

Package ‘canadacovid’

August 22, 2022

Title API Wrapper for the Canadian COVID-19 Tracker

Version 0.3.4

Description Provides R functions to GET data from the Canadian COVID-19 tracker
API <<https://api.covid19tracker.ca>>.

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Suggests covr, testthat (>= 3.0.0)

Config/testthat/edition 3

Encoding UTF-8

RoxygenNote 7.2.1

URL <https://github.com/taylordunn/canadacovid>,
<https://taylordunn.github.io/canadacovid/>

BugReports <https://github.com/taylordunn/canadacovid/issues>

Imports jsonlite, httr, magrittr, dplyr, tidyselect, rlang, stringr,
tibble, purrr, tidyr, utils, lubridate

NeedsCompilation no

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Repository CRAN

Date/Publication 2022-08-22 21:30:10 UTC

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get_content_parsed *Get content and parse it*

Description

Sends a GET request to <https://api.covid19tracker.ca/>. If the request is successful and the returned content is JSON, formats it and returns it parsed (via `jsonlite::fromJSON`).

Usage

```
get_content_parsed(url)
```

Arguments

`url` A string URL linking to the API. If it does not contain the base "https://api.covid19tracker.ca", then `url` will be combined with the base to attempt to make a valid URL (and return a warning).

Value

A list.

Examples

```
get_content_parsed("https://api.covid19tracker.ca/provinces")
```

get_provinces *Get provinces and territories*

Description

Get provinces and territories

Usage

```
get_provinces(geo_only = TRUE)
```

Arguments

`geo_only` Logical, indicating if only provinces/territories should be returned. If FALSE, also returned non-geographic entities like Repatriated Canadians and the Federal Allocation for vaccinations.

Value

A data frame with a row per province/territory.

Examples

```
get_provinces()  
get_provinces(geo_only = FALSE)
```

get_regions	<i>Get health regions</i>
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Description

Returns a list of health regions in the COVID-19 tracker. By default (hr_uid and province NULL), returns all 92 regions.

Usage

```
get_regions(hr_uid = NULL, province = NULL)
```

Arguments

- hr_uid One or more health region UIDs (e.g. 3553) to return.
- province One or more provinces to return.

Value

A data frame with a row per health region.

Examples

```
get_regions()  
get_regions(hr_uid = c("2414", 591))  
get_regions(province = c("ns", "SK"))
```

get_reports

Get the day-to-day reports

Description

Runs a GET request of reports data from the COVID-19 tracker API, and returns parsed data. Via the split argument, data may be "overall" (all provinces/territories combined), or by "province". Alternatively, provide one or more two-letter codes (e.g. "AB") to province to return reports for specific provinces, or one or more numeric region codes (e.g. "1204") to return specific health regions.

Usage

```
get_reports(
  split = c("overall", "province"),
  province = NULL,
  region = NULL,
  fill_dates = NULL,
  stat = NULL,
  date = NULL,
  after = NULL,
  before = NULL
)
```

Arguments

split	One of "overall", or "province" to specify how the data is split. An "overall" report gives cumulative numbers across Canada. Splitting by "province" returns all reports for all provinces/territories.
province	One or more province/territory codes ("AB", "BC", "MB", "NB", "NL", "NS", "NT", "NU", "ON", "PE", "QC", "SK", "YT") to get reports. Upper, lower and mixed case strings are accepted.
region	One or more health region IDs to get reports. Numeric and character values are accepted.
fill_dates	When TRUE, the response fills in any missing dates with blank entries.
stat	Returns only the specified statistics, e.g. "cases".
date	Returns reports from only the specified date, in YYYY-MM-DD format.
after	Returns reports from only on or after the specified date, in YYYY-MM-DD format.
before	Returns reports from only on or before the specified date, in YYYY-MM-DD format.

Value

A data frame containing the reports data, one row per day. Includes a province variable if data is split by province, and a hr_uid variable if data is split by health region.

Examples

```
get_reports()
get_reports(province = c("AB", "SK"))
get_reports(region = 1204)
get_reports(region = c("472", 1204), stat = "cases")
```

get_subregions	<i>Get sub-regions</i>
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Description

Returns a list of sub-regions in the COVID-19 tracker. By default, returns all 805 sub-regions.

Usage

```
get_subregions(subregion_code = NULL)
```

Arguments

`subregion_code` One or more sub-regions to be returned.

Value

A data frame with a row per sub-region.

Examples

```
get_subregions()
get_subregions("AB001")
get_subregions(c("SK003", "SK005"))
```

get_subregion_vaccination_data	<i>Get sub-region vaccination data</i>
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Description

Runs a GET request of sub-region vaccination data from the COVID-19 tracker API, and returns parsed data. The `dates` argument specifies the time frame of the data: "current" (the default; latest report for each sub-region), "recent" (15 most recent reports for each sub-region), and "all" (returns all reports for one or more sub-regions specified by the `subregion_code` argument). To get a list of available sub-regions, use the function `get_subregions()`.

Usage

```
get_subregion_vaccination_data(
  dates = c("current", "recent", "all"),
  subregion_code = NULL
)
```

Arguments

`dates` One of "current", "recent", or "all" to specify the time frame of the reports returned. If choosing "all" reports, must also provide one or more sub-region codes.

`subregion_code` One or more sub-region codes. Returns all reports for those sub-regions (even if `dates` is not "all")

Details

Note that sub-region vaccination data is only for select provinces and territories. Also the percentages reported differ between percent of total population, and percent of eligible population. See the API documentation for more details: <https://api.covid19tracker.ca/docs/1.0/vaccinations>.

Value

A data frame with one row per sub-region report.

Examples

```
get_subregion_vaccination_data()
get_subregion_vaccination_data("recent")
get_subregion_vaccination_data("all", subregion_code = c("ON382", "SK007"))
```

get_summary

Get the most recent summary data

Description

Runs a GET request of summary data from the COVID-19 tracker API, and returns parsed data. Via the `split` argument, data may be "overall" (all provinces/territories combined), by "province" (one row per province/territory) or by "region" (one row per health region).

Usage

```
get_summary(split = c("overall", "province", "region"))
```

Arguments

`split` One of "overall", "province", or "region" to specify how the data is split.

Value

A data frame containing the summary data.

Examples

```
get_summary()  
get_summary("province")  
get_summary("region")
```

get_vaccination_data *Get vaccination data*

Description

Runs a GET request of vaccination data from the COVID-19 tracker API, and returns parsed data. Data may be returned as `type = "summary"` (the most recent data) or `type = "reports"` (day-to-day reports). Via the `split` argument, data may be "overall" (all provinces/territories combined), by "province", or by "region". Alternatively, provide one or more two-letter codes (e.g. "AB") to province to return reports for specific provinces, or one or more numeric region codes (e.g. "1204") to return specific health regions.

Usage

```
get_vaccination_data(  
  type = c("summary", "reports"),  
  split = c("overall", "province", "region"),  
  province = NULL,  
  region = NULL,  
  fill_dates = NULL,  
  stat = NULL,  
  date = NULL,  
  after = NULL,  
  before = NULL  
)
```

Arguments

<code>type</code>	One of "summary" (most recent data) or "reports" (day-to-day data).
<code>split</code>	One of "overall", "province", or "region" to specify how the data is split. An "overall" summary or report gives cumulative numbers across Canada. Splitting by "province" returns data for all provinces/territories. Splitting by "region" is only available for "summary" data, and returns data for all health regions.
<code>province</code>	One or more province/territory codes ("AB", "BC", "MB", "NB", "NL", "NS", "NT", "NU", "ON", "PE", "QC", "SK", "YT") to get reports. Upper, lower and mixed case strings are accepted.

<code>region</code>	One or more health region IDs to get reports. Numeric and character values are accepted.
<code>fill_dates</code>	When TRUE, the response fills in any missing dates with blank entries.
<code>stat</code>	Returns only the specified statistics, e.g. "cases".
<code>date</code>	Returns reports from only the specified date, in YYYY-MM-DD format.
<code>after</code>	Returns reports from only on or after the specified date, in YYYY-MM-DD format.
<code>before</code>	Returns reports from only on or before the specified date, in YYYY-MM-DD format.

Value

A data frame containing the vaccinations data. Includes a province variable if data is split by province, and a hr_uid variable if data is split by health region.

Examples

```
get_vaccination_data()
get_vaccination_data(split = "province")
get_vaccination_data(type = "reports", split = "overall")
get_vaccination_data(type = "reports", split = "overall",
                      date = "2021-12-25")
```

```
get_vaccine_age_groups
```

Get vaccination reports by age group

Description

Runs a GET request of vaccination data by age groups from the COVID-19 tracker API, and returns parsed data. Via the `split` argument, data may be "overall" (all provinces/territories combined), or by "province". Alternatively, provide one or more two-letter codes (e.g. "AB") to province to return reports for specific provinces.

Usage

```
get_vaccine_age_groups(
  split = c("overall", "province"),
  province = NULL,
  group = NULL,
  before = NULL,
  after = NULL
)
```


Arguments

<code>split</code>	One of "overall", or "province" to specify how the data is split. An "overall" report gives cumulative numbers across Canada. Splitting by "province" returns all reports for all provinces/territories.
<code>province</code>	One or more province/territory codes ("AB", "BC", "MB", "NB", "NL", "NS", "NT", "NU", "ON", "PE", "QC", "SK", "YT") to get reports. Upper, lower and mixed case strings are accepted.
<code>group</code>	A specific age group to return, for example: "0-4", "05-11", "30-39", "80+", "not_reported"
<code>before</code>	Returns reports from only on or before the specified date, in YYYY-MM-DD format.
<code>after</code>	Returns reports from only on or after the specified date, in YYYY-MM-DD format.

Value

A data frame with, one row per age group per date. Includes a province variable if data is split by province.

Examples

```
get_vaccine_age_groups()
get_vaccine_age_groups(split = "province")
get_vaccine_age_groups(province = c("AB", "SK"))
get_vaccine_age_groups(province = "NS", group = "18-29")
get_vaccine_age_groups(group = "80+", after = "2021-12-01")
```

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