

Package ‘cdcfluview’

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Type Package

Title Retrieve U.S. Flu Season Data from the CDC FluView Portal

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Description The U.S. Centers for Disease Control (CDC) maintains a portal <<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>> for accessing state, regional and national influenza statistics. The Flash interface makes it difficult and time-consuming to select and retrieve influenza data. This package provides functions to access the data provided by the portal's underlying API.

URL <http://github.com/hrbrmstr/cdcfluview>

BugReports <https://github.com/hrbrmstr/cdcfluview/issues>

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LazyData true

Suggests testthat

Imports httr (>= 0.3.0), pbapply, xml2, dplyr, utils

Depends R (>= 3.0.0)

NeedsCompilation no

Repository CRAN

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cdcfluview	<i>Retrieve Flu Season Data from the CDC FluView Portal</i>
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Description

The U.S. Centers for Disease Control (CDC) maintains a portal <http://gis.cdc.gov/grasp/fluview/fluportaldashboa> for accessing state, regional and national influenza statistics. The Flash interface makes it difficult and time-consuming to select and retrieve influenza data. This package provides functions to access the data provided by portal's underlying API.

Author(s)

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census_regions	<i>Census Region Table</i>
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Description

This dataset contains the states belonging to the (presently) 4 U.S. Census regions in "long" format. It consists of a data.frame with the following columns:

- region: the official Census region name (e.g. "East")
- state: state belonging to the region

Usage

```
data(census_regions)
```

Format

A data frame with 51 rows and 2 variables

Note

Last updated 2015-08-09.

References

<http://www.cdc.gov/std/stats12/images/CensusMap.png>

get_flu_data	<i>Retrieves state, regional or national influenza statistics from the CDC</i>
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Description

Uses the data source from the [CDC FluView](#) and provides flu reporting data as either a single data frame or a list of data frames (depending on whether either WHO NREVSS or ILINet (or both) is chosen).

Usage

```
get_flu_data(region = "hhs", sub_region = 1:10, data_source = "ilinet",
             years = as.numeric(format(Sys.Date(), "%Y")))
```

Arguments

region	one of "hhs", "census", "national"
sub_region	depends on the region_type. For "national", the sub_region should be NA. For "hhs", should be a vector between 1:10. For "census", should be a vector between 1:9
data_source	either of "who" (for WHO NREVSS) or "ilinet" or "all" (for both)
years	a vector of years to retrieve data for (i.e. 2014 for CDC flu season 2014-2015). Default value is the current year and all years values should be > 1997

Details

A lookup table between HHS regions and their member states/territories is provided in [hhs_regions](#).

Value

If only a single data_source is specified, then a single data.frame is returned, otherwise a named list with each data.frame is returned.

Note

There is often a noticeable delay when making the API request to the CDC. This is not due to a large download size, but the time it takes for their servers to crunch the data. Wrap the function call in `httr::with_verbose` if you would like to see what's going on.

Examples

```
## Not run:
flu <- get_flu_data("hhs", 1:10, c("who", "ilinet"), years=2000:2014)

## End(Not run)
```

get_state_data	<i>Retrieves state/territory-level influenza statistics from the CDC</i>
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Description

Uses the data source from the CDC' State-levelFluView <http://gis.cdc.gov/grasp/fluview/main.html> and provides state flu reporting data as a single data frame.

This function provides similar data to [get_weekly_flu_report](#) but provides more metadata about the reporting sources and has access to more historical information.

Usage

```
get_state_data(years = as.numeric(format(Sys.Date(), "%Y")))
```

Arguments

`years` a vector of years to retrieve data for (i.e. 2014 for CDC flu season 2014-2015). Default value is the current year and all years values should be > 1997

Value

A data.frame of state-level data for the specified seasons (also classed as `cdcstatedata`)

Note

There is often a noticeable delay when making the API request to the CDC. This is not due to a large download size, but the time it takes for their servers to crunch the data. Wrap the function call in `httr::with_verbose` if you would like to see what's going on.

Examples

```
## Not run:  
get_state_data(2014)  
get_state_data(c(2013, 2014))  
get_state_data(2010:2014)  
httr::with_verbose(get_state_data(2009:2015))  
  
## End(Not run)
```

get_weekly_flu_report *Retrieves (high-level) weekly influenza surveillance report from the CDC*

Description

The CDC publishes a [weekly influenza report](#) detailing high-level flu activity per-state. They also publish a data file (see References) of historical report readings. This function reads that XML file and produces a long data_frame with the historical surveillance readings.

This function provides similar data to [get_state_data](#) but without the reporting source metadata and a limit on the historical flu information.

Usage

```
get_weekly_flu_report()
```

Value

tbl_df (also classed with cdcweeklyreport) with six columns: year, week_number, state, color, label, subtitle

References

<http://www.cdc.gov/flu/weekly/flureport.xml>

Examples

```
## Not run:  
get_weekly_flu_report()  
  
## End(Not run)
```

hhs_regions *HHS Region Table*

Description

This dataset contains the names, numbers, regional offices for-, and states/territories belonging to the (presently) 10 HHS U.S. regions in "long" format. It consists of a data.frame with the following columns:

- region: the official HHS region name (e.g. "Region 1")
- region_number: the associated region number
- regional_office: the HHS regional office for the entire region
- state_or_territory: state or territory belonging to the region

Usage

```
data(hhs_regions)
```

Format

A data frame with 59 rows and 4 variables

Note

Last updated 2015-08-09.

References

<http://www.hhs.gov/iea/regional/>

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