

User Manual

Herd Immunity application

Guide 1: How to start a simple run?

- ▶ 1. Open Herd Immunity application.
- ▶ 2. Specify parameters for the following sections:
 - ▶ Population
 - ▶ Disease
 - ▶ Vaccine
 - ▶ Environment
- ▶ 3. (Optional) Save the Population + Environment and Disease + Vaccine.
- ▶ 4. Click Begin.
- ▶ 5. You can witness a simulation of the specifications made in previous steps

Guide 2 :

How to start a multiple run simulation?

- ▶ Prerequisite: Do all the steps in Guide 1 until step 3
- ▶ 1. Specify Simulation number (next to Begin button)
- ▶ 2. Specify the stepping you want to test with the multiple run, pick between the following options:
 - ▶ Stepping vaccination rate
 - ▶ Stepping efficacy rate
- ▶ 3. Click Begin.
- ▶ 4. Wait for the multiple simulations to finish.
- ▶ 5. Check out the graph produced on the screen and for more details, check the generated file reports.

Herd Immunity v0.9

Population

Sample size: 100 individuals

Vaccination rate: 50.00 %

Immunodeficiency: 2.00 %

Environment Settings

Density (per sq. km): 50

Cleanliness: 10.00 %

Disease

Mortality rate: 65.00 - 70.00 %

Infection rate: 0.00 - 60.00 %

Incubation period: 2 - 6 days

Latency period: 1 - 2 days

Termination period: 10 - 12 days

Vaccine

Mortality rate: 0.50 - 0.50 %

Efficacy rate: 90.00 - 95.00 %

Population A

Save

Yersinia pestis [Bubonic]

Save

☒ No stepping

☐ Stepping vaccination rate

☐ Stepping efficacy rate

Simulation Number: 1

Begin

☒ Open text reports

[09:56:20] Found 3 population files and 1 disease file.

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