



Analyse of COVID19 Data in Japan

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**Analyze
data**

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COVID-19

- ▶ COVID-19 or Coronavirus Disease 2019 is an acute respiratory disease
- ▶ spreads through droplets from sneezing, coughing, or talking
- ▶ COVID-19 already become pandemic in early 2020.
- ▶ For avoid the infected people increase every country have a different handling methods depends on government policy.



Covid-19 in Japan

Cases

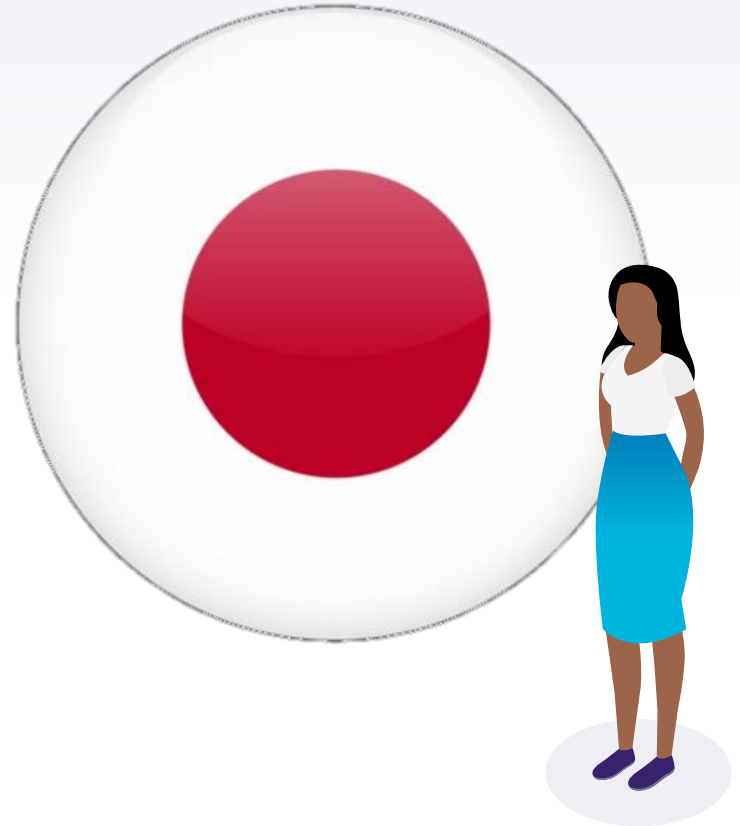
79,140

Deaths

1,500

Recovered

71,404



Last update in 22-09-2020

Purpose

- To share code to find Last update cases In Japan
- To Know Fatality ratio and Recovery rate in Japan
- additional cases per days
- To compare cases and recovery
- To know prefecture with highest Cases



Step for find last update cases in Japan

```
#Library yg di butuhkan
import json
import numpy as np
import pandas as pd
import requests

#Membuat Fungsi get API
def get_json(api_url):
    response = requests.get(api_url)
    if response.status_code == 200:
        return json.loads(response.content.decode('utf-8'))
    else:
        return None

#Memanggil API Covid19
record_date = '2020-09-20'
covid_url = 'https://covid19-api.org/api/status?date='+ record_date
df_covid_worldwide = pd.io.json.json_normalize(get_json(covid_url))
import datetime
df_covid_worldwide['last_update_month'] = df_covid_worldwide['last_update'].apply(
    (lambda x: datetime.datetime.strptime(x, "%Y-%m-%dT%H:%M:%S").strftime('%Y-%m'))

print(df_covid_worldwide.head())

countries = ['JP']
i = 0
for country in countries:
    covid_timeline_url = 'https://covid19-api.org/api/timeline/'+country
    df_covid_timeline = pd.io.json.json_normalize(get_json(covid_timeline_url))
    df_covid_timeline['last_update'] = pd.to_datetime(df_covid_timeline['last_update'], format='%Y-%m-%dT%H:%M:%S')
    df_covid_timeline['last_update'] = df_covid_timeline['last_update'].apply(lambda x: x.date())
    if i==0:
        df_covid_timeline_merged = df_covid_timeline
    else:
        df_covid_timeline_merged = df_covid_timeline.append(df_covid_timeline_merged, ignore_index=True)
    i=i+1
print(df_covid_timeline_merged.head())
```

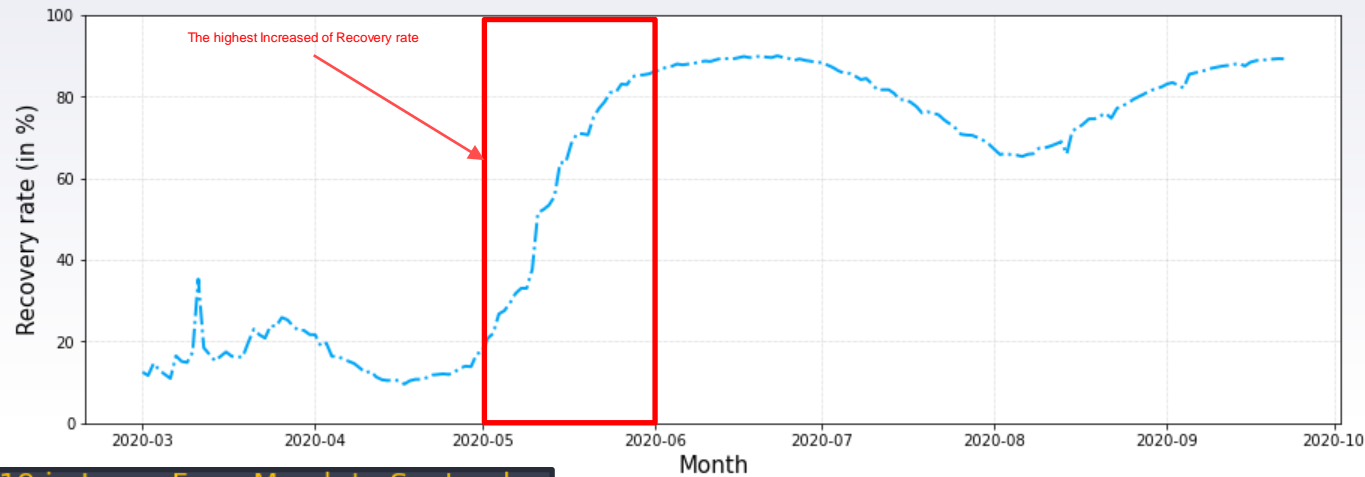


Fatality Ratio and Recovery Rate

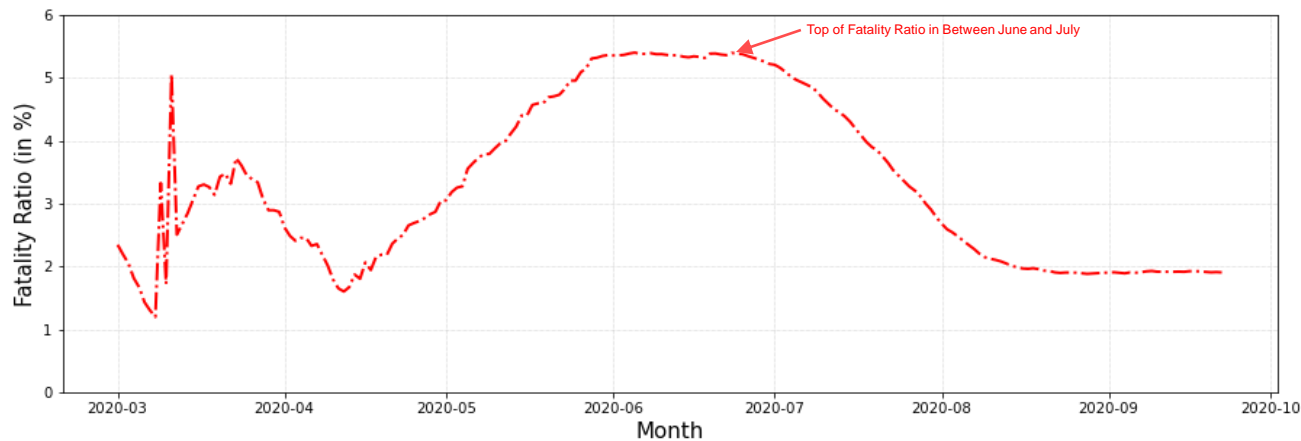
Fatality Ratio and Recovery rate in last 5 days

| fatality_ratio | cure_ratio |
|----------------|------------|
| 0.019042 | 0.892730 |
| 0.019093 | 0.893232 |
| 0.019054 | 0.892118 |
| 0.019120 | 0.890532 |
| 0.019216 | 0.889919 |

Recovery rate COVID 19 in Japan From March to September



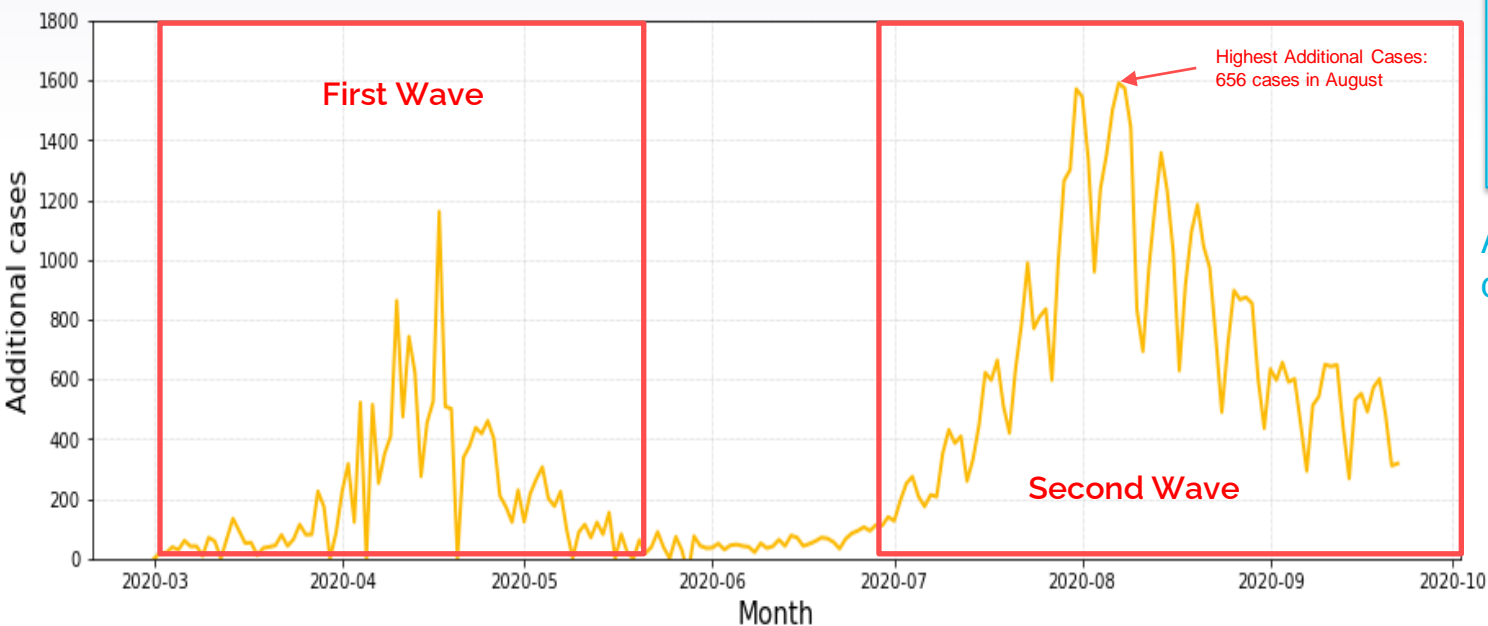
Fatality Ratio COVID 19 in Japan From March to September



Average :
Fatality Ratio/days = 2%
Recovery rate/days= 51%

Additional Cases per days

Additional Cases COVID 19 in Japan From March to September



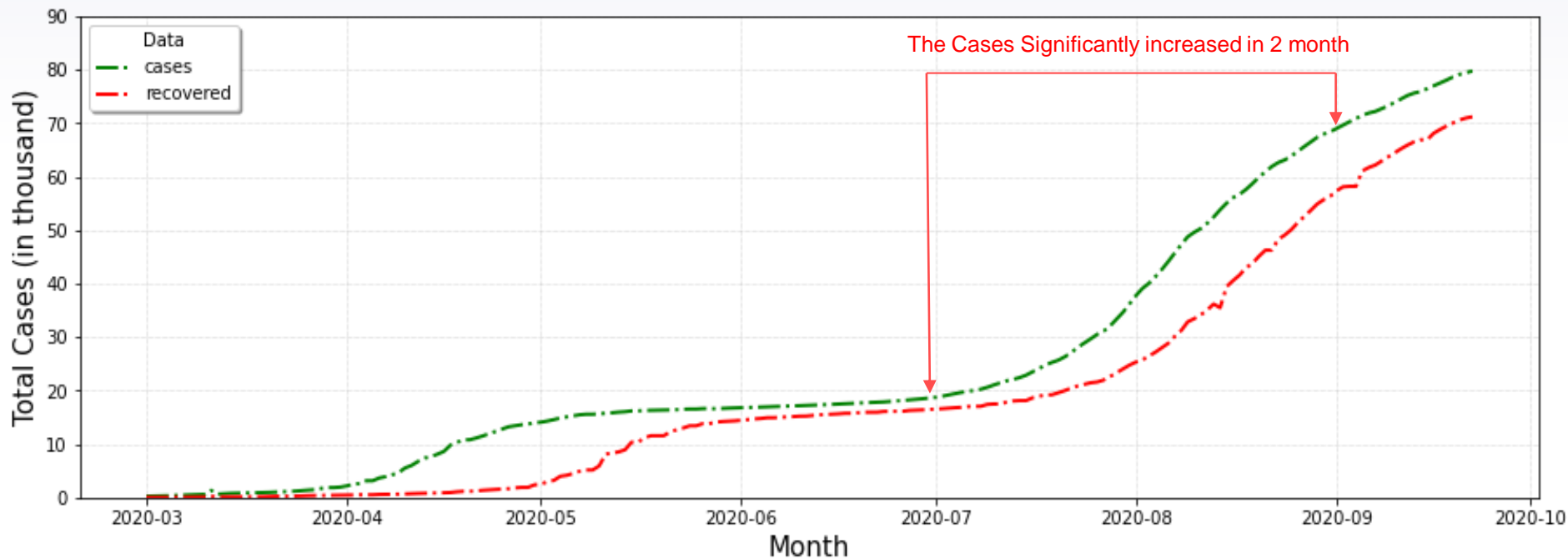
Average of
Additional
Cases/days : 507
cases

Additional cases last 5
days:

| cases_added | |
|-------------|-------|
| | 318.0 |
| | 311.0 |
| | 480.0 |
| | 601.0 |
| | 573.0 |

Cases and Recovery

Cases of COVID 19 in Japan until September 2020



Data of COVID-19 in Japan Prefecture

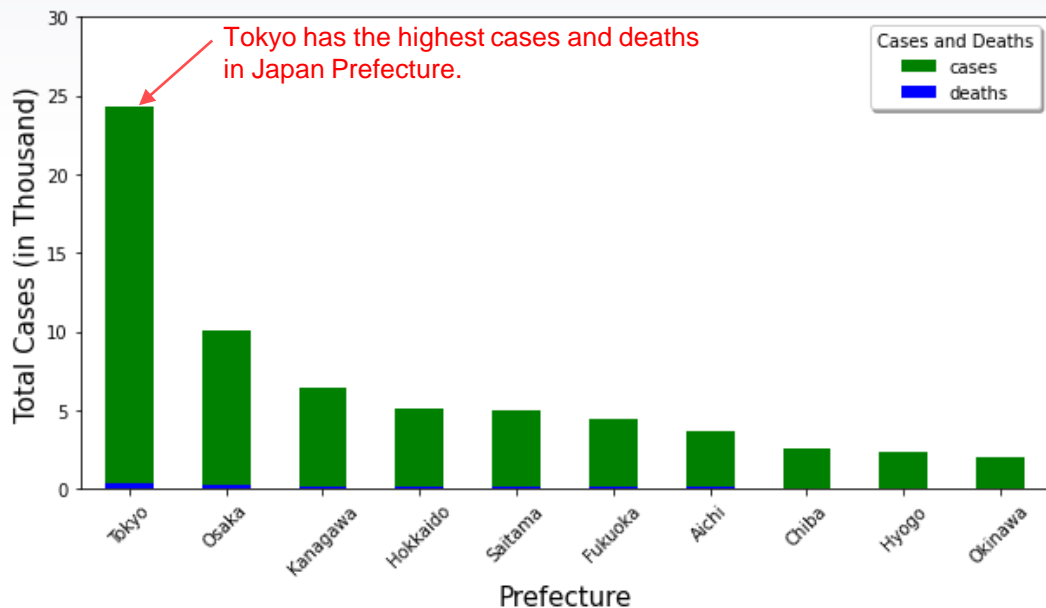
Full Code: in my Kaggle Account

| Kanji | Prefecture | Cases | Deaths |
|-------|------------|-------|--------|
| 東京 | Tokyo | 24306 | 391 |
| 大阪 | Osaka | 10099 | 193 |
| 神奈川 | Kanagawa | 6403 | 135 |
| 愛知 | Aichi | 5103 | 81 |
| 福岡 | Fukuoka | 5004 | 91 |
| 埼玉 | Saitama | 4448 | 100 |
| 千葉 | Chiba | 3651 | 68 |
| 兵庫 | Hyogo | 2575 | 57 |
| 沖縄 | Okinawa | 2358 | 45 |
| 北海道 | Hokkaido | 1960 | 106 |



Cases in Japan prefecture

Top 10 Prefecture COVID 19 Cases in Japan

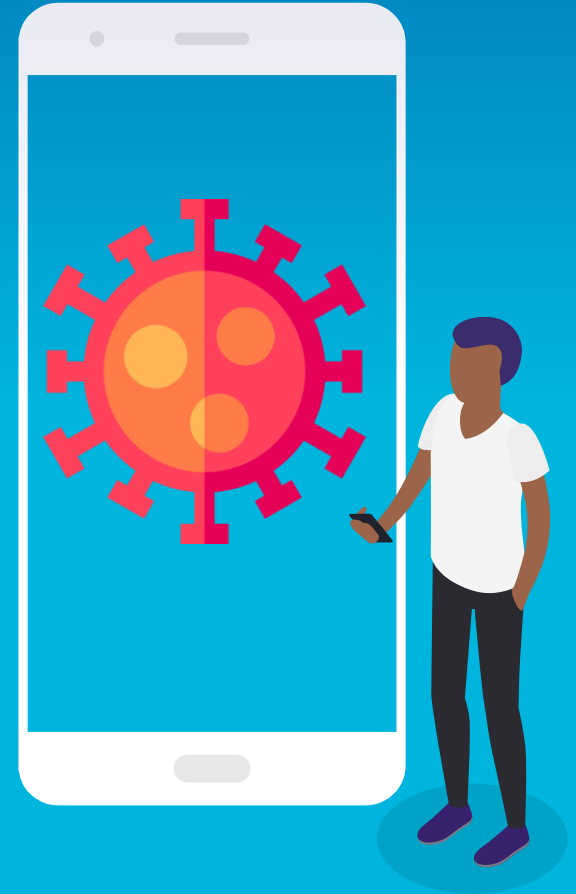


Conclusion

- ▶ Covid-19 in Japan has a low average fatality ratio. For the recovery rate in Japan, from May the recovery rate has been increased significantly.

Based on additional cases graphic we can see Japan already passed the first wave of COVID-19 and now they are entering the second wave of COVID-19.

In some months, cases in Japan have significantly increased and Tokyo is the prefecture that contributed most of the additional cases. On those cases, they can be affected by COVID-19 handling methods from Japan. Because, if the methods were bad, it can make infected people be more increased.



Tools of This Project

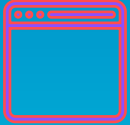


THANKYOU!

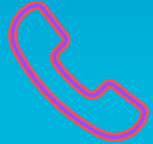
ありがとうございます



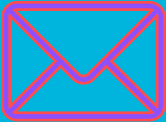
CONTACT ME



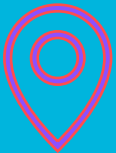
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