

SCIENTIFIC RESEARCH MONITORING ON COVID-19

6 OCTOBER 2020

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SCIENTIFIC RESEARCH MONITORING ON COVID-19

(ISSUE 247)

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.

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Research

Update



Statistics

[Slide 4](#)



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

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).

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Public Health Response

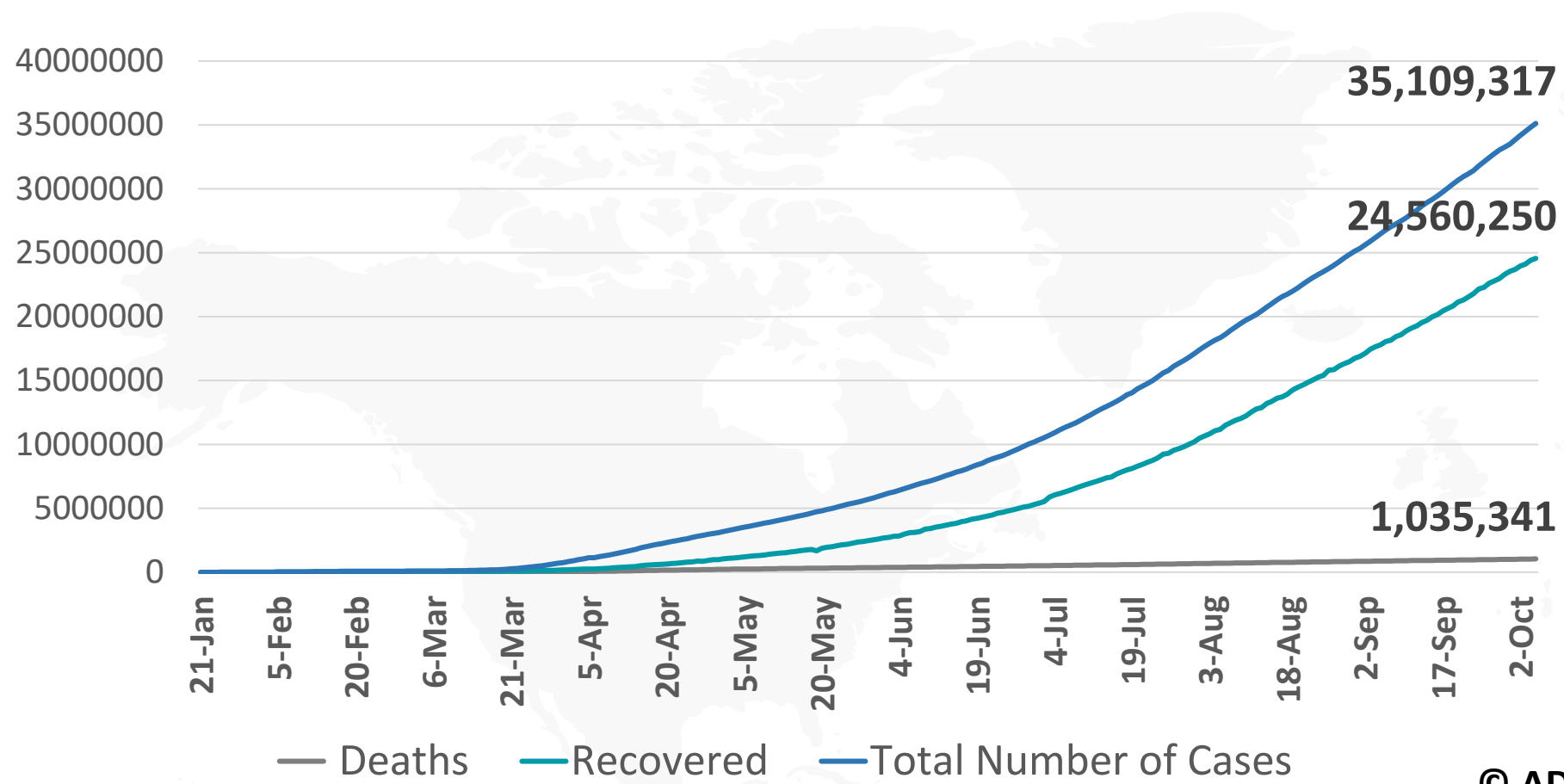
Evaluating Interest in off-Label Use of Disinfectants for COVID-19

Diagnosis

Anti-C5a Antibody IFX-1 (Vilobelimab) Treatment Versus Best Supportive Care for Patients with Severe COVID-19 (PANAMO): An Exploratory, Open-Label, Phase 2 Randomized Controlled Trial



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



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

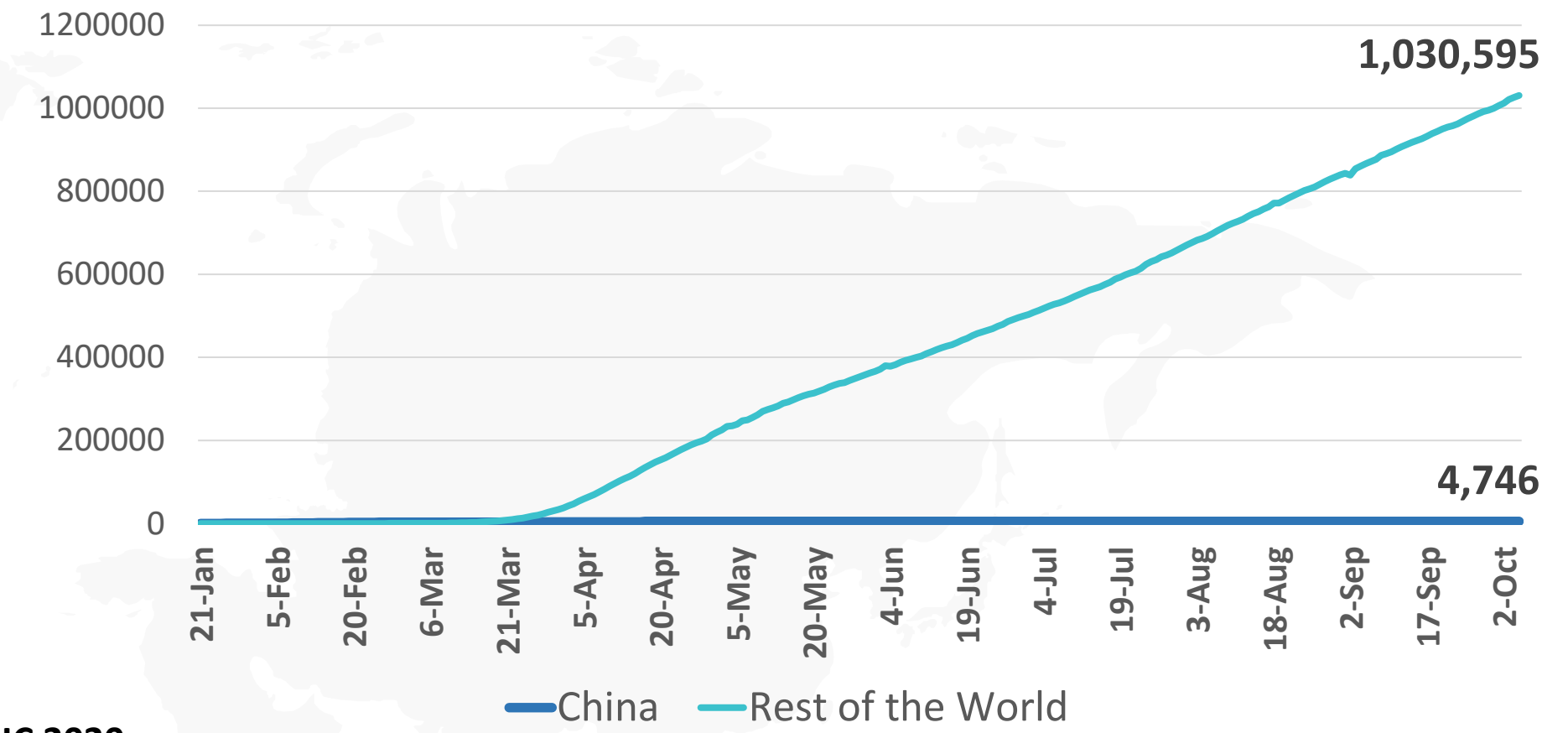


Figure 2: Daily New Infected COVID-19 Cases (China and rest of the world)

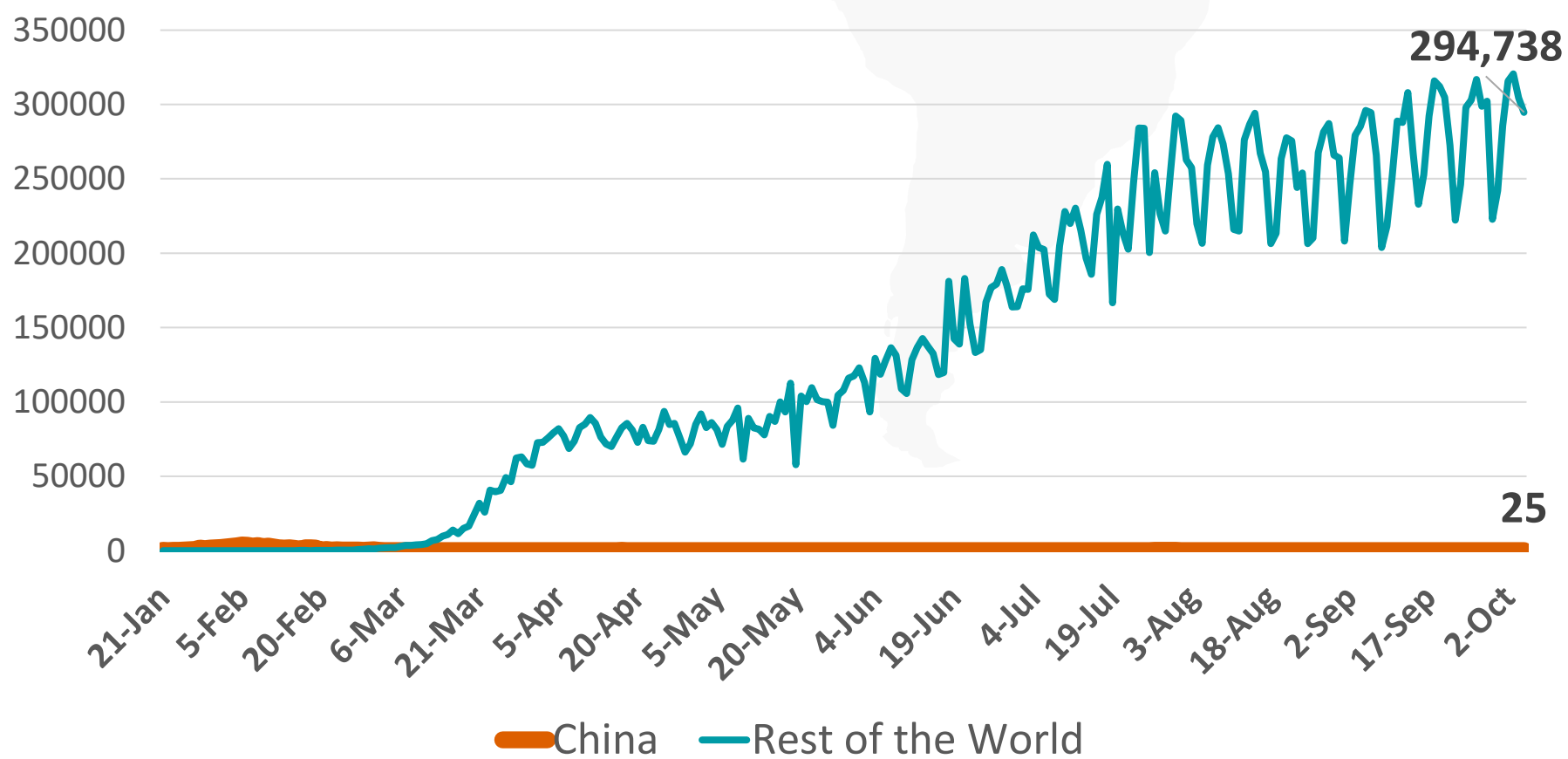


Figure 4: Global Daily New Deaths Due to COVID-19 (china and rest of the world)

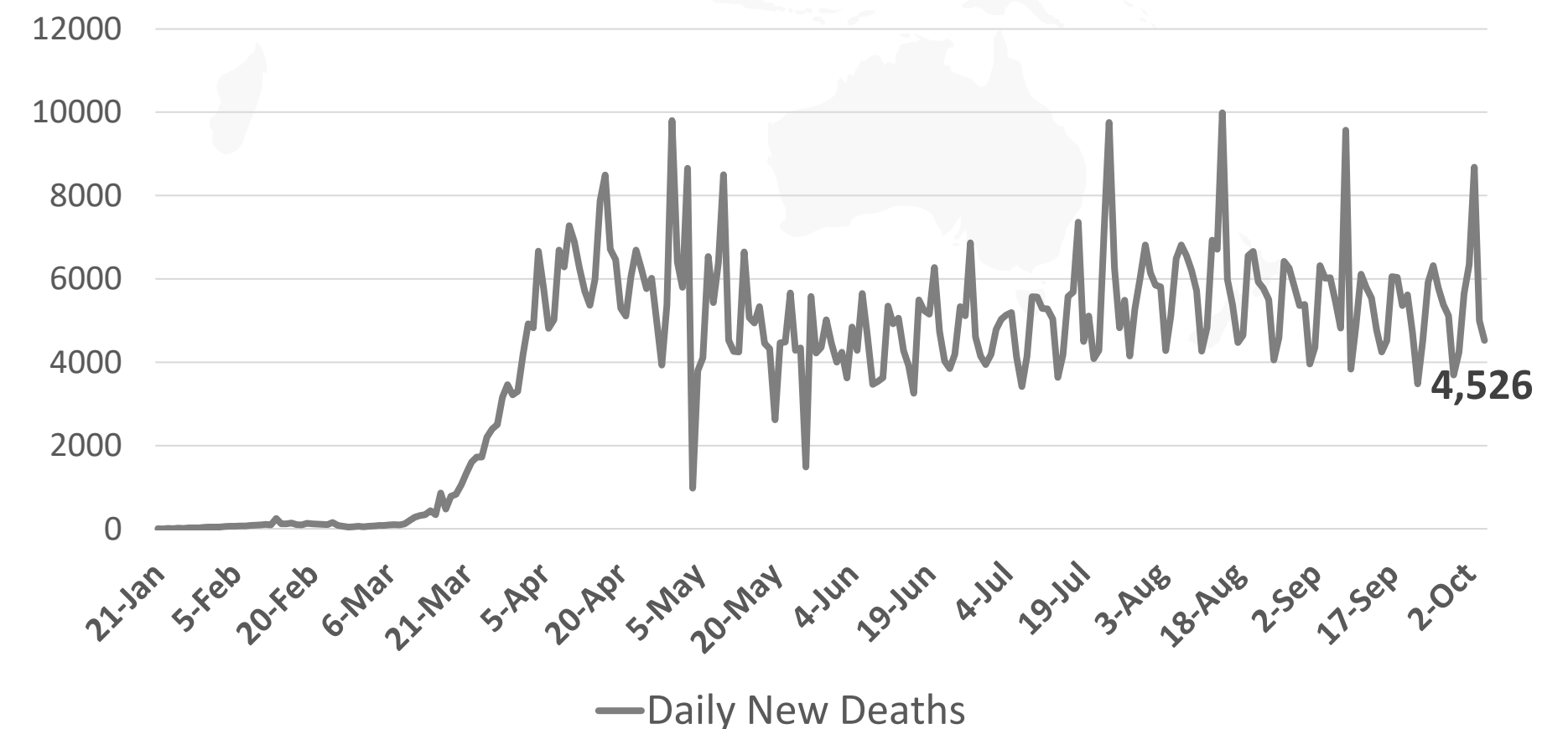
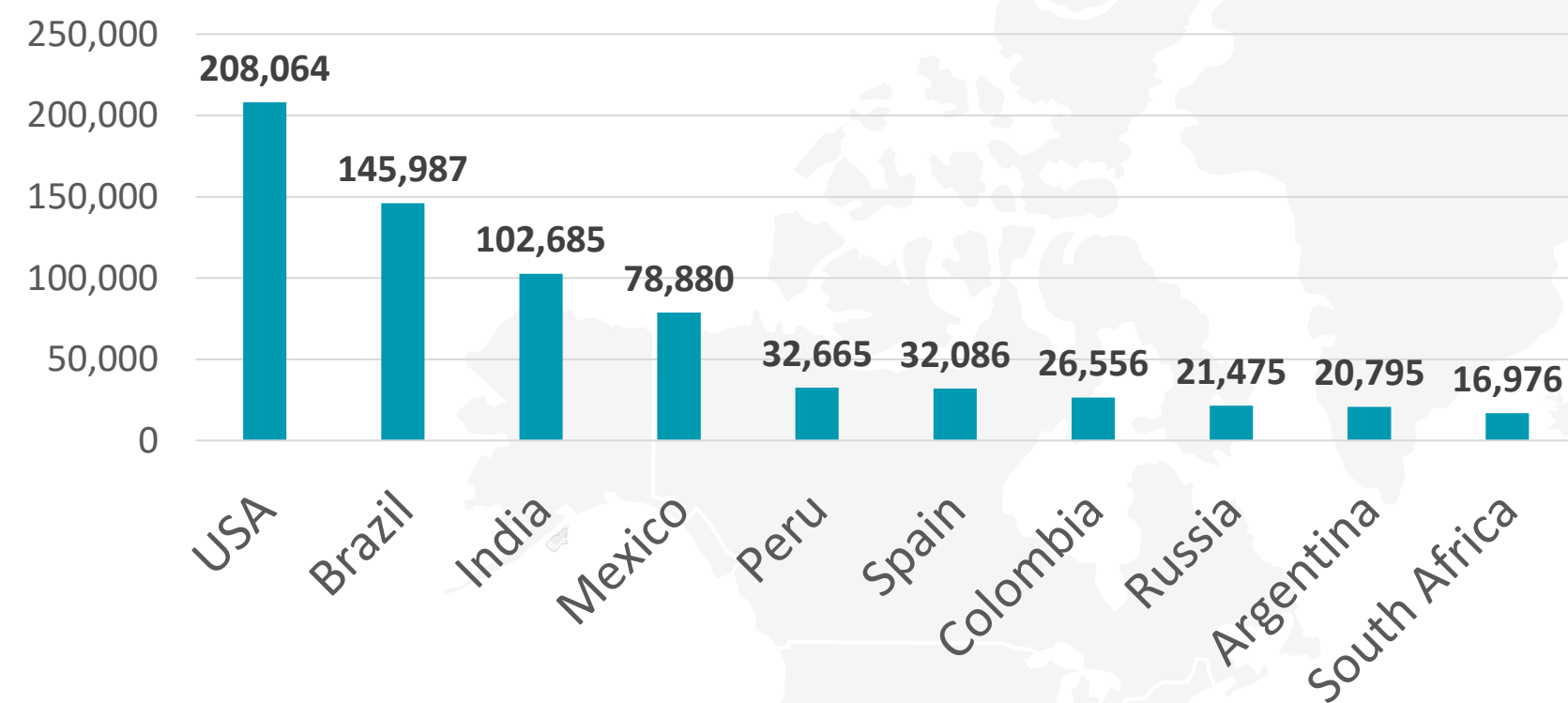
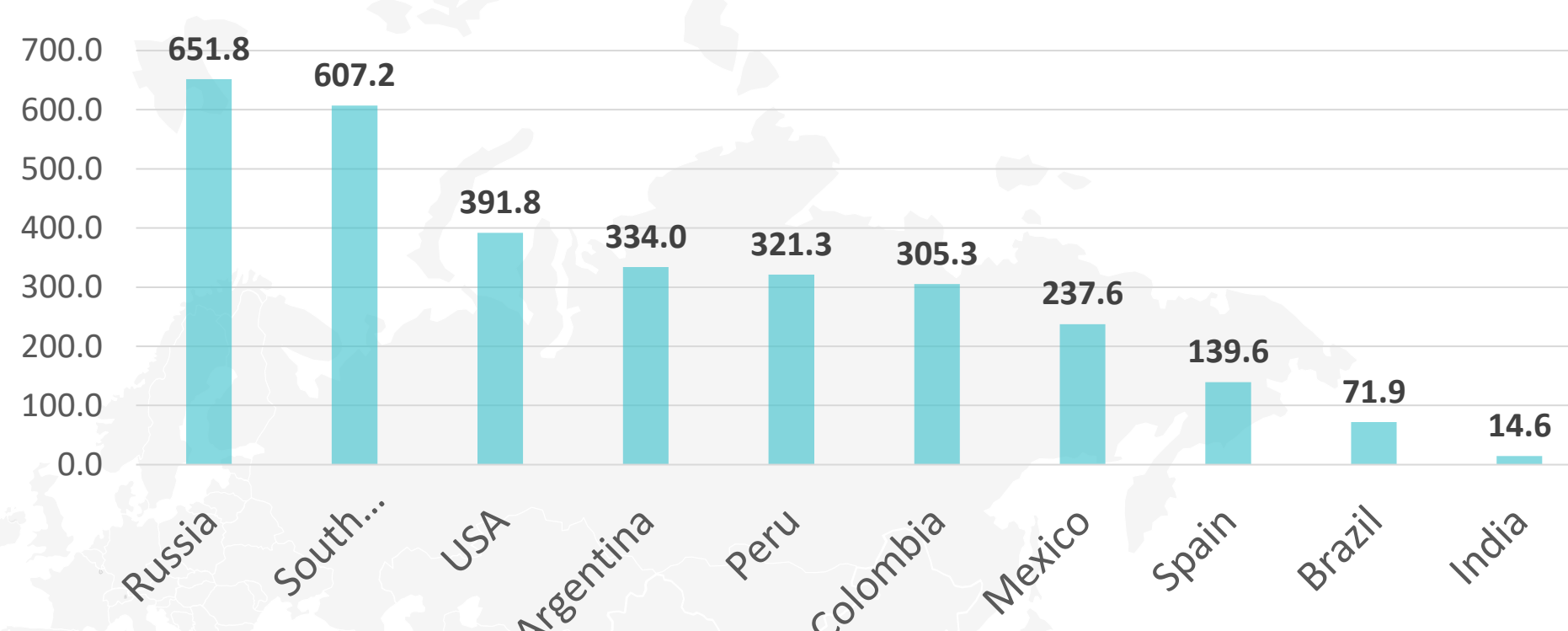


Figure 5: Top 10 Countries in the Total Number of Cases Due to COVID-19

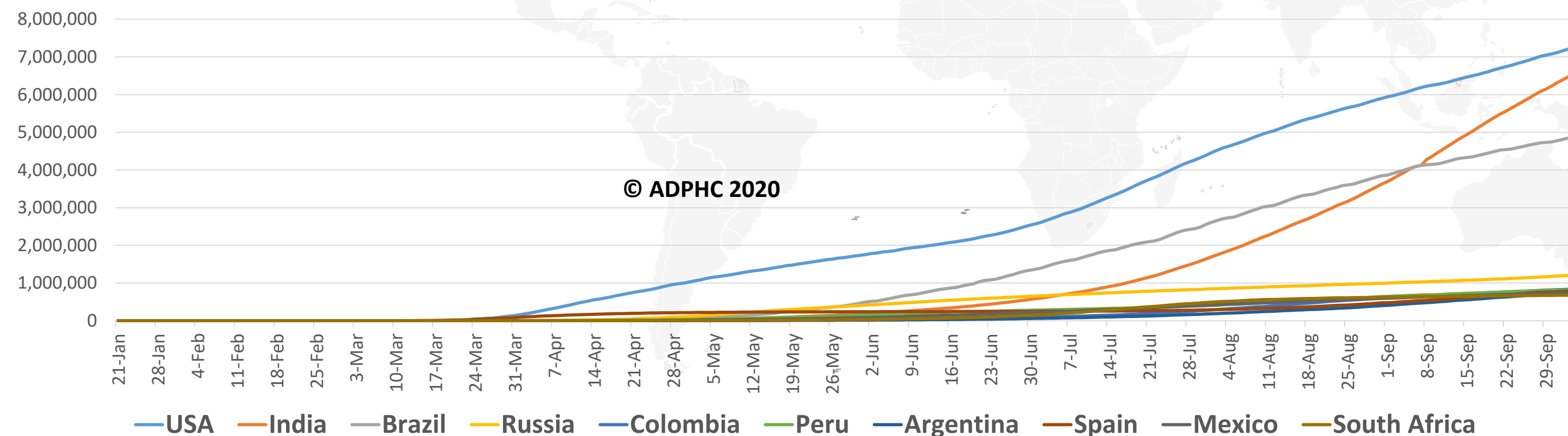
TOTAL DEATHS



DEATHS PER MILLION

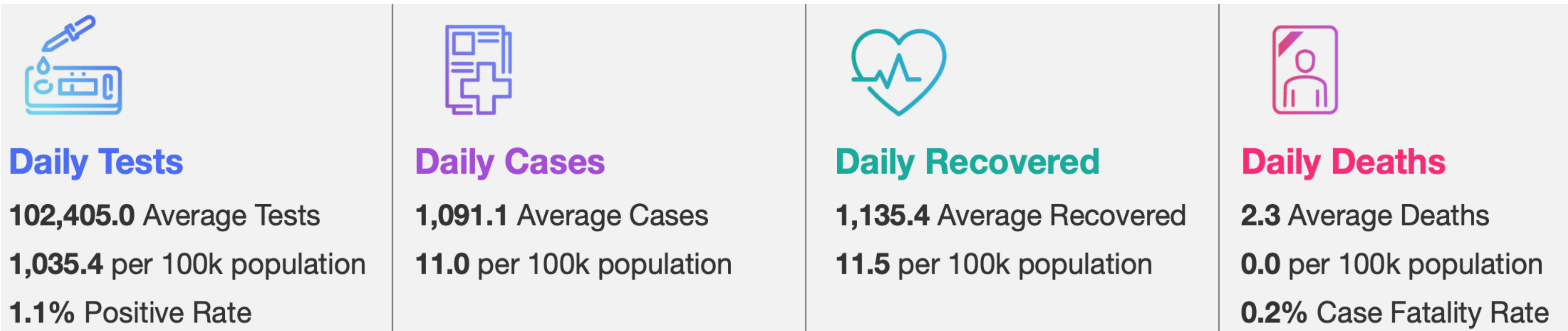


TOTAL INFECTED CASES



USA	7,305,270
India	6,623,815
Brazil	4,906,833
Russia	1,225,889
Colombia	848,147
Peru	824,985
Argentina	790,818
Spain	789,932
Mexico	757,953
South Africa	681,289

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

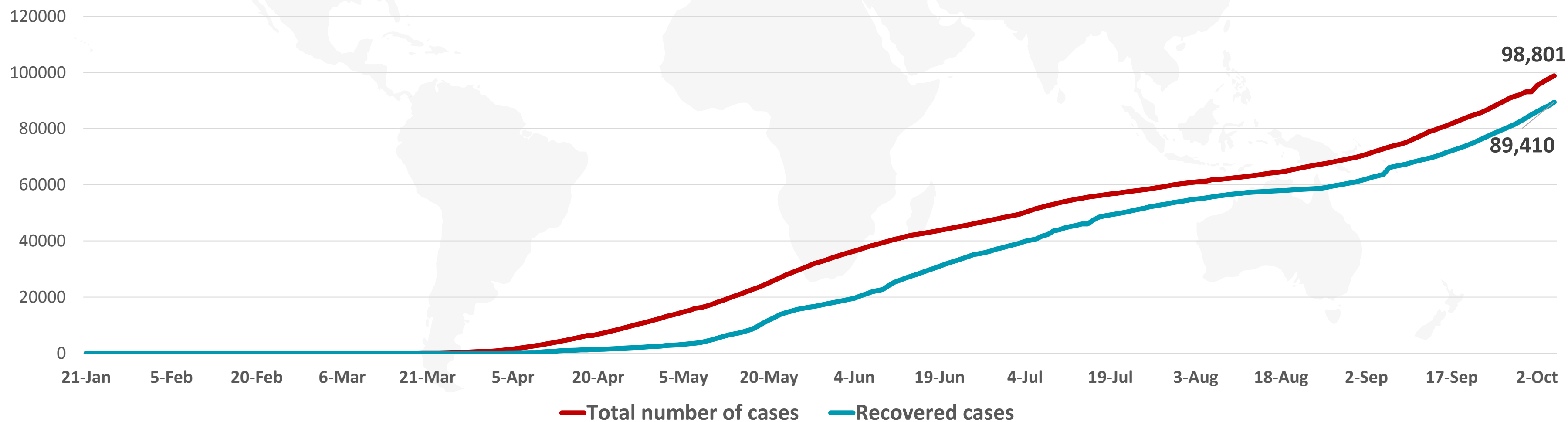


Figure 7A : Global Distribution of COVID-19 Cases

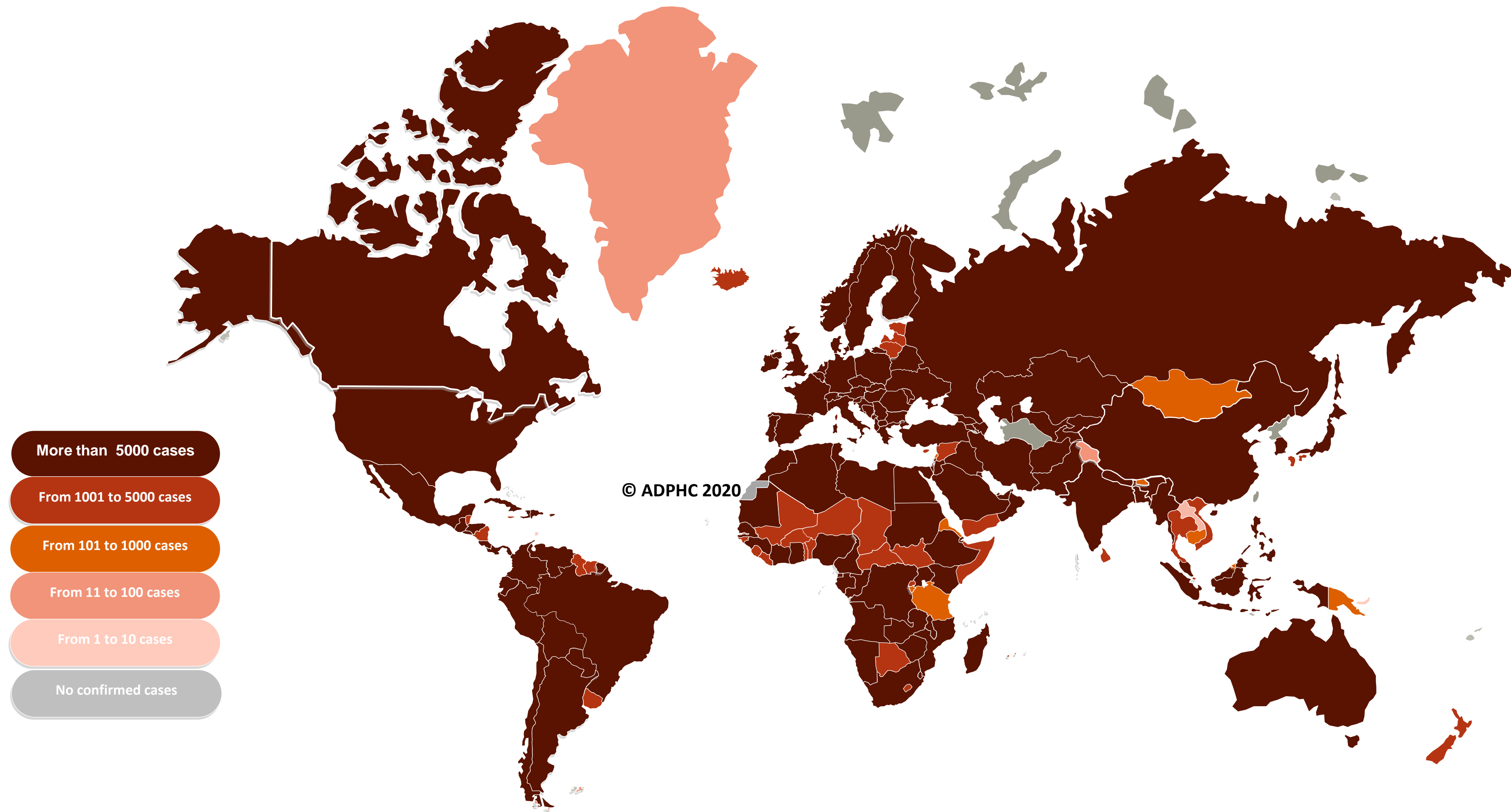
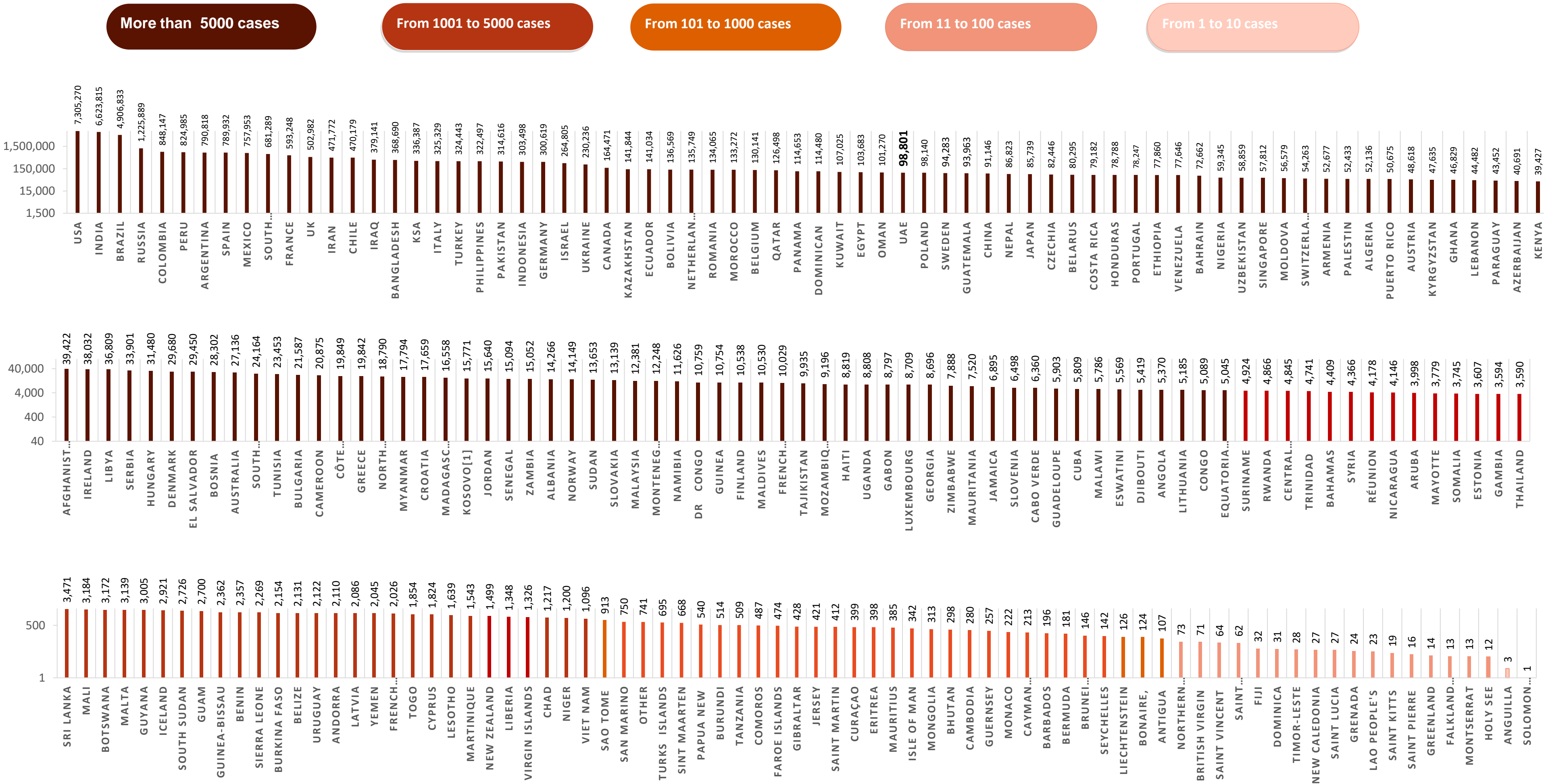


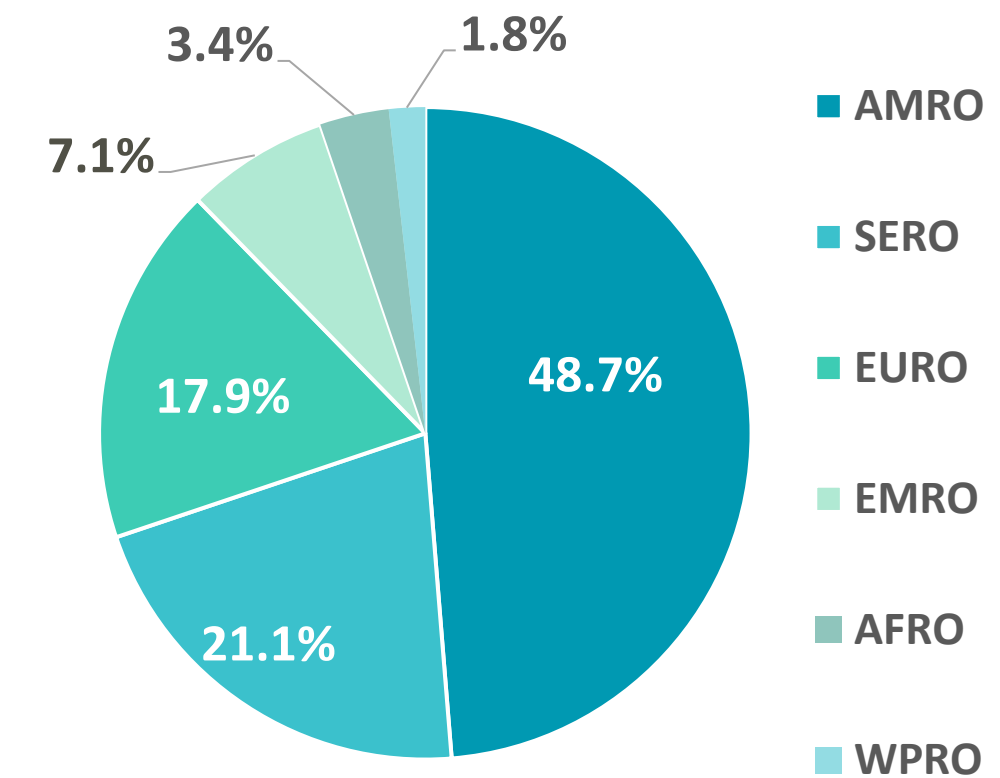
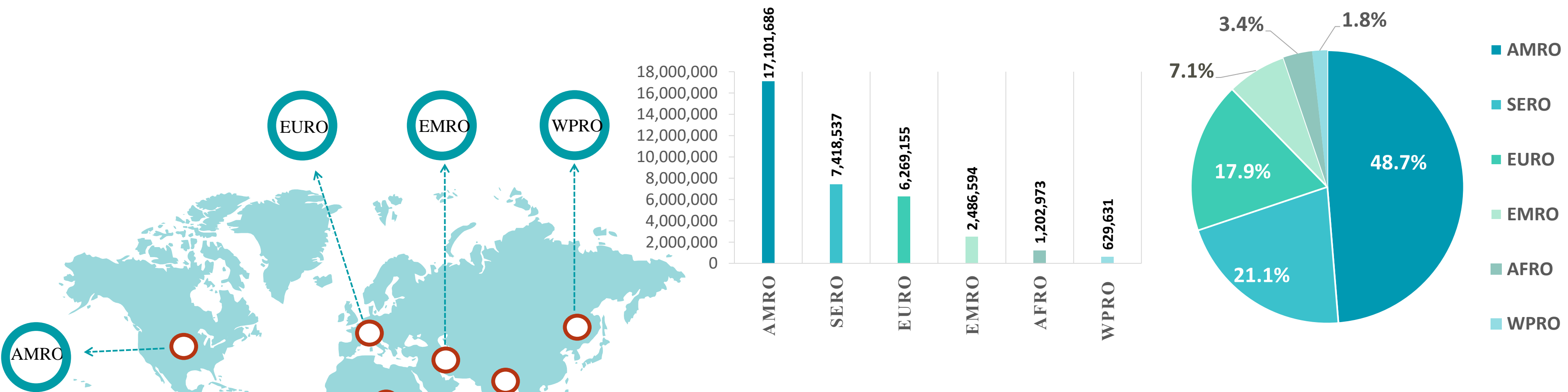
Figure 7B: Bar Chart Illustrates the Global Distribution of COVID19 Cases



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

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

INFECTED



DEATHS

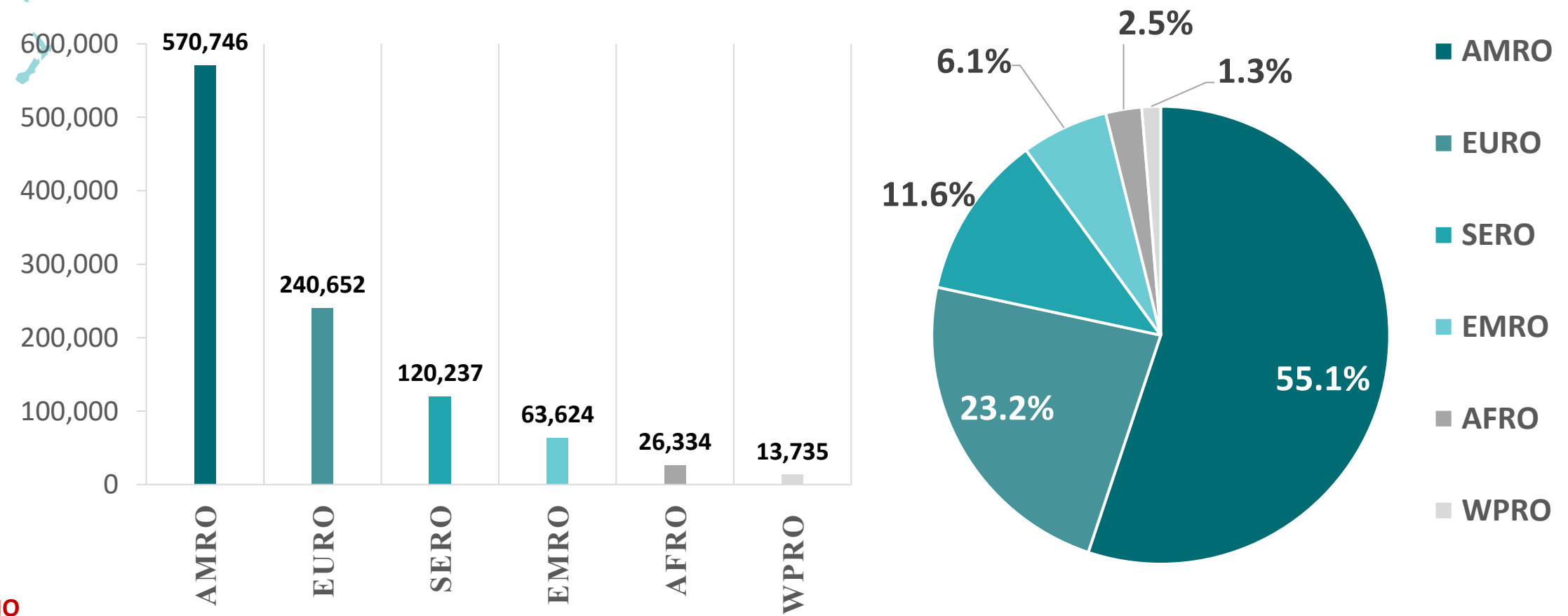
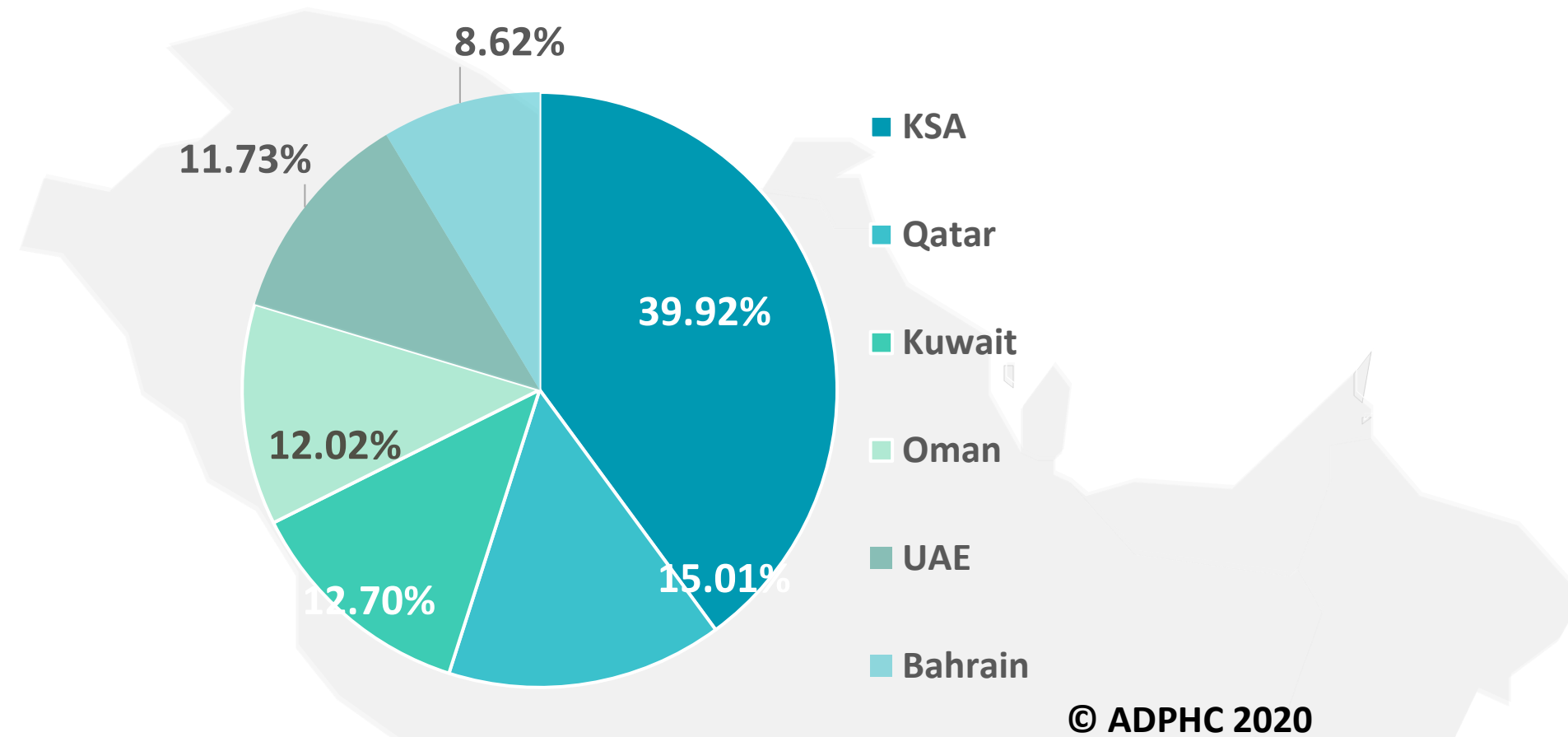
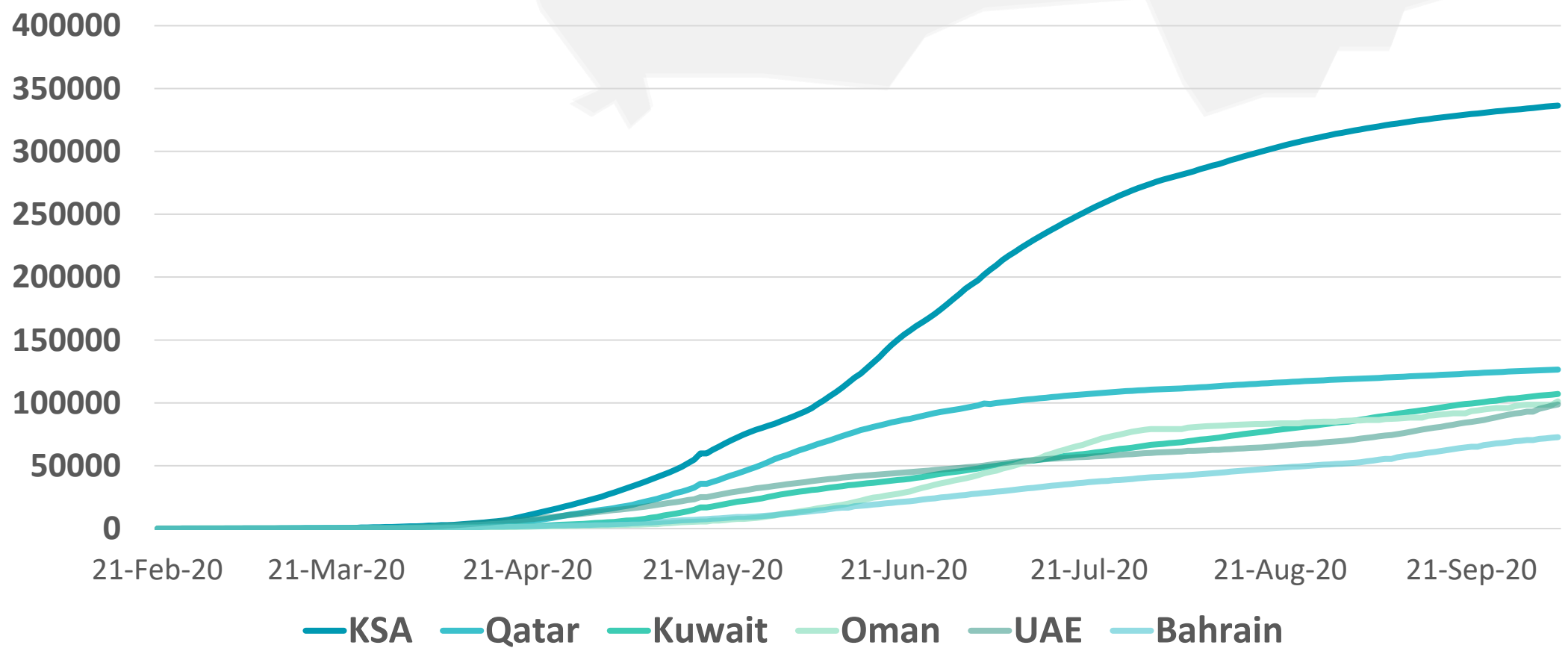
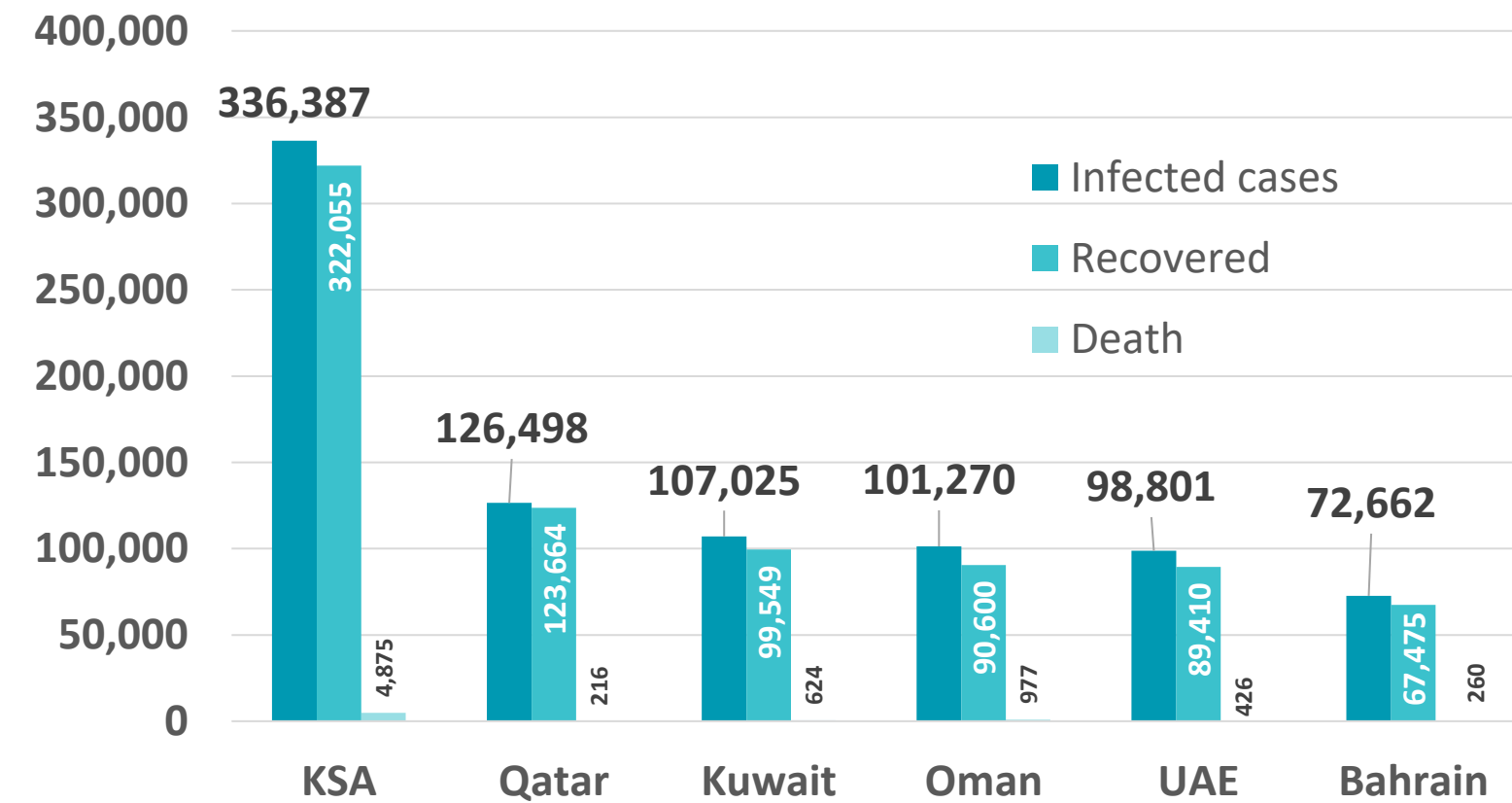


Figure 9: Comparative Analysis of the Distribution of COVID-19 Cases in GCC Countries

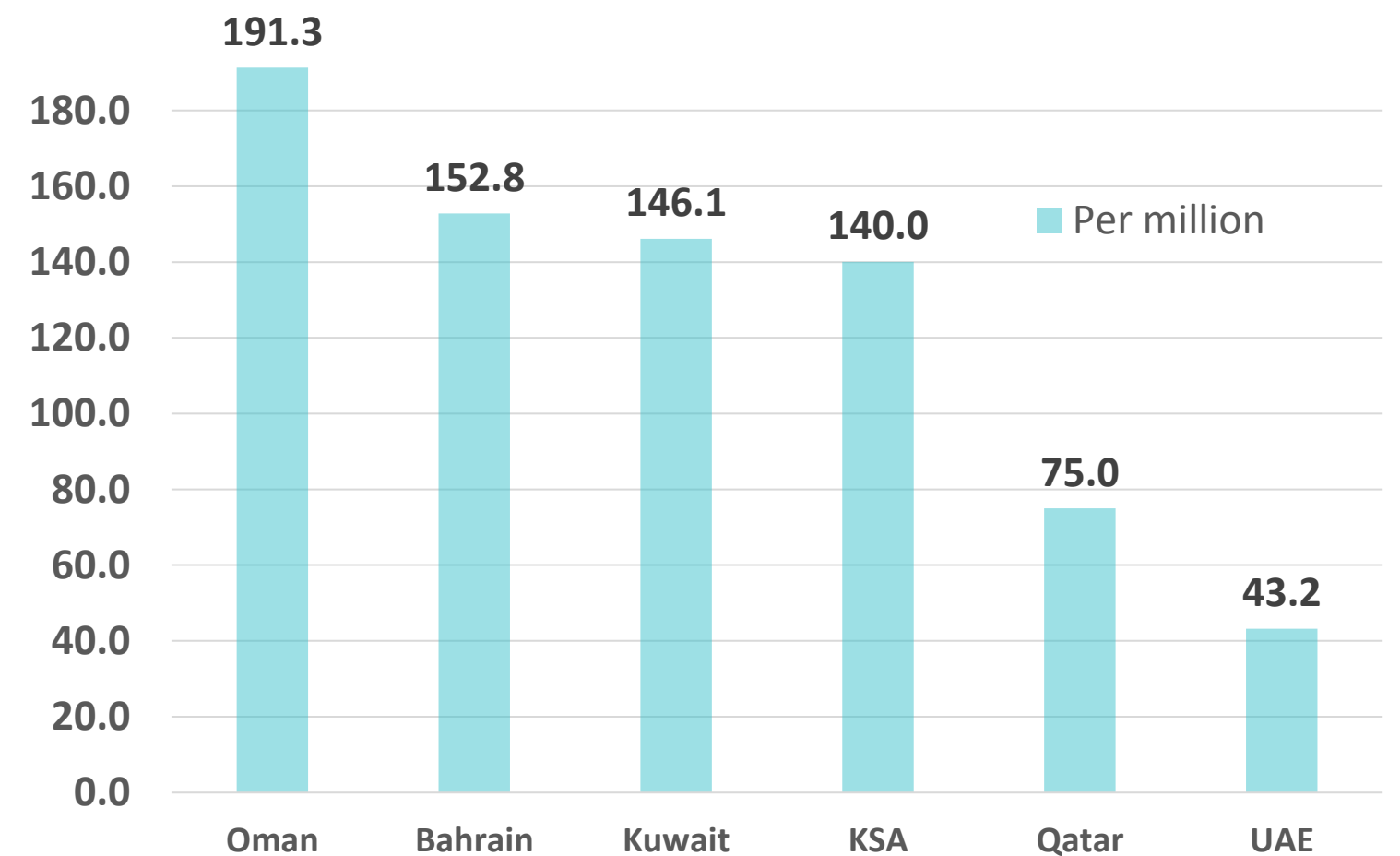
TOTAL NUMBER OF INFECTED CASES



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



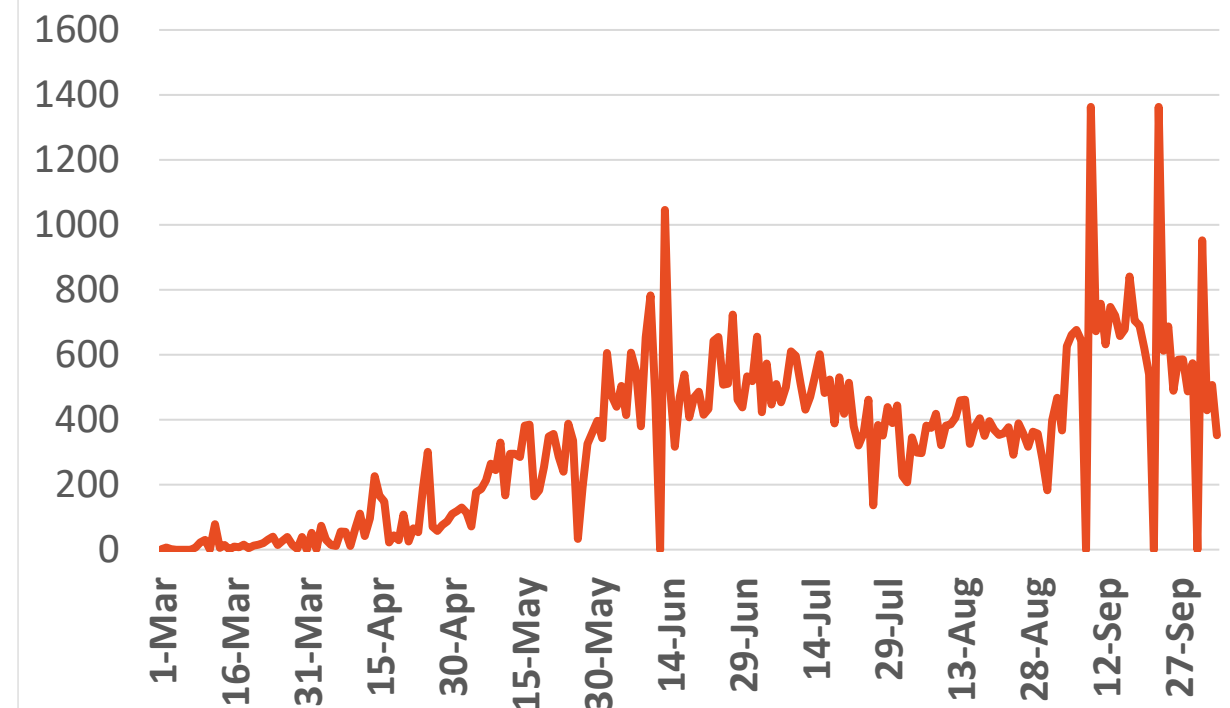
Source : National Emergency Crisis and Disaster Management Authority

KSA



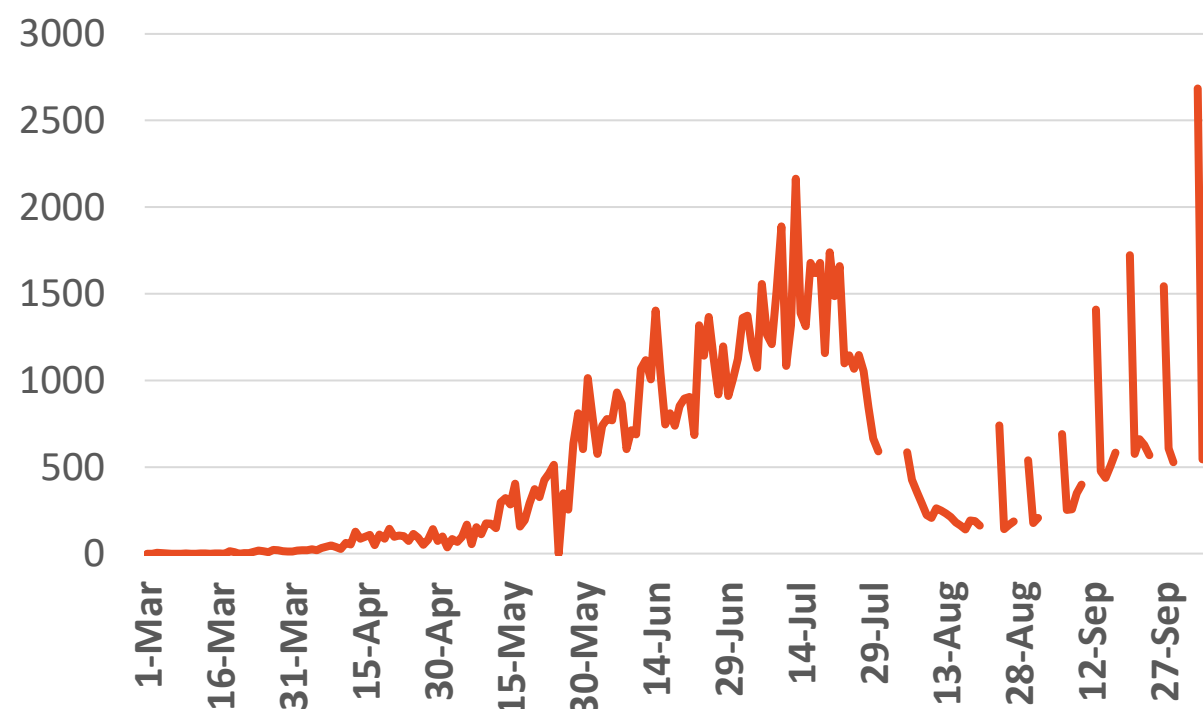
Source : KSA ministry of health

Bahrain



Source :WHO

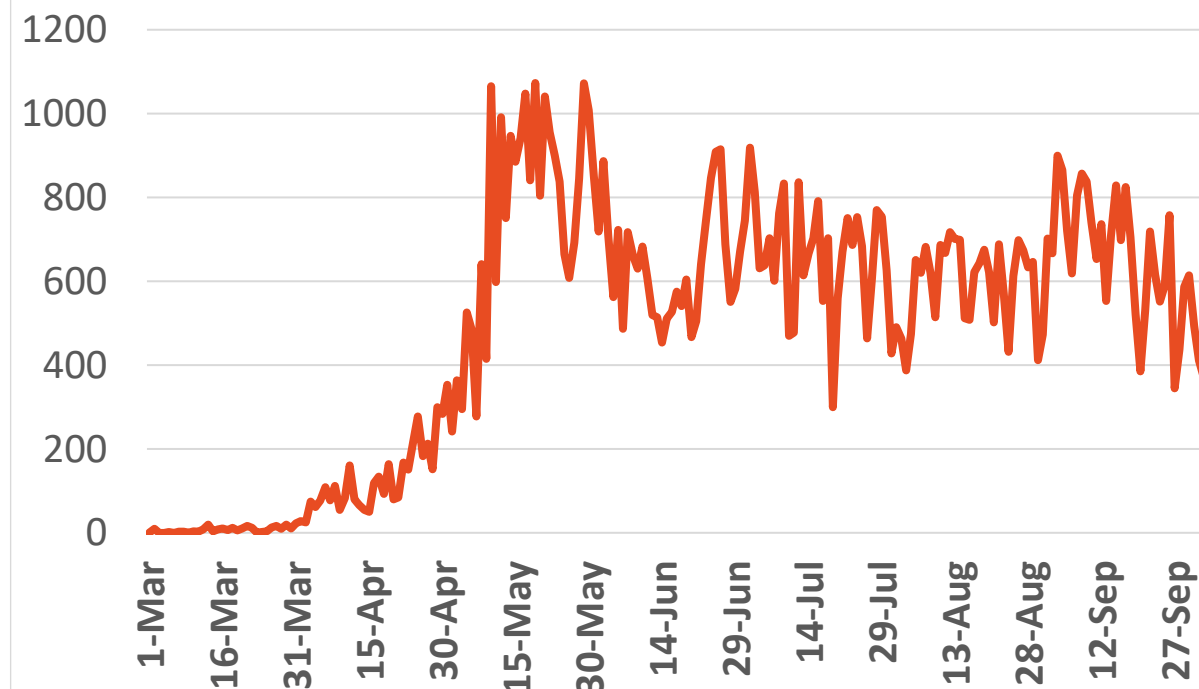
Oman



Source :Oman ministry of health

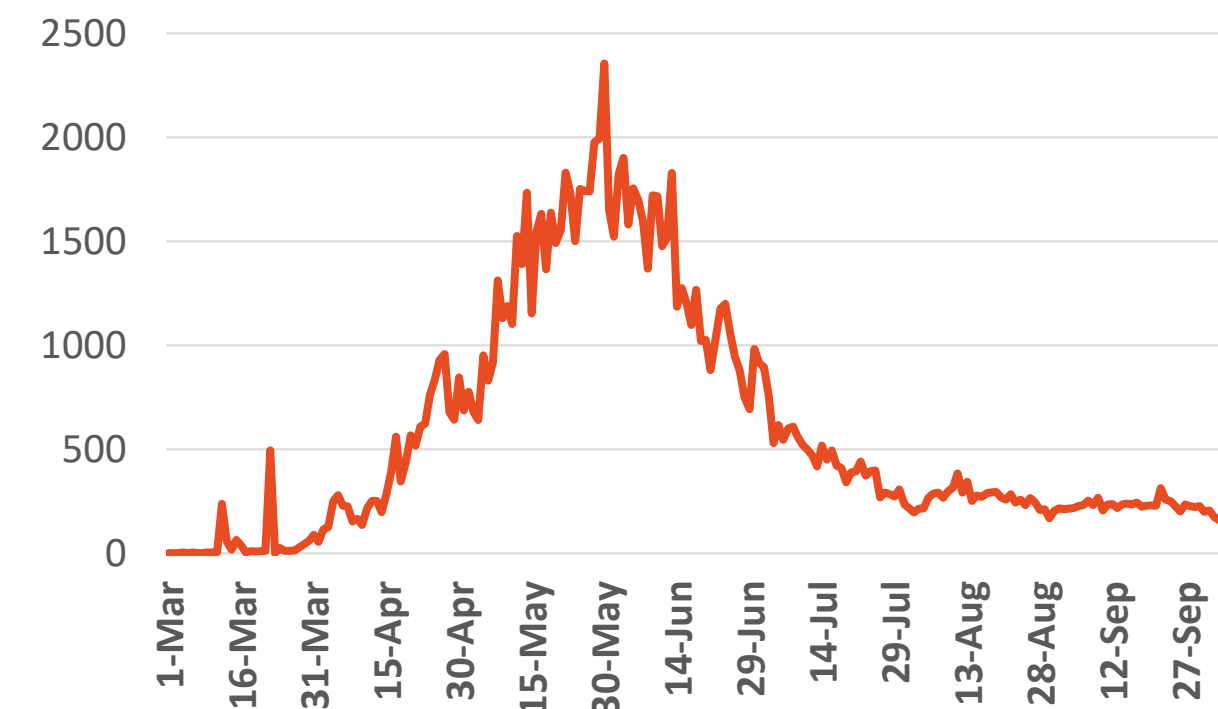
Kuwait

© ADPHC 2020



Source : Kuwait ministry of health

Qatar



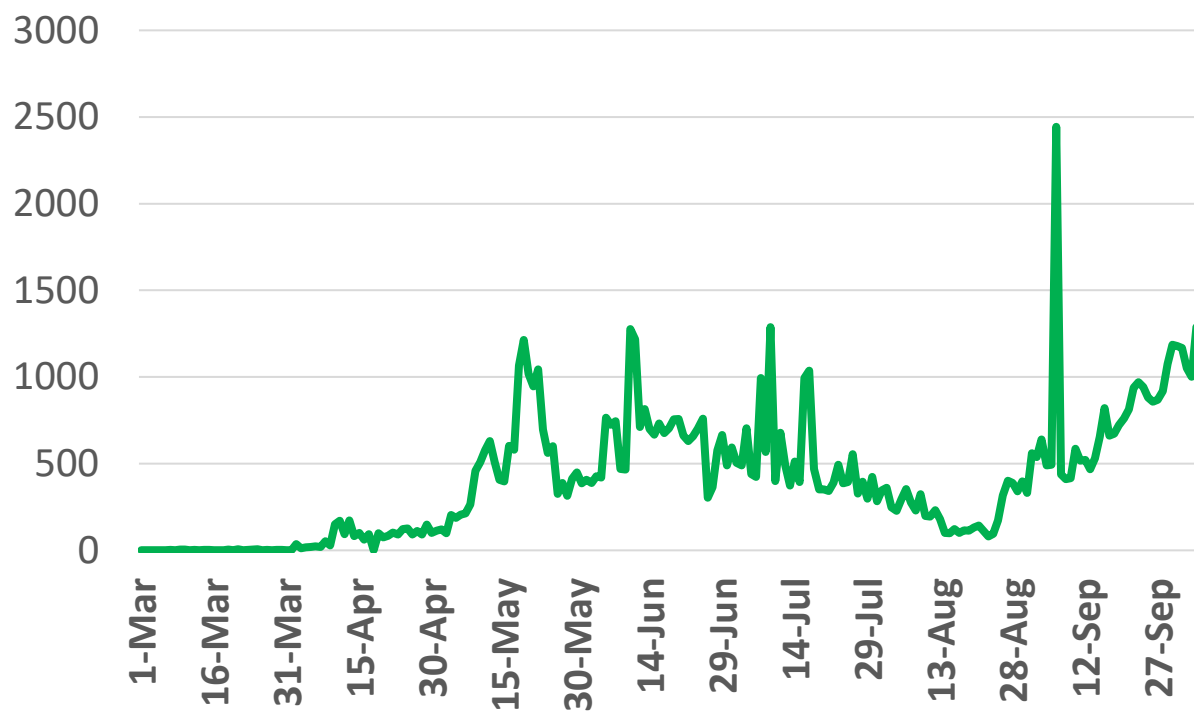
Source : Qatar ministry of health

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



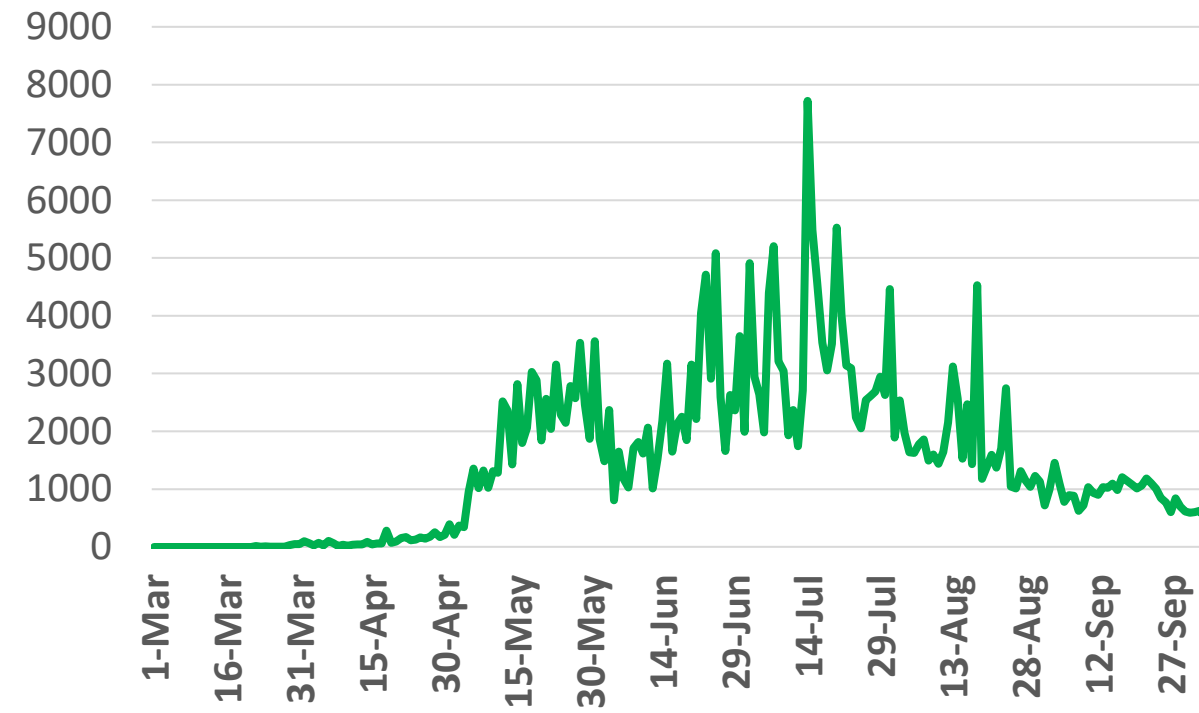
Figure 11: Comparative Analysis of the Distribution of COVID-19 Newly Recovered Cases in GCC Countries

UAE



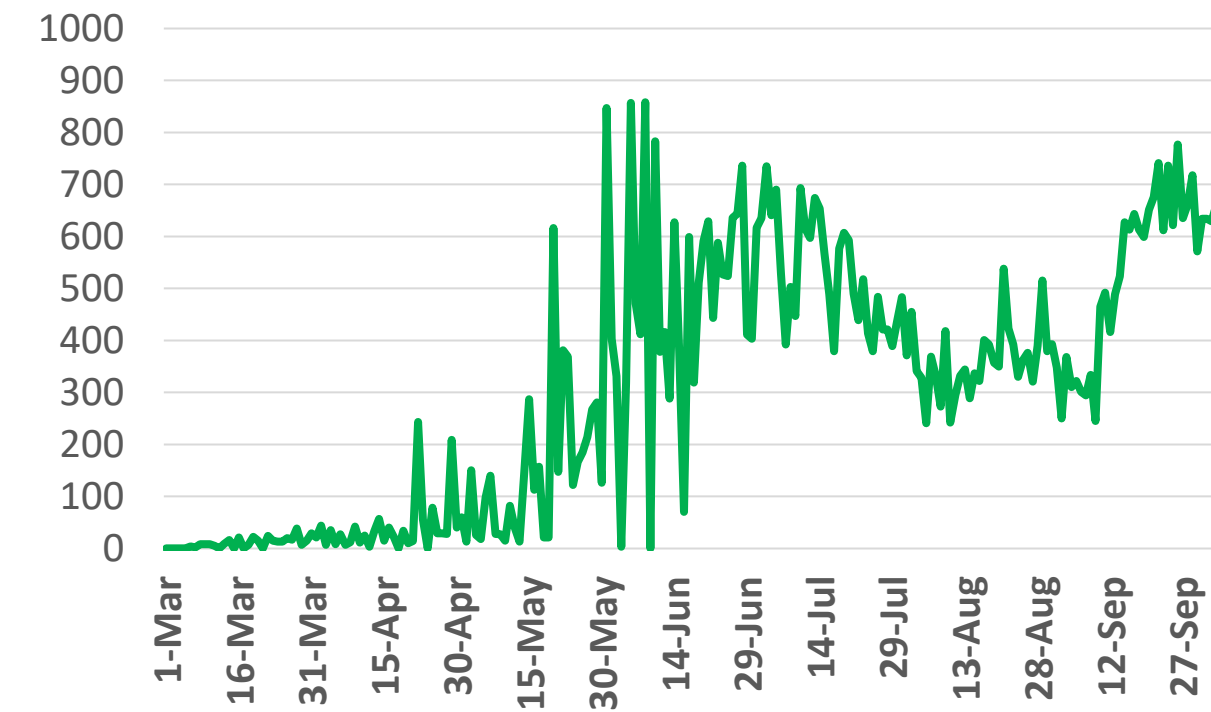
Source : National Emergency Crisis and Disaster Management Authority

KSA



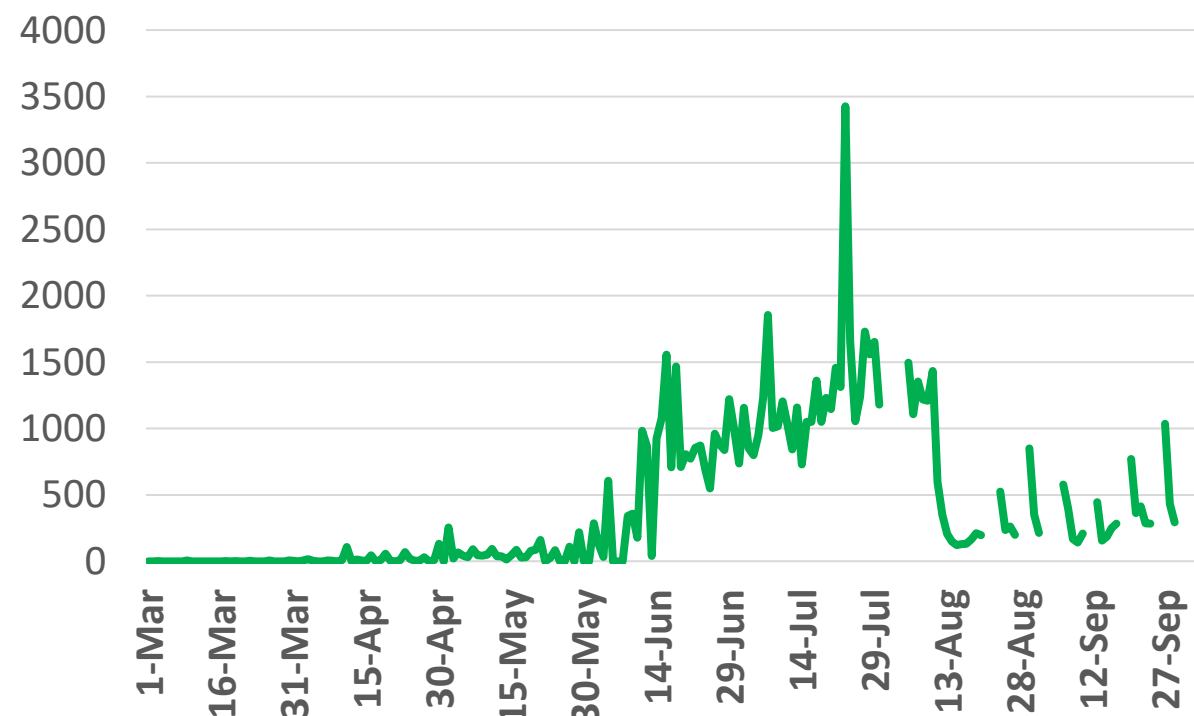
Source : KSA ministry of health

Bahrain



Source : Bahrain ministry of health

Oman



Source : Oman ministry of health

Kuwait

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Source : Kuwait ministry of health

Qatar



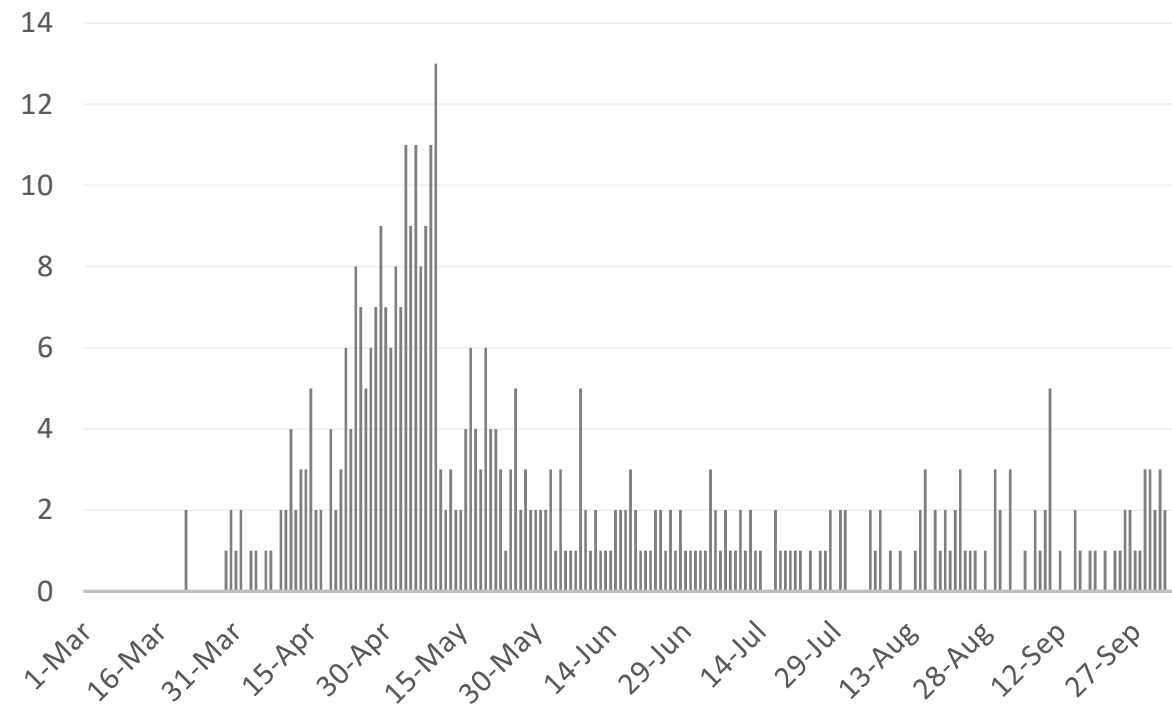
Source : Qatar ministry of health

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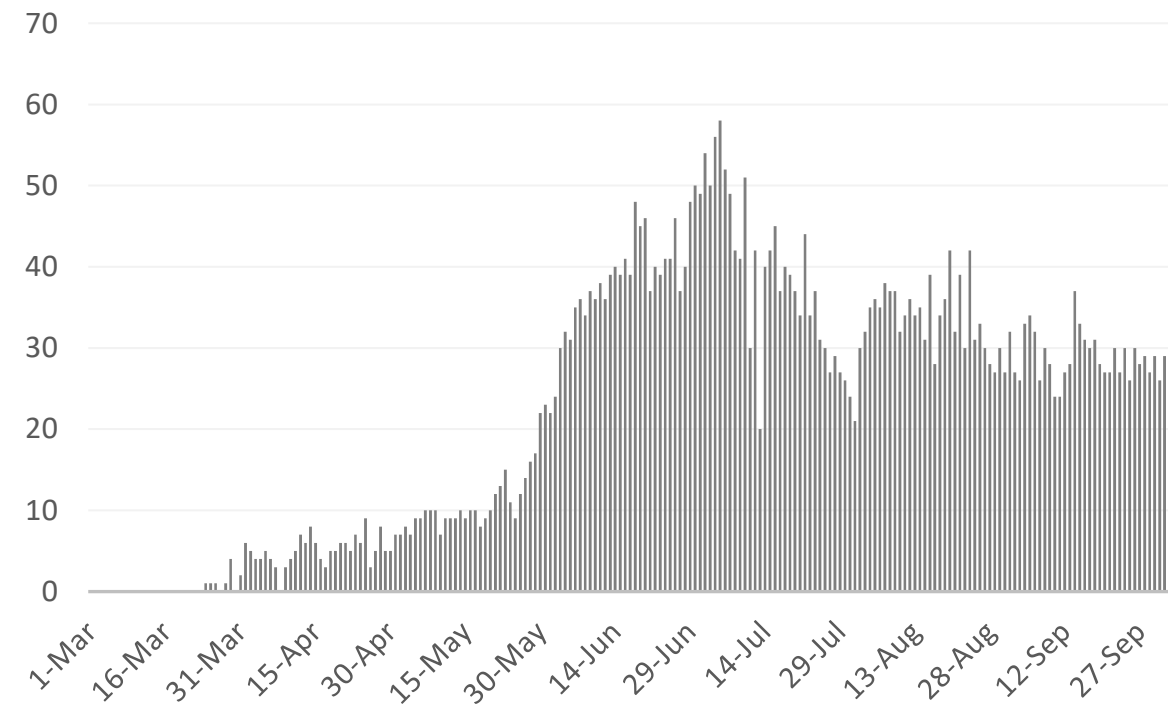
Figure 12: Comparative Analysis of the Distribution of COVID-19 New Death Cases in GCC Countries

UAE



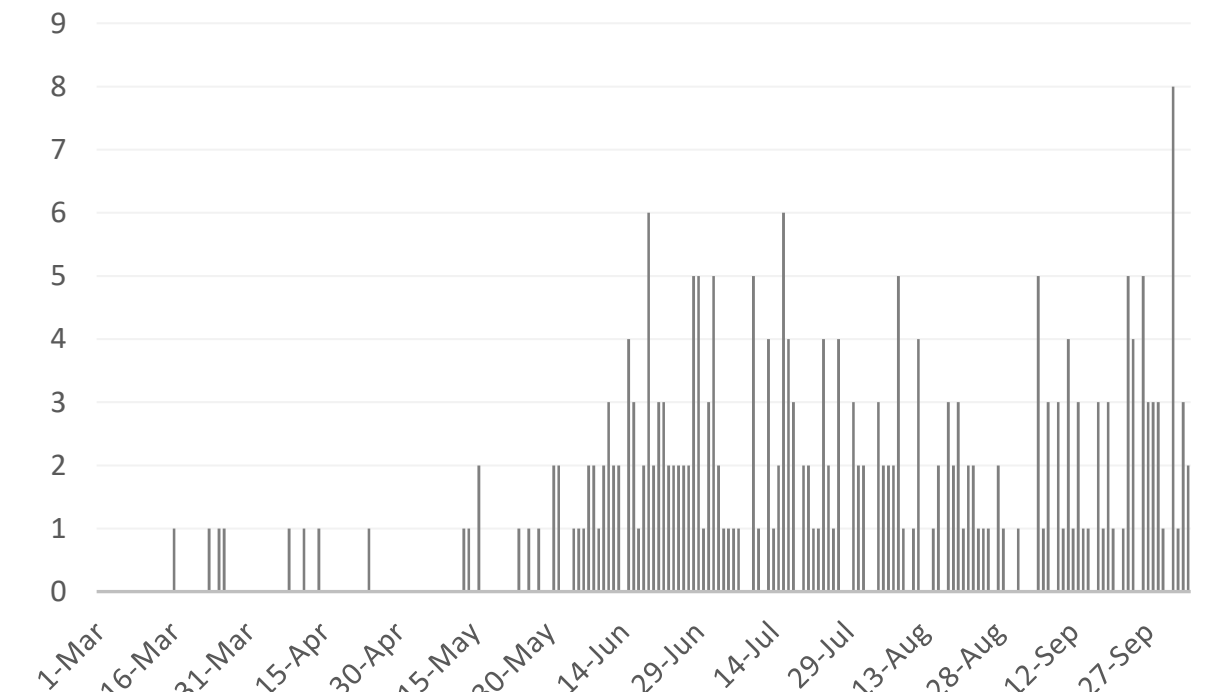
Source : National Emergency Crisis and Disaster Management Authority

KSA



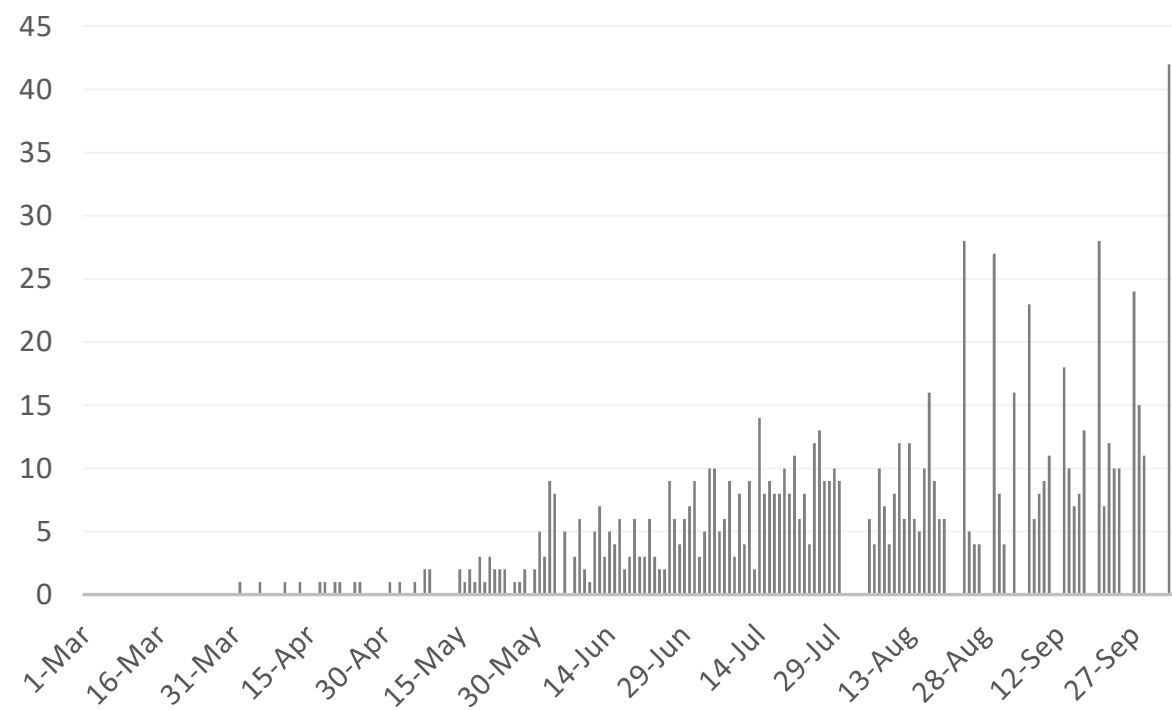
Source : KSA ministry of health

Bahrain



Source :WHO

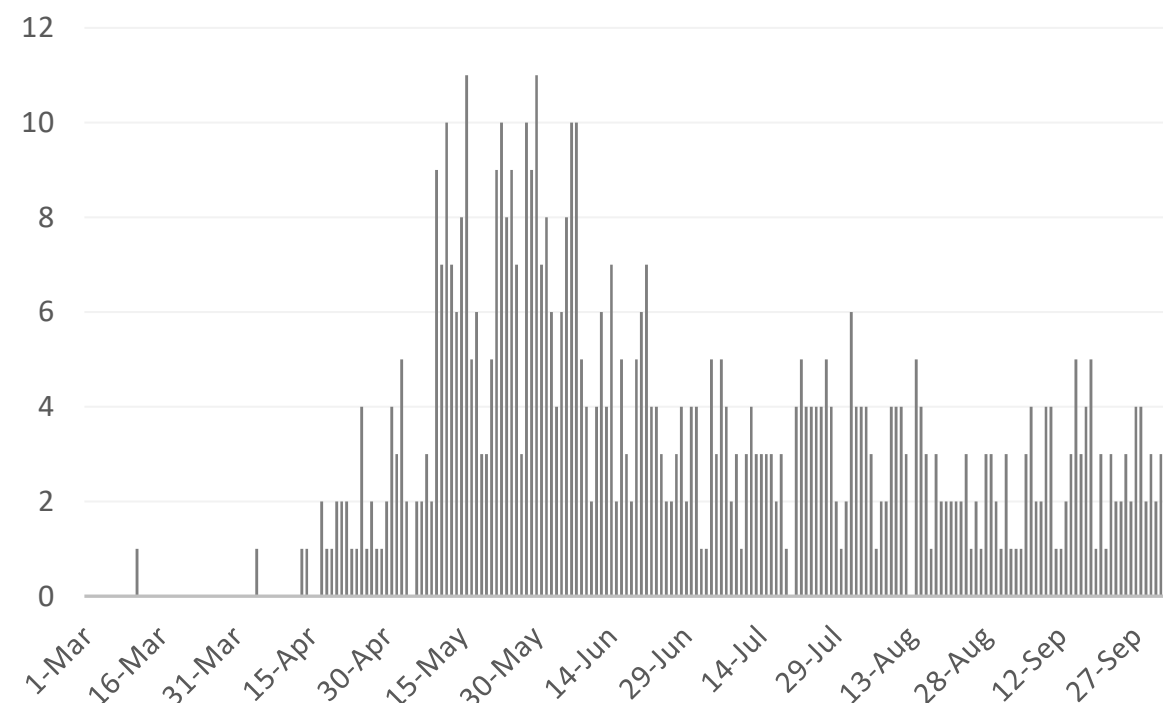
Oman



Source :Oman ministry of health

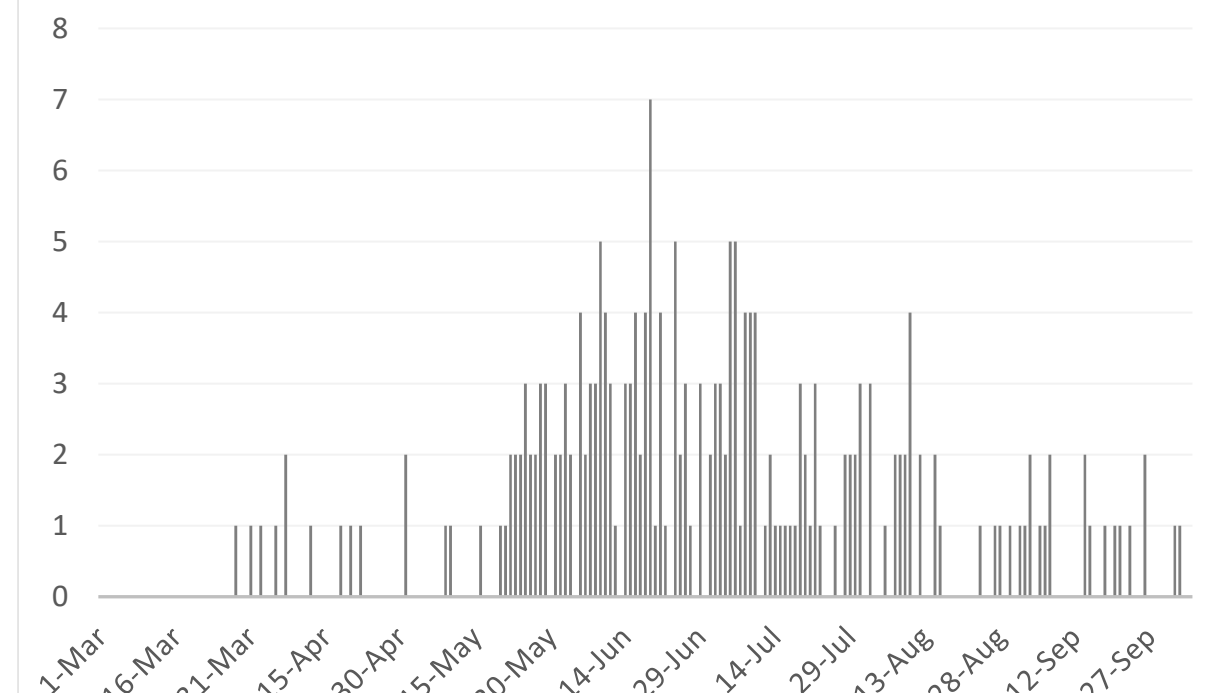
Kuwait

© ADPHC 2020



Source : Kuwait ministry of health

Qatar



Source : Qatar ministry of health

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*No announced statistic data on weekends and official holidays.





Article 1

Evaluating Interest in off-Label Use of Disinfectants for COVID-19

Published

September 28, 2020, [THE LANCET Digital Health](#)

- In the United States, during the early stage of COVID-19 pandemic, Centers for Disease Control and Prevention (CDC) made recommendations to disinfect frequently handled objects that triggered nationwide panic buying of disinfectants. The regulatory agencies and public health organizations have advised against ingestion and off-label use of disinfectants.
- Internet search query data (Google Trends) are used as proxy indicators of public interest in a given topic area. Search interests were evaluated (between January 1 and May 10, 2020) for the purchase and consumption of disinfectants and poison control centers. Google Trends quantifies search interest for a given query as the proportion of search queries for that topic relative to all search queries at that time and location. The resulting numbers are scaled from 0 to 100 (where 100 mean peak search interest).
- Between January and February 2020, the relative search fraction (RSF) values for purchasing (0.17), drinking (0.09) or injecting disinfectants (0.00), and poison control centers (2.19) were minimal. On March 12, 2020, search queries for purchasing disinfectants increased (7.4) that coexist with the President's declaration of a national emergency (March 13, 2020). On April 24, 2020 (the day after the White House press briefing), search queries for drinking and injecting disinfectants were 32.3 and 100 respectively.
- It has been reported that there is an increase in off-label use of disinfectants during this pandemic as compared with the same time period in 2018 and 2019. These results suggest that Google Trends data could be incorporated into a near real-time monitoring system for tracking disinfectant related poisonings and other public health issues during this pandemic.
- Public officials have the responsibility to communicate issues that are evidence-based during public health emergencies. Misleading information related to off-label use of any substance might adversely affect public knowledge and behavior. Public health experts should work to counteract the harmful communication of health information.





Article 2

Published

Anti-C5a Antibody IFX-1 (Vilobelimab) Treatment Versus Best Supportive Care for Patients with Severe COVID-19 (PANAMO): An Exploratory, Open-Label, Phase 2 Randomized Controlled Trial

September 28, 2020, [THE LANCET](#)

Background

- Complement component 5a (C5a) is involved in the inflammatory process and might have a key role in the development of acute respiratory distress syndrome in Covid-19 positive patients.
- However, it is unknown if the blocking of C5a could be helpful in clinical settings.

Methodology

- An exploratory randomized trial was conducted to assess the efficacy of **IFX-1 (treatment group)** versus **best supportive care (control group)** in severe Covid-19, with an aim to assess the typical clinical course and adverse outcomes of Covid-19.
- The primary outcome was the percentage change in ratio of partial pressure of arterial oxygen to fractional concentration of oxygen in inspired air (PaO₂/FiO₂) between baseline and day 5.
- Mortality at 28 days and treatment-emergent and serious adverse events were key secondary outcomes.

Results

- At day 5, there was no difference in relative change of PaO₂/FiO₂ between groups (17% change in the treatment group vs 41% in the control group; difference -24%, p=0.15).
- In the treatment group, there was a statistically non-significant 35% lower 28-days mortality compared with the control group.
- The frequency of serious adverse events were similar between groups (nine [60%] in the treatment group vs seven [47%] in the control group), and no deaths were considered related to treatment assignment.
- A smaller proportion of patients had pulmonary embolisms classed as serious in the treatment group (two [13%]) than in the control group (six [40%]).

Conclusion

- Blocking of C5a with IFX-1 appears to be safe in patients with severe Covid-19.
- Large adequately powered randomized controlled phase 3 trials are needed to confirm the efficacy of IFX-1.





Continued

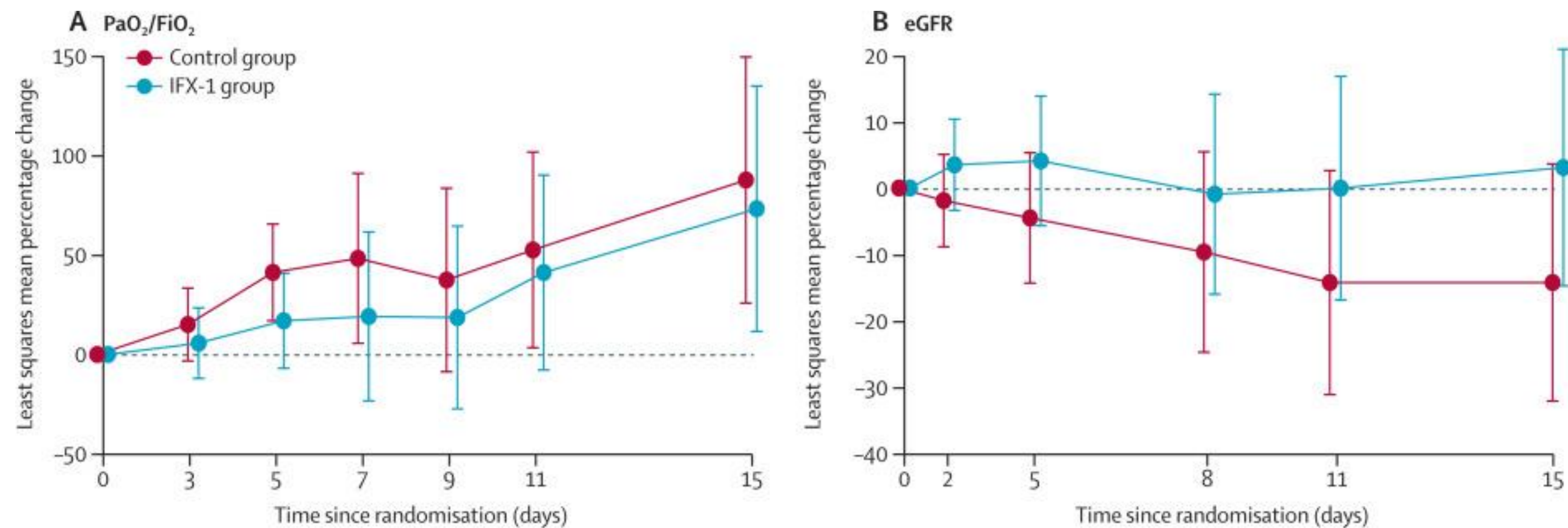


FIGURE. Relative change in mean PaO₂/FiO₂ (A) and eGFR (B).

PaO₂/FiO₂=ratio of partial pressure of arterial oxygen to fractional concentration of oxygen in inspired air. eGFR=estimated glomerular filtration rate. Error bars show 95% CI.



THANK YOU

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