

# SCIENTIFIC RESEARCH MONITORING ON COVID-19

14 OCTOBER 2020

For accessing the full series of published scientific reports please visit the following link:  
<https://www.doh.gov.ae/ar/covid-19/Healthcare-Professionals/Scientific-Publication>

# SCIENTIFIC RESEARCH MONITORING ON COVID-19

## (ISSUE 255)

Abu Dhabi Public Health Center (ADPHC) is gathering the latest scientific research updates and trends on coronavirus disease (COVID-19) in a daily report. The report provides summaries on breakthrough or updated research on COVID-19 to allow health care professionals and public health professionals get easy and fast access to information.

Click on icon to view content



**Research**  
Update



**Statistics**



**Articles**  
Summary

Note : All articles presented in this report represent the authors' views and not necessarily represents Abu Dhabi Public Health Center views or directions. Due the nature of daily posting , some minor language errors are expected.

For further inquiries you may communicate with us as [PHP@adphc.gov.ae](mailto:PHP@adphc.gov.ae)

# RESEARCH UPDATES

The views and opinions expressed in this report are those of the authors and do not reflect the official policy or position of the Abu Dhabi Public Health Center (ADPHC).

Click on icon to view content

MOHAP contribution

## Clinical Features

**Neuropathology of patients with COVID-19 in Germany: a post-mortem case series**

## Clinical Features

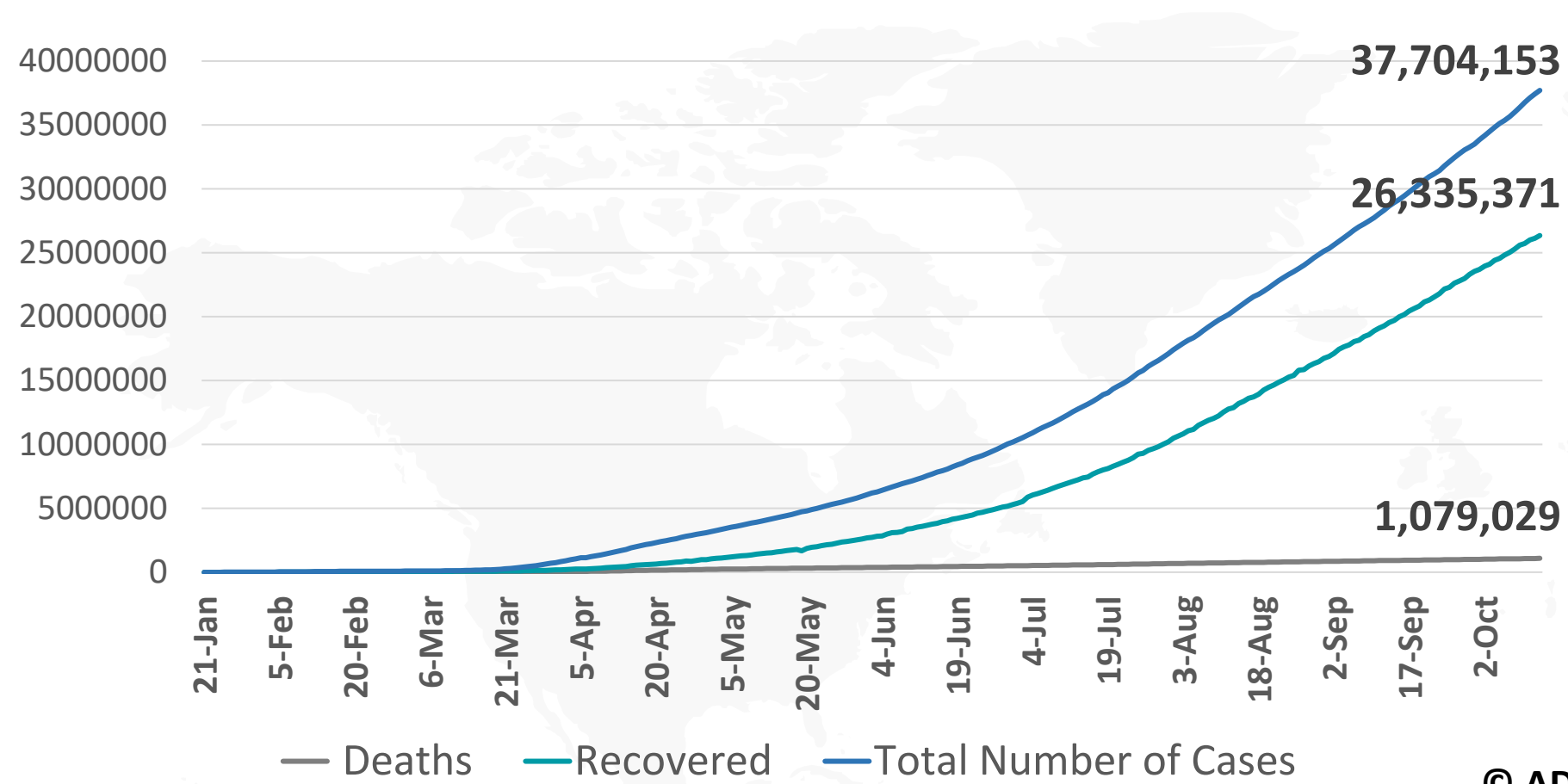
**Case Series of Multisystem Inflammatory Syndrome in Adults Associated with SARS-CoV-2 Infection — United Kingdom and United States, March–August 2020**

## Public Health Response

**COVID-19, comics, and the visual culture of contagion**

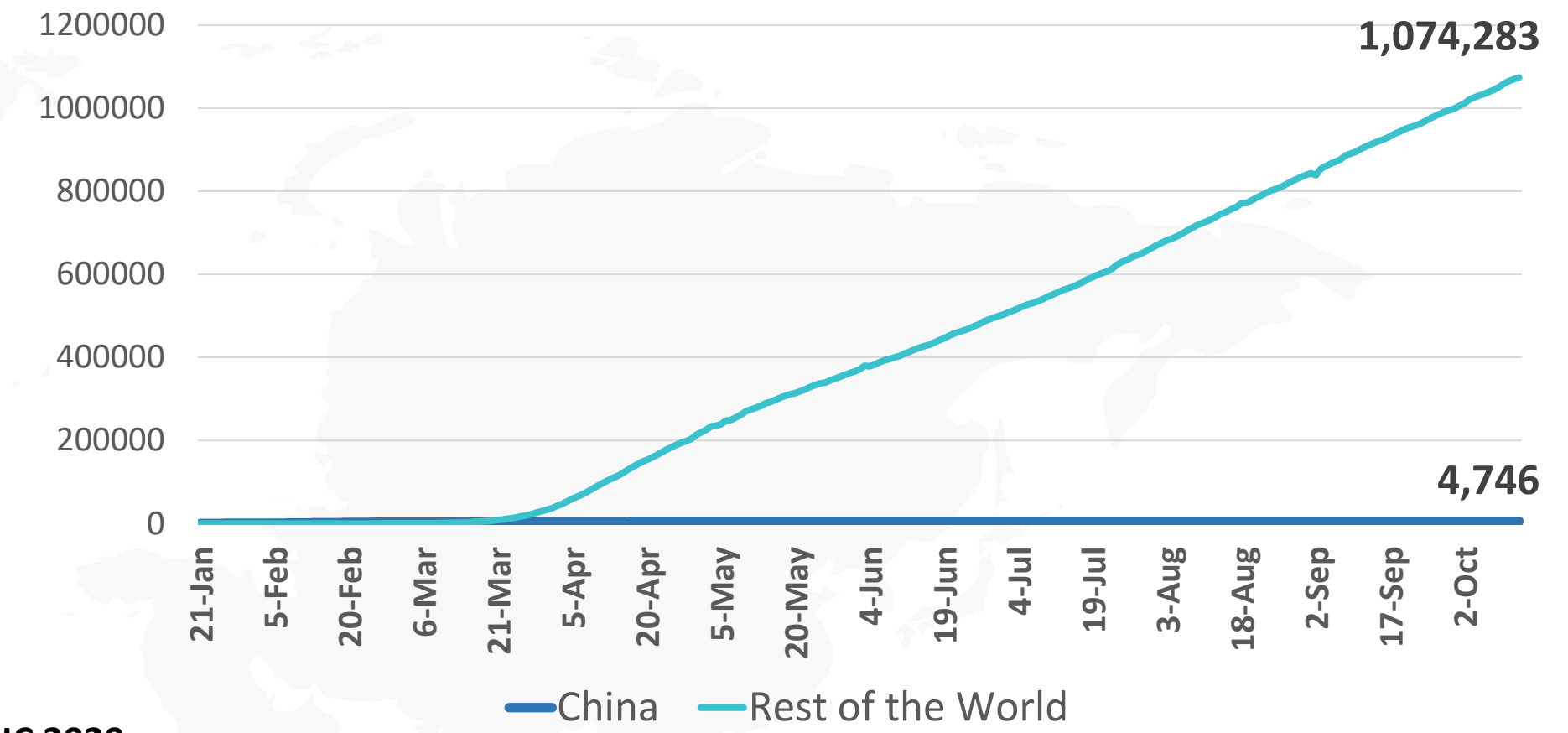


**Figure 1: Total Number of Infected, Recovered, and Death Cases**

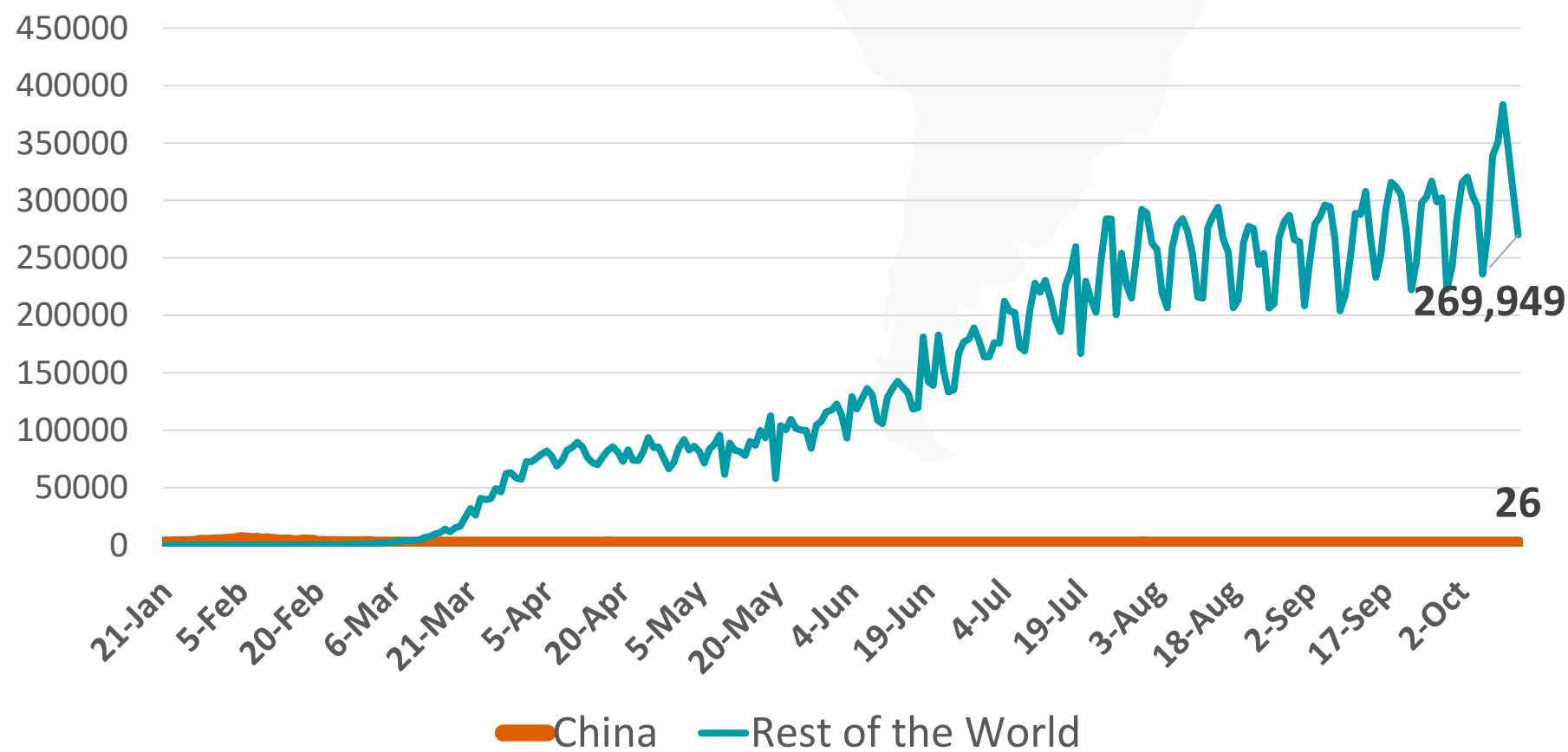


© ADPHC 2020

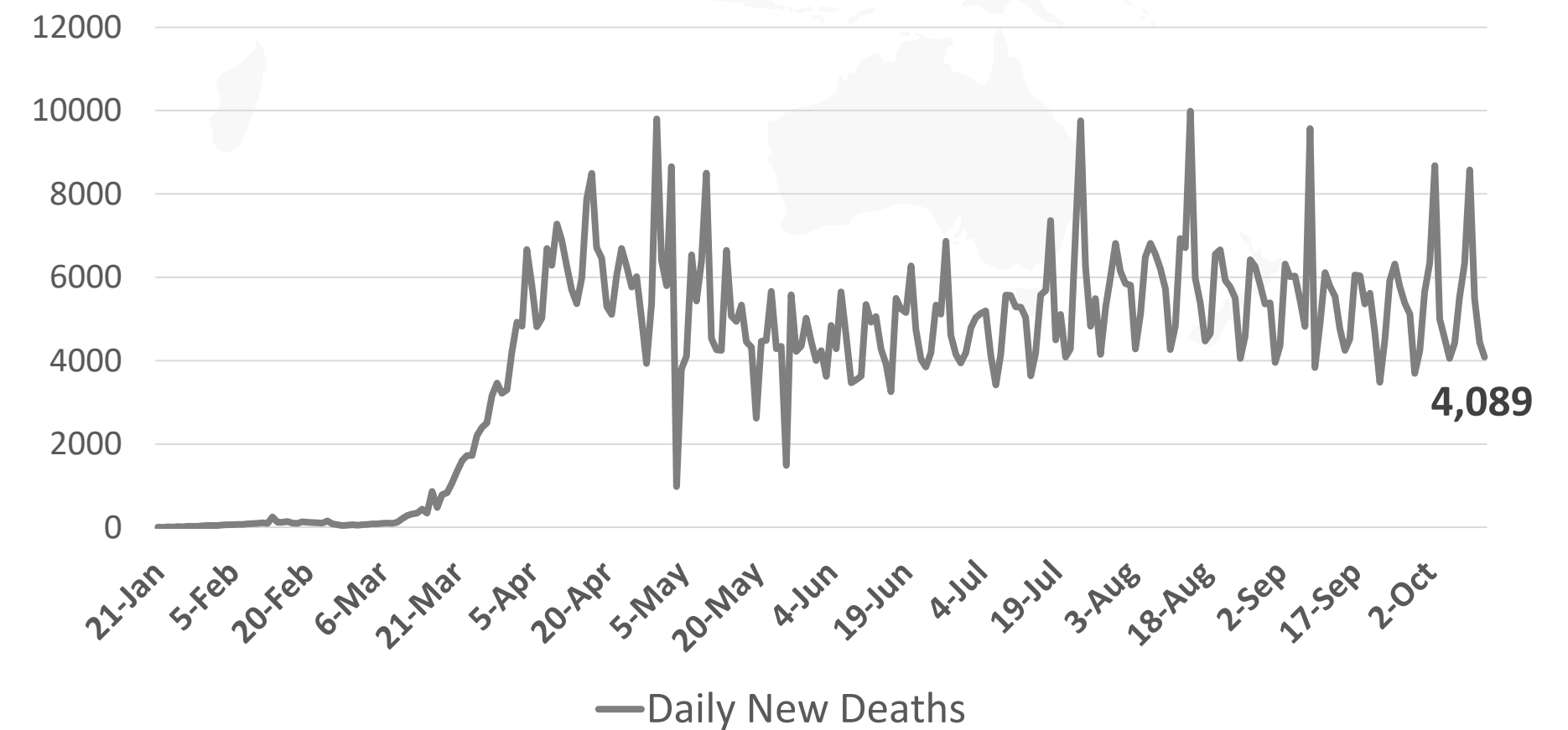
**Figure 3: Total Number of Death Due to COVID-19 (china and result of the world)**



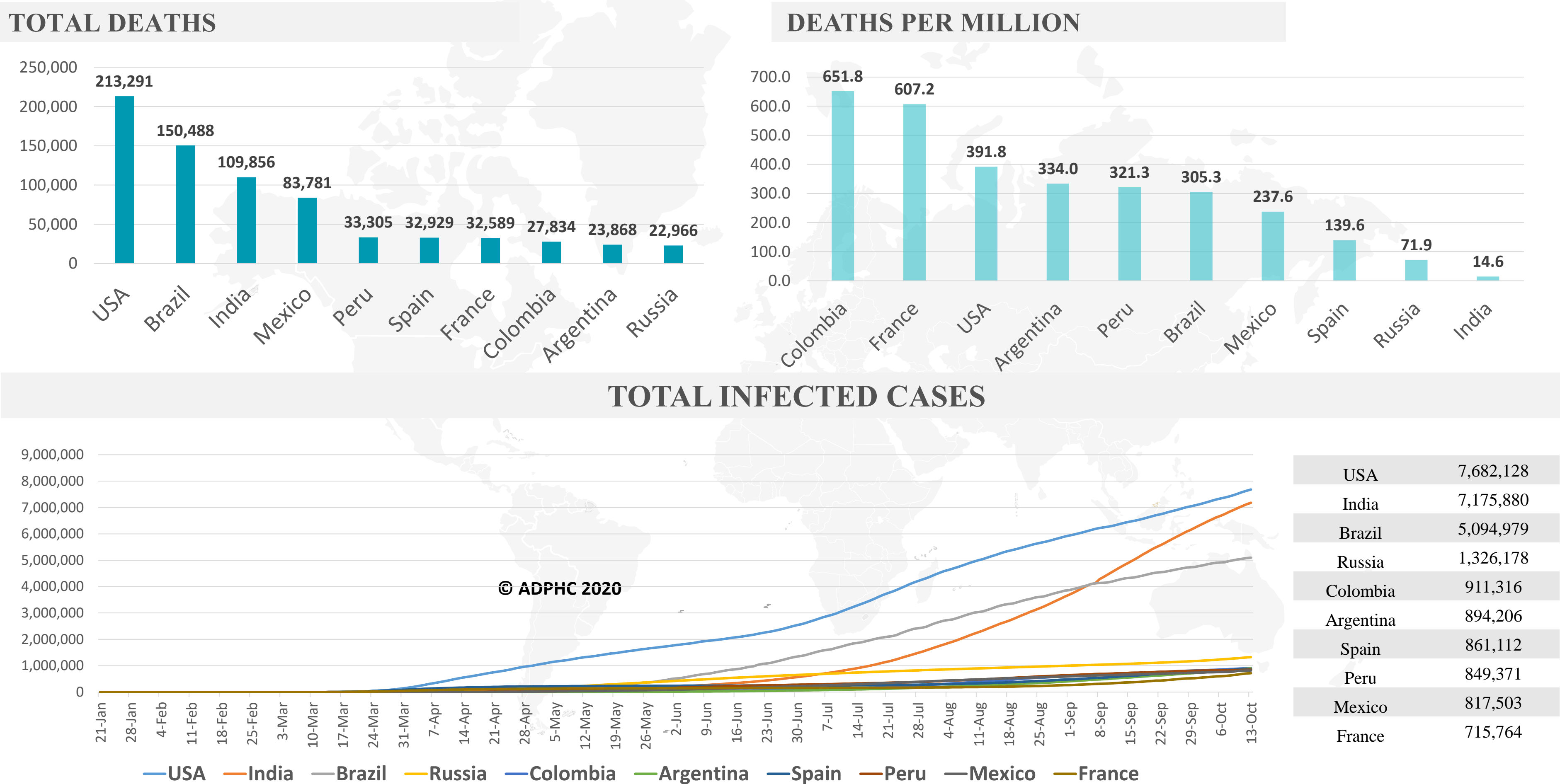
**Figure 2: Daily New Infected COVID-19 Cases (China and rest of the world)**



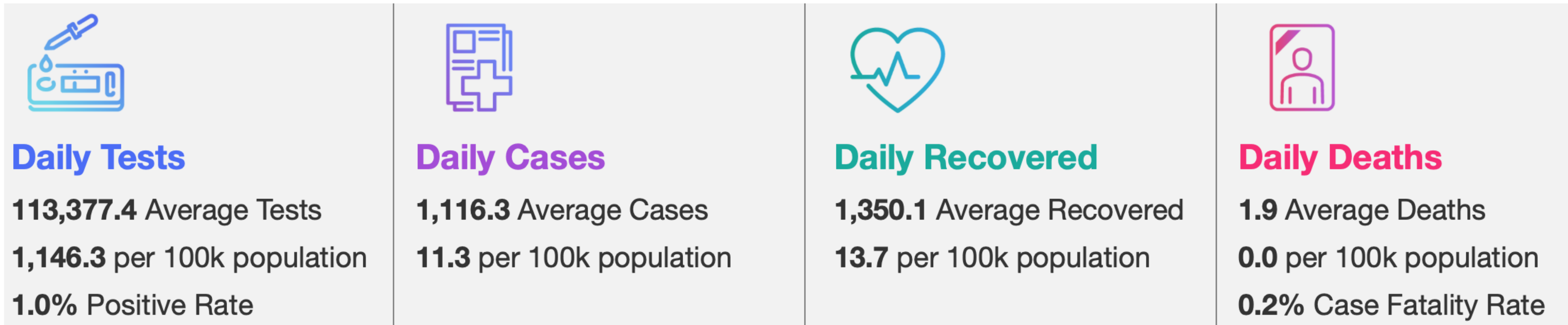
**Figure 4: Global Daily New Deaths Due to COVID-19 (china and rest of the world)**



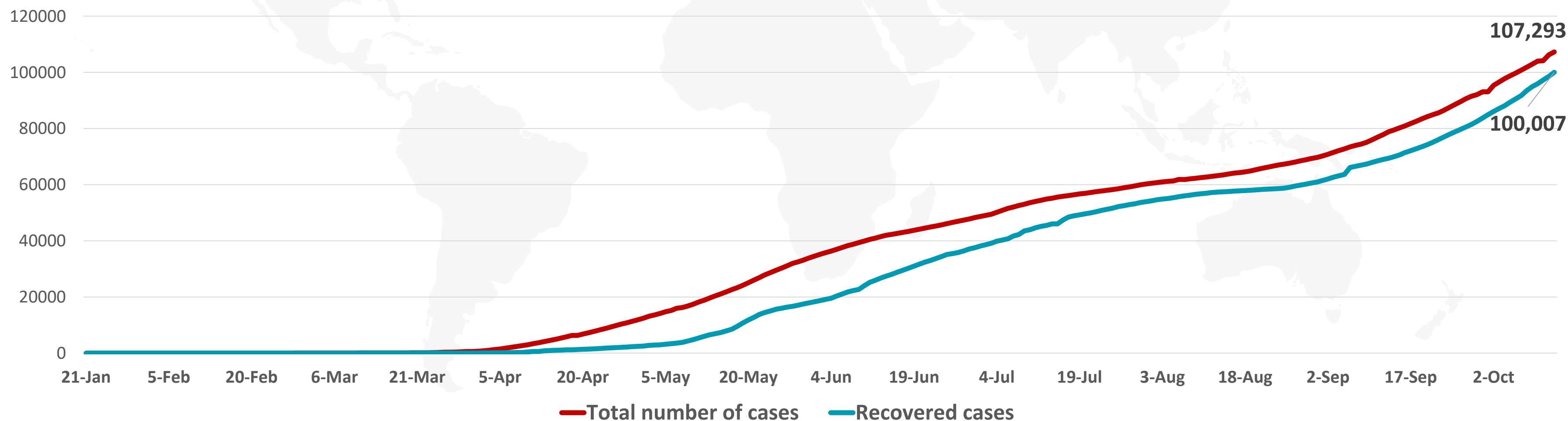
## Figure 5: Top 10 Countries in the Total Number of Cases Due to COVID-19



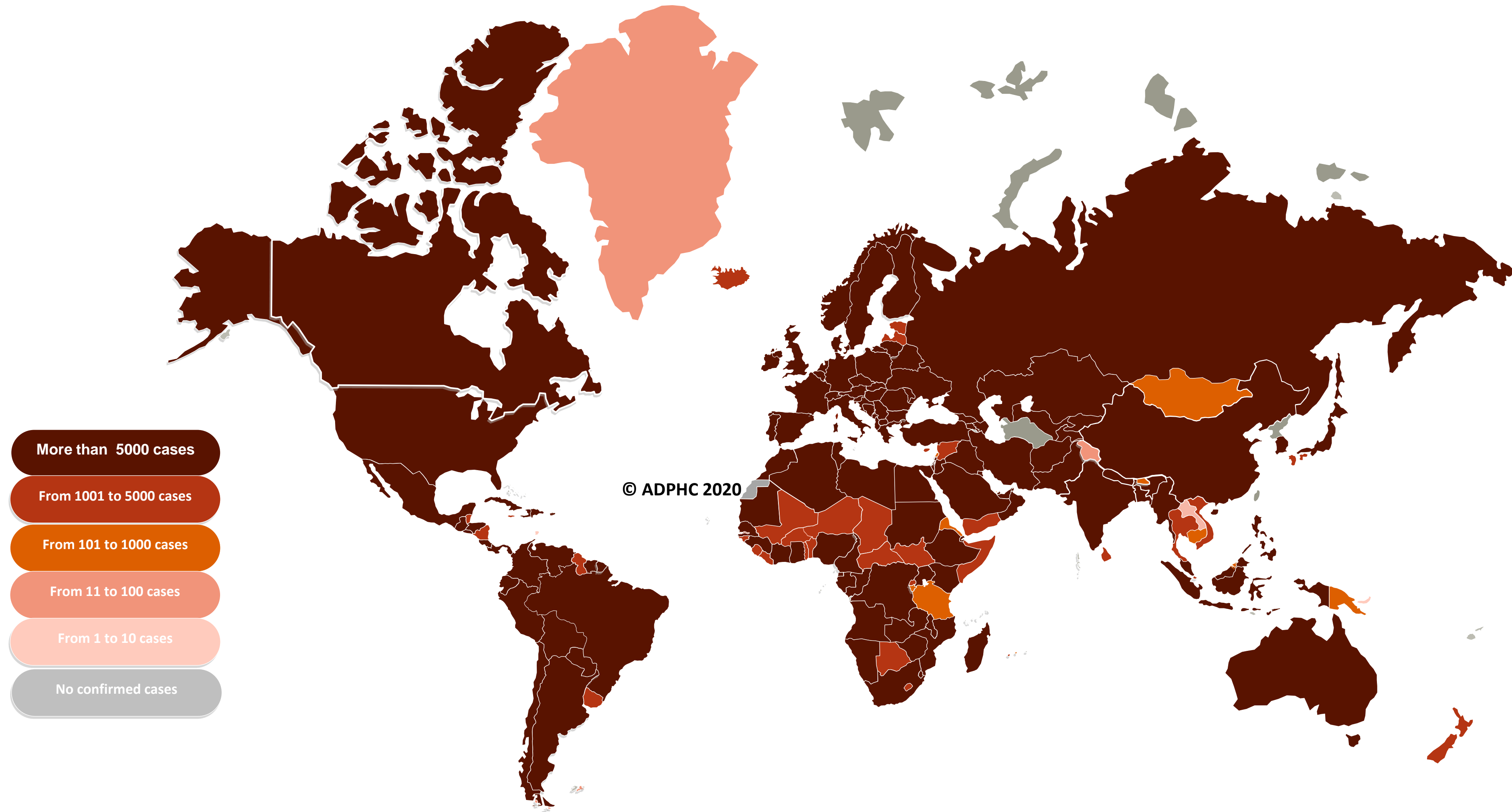
**Figure 6: COVID-19 Status in the UAE** (Federal Competitiveness and Statistics Authority Dashboard)



## TOTAL NUMBER OF INFECTED AND RECOVERED CASES DUE TO COVID-19 REPORTED BY THE UAE



## Figure 7A : Global Distribution of COVID-19 Cases



More than 5000 cases

From 1001 to 5000 cases

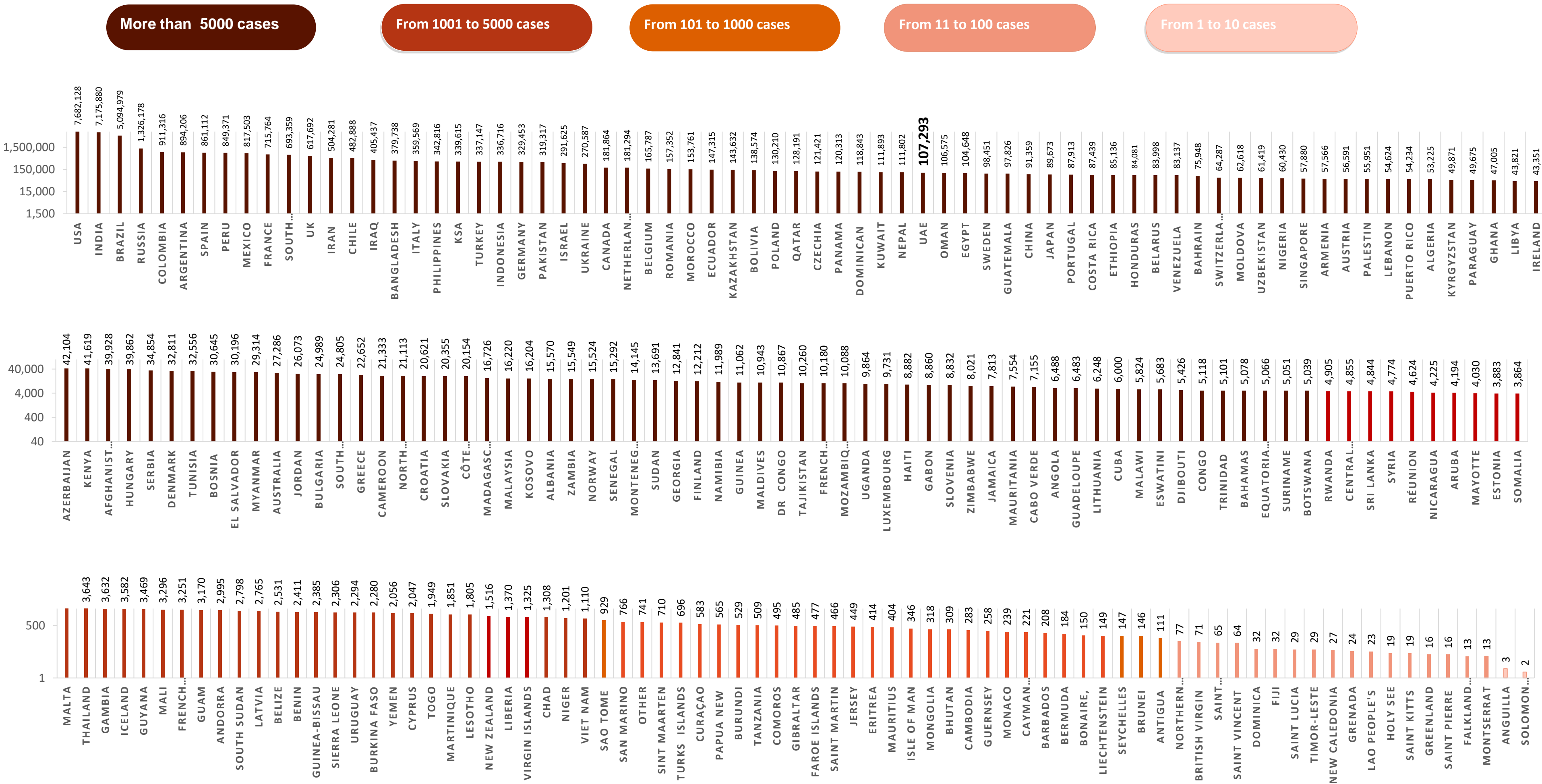
From 101 to 1000 cases

From 11 to 100 cases

From 1 to 10 cases

No confirmed cases

## Figure 7B: Bar Chart Illustrates the Global Distribution of COVID19 Cases



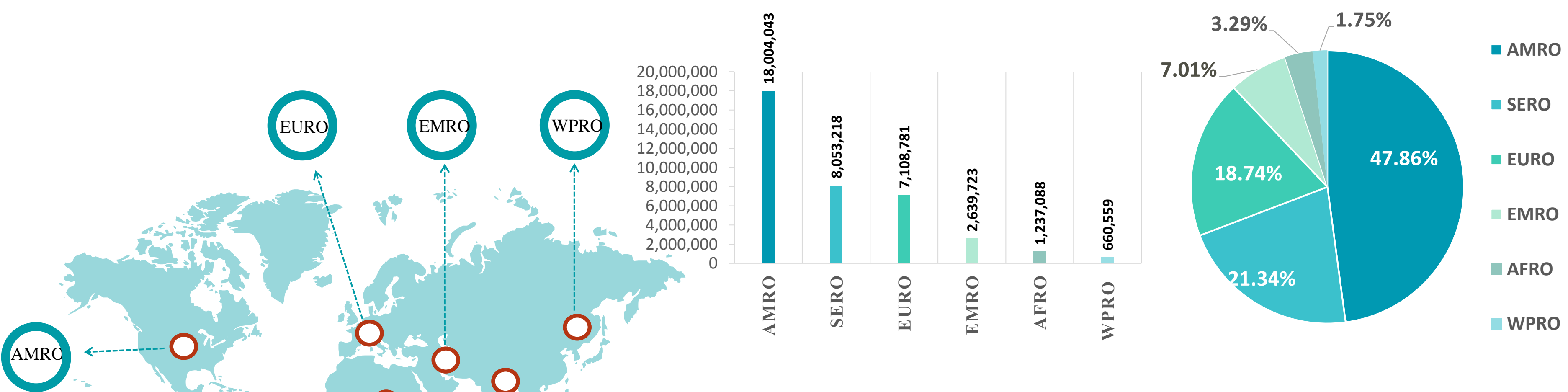
Other\*: includes cases and deaths reported under the international conveyance(Diamond Princess)



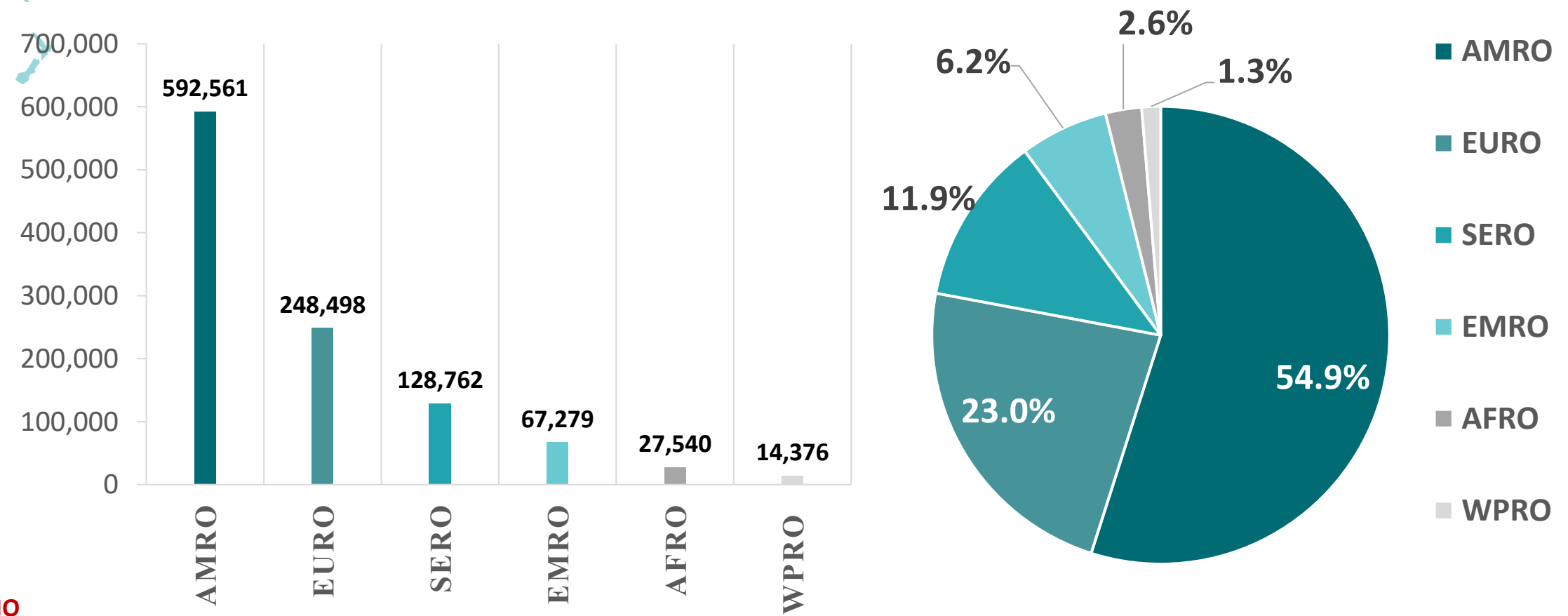


Figure 8: Global Distribution of COVID-19 Cases per Region

## INFECTED

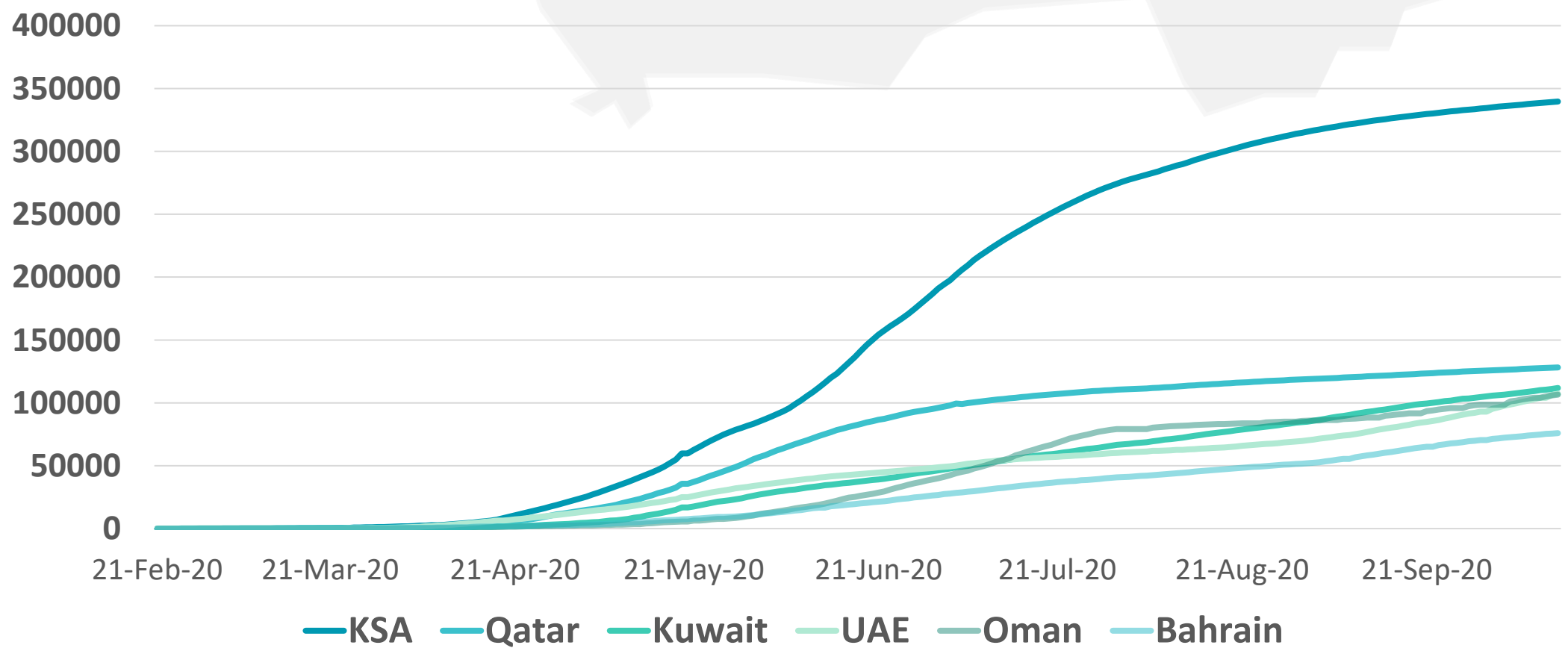
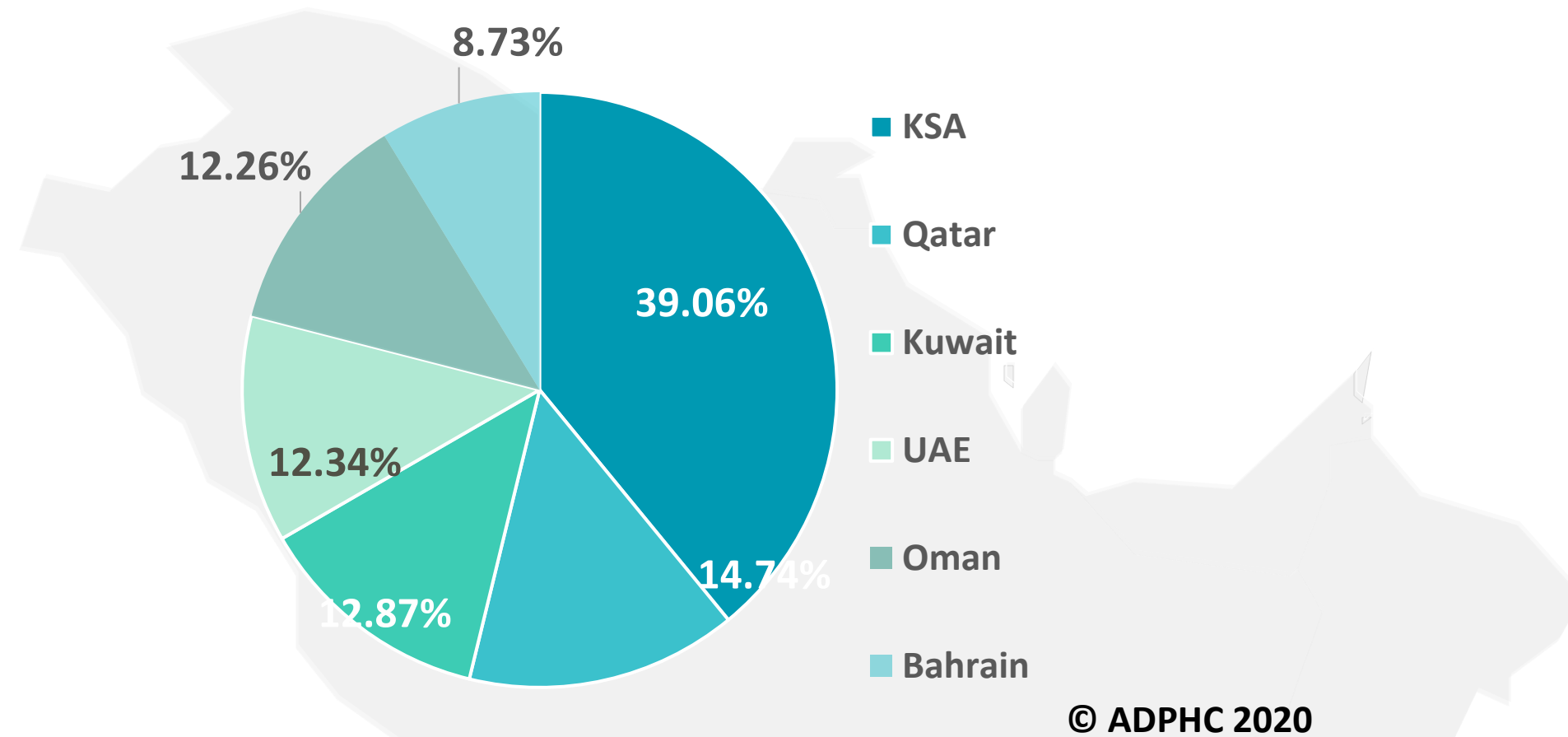


## DEATHS

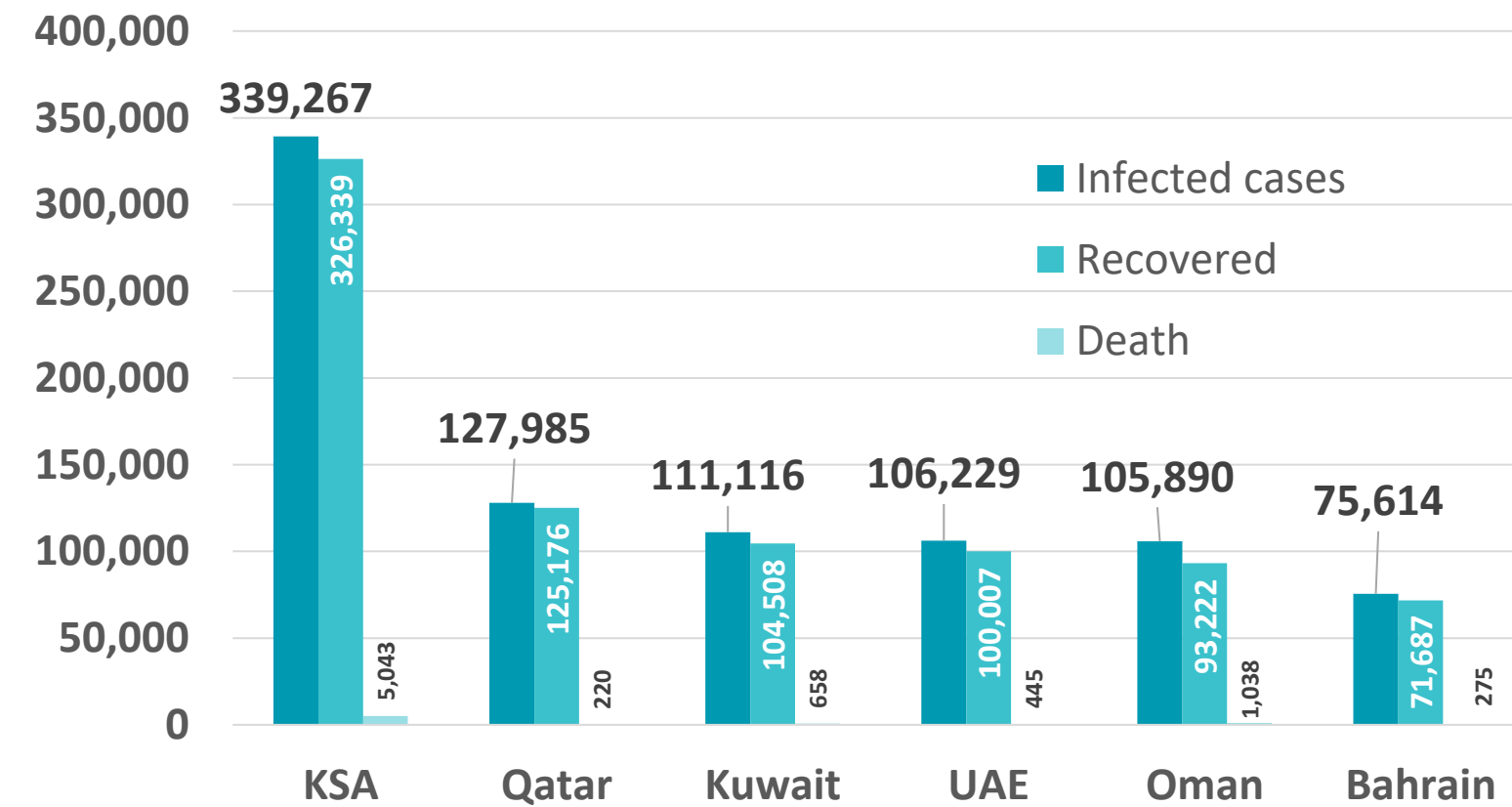


## Figure 9: Comparative Analysis of the Distribution of COVID-19 Cases in GCC Countries

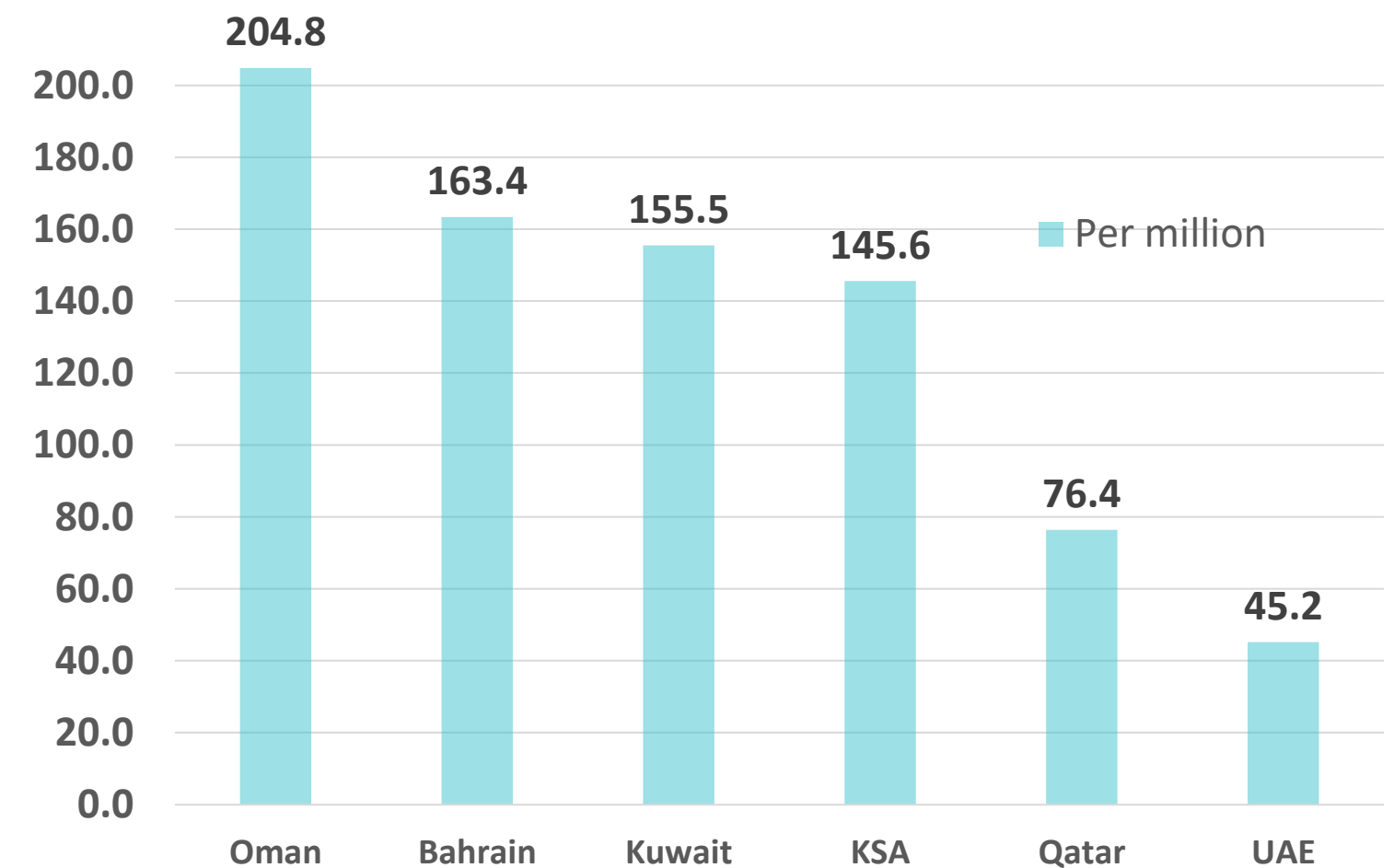
### TOTAL NUMBER OF INFECTED CASES



### TOTAL NUMBER OF INFECTED, RECOVERED AND DEATHS



### DEATHS PER MILLION



Graphs published by Abu Dhabi Public Health Center 2020 | Data resources: [John Hopkins](#), [WHO](#)

## Figure 10: Comparative Analysis of the Distribution of COVID-19 New Cases in GCC Countries

### UAE



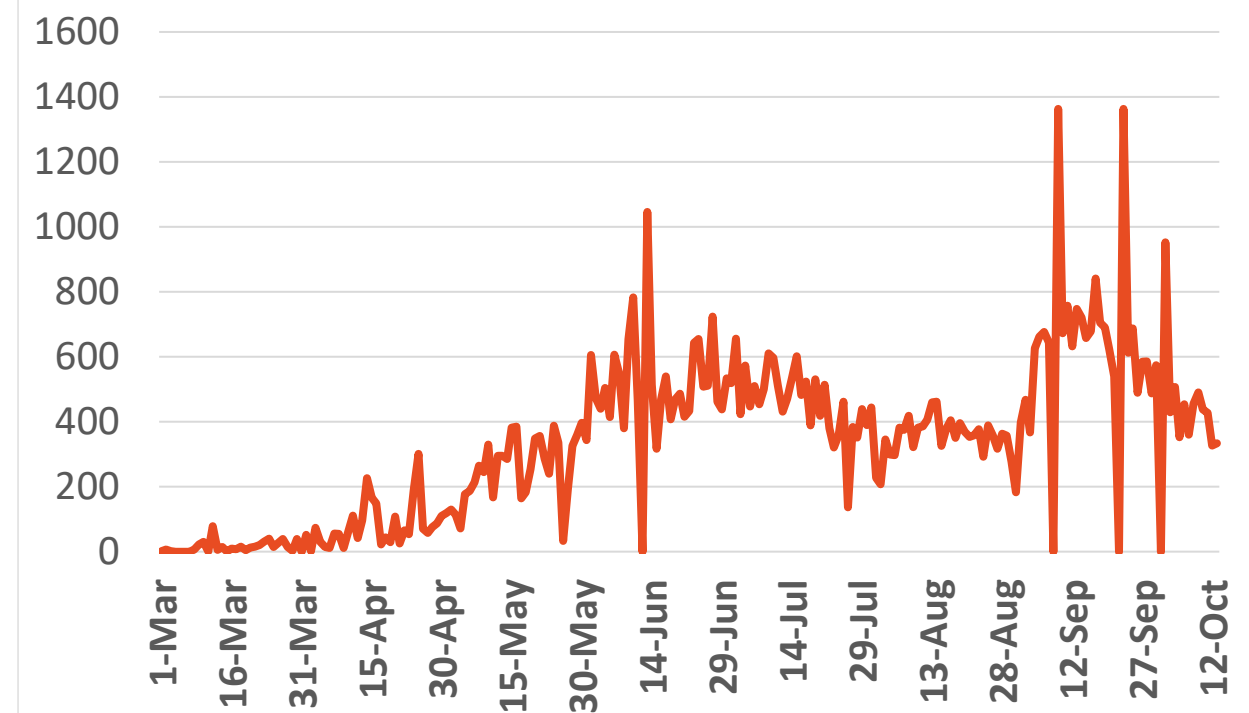
Source : National Emergency Crisis and Disaster Management Authority

### KSA



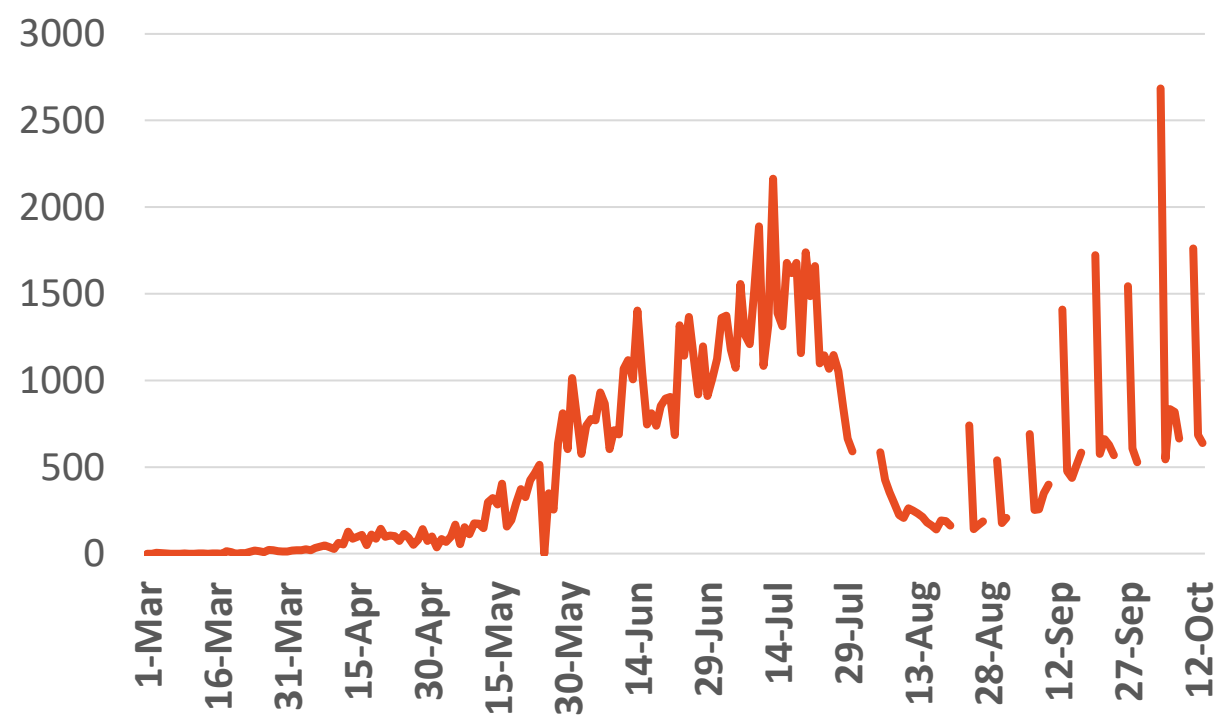
Source : KSA ministry of health

### Bahrain



Source :WHO

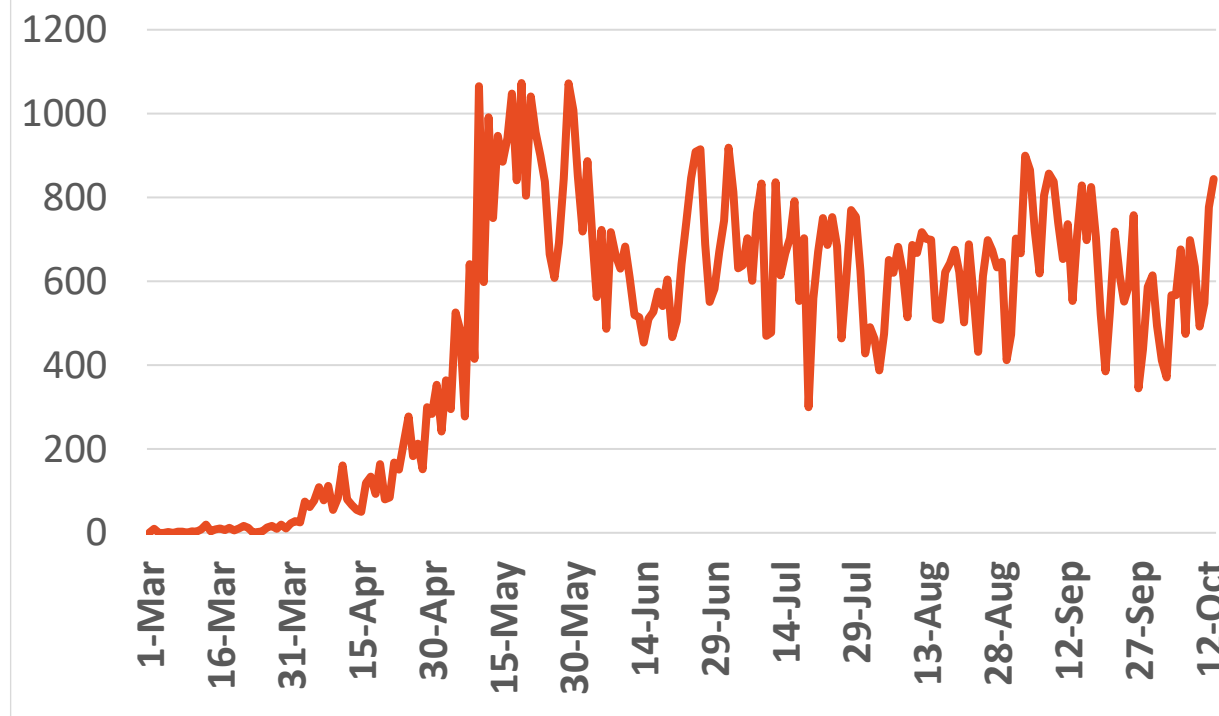
### Oman



Source :Oman ministry of health

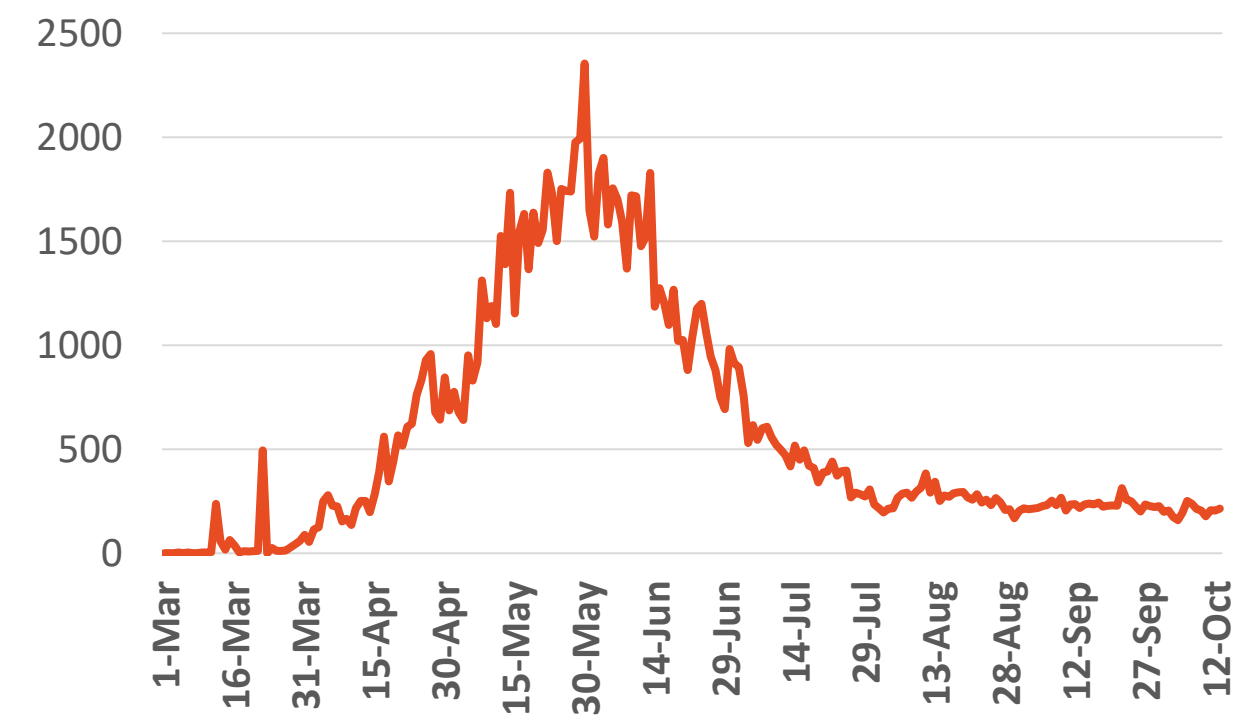
### Kuwait

© ADPHC 2020



Source : Kuwait ministry of health

### Qatar



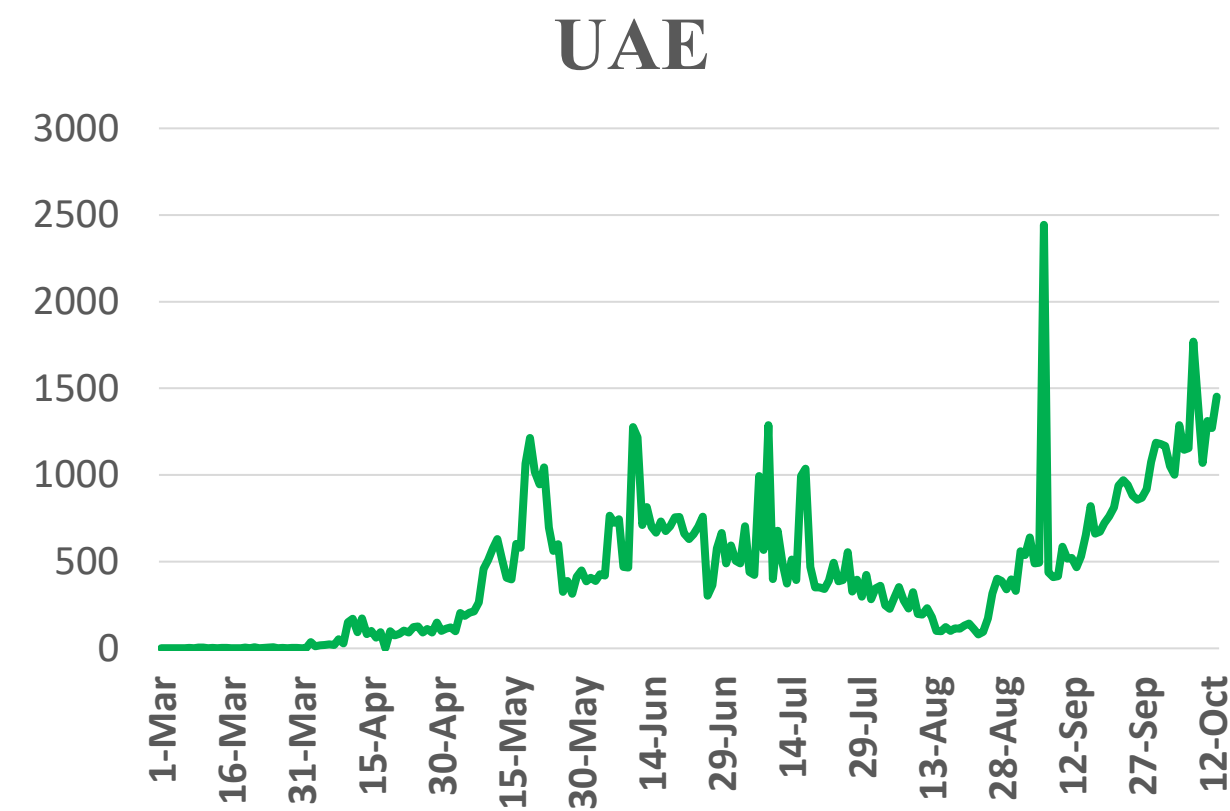
Source : Qatar ministry of health

\*No announced statistic data from 31 July to 4 August, 21,23,28,30 August 2, 4, 5,11,12,18,19,25, 26,30 September,1,2,9 & 10 October

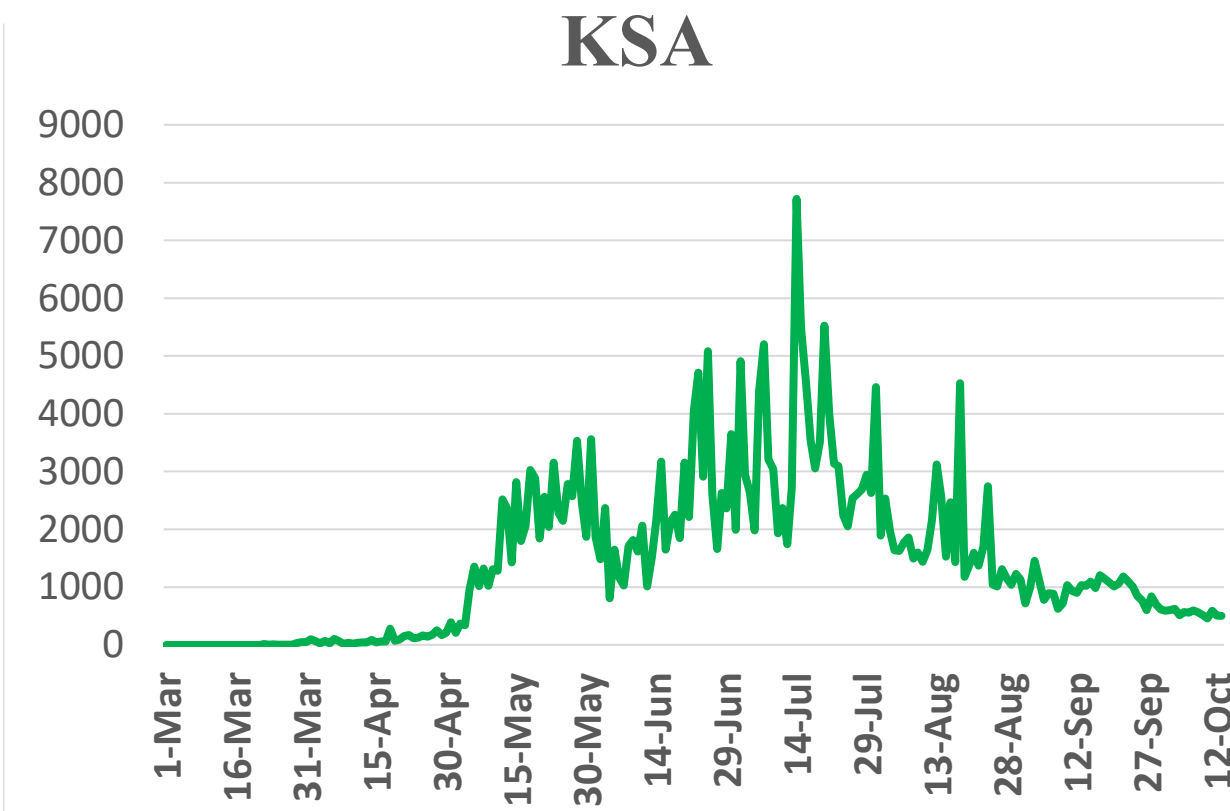
\*No announced statistic data on weekends and official holidays.



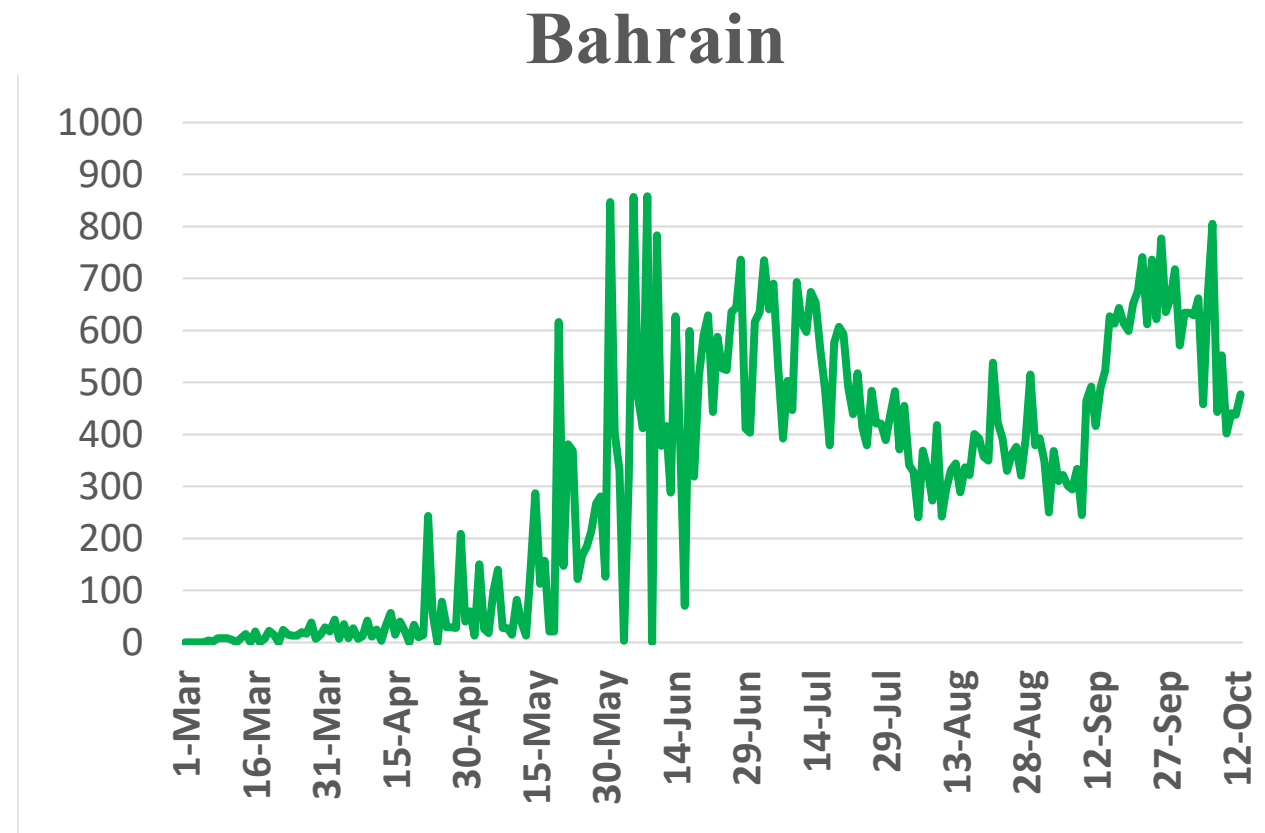
**Figure 11: Comparative Analysis of the Distribution of COVID-19 Newly Recovered Cases in GCC Countries**



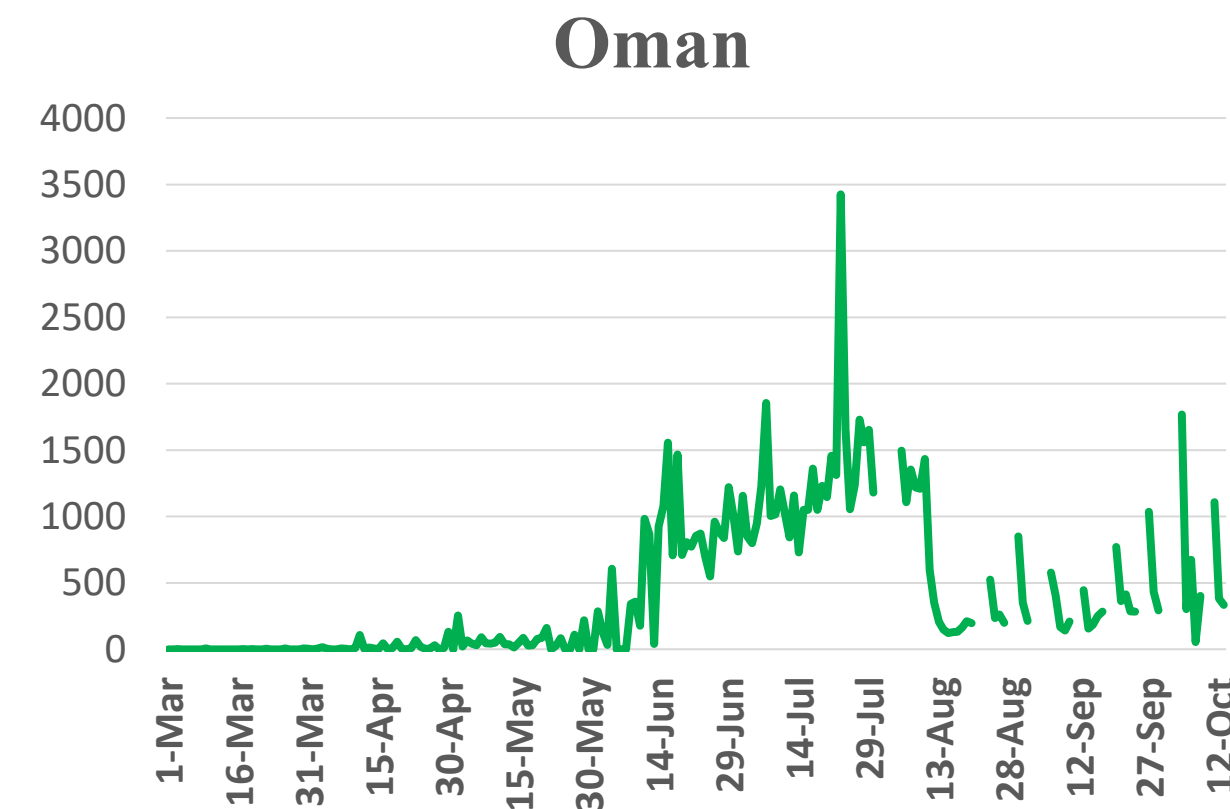
Source : National Emergency Crisis and Disaster Management Authority



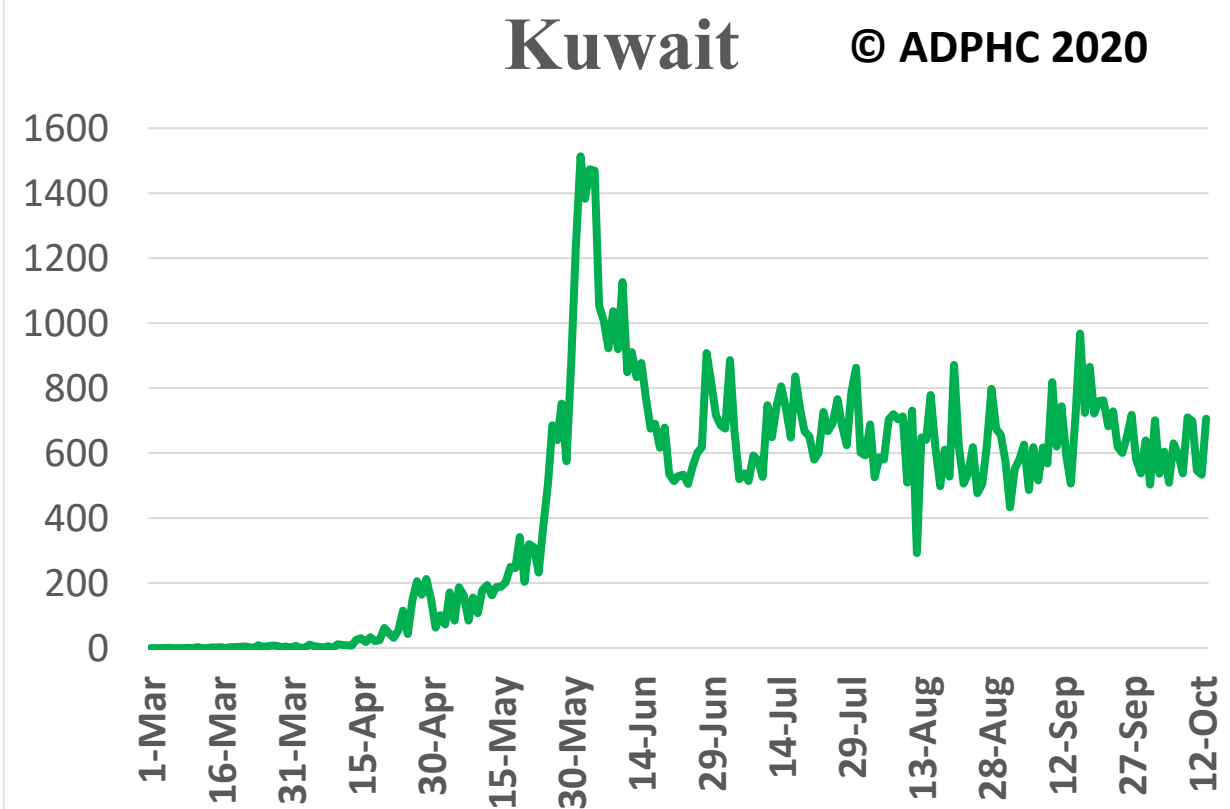
Source : KSA ministry of health



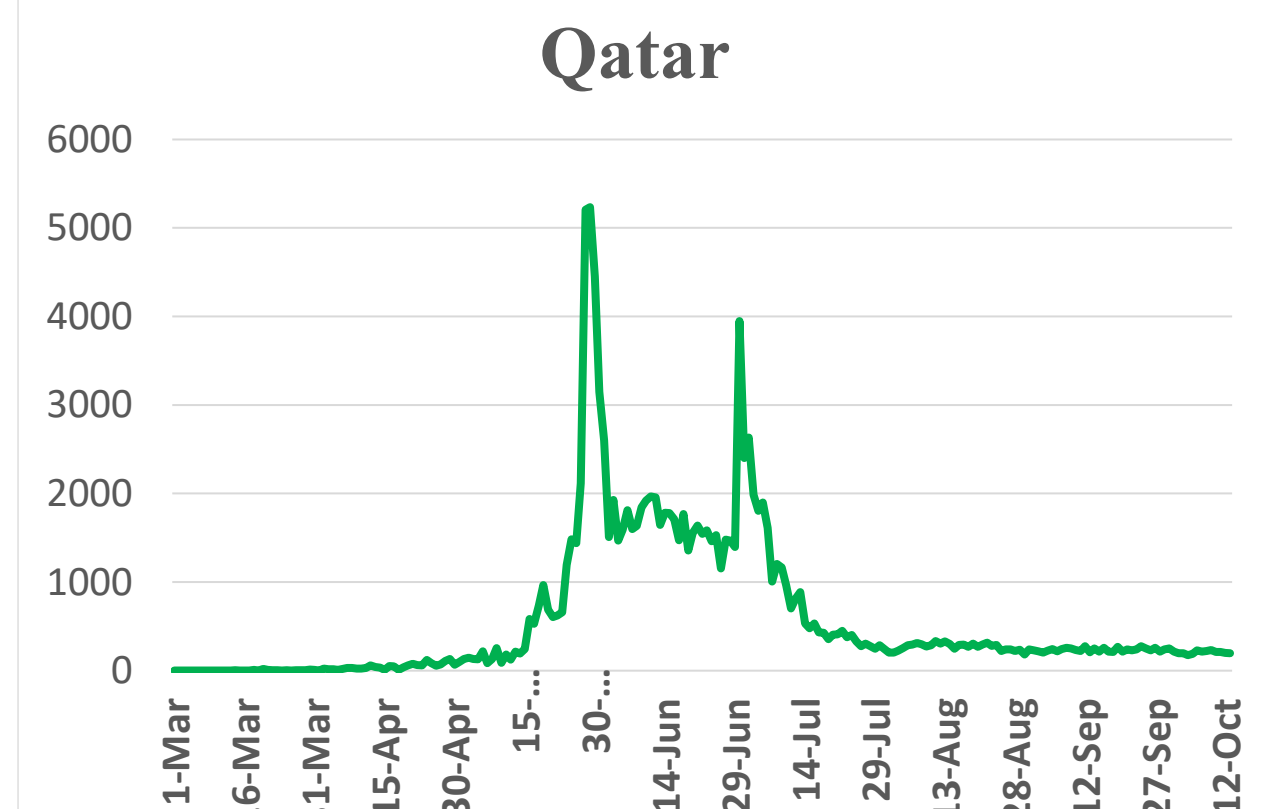
Source : Bahrain ministry of health



Source : Oman ministry of health



Source : Kuwait ministry of health



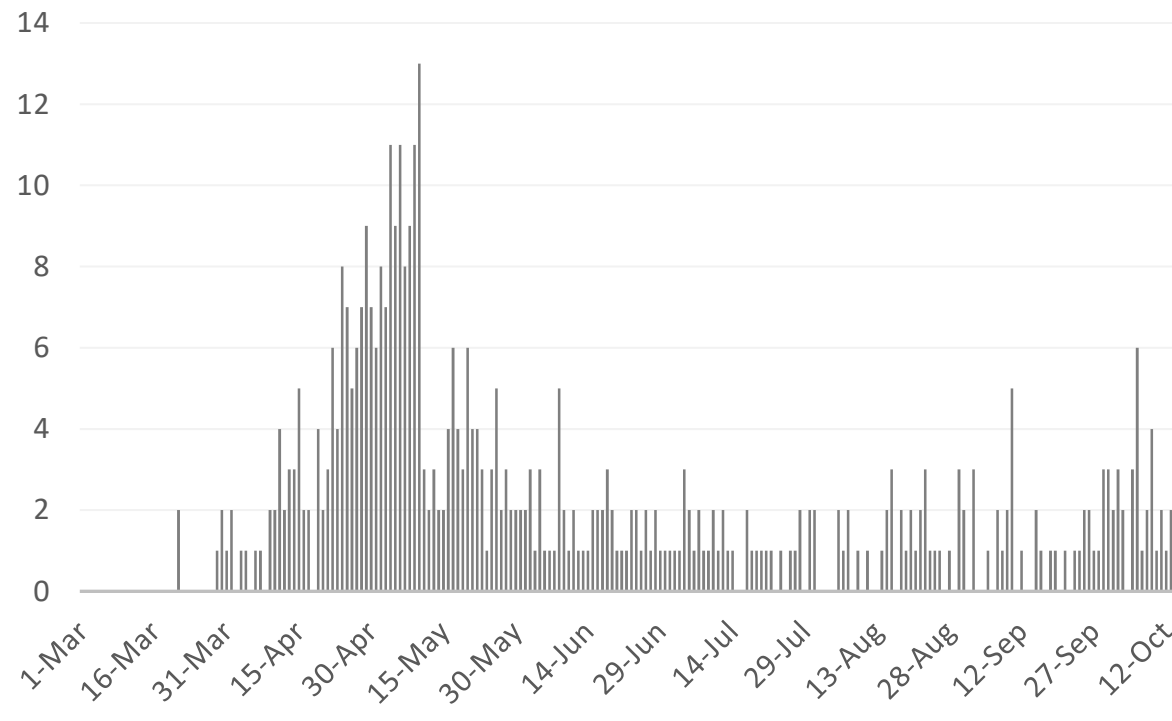
Source : Qatar ministry of health

\*No announced statistic data from 31 July to 4 August, 21,23,28,30 August 2, 4, 5,11,12,18,19,25, 26,30 September,1,2,9 &10 October  
\*No announced statistic data on weekends and official holidays.



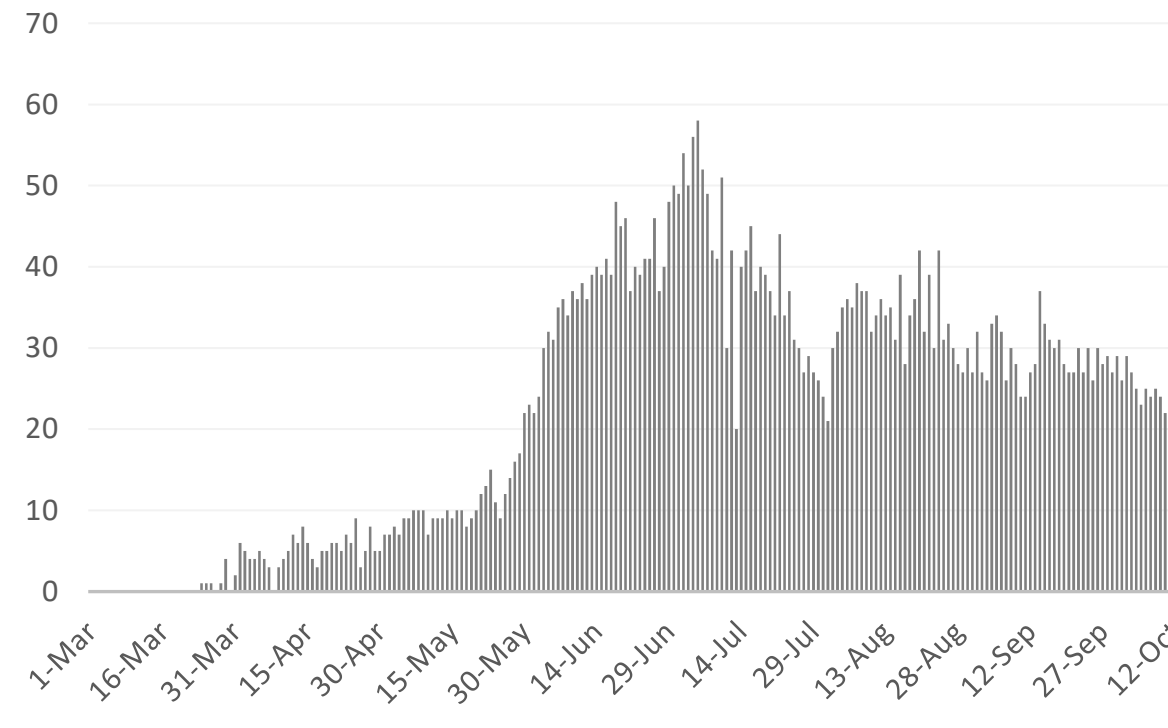
## Figure 12: Comparative Analysis of the Distribution of COVID-19 New Death Cases in GCC Countries

### UAE



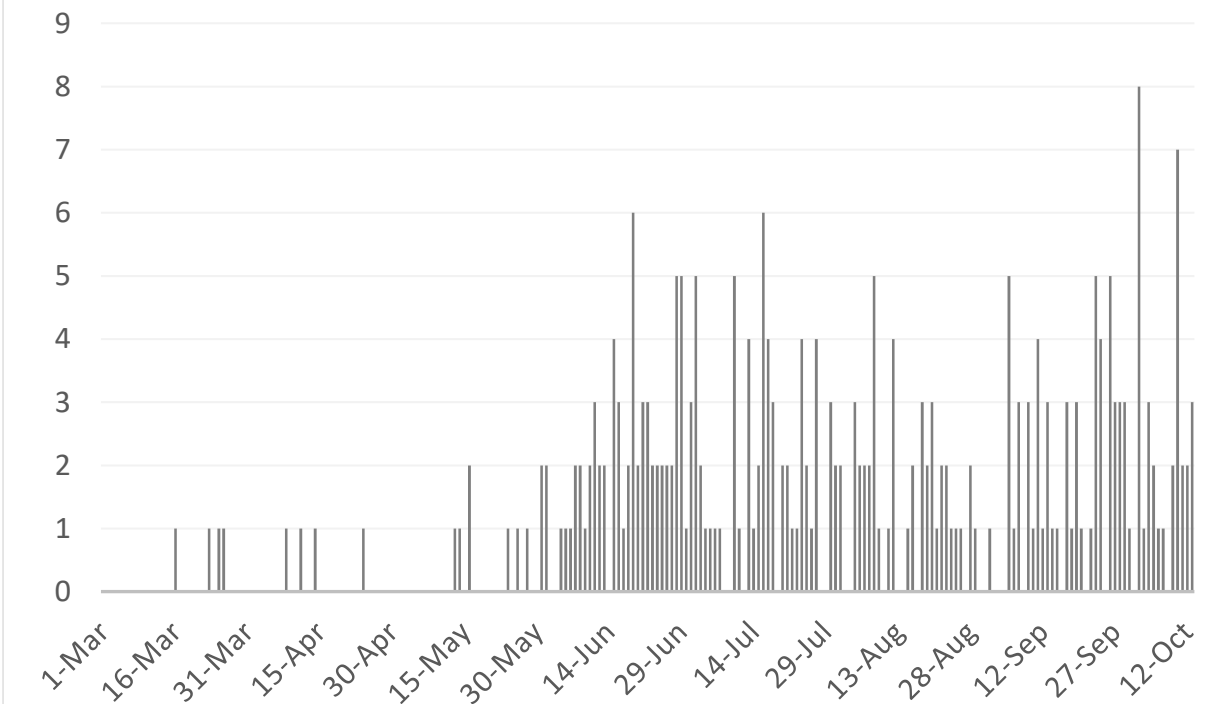
Source : National Emergency Crisis and Disaster Management Authority

### KSA



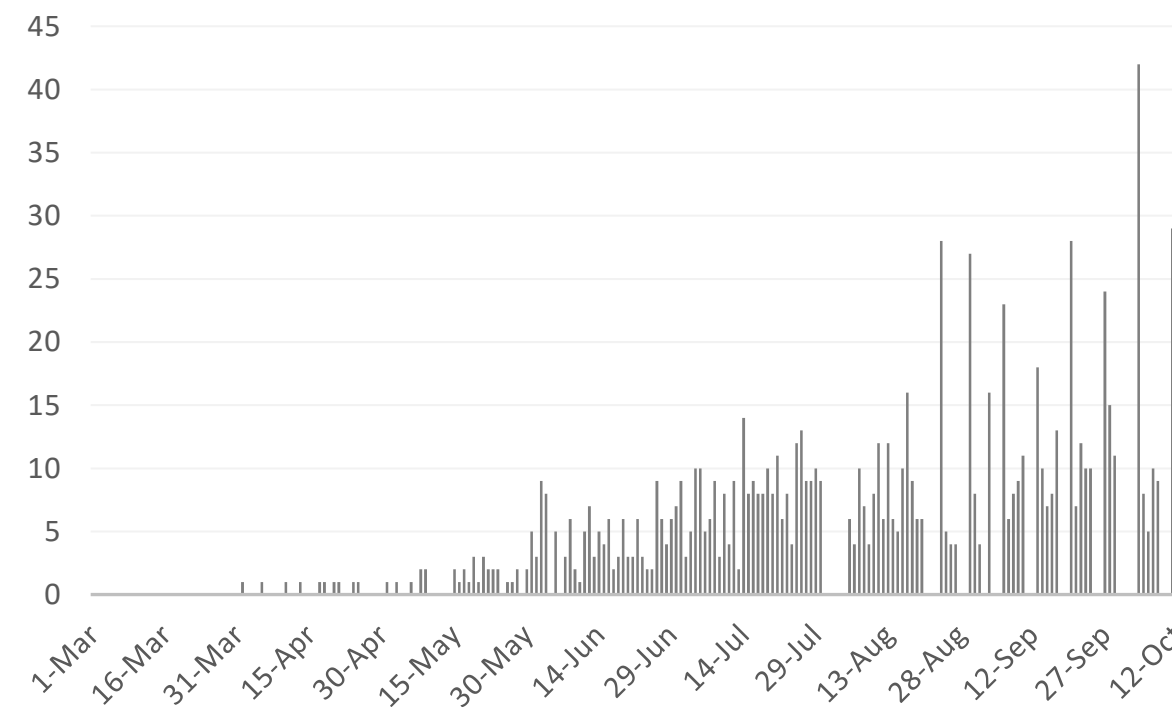
Source : KSA ministry of health

### Bahrain



Source :WHO

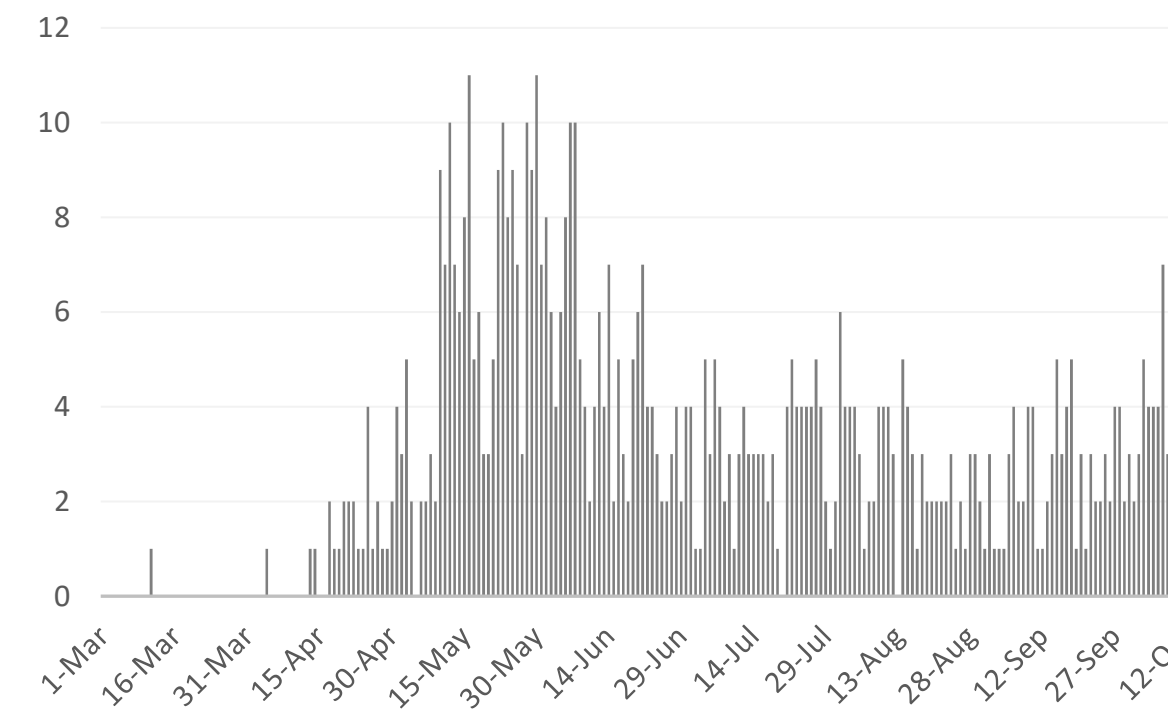
### Oman



Source :Oman ministry of health

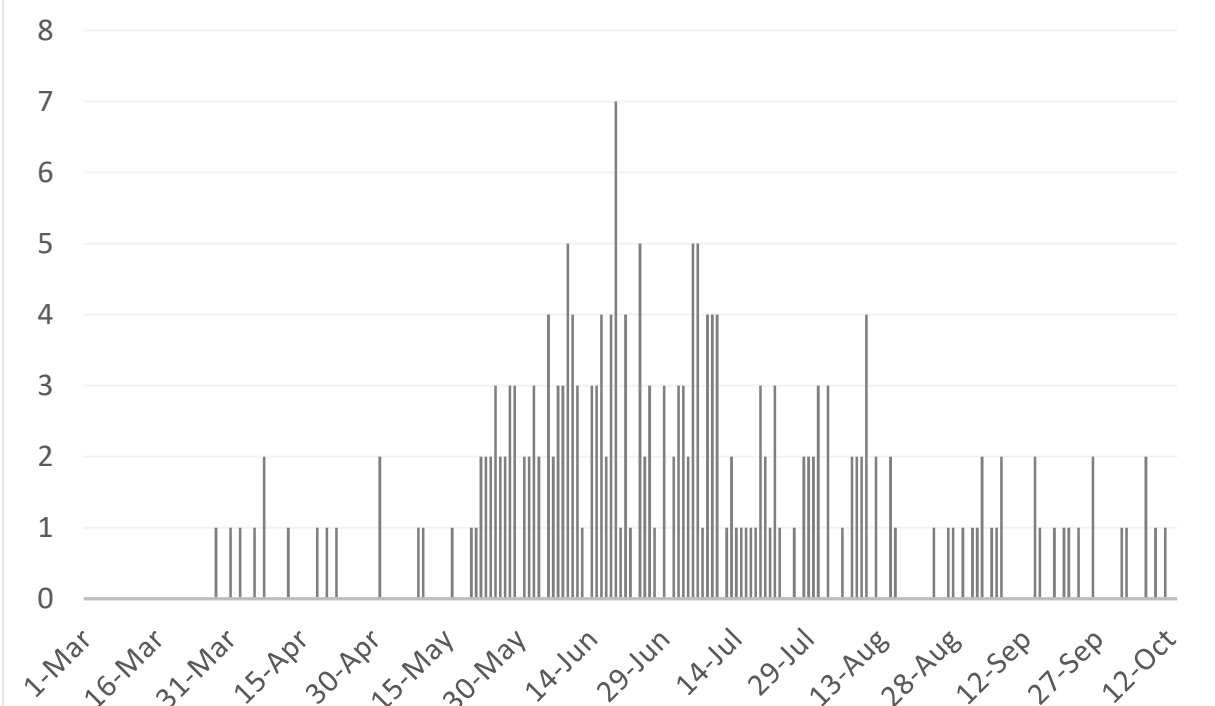
### Kuwait

© ADPHC 2020



Source : Kuwait ministry of health

### Qatar



Source : Qatar ministry of health

\*No announced statistic data from 31 July to 4 August, 21,23,28,30 August 2, 4, 5,11,12,18,19,25, 26,30 September,1,2,9 &10 October  
\*No announced statistic data on weekends and official holidays.





## Article 1

Published

October 05, 2020, [THE LANCET](#)

# Neuropathology of Patients with COVID-19 in Germany: A Post-Mortem Case Series

- This post-mortem case series of 43 patients investigated the brain tissue of those who died from COVID-19 for glial responses, inflammatory changes, and the presence of SARS-CoV-2 in the CNS. The recruited patients died in nursing homes, hospitals, or at home, and were aged between 51 years and 94 years.
- The methods involved in the study included neuropathological workup such as histological staining and immunohistochemical staining for activated astrocytes, activated microglia, and cytotoxic T lymphocytes in the olfactory bulb, brainstem, basal ganglia, and cerebellum. Moreover, this study further investigated the localisation and presence of SARS-CoV-2 by qRT-PCR and by immunohistochemistry in selected patients and brain regions.
- The investigators detected fresh territorial ischaemic lesions in six (14%) patients. Around 37 (86%) patients had astrogliosis in all assessed regions. Activation of microglia and infiltration by cytotoxic T lymphocytes was most pronounced in the brainstem and cerebellum, and meningeal cytotoxic T lymphocyte infiltration was observed in 34 (79%) patients. SARS-CoV-2 could be detected in the brains of 21 (53%) of 40 examined patients, with SARS-CoV-2 viral proteins found in cranial nerves originating from the lower brainstem and in isolated cells of the brainstem.
- The presence of SARS-CoV-2 in the CNS was not associated with the severity of neuropathological changes. Thus, the study showed no evidence for CNS damage directly caused by SARS-CoV-2.





## Article 2

### Published

# Case Series of Multisystem Inflammatory Syndrome in Adults Associated with SARS-CoV-2 Infection - United Kingdom and United States, March–August 2020

October 09, 2020, [CDC](#)

- This study included case series and reports of MIS-A in adults, who usually require intensive care and can have fatal outcomes.
- Multisystem inflammatory syndrome in children (MIS-C) is a rare but severe complication of SARS-CoV-2 infection in children and adolescents. Since June 2020, several case series and reports have been published reporting a similar multisystem inflammatory syndrome in adults (MIS-A); antibody testing was needed to identify SARS-CoV-2 infection in approximately one-third of 27 cases.
- Clinical suspicion and indicated SARS-CoV-2 testing, including antibody testing, might be needed to recognize and treat adults with MIS-A.
- Further research is needed to understand the pathogenesis and long-term effects of this condition. Ultimately, the recognition of MIS-A reinforces the need for prevention efforts to limit SARS-CoV-2 spread.





## Article 3

Published

# COVID-19, Comics, and the Visual Culture of Contagion

October 10, 2020, [THE LANCET](#)

- The perspective published in Lancet suggests that comics, as both a visual medium and cultural product, are important contributions to the visual culture of the COVID-19 pandemic.
- It indicates that images are a vital component of the outbreak story and more broadly contributes to the visual culture of contagion. It provides outbreak narratives in a manner that helps to process, understand and reflect on our experience.
- Such comics allows to develop collective knowledge about the pandemic in a cultural space where images are created, embraced, contested, and at times transformed into icons.





# THANK YOU

 ADPHCAE  ADPHC\_AE  ADPHC\_AE  ADPHC.AE  ADPHC-AE  056 2312171