

# Package ‘EpiSimR’

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**Title** A 'Shiny' App to Simulate the Dynamics of Epidemic and Endemic Diseases Spread

**Version** 1.1

**Maintainer** Nassim AYAD <nassim.ayad.ph@gmail.com>

## Description

The 'EpiSimR' package provides an interactive 'shiny' app based on deterministic compartmental mathematical modeling for simulating and visualizing the dynamics of epidemic and endemic disease spread.

It allows users to explore various intervention strategies, including vaccination and isolation, by adjusting key epidemiological parameters. The methodology follows the approach described by Brauer (2008) <[doi:10.1007/978-3-540-78911-6\\_2](https://doi.org/10.1007/978-3-540-78911-6_2)>. Thanks to 'shiny' package.

**Depends** R (>= 4.1.1), shiny (>= 1.10.0), deSolve (>= 1.40), openxlsx (>= 4.2.8)

**Imports** dplyr, DT, shinythemes

**License** GPL (>= 3)

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**Suggests** knitr, rmarkdown, testthat (>= 3.0.0)

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**NeedsCompilation** no

**Author** Nassim AYAD [aut, cre] (<<https://orcid.org/0000-0002-1809-0935>>, Laboratory of Modeling and Biostatistics, Pasteur Institute of Algeria)

**Repository** CRAN

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`run_app`*Launch the shiny app of the package EpiSimR*

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**Description**

Launch the shiny app of the package EpiSimR

**Usage**

```
run_app()
```

**Value**

No return value, called for side effects. This function launches a Shiny application.

**Examples**

```
if (interactive()) {  
  library(EpiSimR)  
  run_app()  
}
```

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