

# Package: covid19.nhs.data (via r-universe)

October 17, 2024

**Title** NHS Trust Level COVID-19 Data Aggregated to a Range of Spatial Scales

**Version** 0.1.0

**Description** Facilitates access to data on NHS trust level COVID-19 data aggregated to a range of spatial scales.

**Language** en-GB

**License** MIT + file LICENSE

**URL** <https://epiforecasts.io/covid19.nhs.data>,  
<https://github.com/epiforecasts/covid19.nhs.data>

**BugReports** <https://github.com/epiforecasts/covid19.nhs.data/issues>

**Depends** R (>= 2.10)

**Encoding** UTF-8

**LazyData** true

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.1.2

**Imports** lubridate, dplyr, magrittr, RCurl, readxl, purrr, tibble, tidyr, ggplot2, utils, sf

**Suggests** janitor, here, knitr, spelling, usethis, rmarkdown, readr, covr, kableExtra, pacman

**VignetteBuilder** knitr

**Repository** <https://epiforecasts.r-universe.dev>

**RemoteUrl** <https://github.com/epiforecasts/covid19.nhs.data>

**RemoteRef** HEAD

**RemoteSha** 58576e74d54d6fcb5309bf106f7ead29929ae3a1

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download_trust_data	<i>Download English Hospital Trust Admissions Data</i>
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Description

Downloads English hospital admissions data by Trust. Data is released each Thursday. See here for details: <https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-hospital-activity/>

Usage

```
download_trust_data(release_date = Sys.Date())
```

Arguments

release_date	Date, release date of data to download. Will automatically find the Thursday prior to the date specified.
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Value

A data.frame of hospital admissions by trust.

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england_ltla_shape	<i>LTLA Shapefile for England</i>
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**Description**

LTLA Shapefile for England

**Usage**

england\_ltla\_shape

**Format**

An object of class sf (inherits from tbl\_df, tbl, data.frame) with 314 rows and 11 columns.

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england_utla_shape	<i>UTLA Shapefile for England</i>
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**Description**

UTLA Shapefile for England

**Usage**

england\_utla\_shape

**Format**

An object of class sf (inherits from tbl\_df, tbl, data.frame) with 151 rows and 11 columns.

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get_admissions	<i>Get Hospital Admissions</i>
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**Description**

Downloads hospital admissions by Hospital trust using download\_trust\_data and then optionally aggregates to either LTLA or UTLA level. This can be done either with the built in mapping or a user supplied mapping.

**Usage**

```
get_admissions(
  keep_vars = "new_adm",
  level = "trust",
  release_date = Sys.Date(),
  mapping,
  geo_names
)
```

**Arguments**

keep_vars	Character string, defaulting to "new_adm" (first-time COVID-19 hospital admissions). Defines which variables to keep from the raw data. Other supported options are: "all_adm" (for all COVID-19 hospital admissions), and "all_bed" (for all COVID-19 beds occupied). Multiple values allowed.
level	Character string, defaulting to "trust". Defines the level of aggregation at which to return the data. Other supported options are "utla" for UTLA level admissions or "ltla" for LTLA level admissions.
release_date	Date, release date of data to download. Will automatically find the Thursday prior to the date specified.
mapping	A data.frame containing geo_code, trust_code, p_geo and p_trust.
geo_names	A data.frame containing geo_code and geo_name. Used to assign meaningful to geographies.

**Value**

A data.frame of daily admissions and/or bed occupancy data, reported at the Trust, LTLA or UTLA level. Note that new admissions ("new\_adm") are called "admissions" in the data.frame to be consistent with a previous version of this function.

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get\_names

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Link Mapping to Trust and Geography Names

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**Description**

Link Mapping to Trust and Geography Names

**Usage**

```
get_names(mapping, geo_names)
```

**Arguments**

mapping	A data.frame containing geo_code, trust_code, p_geo and p_trust.
geo_names	A data.frame containing geo_code and geo_name. Used to assign meaningful to geographies.

**Value**

A data.frame containing a UTLA to trust level admissions map combined meaningful names.

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load_mapping	<i>Load local authority to Trust mappings</i>
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**Description**

Load LTLA- or UTLA-Trust mappings from two data sources: HES (Hospital Episodes Statistics) until September 2020, and linked COVID-19 cases and admissions June 2020 - May 2021. Replaces previous datasets trust\_ltla\_mapping and trust\_utla\_mapping (the HES mappings).

**Usage**

```
load_mapping(scale, source)
```

**Arguments**

scale	Character string defining the geographical scale. Supported options are "ltla" (lower-tier local authority) and "utla" (upper-tier local authority).
source	Character string defining the source of the mapping. supported options are "link" (linked COVID-19 cases and admissions) and "sus" (Secondary Uses Service, originally the only mapping available).

**Value**

A data.frame with the following columns: geo\_code (9-digit LTLA or UTLA ID); trust\_code; n (the number of reported admissions); p\_geo (the proportion of all admissions from a LTLA/UTLA that go to a given Trust); p\_trust (the proportion of all admissions to a Trust that come from a given LTLA/UTLA); source ("SUS" or "Link"); and level ("ltla" or "utla").

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ltla_names	<i>Linking File Between LTLA Codes and Names</i>
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**Description**

Linking File Between LTLA Codes and Names

**Usage**

```
ltla_names
```

**Format**

An object of class tbl\_df (inherits from tbl, data.frame) with 340 rows and 2 columns.

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map_admissions	<i>Map Admissions</i>
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### Description

Map NHS Hospital aggregated admissions. By default this maps the latest data provided.

### Usage

```
map_admissions(admissions, shapefile, date, scale_fill)
```

### Arguments

admissions	A data.frame of admissions data as produced by get_dadmissions. Must contain the following variables: geo_code, date, and admissions
shapefile	A shapefile defaults to england_utla_shape if not supplied.
date	A date variable (or vector) indicating when to plot data for. If set to NULL then no date filter is applied
scale_fill	A ggplot2 scale_fill used to define the fill colours used in the map. The default is: scale_fill_viridis_c(option = "viridis", direction = -1, na.value = "grey80").

### Value

A map of Covid-19 admissions in England

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summarise_mapping	<i>Summarise Trust Mapping</i>
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### Description

Summarise the Trust mapping (currently only supports the UTLA mapping) both graphically and in a table.

### Usage

```
summarise_mapping(
  trust = NULL,
  geography = NULL,
  mapping,
  shapefile,
  geo_names
)
```

**Arguments**

trust	A character string indicating a trust of interest.
geography	A character string indicating the geography of interest. Only used if trust is not specified. Related to the mapping used so for trust_utla_mapping refers to a UTLA.
mapping	A data.frame containing geo_code, trust_code, p_geo and p_trust.
shapefile	A shapefile defaults to england_utla_shape if not supplied.
geo_names	A data.frame containing geo_code and geo_name. Used to assign meaningful to geographies.

**Value**

A table and optional map summarising the admissions mapping.

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trust_mergers	<i>List of Trust Mergers</i>
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**Description**

List of Trust Mergers

**Usage**

```
trust_mergers
```

**Format**

An object of class spec\_tbl\_df (inherits from tbl\_df, tbl, data.frame) with 11 rows and 3 columns.

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trust_names	<i>Linking File Between NHS Trust Codes and Names</i>
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**Description**

Linking File Between NHS Trust Codes and Names

**Usage**

```
trust_names
```

**Format**

An object of class tbl\_df (inherits from tbl, data.frame) with 228 rows and 2 columns.

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`utla_names`*Linking File Between UTLA Codes and Names*

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**Description**

Linking File Between UTLA Codes and Names

**Usage**

`utla_names`

**Format**

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 174 rows and 2 columns.



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