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Model Assumptions

At any point, the current model assumptions can be displayed by calling the function **explain()**.

In this example, the model is loaded and checked, and then a parameter is changed, and the model assumptions checked again.

```
library(seirR)

## Welcome to package seirR v0.0.0.1

## Checking https://covid.ourworldindata.org/data/ecdc/full_data.csv for data update...

## Loading https://covid.ourworldindata.org/data/ecdc/full_data.csv to global environment data_env

mod <- create_seir_p()
explain(mod)

##
## seirR model assumptions
## Package seirR Version = 0.1
## Model Class Info = seir_p seir list
##
## (1) Initial Conditions
## =====
## init_seeds = 1
## total_population = 4999974
## init_susceptible = 4999973
## start_day = 1
## end_day = 300
##
## (2) Transmission Parameters
## =====
## beta = 1.12
## beta_mult_h = 0.21
## beta_mult_i = 0.08
## beta_mult_j = 0.12
## beta_mult_k = 1
##
## (3) Biological Parameters
## =====
```

```
## incubation_period = 5.19
## latent_period = 3.55
## infectious_period = 4.13
##
## (4) Pathway Flow Parameters
## =====
## prop_asymptomatic = 0.25
## prop_tested = 0.88
## prop_quarantined = 0.05
## prop_hospital = 0
## fraction_hosp_severe = 0
## fraction_risk_group = 0
##
## (5) Physical Distancing Parameters
## =====
## distancing_flag = 0
## pd_percentage_reduction = 0.6
## pd_start_time = 20
## pd_end_time = 300
## pd_start_delay = 1
##
## (6) Health System Parameters
## =====
## avr_HLOS = 15
## avr_results_wait = 2
## icu_residency = 10
## icu_capacity = 250
```

Change a parameter and call **explain()** again (see parameter **distancing_flag** has changed)

```
mod <- set_param(mod,"distancing_flag",1)
explain(mod)
```

```
##
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## Package seirR Version = 0.1
## Model Class Info = seir_p seir list
##
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## =====
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