

SCIENTIFIC RESEARCH MONITORING ON COVID-19

8 OCTOBER 2020

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SCIENTIFIC RESEARCH MONITORING ON COVID-19

(ISSUE 250)

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



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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Immunology

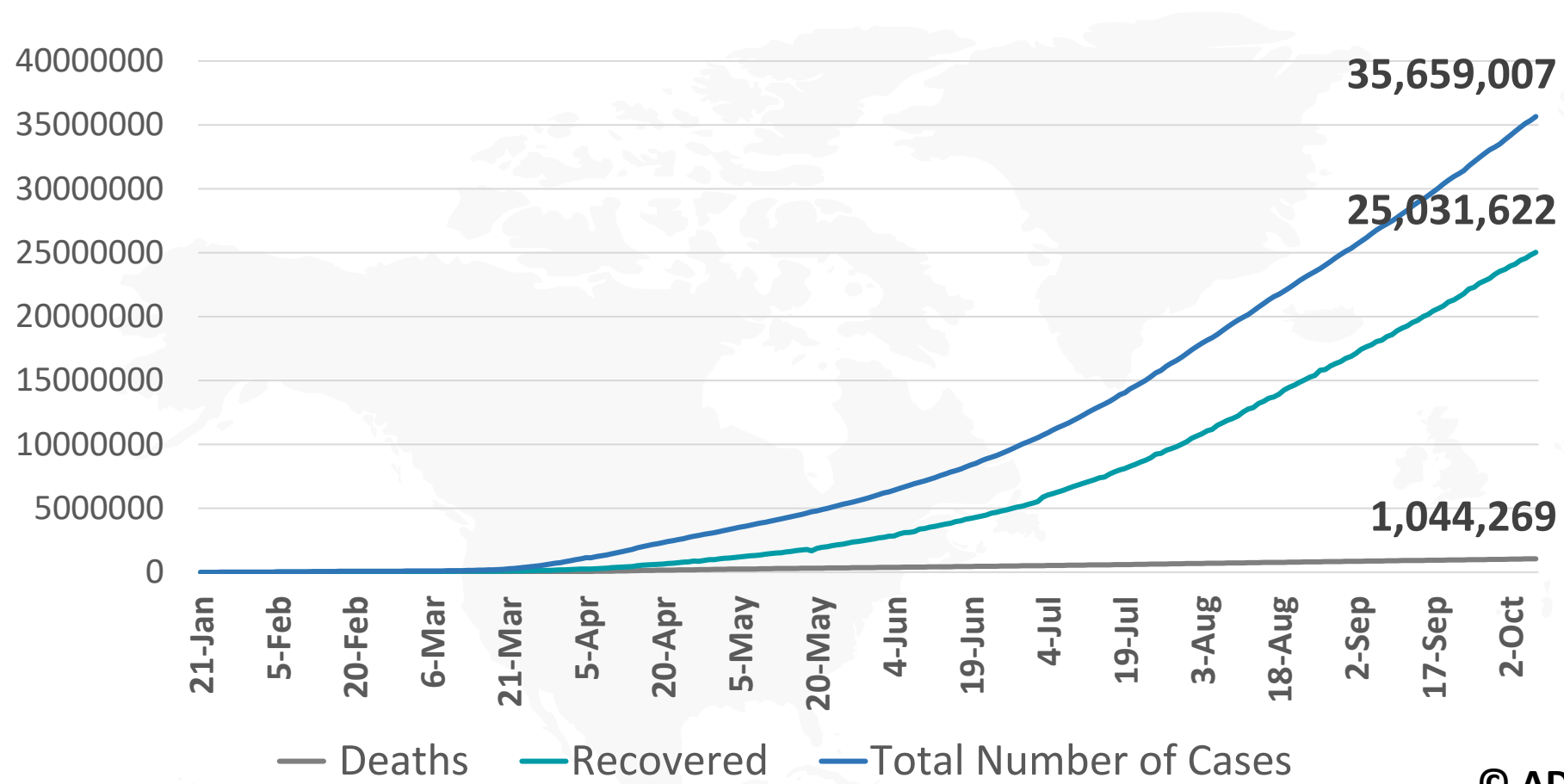
Seroprevalence of SARS-CoV-2 Antibodies in People with an Acute Loss in Their Sense of Smell and/or Taste in a Community-Based Population in London, UK: An Observational Cohort Study

Clinical Features

Prevalence, Management, and Outcomes of SARS-CoV-2 Infections in Older People and Those with Dementia in Mental Health Wards in London, UK: A Retrospective Observational Study



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)

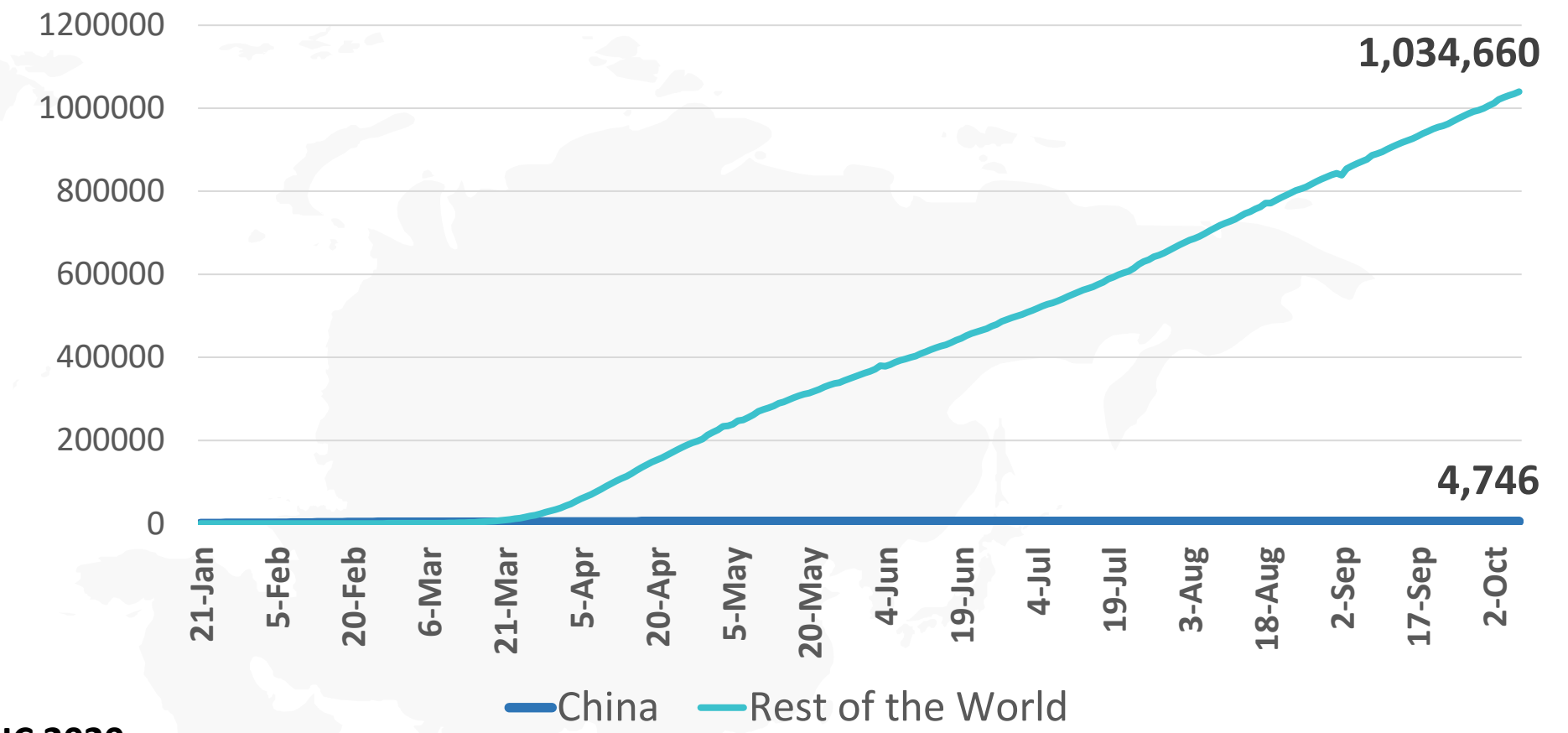


Figure 2: Daily New Infected COVID-19 Cases (China and rest of the world)

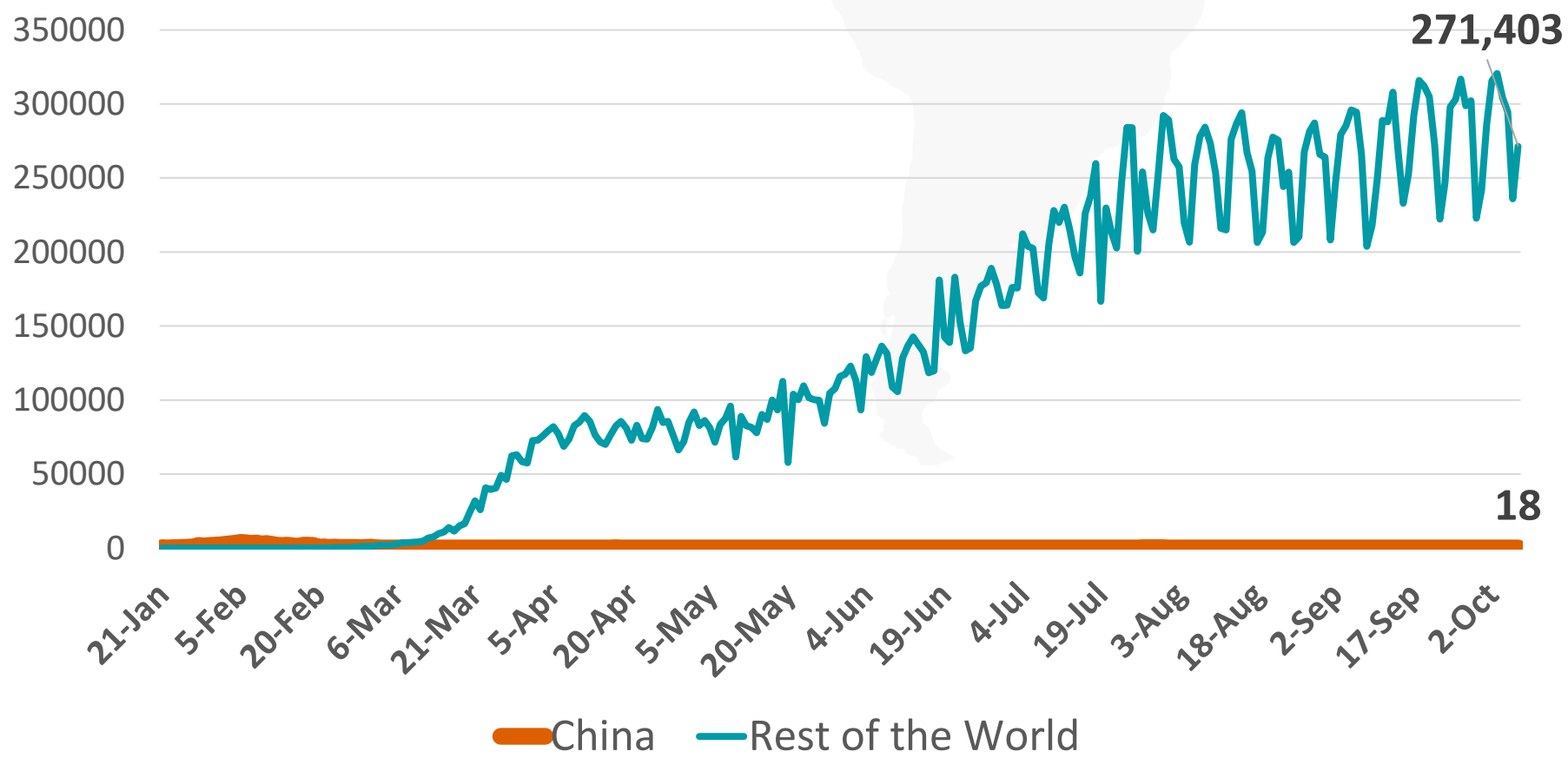


Figure 4: Global Daily New Deaths Due to COVID-19 (china and rest of the world)

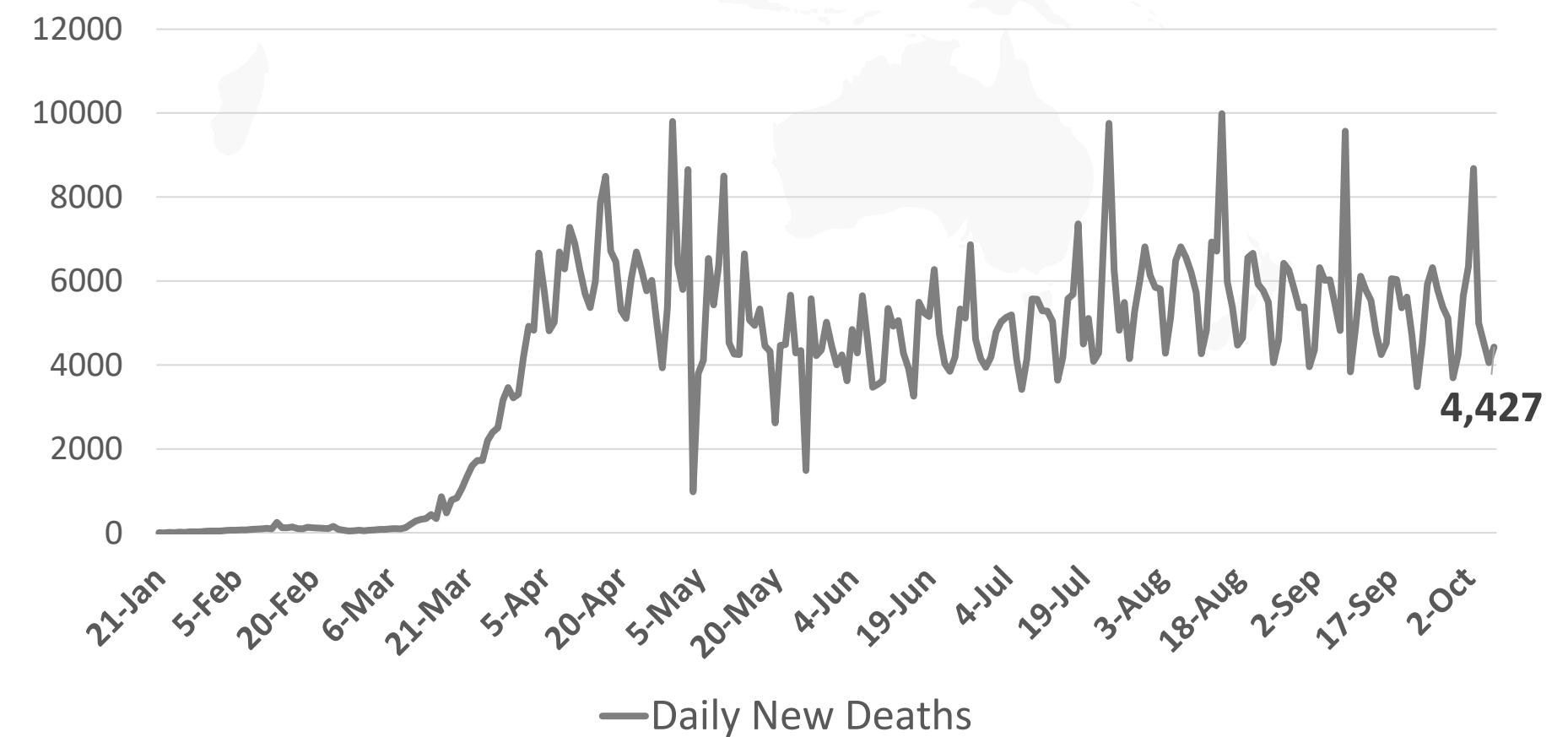
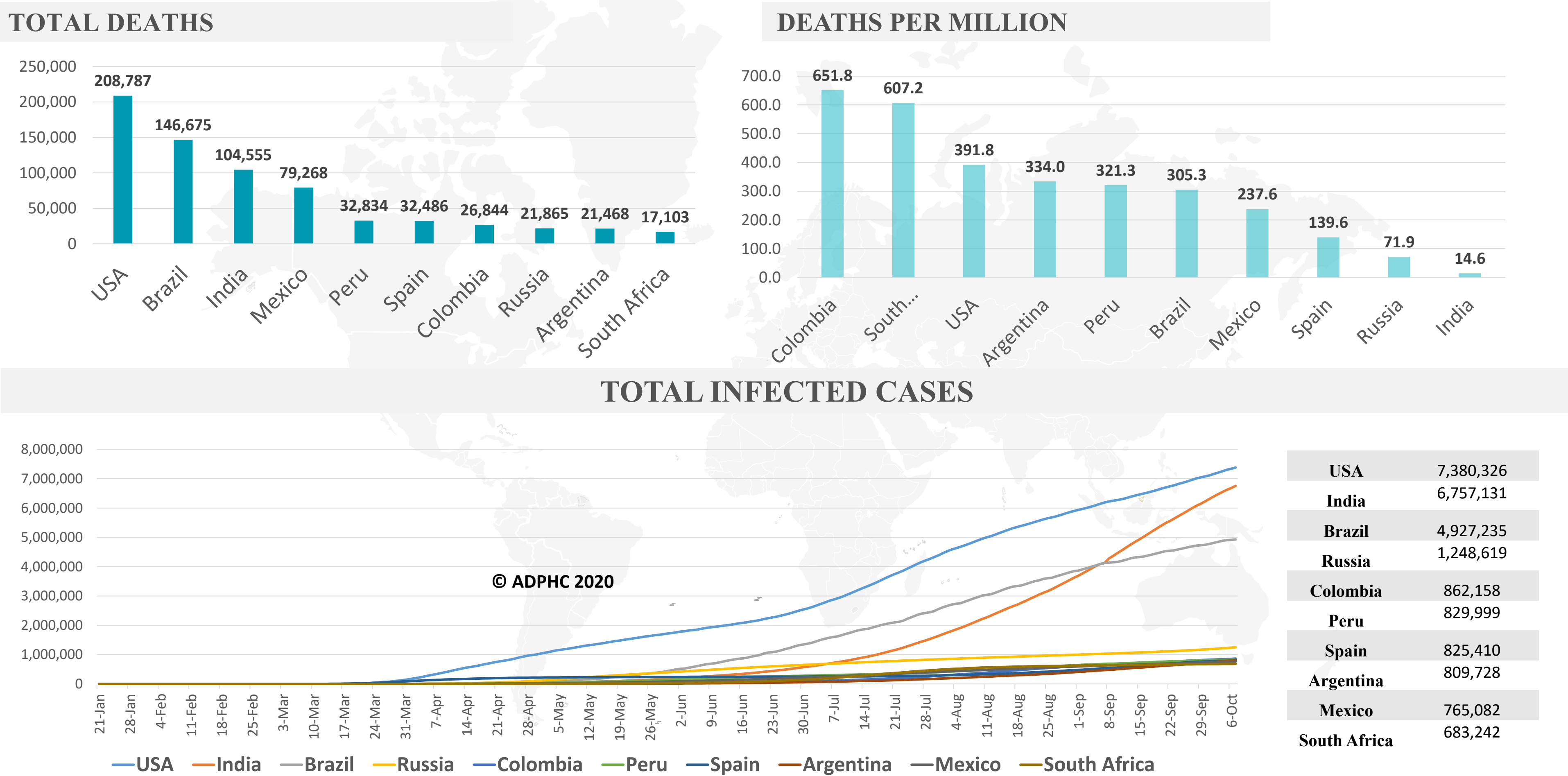
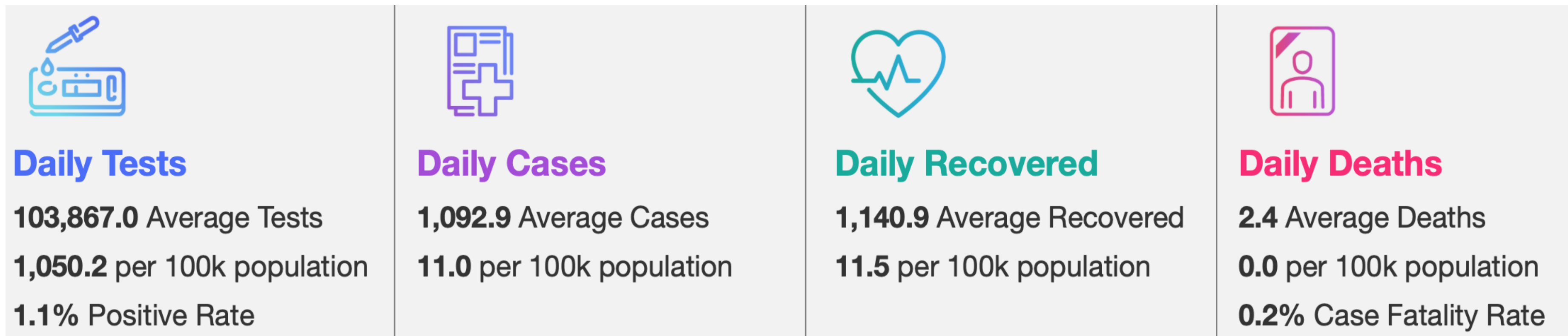


Figure 5: Top 10 Countries in the Total Number of Cases Due to COVID-19



USA	7,380,326
India	6,757,131
Brazil	4,927,235
Russia	1,248,619
Colombia	862,158
Peru	829,999
Spain	825,410
Argentina	809,728
Mexico	765,082
South Africa	683,242

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

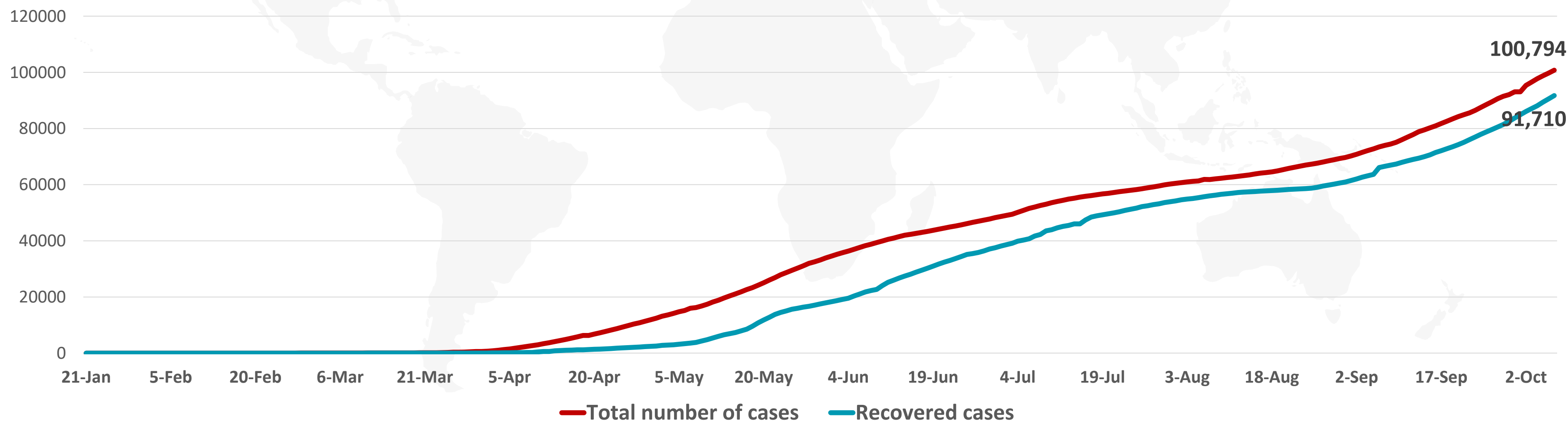
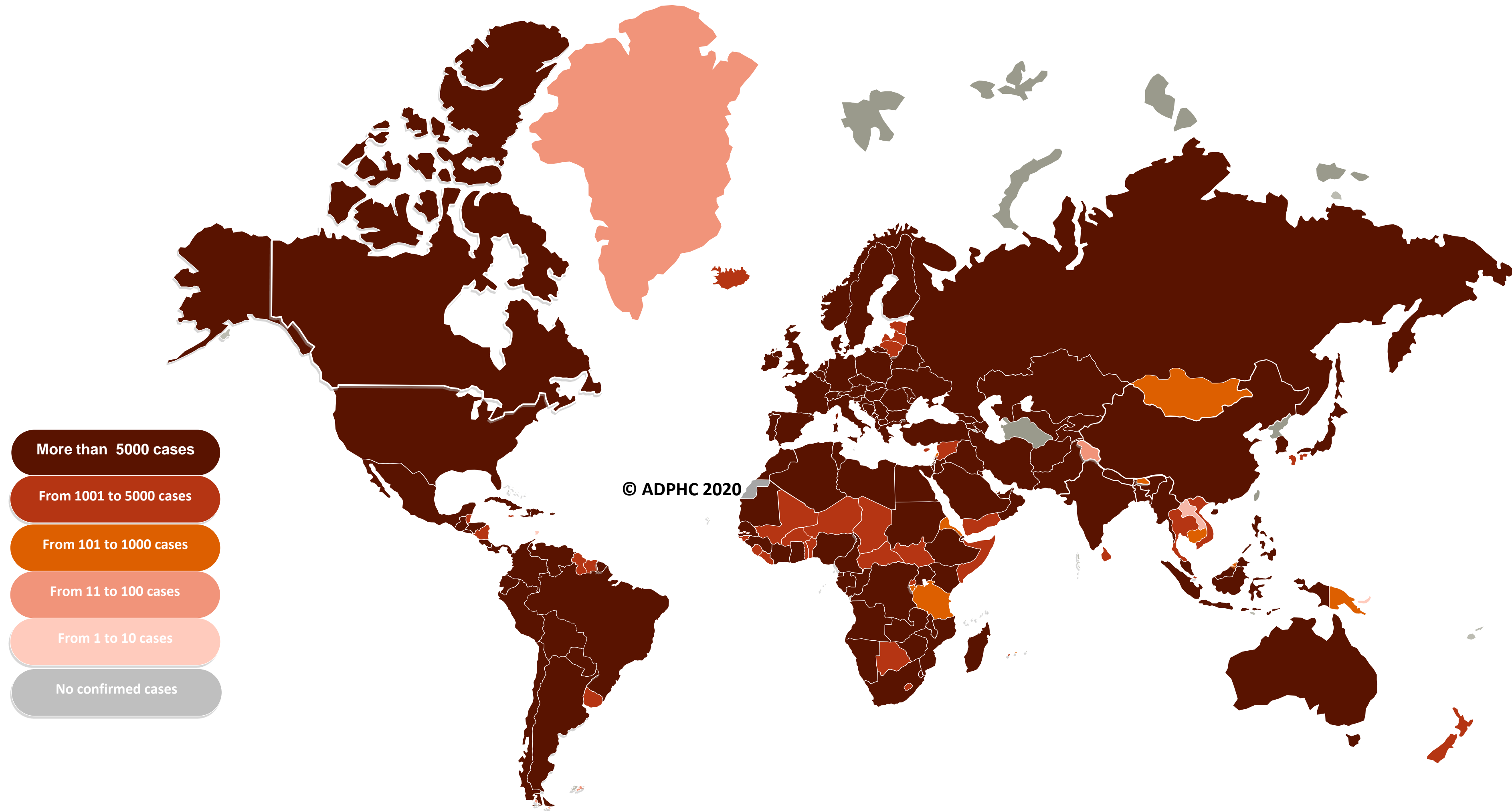


Figure 7A : Global Distribution of COVID-19 Cases



More than 5000 cases

From 1001 to 5000 cases

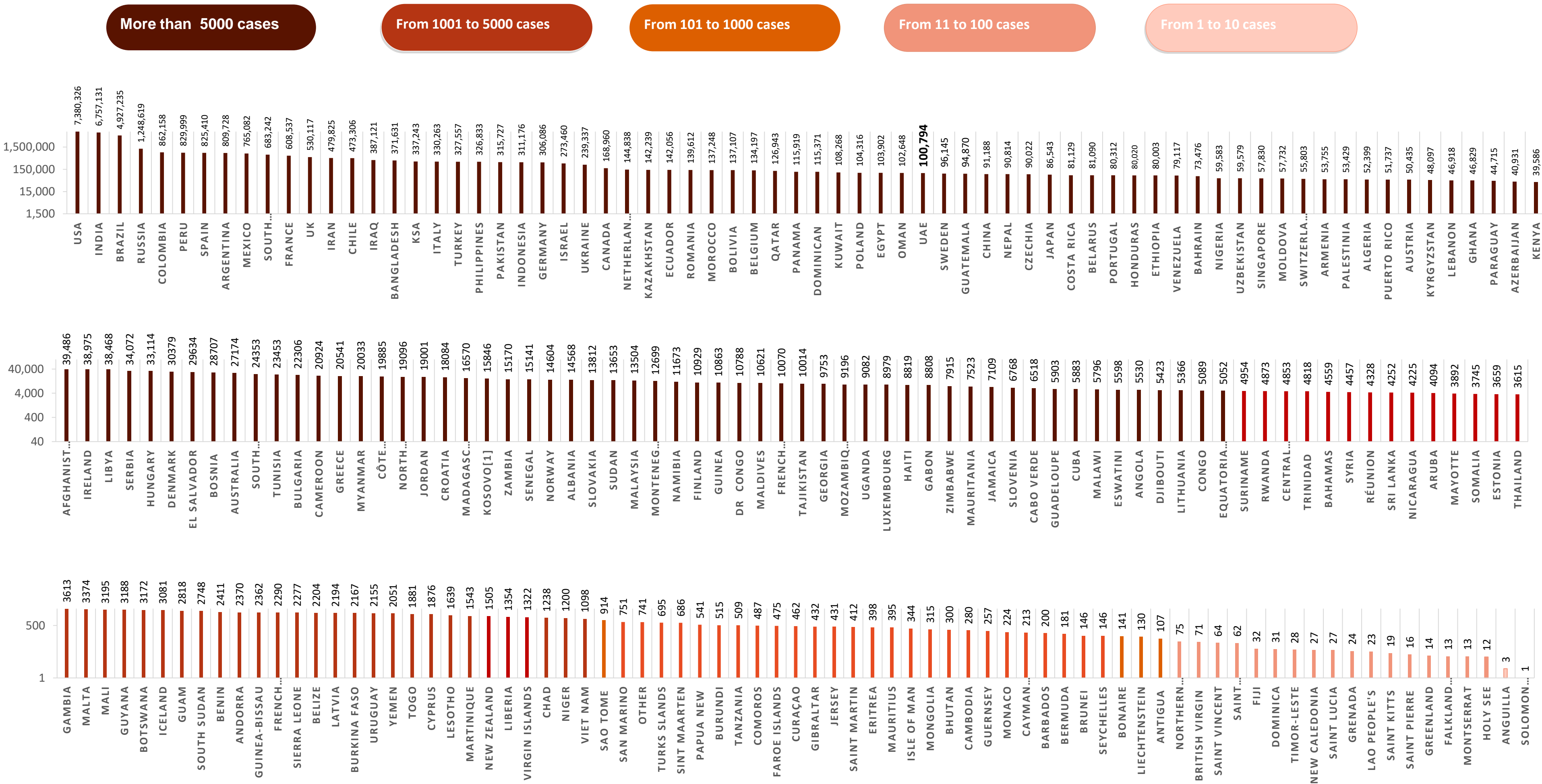
From 101 to 1000 cases

From 11 to 100 cases

From 1 to 10 cases

No confirmed cases

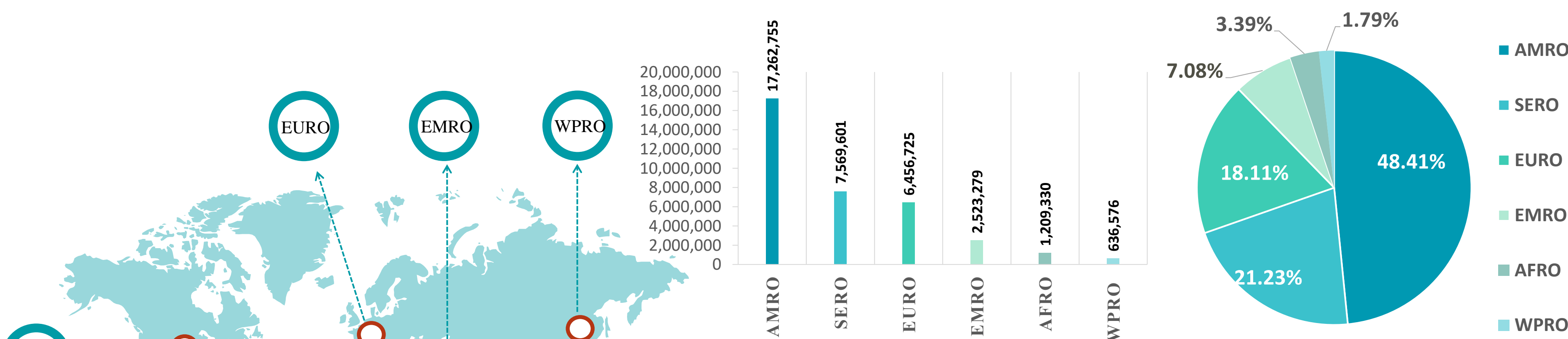
Figure 7B: Bar Chart Illustrates the Global Distribution of COVID19 Cases



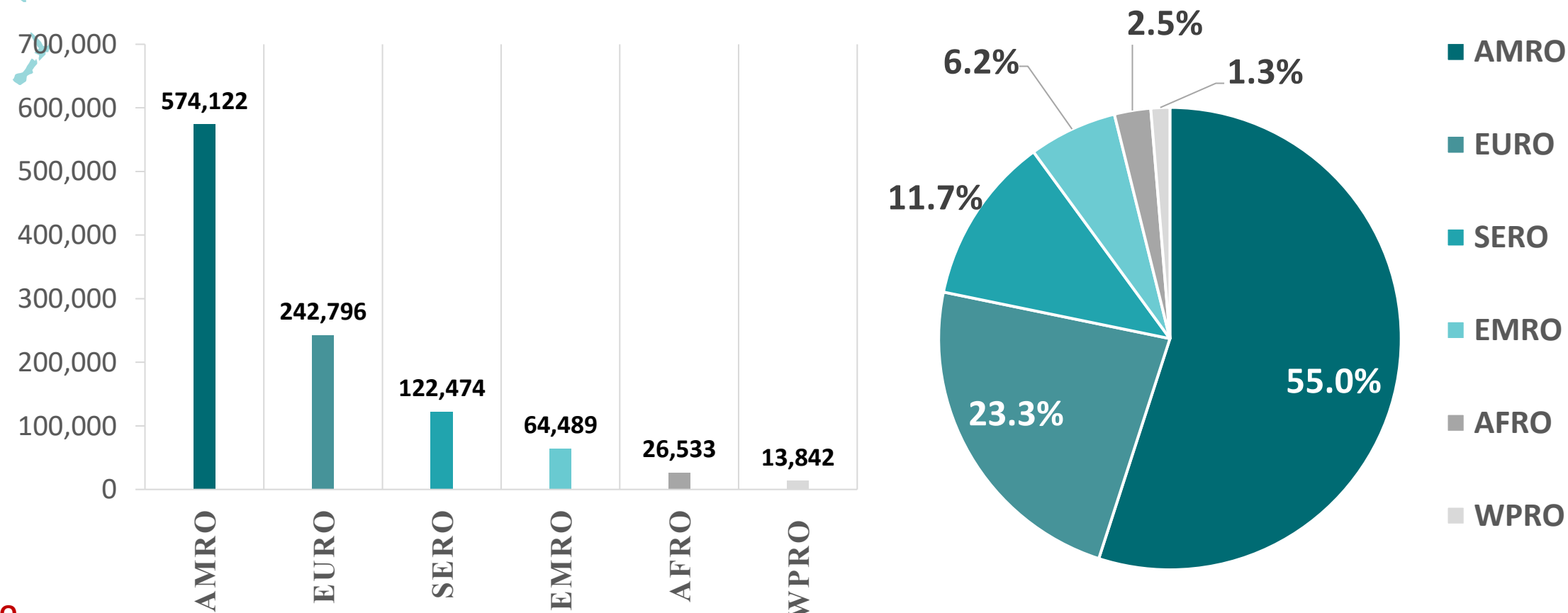
Other*: includes cases and deaths reported under the international conveyance(Diamond Princess)

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

INFECTED



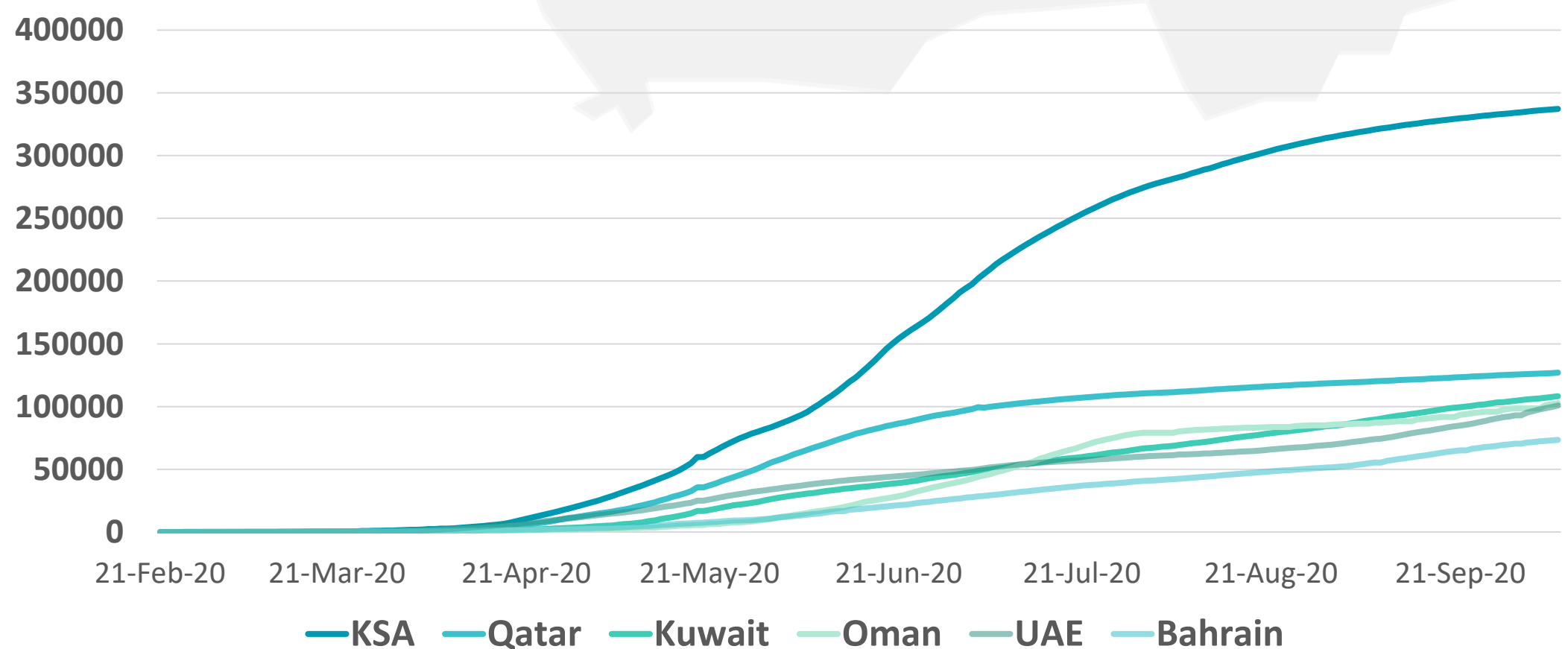
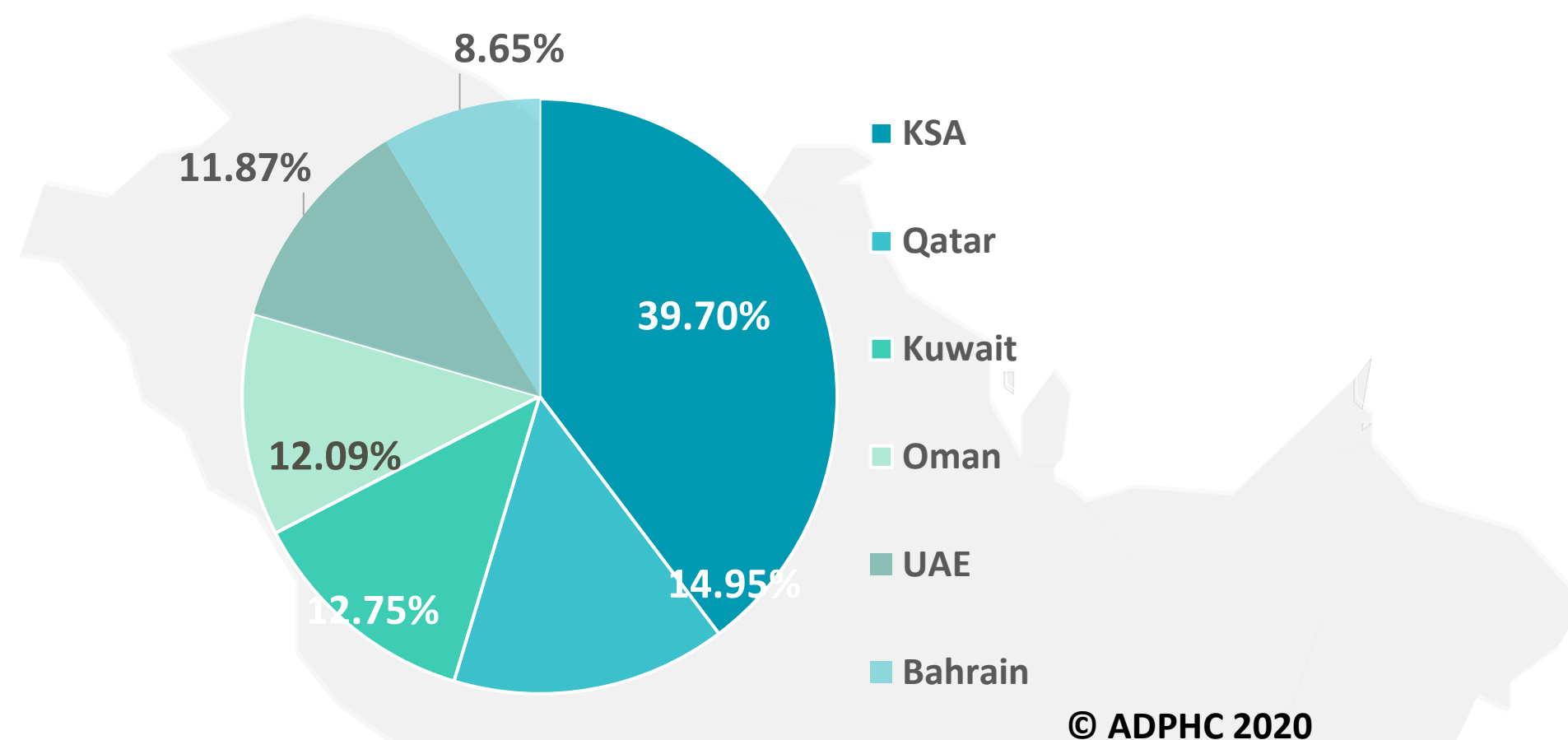
DEATHS



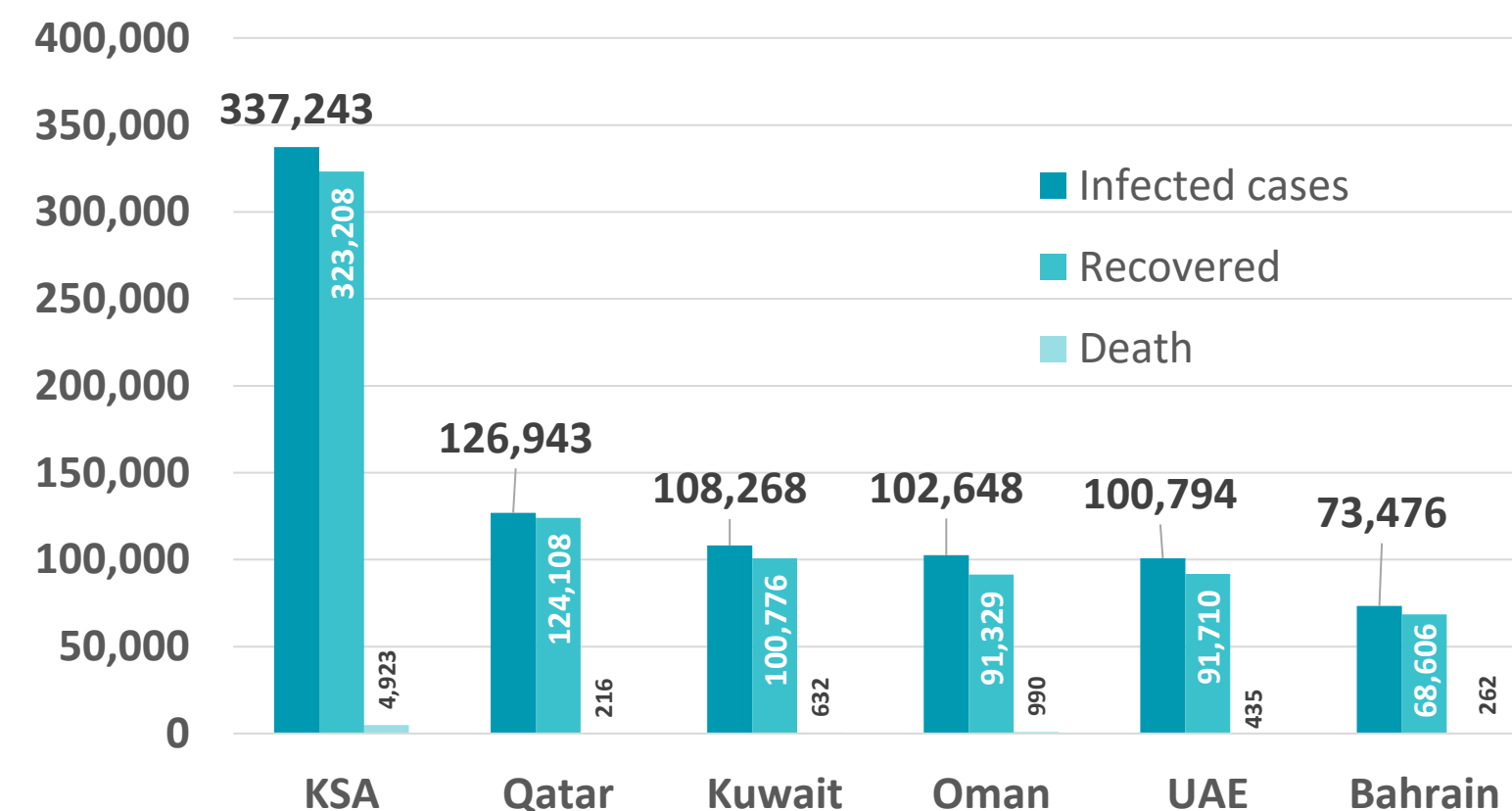
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Figure 9: Comparative Analysis of the Distribution of COVID-19 Cases in GCC Countries

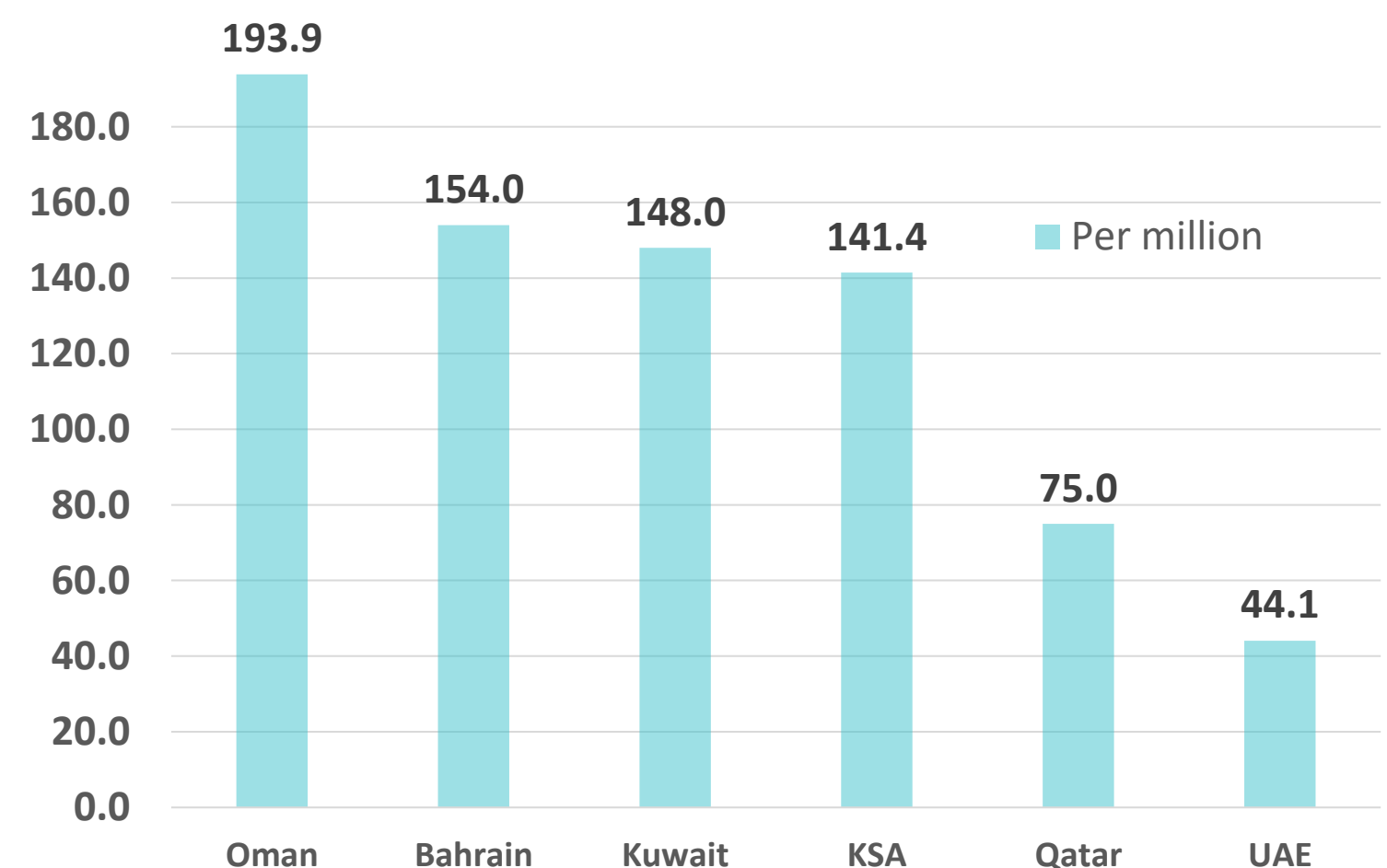
TOTAL NUMBER OF INFECTED CASES



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



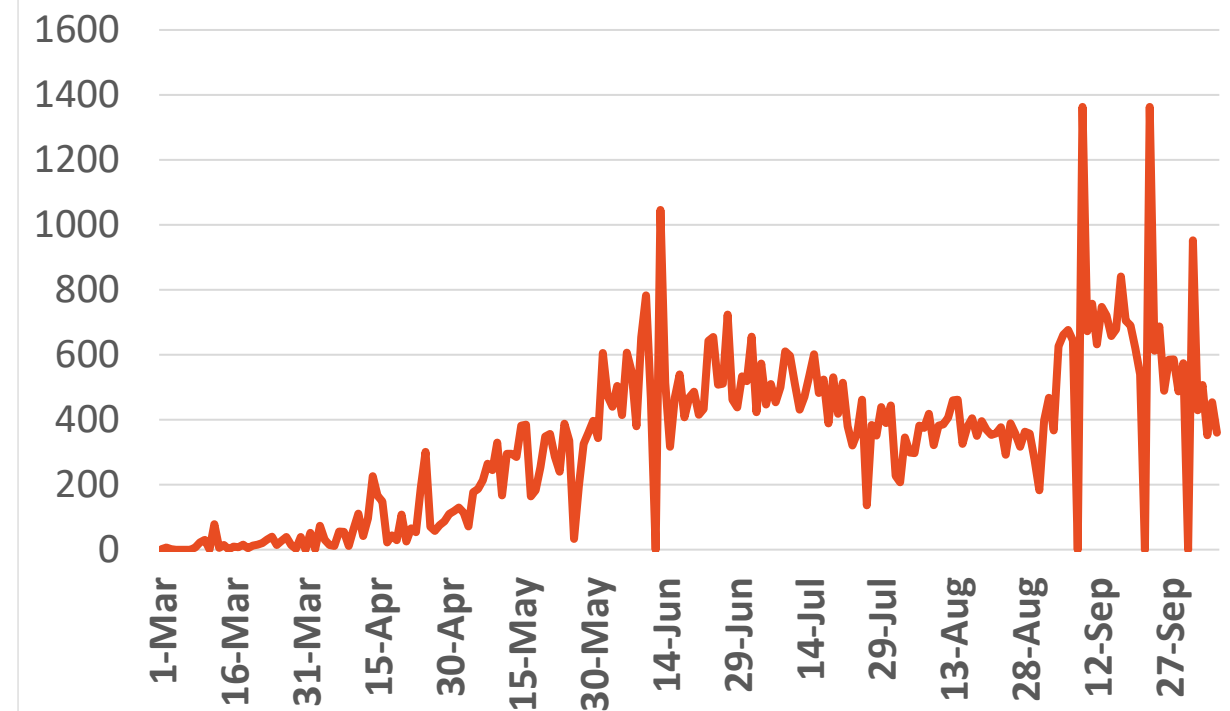
Source : National Emergency Crisis and Disaster Management Authority

KSA



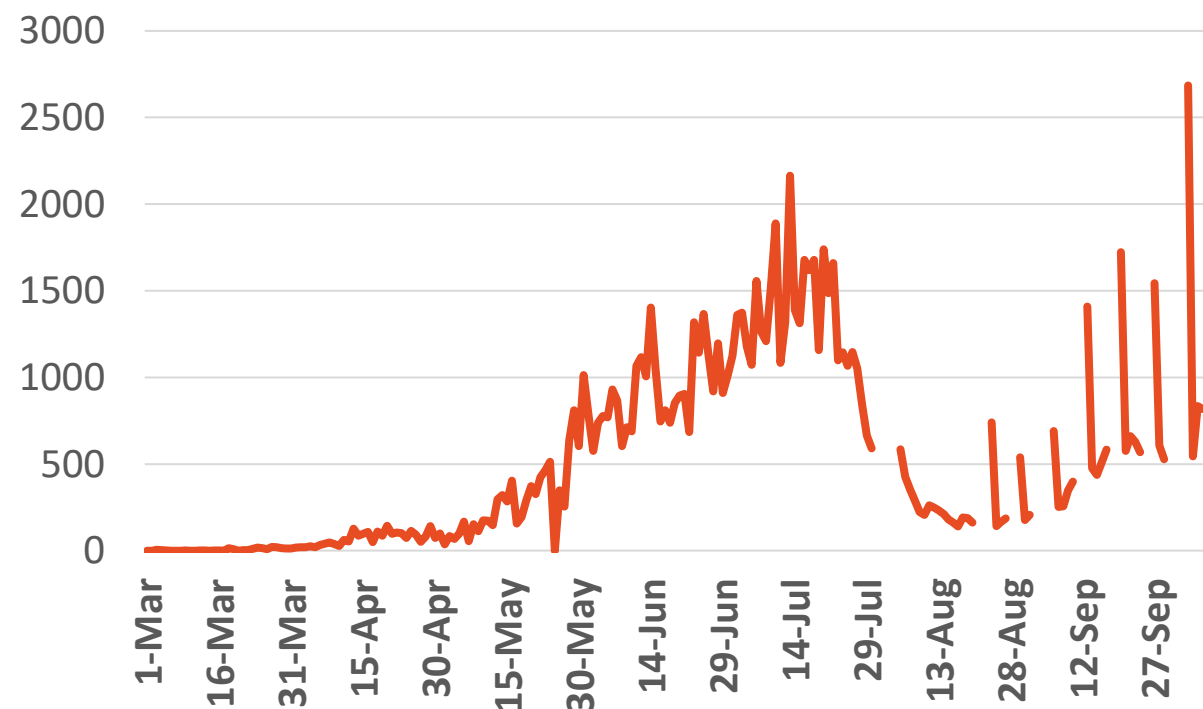
Source : KSA ministry of health

Bahrain



Source :WHO

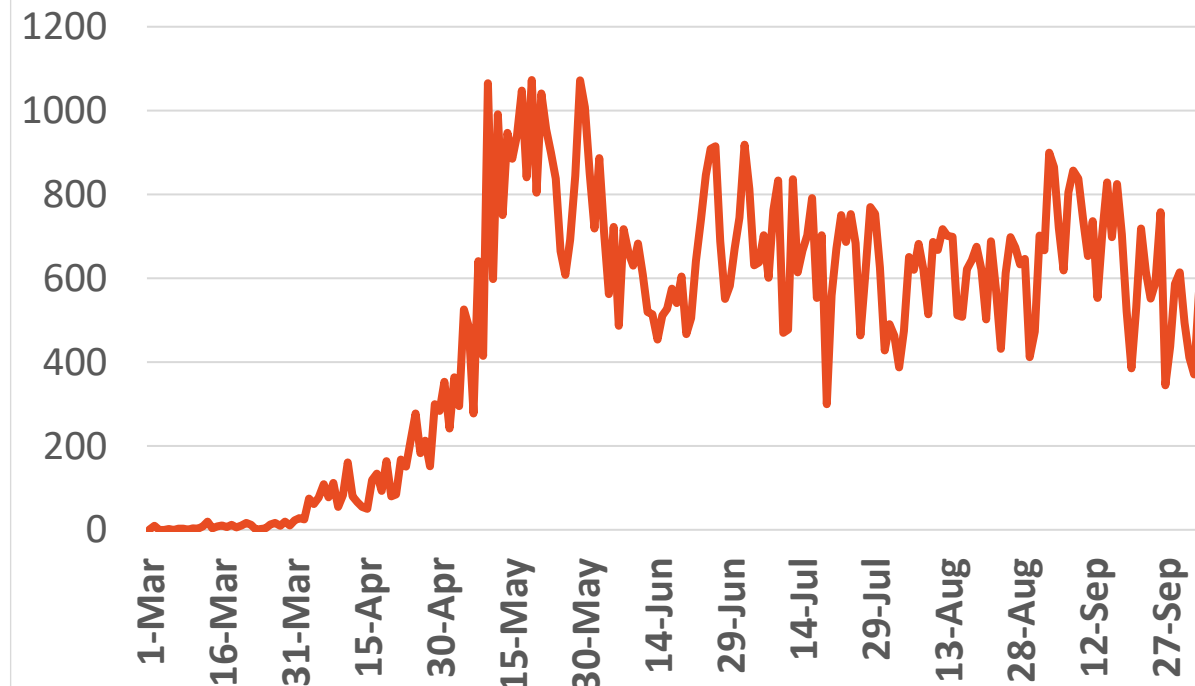
Oman



Source :Oman ministry of health

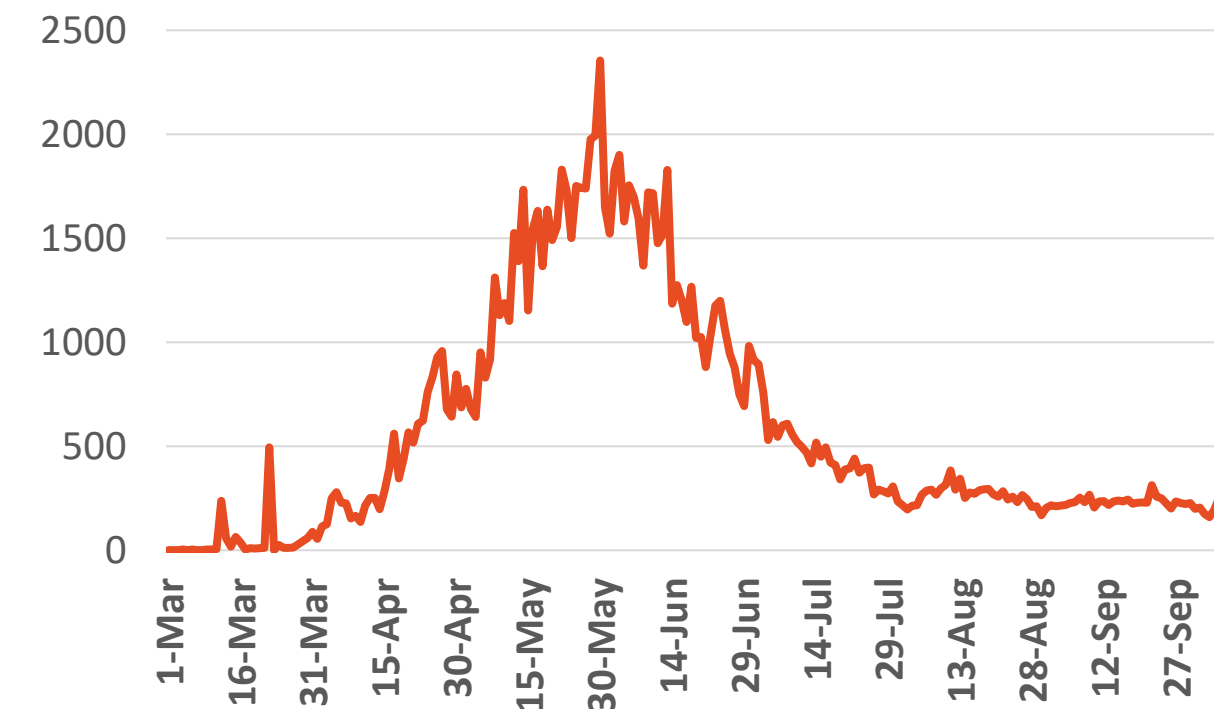
Kuwait

© ADPHC 2020



Source : Kuwait ministry of health

Qatar



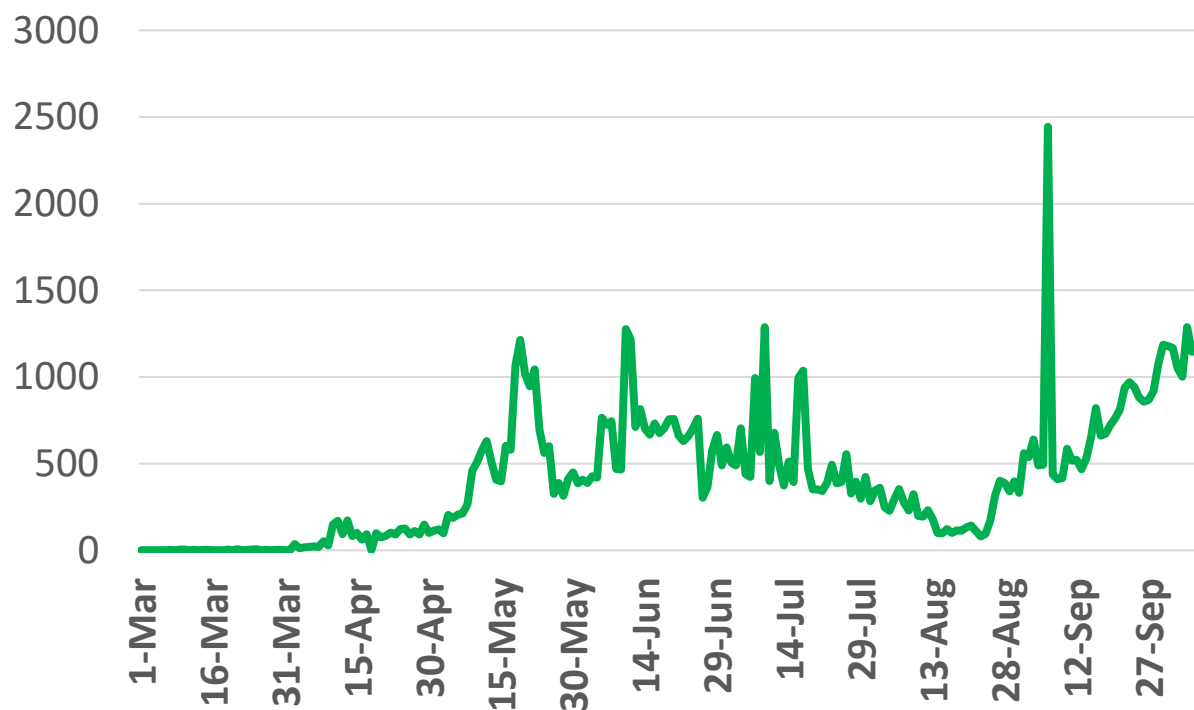
Source : Qatar ministry of health

*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.



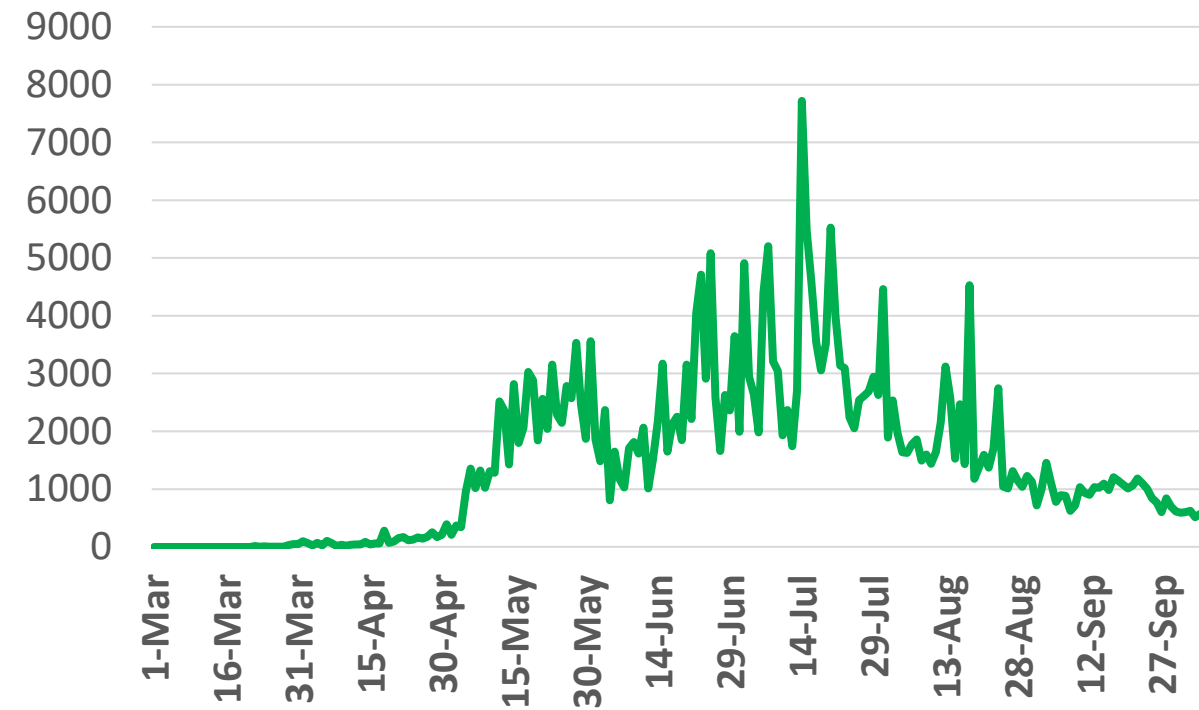
Figure 11: Comparative Analysis of the Distribution of COVID-19 Newly Recovered Cases in GCC Countries

UAE



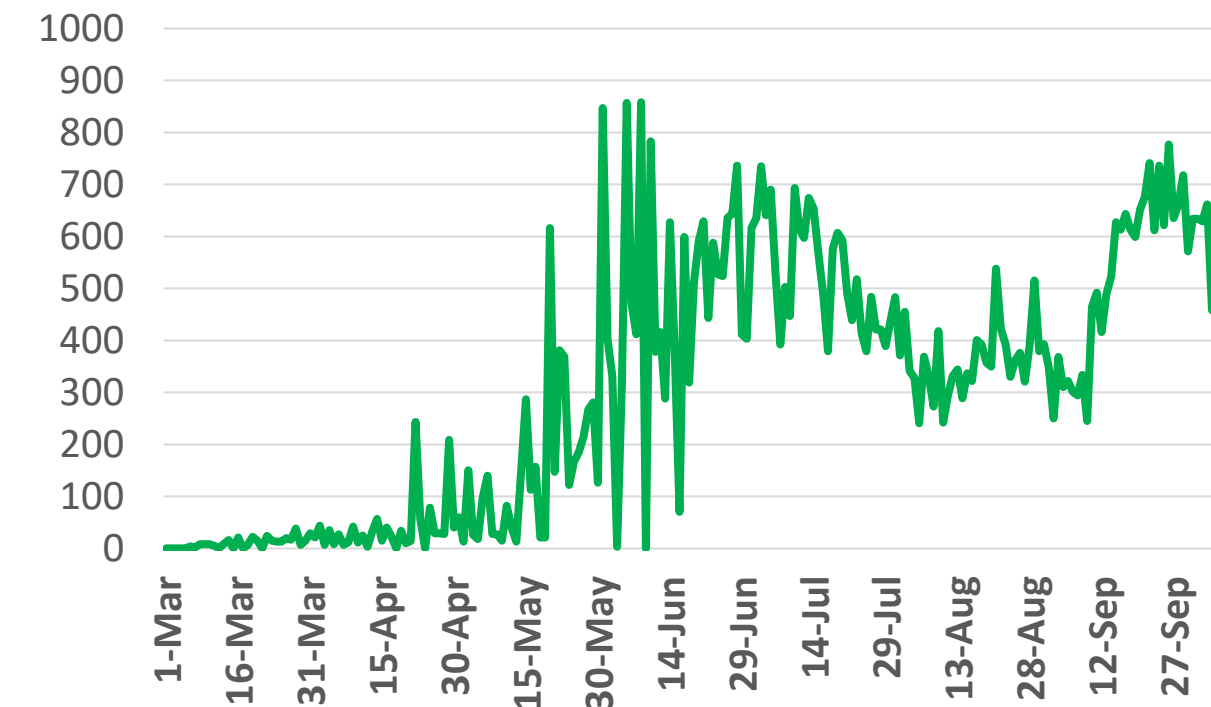
Source : National Emergency Crisis and Disaster Management Authority

KSA



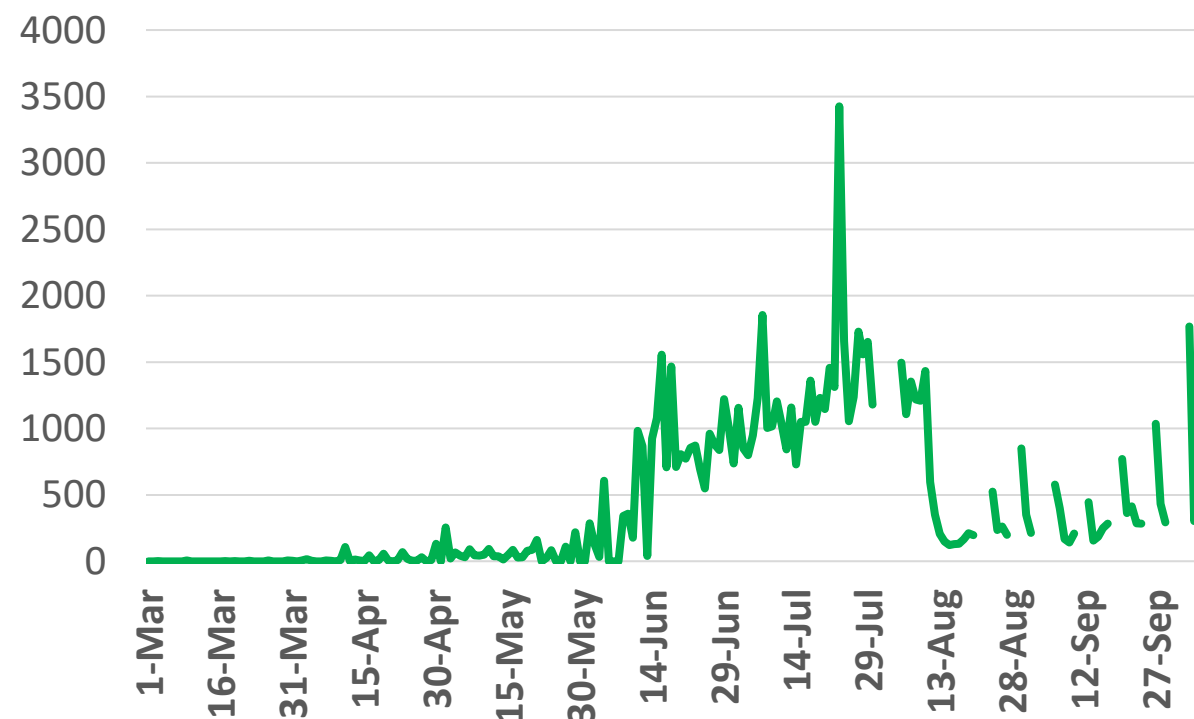
Source : KSA ministry of health

Bahrain



Source : Bahrain ministry of health

Oman



Source : Oman ministry of health

Kuwait

© ADPHC 2020



Source : Kuwait ministry of health

Qatar



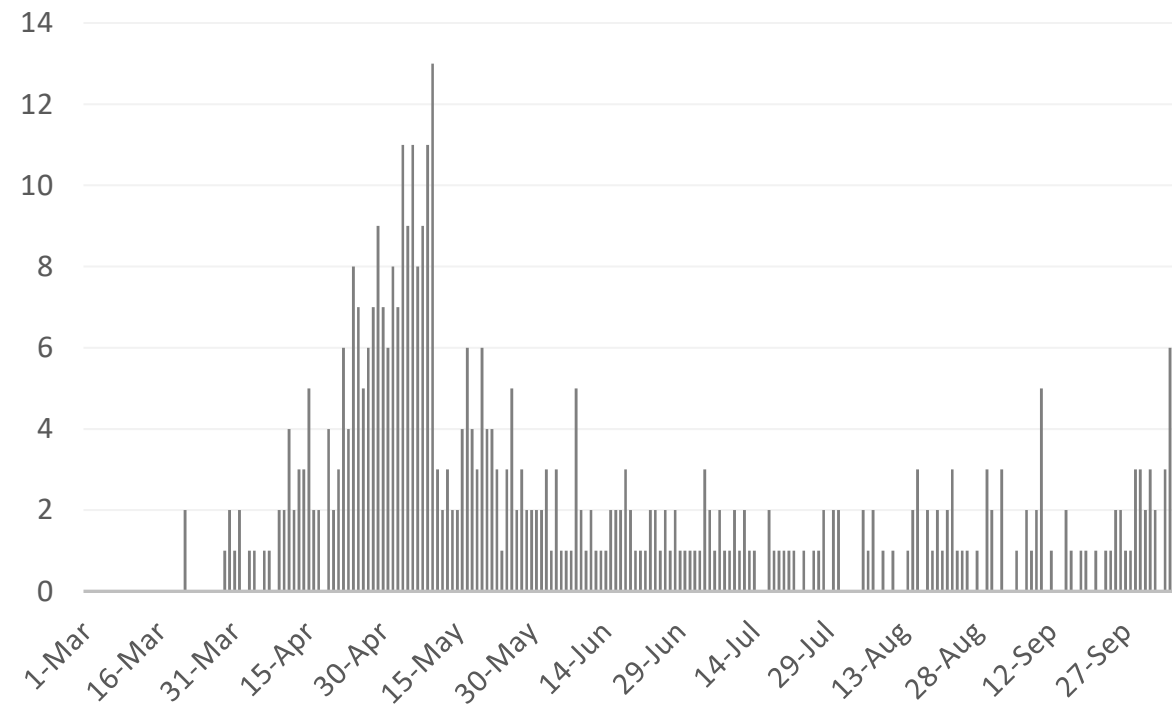
Source : Qatar ministry of health

*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.



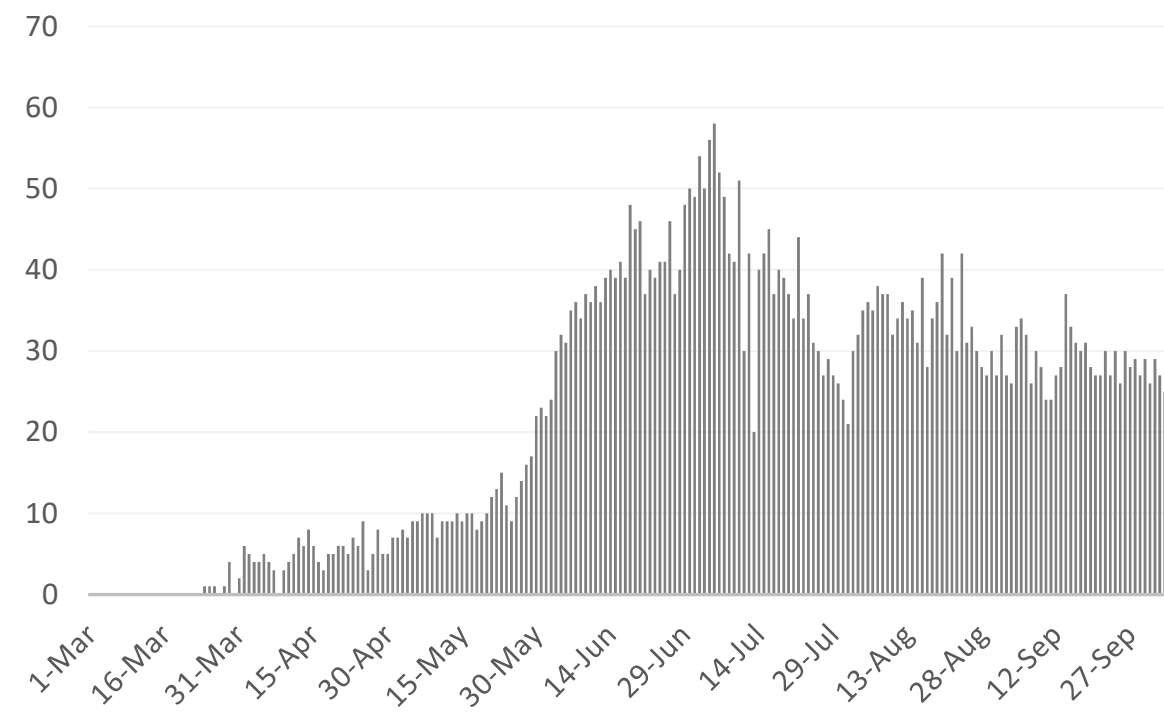
Figure 12: Comparative Analysis of the Distribution of COVID-19 New Death Cases in GCC Countries

UAE



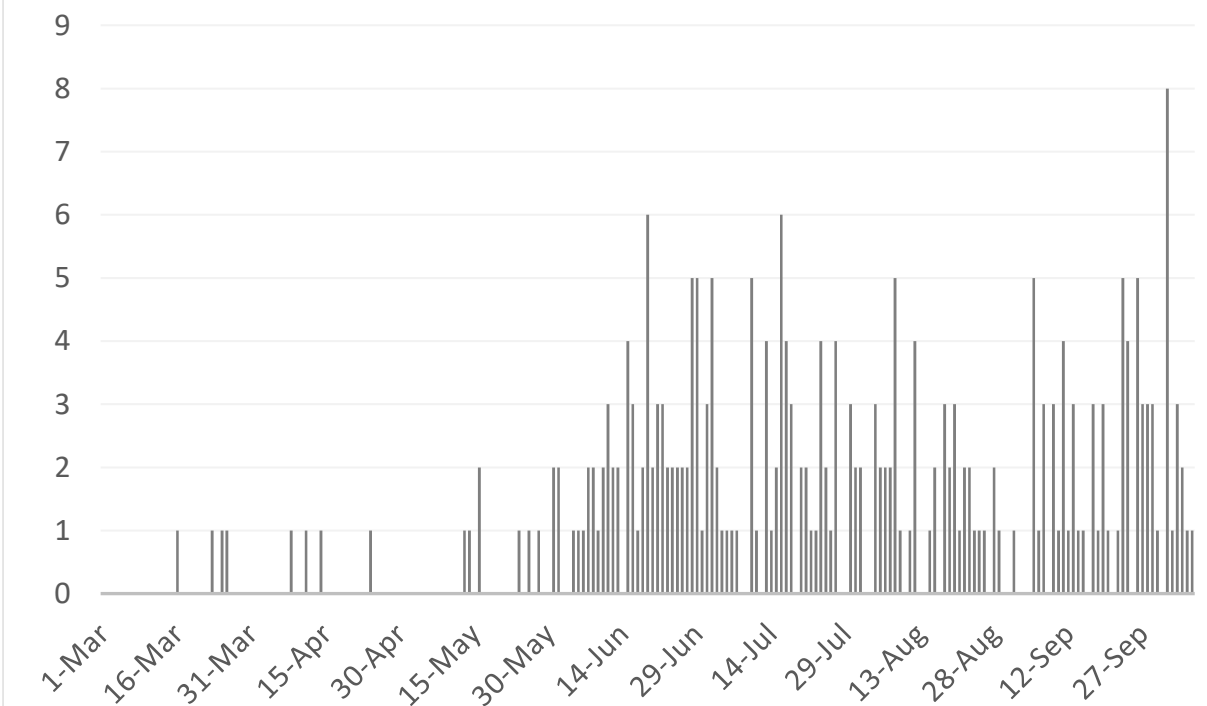
Source : National Emergency Crisis and Disaster Management Authority

KSA



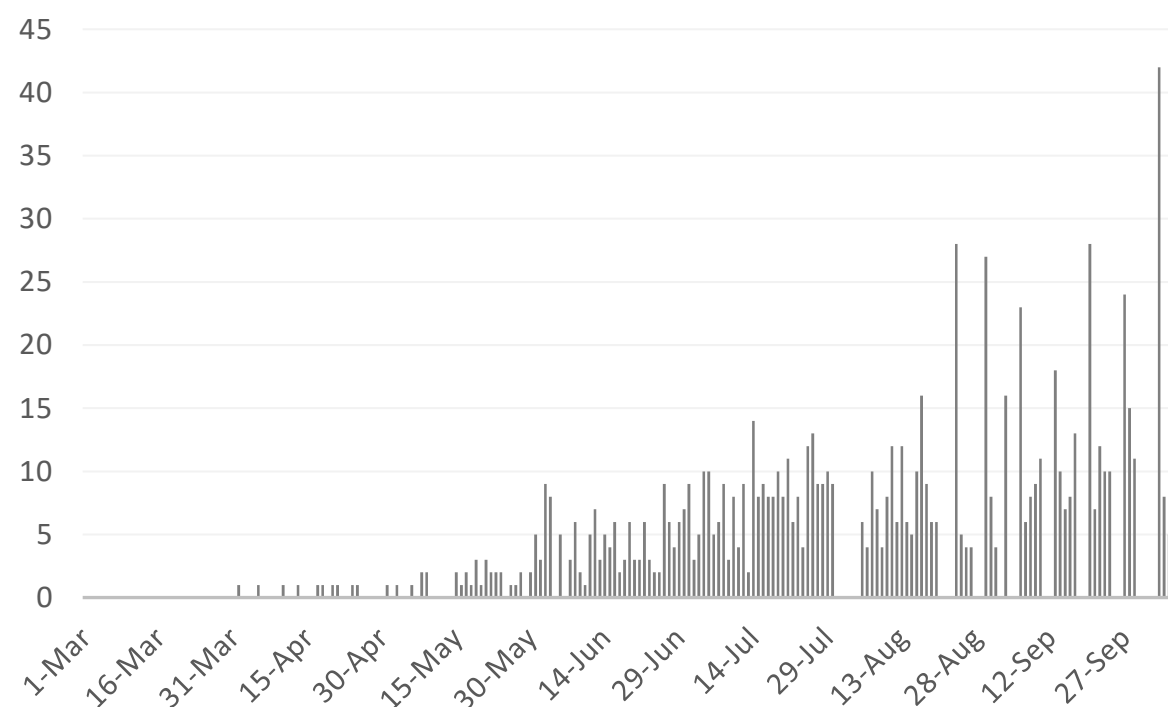
Source : KSA ministry of health

Bahrain



Source :WHO

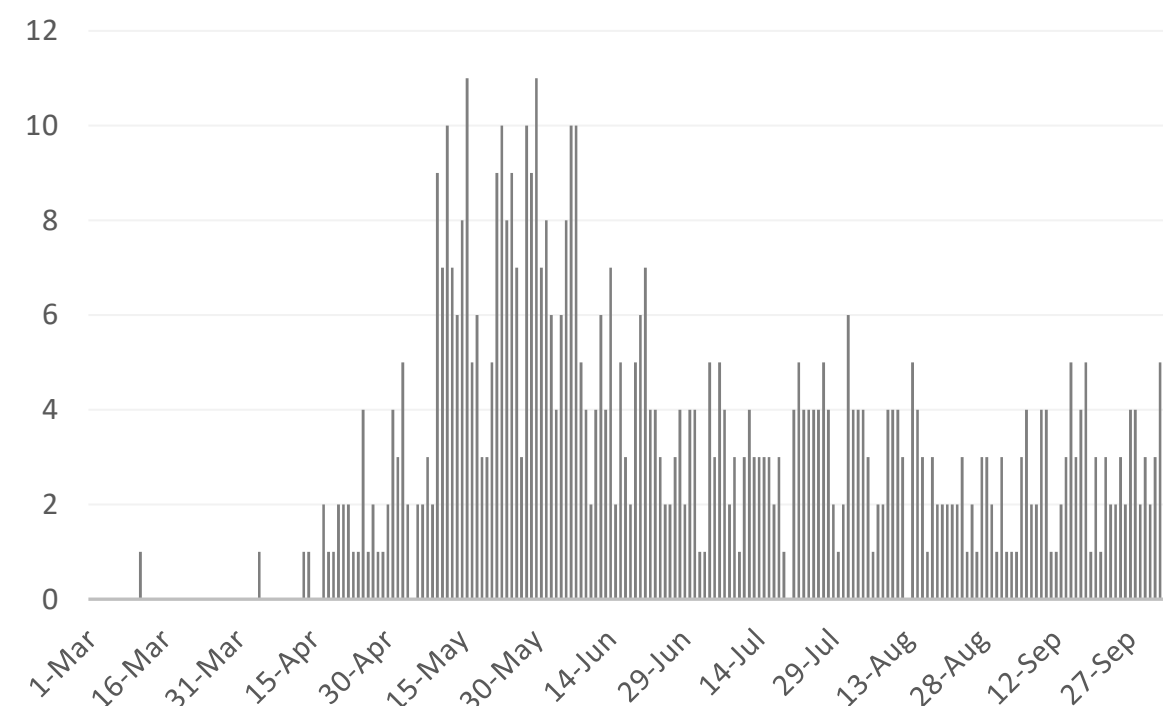
Oman



Source :Oman ministry of health

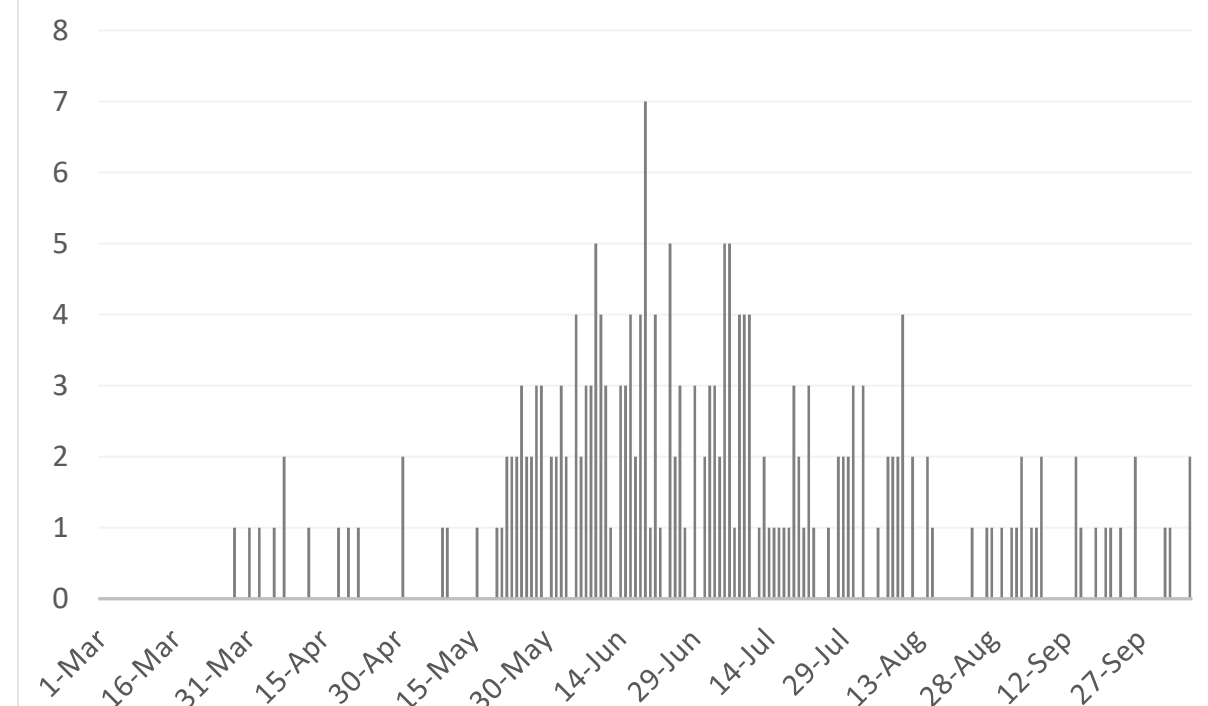
Kuwait

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





IMMUNOLOGY

Article 1

Published

October 01, 2020 [PLOS MEDICINE](#)

Seroprevalence of SARS-CoV-2 Antibodies in People with an Acute Loss in Their Sense of Smell and/or Taste in a Community-Based Population in London, UK: An Observational Cohort Study

Study Aims

- Determine the seroprevalence of SARS-CoV-2 specific antibodies in a community-based cohort with a new loss of their sense of smell and/or taste during the COVID-19 outbreak in London, UK.
- To compare the frequency of COVID-19 associated symptoms in participants with and without SARS-CoV-2 antibodies.
- It also evaluated whether smell or taste loss is indicative of COVID-19 infection.
- Adults registered with four participating primary care centers in London were sent text messages to their mobile telephones inviting those who experienced a new loss of their sense of smell and/or taste in the preceding month to participate. Recruitment took place between 23 April 2020 and 14 May 2020.
- Participants were directed to an online platform with the study information and an eligibility check.
- Written informed consent was obtained electronically. Enrolled participants completed an online questionnaire.
- They were subsequently sent a point-of-care lateral flow immunoassay testing kit detecting the presence of immunoglobulin M (IgM) and immunoglobulin G (IgG) antibodies to SARS-CoV-2.
- A healthcare professional had a telemedicine video consultation with each participant.
- A total of 590 participants enrolled. Out of these 567, (96.1%) had a telemedicine consultation during which a lateral flow immunoassay test that detected SARS-CoV-2 antibodies was undertaken under medical supervision. Mean age was 39.4 years (SD ± 12.0) and 69.1% (n = 392) of participants were female.





IMMUNOLOGY

Continued

Findings

- A total of 77.6% of 567 participants with an acute smell and/or taste loss had SARS-CoV-2 antibodies; of these, 39.8% (n = 175) had neither cough nor fever.
- New loss of smell was more prevalent in participants with SARS-CoV-2 antibodies, compared with those without antibodies (93.4% versus 78.7%, $p < 0.001$), whereas taste loss was equally prevalent (90.2% versus 89.0%, $p = 0.738$). Seropositivity for SARS-CoV-2 was three times more likely in participants with smell loss (OR 2.86; 95% CI 1.27–6.36; $p < 0.001$) compared with those with taste loss.

Table 5. Logistic regression exploring the seroprevalence of SARS-CoV-2 antibodies in people with loss in the sense of smell in isolation, loss in the sense of taste in isolation, and a loss both in the sense of smell and taste in combination.

	Odds ratio (95% CI) (unadjusted)	p-value		Odds ratio (95% CI) (adjusted) ¹	p-value
Loss in the sense of taste only (baseline)	1.00				
Loss in the sense of smell only	2.86 (95% CI 1.27–6.36)	<0.001	Loss in the sense of smell only	2.72 (95% CI 1.21–6.14)	0.016
Combined loss in the sense of smell and taste	3.98 (95% CI 2.24–7.08)	<0.001	Combined loss in the sense of smell and taste	4.11 (95% CI 2.29–7.37)	<0.001
Constant	1.07 (95% CI 0.64–1.81)	0.789	Constant	2.91 (0.75–11.35)	0.123

¹For sex, age, ethnicity, and smoking status.

CI, confidence interval; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

Conclusion

- The recent loss of smell is a highly specific COVID-19 symptom and should be considered more generally in guiding case isolation, testing, and treatment of COVID-19.





Article 2

Published

Prevalence, Management, and Outcomes of SARS-CoV-2 Infections in Older People and Those with Dementia in Mental Health Wards in London, UK:

A Retrospective Observational Study

September 29, 2020 [THE LANCET Psychiatry](#)

- Older people and those with multi-morbidity have higher mortality if they become infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) than the general population. People living in group situations or with dementia are more vulnerable to infection.
- The investigators of this study aimed to describe the period prevalence, demographics, symptoms (and asymptomatic cases), management, and survival outcomes of COVID-19 in the older inpatient psychiatric population and people with young-onset dementia in five National Health Service Trusts in London, UK, from March 1 to April 30, 2020
- In this retrospective, observational study data of COVID-19 outcomes of inpatients aged 65 years or older or with dementia who were admitted to five London mental health Trusts between March and April 2020 were collected. Patients were determined to have COVID-19 if they had a positive SARS-CoV-2 PCR test, or had relevant symptoms indicative of COVID-19, as determined by their treating physician.
- Of 344 inpatients, 131 (38%) were diagnosed with COVID-19 during the study period (period prevalence 38% [95% CI 33–43]). The mean age of patients who had COVID-19 was 75.3 years (SD 8.2); 68 (52%) were women and 47 (36%) from ethnic minority groups. 16 (12%) of 131 patients were asymptomatic, and 121 (92%) had one or more disease-related comorbidity. 108 (82%) patients were compulsorily detained. 74 (56%) patients had dementia, of whom 13 (18%) had young-onset dementia.
- Implementation of the long-standing policy of parity of esteem for mental health and planning for future COVID-19 waves in psychiatric hospitals is urgent.



THANK YOU

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