Package ‘contactdata’

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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> and Prem et al. <doi: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


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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R topics documented:

- age_df_countries
- contact_df_countries
- contact_matrix
- list_countries

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

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


Examples
contact_df_countries(c("Austria", "Belgium"), location = "all")
contact_matrix

Get contact data matrix for a specific country

Description

Get contact data matrix for a specific country

Usage

```r
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


Examples

```r
contact_matrix("France", location = "all")

contact_matrix("Belgium", location = "school")
```
list_countries

Get the list of countries included in the dataset

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

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