Package: covdata (via r-universe)

October 23, 2024

October 25, 2024
Type Package
Title COVID-19 Data
Version 1.01
Description COVID-19 related data from the ECDC, the COVID-19 Tracking Project, the New York Times, the Human Mortality Database, and Apple. Packaged for R.
Depends R (>= 2.10)
License MIT + file LICENSE
Encoding UTF-8
LazyData true
LazyDataCompression xz
$\mathbf{Roxygen} \ \operatorname{list}(\operatorname{markdown} = \operatorname{TRUE})$
RoxygenNote 7.2.3
<pre>URL https://github.com/kjhealy/covdata</pre>
BugReports https://github.com/kjhealy/covdata/issues
Imports dplyr, magrittr, tidyr
Suggests drat, ggforce, ggrepel, lubridate, knitr, rmarkdown, scales, skimr, slider, tidyverse, testthat
VignetteBuilder knitr
Repository https://kjhealy.r-universe.dev
${\bf RemoteUrl\ https://github.com/kjhealy/covdata}$
RemoteRef HEAD
${\bf RemoteSha}\ \ 0626c6522c38f1ac0c74453267dd5779a88ca2c6$
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apple_mobility

 $Apple\ Mobility\ Data$

Description

Data from Apple Maps on relative changes in mobility in various cities and countries.

54

Usage

apple_mobility

apple_mobility 3

Format

A data frame with 2,254,515 rows and 7 variables:

country character Country name (not provided for all countries)

sub_region character Subregion names

subregion_and_city character Subregion and city names

geo_type character Type geographical unit. Values: city, country/region, sub-region transportation_type character Mode of transport. Values: driving, transit, or walking date double Date in yyyy-mm-dd format

score double Activity score. Indexed to 100 on the first date of observation for a given mode of transport.

Details

Table: Data summary

Name	apple_mobility
Number of rows	2254515
Number of columns	7
Column type frequency:	
Date	1
character	5
numeric	1
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	complete_rate	\min	max	median	n _unique
date	0	1	2020-01-13	2022-04-12	2021-02-26	819

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	\max	empty	nunique	whitespace
country	0	1	5	20	0	63	0
$\operatorname{sub_region}$	0	1	4	46	0	606	0
$subregion_and_city$	0	1	4	46	0	853	0
geo_type	0	1	4	14	0	3	0
transportation_type	0	1	7	7	0	3	0

Variable type: numeric

4 cdc_catchments

```
p0
skim variable
                  n missing
                                complete rate
                                                                 \operatorname{sd}
                                                                               p25
                                                                                         p50
                                                                                                  p75
                                                                                                            p100
                                                                                                                    hist
                                                    mean
                                                                                      113.72
                      608041
                                                   122.59
                                                             66.81
                                                                      2.43
                                                                             83.79
                                                                                                148.8
                                                                                                         2228.83
score
                                            0.73
```

Data made available by Apple, Inc. at https://www.apple.com/covid19/mobility, showing relative volume of directions requests per country/region or city compared to a baseline volume on January 13th, 2020. Apple defines the day as midnight-to-midnight, Pacific time. Cities represent usage in greater metropolitan areas and are stably defined during this period. In many countries/regions and cities, relative volume has increased since January 13th, consistent with normal, seasonal usage of Apple Maps. Day of week effects are important to normalize as you use this data. Data that is sent from users' devices to the Apple Maps service is associated with random, rotating identifiers so Apple does not have a profile of individual movements and searches. Apple Maps has no demographic information about its users, and so cannot make any statements about the representativeness of its usage against the overall population.

Author(s)

Kieran Healy

Source

https://www.apple.com/covid19/mobility

References

See https://www.apple.com/covid19/mobility for detailed terms of use.

cdc catchments

CDC surveillance network and network catchment area

Description

What the CDC surveillance network covers

Usage

cdc_catchments

Format

A data frame with 17 rows and 2 variables:

name character Network name

area character Area

 $cdc_catchments$ 5

Details

Table: Data summary

Name	cdc _catchments
Number of rows	17
Number of columns	2
Column type frequency:	
character	2
Group variables	None

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	nunique	whitespace
name	0	1	3	9	0	3	0
area	0	1	4	14	0	15	0

The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) conducts population-based surveillance for laboratory-confirmed COVID-19-associated hospitalizations in children (persons younger than 18 years) and adults. The current network covers nearly 100 counties in the 10 Emerging Infections Program (EIP) states (CA, CO, CT, GA, MD, MN, NM, NY, OR, and TN) and four additional states through the Influenza Hospitalization Surveillance Project (IA, MI, OH, and UT). The network represents approximately 10% of US population (~32 million people). Cases are identified by reviewing hospital, laboratory, and admission databases and infection control logs for patients hospitalized with a documented positive SARS-CoV-2 test. Data gathered are used to estimate age-specific hospitalization rates on a weekly basis and describe characteristics of persons hospitalized with COVID-19. Laboratory confirmation is dependent on clinician-ordered SARS-CoV-2 testing. Therefore, the unadjusted rates provided are likely to be underestimated as COVID-19-associated hospitalizations can be missed due to test availability and provider or facility testing practices. COVID-NET hospitalization data are preliminary and subject to change as more data become available. All incidence rates are unadjusted. Please use the following citation when referencing these data: "COVID-NET: COVID-19-Associated Hospitalization Surveillance Network, Centers for Disease Control and Prevention. WEBSITE. Accessed on DATE".

name	area
COVID-NET	Entire Network
EIP	California
EIP	Colorado
EIP	Connecticut
EIP	Entire Network
EIP	Georgia

EIP	Maryland
EIP	Minnesota
EIP	New Mexico
EIP	New York
EIP	Oregon
EIP	Tennessee
IHSP	Entire Network
IHSP	Iowa
IHSP	Michigan
IHSP	Ohio
IHSP	Utah

Author(s)

Kieran Healy

Source

Courtesy of Bob Rudis's cdccovidview package

References

https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html

cdc_deaths_by_age

CDC Surveillance Network Death Counts by Age

Description

Provisional Death Counts for Coronavirus Disease (COVID-19)

Usage

```
cdc_deaths_by_age
```

Format

```
A data frame with 12 rows and 10 variables:
```

```
data_as_of date When the data were most recently recorded age_group character Age range start_week date Start week end_week date End week covid_deaths integer COLUMN_DESCRIPTION total_deaths integer COLUMN_DESCRIPTION
```

cdc_deaths_by_age 7

percent_expected_deaths double COLUMN_DESCRIPTION
pneumonia_deaths integer COLUMN_DESCRIPTION
pneumonia_and_covid_deaths integer COLUMN_DESCRIPTION
all_influenza_deaths_j09_j11 integer COLUMN_DESCRIPTION

Details

Table: Data summary

Name	$cdc_deaths_by_age$
Number of rows	12
Number of columns	10
Column type frequency:	
Date	3
character	1
numeric	6
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
$data_as_of$	0	1	2020-04-30	2020-04-30	2020-04-30	1
$start_week$	0	1	2020-02-01	2020-02-01	2020-02-01	1
end_week	0	1	2020-04-25	2020-04-25	2020 - 04 - 25	1

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	\max	empty	nunique	whitespace
age group	0	1	5	10	0	12	0

Variable type: numeric

skim_variable	n_missing	$complete_rate$	mean	sd	p0	p25	p
covid _deaths	0	1	5753.50	9877.31	2.00	30.25	1211.
$total_deaths$	0	1	118897.67	202377.07	712.00	5675.25	28460.
$percent_expected_deaths$	0	1	0.97	0.00	0.97	0.97	0.
pneumonia_deaths	0	1	10454.17	18036.25	33.00	109.00	1799.
pneumonia_and_covid_deaths	0	1	2550.17	4387.93	0.00	12.50	491.
all_influenza_deaths_j09_j11	0	1	970.17	1618.90	11.00	40.75	358.

The U.S. Centers for Disease Control provides weekly summary and interpretation of key indicators that have been adapted to track the COVID-19 pandemic in the United States. Data is retrieved using the cdccovidview package from both COVIDView (https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html) and COVID-NET (https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html). Please see the indicated reference for all the caveats and precise meanings for each field.

Author(s)

Kieran Healy

Source

Courtesy of Bob Rudis's cdccovidview package

References

https://data.cdc.gov/api/views/hc4f-j6nb/rows.csv?accessType=DOWNLOAD&bom=true&format=true

cdc_deaths_by_sex

CDC provisional death counts by sex

Description

Provisional Death Counts for Coronavirus Disease (COVID-19)

Usage

```
cdc_deaths_by_sex
```

Format

A data frame with 3 rows and 10 variables:

data_as_of date Date most recently updated
sex character Sex
start_week date Beginning week
end_week date Ending week
covid_deaths integer COVID deaths
total_deaths integer Total deaths
percent_expected_deaths double COLUMN_DESCRIPTION
pneumonia_deaths integer COLUMN_DESCRIPTION
pneumonia_and_covid_deaths integer COLUMN_DESCRIPTION
all_influenza_deaths_j09_j11 integer COLUMN_DESCRIPTION

cdc_deaths_by_sex 9

Details

Table: Data summary

Name	cdc_deaths_by_sex
Number of rows	3
Number of columns	10
Column type frequency:	
Date	3
character	1
numeric	6
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
$data_as_of$	0	1	2020-04-30	2020-04-30	2020-04-30	1
$start_week$	0	1	2020-02-01	2020-02-01	2020-02-01	1
end week	0	1	2020-04-25	2020-04-25	2020-04-25	1

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	\max	empty	n_unique	whitespace
sev	0	1	4	7	0	3	0

Variable type: numeric

skim variable	n missing	complete rate	mean	sd	0q	p25	
covid deaths	_ 0	1	11507.33	10231.40	1.00	7470.50	1494
total deaths	0	1	237795.00	206241.06	25.00	172555.00	34508
percent_expected_deaths	0	1	0.97	0.00	0.97	0.97	
pneumonia_deaths	0	1	20908.33	18248.40	1.00	14545.00	2908
pneumonia_and_covid_deaths	0	1	5100.33	4559.67	1.00	3258.00	651
all influenza deaths j09 j11	0	1	1940.33	1682.21	0.00	1416.00	283

The U.S. Centers for Disease Control provides weekly summary and interpretation of key indicators that have been adapted to track the COVID-19 pandemic in the United States. Data is retrieved using the cdccovidview package from both COVIDView (https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html) and COVID-NET (https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html). Please see the indicated reference for all the caveats and precise meanings for each field.

Author(s)

Kieran Healy

Source

Courtesy of Bob Rudis's cdccovidview package

References

 $\verb"cdc_deaths_by_state" \ CDC \ provisional \ death \ counts \ by \ state$

Description

CDC Surveillance Network provisional death counts

Usage

```
cdc_deaths_by_state
```

Format

A data frame with 53 rows and 10 variables:

data_as_of date Date most recently updated

state character State name

start_week date Start week

end_week double End week

covid_deaths integer COVID Deaths

total_deaths integer Total deaths

percent_expected_deaths double COLUMN_DESCRIPTION

pneumonia_deaths integer COLUMN_DESCRIPTION

pneumonia_and_covid_deaths integer COLUMN_DESCRIPTION

all_influenza_deaths_j09_j11 integer COLUMN_DESCRIPTION

Details

Table: Data summary

Name Number of rows Number of columns	cdc_deaths_by_state 53
Column type frequency: Date character numeric	3 1 6
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
$data_as_of$	0	1	2020-04-30	2020-04-30	2020-04-30	1
$start_week$	0	1	2020-02-01	2020-02-01	2020-02-01	1
end week	0	1	2020-04-25	2020-04-25	2020-04-25	1

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	\max	empty	nunique	whitespace
state	0	1	4	20	0	53	0

Variable type: numeric

skim_variable	n_missing	$complete_rate$	mean	sd	p0	p25	p50
covid_deaths	6	0.89	735.02	1801.11	0	54.50	153.00
total_deaths	0	1.00	13557.43	13996.83	856	3813.00	10721.00
$percent_expected_deaths$	0	1.00	0.93	0.27	0	0.86	0.95
pneumonia_deaths	0	1.00	1197.26	1453.17	41	277.00	769.00
pneumonia_and_covid_deaths	10	0.81	355.81	759.51	0	30.50	65.00
all influenza deaths j09 j11	3	0.94	116.58	142.24	14	30.50	87.50

The U.S. Centers for Disease Control provides weekly summary and interpretation of key indicators that have been adapted to track the COVID-19 pandemic in the United States. Data is retrieved using the cdccovidview package from both COVIDView (https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html) and COVID-NET. Please see the indicated reference for all the caveats and precise meanings for each field. (https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html).

Author(s)

Kieran Healy

References

https://data.cdc.gov/api/views/hc4f-j6nb/rows.csv?accessType=DOWNLOAD&bom=true&format=true

cdc_deaths_by_week

CDC Provisional death counts by week

Description

Provisional Death Counts for Coronavirus Disease (COVID-19)

Usage

```
cdc_deaths_by_week
```

Format

A data frame with 13 rows and 10 variables:

data_as_of date When the data were most recently recorded start_week date Start week end_week double End week covid_deaths integer COVID deaths total_deaths integer Total deaths percent_expected_deaths double COLUMN_DESCRIPTION pneumonia_deaths integer COLUMN_DESCRIPTION pneumonia_and_covid_deaths integer COLUMN_DESCRIPTION all_influenza_deaths_j09_j11 integer COLUMN_DESCRIPTION pneumonia_influenza_and_covid_19_deaths integer COLUMN_DESCRIPTION

Details

Table: Data summary

Name	$cdc_deaths_by_week$
Number of rows	13
Number of columns	10

Column type frequency:

Date	3
numeric	7
Group variables	 None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
$data_as_of$	0	1	2020-04-30	2020-04-30	2020-04-30	1
$start_week$	0	1	2020-02-01	2020 - 04 - 25	2020-03-14	13
end week	0	1	2020-02-01	2020-04-25	2020-03-14	13

Variable type: numeric

skim_variable	$n_{missing}$	$complete_rate$	mean	sd	p0	
covid_deaths	0	1	2655.46	4194.37	0.00	
total_deaths	0	1	54875.85	9864.46	24387.00	53
percent_expected_deaths	0	1	0.97	0.17	0.45	
pneumonia_deaths	0	1	4825.00	2217.19	2219.00	3
$pneumonia_and_covid_deaths$	0	1	1177.00	1863.76	0.00	
all_influenza_deaths_j09_j11	0	1	447.77	156.19	58.00	
pneumonia_influenza_and_covid_19_deaths	0	1	6690.23	4292.62	3553.00	4

The U.S. Centers for Disease Control provides weekly summary and interpretation of key indicators that have been adapted to track the COVID-19 pandemic in the United States. Data is retrieved using the cdccovidview package from both COVIDView (https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html) and COVID-NET (https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html). Please see the indicated reference for all the caveats and precise meanings for each field.

Author(s)

Kieran Healy

Source

Courtesy of Bob Rudis's cdccovidview package

References

 $\label{lem:https://data.cdc.gov/api/views/hc4f-j6nb/rows.csv?accessType=DOWNLOAD&bom=true\&format=true \\$

14 countries

countries	Cor
countries	Cor

 $Country\ Names\ and\ ISO\ codes$

Description

Convenience table of country names and their abbreviated names

Usage

countries

Format

A data frame with 213 rows and 4 variables:

cname character Country name
iso3 character ISO 3 designation
iso2 character ISO 2 designation
continent Continent

Details

Table: Data summary

Name	dplyr::ungroup(countries)
Number of rows	213
Number of columns	4
Column type frequency:	
character	4
Group variables	None

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	nunique	whitespace
cname	0	1.00	4	42	0	213	0
iso3	0	1.00	3	3	0	213	0
iso2	2	0.99	2	2	0	211	0
continent	0	1.00	4	13	0	6	0

Produced from the ECDC tables in the covdata package.

covnat_daily 15

Author(s)

Kieran Healy

References

```
ISO 2: https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2 ISO 3: https://en.wikipedia.org/wiki/ISO_3166-1_alpha-3
```

covnat_daily

Daily international COVID-19 cases and deaths for 2020

Description

A dataset containing daily national-level ECDC data on COVID-19. Archived as of December 14th 2020. ECDC switched to a weekly reporting schedule for the COVID-19 situation worldwide and in the EU/EEA and the UK on 17 December 2020. Daily updates have been discontinued from 14 December 2020.

Usage

```
covnat_daily
```

Format

A tibble with 61,836 rows and 8 columns

date date in YYYY-MM-DD format

cname Name of country (character)

iso3 ISO3 country code (character)

cases N reported COVID-19 cases for this day

deaths N reported COVID-19 deaths for this day

pop Country population from Eurostat or UN data

cu_cases Cumulative N reported COVID-19 cases up to and including this day

cu_deaths Cumulative N reported COVID-19 deaths up to and including this day

Details

Table: Data summary

Name dplyr::ungroup(covnat_dai...

Number of rows 61836 Number of columns 8

Column type frequency:

16 covnat_weekly

Date	1
character	2
numeric	5
Group variables	None

Variable type: Date

$skim_variable$	$n_{}$ missing	$complete_rate$	\min	max	median	nunique
date	0	1	2019-12-31	2020-12-14	2020-07-21	350

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	n_unique	whitespace
cname	0	1	4	42	0	213	0
iso3	0	1	3	3	0	213	0

Variable type: numeric

$skim_variable$	$n_{missing}$	$complete_rate$	mean	sd	p0	p25	p50	
cases	0	1	1156.33	6782.63	-8261	0	15	27
deaths	0	1	26.08	131.29	-1918	0	0	
pop	59	1	40987698.23	153129379.34	815	1293120	7169456	2851582
cu_cases	0	1	100686.99	607743.06	0	129	2055	2465
cu_deaths	0	1	3104.89	15545.84	0	1	42	46

Source

https://www.ecdc.europa.eu/en/publications-data/download-todays-data-geographic-distribution-control and a second control and a second

covnat_weekly	Weekly International COVID-19 cases and deaths, current as of Sunday, January 22, 2023

Description

A dataset containing weekly national-level ECDC data on COVID-19 $\,$

Usage

covnat_weekly

covnat_weekly 17

Format

A tibble with 4,966 rows and 11 columns

date date in YYYY-MM-DD format

year_week Year and week of reporting (character, YYYY-WW)

cname Name of country (character)

pop Country population from Eurostat or UN data

iso3 ISO3 country code (character)

cases N reported COVID-19 cases for this week

deaths N reported COVID-19 deaths for this week

cu_cases Cumulative N reported COVID-19 cases up to and including this week

 ${\bf cu_deaths}$ Cumulative N reported COVID-19 deaths up to and including this week

r14_cases 14-day notification rate of reported COVID-19 cases per 100,000 population

r14 deaths 14-day notification rate of reported COVID-19 cases per 100,000 population

Details

Table: Data summary

Name	dplyr::ungroup(covnat_wee
Number of rows	4966
Number of columns	11
Column type frequency:	
Date	1
character	3
numeric	7
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	complete_rate	\min	max	median	nunique
date	0	1	2019-12-30	2023-01-09	2021-07-05	159

Variable type: character

skım_varıable	$n_{missing}$	complete_rate	\min	\max	$_{ m empty}$	n _unique	whitespace
$year_week$	0	1.00	7	7	0	159	0
cname	0	1.00	5	14	0	31	0
iso3	196	0.96	3	3	0	30	0

18 covus

Variable type: numeric

$skim_variable$	$n_{}$ missing	$complete_rate$	mean	sd	p0	p25	p50	
pop	0	1.00	31613614.13	85253844.55	39055	2108977.00	6916548.00	174
cases	222	0.96	77511.62	374657.80	0	1127.00	5487.00	
deaths	279	0.94	514.14	2005.64	0	8.00	46.00	
cu_cases	222	0.96	4188407.63	16969793.99	0	43400.25	485047.50	21
cu_deaths	279	0.94	44362.78	142967.65	0	651.00	6268.00	
$r14_cases$	263	0.95	557.34	1044.46	0	51.61	216.74	
$r14_deaths$	321	0.94	34.08	50.74	0	3.81	14.21	

Source

http://ecdc.europa.eu/

covus COVID-19 data for the USA, current as of Sunday, January 22, 2023

Description

A dataset containing US state-level data on COVID-19

Usage

covus

Format

A tibble with 664,960 rows and 7 columns

date Date in YYYY-MM-DD format (date)

state Two letter State abbreviation (character)

fips State FIPS code (character)

data_quality_grade character Data quality as assessed by COVID Tracking Project staff

measure Outcome measure for this date

count Count of measure

measure_label character Outcome measure, suitable for use as a plot label

covus 19

Details

Table: Data summary

Name	covus
Number of rows	664960
Number of columns	7
Column type frequency:	
Date	1
character	4
logical	1
numeric	1
Group variables	None

Variable type: Date

$skim_variable$	$n_{}$ missing	$complete_rate$	\min	max	median	nunique
date	0	1	2020-01-13	2021-03-07	2020-09-03	420

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	nunique	whitespace
state	0	1	2	2	0	56	0
fips	0	1	2	2	0	56	0
measure	0	1	5	30	0	31	0
measure label	0	1	6	54	0	32	0

Variable type: logical

Variable type: numeric

$skim_variable$	$n_{}missing$	$complete_rate$	mean	sd	p0	p25	p50	p75	p100	hist
count	434365	0.35	387436.8	1638507	0	498	7782	134223	49646014	

The measures tracked by the COVID tracking project are as follows:

20 covus

measure measure_label
positive Positive Tests
probable_cases Probable Cases
negative Negative Tests
pending Pending Tests

hospitalized_currently
hospitalized_cumulative
cumulative Hospitalized
in_icu_currently
currently in ICU
cumulative in ICU
cumulative cumulative
currently on Ventilator
Cumulative on Ventilator

recovered Recovered death Deaths

hospitalized_discharged Total Discharged from Hospital total_tests_viral Total number of PCR tests performed positive_tests_viral Total number of positive PCR tests negative_tests_viral Total number of negative PCR tests

positive_cases_viral Total number of positive cases measured with PCR tests

death_confirmed Deaths Confirmed death_probable Deaths Probable

total_test_encounters_viralTotal Test Encounters (PCR)total_tests_people_viralTotal PCR Tests (People)total_tests_antibodyTotal Antibody Testspositive_tests_antibodyPositive Antibody Tests

negative_tests_antibody Total number of negative antibody tests

negative_tests_antibody
total_tests_people_antibody
positive_tests_people_antibody
negative_tests_people_antibody
total_tests_people_antigen
positive_tests_people_antigen

Negative Antibody Tests (People)
Positive Antibody Tests (People)
Negative Antibody Tests (People)
Positive Antigen Tests (People)
Positive Antigen Tests (People)

total_tests_antigen Total Antigen Tests
positive tests antigen Positive Antigen Tests

Not all measures are reported by all states. The positive, negative, death, death_confirmed, probable_cases and death_probable measures are cumulative counts. death_confirmed is the total number deaths of individuals with COVID-19 infection confirmed by a laboratory test. In states where the information is available, it tracks only those laboratory-confirmed deaths where COVID also contributed to the death according to the death certificate. death_probable is the total number of deaths where COVID was listed as a cause of death and there is not a laboratory test confirming COVID-19 infection.

For further information on the COVID Tracking Project's measures, see https://covidtracking.com/about-data/data-definitions

Source

The COVID-19 Tracking Project https://covidtracking.com

covus_ethnicity 21

covus_ethnicity	COVID-19 case and death counts for the USA by Hispanic/Non-Hispanic ethnicity and state current as of Sunday, January 22, 2023

Description

The COVID Racial Data Tracker advocates for, collects, publishes, and analyzes racial data on the pandemic across the United States. It's a collaboration between the COVID Tracking Project and the Boston University Center for Antiracist Research.

Usage

covus_ethnicity

Format

A tibble with 15,960 rows and 7 columns date date Data reported as of this date state character State group character Ethnic group cases integer Total cases, count deaths integer Total deaths, count hosp integer Total hospitalizations, count

Details

Table: Data summary

Name	$covus_ethnicity$
Number of rows	15960
Number of columns	7
Column type frequency:	-
Date	1
character	2
numeric	4
Group variables	 None

Variable type: Date

22 covus_race

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
date	0	1	2020-04-12	2021-03-07	2020-09-23	95

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	\max	empty	nunique	whitespace
state	0	1	2	2	0	56	0
group	0	1	7	12	0	3	0

Variable type: numeric

skim variable	n missing	complete rate	mean	sd	p0	p25	p50	p75	p.
cases	3080	0.81	73357.18	166184.31	0	5529	21920.5	70265.5	26194
deaths	3144	0.80	1645.64	3463.93	-1	63	291.5	1401.0	326
hosp	11662	0.27	5079.37	8831.52	0	556	1556.0	4959.5	56^{2}
tests	14271	0.11	892566.44	2376098.22	0	58933	224156.0	537668.0	216339

The group variable is coded as "Hispanic", "Non-Hispanic", or "Unknown". Hispanics may be of any race. State-level counts should be handled with care, given the widely varying population distribution of people of different ethnic backgrounds by state.

Author(s)

Kieran Healy

Source

https://covidtracking.com/race

covus_race	COVID-19 case and death counts for the USA by race and state
	current as of Sunday, January 22, 2023

Description

The COVID Racial Data Tracker advocates for, collects, publishes, and analyzes racial data on the pandemic across the United States. It's a collaboration between the COVID Tracking Project and the Boston University Center for Antiracist Research.

Usage

covus_race

covus_race 23

Format

A tibble with 47,880 rows and 7 columns date date Data reported as of this date state character State group character Racial group cases integer Total cases, count deaths integer Total deaths, count hosp integer Total hospitalizations, count

Details

Table: Data summary

Name	covus_race
Number of rows	47880
Number of columns	7
Column type frequency:	
Date	1
character	2
numeric	4
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
date	0	1	2020-04-12	2021-03-07	2020-09-23	95

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	nunique	whitespace
state	0	1	2	2	0	56	0
group	0	1	5	11	0	9	0

Variable type: numeric

skim_variable	n_missing	$complete_rate$	mean	sd	p0	p25	p50	p75	p100
cases	15684	0.67	30240.68	103176.64	0	568	3661	21026	2619476
deaths	17686	0.63	708.93	1836.84	-1	12	68	440	24402
hosp	37253	0.22	2077.78	4654.37	0	67	345	1716	41099

 fmt_nc

The group variable is coded as follows:

groups
White
Black
Latino
Asian
AI/AN
NH/PI
Multiracial
Other
Unknown

AI/AN is American Indian/Alaska Native. NH/PI is Native Hawaiian/Pacific Islander. State-level counts should be handled with care, given the widely varying population distribution of people of different racial backgrounds by state.

Author(s)

Kieran Healy

Source

https://covidtracking.com/race

 fmt_nc fmt_nc

Description

Format fmt_nc in df

Usage

fmt_nc(x)

Arguments

x df

Details

use in fn documentation

 fmt_nr 25

```
Value
```

formatted string

Author(s)

Kieran Healy

Examples

```
## Not run:
if(interactive()){
  #EXAMPLE1
}
## End(Not run)
```

 ${\tt fmt_nr}$

 fmt_nr

Description

Format fmt_nr in df

Usage

fmt_nr(x)

Arguments

 \mathbf{x} df

Details

use in fn documentation

Value

formatted string

Author(s)

Kieran Healy

```
## Not run:
if(interactive()){
  #EXAMPLE1
}
## End(Not run)
```

26 MMWRweek2Date

MMWRweek2Date

 $FUNCTION_TITLE$

Description

```
FUNCTION_DESCRIPTION
```

Usage

```
MMWRweek2Date(MMWRyear, MMWRweek, MMWRday = NULL)
```

Arguments

MMWRyear PARAM_DESCRIPTION
MMWRweek PARAM_DESCRIPTION

MMWRday PARAM_DESCRIPTION, Default: NULL

Details

DETAILS

Value

```
OUTPUT_DESCRIPTION
```

Author(s)

Kieran Healy

Source

http://

```
## Not run:
if(interactive()){
   #EXAMPLE1
  }
## End(Not run)
```

MMWRweekday 27

 ${\tt MMWRweekday}$

 $FUNCTION_TITLE$

```
Description
```

```
FUNCTION_DESCRIPTION
```

Usage

```
MMWRweekday(date)
```

Arguments

date

PARAM_DESCRIPTION

Details

DETAILS

Value

```
OUTPUT_DESCRIPTION
```

Author(s)

Kieran Healy

Source

http://

```
## Not run:
if(interactive()){
  #EXAMPLE1
}
## End(Not run)
```

```
\verb|mmwr_week_to_date| FUNCTION\_TITLE|
```

Description

```
FUNCTION_DESCRIPTION
```

Usage

```
mmwr_week_to_date(year, week, day = NULL)
```

Arguments

year PARAM_DESCRIPTION week PARAM_DESCRIPTION

day PARAM_DESCRIPTION, Default: NULL

Details

DETAILS

Value

OUTPUT_DESCRIPTION

Author(s)

Kieran Healy

Source

http://

See Also

MMWRweek2Date

```
## Not run:
if(interactive()){
  #EXAMPLE1
  }
## End(Not run)
```

nchs_sas 29

nchs_sas

Provisional COVID-19 Death Counts by Sex, Age, and State

Description

Deaths involving coronavirus disease (COVID-19), pneumonia, and influenza reported to NCHS by sex and age group and state.

Usage

nchs_sas

Format

```
A tibble with 115,668 rows and 15 variables:
```

data_as_of date Date of data release

start_date date First date of data period

end_date date Last date of data period

group character Unit of time observation: whether data in this row are measured By month, By total, or By year

year integer Year of observation

month integer Month of observation

state character Jurisdiction of occurrence. One of: United States total, a US State, District of Columbia, and New York City, separate from New York state.

sex character Sex

age_group character Age group

covid_19_deaths integer Deaths involving COVID-19 (ICD-code U07.1)

total_deaths integer Deaths from all causes of death

pneumonia_deaths integer Pneumonia Deaths (ICD-10 codes J12.0-J18.9)

pneumonia_and_covid_19_deaths integer Deaths with Pneumonia and COVID-19 (ICD-10 codes J12.0-J18.9 and U07.1)

influenza_deaths integer Influenza Deaths (ICD-10 codes J09-J11)

pneumonia_influenza_or_covid_19_deaths integer Deaths with Pneumonia, Influenza, or COVID-19 (ICD-10 codes U07.1 or J09-J18.9)

Details

Table: Data summary

Name Number of rows nchs_sas 115668 30 nchs_sas

Number of columns	15
Column type frequency:	
Date	1
character	6
numeric	8
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	n _unique
data as of	0	1	2023-01-18	2023-01-18	2023-01-18	1

Variable type: character

$skim_variable$	n_missing	$complete_rate$	\min	max	empty	nunique	whitespace
$start_date$	0	1	10	10	0	37	0
end_date	0	1	10	10	0	37	0
group	0	1	7	8	0	3	0
state	0	1	4	20	0	54	0
sex	0	1	4	9	0	3	0
age_group	0	1	8	17	0	17	0

Variable type: numeric

skim_variable	$n_{missing}$	$complete_rate$	mean	sd	p0	p25
year	2754	0.98	2021.10	0.91	2020	2020
month	13770	0.88	6.35	3.52	1	3
covid_19_deaths	31823	0.72	351.76	6263.51	0	0
$total_deaths$	17146	0.85	2812.18	52269.95	0	41
pneumonia_deaths	36293	0.69	349.71	6016.66	0	0
pneumonia_and_covid_19_deaths	30476	0.74	174.88	3162.39	0	0
influenza_deaths	22407	0.81	4.94	103.26	0	0
$pneumonia_influenza_or_covid_19_deaths$	35678	0.69	535.21	9239.91	0	0

Number of deaths reported in this table are the total number of deaths received and coded as of the date of analysis, and do not represent all deaths that occurred in that period. Data during this period are incomplete because of the lag in time between when the death occurred and when the death certificate is completed, submitted to NCHS and processed for reporting purposes. This delay can range from 1 week to 8 weeks or more. Missing values may indicate that a category has between 1 and 9 observed cases and have been suppressed in accordance with NHCS confidentiality standards. As of September 2, 2020, this data file

nchs_wdc 31

includes the following age groups in addition to the age groups that are routinely included: 0-17, 18-29, 30-49, and 50-64. The new age groups are consistent with categories used across CDC COVID-19 surveillance pages. When analyzing the file, the user should make sure to select only the desired age groups. Summing across all age categories provided will result in double counting deaths from certain age groups. Similarly, the state variable includes the United States as a whole, and New York City counted separately from the rest of New York State. The temporal unit of observation also varies, with totals given by year, by month, and overall. It is necessary to first filter the data by desired time unit, region, and age group to ensure there is no double-counting in subsequent calculations.

Author(s)

Kieran Healy

Source

National Center for Health Statistics https://data.cdc.gov/NCHS/Provisional-COVID-19-Death-Counts-by-9bhg-hcku

References

https://data.cdc.gov/NCHS/Provisional-COVID-19-Death-Counts-by-Sex-Age-and-S/9bhg-hcku

nchs wdc

Weekly Counts of Deaths by State and Select Causes 2014-2021

Description

Final counts of deaths by the week the deaths occurred, by state of occurrence, and by select causes of death for 2014-2018, and Provisional counts of deaths by the week the deaths occurred, by state of occurrence, and by select underlying causes of death for 2019-2020. The dataset also includes weekly provisional counts of death for COVID-19, coded to ICD-10 code U07.1 as an underlying or multiple cause of death.

Usage

nchs_wdc

Format

A data frame with 347,706 rows and 7 variables:

jurisdiction character Jurisdiction of Occurrence
year double MMWR Year
week double MMWR Week
week_ending_date double MMWR Week ending date

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```
cause_detailed character Cause with ICD Codes
n double Count of deaths
cause character Cause of death
```

Details

For 2014-2019, death counts in this dataset were derived from the National Vital Statistics System database that provides the most timely access to the data. Therefore, counts may differ slightly from final data due to differences in processing, recoding, and imputation. For 2019-2021, the dataset also includes weekly provisional counts of death for COVID-19, coded to ICD-10 code U07.1 as an underlying or multiple cause of death. Number of deaths reported in this table are the total number of deaths received and coded as of the date of analysis, and do not represent all deaths that occurred in that period. Data for 2020 and 2021 are provisional and may be incomplete because of the lag in time between when the death occurred and when the death certificate is completed, submitted to NCHS and processed for reporting purposes. Causes of death included in this dataset are tabulated by underlying cause of death ICD-10 codes. COVID-19 deaths by underlying cause and multiple cause of death are also included.

Author(s)

Kieran Healy

Source

```
2014-2019: https://data.cdc.gov/NCHS/Weekly-Counts-of-Deaths-by-State-and-Select-Causes/3yf8-kanr. 2020-2021: https://data.cdc.gov/NCHS/Weekly-Counts-of-Deaths-by-State-and-Select-Causemuzy-jte6
```

nchs_wss

Provisional Death Counts for Coronavirus Disease (COVID-19): Weekly State-Specific Data Updates

Description

This report provides a weekly summary of deaths with coronavirus disease 2019 (COVID-19) by select geographic and demographic variables. In this release, counts of deaths are provided by the race and Hispanic origin of the decedent.

Usage

nchs_wss

nchs_wss 33

Format

A tibble with 15,582 rows and 12 variables:

data_as_of date Date of analysis

start_date date Start date of coverage

end_date date End date of coverage

year character Year. One of "2020", "2021", or "2020/2021".

month dbl Month

obs unit character Unit of observation. One of: By Total, By Year, By Month.

state character Geographical unit. One of: the United States, a U.S. State, the District of Columbia, or New York City. New York state measures do not include New York City

race_ethnicity chr Race and ethnic group. One of: Non-Hispanic White, Non-Hispanic Black or African American, Non-Hispanic American Indian or Alaska Native, Non-Hispanic Asian, Non-Hispanic Native Hawaiian or Other Pacific Islander, Non Hispanic more than one race, Hispanic or Latino.

deaths integer Count of deaths

- dist_pct double Distribution of COVID-19 deaths (%): Deaths for each group as a percent of the total number of COVID-19 deaths reported.
- uw_dist_pop_pct double Unweighted distribution of population (%): Population of each group as a percent of the total population.
- wt_dist_pop_pct double Weighted distribution of population (%): Population of each group as percent of the total population after accounting for how the race and Hispanic origin population is distributed in relation to the geographic areas impacted by COVID-19.

Details

Table: Data summary

Name	$nchs_wss$
Number of rows	15582
Number of columns	12
Column type frequency:	
Date	1
character	6
numeric	5
Group variables	None

Variable type: Date

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$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
data as of	0	1	2023-01-18	2023-01-18	2023-01-18	1

Variable type: character

$skim_variable$	n_{missing}	$complete_rate$	\min	max	empty	n _unique	whitespace
$start_date$	0	1	10	10	0	37	0
end_date	0	1	10	10	0	37	0
year	0	1	4	9	0	5	0
obs_unit	0	1	7	8	0	3	0
state	0	1	4	20	0	53	0
race ethnicity	0	1	18	54	0	7	0

Variable type: numeric

$skim_variable$	$n_{missing}$	$complete_rate$	mean	sd	p0	p25	p50	p75	p100	hist
month	1855	0.88	6.35	3.52	1	3.0	6.0	9.0	12.0	
deaths	4625	0.70	596.40	8680.87	0	0.0	14.0	100.0	718968.0	
$dist_pct$	4625	0.70	17.59	29.22	0	0.0	1.1	19.7	100.0	
$uw_dist_pop_pct$	0	1.00	14.28	23.57	0	0.9	3.1	12.7	92.7	
$wt_dist_pop_pct$	0	1.00	13.68	21.60	0	0.5	3.2	14.4	93.6	

The percent of deaths reported in this table are the total number of represent all deaths received and coded as of the date of analysis and do not represent all deaths that occurred in that period. Data are incomplete because of the lag in time between when the death occurred and when the death certificate is completed, submitted to NCHS and processed for reporting purposes. This delay can range from 1 week to 8 weeks or more, depending on the jurisdiction, age, and cause of death. Provisional counts reported here track approximately 1-2 weeks behind other published data sources on the number of COVID-19 deaths in the U.S. COVID-19 deaths are defined as having confirmed or presumed COVID-19, and are coded to ICD-10 code U07.1. Unweighted population percentages are based on the Single-Race Population Estimates from the U.S. Census Bureau, for the year 2018 (available from: https://wonder.cdc.gov/single-race-population.html). Weighted population percentages are computed by multiplying county-level population counts by the count of COVID deaths for each county, summing to the state-level, and then estimating the percent of the population within each racial and ethnic group. These weighted population distributions therefore more accurately reflect the geographic locations where COVID outbreaks are occurring. Jurisdictions are included in this table if more than 100 deaths were received and processed by NCHS as of the data of analysis.

Race and Hispanic-origin categories are based on the 1997 Office of Management and Budget (OMB) standards (1,2), allowing for the presentation of data by single race and Hispanic origin. These race and Hispanic-origin groups—non-Hispanic single-race white, non-Hispanic single-race black or African American, non-Hispanic single-race American Indian

nssp_covid_er_nat 35

or Alaska Native (AIAN), non-Hispanic single-race Asian, and non-Hispanic single-race Native Hawaiian and Other Pacific Islander —differ from the bridged-race categories shown in most reports using mortality data.

New York State totals exclude New York City (provided in table separately).

Missing values may indicate that a category has between 1 and 9 observed cases and have been suppressed in accordance with NHCS confidentiality standards.

Author(s)

Kieran Healy

Source

National Center for Health Statistics https://data.cdc.gov/NCHS/Provisional-Death-Counts-for-Coronavirpj7m-y5uh

nssp_covid_er_nat

NSSP National COVID-related ER Visits

Description

National Syndromic Surveillance Program (NSSP): Emergency Department Visits and Percentage of Visits for COVID-19-Like Illness (CLI) or Influenza-like Illness (ILI)

Usage

```
nssp_covid_er_nat
```

Format

A data frame with 54 rows and 9 variables:

```
week integer COLUMN_DESCRIPTION

num_fac integer COLUMN_DESCRIPTION

total_ed_visits character COLUMN_DESCRIPTION

visits integer COLUMN_DESCRIPTION

pct_visits double COLUMN_DESCRIPTION

visit_type character COLUMN_DESCRIPTION

region character COLUMN_DESCRIPTION

source character COLUMN_DESCRIPTION

year integer COLUMN_DESCRIPTION
```

Details

Table: Data summary

Name	$nssp_covid_er_nat$
Number of rows	54
Number of columns	9
Column type frequency:	
character	4
numeric	5
	_
Group variables	None

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	\max	empty	n_unique	whitespace
$total_ed_visits$	0	1	7	7	0	27	0
$visit_type$	0	1	3	3	0	2	0
region	0	1	8	8	0	1	0
source	0	1	21	21	0	1	0

Variable type: numeric

$skim_variable$	$n_{missing}$	$complete_rate$	mean	sd	p0	p25	p50	p75
week	0	1	26.04	19.81	1.00	7.25	14.00	45.75
num_fac	0	1	3346.89	48.97	3249.00	3329.50	3352.00	3389.50
visits	0	1	41521.67	16344.25	17639.00	31216.00	39183.50	50532.00
pct _visits	0	1	0.02	0.01	0.01	0.01	0.02	0.02
year	0	1	2019.52	0.50	2019.00	2019.00	2020.00	2020.00

The U.S. Centers for Disease Control provides weekly summary and interpretation of key indicators that have been adapted to track the COVID-19 pandemic in the United States. Data is retrieved using the cdccovidview package from both COVIDView (https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html) and COVID-NET (https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html).

Author(s)

Kieran Healy

Source

Courtesy of Bob Rudis's cdccovidview package

nssp_covid_er_reg 37

References

https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/04102020/nssp-regions.html

Description

Regional Syndromic Surveillance Program (NSSP): Emergency Department Visits and Percentage of Visits for COVID-19-Like Illness (CLI) or Influenza-like Illness (ILI)

Usage

```
nssp_covid_er_reg
```

Format

A tibble with 538 rows and 9 variables:

```
week integer COLUMN_DESCRIPTION

num_fac integer COLUMN_DESCRIPTION

total_ed_visits character COLUMN_DESCRIPTION

visits integer COLUMN_DESCRIPTION

pct_visits double COLUMN_DESCRIPTION

visit_type character COLUMN_DESCRIPTION

region character COLUMN_DESCRIPTION

source character COLUMN_DESCRIPTION

year integer COLUMN DESCRIPTION
```

Details

Table: Data summary

Name	nssp_covid_er_reg
Number of rows	538
Number of columns	9
Column type frequency:	
character	4
numeric	5
Group variables	None

38 nytcovcounty

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	n _unique	whitespace
$total_ed_visits$	0	1	5	6	0	269	0
$visit_type$	0	1	3	3	0	2	0
region	0	1	8	9	0	10	0
source	0	1	21	21	0	1	0

Variable type: numeric

$skim_variable$	$n_{missing}$	$complete_rate$	mean	sd	p0	p25	p50	p75	p100
week	0	1	25.99	19.66	1	7.00	14.00	46.00	52.00
$\operatorname{num_fac}$	0	1	335.18	234.58	135	190.00	222.00	343.00	884.00
visits	0	1	4164.87	4028.53	279	1596.00	2780.00	4723.75	23345.00
pct _visits	0	1	0.02	0.01	0	0.01	0.02	0.02	0.11
year	0	1	2019.52	0.50	2019	2019.00	2020.00	2020.00	2020.00

The U.S. Centers for Disease Control provides weekly summary and interpretation of key indicators that have been adapted to track the COVID-19 pandemic in the United States. Data is retrieved using the cdccovidview package from both COVIDView (https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html) and COVID-NET (https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html).

Author(s)

Kieran Healy

Source

Courtesy of Bob Rudis's cdccovidview package

References

 $\verb|https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/04102020/nssp-regions.| html|$

nytcovcounty	NYT COVID-19 data for US counties, current as of Sunday, January 22, 2023

Description

A dataset containing US county-level data on COVID-19, collected by the New York Times.

nytcovcounty 39

Usage

nytcovcounty

Format

A tibble with 2,502,832 rows and 6 columns

date Date in YYYY-MM-DD format (date)

county County name (character)

state State name (character)

fips County FIPS code (character)

cases Cumulative N reported cases

deaths Cumulative N reported deaths

Details

Table: Data summary

nytcovcounty
2502832
6
_
1
3
2
None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
date	0	1	2020-01-21	2022 - 05 - 13	2021-04-23	844

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	nunique	whitespace
county	0	1.00	3	35	0	1932	0
state	0	1.00	$_4$	24	0	56	0
fips	23678	0.99	5	5	0	3220	0

Variable type: numeric

40 nytcovstate

$skim_variable$	$n_{missing}$	$complete_rate$	mean	sd	p0	p25	p50	p75	p100	$_{ m hist}$
cases	0	1.00	10033.80	47525.22	0	382	1773	5884	2908425	
deaths	57605	0.98	161.61	820.33	0	6	33	101	40267	

Source

The New York Times https://github.com/nytimes/covid-19-data For details on the methods and limitations see https://github.com/nytimes/covid-19-data. For county data, note in particular:

- New York: All cases for the five boroughs of New York City (New York, Kings, Queens,
 Bronx and Richmond counties) are assigned to a single area called New York City.
 There is a large jump in the number of deaths on April 6th due to switching from data
 from New York City to data from New York state for deaths. For all New York state
 counties, starting on April 8th we are reporting deaths by place of fatality instead of
 residence of individual.
- Kansas City, Mo: Four counties (Cass, Clay, Jackson and Platte) overlap the municipality of Kansas City, Mo. The cases and deaths that we show for these four counties are only for the portions exclusive of Kansas City. Cases and deaths for Kansas City are reported as their own line.
- Alameda County, Calif: Counts for Alameda County include cases and deaths from Berkeley and the Grand Princess cruise ship.
- Douglas County, Neb. Counts for Douglas County include cases brought to the state from the Diamond Princess cruise ship.
- Chicago: All cases and deaths for Chicago are reported as part of Cook County.
- Guam: Counts for Guam include cases reported from the USS Theodore Roosevelt.

Description

A dataset containing US state-level data on COVID-19, collected by the New York Times.

Usage

nytcovstate

Format

A tibble with 58,526 rows and 5 columns

date Date in YYYY-MM-DD format (date)

state State name (character)

fips State FIPS code (character)

cases Cumulative N reported cases

deaths Cumulative N reported deaths

nytcovstate 41

Details

Table: Data summary

Name	nytcovstate
Number of rows	58526
Number of columns	5
Column type frequency:	
Date	1
character	2
numeric	2
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
date	0	1	2020-01-21	2023-01-21	2021-08-16	1097

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	nunique	whitespace
state	0	1	4	24	0	56	0
fins	0	1	2	2	0	56	0

Variable type: numeric

$skim_variable$	$n_{missing}$	$complete_rate$	mean	sd	p0	p25	p50	p75	p10
cases	0	1	834511.91	1394631.70	1	64160	324958	985279.8	1195560
deaths	0	1	11294.84	16797.98	0	1080	4790	14373.0	10198

Source

The New York Times https://github.com/nytimes/covid-19-data. For details on the methods and limitations see https://github.com/nytimes/covid-19-data.

nytcovus

nytcovus NYT COVID-19 data for the US, current as of Sunday, January 22, 2023

Description

A dataset containing US national-level data on COVID-19, collected by the New York Times.

Usage

nytcovus

Format

A tibble with 1,097 rows and 3 columns

date Date in YYYY-MM-DD format (date)

cases Cumulative N reported cases

deaths Cumulative N reported deaths

Details

Table: Data summary

Name Number of rows Number of columns	nytcovus 1097 3
Column type frequency: Date numeric	1 2
Group variables	None

Variable type: Date

skim_variable	$n_{missing}$	complete_rate	min	max	median	n_unique
date	0	1	2020 - 01 - 21	2023-01-21	2021-07-22	1097

Variable type: numeric

skim_variable n_missing complete_rate mean sd p0 p25 p50 p75

nytexcess 43

cases	0	1	44522009.0	35239239.4	1	8404635	34364829	80836264	
deaths	0	1	602590.7	370532.5	0	222195	609870	989584	

Source

The New York Times https://github.com/nytimes/covid-19-data. For details on the methods and limitations see https://github.com/nytimes/covid-19-data.

nytexcess NYT Excess Mortality Estimates, current as of Sunday, January 22, 2023	nytexcess	y y
--	-----------	-----

Description

All-cause mortality is widely used by demographers and other researchers to understand the full impact of deadly events, including epidemics, wars and natural disasters. The totals in this data include deaths from Covid-19 as well as those from other causes, likely including people who could not be treated or did not seek treatment for other conditions.

Usage

nytexcess

Format

A tibble with 7,258 rows and 12 columns

country character Country Name

placename character Place Name

frequency character Reporting period. Weekly or monthly, depending on how the data is recorded.

start_date date The first date included in the period.

end_date date The last date included in the period,

year character Year of data. Note that this variable is of type character and not integer because several observations are notes to the effect that the year is an average of two years.

month integer Numerical month.

week integer Numerical week.

deaths integer The total number of confirmed deaths recorded from any cause.

expected_deaths integer The baseline number of expected deaths, calculated from a historical average. See details below.

excess_deaths integer The number of deaths minus the expected deaths.

baseline character The years used to calculate expected_deaths.

nytexcess nytexcess

Details

Table: Data summary

Name	nytexcess
Number of rows	7258
Number of columns	12
Column type frequency:	
Date	2
	-
character	5
numeric	5
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
$start_date$	768	0.89	2010-01-09	2020 - 12 - 23	2018-02-05	1267
end date	768	0.89	2010-01-15	2020-12-29	2018-02-11	1267

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	$_{ m empty}$	n _unique	whitespace
country	0	1.00	4	14	0	35	0
placename	6883	0.05	6	8	0	4	0
frequency	0	1.00	6	7	0	2	0
year	0	1.00	4	17	0	15	0
baseline	5990	0.17	20	25	0	7	0

Variable type: numeric

$n_{missing}$	$complete_rate$	mean	sd	p0	p25	p50	p75	p10
0	1.00	6.60	3.36	1	4.00	7.0	9.0	1:
666	0.91	26.77	14.58	2	14.00	27.0	39.0	5
0	1.00	7968.24	14334.14	455	1460.00	2395.5	10486.0	14129
5990	0.17	9237.09	15850.00	548	1443.00	2423.0	10771.5	139343
5990	0.17	1195.43	3242.72	-6721	-42.25	76.5	926.0	3040
	- 0 666 0 5990	$\begin{array}{cccc} & & & & & & \\ & & & & & & \\ & 666 & & & 0.91 \\ & 0 & & & 1.00 \\ & 5990 & & 0.17 \end{array}$	0 1.00 6.60 666 0.91 26.77 0 1.00 7968.24 5990 0.17 9237.09	0 1.00 6.60 3.36 666 0.91 26.77 14.58 0 1.00 7968.24 14334.14 5990 0.17 9237.09 15850.00	0 1.00 6.60 3.36 1 666 0.91 26.77 14.58 2 0 1.00 7968.24 14334.14 455 5990 0.17 9237.09 15850.00 548	0 1.00 6.60 3.36 1 4.00 666 0.91 26.77 14.58 2 14.00 0 1.00 7968.24 14334.14 455 1460.00 5990 0.17 9237.09 15850.00 548 1443.00	0 1.00 6.60 3.36 1 4.00 7.0 666 0.91 26.77 14.58 2 14.00 27.0 0 1.00 7968.24 14334.14 455 1460.00 2395.5 5990 0.17 9237.09 15850.00 548 1443.00 2423.0	0 1.00 6.60 3.36 1 4.00 7.0 9.0 666 0.91 26.77 14.58 2 14.00 27.0 39.0 0 1.00 7968.24 14334.14 455 1460.00 2395.5 10486.0 5990 0.17 9237.09 15850.00 548 1443.00 2423.0 10771.5

Expected deaths for each area based on historical data for the same time of year. These expected deaths are the basis for our excess death calculations, which estimate how many more people have died this year than in an average year.

start_date 45

The number of years used in the historical averages changes depending on what data is available, whether it is reliable and underlying demographic changes. See Data Sources for the years used to calculate the baselines. The baselines do not adjust for changes in age or other demographics, and they do not account for changes in total population.

The number of expected deaths are not adjusted for how non-Covid-19 deaths may change during the outbreak, which will take some time to figure out. As countries impose control measures, deaths from causes like road accidents and homicides may decline. And people who die from Covid-19 cannot die later from other causes, which may reduce other causes of death. Both of these factors, if they play a role, would lead these baselines to understate, rather than overstate, the number of excess deaths.

Author(s)

Kieran Healy

Source

The New York Times https://github.com/nytimes/covid-19-data/tree/master/excess-deaths.

References

For further details on these data see https://github.com/nytimes/covid-19-data/tree/master/excess-deaths

start_date

 $FUNCTION_TITLE$

Description

FUNCTION DESCRIPTION

Usage

start_date(year)

Arguments

year

PARAM DESCRIPTION

Details

DETAILS

Value

OUTPUT_DESCRIPTION

46 stmf

```
Author(s)
```

AUTHOR NAME

Source

http://

Examples

```
## Not run:
if(interactive()){
  #EXAMPLE1
  }
## End(Not run)
```

stmf

Short Term Mortality Fluctuations (STMF) data series

Description

Human Mortality Database (HMD) series of weekly death counts across countries.

Usage

stmf

Format

A tibble with 580,395 rows and 17 variables:

country_code Mortality database country code

cname character Country name

iso2 character ISO2 country code

iso3 character ISO3 country code

year double Year

week double Week number. Each year in the STMF refers to 52 weeks, each week has 7 days. In some cases, the first week of a year may include several days from the previous year or the last week of a year may include days (and, respectively, deaths) of the next year. In particular, it means that a statistical year in the STMF is equal to the statistical year in annual country-specific statistics.

```
sex character Sex. m = Males. f = Females. b = Both combined.
```

split double Indicates if data were split from aggregated age groups (0 if the original data has necessary detailed age scale). For example, if the original age scale was 0-4, 5-29, 30-65, 65+, then split will be equal to 1

stmf 47

split_sex double Indicates if the original data are available by sex (0) or data are interpolated (1)

forecast double Equals 1 for all years where forecasted population exposures were used to calculate weekly death rates.

approx_date double Approximate date (derived from the year and week number).

age_group character Age group for death counts and rates

death_count double Weekly death count. This number need not be an integer, because the age categories may be aggregated or split across the source national data.

death_rate double Weekly death rate.

deaths_total double Count of deaths for all ages combined.

rate_total double Crude death rate.

Details

For further details on the construction of this dataset see the codebook at https://www.mortality.org/Public/STMF_DOC/STMFNote.pdf. For the original input data files in standardized form, see https://www.mortality.org/Public/STMF/Inputs/STMFinput.zip.

Countries and years covered in the dataset:

cname	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Australia	_	_	_	_	_	_	_	_	_	_	_	_
Austria	_	_	_	_	_	_	_	_	_	_	Y	Y
Belgium	_	_	_	_	_	_	_	_	_	_	Y	Y
Bulgaria	_	-	-	_	-	-	-	_	-	-	Y	Y
Canada	_	_	_	_	_	_	_	_	_	_	_	_
Chile	_	-	-	_	-	-	-	_	-	-	_	-
Croatia	_	-	-	_	-	-	-	-	-	-	-	Y
Czech Republic	_	-	-	_	-	-	-	-	-	-	-	-
Denmark	_	-	-	_	-	-	-	_	-	-	_	-
England and Wales	_	-	-	_	-	-	-	_	-	-	_	-
Estonia	_	-	-	_	-	-	-	_	-	-	Y	Y
Finland	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
France	_	-	-	_	-	-	-	_	-	-	Y	Y
Germany	-	-	-	-	-	-	-	-	-	-	Y	Y
Greece	-	-	-	-	-	-	-	-	-	-	-	-
Hungary	_	-	-	_	-	-	-	_	-	-	Y	Y
Iceland	_	-	-	_	-	-	-	_	-	-	Y	Y
Israel	_	-	-	_	-	-	-	_	-	-	Y	Y
Italy	_	-	-	_	-	-	-	-	-	-	-	-
Korea, Republic of	-	-	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-	Y	Y
Lithuania	-	-	-	-	-	-	-	-	-	-	Y	Y
Luxembourg	-	-	-	-	-	-	-	-	-	-	Y	Y
Netherlands	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y
New Zealand	-	-	-	-	-	-	-	-	-	-	-	-
Northern Ireland	-	-	-	-	-	-	-	-	-	-	-	-

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Norway	-	-	-	-	-	-	-	-	-	-	Y	Y
Poland	-	-	-	-	-	-	-	-	-	-	Y	Y
Portugal	-	-	-	-	-	-	-	-	-	-	Y	Y
Russian Federation	-	-	-	-	-	-	-	-	-	-	Y	Y
Scotland	-	-	-	-	-	-	-	-	-	-	Y	Y
Slovakia	-	-	-	-	-	-	-	-	-	-	Y	Y
Slovenia	-	-	-	-	-	-	-	-	-	-	Y	Y
Spain	-	-	-	-	-	-	-	-	-	-	Y	Y
Sweden	-	-	-	-	-	-	-	-	-	-	Y	Y
Switzerland	-	-	-	-	-	-	-	-	-	-	Y	Y
Taiwan, Province of China	-	-	-	-	-	-	-	-	-	-	Y	Y
United States	-	-	-	-	-	-	-	-	-	-	-	-

Variables Table: Data summary

Name	stmf
Number of rows	580395
Number of columns	17
Column type frequency:	
Date	1
character	7
numeric	9
	None
Group variables	None

Variable type: Date

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	median	nunique
approx_date	0	1	1990-01-07	2023-01-01	2012-10-07	1722

Variable type: character

$skim_variable$	$n_{missing}$	$complete_rate$	\min	max	empty	n_unique	whitespace
$country_code$	0	1.00	3	7	0	38	0
cname	0	1.00	5	25	0	38	0
iso2	34380	0.94	2	2	0	35	0
continent	35850	0.94	4	13	0	5	0
iso3	34380	0.94	3	3	0	35	0
sex	0	1.00	1	1	0	3	0
age_group	0	1.00	3	5	0	5	0

Variable type: numeric

stmf_country_years 49

$skim_variable$	n_missing	$complete_rate$	mean	sd	p0	p25	p50	p75	p100
year	0	1	2011.58	6.88	1990	2006.00	2012.00	2017.00	2022.00
week	0	1	26.50	15.03	1	13.00	26.00	39.00	53.00
split	0	1	0.12	0.32	0	0.00	0.00	0.00	1.00
$\operatorname{split} \operatorname{\underline{\hspace{1pt}-sex}}$	0	1	0.00	0.07	0	0.00	0.00	0.00	1.00
forecast	0	1	0.10	0.30	0	0.00	0.00	0.00	1.00
$death_count$	0	1	617.60	1585.49	0	39.00	162.00	449.75	26362.00
$death_rate$	0	1	0.05	0.07	0	0.00	0.02	0.07	0.57
$deaths_total$	0	1	3088.00	6498.29	2	472.00	998.00	2543.00	87413.00
$rate_total$	0	1	0.01	0.00	0	0.01	0.01	0.01	0.04

Author(s)

Kieran Healy

Source

Human Mortality Database, http://mortality.org

References

"Short-term Mortality Fluctuations Dataseries" n.d., https://www.mortality.org/Public/STMF_DOC/STMFNote.pdf

Description

Make a table of stmf country years

Usage

```
stmf_country_years(df = stmf)
```

Arguments

df

The stmf data frame

Details

Get a table of country x year coverage for stmf

Value

A tibble

50 tabular

```
Author(s)
```

Kieran Healy

Source

http://

Examples

```
## Not run:
if(interactive()){
  #EXAMPLE1
}
## End(Not run)
```

tabular

tabular

Description

Make an Rd table from a data frame

Usage

```
tabular(df, ...)
```

Arguments

df Data frame
... Other args

Details

DETAILS

Value

Rd table

Author(s)

Kieran Healy

Source

http://

uspop 51

Examples

```
## Not run:
if(interactive()){
  #EXAMPLE1
}
## End(Not run)
```

uspop

State population estimates for US States

Description

Population estimates for US States as of July 1st 2018

Usage

uspop

Format

```
A tibble with 459 rows and 17 variables:
```

```
state character State Name
state_abbr character State Abbreviation
statefips character 2-digit FIPS code
region_name character Census region
division_name character Census Division
sex_id character Sex id
sex character Sex label
hisp_id character Ethnicity: Hispanic id
hisp_label character Hispanic label
fips character Full FIPS code
pop double Total population
white double Race alone: White
black double Race alone: Black or African-American
amind double Race alone: American Indian and Alaska Native
asian double Race alone: Asian
nhopi double Race alone: Native Hawaiian and Other Pacific Islander
tom double Race alone: Two or more races
```

52 uspop

Details

Table: Data summary

Name	uspop
Number of rows	459
Number of columns	17
Column type frequency:	
character	10
numeric	7
Group variables	None

Variable type: character

skim_variable	n_missing	complete_rate	\min	max	empty	n_unique	whitespace
state	0	1.00	4	20	0	51	0
$state_abbr$	9	0.98	2	2	0	50	0
statefips	0	1.00	2	2	0	51	0
region_name	9	0.98	4	9	0	4	0
division_name	9	0.98	7	18	0	9	0
sex_id	0	1.00	4	6	0	3	0
sex	0	1.00	4	10	0	3	0
hisp_id	0	1.00	4	7	0	3	0
hisp_label	0	1.00	5	12	0	3	0
fips	0	1.00	11	11	0	51	0

Variable type: numeric

$skim_variable$	n_missing	$complete_rate$	mean	sd	p0	p25	p50	p75
pop	0	1	2851132.32	4198641.26	6154	386961.5	1349442	3558480.0
white	0	1	2179861.40	3116129.25	5120	296294.0	1088503	2759335.5
black	0	1	381736.98	644380.66	260	11907.0	80714	486281.5
amind	0	1	36143.97	65036.83	161	6103.5	15273	35770.5
asian	0	1	168458.39	515557.14	79	5045.5	26484	140424.5
nhopi	0	1	6966.61	18657.18	23	669.0	2029	5063.5
tom	0	1	77964.97	131251.16	455	12091.0	33757	98669.5

U.S. Census estimates. Be aware of the US Census classifications of Race and Ethnicity. For the estimated total population for each State, jointly filter on totsex in sex_id and tothisp in hisp_id and then select pop.

Author(s)

Kieran Healy

%nin%

Source

https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-detail.html

References

https://www2.census.gov/programs-surveys/popest/tables/2010-2018/state/asrh/PEPSR6H.pdf

%nin%

%nin%

Description

Convenience 'not-in' operator

Usage

```
x %nin% y
```

Arguments

x vector of itemsy vector of all values

Details

Complement of the built-in operator %in%. Returns the elements of x that are not in y.

Value

logical vector of items in \mathbf{x} not in \mathbf{y}

Author(s)

Kieran Healy

Examples

```
fruit <- c("apples", "oranges", "banana")
"apples" %nin% fruit
"pears" %nin% fruit</pre>
```

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