

# Package ‘contactdata’

March 22, 2023

**Title** Social Contact Matrices for 177 Countries

**Version** 1.0.0

**Description** Data package for the supplementary data in Prem et al. (2017) [doi:10.1371/journal.pcbi.1005697](https://doi.org/10.1371/journal.pcbi.1005697) and Prem et al. [doi:10.1371/journal.pcbi.1009098](https://doi.org/10.1371/journal.pcbi.1009098).

Provides easy access to contact data for 177 countries, for use in epidemiological, demographic or social sciences research.

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**Depends** R (>= 3.5.0)

**Suggests** countrycode, ggplot2, knitr, rmarkdown, spelling, testthat(>= 3.0.0), covr

**URL** <https://hugogruson.fr/contactdata/>,  
<https://github.com/bisaloo/contactdata>

**BugReports** <https://github.com/bisaloo/contactdata/issues>

**Encoding** UTF-8

**Language** en-GB

**RoxygenNote** 7.2.3

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**NeedsCompilation** no

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**Repository** CRAN

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age_df_countries	<i>Get a data.frame (in long format) of population by age for multiple countries</i>
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### Description

Get a data.frame (in long format) of population by age for multiple countries

### Usage

```
age_df_countries(countries)
```

### Arguments

countries	A character string or a vector of character containing the names of the countries for which to return contact data
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### Value

A data.frame (in long format) with 3 columns:

- country: the country name
- age: the age group
- population: the number of people in this age group

### References

<https://www.census.gov/programs-surveys/international-programs/about/idb.html>

### Examples

```
age_df_countries(c("Austria", "Belgium"))
```

---

contact\_df\_countries *Get a data.frame (in long format) of contact data for multiple countries*

---

## Description

Get a data.frame (in long format) of contact data for multiple countries

## Usage

```
contact_df_countries(countries, ...)
```

## Arguments

countries      A character string or a vector of character containing the names of the countries for which to return contact data

...             Arguments passed to [contact\\_matrix\(\)](#)

## Value

A data.frame (in long format) with 4 columns:

- country: the country name
- age\_from: the age group of individual
- age\_to: the age group of contact
- contact: the intensity of contact

## References

Kiesha Prem, Alex R. Cook, Mark Jit, *Projecting social contact matrices in 152 countries using contact surveys and demographic data*, PLoS Comp. Biol. (2017), [doi:10.1371/journal.pcbi.1005697](https://doi.org/10.1371/journal.pcbi.1005697)

Kiesha Prem, Kevin van Zandvoort, Petra Klepac, Rosalind M. Eggo, Nicholas G. Davies, CMMID COVID-19 Working Group, Alex R. Cook, Mark Jit, *Projecting contact matrices in 177 geographical regions: An update and comparison with empirical data for the COVID-19 era*, PLoS Comp. Biol. (2021), [doi:10.1371/journal.pcbi.1009098](https://doi.org/10.1371/journal.pcbi.1009098).

## Examples

```
contact_df_countries(c("Austria", "Belgium"), location = "all")
```

---

contact\_matrix      *Get contact data matrix for a specific country*

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### Description

Get contact data matrix for a specific country

### Usage

```
contact_matrix(  
  country,  
  location = c("all", "home", "school", "work", "other"),  
  geographic_setting = c("all", "rural", "urban"),  
  data_source = c("2020", "2017")  
)
```

### Arguments

country	Character. The name of the country for which you want contact data.
location	Character. One of "all" (default), "home", "school", "work" or "other".
geographic_setting	Character. One of "all" (default), "rural", "urban"
data_source	Character. Either "2020" (default) or "2017"

### Value

A square (16 by 16) matrix containing the contact data between the different age classes for a given country.

### References

Kiesha Prem, Alex R. Cook, Mark Jit, *Projecting social contact matrices in 152 countries using contact surveys and demographic data*, PLoS Comp. Biol. (2017), [doi:10.1371/journal.pcbi.1005697](https://doi.org/10.1371/journal.pcbi.1005697)

Kiesha Prem, Kevin van Zandvoort, Petra Klepac, Rosalind M. Eggo, Nicholas G. Davies, CMMID COVID-19 Working Group, Alex R. Cook, Mark Jit, *Projecting contact matrices in 177 geographical regions: An update and comparison with empirical data for the COVID-19 era*, PLoS Comp. Biol. (2021), [doi:10.1371/journal.pcbi.1009098](https://doi.org/10.1371/journal.pcbi.1009098).

### Examples

```
contact_matrix("France", location = "all")  
  
contact_matrix("Belgium", location = "school")
```

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list_countries	<i>Get the list of countries included in the dataset</i>
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### Description

Get the list of countries included in the dataset

### Usage

```
list_countries(  
  geographic_setting = c("all", "rural", "urban"),  
  data_source = c("2020", "2017")  
)
```

### Arguments

`geographic_setting` Character. One of "all" (default), "rural", "urban"  
`data_source` Character. Either "2020" (default) or "2017"

### Value

A character vector with the name of all countries included in the dataset

### Note

This package uses the nomenclature from the **countrycode** package. If your names differ from the names used here, you should use **countrycode** as well to update them.

### References

Kiesha Prem, Alex R. Cook, Mark Jit, *Projecting social contact matrices in 152 countries using contact surveys and demographic data*, PLoS Comp. Biol. (2017), [doi:10.1371/journal.pcbi.1005697](https://doi.org/10.1371/journal.pcbi.1005697)  
Kiesha Prem, Kevin van Zandvoort, Petra Klepac, Rosalind M. Eggo, Nicholas G. Davies, CMMID COVID-19 Working Group, Alex R. Cook, Mark Jit, *Projecting contact matrices in 177 geographical regions: An update and comparison with empirical data for the COVID-19 era*, PLoS Comp. Biol. (2021), [doi:10.1371/journal.pcbi.1009098](https://doi.org/10.1371/journal.pcbi.1009098).

### Examples

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list_countries()
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