

# Package ‘covid19india’

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**Type** Package

**Title** Pulling Clean Data from Covid19india.org

**Version** 0.1.4

**Description** Pull raw and pre-cleaned versions of national and state-level COVID-19 time-series data from covid19india.org <<https://www.covid19india.org>>. Easily obtain and merge case count data, testing data, and vaccine data. Also assists in calculating the time-varying effective reproduction number with sensible parameters for COVID-19.

**URL** <https://github.com/maxsal/covid19india>

**BugReports** <https://github.com/maxsal/covid19india/issues>

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**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.2

**Imports** data.table (>= 1.14.1), EpiEstim, cli, gt, httr, glue, janitor, scales, stringr, magrittr

**Depends** R (>= 3.6)

**NeedsCompilation** no

**Author** Max Salvatore [aut, cre],  
Michael Kleinsasser [aut]

**Maintainer** Max Salvatore <mmsalva@umich.edu>

**Repository** CRAN

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check\_for\_data\_correction

*Check for data corrections of X-times magnitude - data.table style*

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### Description

Check for data corrections of X-times magnitude - data.table style

### Usage

```
check_for_data_correction(
  dat,
  var = "daily_cases",
  magnitude = 10,
  min_count = 10
)
```

### Arguments

dat	data set
var	variable for which to check for corrections. Default is "daily_cases"
magnitude	magnitude of difference that qualifies as a data correction. Default is 10.
min_count	minimum count of var. Default is 10.

### Value

Data set with data correction observations removed

### Examples

```
## Not run:
check_for_data_correction(dat = get_nat_counts, var = "daily_cases", magnitude = 10)

## End(Not run)
```

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extract_latest	<i>Helper function</i>
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**Description**

Helper function

**Usage**

```
extract_latest(dat, group = place, clmns = c("total_tests", "tpr", "ppt"))
```

**Arguments**

dat	data set
group	place variable
clmns	columns to be extracted

**Value**

Data set of recent observations of selected variables

**Examples**

```
## Not run:
extract_latest(dat = get_all_data())

## End(Not run)
```

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get_all_data	<i>Pull all covid19india count, test, and vaccine data for states and nation</i>
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**Description**

Pull all covid19india count, test, and vaccine data for states and nation

**Usage**

```
get_all_data(keep_nat = TRUE, covind19_name_scheme = FALSE, corr_check = TRUE)
```

**Arguments**

keep_nat	Keep the national data as well. Default is FALSE
covind19_name_scheme	Variable naming scheme used for development of <a href="https://covind19.org">covind19.org</a> application
corr_check	Check for data corrections of X-times magnitude. Default is TRUE

**Value**

Pulls the district-level time-series case, death, and recovered data directly from [covid19india.org](https://covid19india.org).

**Examples**

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

---

get_cfr	<i>Calculate case_fatality rate</i>
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**Description**

Calculate case\_fatality rate

**Usage**

```
get_cfr(x)
```

**Arguments**

x                    Input dataset. Expects total\_cases and total\_deaths variables

**Value**

Calculates a case-fatality rate estimate and corresponding 95% confidence interval

**Examples**

```
## Not run:  
get_cfr(x = get_nat_counts())  
  
## End(Not run)
```

---

get\_district\_counts     *Pull covid19india district-level data*

---

**Description**

Pull covid19india district-level data

**Usage**

```
get_district_counts(  
  path = "https://api.covid19india.org/csv/latest/districts.csv",  
  raw = FALSE  
)
```

**Arguments**

path	The URL path for the data. Default: <a href="https://api.covid19india.org/csv/latest/districts.csv">https://api.covid19india.org/csv/latest/districts.csv</a>
raw	Pull raw unaltered data. Default is FALSE

**Value**

Pulls the district-level time-series case, death, and recovered data directly from covid19india.org.

**Examples**

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

---

get\_metrics\_tables     *Create metrics tables*

---

**Description**

Create metrics tables

**Usage**

```
get_metrics_tables(seed = 46342, top20 = NULL, corr_check = TRUE)
```

**Arguments**

seed	set seed
top20	Vector of state abbreviations for top 20 table
corr_check	Check for data corrections of X-times magnitude. Default is TRUE

**Value**

Creates metrics tables for use in covind19.org

**Examples**

```
## Not run:
tabs <- get_metrics_tables()

tabs$full

## End(Not run)
```

---

get_nat_counts	<i>Pull covid19india national time series data</i>
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---

**Description**

Pull covid19india national time series data

**Usage**

```
get_nat_counts(
  path = "https://api.covid19india.org/csv/latest/case_time_series.csv",
  raw = FALSE,
  corr_check = FALSE
)
```

**Arguments**

path	The URL path for the data. Default: <a href="https://api.covid19india.org/csv/latest/case_time_series.csv">https://api.covid19india.org/csv/latest/case_time_series.csv</a>
raw	Pull raw unaltered data. Default is FALSE
corr_check	Check for data correction. Default is FALSE

**Value**

Pulls the time-series case, death, and recovered data directly from covid19india.org.

**Examples**

```
## Not run:
get_nat_counts_dt()

## End(Not run)
```

---

get_nat_tests	<i>Pull covid19india national time series test data</i>
---------------	---

---

**Description**

Pull covid19india national time series test data

**Usage**

```
get_nat_tests(  
  path = "https://data.covid19india.org/csv/latest/tested_numbers_icmr_data.csv",  
  raw = FALSE  
)
```

**Arguments**

path	The URL path for the data. Default: <a href="https://api.covid19india.org/data.json">https://api.covid19india.org/data.json</a>
raw	Pull raw unaltered data. Default is FALSE

**Value**

Pulls the time-series test data directly from covid19india.org.

**Examples**

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

---

get_r0	<i>Calculate r0</i>
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---

**Description**

Calculate r0

**Usage**

```
get_r0(  
  dat,  
  daily_filter = 0,  
  total_filter = 50,  
  min_date = "2020-03-23",  
  corr_check = FALSE  
)
```

**Arguments**

dat	Input dataset. Expects daily_cases, total_cases, and place columns
daily_filter	Threshold for minimum daily cases. Default = 0.
total_filter	Threshold for minimum total cases reported to date. Default = 50.
min_date	Threshold for earliest date to report R_0. Default = "2020-03-23".
corr_check	Check for data corrections of X-times magnitude. Default is FALSE

**Value**

Pulls the time-series state-level testing data directly from covid19india.org. Expects columns named place, daily\_cases, and total\_cases. Can specify corresponding variables through other arguments.

**Examples**

```
## Not run:  
get_r0(dat = get_nat_counts())  
  
## End(Not run)
```

---

get\_r\_est

*Helper function for pulling latest R estimates*

---

**Description**

Helper function for pulling latest R estimates

**Usage**

```
get_r_est(x)
```

**Arguments**

x                    data set containing R estimates

**Value**

Pulls 7-day trailing average R estimates and 95% confidence intervals

**Examples**

```
## Not run:  
get_r_est(x = get_all_data())  
  
## End(Not run)
```

---

get\_state\_counts      *Pull covid19india state*

---

### Description

Pull covid19india state

### Usage

```
get_state_counts(  
  path = "https://api.covid19india.org/csv/latest/state_wise_daily.csv",  
  raw = FALSE,  
  keep_nat = FALSE,  
  corr_check = FALSE  
)
```

### Arguments

path	The URL path for the data. Default: <a href="https://api.covid19india.org/csv/latest/state_wise_daily.csv">https://api.covid19india.org/csv/latest/state_wise_daily.csv</a>
raw	Pull raw unaltered data. Default is FALSE
keep_nat	Keep the national data as well. Default is FALSE
corr_check	Check for data correction. Default is FALSE

### Value

Pulls the time-series case, death, and recovered data directly from covid19india.org.

### Examples

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

---

get\_state\_tests      *Pull covid19india state-level testing data*

---

### Description

Pull covid19india state-level testing data

### Usage

```
get_state_tests(  
  path = "https://api.covid19india.org/csv/latest/statewise_tested_numbers_data.csv",  
  raw = FALSE  
)
```

**Arguments**

path            The URL path for the data. Default: [https://api.covid19india.org/csv/latest/statewise\\_tested\\_numbers\\_data.csv](https://api.covid19india.org/csv/latest/statewise_tested_numbers_data.csv)  
 raw            Pull raw unaltered data. Default is FALSE

**Value**

Pulls the time-series state-level testing data directly from covid19india.org.

**Examples**

```
## Not run:
get_state_tests()

## End(Not run)
```

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<code>get_state_vax</code>	<i>Pull covid19india state-level vaccine data</i>
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**Description**

Pull covid19india state-level vaccine data

**Usage**

```
get_state_vax(
  path = "https://api.covid19india.org/csv/latest/vaccine_doses_statewise_v2.csv",
  raw = FALSE,
  keep_nat = TRUE
)
```

**Arguments**

path            The URL path for the data. Default: [https://api.covid19india.org/csv/latest/vaccine\\_doses\\_statewise\\_v2.csv](https://api.covid19india.org/csv/latest/vaccine_doses_statewise_v2.csv)  
 raw            Pull raw unaltered data. Default is FALSE  
 keep\_nat       Keep national level data? Default is TRUE

**Value**

Pulls the time-series state-level vaccine data directly from covid19india.org.

**Examples**

```
## Not run:
get_state_vax()

## End(Not run)
```

---

pop

*List of places, abbreviations, and populations in India*

---

### **Description**

This data set contains the names of states and union territories in India along with their respective abbreviations and populations. The population of India is also given. These are 2019 projections as reported in the Unique Identification Authority of India 2019-2020 Annual Report.

### **Usage**

pop

### **Format**

A data frame with 39 rows and 3 variables: place, abbrev, population

**place** The name of the place

**abbrev** The abbreviations corresponding to place

**population** The population size

### **References**

2019-2020 Annual Report Annexure IV (pg 103), Unique Identification Authority of India [https://uidai.gov.in/images/AADHAR\\_AR\\_2019\\_20\\_ENG\\_approved.pdf](https://uidai.gov.in/images/AADHAR_AR_2019_20_ENG_approved.pdf)

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