Table simulated scenarios

January 24, 2021

The following table lists the simulations planned grouped by experiment, whose aim is described in the column Experim. Note that some simulations appear repeated in different experiments for clarity. The choice of some parameters is orientative, since some may be best determined after examining the output of previous experiments, and hence for now it may be considered a guide for the development of flexible downstream post-processing scripts.

| Simul. | Experim. | Structure | Npop | Evac. | N.Tents | Onset | Contacts | Tcheck | lock | self | H-fate |
|-----------------|--------------------------|---------------|--|-------|----------|-----------------|-----------------|--------|------|------|--------|
| 1 | A. Shielding and limits | N11 M: 1 | 2000 | | | 0 | ME | No | | | D |
| 2 | | Null Mixed | | | | | MF | | | | R |
| 3 | | Shield (20%) | | No | 0 | | 2/7 Yes | No | No | D | |
| 4 | | | | | | | | | | R | |
| 5 | | | | | | | 10/7 | res | | | D |
| 6 | | | | | | | 10/1 | | | | R |
| 7 | B. Role individual tents | Null Mixed | - 2000 | No | 10 | 24 | MF | No | – No | No | D |
| 8 | | | | | 20 | | | | | | |
| 9 | | | | | 50 | | | | | | |
| 10 | | | | | 100 | | | | | | |
| 11 | | | | | 250 | | | | | | |
| 12 | | | | | 500 | | | | | | |
| 13 | | | | | ∞ | | | | | | |
| 14 | | Shield (20%) | | | 10 | | 2/7 Yes | Yes | | | |
| 15 | | | | | 20 | | | | | | |
| 16 | | | | | 50 | | | | | | |
| 17 | | | | | 100 | | | | | | |
| 18 | | | | | 250 | | | | | | |
| 19 | | | | | 500 | | | | | | |
| 20 | | | | | ∞ | | | | | | |
| 21 | C. Time to isolation | Null Mixed | 2000 | No | | 12 | l MD | No | - No | No | D |
| 22 23 | | | | | 50 | 24 | MF | | | | |
| $\frac{23}{24}$ | | Shield (20%) | | | | 48 12 | 2/7 | Yes | | | |
| $\frac{24}{25}$ | | | | | | $\frac{12}{24}$ | | | | | |
| $\frac{25}{26}$ | | | | | | 48 | | | | | |
| $\frac{20}{27}$ | | Shield (age3) | | | | 40 | | | | | |
| 28 | D. Population shielded | | nield (age2) nield (20%) nield (25%) | No | 0 | 0 | 2/7 | Yes | No | No | D |
| $\frac{28}{29}$ | | Shield (20%) | | | | | | | | | |
| $\frac{29}{30}$ | | | | | | | | | | | |
| 31 | | Shield (30%) | | | | | | | | | |
| 32 | E. Population size | Null Mixed | 500 | No | | | MF No | | | | |
| 33 | | | 1000 | | 0 | | | No | No | D | |
| 34 | | | 500 | | | | | | | | |
| 35 | | Shield (20%) | 1000 | | | | 2/7 | Yes | | | |
| 36 | | | 2000 | | | 0 | 2/7 — 10/7 — | No | | No | |
| 37 | F. Safety zone testing | Shield (20%) | 2000 | No | 0 | | | Yes | No | | _ |
| 38 | | | | | | | | No | | | D |
| 39 | | | | | | | | Yes | | | |
| | | | | | | | | | | | |

Table 1: List of simulations performed. Npop = Population size. Evac. = Is people requiring hospitalization evacuated? N. tents = Number self-isolation tents per camp. Onset = Mean time that an individual takes to self-isolate from onset of symptoms. Contacts = Number of contacts per day between populations shielded. Tcheck = Are temperature checks performed? Lock = Is lockdown applied after first symptomatic case is identified? self = Fraction of contacts remaining after self-distancing is implemented. H-fate = Final compartment for hospitalized people. MF = Mean field. Shield = Population shielded. age3 = elderly population. age2 = adults with comorbidities and spouses. (20-30%) = kids from adults shielded up to x% of total population.

| Simul. | Experim. | Structure | Npop | Evac. | N. tents | Onset | Contacts | Tcheck | lock | self | H-fa |
|----------|---------------------------|----------------|--------|-------|----------|-------|----------|--------|------------------|--------------|------|
| 40 | G. Lockdown | Shield (20%) | 2000 | No | 0 | 0 | 2/7 | Yes | 0.5 | | |
| 41 42 | | | 2000 | | | | | | 0.9 | No | D |
| 43 | | | | | | | | | 0.99 | 0.1 | |
| 44 | H. Self-distancing | Null Mixed | - 2000 | No | 0 | 0 | MF | No | - No | 0.2 | D |
| 45 | | | | | | | | | | 0.3 | |
| 46 | | | | | | | | | | 0.4 | |
| 47 | | | | | | | | | | 0.5 | |
| 48 | | Shield (20%) | | | | | 2/7 | Yes | | 0.1 | |
| 50 | | | | | | | | | | 0.2 | |
| 52 | | Siliera (2070) | | | | | | | | 0.4 | |
| 53 | | | | | | | | | | 0.5 | |
| 54 | J. Evacuation | Null Mixed | 2000 | Yes | 0 | 0 | MF | No | No | No | D |
| 55 | J. Evacuation | Shield (20%) | 2000 | 105 | 0 | 0 | 2/7 | Yes | 110 | | |
| 56 57 | K. Combined interventions | Null Mixed | 2000 | No | 50 | 24 | MF | No | No | 0.2 | D |
| 58 | | Shield (20%) | | | | | 2/7 | Yes | No | 0.5 | |
| 59 | | | | | | | | | 0.5 | No | |
| 61 | | | | | | | | | 0.5 | 0.2 | |
| 62 | | | | | | | | | 0.9 | 0.2 | |
| 63 | | | | | | | | | 0.5 | 0.5 | |
| 64 | | | | | | | | | 0.9 | 0.5 | |
| 65 66 | | Null Mixed | - | Yes | 50 | 24 | MF | No No | No | 0.2 | - |
| 67 | | | | | | | | Yes | No | 0.3 | |
| 68 | | | 2000 | | | | 2/7 | | 0.5 | No | D |
| 69 | | Shield (20%) | 500 | | | | | | 0.5 | 0.2 | |
| 70 | | | | | | | | | 0.9 | 0.2 | |
| 71 | | | | | | | | | 0.5 | 0.5 | |
| 72 73 | | | | | | | | | 0.9 No 0.5 | $0.5 \\ 0.2$ | |
| 74 | | | | | | | | | | No | |
| 75 | | | | | | | | | 0.5 | 0.2 | |
| | | | | | 1 | | | | | | |

Table 2: List of simulations performed (II). Npop = Population size. Evac. = Is people requiring hospitalization evacuated? N. tents = Number self-isolation tents per camp. Onset = Mean time that an individual takes to self-isolate from onset of symptoms. Contacts = Number of contacts per day between populations shielded. Tcheck = Are temperature checks performed? Lock = Is lockdown applied after first symptomatic case is identified? self = Fraction of contacts remaining after self-distancing is implemented. H-fate = Final compartment for hospitalized people. MF = Mean field. Shield = Population shielded. age3 = elderly population. age2 = adults with comorbidities and spouses. (20-30%) = kids from adults shielded up to x% of total population.