053\,060}{21\,841}\right\}, \left\{1., \frac{4\,996\,485}{21\,841}\right\}, \left\{0., \frac{4\,942\,100}{21\,841}\right\}\right\}$

Out[665]=
$$\left\{\left\{100., \frac{1\,338\,820}{21\,841}\right\}, \left\{99., \frac{1\,343\,200}{21\,841}\right\}, \left\{98., \frac{1\,347\,945}{21\,841}\right\}, \left\{97., \frac{1\,352\,690}{21\,841}\right\},\right.$$
$$\left\{96., \frac{1\,357\,435}{21\,841}\right\}, \left\{95., \frac{1\,362\,910}{21\,841}\right\}, \left\{94., \frac{1\,368\,020}{21\,841}\right\}, \left\{93., \frac{1\,373\,860}{21\,841}\right\},$$
$$\left\{92., \frac{1\,379\,700}{21\,841}\right\}, \left\{91., \frac{1\,385\,905}{21\,841}\right\}, \left\{90., \frac{1\,392\,475}{21\,841}\right\}, \left\{89., \frac{1\,399\,410}{21\,841}\right\},$$
$$\left\{88., \frac{1\,406\,710}{21\,841}\right\}, \left\{87., \frac{1\,414\,375}{21\,841}\right\}, \left\{86., \frac{1\,422\,405}{21\,841}\right\}, \left\{85., \frac{1\,431\,165}{21\,841}\right\},$$
$$\left\{84., \frac{1\,440\,655}{21\,841}\right\}, \left\{83., \frac{1\,450\,875}{21\,841}\right\}, \left\{82., \frac{1\,461\,825}{21\,841}\right\}, \left\{81., \frac{1\,473\,870}{21\,841}\right\},$$
$$\left\{80., \frac{1\,487\,375}{21\,841}\right\}, \left\{79., \frac{1\,501\,975}{21\,841}\right\}, \left\{78., \frac{1\,518\,400}{21\,841}\right\}, \left\{77., \frac{1\,537\,380}{21\,841}\right\},$$
$$\left\{76., \frac{1\,558\,915}{21\,841}\right\}, \left\{75., \frac{1\,584\,465}{21\,841}\right\}, \left\{74., \frac{1\,615\,125}{21\,841}\right\}, \left\{73., \frac{1\,653\,085}{21\,841}\right\},$$
$$\left\{72., \frac{1\,702\,725}{21\,841}\right\}, \left\{71., \frac{1\,770\,980}{21\,841}\right\}, \left\{70., \frac{1\,876\,465}{21\,841}\right\}, \left\{69., \frac{2\,076\,120}{21\,841}\right\},$$
$$\left\{68., \frac{3\,514\,950}{21\,841}\right\}, \left\{67., \frac{7\,651\,495}{21\,841}\right\}, \left\{66., \frac{9\,618\,115}{21\,841}\right\}, \left\{65., \frac{11\,549\,330}{21\,841}\right\},$$
$$\left\{64., \frac{13\,461\,930}{21\,841}\right\}, \left\{63., \frac{14\,768\,630}{21\,841}\right\}, \left\{62., \frac{14\,696\,360}{21\,841}\right\}, \left\{61., \frac{13\,583\,110}{21\,841}\right\},$$
$$\left\{60., \frac{12\,257\,430}{21\,841}\right\}, \left\{59., \frac{11\,076\,655}{21\,841}\right\}, \left\{58., \frac{10\,097\,360}{21\,841}\right\}, \left\{57., \frac{9\,293\,630}{21\,841}\right\},$$
$$\left\{56., \frac{8\,628\,600}{21\,841}\right\}, \left\{55., \frac{8\,072\,340}{21\,841}\right\}, \left\{54., \frac{7\,600\,395}{21\,841}\right\}, \left\{53., \frac{7\,195\,245}{21\,841}\right\},$$
$$\left\{52., \frac{6\,844\,115}{21\,841}\right\}, \left\{51., \frac{6\,536\,055}{21\,841}\right\}, \left\{50., \frac{6\,264\,130}{21\,841}\right\}, \left\{49., \frac{6\,021\,770}{21\,841}\right\},$$
$$\left\{48., \frac{5\,804\,230}{21\,841}\right\}, \left\{47., \frac{5\,608\,225}{21\,841}\right\}, \left\{46., \frac{5\,430\,470}{21\,841}\right\}, \left\{45., \frac{5\,268\,045}{21\,841}\right\},$$
$$\left\{44., \frac{5\,119\,490}{21\,841}\right\}, \left\{43., \frac{4\,982\,980}{21\,841}\right\}, \left\{42., \frac{4\,856\,690}{21\,841}\right\}, \left\{41., \frac{4\,739\,890}{21\,841}\right\},$$
$$\left\{40., \frac{4\,631\,120}{21\,841}\right\}, \left\{39., \frac{4\,530\,015}{21\,841}\right\}, \left\{38., \frac{4\,435\,480}{21\,841}\right\}, \left\{37., \frac{4\,346\,785}{21\,841}\right\},$$
$$\left\{36., \frac{4\,263\,565}{21\,841}\right\}, \left\{35., \frac{4\,185\,090}{21\,841}\right\}, \left\{34., \frac{4\,111\,360}{21\,841}\right\}, \left\{33., \frac{4\,041\,645}{21\,841}\right\},$$
$$\left\{32., \frac{3\,975\,580}{21\,841}\right\}, \left\{31., \frac{3\,912\,800}{21\,841}\right\}, \left\{30., \frac{3\,853\,305}{21\,841}\right\}, \left\{29., \frac{3\,796\,730}{21\,841}\right\},$$
$$\left\{28., \frac{3\,743\,075}{21\,841}\right\}, \left\{27., \frac{3\,691\,610}{21\,841}\right\}, \left\{26., \frac{3\,642\,700}{21\,841}\right\}, \left\{25., \frac{3\,595\,615}{21\,841}\right\},$$
$$\left\{24., \frac{3\,550\,720}{21\,841}\right\}, \left\{23., \frac{3\,507\,650}{21\,841}\right\}, \left\{22., \frac{3\,466\,405}{21\,841}\right\}, \left\{21., \frac{3\,426\,985}{21\,841}\right\},$$
$$\left\{20., \frac{3\,389\,025}{21\,841}\right\}, \left\{19., \frac{3\,352\,525}{21\,841}\right\}, \left\{18., \frac{3\,317\,120}{21\,841}\right\}, \left\{17., \frac{3\,283\,175}{21\,841}\right\},$$
$$\left\{16., \frac{3\,250\,690}{21\,841}\right\}, \left\{15., \frac{3\,218\,935}{21\,841}\right\}, \left\{14., \frac{3\,188\,640}{21\,841}\right\}, \left\{13., \frac{3\,159\,075}{21\,841}\right\},$$
$$\left\{12., \frac{3\,130\,605}{21\,841}\right\}, \left\{11., \frac{3\,102\,865}{21\,841}\right\}, \left\{10., \frac{3\,076\,220}{21\,841}\right\}, \left\{9., \frac{3\,050\,305}{21\,841}\right\},$$
$$\left\{8., \frac{3\,025\,485}{21\,841}\right\}, \left\{7., \frac{3\,001\,030}{21\,841}\right\}, \left\{6., \frac{2\,977\,670}{21\,841}\right\}, \left\{5., \frac{2\,954\,675}{21\,841}\right\}, \left\{4., \frac{2\,932\,410}{21\,841}\right\},$$
$$\left.\left\{3., \frac{2\,910\,875}{21\,841}\right\}, \left\{2., \frac{2\,889\,705}{21\,841}\right\}, \left\{1., \frac{2\,869\,265}{21\,841}\right\}, \left\{0., \frac{2\,849\,555}{21\,841}\right\}\right\}$$

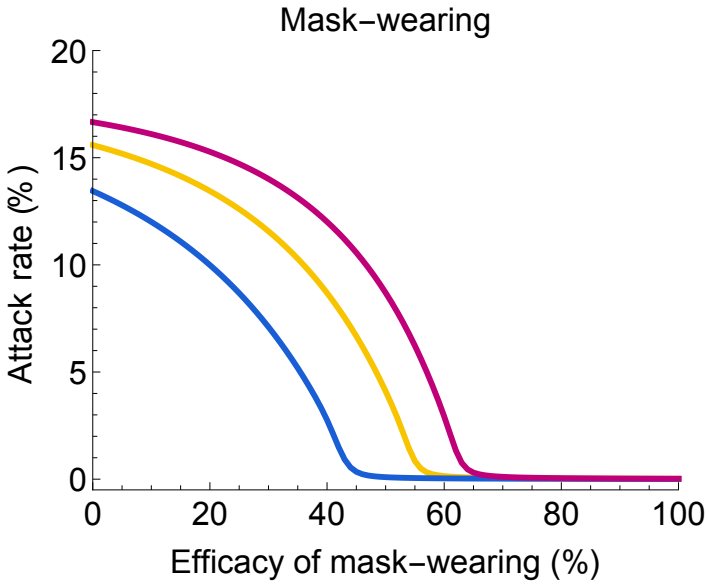
In[666]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS25 = ListLinePlot[{PeakMaskBaseline, PeakMaskMin, PeakMaskMax},
```

```
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS25", ".pdf"], SS25];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS25", ".eps"], SS25];

SS26 =
 ListLinePlot[{AttackRateMaskBaseline, AttackRateMaskMin, AttackRateMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel →
   {{"Attack rate (%)", None}, {"Efficacy of mask-wearing (%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS26", ".pdf"], SS26];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS26", ".eps"], SS26];

SS27 =
 ListLinePlot[{PeakTimingMaskBaseline, PeakTimingMaskMin, PeakTimingMaskMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 365 × 5 / 2 + 20}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of mask-wearing (%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Mask-wearing"}], 17, Black], PlotLegends → LineLegend[
    Table[Style[Row[{label}], Black, 13, "Text"], {label, {"2.5", "2", "3"}}],
    LegendLabel → Style["Basic reproduction number", Black, 13, "Text"]],
  FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
      {365 × 3 / 2, "18"}, {365 × 5 / 2, "30"}}, None}, {Automatic, None}}]
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS27", ".pdf"], SS27];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS27", ".eps"], SS27];
```

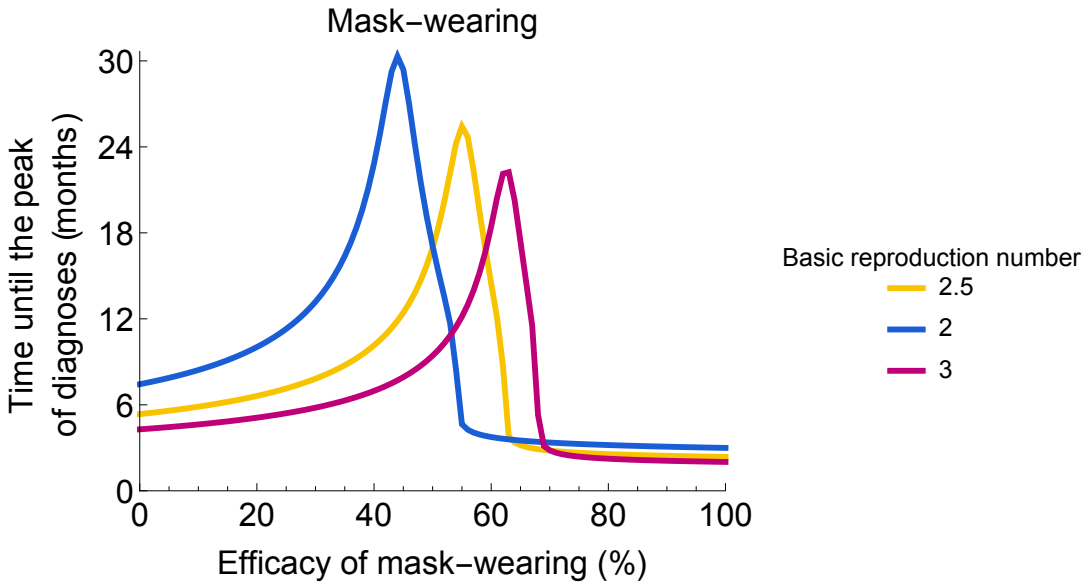
Out[667]=



Out[670]=



Out[673]=



In[726]:=

```
tend = 1.5;
ReductionFactor = Table[i, {i, 0, 1, 0.01}];

PeakGovBaseline =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMin =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberMin, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakGovMax =
 PeakRange["ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberMax, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovBaseline = AttackRateRange[
   "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
```

```
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMin = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberMin, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

AttackRateGovMax = AttackRateRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberMax, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovBaseline = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberBaseline, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMin = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberMin, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]

PeakTimingGovMax = PeakTimingRange[
  "ContactReductionGovernment", Join[ParametersSensitivityAnalyses[
    RelativeInfectivityBaseline, ProportionMildSymptomsBaseline,
    RecoveryRateMildSymptomsBaseline, DiagnosisRateBaseline,
    BasicReproductionNumberMax, RelativeSusceptibilityAwarenessBaseline,
    RateAwarenessFadingSusceptibleExposedMildSymptomsBaseline,
    RateAwarenessFadingSevereSymptomsBaseline,
    AcquisitionRateAwarenessBaseline, DiagnosisRateAwareBaseline,
    StartTimeBaseline], {r4 → factor}]]
```

Out[728]= {{100., 19.1862}, {99., 19.1863}, {98., 19.1863}, {97., 19.1863}, {96., 19.1864},
{95., 19.1865}, {94., 19.1865}, {93., 19.1865}, {92., 19.1866}, {91., 19.1866},
{90., 19.1867}, {89., 19.1868}, {88., 19.1869}, {87., 19.187}, {86., 19.187},
{85., 19.1871}, {84., 19.1872}, {83., 19.1873}, {82., 19.1874}, {81., 19.1875},
{80., 19.1876}, {79., 19.1878}, {78., 19.1879}, {77., 19.1881}, {76., 19.1883},
{75., 19.1885}, {74., 19.1887}, {73., 19.1889}, {72., 19.1892}, {71., 19.1895},
{70., 19.1898}, {69., 19.1902}, {68., 19.1905}, {67., 19.1909}, {66., 19.1914},
{65., 19.1919}, {64., 19.1925}, {63., 19.1931}, {62., 19.1938}, {61., 19.1946},
{60., 19.1955}, {59., 19.1964}, {58., 19.1974}, {57., 19.1986}, {56., 19.1999},
{55., 19.2013}, {54., 19.2028}, {53., 19.2045}, {52., 19.2064}, {51., 19.2085},
{50., 19.2108}, {49., 19.2133}, {48., 19.2161}, {47., 19.2192}, {46., 19.2225},
{45., 19.2263}, {44., 19.2304}, {43., 19.2349}, {42., 19.2399}, {41., 19.2454},
{40., 19.2514}, {39., 19.2581}, {38., 19.2654}, {37., 19.2734}, {36., 19.2822},
{35., 19.2918}, {34., 19.3023}, {33., 19.3137}, {32., 19.3263}, {31., 19.3398},
{30., 19.3546}, {29., 19.3705}, {28., 19.3877}, {27., 19.4063}, {26., 19.4262},
{25., 19.4475}, {24., 19.4702}, {23., 19.4943}, {22., 19.5197},
{21., 19.5465}, {20., 19.5743}, {19., 19.6032}, {18., 19.6328},
{17., 19.6628}, {16., 19.6929}, {15., 19.7226}, {14., 19.7511},
{13., 19.7779}, {12., 19.8019}, {11., 19.8219}, {10., 19.8368},
{9., 19.8448}, {8., 19.8442}, {7., 19.8326}, {6., 19.8076}, {5., 19.7663},
{4., 19.7055}, {3., 19.6212}, {2., 19.5093}, {1., 19.3653}, {0., 19.1837}}

Out[729]= {{100., 48.3183}, {99., 48.3183}, {98., 48.3184}, {97., 48.3184}, {96., 48.3184},
{95., 48.3184}, {94., 48.3184}, {93., 48.3184}, {92., 48.3184}, {91., 48.3184},
{90., 48.3184}, {89., 48.3184}, {88., 48.3185}, {87., 48.3185}, {86., 48.3185},
{85., 48.3185}, {84., 48.3185}, {83., 48.3185}, {82., 48.3185}, {81., 48.3186},
{80., 48.3186}, {79., 48.3186}, {78., 48.3186}, {77., 48.3186}, {76., 48.3187},
{75., 48.3187}, {74., 48.3187}, {73., 48.3187}, {72., 48.3188},
{71., 48.3188}, {70., 48.3188}, {69., 48.3189}, {68., 48.3189}, {67., 48.319},
{66., 48.319}, {65., 48.3191}, {64., 48.3191}, {63., 48.3192}, {62., 48.3193},
{61., 48.3193}, {60., 48.3194}, {59., 48.3195}, {58., 48.3196}, {57., 48.3197},
{56., 48.3198}, {55., 48.3199}, {54., 48.3201}, {53., 48.3202}, {52., 48.3203},
{51., 48.3205}, {50., 48.3207}, {49., 48.3209}, {48., 48.3211}, {47., 48.3213},
{46., 48.3216}, {45., 48.3218}, {44., 48.3221}, {43., 48.3224}, {42., 48.3228},
{41., 48.3231}, {40., 48.3235}, {39., 48.3239}, {38., 48.3244},
{37., 48.3249}, {36., 48.3254}, {35., 48.3259}, {34., 48.3264}, {33., 48.327},
{32., 48.3277}, {31., 48.3283}, {30., 48.329}, {29., 48.3297}, {28., 48.3305},
{27., 48.3313}, {26., 48.3321}, {25., 48.333}, {24., 48.3338}, {23., 48.3347},
{22., 48.3356}, {21., 48.3365}, {20., 48.3375}, {19., 48.3384},
{18., 48.3393}, {17., 48.3402}, {16., 48.341}, {15., 48.3418}, {14., 48.3425},
{13., 48.3431}, {12., 48.3435}, {11., 48.3438}, {10., 48.3438},
{9., 48.3436}, {8., 48.3431}, {7., 48.3422}, {6., 48.3409}, {5., 48.339},
{4., 48.3365}, {3., 48.3332}, {2., 48.3291}, {1., 48.3239}, {0., 48.3176}}

Out[730]= {{100., −3.12285}, {99., −3.12267}, {98., −3.12256}, {97., −3.12239},
{96., −3.12221}, {95., −3.12203}, {94., −3.12183}, {93., −3.12156},
{92., −3.12135}, {91., −3.12108}, {90., −3.12081}, {89., −3.1205},
{88., −3.12025}, {87., −3.11989}, {86., −3.11949}, {85., −3.11912},
{84., −3.11864}, {83., −3.11819}, {82., −3.11764}, {81., −3.11705},
{80., −3.11634}, {79., −3.11563}, {78., −3.11483}, {77., −3.11393},
{76., −3.11295}, {75., −3.11183}, {74., −3.11058}, {73., −3.10917},
{72., −3.10754}, {71., −3.10582}, {70., −3.10381}, {69., −3.10157},
{68., −3.09902}, {67., −3.09615}, {66., −3.09293}, {65., −3.0893},
{64., −3.08518}, {63., −3.08045}, {62., −3.07519}, {61., −3.06915},
{60., −3.06227}, {59., −3.05449}, {58., −3.04566}, {57., −3.03549},
{56., −3.02397}, {55., −3.01088}, {54., −2.99591}, {53., −2.97885},
{52., −2.95942}, {51., −2.93725}, {50., −2.91205}, {49., −2.88339},
{48., −2.85075}, {47., −2.81361}, {46., −2.77154}, {45., −2.72375},
{44., −2.66962}, {43., −2.60834}, {42., −2.53915}, {41., −2.46098},
{40., −2.37297}, {39., −2.27403}, {38., −2.16286}, {37., −2.03839},
{36., −1.89927}, {35., −1.74412}, {34., −1.5716}, {33., −1.38027},
{32., −1.16893}, {31., −0.936167}, {30., −0.680941}, {29., −0.402169},
{28., −0.099351}, {27., 0.227846}, {26., 0.579179}, {25., 0.953862},
{24., 1.35019}, {23., 1.76552}, {22., 2.19623}, {21., 2.63733}, {20., 3.08246},
{19., 3.5237}, {18., 3.95156}, {17., 4.3549}, {16., 4.72116}, {15., 5.03628},
{14., 5.28532}, {13., 5.45262}, {12., 5.52259}, {11., 5.48041}, {10., 5.3126},
{9., 5.00856}, {8., 4.56106}, {7., 3.96798}, {6., 3.23308}, {5., 2.36717},
{4., 1.38811}, {3., 0.320487}, {2., −0.80721}, {1., −1.9659}, {0., −3.13045}}

Out[731]= {{100., 15.5894}, {99., 15.5894}, {98., 15.5894}, {97., 15.5894}, {96., 15.5894},
{95., 15.5894}, {94., 15.5894}, {93., 15.5894}, {92., 15.5894}, {91., 15.5894},
{90., 15.5894}, {89., 15.5894}, {88., 15.5894}, {87., 15.5894}, {86., 15.5894},
{85., 15.5894}, {84., 15.5894}, {83., 15.5894}, {82., 15.5894}, {81., 15.5894},
{80., 15.5894}, {79., 15.5894}, {78., 15.5894}, {77., 15.5894}, {76., 15.5894},
{75., 15.5894}, {74., 15.5893}, {73., 15.5893}, {72., 15.5893}, {71., 15.5893},
{70., 15.5893}, {69., 15.5893}, {68., 15.5893}, {67., 15.5893}, {66., 15.5893},
{65., 15.5893}, {64., 15.5893}, {63., 15.5892}, {62., 15.5892}, {61., 15.5892},
{60., 15.5892}, {59., 15.5892}, {58., 15.5891}, {57., 15.5891}, {56., 15.5891},
{55., 15.589}, {54., 15.589}, {53., 15.589}, {52., 15.5889}, {51., 15.5889},
{50., 15.5888}, {49., 15.5888}, {48., 15.5887}, {47., 15.5886}, {46., 15.5885},
{45., 15.5884}, {44., 15.5883}, {43., 15.5882}, {42., 15.5881}, {41., 15.588},
{40., 15.5878}, {39., 15.5877}, {38., 15.5875}, {37., 15.5873},
{36., 15.5871}, {35., 15.5869}, {34., 15.5866}, {33., 15.5863}, {32., 15.586},
{31., 15.5857}, {30., 15.5853}, {29., 15.5849}, {28., 15.5845},
{27., 15.5841}, {26., 15.5836}, {25., 15.5831}, {24., 15.5825},
{23., 15.5819}, {22., 15.5813}, {21., 15.5807}, {20., 15.58}, {19., 15.5793},
{18., 15.5786}, {17., 15.5778}, {16., 15.5771}, {15., 15.5764},
{14., 15.5757}, {13., 15.575}, {12., 15.5744}, {11., 15.5739}, {10., 15.5735},
{9., 15.5733}, {8., 15.5733}, {7., 15.5736}, {6., 15.5742}, {5., 15.5752},
{4., 15.5767}, {3., 15.5787}, {2., 15.5815}, {1., 15.585}, {0., 15.5895}}

Out[732]= {{100., 13.1731}, {99., 13.2476}, {98., 13.2998}, {97., 13.3369}, {96., 13.3636},
{95., 13.3831}, {94., 13.3974}, {93., 13.4081}, {92., 13.4162}, {91., 13.4223},
{90., 13.4269}, {89., 13.4305}, {88., 13.4333}, {87., 13.4355}, {86., 13.4373},
{85., 13.4386}, {84., 13.4397}, {83., 13.4406}, {82., 13.4413}, {81., 13.4419},
{80., 13.4423}, {79., 13.4427}, {78., 13.443}, {77., 13.4432}, {76., 13.4434},
{75., 13.4436}, {74., 13.4438}, {73., 13.4439}, {72., 13.444}, {71., 13.4441},
{70., 13.4441}, {69., 13.4442}, {68., 13.4442}, {67., 13.4443}, {66., 13.4443},
{65., 13.4443}, {64., 13.4443}, {63., 13.4444}, {62., 13.4444}, {61., 13.4444},
{60., 13.4444}, {59., 13.4444}, {58., 13.4444}, {57., 13.4444}, {56., 13.4444},
{55., 13.4444}, {54., 13.4444}, {53., 13.4444}, {52., 13.4444}, {51., 13.4444},
{50., 13.4444}, {49., 13.4444}, {48., 13.4444}, {47., 13.4444}, {46., 13.4444},
{45., 13.4444}, {44., 13.4444}, {43., 13.4444}, {42., 13.4443}, {41., 13.4443},
{40., 13.4443}, {39., 13.4443}, {38., 13.4443}, {37., 13.4443}, {36., 13.4442},
{35., 13.4442}, {34., 13.4442}, {33., 13.4442}, {32., 13.4441},
{31., 13.4441}, {30., 13.4441}, {29., 13.4441}, {28., 13.444}, {27., 13.444},
{26., 13.444}, {25., 13.4439}, {24., 13.4439}, {23., 13.4438}, {22., 13.4438},
{21., 13.4438}, {20., 13.4437}, {19., 13.4437}, {18., 13.4437},
{17., 13.4436}, {16., 13.4436}, {15., 13.4435}, {14., 13.4435},
{13., 13.4435}, {12., 13.4435}, {11., 13.4435}, {10., 13.4435},
{9., 13.4435}, {8., 13.4435}, {7., 13.4435}, {6., 13.4436}, {5., 13.4437},
{4., 13.4438}, {3., 13.4439}, {2., 13.4441}, {1., 13.4443}, {0., 13.4446}}

Out[733]= {{100., 16.6592}, {99., 16.6592}, {98., 16.6592}, {97., 16.6592}, {96., 16.6592},
{95., 16.6592}, {94., 16.6592}, {93., 16.6592}, {92., 16.6592}, {91., 16.6592},
{90., 16.6592}, {89., 16.6591}, {88., 16.6591}, {87., 16.6591}, {86., 16.6591},
{85., 16.6591}, {84., 16.6591}, {83., 16.6591}, {82., 16.6591}, {81., 16.6591},
{80., 16.6591}, {79., 16.6591}, {78., 16.6591}, {77., 16.659}, {76., 16.659},
{75., 16.659}, {74., 16.659}, {73., 16.659}, {72., 16.659}, {71., 16.6589},
{70., 16.6589}, {69., 16.6589}, {68., 16.6588}, {67., 16.6588}, {66., 16.6587},
{65., 16.6587}, {64., 16.6586}, {63., 16.6585}, {62., 16.6585}, {61., 16.6584},
{60., 16.6583}, {59., 16.6581}, {58., 16.658}, {57., 16.6579}, {56., 16.6577},
{55., 16.6575}, {54., 16.6572}, {53., 16.657}, {52., 16.6567}, {51., 16.6564},
{50., 16.656}, {49., 16.6555}, {48., 16.655}, {47., 16.6545}, {46., 16.6538},
{45., 16.6531}, {44., 16.6523}, {43., 16.6513}, {42., 16.6502}, {41., 16.649},
{40., 16.6477}, {39., 16.6462}, {38., 16.6444}, {37., 16.6425}, {36., 16.6403},
{35., 16.6379}, {34., 16.6352}, {33., 16.6322}, {32., 16.6288}, {31., 16.6251},
{30., 16.6211}, {29., 16.6166}, {28., 16.6117}, {27., 16.6063}, {26., 16.6005},
{25., 16.5943}, {24., 16.5876}, {23., 16.5806}, {22., 16.5731},
{21., 16.5654}, {20., 16.5575}, {19., 16.5494}, {18., 16.5414},
{17., 16.5336}, {16., 16.5263}, {15., 16.5196}, {14., 16.5138},
{13., 16.5093}, {12., 16.5063}, {11., 16.5051}, {10., 16.5059},
{9., 16.5092}, {8., 16.5149}, {7., 16.5234}, {6., 16.5348}, {5., 16.549},
{4., 16.566}, {3., 16.5857}, {2., 16.608}, {1., 16.6326}, {0., 16.6593}}

Out[734]= {{100., 366.872}, {99., 361.959}, {98., 357.313}, {97., 352.968}, {96., 348.824},
{95., 344.88}, {94., 341.103}, {93., 337.46}, {92., 333.985}, {91., 330.609},
{90., 327.367}, {89., 324.225}, {88., 321.151}, {87., 318.209}, {86., 315.302},
{85., 312.494}, {84., 309.754}, {83., 307.08}, {82., 304.473}, {81., 301.933},
{80., 299.426}, {79., 296.987}, {78., 294.614}, {77., 292.274}, {76., 289.968},
{75., 287.729}, {74., 285.523}, {73., 283.35}, {72., 281.211}, {71., 279.139},
{70., 277.101}, {69., 275.095}, {68., 273.09}, {67., 271.151}, {66., 269.246},
{65., 267.341}, {64., 265.503}, {63., 263.665}, {62., 261.827}, {61., 260.055},
{60., 258.251}, {59., 256.479}, {58., 254.741}, {57., 253.003}, {56., 251.265},
{55., 249.528}, {54., 247.79}, {53., 246.052}, {52., 244.314}, {51., 242.609},
{50., 240.871}, {49., 239.133}, {48., 237.429}, {47., 235.691}, {46., 233.986},
{45., 232.248}, {44., 230.544}, {43., 228.839}, {42., 227.135}, {41., 225.464},
{40., 223.759}, {39., 222.088}, {38., 220.417}, {37., 218.746}, {36., 217.108},
{35., 215.471}, {34., 213.833}, {33., 212.195}, {32., 210.591},
{31., 208.953}, {30., 207.383}, {29., 205.778}, {28., 204.207},
{27., 202.637}, {26., 201.066}, {25., 199.495}, {24., 197.958}, {23., 196.42},
{22., 194.883}, {21., 193.379}, {20., 191.841}, {19., 190.337},
{18., 188.833}, {17., 187.363}, {16., 185.859}, {15., 184.388},
{14., 182.918}, {13., 181.447}, {12., 180.01}, {11., 178.54}, {10., 177.102},
{9., 175.665}, {8., 174.195}, {7., 172.758}, {6., 171.354}, {5., 169.917},
{4., 168.48}, {3., 167.076}, {2., 165.639}, {1., 164.235}, {0., 162.798}}

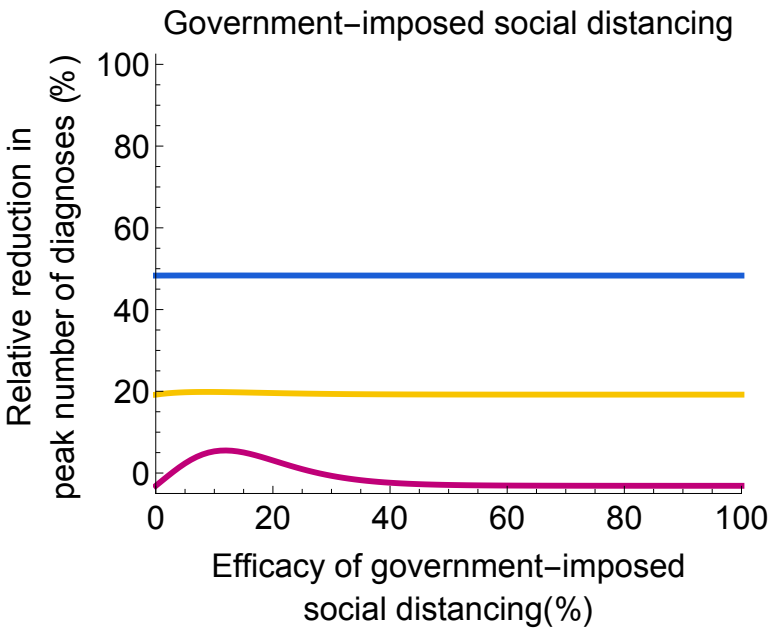
Out[735]= {{100., 476.93}, {99., 471.248}, {98., 465.834}, {97., 460.687}, {96., 455.74},
{95., 450.994}, {94., 446.449}, {93., 442.071}, {92., 437.826}, {91., 433.715},
{90., 429.705}, {89., 425.828}, {88., 422.085}, {87., 418.408}, {86., 414.832},
{85., 411.323}, {84., 407.914}, {83., 404.571}, {82., 401.296}, {81., 398.088},
{80., 394.946}, {79., 391.871}, {78., 388.863}, {77., 385.889}, {76., 382.948},
{75., 380.073}, {74., 377.266}, {73., 374.492}, {72., 371.751}, {71., 369.044},
{70., 366.404}, {69., 363.763}, {68., 361.19}, {67., 358.65}, {66., 356.143},
{65., 353.703}, {64., 351.264}, {63., 348.857}, {62., 346.484}, {61., 344.145},
{60., 341.839}, {59., 339.533}, {58., 337.293}, {57., 335.054}, {56., 332.882},
{55., 330.709}, {54., 328.57}, {53., 326.431}, {52., 324.326}, {51., 322.253},
{50., 320.215}, {49., 318.176}, {48., 316.171}, {47., 314.165}, {46., 312.193},
{45., 310.222}, {44., 308.283}, {43., 306.345}, {42., 304.406}, {41., 302.501},
{40., 300.596}, {39., 298.691}, {38., 296.786}, {37., 294.881}, {36., 293.009},
{35., 291.104}, {34., 289.199}, {33., 287.328}, {32., 285.423}, {31., 283.518},
{30., 281.646}, {29., 279.741}, {28., 277.836}, {27., 275.964},
{26., 274.059}, {25., 272.188}, {24., 270.282}, {23., 268.411},
{22., 266.506}, {21., 264.634}, {20., 262.763}, {19., 260.891},
{18., 259.019}, {17., 257.148}, {16., 255.276}, {15., 253.438},
{14., 251.566}, {13., 249.728}, {12., 247.89}, {11., 246.052}, {10., 244.247},
{9., 242.409}, {8., 240.604}, {7., 238.799}, {6., 236.994}, {5., 235.19},
{4., 233.385}, {3., 231.613}, {2., 229.842}, {1., 228.071}, {0., 226.299}}

Out[736]=
```
{{100., 310.89}, {99., 306.345}, {98., 302.167}, {97., 298.223}, {96., 294.513},
 {95., 291.004}, {94., 287.662}, {93., 284.453}, {92., 281.412}, {91., 278.471},
 {90., 275.63}, {89., 272.889}, {88., 270.216}, {87., 267.642}, {86., 265.169},
 {85., 262.729}, {84., 260.39}, {83., 258.084}, {82., 255.844}, {81., 253.672},
 {80., 251.533}, {79., 249.461}, {78., 247.455}, {77., 245.45}, {76., 243.512},
 {75., 241.607}, {74., 239.735}, {73., 237.897}, {72., 236.092}, {71., 234.287},
 {70., 232.516}, {69., 230.744}, {68., 229.007}, {67., 227.269}, {66., 225.531},
 {65., 223.793}, {64., 222.055}, {63., 220.35}, {62., 218.612}, {61., 216.908},
 {60., 215.203}, {59., 213.499}, {58., 211.794}, {57., 210.123},
 {56., 208.419}, {55., 206.781}, {54., 205.11}, {53., 203.472}, {52., 201.868},
 {51., 200.23}, {50., 198.659}, {49., 197.055}, {48., 195.484}, {47., 193.914},
 {46., 192.376}, {45., 190.839}, {44., 189.335}, {43., 187.831}, {42., 186.327},
 {41., 184.823}, {40., 183.352}, {39., 181.915}, {38., 180.478}, {37., 179.041},
 {36., 177.604}, {35., 176.2}, {34., 174.796}, {33., 173.426}, {32., 172.022},
 {31., 170.652}, {30., 169.315}, {29., 167.978}, {28., 166.608},
 {27., 165.304}, {26., 163.968}, {25., 162.664}, {24., 161.327},
 {23., 160.024}, {22., 158.72}, {21., 157.417}, {20., 156.113}, {19., 154.81},
 {18., 153.507}, {17., 152.203}, {16., 150.9}, {15., 149.563}, {14., 148.226},
 {13., 146.889}, {12., 145.552}, {11., 144.215}, {10., 142.845},
 {9., 141.475}, {8., 140.138}, {7., 138.801}, {6., 137.464}, {5., 136.161},
 {4., 134.924}, {3., 133.721}, {2., 132.584}, {1., 131.515}, {0., 130.479}}
```

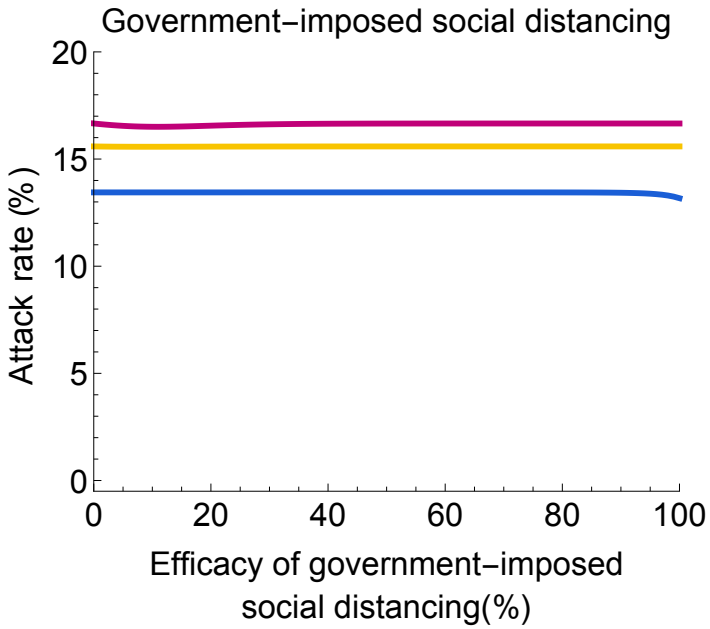
In[737]:=
```
imagePadding = {{80, 15}, {73, 7.5}};

SS28 = ListLinePlot[{PeakGovBaseline, PeakGovMin, PeakGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-5, 102.5}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding,
  FrameLabel → {{"Relative reduction in\npeak number of diagnoses (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS28", ".pdf"], SS28];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS28", ".eps"], SS28];


SS29 = ListLinePlot[{AttackRateGovBaseline, AttackRateGovMin, AttackRateGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {-0.5, 20}},
  AxesOrigin → {0, 0}, Filling → {1 → {2}}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotRangePadding → None,
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  ImagePadding → imagePadding, FrameLabel → {{"Attack rate (%)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS29", ".pdf"], SS29];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
     Resubmission//FinalFigures//SS29", ".eps"], SS29];
```

```
SS30 = ListLinePlot[{PeakTimingGovBaseline, PeakTimingGovMin, PeakTimingGovMax},
  AspectRatio → 0.75, ImageSize → 400, PlotRange → {All, {0, 800}},
  AxesOrigin → {0, 0}, Frame → {{True, False}, {True, False}},
  FrameStyle → Directive[Black, 17], PlotMarkers → {"", "", "",
    Graphics[{RGBColor[28 / 255, 162 / 255, 0], Thick, Circle[]}, ImageSize → 10],
    Graphics[{RGBColor[185 / 255, 76 / 255, 225 / 255], Thick, Circle[]},
     ImageSize → 10], ""},
  PlotStyle → {{Thickness[0.01], RGBColor[248 / 255, 196 / 255, 0]},
    {Thickness[0.01], RGBColor[26 / 255, 94 / 255, 214 / 255]},
    {Thickness[0.01], RGBColor[192 / 255, 0, 120 / 255]}},
  FrameLabel → {{"Time until the peak\nof diagnoses (months)", None},
    {"Efficacy of government-imposed\nsocial distancing(%)", None}},
  ImagePadding → imagePadding, PlotRangePadding → None,
  PlotLabel → Style[Row[{"Government-imposed social distancing"}], 17, Black],
  PlotLegends → LineLegend[
    Table[Style[Row[{label}], Black, 13, "Text"], {label, {"2.5", "2", "3"}}],
    LegendLabel → Style["Basic reproduction number", Black, 13, "Text"]],
  FrameTicks → {{{{0, "0"}, {365 / 2, "6"}, {365, "12"}, {365 × 2, "24"},
      {365 × 3 / 2, "18"}}, None}, {Automatic, None}}]

Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS30", ".pdf"], SS30];
Export[StringJoin[
   "//Users//LynxGAV//Documents//Work//CoronaLadies//Submission//PlosMedicine//
    Resubmission//FinalFigures//SS30", ".eps"], SS30];
```

Out[738]=



Out[741]=



Out[744]=