

covid19census: U.S. and Italy COVID-19
epidemiological data and, demographic and health
related metrics

Claudio Zanettini

Department of Oncology, Johns Hopkins University School of Medicine,
Baltimore, MD, USA
claudio.zanettini@gmail.com

Luigi Marchionni

Department of Oncology, Johns Hopkins University School of Medicine,
Baltimore, MD, USA
marchion@jhu.edu

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Others to be add
Another University
otherst@example.com

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Abstract

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*Corresponding author; Email: marchion@jhu.edu

1 Introduction

In the mist of a virus pandemic, unraveling the constant flow of epidemiological data is of paramount importance, not only to guide the implementation and evaluation of non-pharmacological interventions, but also to optimize drug development.

- Examples of epidemiological alone or + other data guiding interventions:
[Kissler et al., 2020]: proposed non pharmacological intervention

[Wu et al., 2020]: correlation p2.5

BCG: clinical trial on BCG

We need data banks, repositories of aggregated data

- Examples of that and databanks of epidemiological as well as genetic data. The tracking project
- Examples of R package ccdcovidview

Boom our package

2 Implementation

A family of `get` functions is employed by the package to extract updated time-series data dynamically from different on-line sources.

For **U.S** the prefix of the function is `getus_` follow by the specific metric of interest:

- `getus_covid`: extracts data of COVID-19 from the New York Time git repository.
- `getus_dex`: extracts data of DEX, an activity indexes calculated by Victor Couture, Jonathan Dingel, Allison Green, Jessie Handbury, and Kevin Williams based on smartphone movement data provided by PlaceIQ.
- `getus_tests`: extract info regarding number of tests performed, their results and hospitalization from the repository of the Covid Tracking Project.
- `getus_all`: executes all the above functions and join the results with other datasets statically contained in the package.

For **Italy**, the prefix of the function is `getit_`

- `getit_covid`: extracts data of COVID-19 cases, deaths, hospitalizations and tests from the Protezione Civile.
- `getit_all`: executes the above function and join the results with other datasets statically contained in the package

3 Discussion

For U.S., data regarding COVID-19 number of cases and deaths (at the county level) were obtained from a repository maintained by the New York Time, whereas number of tests and hospitalizations (at the state level) thefrom the [the Covid Tracking Project].

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