Risk assessment model of AMR selection

User manual

The current available risk assessment (RA) model computes the risk of acquisition for a human individual based on five different routes. Each route is depicted in an independent submodel.

1. **Defining values for RA model variables**

Open *Variables.R.*

In this script are defined all the average values for the five RA submodels.

In commentary is indicated the neutral value, i.e. the value that makes this parameter completely neutral on the model outcome.

Running all RA model and submodels will require using the script *RA\_main.R.*

1. **Running a specific submodel**

Open *RA\_main.R.*

Set up working directory by defining the path on the drive to access the directory where the model files are saved

Execute the first lines to load files and libraries.

To run a specific model, you should execute the line of type (here example of the water model):

W\_res <- W\_distrib\_risk()

To get the model output run the following line:

ECW <- W\_res[[2]]

RW <- W\_res[[1]]

It is possible to look at the distributions of variables with:

hist(ECW)

1. **Running the full model**

Open *RA\_main.R.*

Set up working directory by defining the path on the drive to access the directory where the model files are saved

Execute the first lines to load files and libraries.

To run the full model, run all the lines of the file. It should create an output directory at the location of your model files.