

# Package: intervalcalc (via r-universe)

September 1, 2024

**Title** Calculations for Epidemiological Intervals

**Version** 0.0.1.9001

**Description** Calculating epidemiological intervals

**License** MIT + file LICENSE

**Encoding** UTF-8

**LazyData** true

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.1.1

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

**Depends** R (>= 2.10)

**Imports** staninside, checkmate, rappdirs, cli, loo

**Additional\_repositories** <https://mc-stan.org/r-packages/>,

<https://medewitt.r-universe.dev>

**SystemRequirements** CmdStan  
(<https://mc-stan.org/users/interfaces/cmdstan>)

**VignetteBuilder** knitr

**Repository** <https://medewitt.r-universe.dev>

**RemoteUrl** <https://github.com/medewitt/intervalcalc>

**RemoteRef** HEAD

**RemoteSha** 2b759d5ac483e1358ac3bd02b0148bd805db603b

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`fit_interval_data`      *Fitting Data for Interval Calculation*

## Description

This function takes data from the `prep_interval_data` function and fits it to a series of specified distributions

## Usage

```
fit_interval_data(
  interval_data,
  distribution = c("gamma", "gamma-trunc"),
  stan_opts = list(),
  return_raw = FALSE
)
```

## Arguments

<code>interval_data</code>	a named list containing the interval data
<code>distribution</code>	a string vector indicating the distributions with which to fit the data
<code>stan_opts</code>	a named list with additional options passed to CmdStanR
<code>return_raw</code>	a logical, should the samples be returned

nishiura

*Serial Interval Data from Nishiura et al*

## Description

Serial Interval Data from Nishiura et al

## Usage

`nishiura`

## Format

a data.frame with 28 rows and 10 columns

**V1** Row number

**SIClassification** Certainty of the Classification

**DiagnosisCounty** County of Diagnosis

**InfecteeOnset** Onset for index case

**InfecteeOnset** Onset for infected individual

**ER** Symptom interval for infector  
**EL** Symptom interval for infector  
**SL** Symptom interval for infectee  
**SR** Symptom interval for infectee  
**Source** Source for the data

**Source**

Supporting materials for Nishiura H, Linton NM, Akhmetzhanov AR 2020 "Serial interval of novel coronavirus (COVID-19) infections" International journal of infectious diseases 93: 284–6  
([doi:10.1016/j.ijid.2020.02.060](https://doi.org/10.1016/j.ijid.2020.02.060))

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`prep_interval_data`      *Prepare Interval Data*

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**Description**

This function can be used to prepare data for fitting

**Usage**

`prep_interval_data(dat)`

**Arguments**

`dat`            a data.frame with columns named er, el sl,sr

**Value**

a named list for use with `fit_interval_data`

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