Parameter values

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | Baseline values | Range | source |
| Durations number of days |  |  |  |
| incubation period | 3 | 5-6 days (max 14 days) | [WHO](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200402-sitrep-73-covid-19.pdf?sfvrsn=5ae25bc7_4) |
| Pre-symptomatic infectious period | 2 | 1-3 days | [WHO](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200402-sitrep-73-covid-19.pdf?sfvrsn=5ae25bc7_4) |
| Infectious period (for both clinical ) | 7 | First 3-days from onset of symptoms | [WHO](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200402-sitrep-73-covid-19.pdf?sfvrsn=5ae25bc7_4) |
| Isolation stay (Ih) | 10 | 12 days (7–16) | [South Africa](https://www.nicd.ac.za/wp-content/uploads/2020/05/SACMC_19052020_slides-for-MoH-media-briefing.pdf) |
|  |  |  |  |
| R0 | 2.21 | [1.35-3.865] | data |
| Facemask efficacy | 0.3 | 0.35 Choose from | [link](https://pubmed.ncbi.nlm.nih.gov/32355904/)  [link2](https://pubmed.ncbi.nlm.nih.gov/20092668/) |
| Hand hygiene |  |  |  |
| Relative infectiousness of isolated cases compared to clinical infectious | 0.2 |  | assumed |
| Relative infectiousness of pre-clinical compared to clinical infectious | 0.5 |  | assumed |
| Proportion mortality from Clinical non-isolated infectious | 1.3% | 1.3% (Senegal) -7.5% (Egypt) | [Mehtar et al](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(20)30212-6/fulltext) |
| **Intervention** |  |  |  |
| Facemask coverage |  | 0-70% | assumed |
| Relative reduction in contact rate by **social distancing** |  | 0-30% | assumed |
| Proportion Preclinical infectious isolated (by **contact tracing &mass testing**) |  | 0-25% | assumed |
| **Initial Populations at start of model run** |  |  |  |
| Total population | 4.8mil |  |  |
| Exposed proportion | 0.1% |  |  |
| Pre-clinical proportion | 0.1% |  |  |
| Infectious proportion | 0.1% |  |  |
| Isolated infectious proportion | 0.05% |  |  |
| Recovered proportion | 0.00013 |  |  |
| Dead proportion | 0.0987 |  |  |