

Package ‘denguedatahub’

September 22, 2024

Title A Tidy Format Datasets of Dengue by Country

Version 2.1.1

Description Provides a weekly, monthly, yearly summary of dengue cases by state/ province/ country.

License GPL-3

URL <https://denguedatahub.netlify.app/>

BugReports <https://github.com/thiyangt/denguedatahub/issues>

Encoding UTF-8

RoxygenNote 7.3.1

Imports dplyr, tibble, tidyr, rvest, stringr, lifecycle, magrittr,
here, utils, purrr, xml2, tabulapdf, rlang (>= 0.4.11)

LazyData true

Suggests roxygen2, tsibble

SystemRequirements Java (>= 7.0): openjdk-11-jdk (deb),
java-11-openjdk.x86_64 (rpm), openjdk@11 (brew)

Depends R (>= 3.5.0)

NeedsCompilation no

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americas_annual_data *Dengue and severe dengue cases and deaths for subregions of the Americas*

Description

Region/Country-wise dengue and severe dengue cases and deaths since 1980 (Last accessed from the source on 30 January 2023).

Usage

americas_annual_data

Format

A tibble with 899134 rows and 5 variables:

region Name of the affected region
country Name of the country
type An indicator for the type of cases (deaths, cases)
cases cases
year year

Source

<https://www3.paho.org/data/index.php/en/mnu-topics/indicadores-dengue-en/dengue-regional-en/261-dengue-reg-ano-en.html>

Examples

```
head(americas_annual_data)
```

cdc_casesby_week	<i>All dengue cases by week in US states and territories, 2010 - 2023</i>
------------------	---

Description

All dengue cases by week in US states and territories, 2010 - 2023 published by the US Centers for Disease Control and Prevention (CDC)

Usage

```
cdc_casesby_week
```

Format

A tibble with 742 rows and 4 variables:

Year Year

Travel.status Travel status

Week Week

Reported.cases Number of reported dengue cases

Source

Accessed from <https://www.cdc.gov/dengue/data-research/facts-stats/historic-data.html>. Last accessed (Sep 3, 2024)

Examples

```
head(cdc_casesby_week)
```

cdc_dengue_agesex *All dengue cases by age group and sex in US states and territories, 2010 - 2023*

Description

Annual dengue cases by age group and sex in US states and territories, 2010 - 2023 published by the US Centers for Disease Control and Prevention (CDC)

Usage

```
cdc_dengue_agesex
```

Format

A tibble with 3900 rows and 7 variables:

Year Year

Travel.status Travel status

Age Age group

Male Number of male dengue cases

Female Number of female dengue cases

Source

Accessed from <https://www.cdc.gov/dengue/data-research/facts-stats/historic-data.html>. Last accessed (Sep 3, 2024)

Examples

```
head(cdc_dengue_agesex)
```

cdc_dengue_casesbyjurisdiction *All dengue cases by jurisdiction of residence in US states and territories, 2010 - 2023*

Description

All dengue cases by jurisdiction of residence in US states and territories, 2010 - 2023 published by the US Centers for Disease Control and Prevention (CDC)

Usage

```
cdc_dengue_casesbyjurisdiction
```

Format

A tibble with 742 rows and 4 variables:

Year Year

Travel.status Travel status

Jurisdiction Jurisdiction

Count Dengue counts

Legend Categorization of counts for easy plotting

Notes Additional notes regarding the observation record

Source

Accessed from <https://www.cdc.gov/dengue/data-research/facts-stats/historic-data.html>. Last accessed (Sep 3, 2024)

Examples

```
head(cdc_dengue_casesbyjurisdiction)
```

cdc_dengue_countyyear *All dengue cases by county of residence in US states and territories, 2010 - 2023*

Description

Annual dengue cases by county of residence in US states and territories, 2010 - 2023 published by the US Centers for Disease Control and Prevention (CDC)

Usage

```
cdc_dengue_countyyear
```

Format

A tibble with 3900 rows and 7 variables:

FullGeoName Reporting Area

Year Year

Travel.status Travel status

County County

Legend Categorisation of counts for easy visualisations

Notes Additional note about the area

Source

Accessed from <https://www.cdc.gov/dengue/data-research/facts-stats/historic-data.html>. Last accessed (Sep 3, 2024)

Examples

```
head(cdc_usa_dengue_infection)
```

```
cdc_local_dengue_cases
```

Locally acquired dengue cases by year, 2010 - 2023

Description

Locally acquired dengue cases by year in the US, 2010 - 2023 published by the US Centers for Disease Control and Prevention (CDC)

Usage

```
cdc_local_dengue_cases
```

Format

A tibble with 14 rows and 3 variables:

Year Year

Travel.status Travel status

Reported.cases Number of reported cases

Source

Accessed from <https://www.cdc.gov/dengue/data-research/facts-stats/historic-data.html>. Last accessed (Sep 3, 2024)

Examples

```
head(cdc_local_dengue_cases)
```

`cdc_travel_associated_dengue_cases`*Travel associated dengue cases by year, 2010 - 2023*

Description

Travel associated dengue cases by year, 2010 - 2023 in the US, 2010 - 2023 published by the US Centers for Disease Control and Prevention (CDC)

Usage`cdc_travel_associated_dengue_cases`**Format**

A tibble with 14 rows and 3 variables:

Year Year

Travel.status Travel status

Reported.cases Number of reported cases

Source

Accessed from <https://www.cdc.gov/dengue/data-research/facts-stats/historic-data.html>. Last accessed (Sep 3, 2024)

Examples

```
head(cdc_travel_associated_dengue_cases)
```

`cdc_usa_dengue_infection`*Annual number of dengue fever infections in the USA*

Description

Annual cases of dengue in different areas of the USA

Usage`cdc_usa_dengue_infection`

Format

A tibble with 9170 rows and 38 variables:

area Reporting Area

year Year

week Week

dengue_cases Dengue cases in the current week

dengue_like_illness Dengue like illness cases in the current week

severe_dengue Severe dengue cases in the current week

Source

https://data.cdc.gov/browse.php?federation_filter=85&format=php&sortBy=alpha&tags=dengue

Examples

```
head(cdc_usa_dengue_infection)
```

china_annual_data	<i>Dengue related data in China</i>
-------------------	-------------------------------------

Description

Annual indigenous and imported dengue cases in mainland China, 2005-2020

Usage

```
china_annual_data
```

Format

A tibble with 16 rows and 5 variables:

year Year

dengue.cases.indigenous Number of indigenous dengue cases

dengue.cases.imported Number of imported dengue cases

counties.with.dengue.fever.indigenous Number of counties with dengue fever - indigenous cases

counties.with.dengue.fever.imported Number of counties with dengue fever - imported cases

Source

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8997546/table/ijerph-19-03910-t001/?report=objectonly>

Examples

```
head(china_annual_data)
```

convert_slwer_to_tidy *Read weekly epidemiological reports and convert dengue data into tidy format*

Description

Read weekly epidemiological reports and convert dengue data into tidy format

Usage

```
convert_slwer_to_tidy(
  year,
  reports.url,
  start.date.first,
  end.date.first,
  start.date.last,
  end.date.last,
  week.no
)
```

Arguments

year	year
reports.url	URL address vector obtained from get_pdflinks_srilanka
start.date.first	starting date of the first report week (format "2006-12-23")
end.date.first	ending date of the first report week (format "2006-12-23")
start.date.last	starting date of the last report week (format "2006-12-23")
end.date.last	ending date of the first report week (format "2006-12-23")
week.no	report number vector

convert_srilanka_wer_to_tidy
Read weekly epidemiological reports and convert dengue data into tidy format

Description

Read weekly epidemiological reports and convert dengue data into tidy format

Usage

```

convert_srilanka_wer_to_tidy(
  year,
  url.part1 = "https://www.epid.gov.lk",
  url.part2,
  start.date.first,
  end.date.first,
  start.date.last,
  end.date.last,
  week.no
)

```

Arguments

year	year
url.part1	first part of the URL, by default "https://www.epid.gov.lk"
url.part2	URL address vector obtained from filter_year_url_link
start.date.first	starting date of the first report week (format "2006-12-23")
end.date.first	ending date of the first report week (format "2006-12-23")
start.date.last	starting date of the last report week (format "2006-12-23")
end.date.last	ending date of the first report week (format "2006-12-23")
week.no	report number vector

download_pdfwer_srilanka

Download and save weekly epidemiological reports from Epidemiology Unit, Ministry of Health, Sri Lanka (url <https://www.epid.gov.lk/weekly-epidemiological-report/weekly-epidemiological-report>)

Description

Download and save weekly epidemiological reports from Epidemiology Unit, Ministry of Health, Sri Lanka (url <https://www.epid.gov.lk/weekly-epidemiological-report/weekly-epidemiological-report>)

Usage

```

download_pdfwer_srilanka(
  url =
  "https://www.epid.gov.lk/weekly-epidemiological-report/weekly-epidemiological-report",
  folder.name,
  volume.number
)

```

Arguments

- url url of the webpage that you intend to download files. The default is URL of the weekly epidemiological reports page
- folder.name create a folder with this name and save the pdf file inside this folder
- volume.number Volume number of the epidemiological reports (Volumes corresponds to year)

Value

Pdf files corresponds to the volume number you specified inside the folder.name

Author(s)

Thiyanga S Talagala

filter_year_wer *Filter links corresponds to a specific year using the function output get_address*

Description

Filter links corresponds to a specific year using the function output get_address

Usage

```
filter_year_wer(year, address)
```

Arguments

- year year that you want to extract the reports
- address list or the outout from get_address function

Author(s)

Thiyanga S Talagala

get_addresses	<i>Extract links of all downloadable files on a webpage</i>
---------------	---

Description

Extract links of all downloadable files on a webpage

Usage

```
get_addresses(url)
```

Arguments

url	url of the webpage that you intend to download files.
-----	---

Value

web addresses of all downloadable files

Author(s)

Thiyanga S Talagala

get_pdflinks_srilanka	<i>Get URLs of weekly epidemiological reports from Epidemiology Unit, Ministry of Health, Sri Lanka (url https://www.epid.gov.lk/weekly-epidemiological-report/weekly-epidemiological-report)</i>
-----------------------	---

Description

Get URLs of weekly epidemiological reports from Epidemiology Unit, Ministry of Health, Sri Lanka (url <https://www.epid.gov.lk/weekly-epidemiological-report/weekly-epidemiological-report>)

Usage

```
get_pdflinks_srilanka(
    url =
        "https://www.epid.gov.lk/weekly-epidemiological-report/weekly-epidemiological-report",
    volume.number
)
```

Arguments

url	url of the webpage that you intend to download files. The default is URL of the weekly epidemiological reports page
volume.number	Volume number of the epidemiological reports (Volumes corresponds to year)

Value

URLS of PDF files corresponds to the volume number

Author(s)

Thiyanga S Talagala

india_annual_data *DENGUE/DHF situation in India since 2017*

Description

State/Union Territory(UT)-wise dengue/DHF annual deaths and cases since 2017 (Last accessed from the source on 30 January 2023).

Usage

india_annual_data

Format

A tibble with 432 rows and 5 variables:

area Name of the affected states/UTs

type An indicator for the type of cases (deaths, cases)

year Year

additional_information Additional information regarding collected year period

value Cases

Source

National Center for Vector Borne Disease Control, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India.

Examples

```
head(india_annual_data)
```

korea_dengue	<i>Imported dengue cases in Korea</i>
--------------	---------------------------------------

Description

Data for imported dengue cases were collected from Korea Centers for Disease Control and Prevention (KCDC)

Usage

```
korea_dengue
```

Format

A tibble with 33 rows and 7 variables:

Country Country

Region Region

2011 Year 2011

2012 Year 2012

2013 Year 2013

2014 Year 2014

2015 Year 2015

Source

Je, Sungmo, Wonjun Bae, Jiyeon Kim, Seung Hyeok Seok, and Eung-Soo Hwang. "Epidemiological characteristics and risk factors of dengue infection in Korean travelers." *Journal of Korean Medical Science* 31, no. 12 (2016): 1863-1873.

Examples

```
head(korea_dengue)
```

level_of_risk	<i>Level of Dengue risk around the world</i>
---------------	--

Description

Country-wise dengue risk levels (Last accessed from the source on 18 January 2023).

Usage

```
level_of_risk
```

Format

A tibble with 293 rows and 4 variables:

country factor Name of the country

level_of_risk factor Dengue risk level. There are three categories: Frequent or continuous, Sporadic or uncertain, Varies by region. Frequent/continuous risk: evidence of more than 10 dengue cases in at least 3 of the previous 10 years. Sporadic/uncertain risk: evidence of at least 1 locally acquired dengue case during the last 10 years.

region factor Region

last_accessed information last accessed date

Source

The 2024 data accessed from <https://www.cdc.gov/dengue/areas-with-risk/index.html>.

Examples

```
head(level_of_risk)
```

min_max

Apply min-max transformation

Description

Apply min-max transformation

Usage

```
min_max(data, variable.to.minmax, local = FALSE, group.var)
```

Arguments

data tibble that contains cases, groups

variable.to.minmax

the variable that we want to transform using the min-max transformation

local TRUE if you need to apply local minmax transformation

group.var variables that you need to create group-wise

Value

tibble with minmax transformed applied

philippines_daily_data

Daily number of dengue fever infections in Philippines

Description

Daily cases of dengue in Philippines

Usage

```
philippines_daily_data
```

Format

A tibble with 32701 rows and 5 variables:

location location

affected_and_infected affected and infected number of cases

affected_and_killed affected and killed number of cases

date date of the week

region region name

Source

<https://data.humdata.org/dataset/philippine-dengue-cases-and-deaths?>

Examples

```
head(philippines_daily_data)
```

singapore_weekly_data *Weekly number of dengue fever infections in Sri Lanka*

Description

Weekly cases of dengue in Sri Lanka

Usage

```
singapore_weekly_data
```


Format

A tibble with 18772 rows and 6 variables:

year year

week week number

cases Number of dengue cases

Source

<https://www.straitstimes.com/multimedia/graphics/2022/06/singapore-dengue-cases/index.html?shell#:~:text=Singapore%20is%20currently%20seeing%2030,lower%20than%20the%202020%20surge>

Examples

```
head(singapore_weekly_data)
```

sl_annual	<i>Annual reported dengue cases in Sri Lanka</i>
-----------	--

Description

Annual reported dengue cases in Sri Lanka 1989-2021

Usage

```
sl_annual
```

Format

A tibble with 35 rows and 3 variables:

year Year

dengue.cases Number of dengue cases

epidemic Epidemic: 1 if the year is classified as an epidemic year, 0 otherwise

Source

Source 1: World Health Organization. Dengue Fact Sheet and Situation Report, Sri Lanka. 22 July 2022. Available at: https://cdn.who.int/media/docs/default-source/sri-lanka-documents/dengue-fact-sheet_7-2022-sr1.pdf?sfvrsn=49021bd_1. (Accessed: 4 September 2024), Source 2: Weekly Dengue Updates, National Dengue Control Unit, Ministry of Health

Examples

```
head(sl_annual)
```

sl_dengue_serotype	<i>Identification of dengue serotypes circulating in Sri Lanka</i>
--------------------	--

Description

History of dengue dengue serotypes circulating in Sri Lanka.

Usage

sl_dengue_serotype

Format

A tibble with 35 rows and 3 variables:

year Year

dengue.cases Number of dengue cases

Source

Ali, Shahid, Abdul Waheed Khan, Andrew W. Taylor-Robinson, Muhammad Adnan, Shahana Malik, and Saba Gul. "The unprecedented magnitude of the 2017 dengue outbreak in Sri Lanka provides lessons for future mosquito-borne infection control and prevention." *Infection, Disease & Health* 23, no. 2 (2018): 114-120.

Examples

```
head(sl_dengue_serotype)
```

sl_sites	<i>Type and proportion of breeding habitats positive for Aedes aegypti mosquitoes, across provinces in Sri Lanka, 2017.</i>
----------	---

Description

Total number of premises inspected: 279,728; Total number of premises inspected: 279,728; total Ae. aegypti-positive containers: 9,699. Other miscellaneous items include refrigerator trays, nonfunctional cisterns, pet feeding cups, gutters, concrete slabs, and any other water-collecting containers. (Last accessed from the source on 3 September 2024).

Usage

sl_sites

Format

A tibble with 9 rows and 7 variables:

Province Province

Discarded_items Percentage of water-retaining containers positive for discarded items

Water_storage_containers_and_tanks Percentage of water-retaining containers positive for water storage containers and tanks

Ponds_and_ornamental_items Percentage of water-retaining containers positive for ponds and ornamental items

Wells_and_tube_wells Percentage of water-retaining containers positive for wells and tube wells

Natural_water_collections Percentage of water-retaining containers positive for natural water collections

Other_miscellaneous_items Percentage of water-retaining containers positive for other miscellaneous items

Source

Tissera, H.A., Jayamanne, B.D., Raut, R., Janaki, S.M., Tozan, Y., Samaraweera, P.C., Liyanage, P., Ghouse, A., Rodrigo, C., de Silva, A.M. and Fernando, S.D., 2020. Severe dengue epidemic, Sri Lanka, 2017. *Emerging infectious diseases*, 26(4), p.682. head(sl_sites)

srilanka_weekly_data *Weekly number of dengue fever infections in Sri Lanka*

Description

Weekly cases of dengue in Sri Lanka

Usage

srilanka_weekly_data

Format

A tibble with 23815 rows and 6 variables:

year year

week week number

start.date starting date of the week

end.date ending date of the week

district district name

cases Number of dengue cases

Source

Weekly Epidemiological Reports, Epidemiology Unit, Ministry of Health, Sri Lanka.

Examples

```
head(srilanka_weekly_data)
```

taiwan_dengue

Indigenous and imported dengue cases in Taiwan, 1987-2023.

Description

Annual indigenous and imported dengue cases in Taiwan, 1987-2023.

Usage

```
taiwan_dengue
```

Format

A tibble with 37 rows and 3 variables:

year Year

indigenous.dengue Number of indigenous dengue cases

imported.dengue Number of imported dengue

Source

Taiwan Centres for Disease Control, Available at: https://www.cdc.gov.tw/En/Category/ListContent/bg0g_VU_Ysrgkes_KRUDgQ?uaid=9_0q70YHa-l8B05iUwyVvQ. (Accessed: 4 September 2024), Source 2: Weekly Dengue Updates, National Dengue Control Unit, Ministry of Health

Examples

```
head(taiwan_dengue)
```

world_annual	<i>Annual number of dengue fever infections around the world</i>
--------------	--

Description

Annual incidence of dengue around the world

Usage

world_annual

Format

A tibble with 6750 rows and 4 variables:

longitude Longitude

latitude Latitude

group group variable

order collect in order

region regions

subregion subregions

code Country or area code

year year

incidence Number of dengue incidence across all ages #'

dengue.present whetherdengue cases present or not

Source

<https://ourworldindata.org/grapher/dengue-incidence>

Examples

```
head(world_annual)
```

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