مركز أبوظبي
للصحة العامة
ABU DHABI PUBLIC
HEALTH CENTRE

SCIENTIFIC RESEARCH MONITORING ON COVID-19

26 SEPTEMBER 2020

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SCIENTIFIC RESEARCH MONITORING ON COVID-19 (ISSUE 237)

مركز أبوظبي للصحة العامة
ABU DHABI PUBLIC HEALTH CENTRE

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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Clinical Features

Case 29-2020: A 66-Year-Old Man with Fever and Shortness of Breath after Liver Transplantation

Public Health Response

Occupational Safety and Health Administration (OSHA) and Worker Safety During the COVID-19 Pandemic

EPIDEMIOLOGY

FROM 21 JAN TO 25 SEPT 2020

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

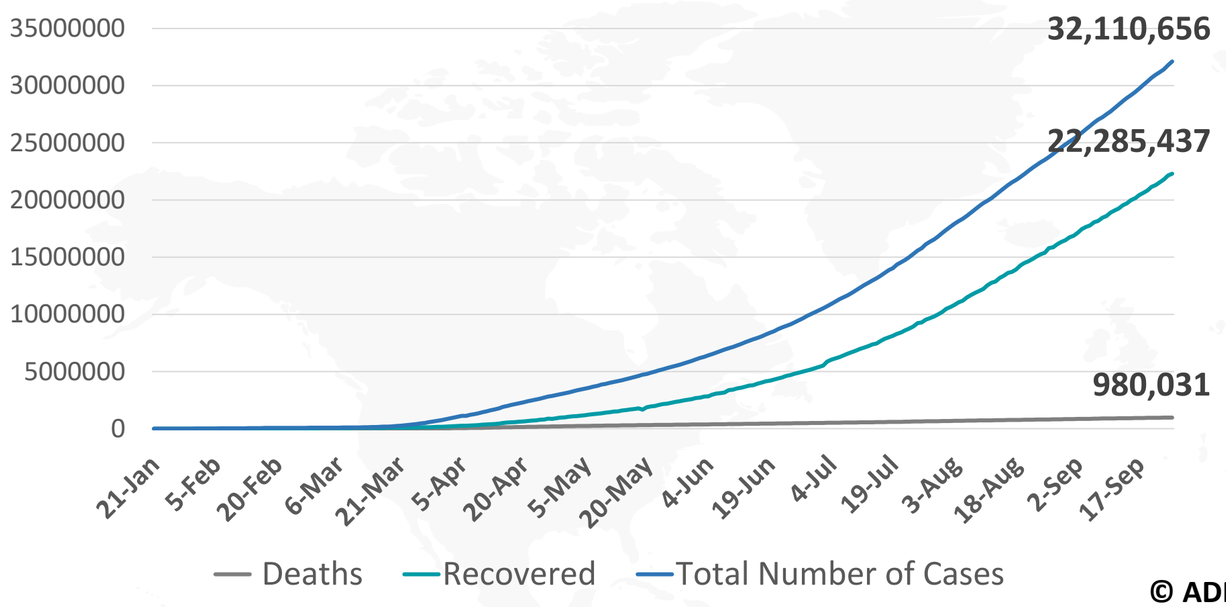


Figure 3: Total Number of Death Due to COVID-19 (china and result of the world)

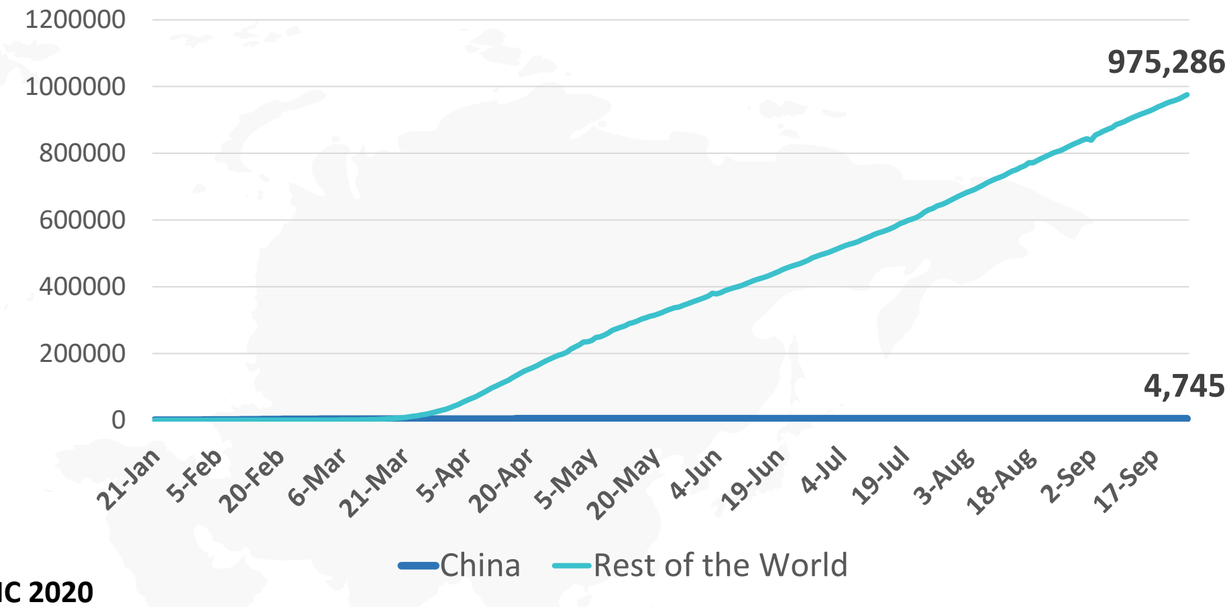


Figure 2: Daily New Infected COVID-19 Cases (China and rest of the world)

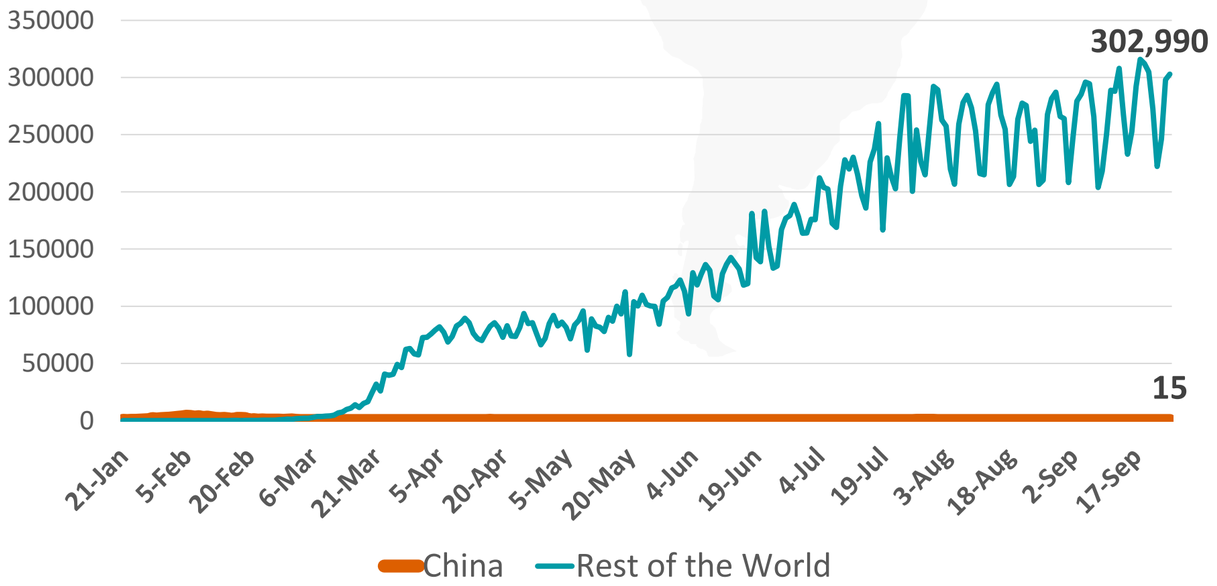
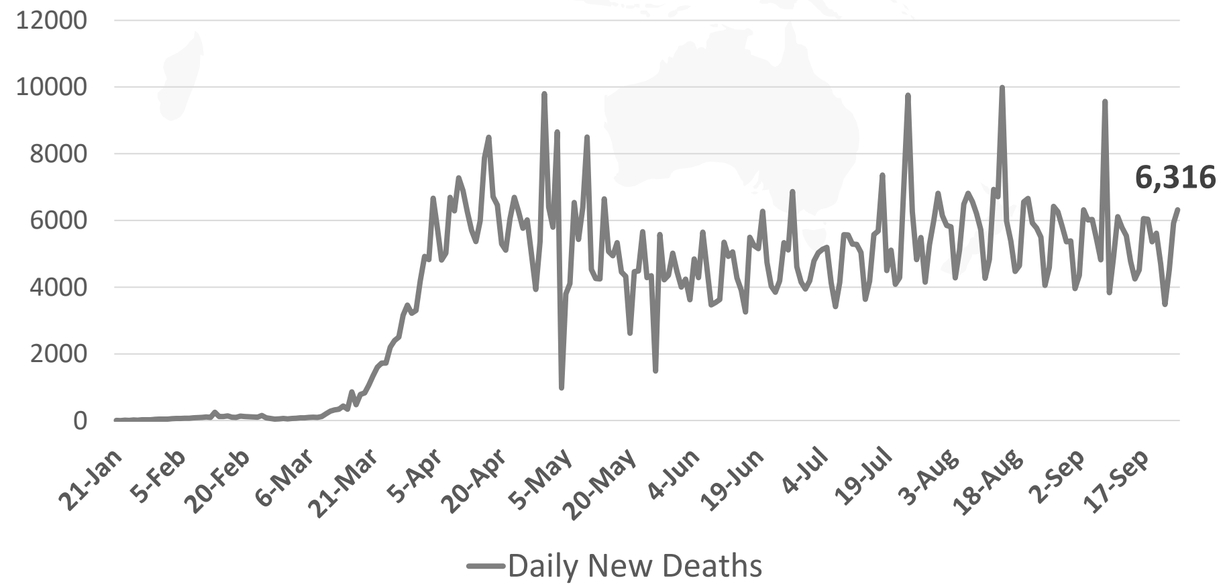


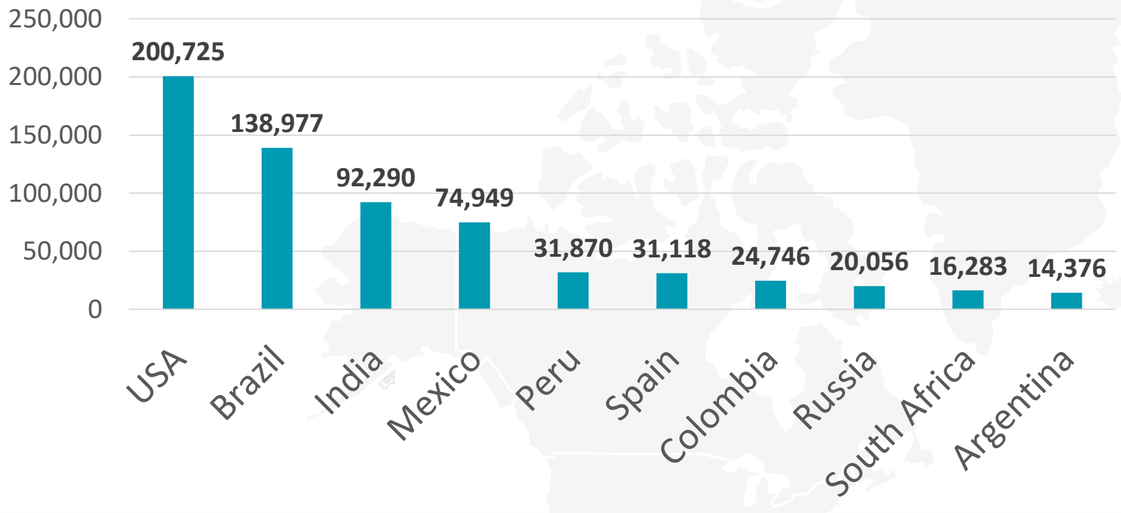
Figure 4: Global Daily New Deaths Due to COVID-19 (china and rest of the world)



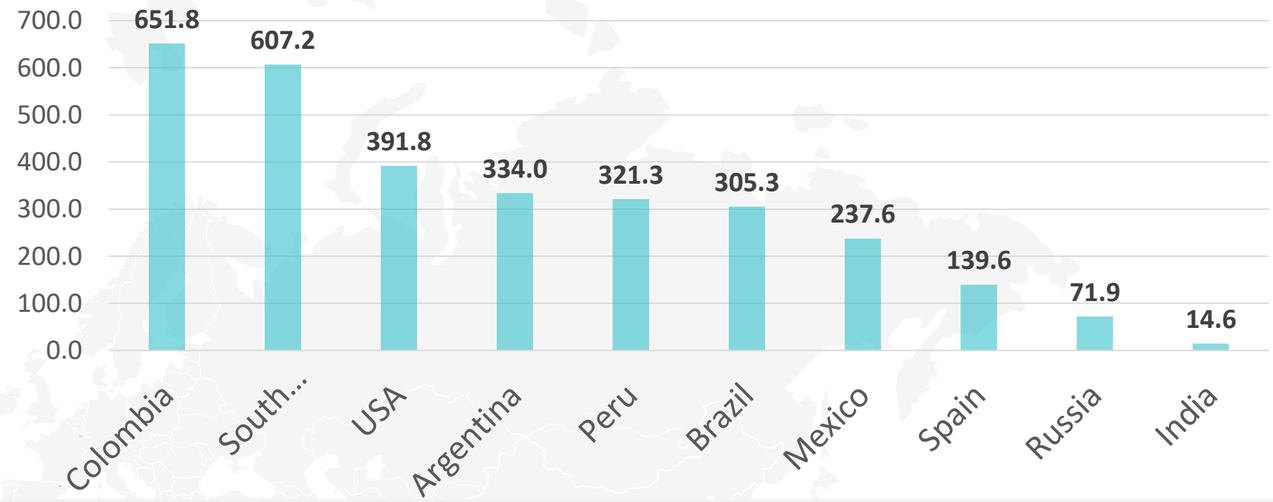
Graphs published by Abu Dhabi Public Health Center 2020 | Data resources: John Hopkins, WHO

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

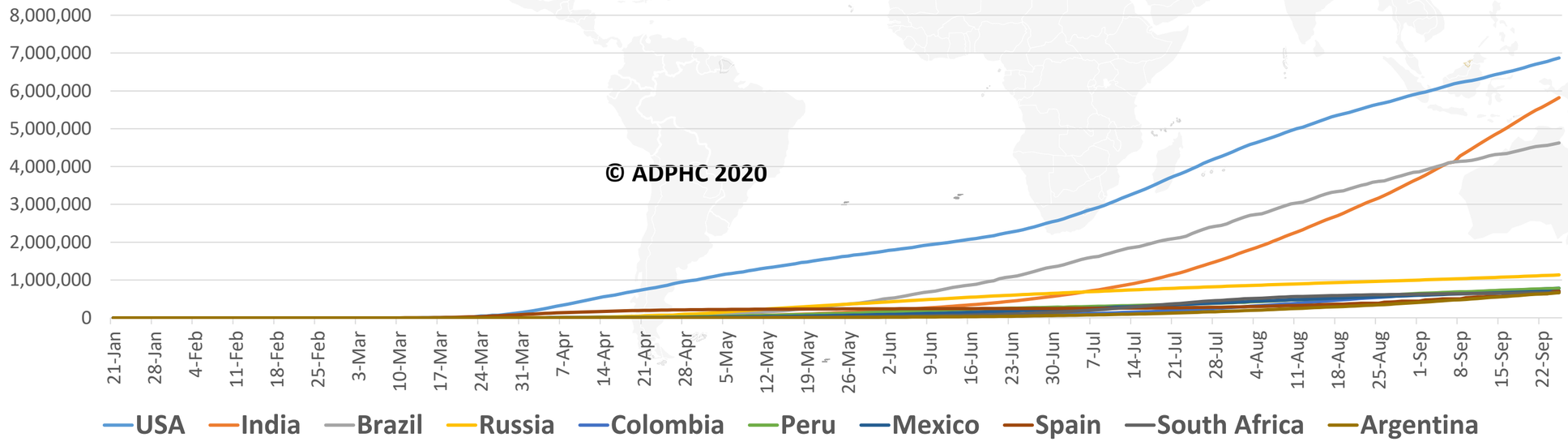
TOTAL DEATHS



DEATHS PER MILLION



TOTAL INFECTED CASES



USA	6,868,828
India	5,818,570
Brazil	4,624,885
Russia	1,136,048
Colombia	784,268
Peru	782,695
Mexico	710,049
Spain	704,209
South Africa	667,049
Argentina	664,799

Graphs published by Abu Dhabi Public Health Center 2020 | Data resources: WHO

EPIDEMIOLOGY

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

Daily Tests

94,309.4 Average Tests

953.5 per 100k population

0.9% Positive Rate

Daily Cases

872.4 Average Cases

8.8 per 100k population

Daily Recovered

861.3 Average Recovered

8.7 per 100k population

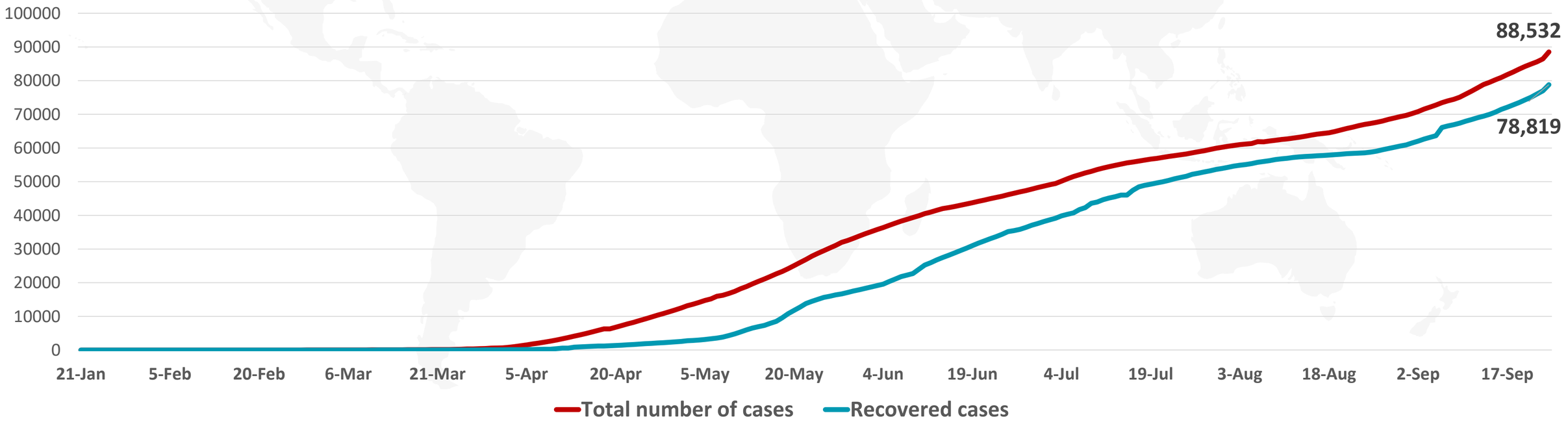
Daily Deaths

0.9 Average Deaths

0.0 per 100k population

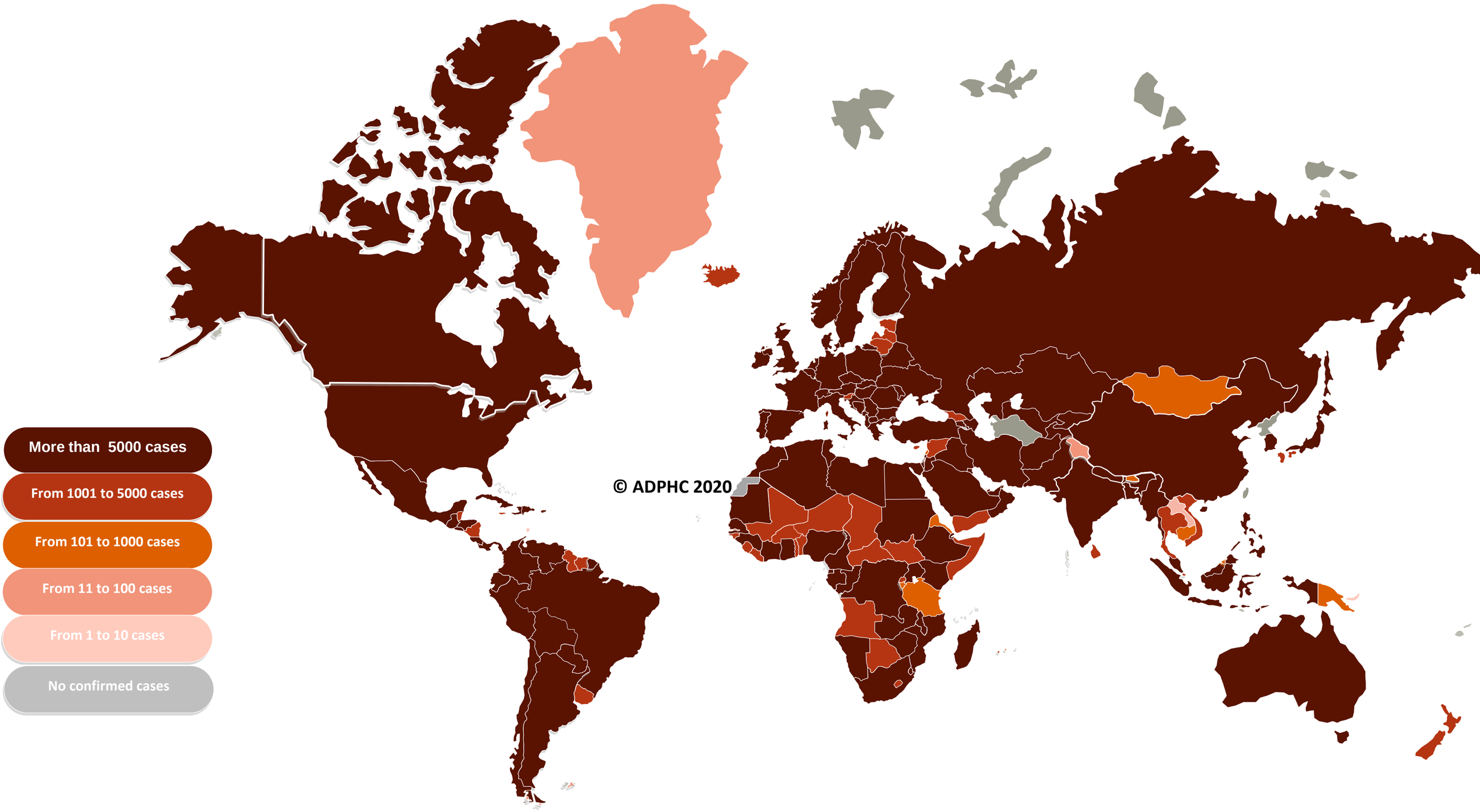
0.1% Case Fatality Rate

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



Graphs published by Abu Dhabi Public Health Center 2020 | Data resources: FCSA, WHO, John Hopkins

Figure 7A : Global Distribution of COVID-19 Cases



Graphs published by Abu Dhabi Public Health Center 2020 | Data resources: WHO

EPIDEMIOLOGY

Date: 25 SEPT 2020

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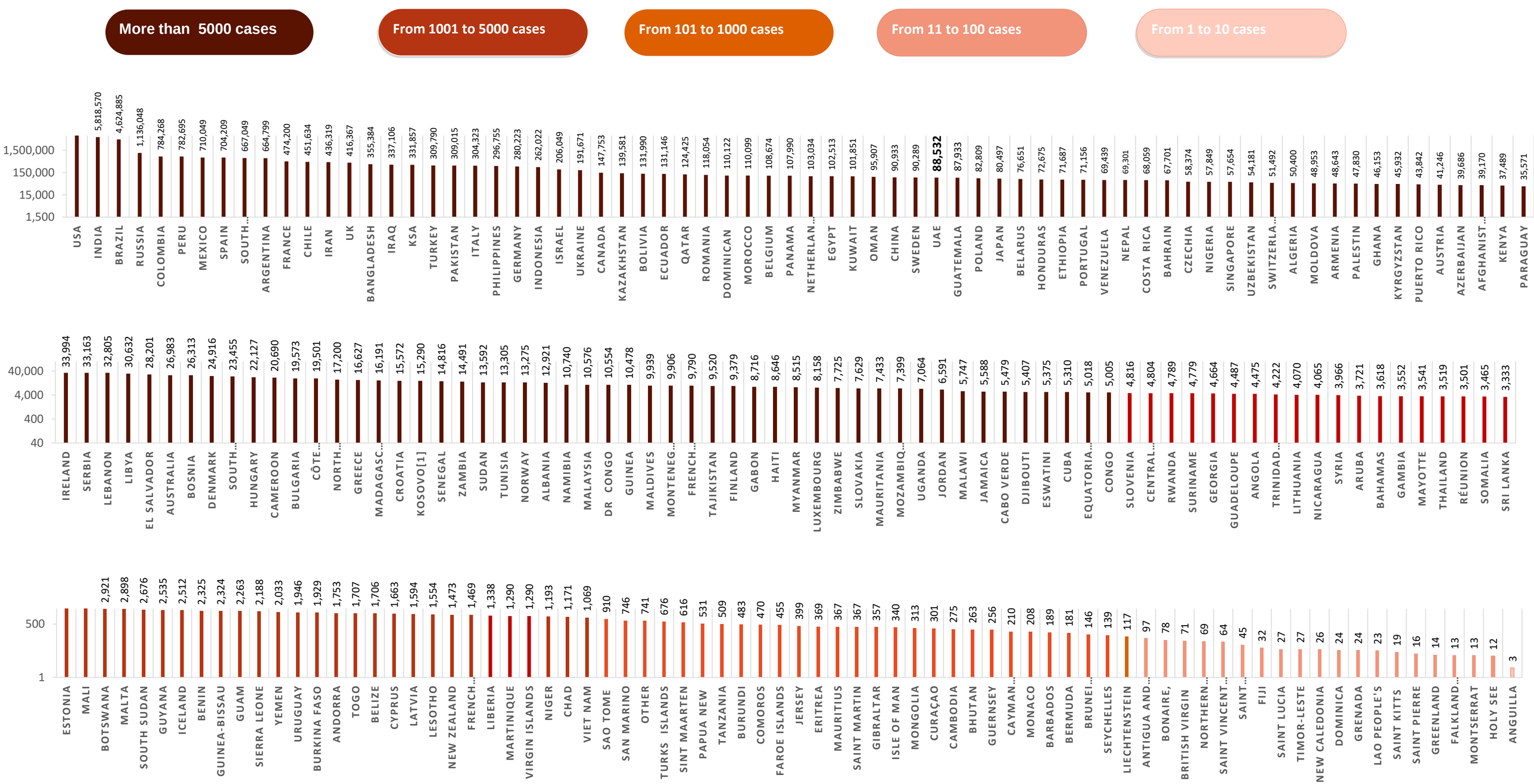
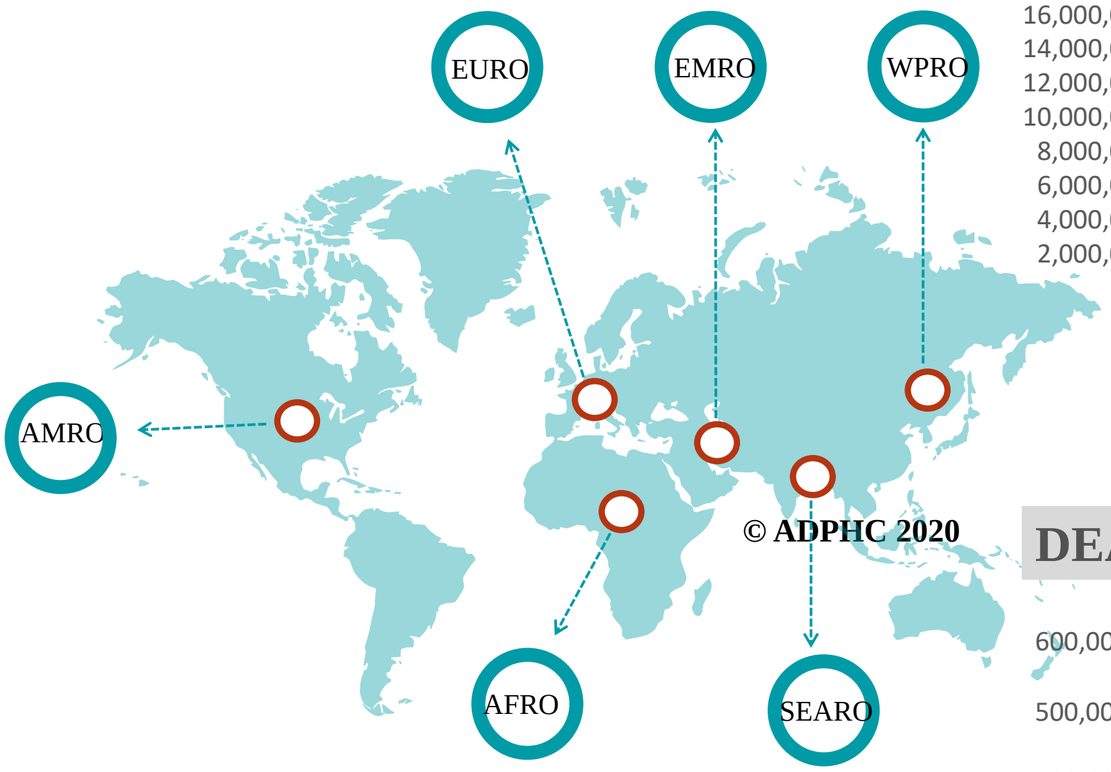
Figure 7B: Bar Chart Illustrates the Global Distribution of COVID19 Cases



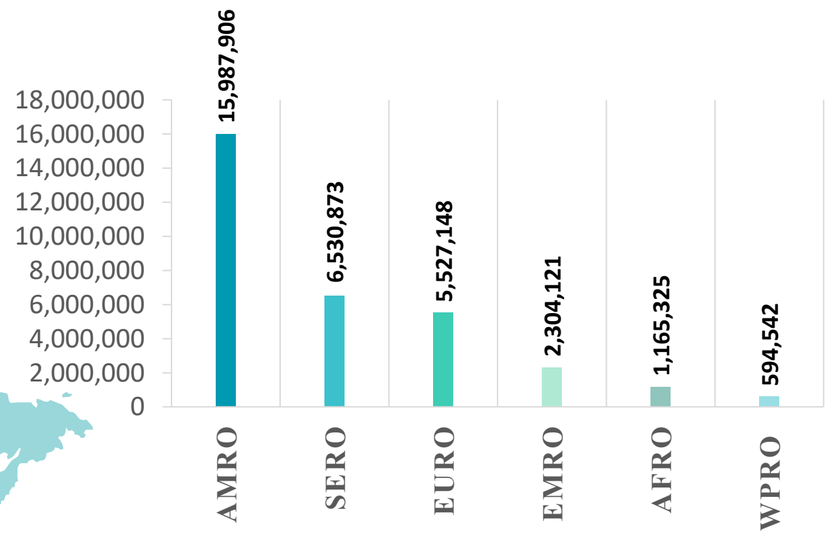
Other*:includes cases and deaths reported under the international conveyance(Diamond Princess)

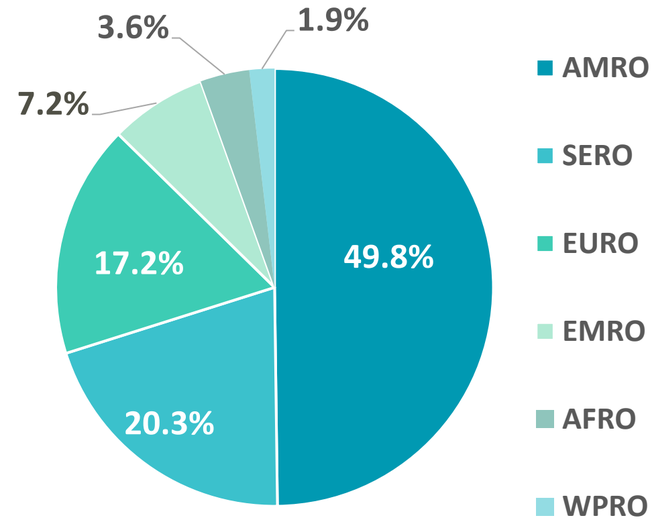
Graphs published by Abu Dhabi Public Health Center 2020 | Data resources: WHO

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

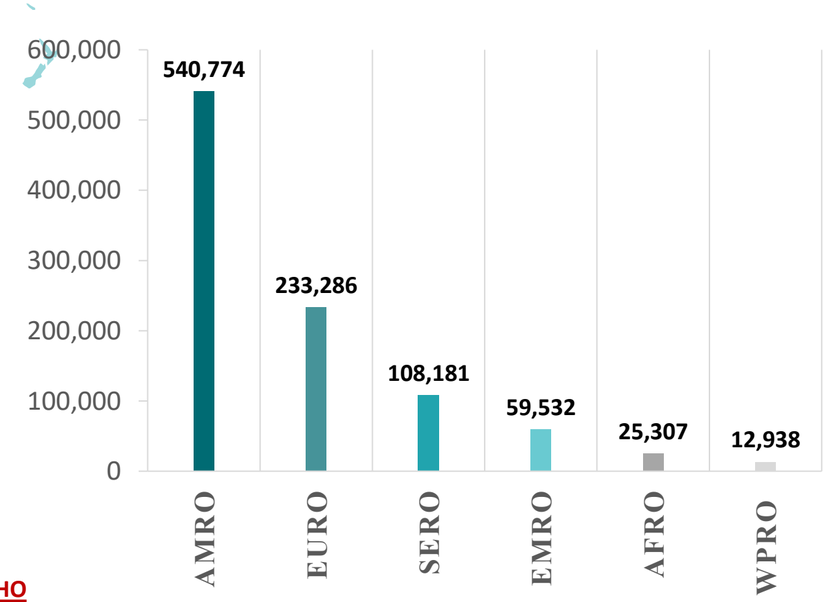


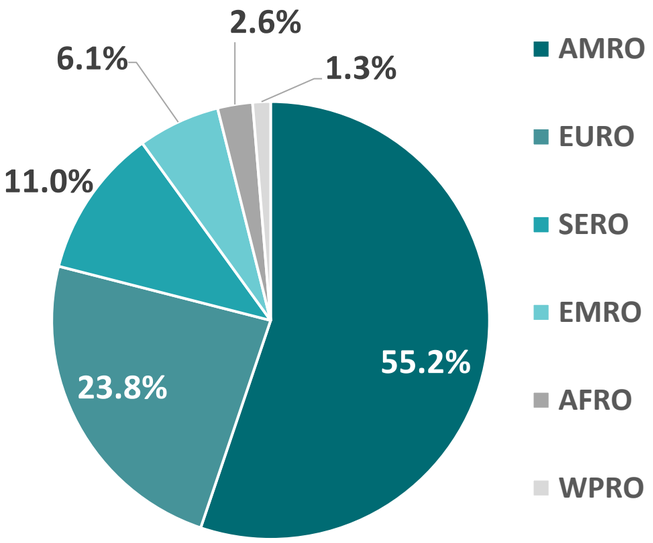
INFECTED





DEATHS





Graphs published by Abu Dhabi Public Health Center 2020 | Data resources: WHO

EPIDEMIOLOGY

Date: 25 SEPT 2020

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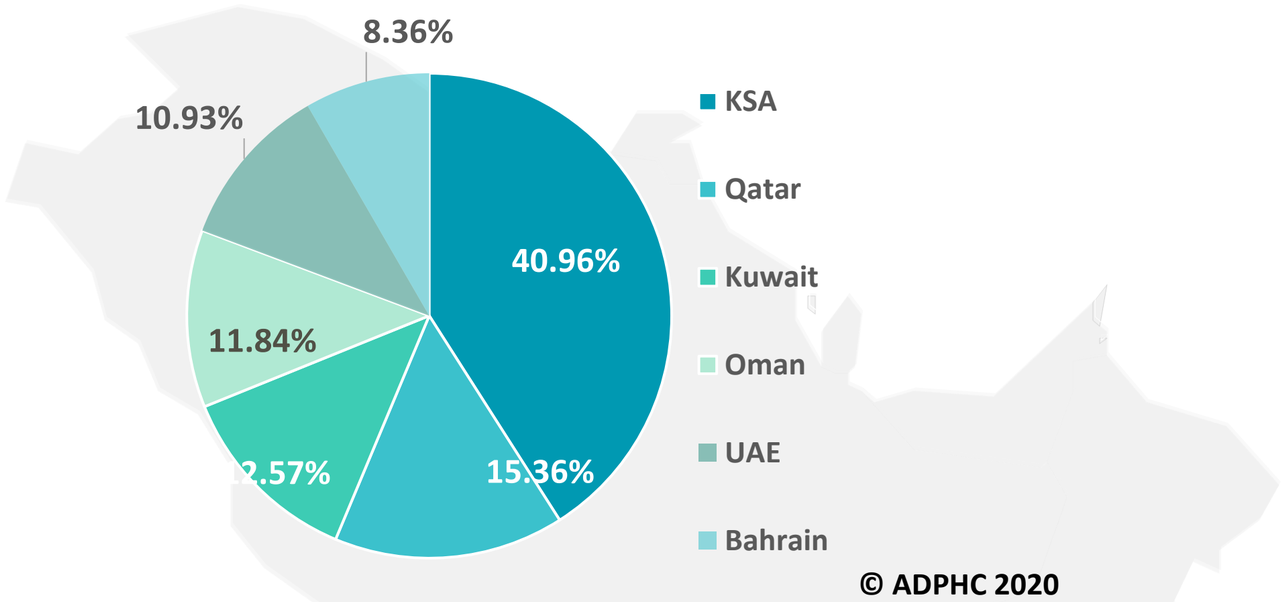
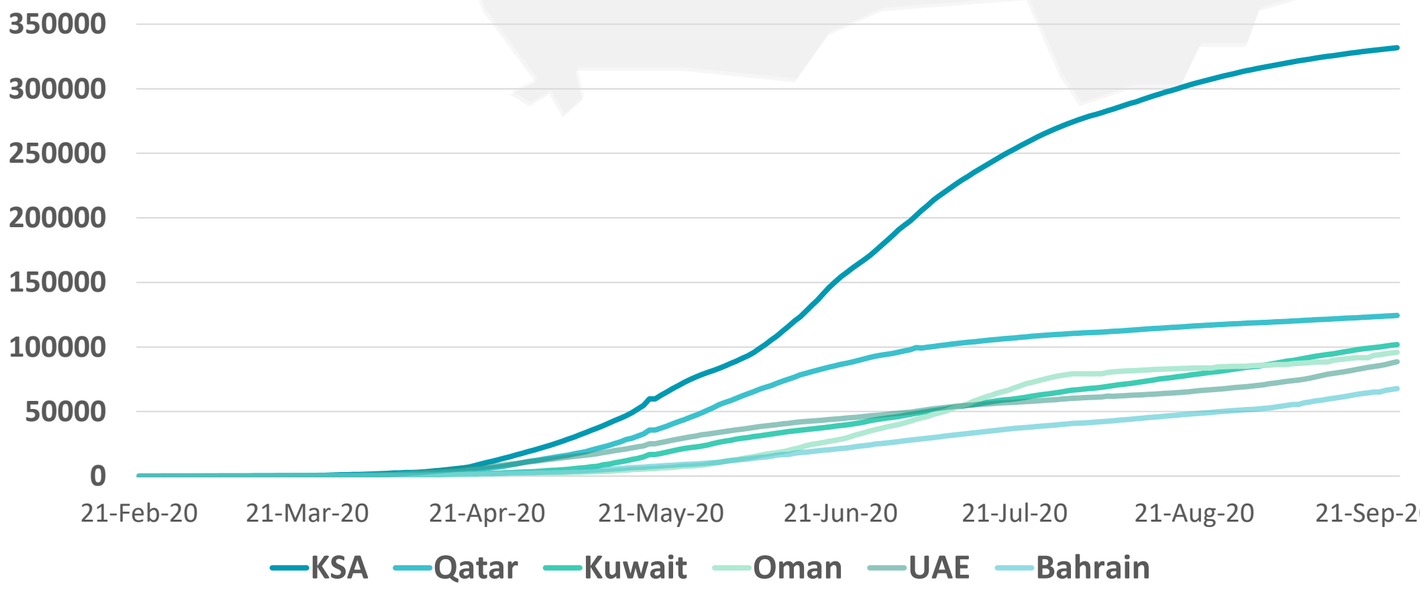
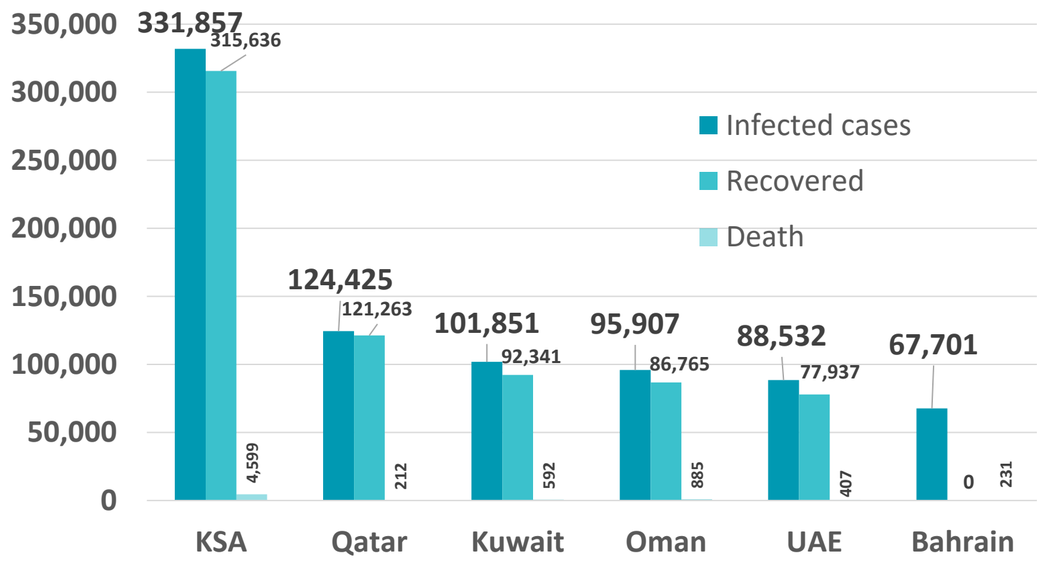
Figure 9: Comparative Analysis of the Distribution of COVID-19 Cases in GCC Countries

TOTAL NUMBER OF INFECTED CASES

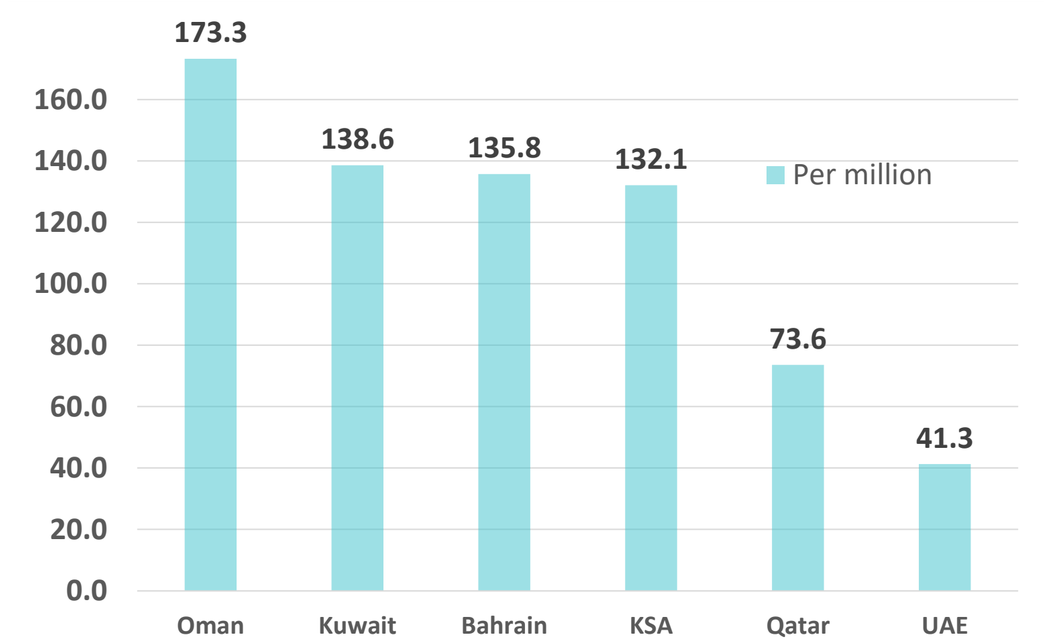




TOTAL NUMBER OF INFECTED, RECOVERED AND DEATHS



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

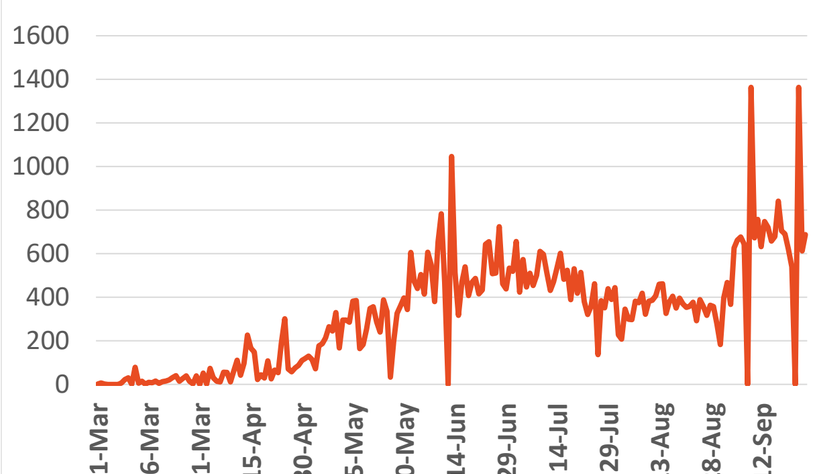
UAE

Source : National Emergency Crisis and Disaster Management Authority

KSA

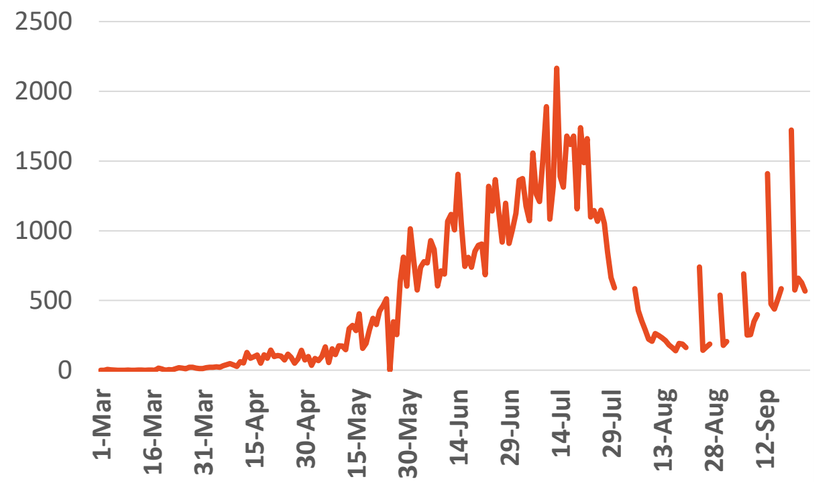
Source : KSA ministry of health

Bahrain



Source :WHO

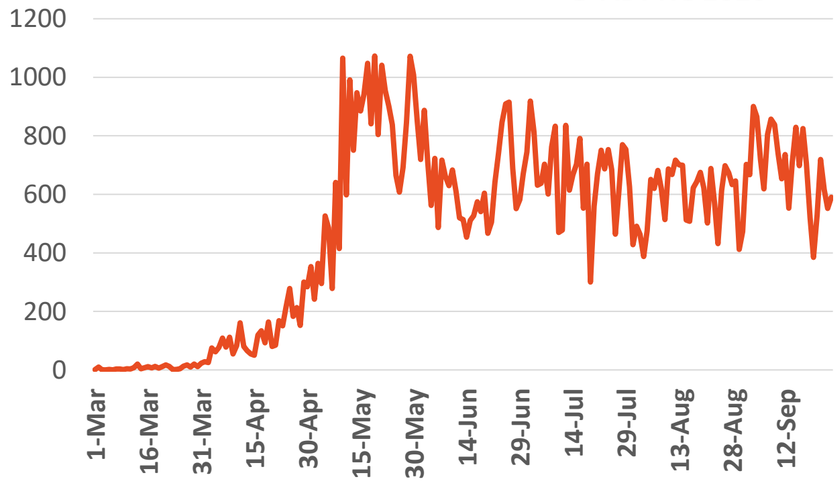
Oman



Source :Oman ministry of health

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

Kuwait



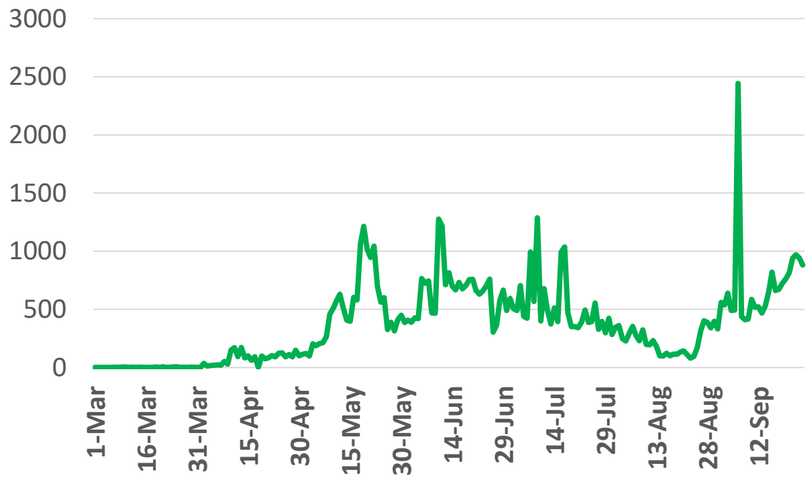
Source : Kuwait ministry of health

Qatar

Source : Qatar ministry of health

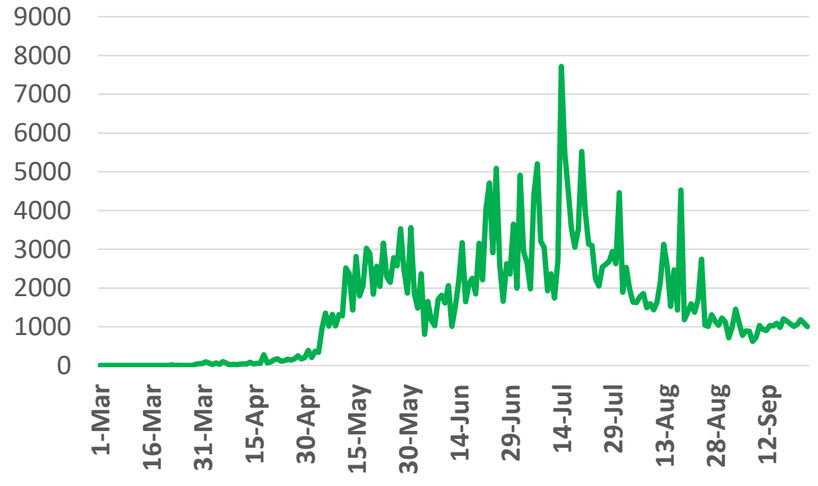
Figure 11: Comparative Analysis of the Distribution of COVID-19 Newly Recovered Cases in GCC Countries

UAE



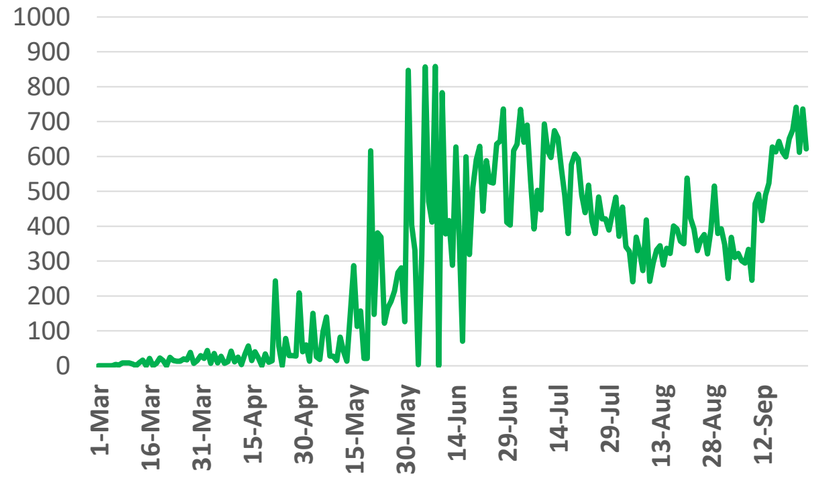
Source : National Emergency Crisis and Disaster Management Authority

KSA



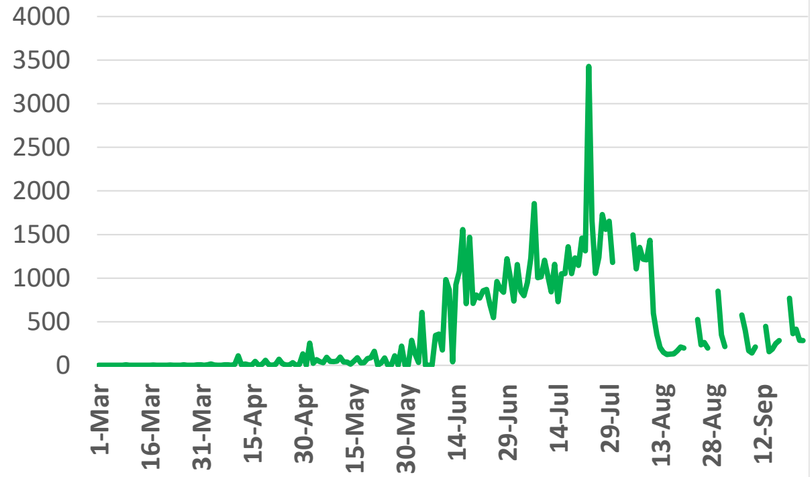
Source : KSA ministry of health

Bahrain



Source : Bahrain ministry of health

Oman



Source :Oman ministry of health

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

Kuwait

Source : Kuwait ministry of health

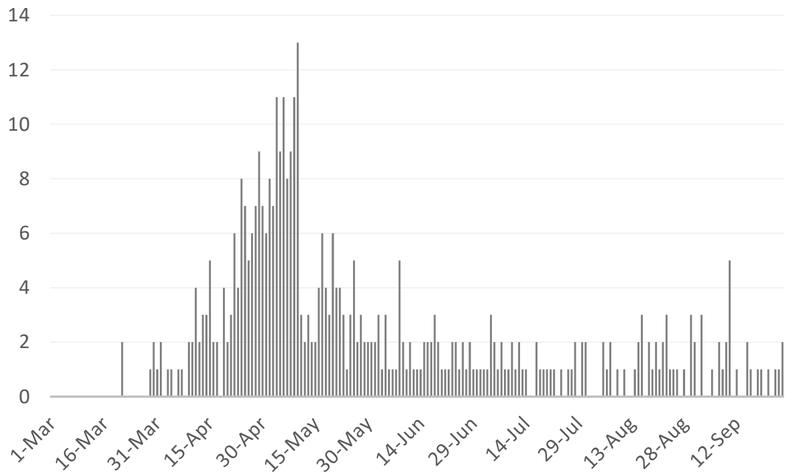
Qatar

Source : Qatar ministry of health

*No announced statistic data on weekends and official holidays.

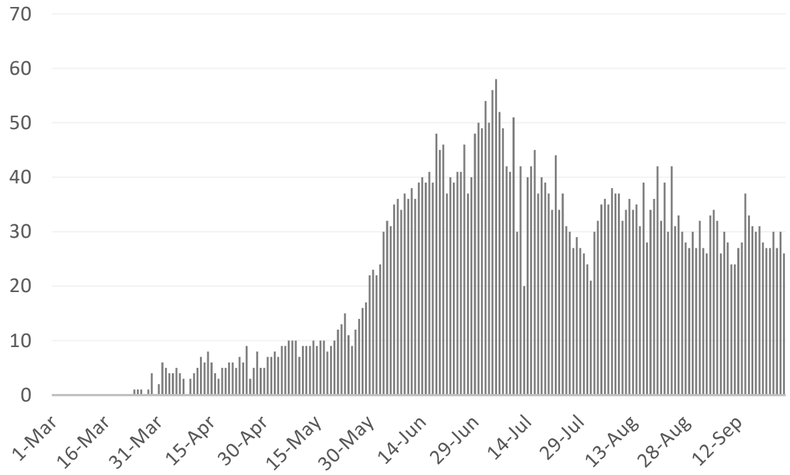
Figure 12: Comparative Analysis of the Distribution of COVID-19 New Death Cases in GCC Countries

UAE



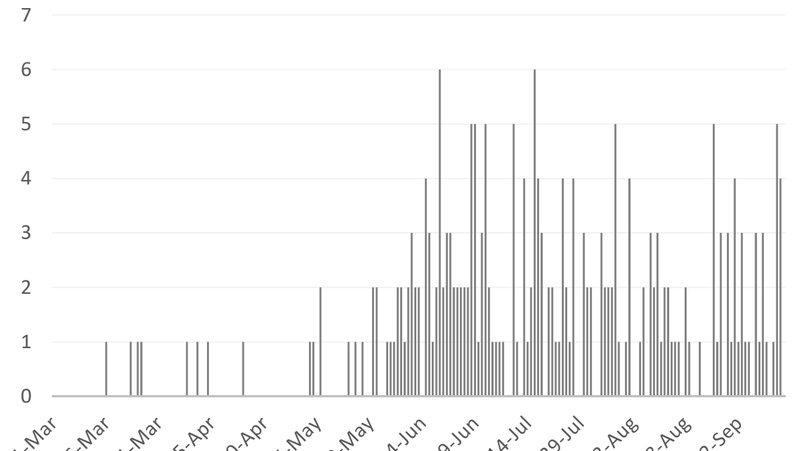
Source : National Emergency Crisis and Disaster Management Authority

KSA



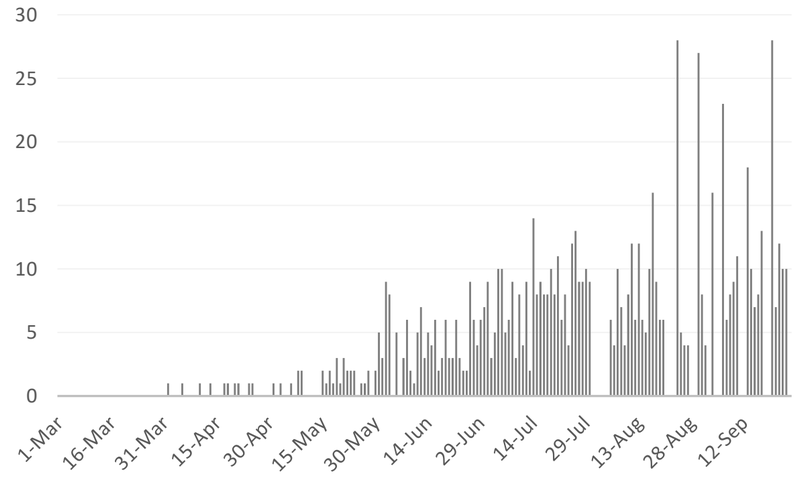
Source : KSA ministry of health

Bahrain



Source :WHO

Oman

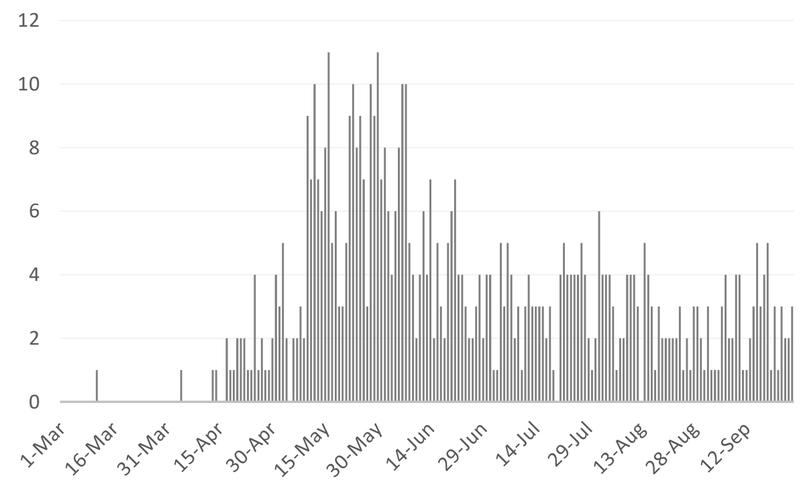


Source :Oman ministry of health

*No announced statistic data from 31 July to 4 August, 21,23,28,30 August, 2, 4، 5,11,12,18 & 19 September

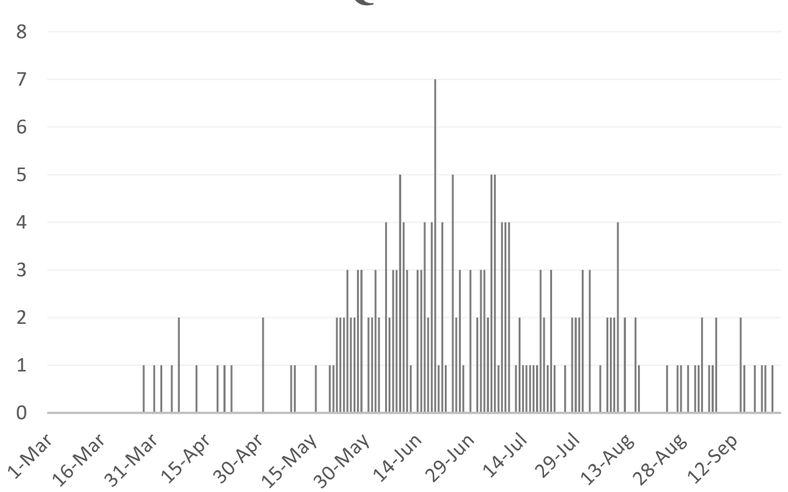
*No announced statistic data on weekends and official holidays.

Kuwait



Source : Kuwait ministry of health

Qatar



Source : Qatar ministry of health

CLINICAL FEATURE

Article 1

Published

Case 29-2020: A 66-Year-Old Man with Fever and Shortness of Breath after Liver Transplantation

September 17, 2020 NEJM

- During COVID-19 pandemic, a 66-year-old patient with liver transplantation, was admitted to the Massachusetts General Hospital, the USA due to fever, cough, and mild dyspnea. A nasopharyngeal swab, for nucleic acid testing for SARS-CoV-2 RNA, was collected. The patient was diagnosed with COVID-19. Gram staining of sputum showed rare polymorphonuclear leukocytes, and few mixed gram-positive and gram-negative organisms with no specific type predominating. Sputum and blood samples were collected for culture.

- On admission day, chest radiography showed low lung volumes with patchy, confluent airspace opacities in the mid to lower lungs that were more prominent on the left side, with peripheral predominance. Radiographically significant pleural effusions were not found. On hospital day 5, chest radiography showed low lung volumes with increased diffuse multifocal airspace opacities.

- The patient had several risk factors for severe COVID-19 such as diabetes, obesity, chronic renal insufficiency, and immunosuppression. Initial presentations of COVID-19 vary in both normal and immunocompromised hosts. The heterogeneous progression of SARS-CoV-2 infection in the context of solid organ transplantation emphasizes the role of the immune response as a driver of clinical progression.

- After prolonged intensive care management that included mechanical ventilator, that was complicated by Pseudomonas Aeruginosa ventilator-associated pneumonia, the patient's trachea, was extubated successfully on hospital day 24. The patient had elevated results of liver function tests on day 26. The liver function test abnormalities normalized after an increased dose of tacrolimus and with the administration of prednisone

Article 2

Published

Occupational Safety and Health Administration (OSHA) and Worker Safety During the COVID-19 Pandemic

September 16, 2020 JAMA

- Every employee has the right to a safe workplace. In the United States (US), the mission of Occupational Safety and Health Administration (OSHA) is to protect this right by ensuring that employers eliminate hazards that could injure employees or increase their risk of illness. Until businesses can be confident that employees, service personnel, and customers entering workplaces are not shedding virus, they must apply a series of preventive measures.

- Every workplace requires a COVID-19 prevention plan such as avoid crowding; wearing musk; enhanced ventilation; hand sanitation and adequate washing facilities; and disinfection of potentially contaminated surfaces. Screening should be conducted to identify employees with symptoms of COVID-19 or who have had close contact with others who are infected.

- OSHA does not currently have the tools required to address workplace-related risks of exposure and infection with SARS-CoV-2. The action the federal government could take is for OSHA to issue an Emergency Temporary Standard (ETS) that would require every employer to develop and implement an infection control plan.

- Several states in the US have taken actions to help ensure the protection of employees. For example, Virginia has issued an ETS and Oregon is developing one. Other states such as California, Illinois, Kentucky etc. have taken steps to protect employees, although enforcement will be more challenging in states without their own plan.

- The nature of the COVID-19 pandemic requires strong, and immediate action including by government agencies, unions, employers, and employees. Worker safety needs to become a high priority for the federal government, and the White House should create a comprehensive plan that focuses on this issue.

THANK YOU

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