

Covid-19 Project

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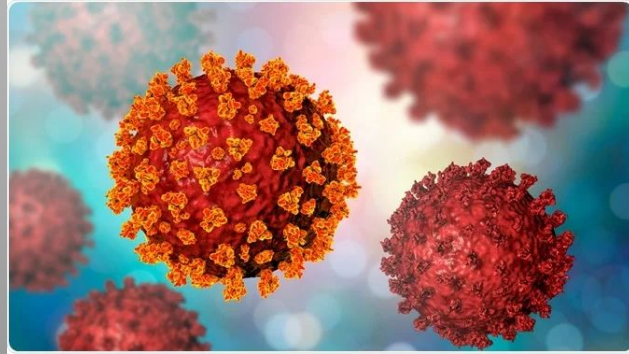


Illustration Credit: Kateryna Kon / Shutterstock

Data Sources

1. Covid-19 in USA-Number of Novel Corona Virus 2019 cases in USA from Kaggle.com 3 csv files (primary)

Reference Link:

https://www.kaggle.com/sudalairajkumar/covid19-in-usa?select=us_counties_covid19_daily.csv

2. State, County, CBSA, Country API Data from Covid Act Now (primary)

Reference Link:

<https://apidocs.covidactnow.org/data-definitions/>

API Value	CDC Community Transmission Level
0	Low
1	Moderate
2	Substantial
3	High
4	“Unknown”

Data Wrangling

	fips	country	state	county	level	lat	locationId	long	population	metrics	riskLevels	cdcTransmissionLevel	actuals	annotations	lastUpdatedDate
0	2013	US	AK	Aleutians East Borough	county	NaN	iso1:us#iso2:us-ak#fips:02013	NaN	3337	{'testPositivityRatio': None, 'testPositivityR...	{'overall': 2, 'testPositivityRatio': 4, 'case...	2	{'cases': 433, 'deaths': 3, 'positiveTests': N...	{'cases': {'sources': ['type': 'NYTimes', 'ur...	2021-10-19
1	2016	US	AK	Aleutians West Census Area	county	NaN	iso1:us#iso2:us-ak#fips:02016	NaN	5634	{'testPositivityRatio': 0.05, 'testPositivityR...	{'overall': 2, 'testPositivityRatio': 1, 'case...	2	{'cases': 919, 'deaths': 0, 'positiveTests': N...	{'cases': {'sources': ['type': 'NYTimes', 'ur...	2021-10-19
2	2020	US	AK	Anchorage Municipality	county	NaN	iso1:us#iso2:us-ak#fips:02020	NaN	288000	{'testPositivityRatio': 0.111, 'testPositivity...	{'overall': 5, 'testPositivityRatio': 2, 'case...	3	{'cases': 52685, 'deaths': 294, 'positiveTests': ...	{'cases': {'sources': ['type': 'NYTimes', 'ur...	2021-10-19
3	2050	US	AK	Bethel Census Area	county	NaN	iso1:us#iso2:us-ak#fips:02050	NaN	18386	{'testPositivityRatio': None, 'testPositivityR...	{'overall': 5, 'testPositivityRatio': 4, 'case...	3	{'cases': 5628, 'deaths': 25, 'positiveTests': ...	{'cases': {'sources': ['type': 'NYTimes', 'ur...	2021-10-19
4	2060	US	AK	Bristol Bay Borough	county	NaN	iso1:us#iso2:us-ak#fips:02060	NaN	836	{'testPositivityRatio': None, 'testPositivityR...	{'overall': 0, 'testPositivityRatio': 4, 'case...	0	{'cases': 608, 'deaths': 2, 'positiveTests': N...	{'cases': {'sources': ['type': 'USAFacts', 'u...	2021-10-19

	fips	country	state	county	population	transmission_level	last_updated
0	2013	US	AK	Aleutians East Borough	3337	2	2021-10-19
1	2016	US	AK	Aleutians West Census Area	5634	2	2021-10-19
2	2020	US	AK	Anchorage Municipality	288000	3	2021-10-19
3	2050	US	AK	Bethel Census Area	18386	3	2021-10-19
4	2060	US	AK	Bristol Bay Borough	836	0	2021-10-19

Data Wrangling Pt. 2

```
1 covid_daily_data_df.fillna(0, inplace=True)
2 covid_daily_data_df['fips'] = covid_daily_data_df['fips'].astype(int)
3 covid_daily_data_df = covid_daily_data_df[covid_daily_data_df['fips'] != 0]
```

	date	county	state	fips	cases	deaths
0	2020-01-21	Snohomish	Washington	53061	1	0.0
1	2020-01-22	Snohomish	Washington	53061	1	0.0
2	2020-01-23	Snohomish	Washington	53061	1	0.0
3	2020-01-24	Cook	Illinois	17031	1	0.0
4	2020-01-24	Snohomish	Washington	53061	1	0.0

Loading the Data on PostgreSQL

```
1 CREATE TABLE daily(  
2     date DATE,  
3     county VARCHAR(255),  
4     state VARCHAR (255),  
5     fips FLOAT,  
6     cases INT,  
7     deaths FLOAT  
8  
9 );
```

```
1 CREATE TABLE current_data(  
2     fips FLOAT,  
3     country VARCHAR(255),  
4     state VARCHAR(255),  
5     county VARCHAR (255),  
6     population INT,  
7     transmission_level INT,  
8     last_updated DATE  
9 );
```

```
covid_daily_data_df.to_sql(name="daily", con=engine, if_exists='append', index=False)  
new_covid_json.to_sql(name='current_data', con=engine, if_exists='append', index=False)
```

Thank You!