مركز أبوظبي
للصحة العامة
ABU DHABI PUBLIC
HEALTH CENTRE

SCIENTIFIC RESEARCH MONITORING ON COVID-19

25 SEPTEMBER 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

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SCIENTIFIC RESEARCH MONITORING ON COVID-19 (ISSUE 236)

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

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RESEARCH UPDATES

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Epidemiology

Change in Donor Characteristics and Antibodies to SARS-CoV-2 in Donated Blood in the US, June-August 2020

Public Health Response

Flipping the Script for Coronavirus Disease 2019 Contact Tracing

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EPIDEMIOLOGY

FROM 21 JAN TO 24 SEPT 2020

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

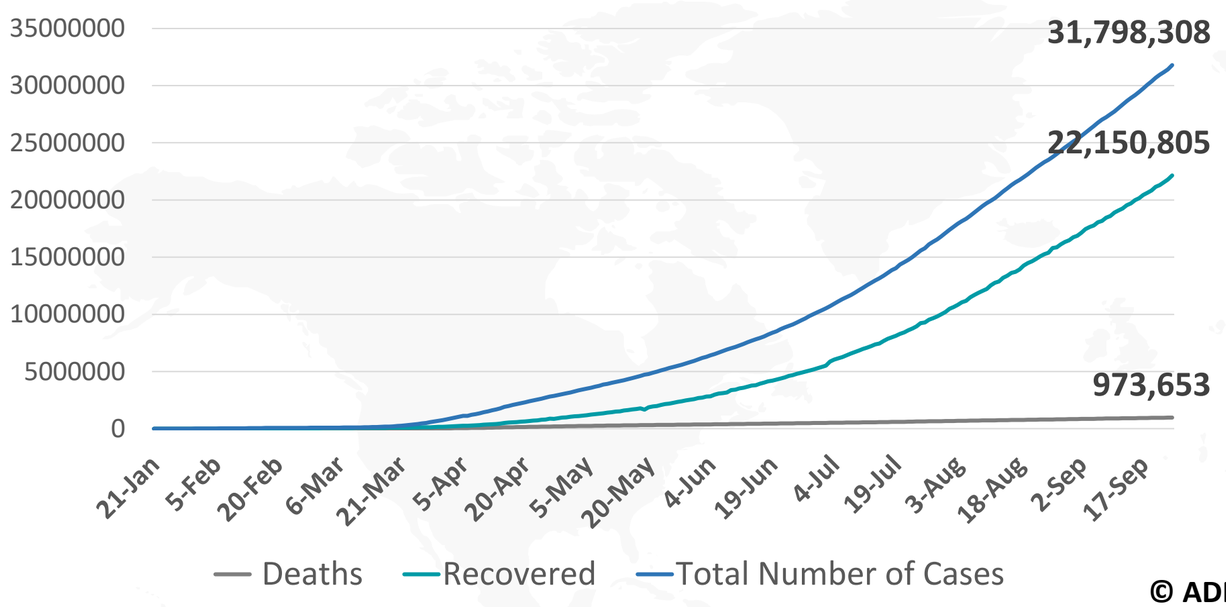

Figure 3: Total Number of Death Due to COVID-19 (china and result of the world)

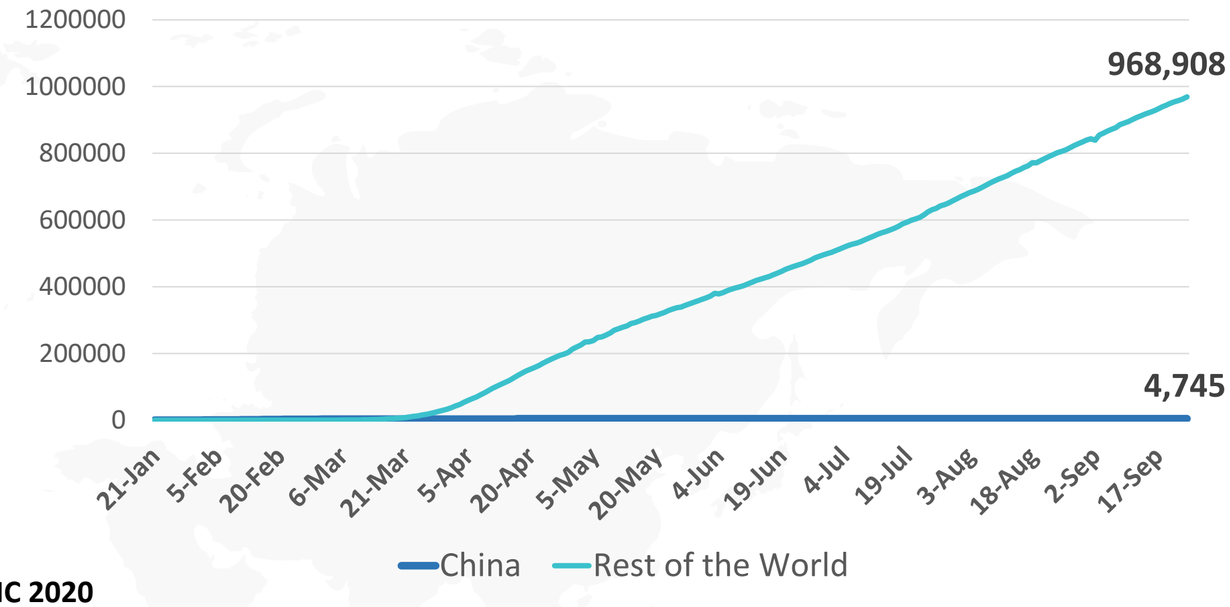

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Figure 2: Daily New Infected COVID-19 Cases (China and rest of the world)

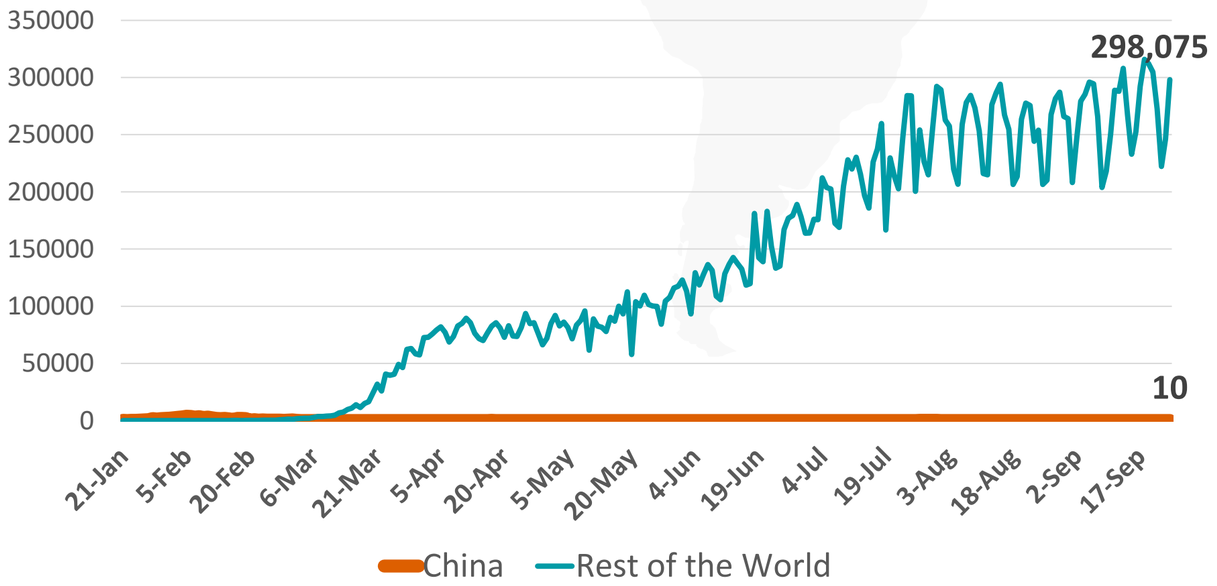

Figure 4: Global Daily New Deaths Due to COVID-19 (china and rest of the world)

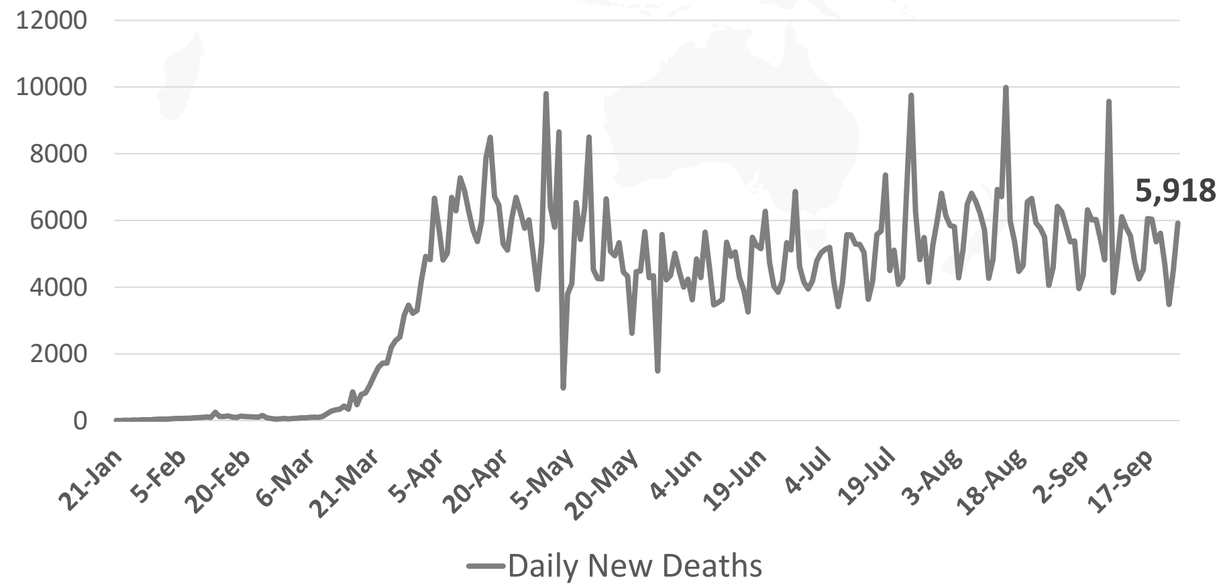

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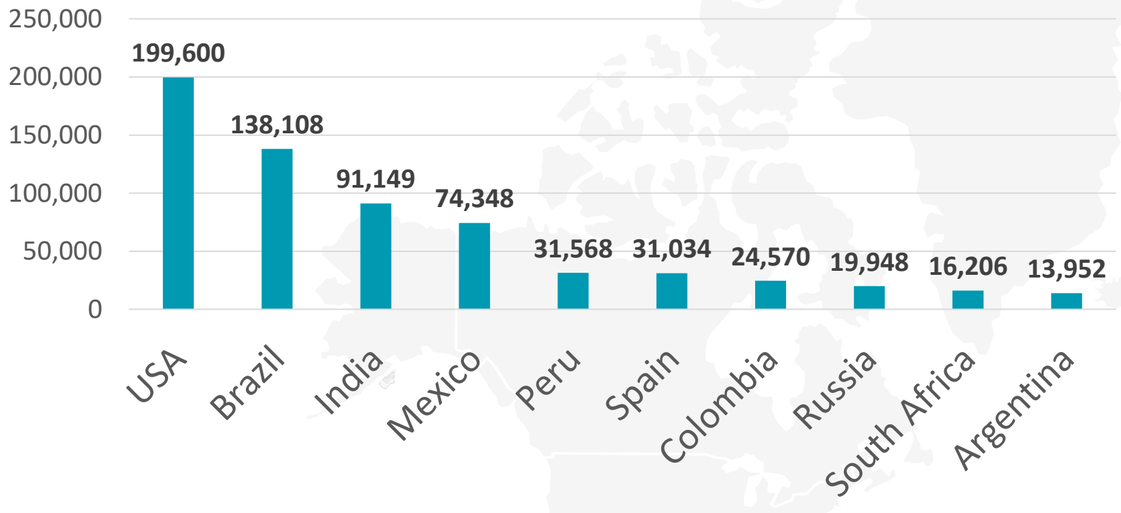
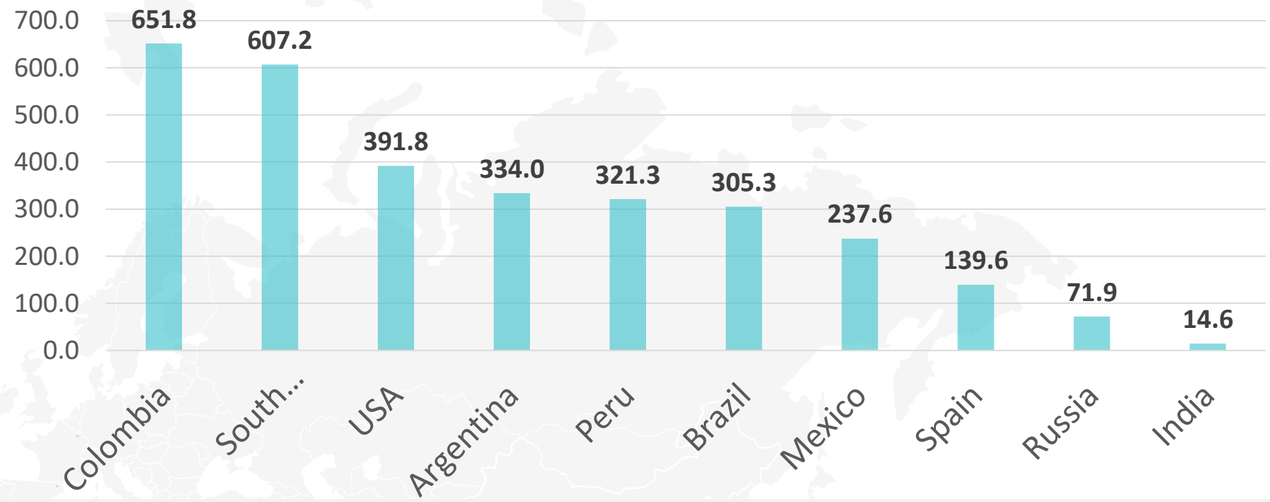
Figure 5: Top 10 Countries in the Total Number of Cases Due to COVID-19

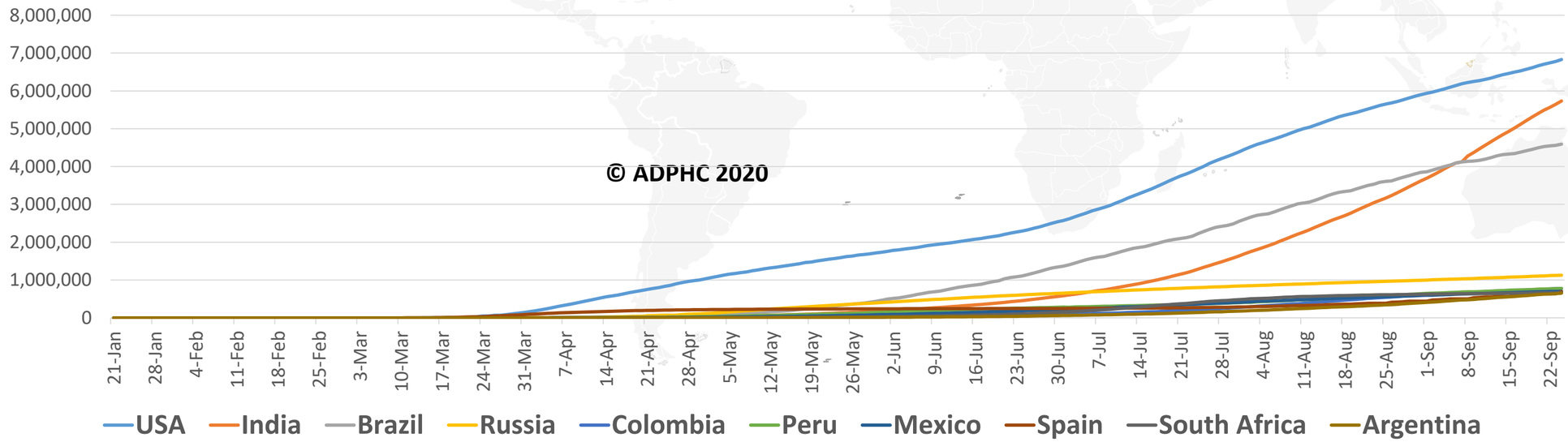
TOTAL DEATHS



DEATHS PER MILLION



TOTAL INFECTED CASES



USA	6,828,785
India	5,732,518
Brazil	4,591,604
Russia	1,128,836
Colombia	777,537
Peru	776,546
Mexico	705,263
Spain	693,556
South Africa	665,188
Argentina	652,174

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EPIDEMIOLOGY

FROM 21 JAN TO 24 SEPT 2020

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

Daily Tests

95,082.4 Average Tests

961.4 per 100k population

0.9% Positive Rate

Daily Cases

852.0 Average Cases

8.6 per 100k population

Daily Recovered

831.4 Average Recovered

8.4 per 100k population

Daily Deaths

0.7 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

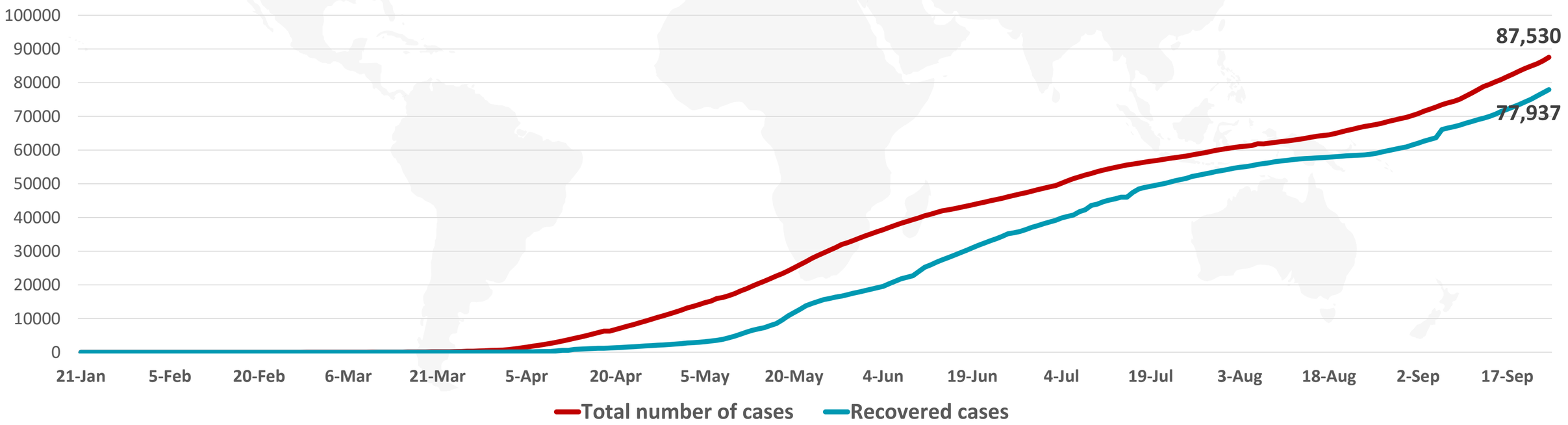

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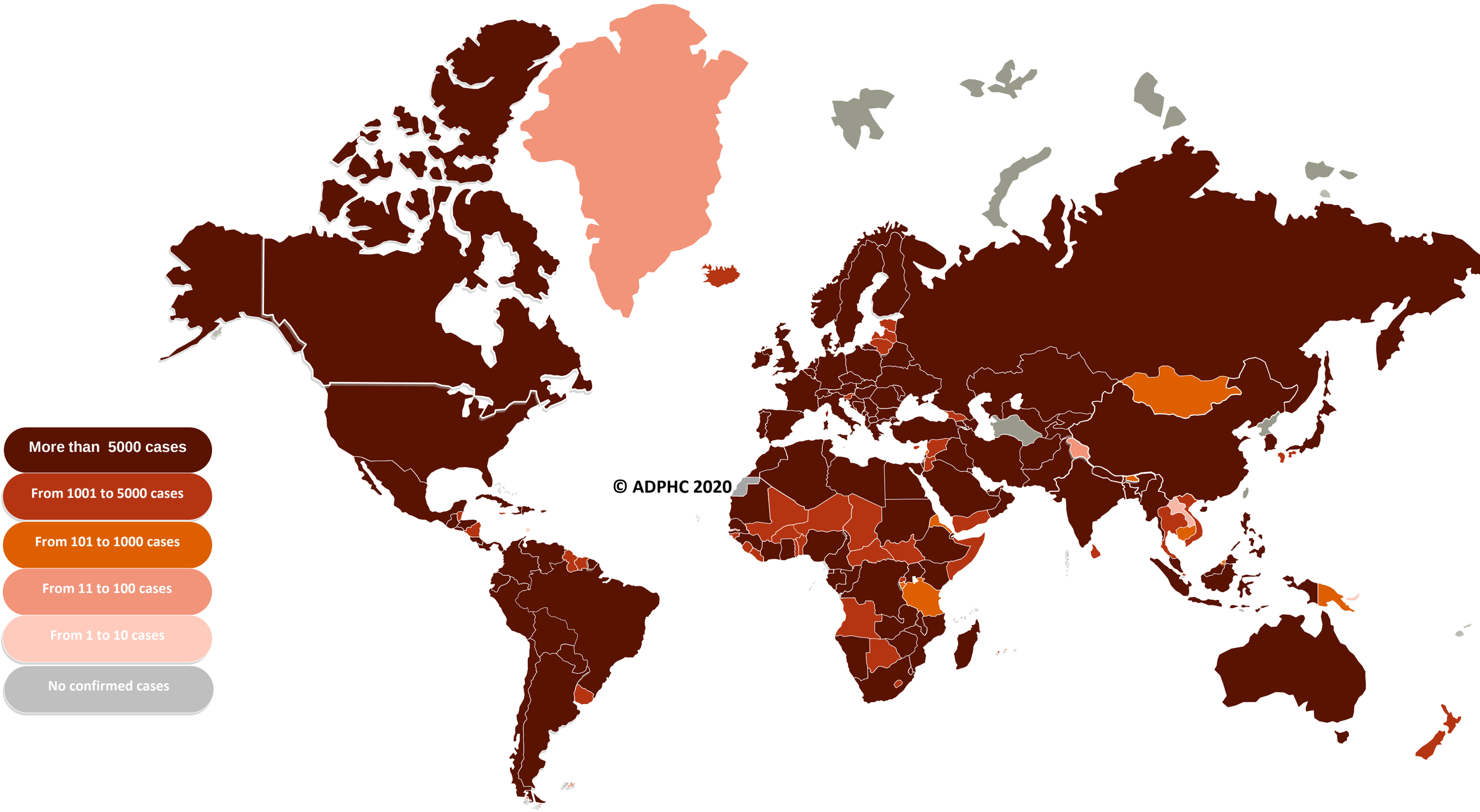
Figure 7A : Global Distribution of COVID-19 Cases



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EPIDEMIOLOGY

Date: 24 SEPT 2020

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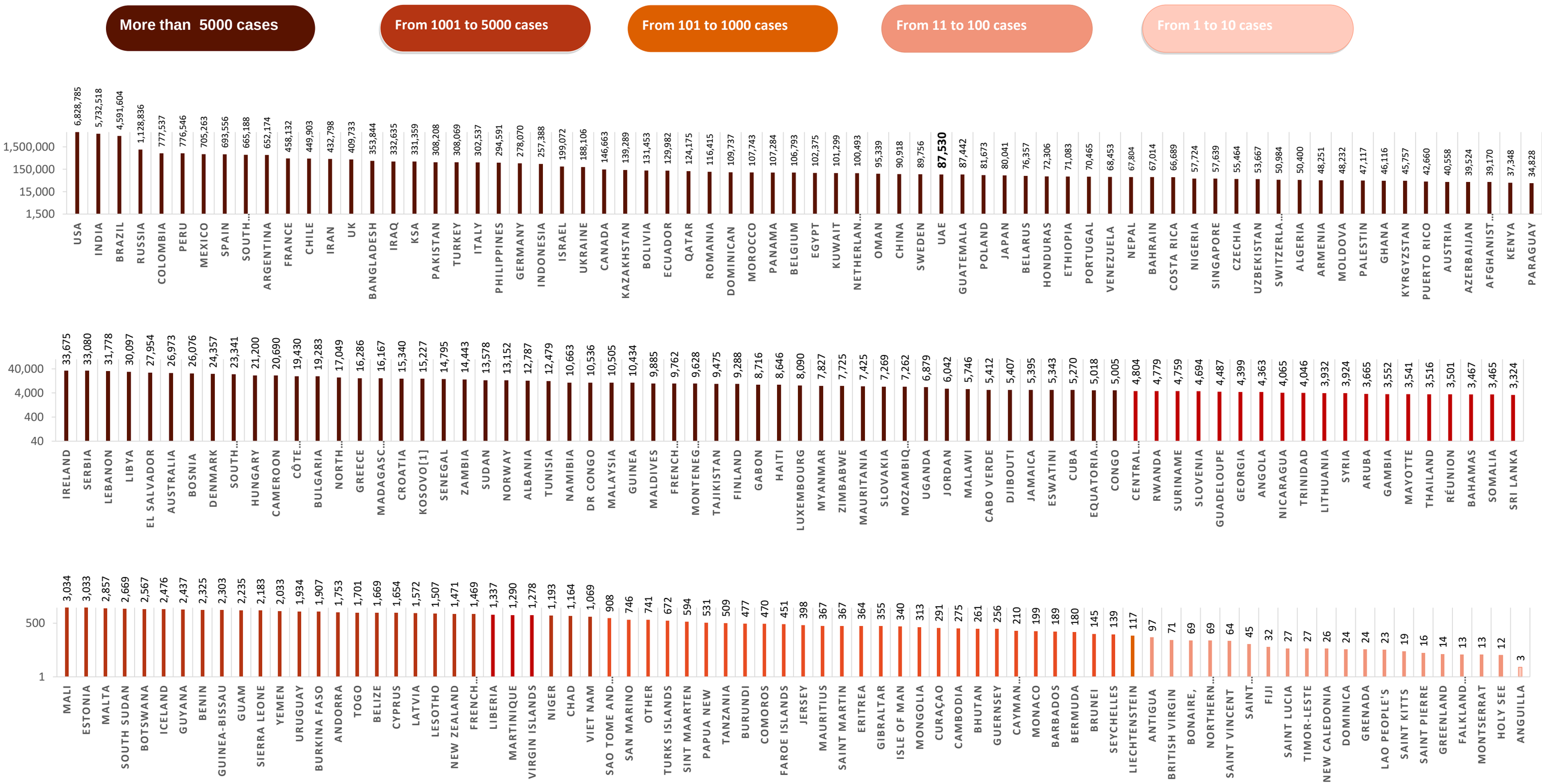
Figure 7B: Bar Chart Illustrates the Global Distribution of COVID19 Cases



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

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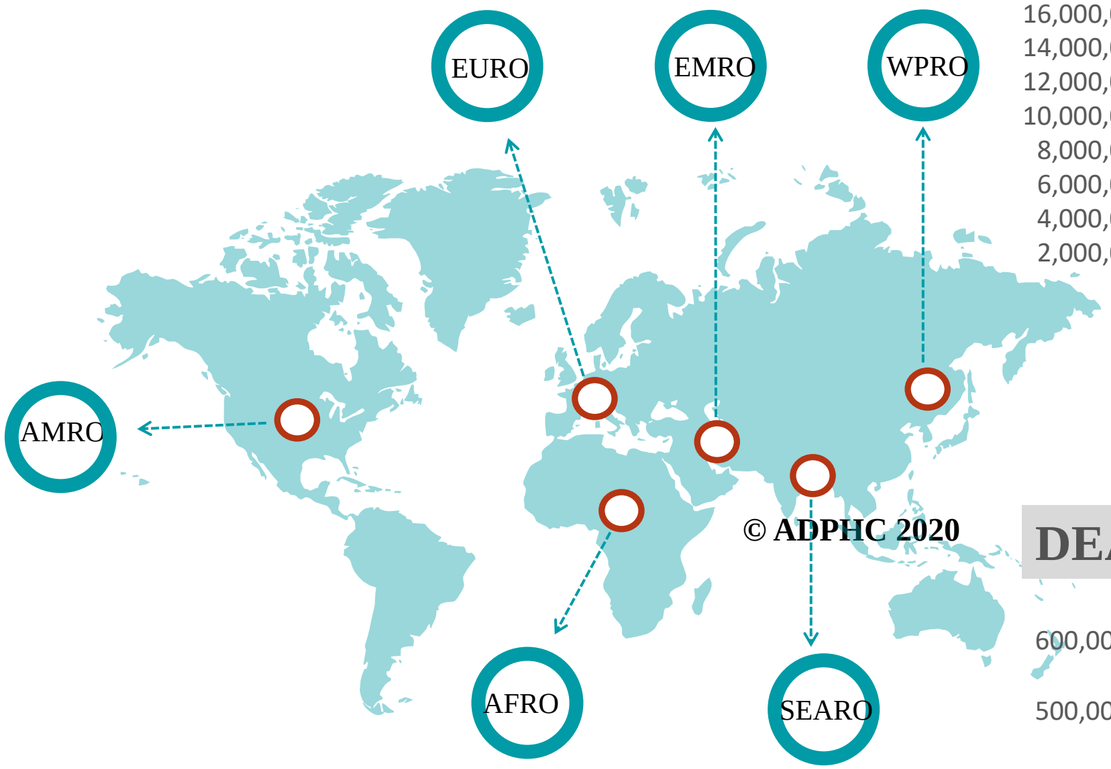
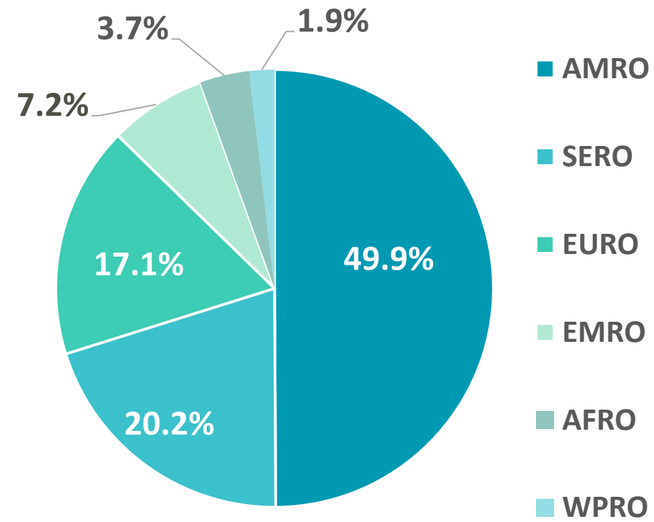
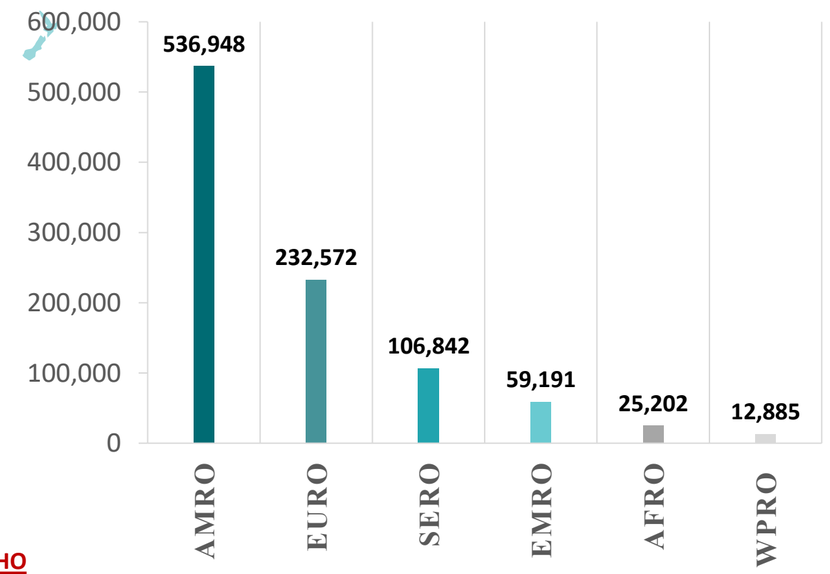
Figure 8: Global Distribution of COVID-19 Cases per Region



INFECTED



DEATHS



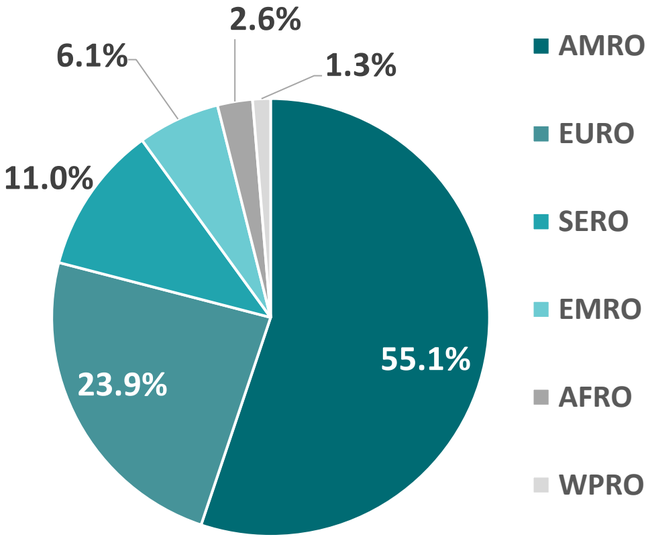


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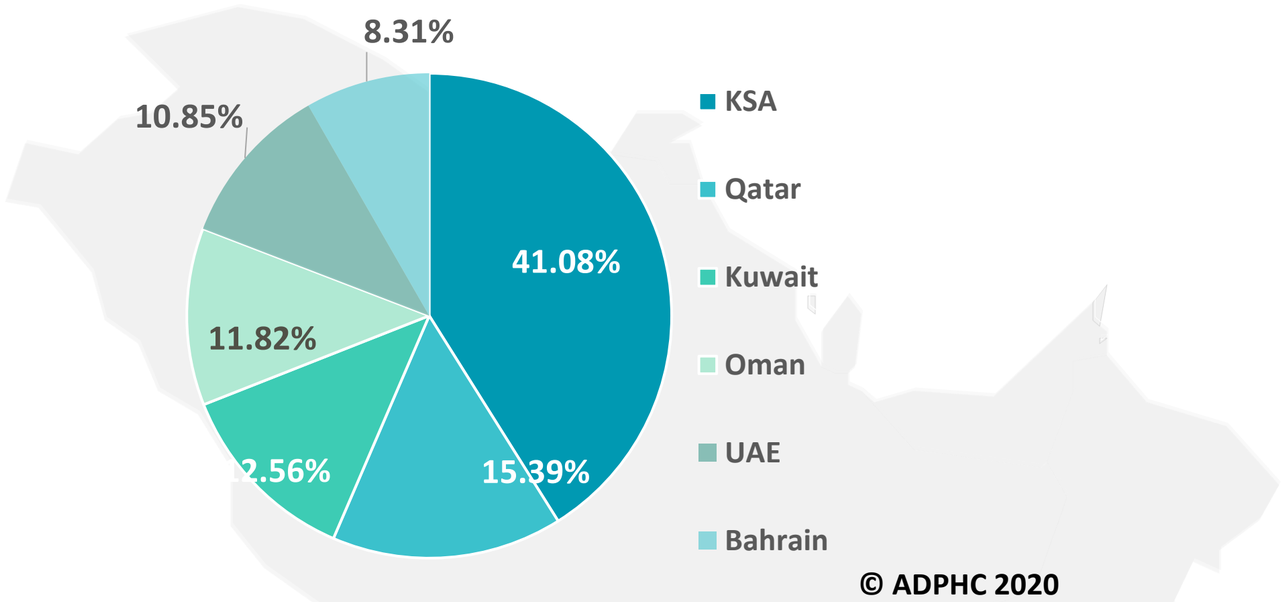
Figure 9: Comparative Analysis of the Distribution of COVID-19 Cases in GCC Countries

TOTAL NUMBER OF INFECTED CASES



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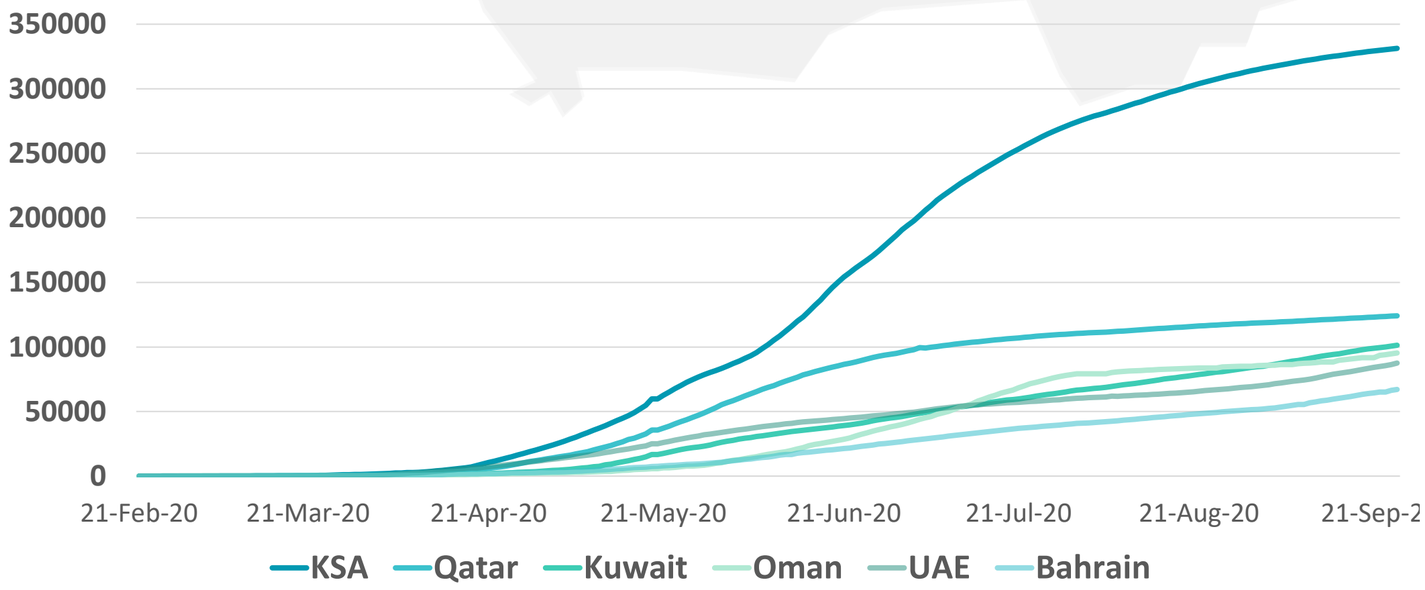
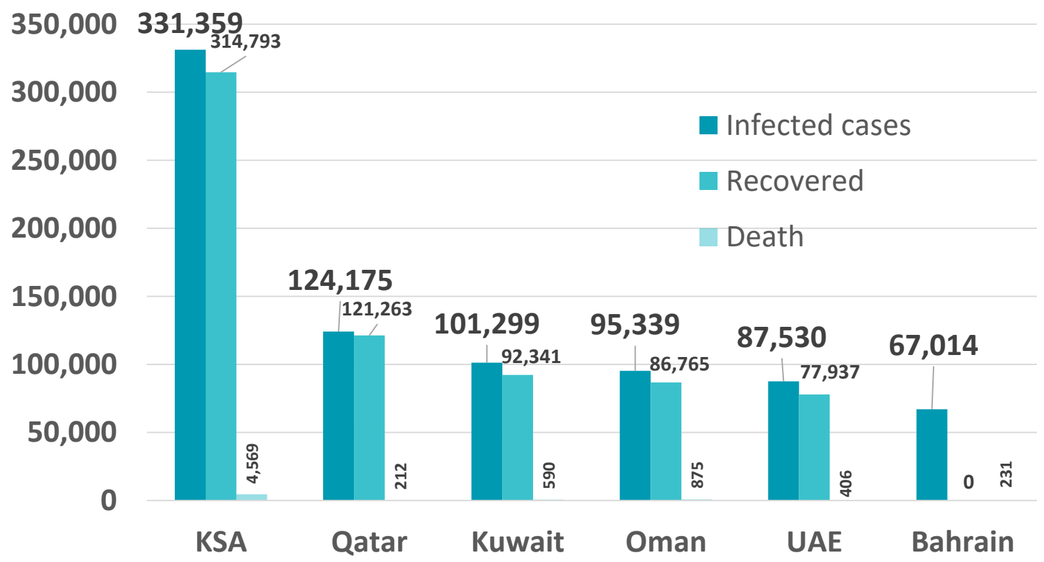


TOTAL NUMBER OF INFECTED, RECOVERED AND DEATHS



DEATHS PER MILLION

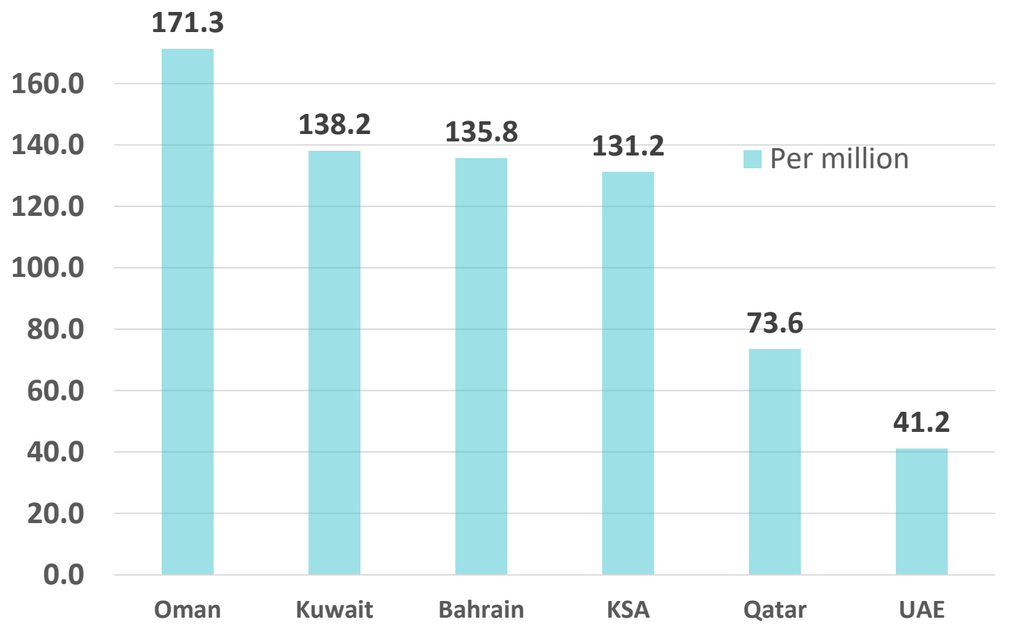


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Figure 10: Comparative Analysis of the Distribution of COVID-19 New Cases in GCC Countries

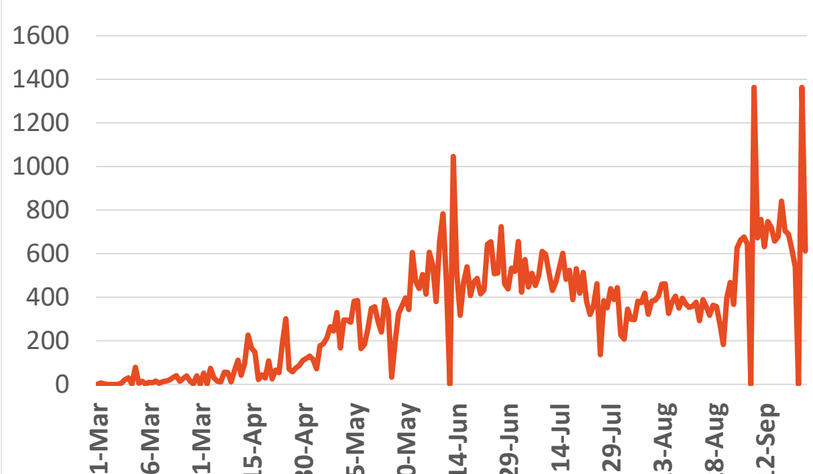
UAE

Source : National Emergency Crisis and Disaster Management Authority

KSA

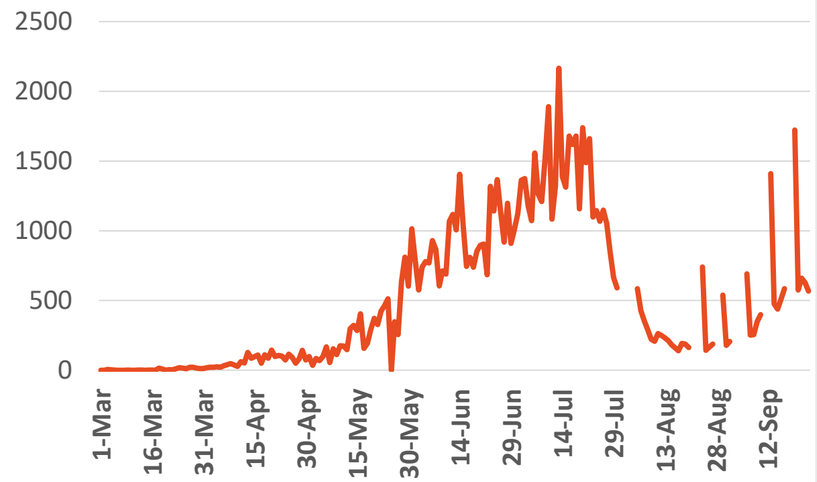
Source : KSA ministry of health

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 September

*No announced statistic data on weekends and official holidays.

Kuwait

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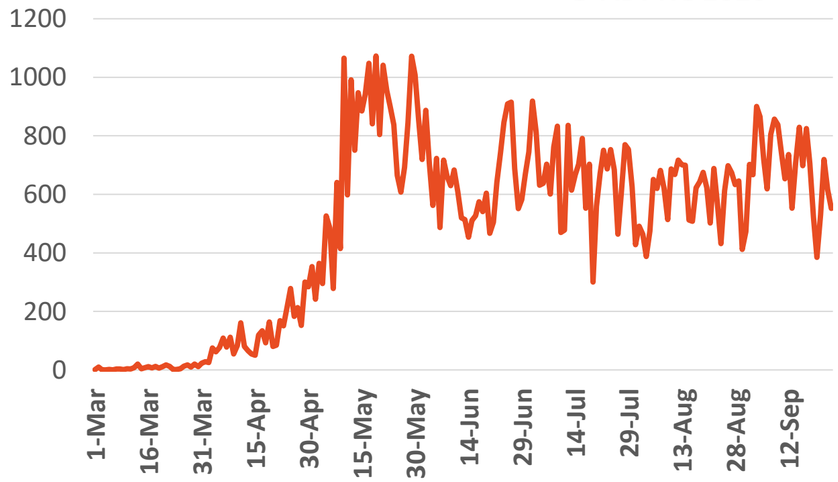
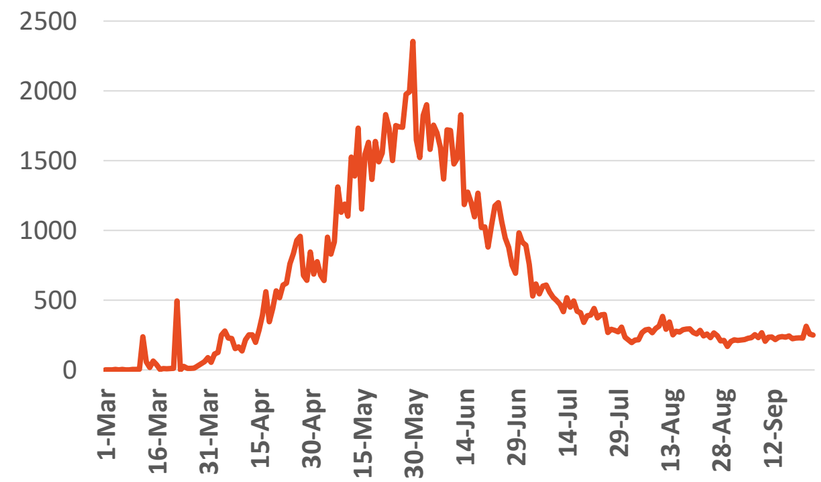


Source : Kuwait ministry of health

Qatar



Source : Qatar ministry of health

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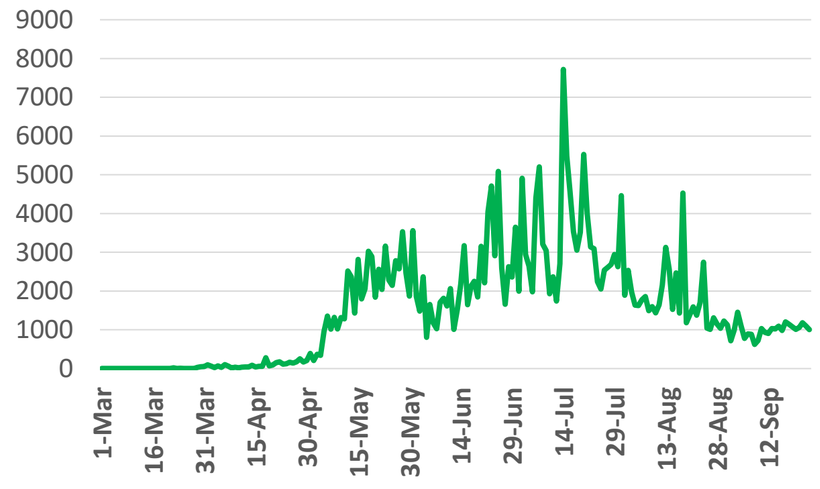
Figure 11: Comparative Analysis of the Distribution of COVID-19 Newly Recovered Cases in GCC Countries

UAE

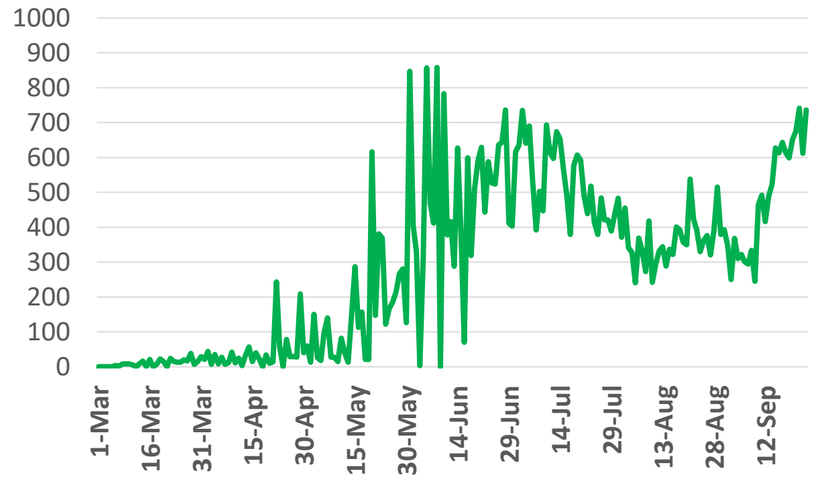
Source : National Emergency Crisis and Disaster Management Authority

KSA



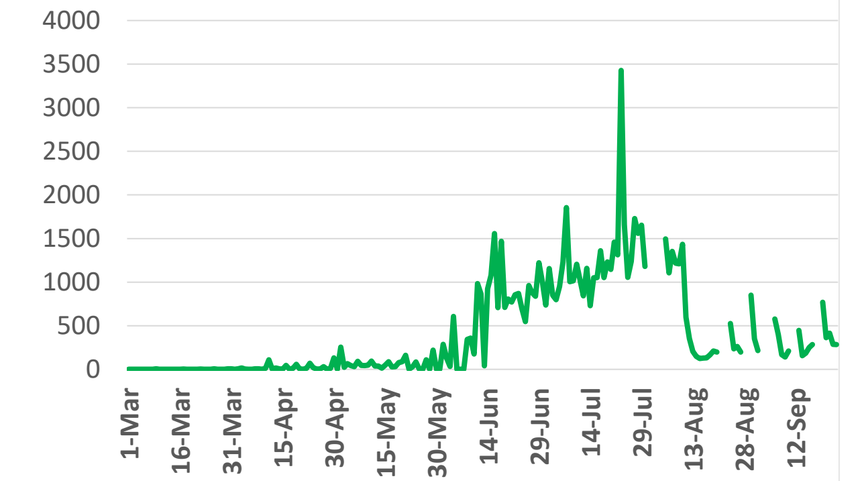
Source : KSA ministry of health

Bahrain



Source : Bahrain ministry of health

Oman



Source :Oman ministry of health

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*No announced statistic data on weekends and official holidays.

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Source : Kuwait ministry of health

Qatar

Source : Qatar ministry of health

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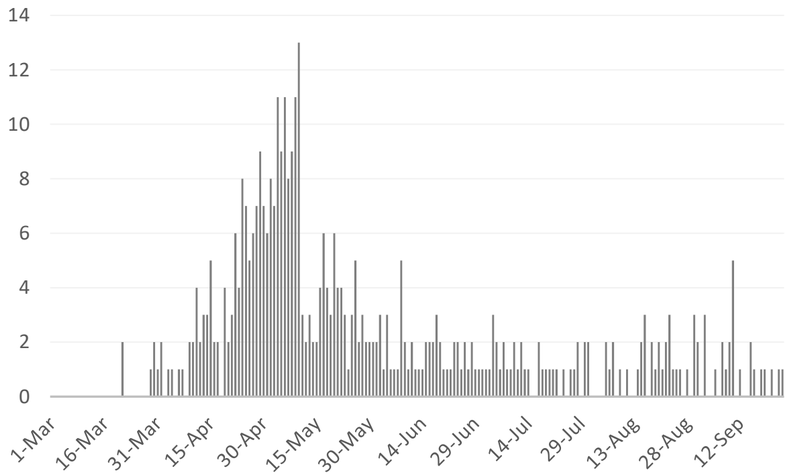
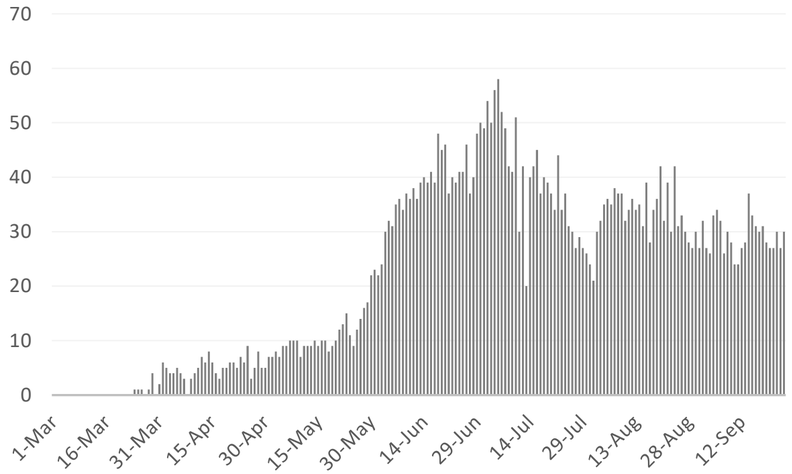
Figure 12: Comparative Analysis of the Distribution of COVID-19 New Death Cases in GCC Countries

UAE



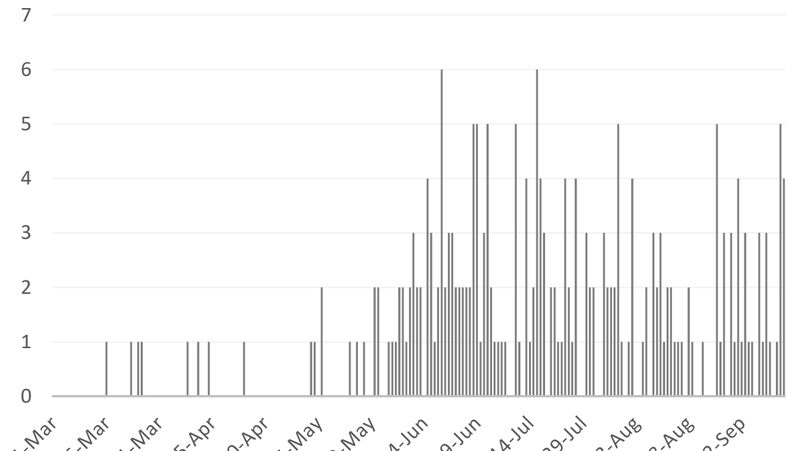
Source : National Emergency Crisis and Disaster Management Authority

KSA



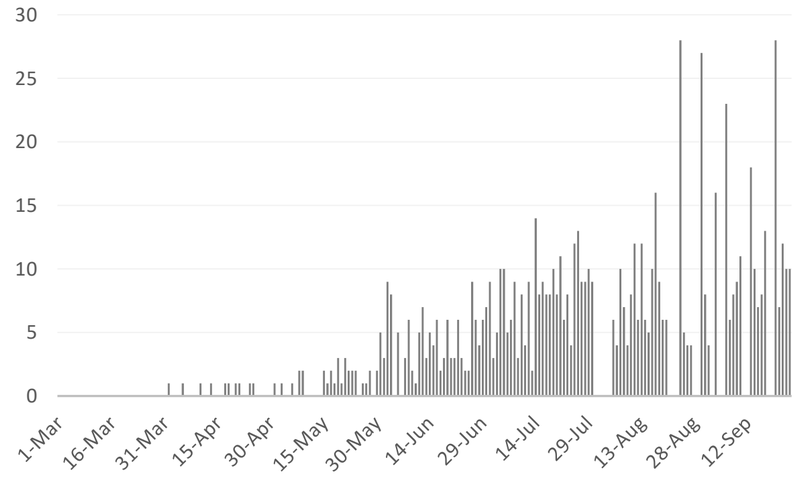
Source : KSA ministry of health

Bahrain



Source :WHO

Oman



Source :Oman ministry of health

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Kuwait

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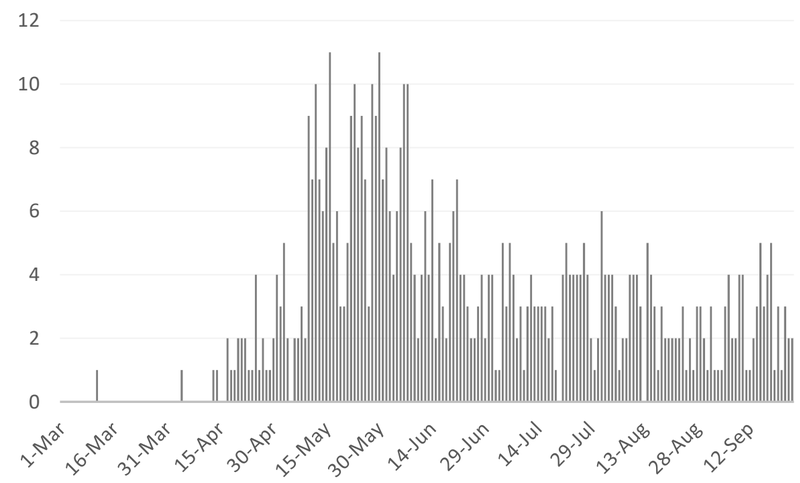
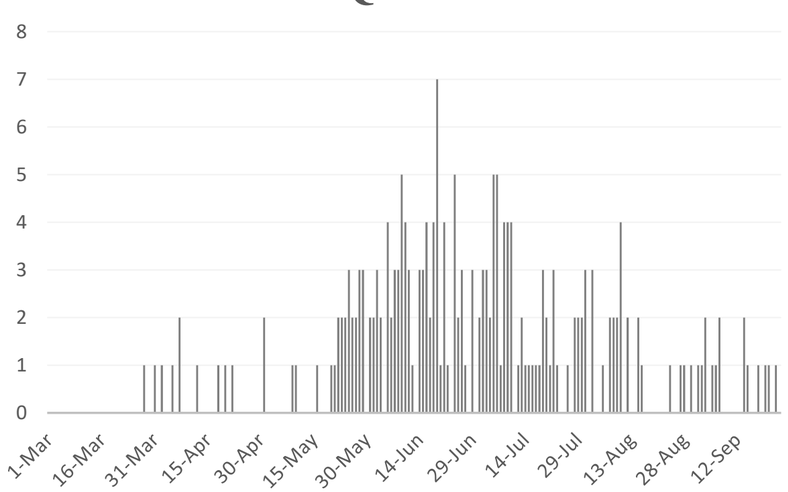


Source : Kuwait ministry of health

Qatar



Source : Qatar ministry of health

*No announced statistic data on weekends and official holidays.

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Article 1

Published

Change in Donor Characteristics and Antibodies to SARS-CoV-2 in Donated Blood in the US, June-August 2020

September 14, 2020 JAMA

This study investigated the presence of Covid-19 antibodies and changes in the characteristics of people who donated blood.

Background

- Many blood collection organizations have implemented and publicized routine testing of donations for SARS-CoV-2 antibodies to attract new donors and support the collection of convalescent plasma.

Methodology

- The American Red Cross initiated testing of all blood donations on June 15, 2020.
- Each donation sample was tested once; results were reported to donors electronically.
- The change in first-time vs repeat donors was compared in the first 2 weeks before testing was initiated (June 1-14, 2020) vs after testing (June 15-August 23, 2020).

Results

- In the 2 weeks before the start of testing, 11% of donors were first-time donors compared with 17% ($P < .001$) after that time.
- Of 953,926 total donations tested, 17,336 (1.82%) had antibodies.
- Of 160,328 first time donors, 4786 (3%) had antibodies.
- The chance of having Covid-19 antibodies was higher in donors aged 18 to 24 years compared with donors who were aged 55 years and older.
- The chances of having antibodies were also higher in African American, and Hispanic compared with White donors, and donors from the Northeast compared with the West.
- Overall presence of antibodies increased over the study period, from 1.18% to 2.58% in the studied sample.

Public Health Message

- This study found that, after the introduction of antibody testing, the proportion of first-time donors increased, and donations from younger and racial and ethnic minority donors were more likely to have Covid-19 antibodies.
- The increase in rates of antibody presence may be due to donors with higher rates of prior exposure donating to obtain antibody test results, particularly first-time donors. However, this may also reflect increased exposure in the general population or increased recognition of the need for convalescent plasma.

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Article 2

Flipping the Script for Coronavirus Disease 2019 Contact Tracing

Published September 16, 2020 JAMA

- Traditional contact tracing requires that people can take protective actions, including self-isolation once identified as being at risk of acquiring or transmitting infection. Without proper support and advice, people who learn that they are diagnosed with COVID-19 can make reasonable decisions that may reflect misinformation and bias.

- Approach to contact tracing by Chicago's Howard Brown Health (a federally qualified health center in Chicago, USA) has focused on relationships and engagement along with epidemiological surveillance and case finding. Instead of asking 'please name the people with whom you have been in contact', people were asked 'how can we help you? what can we do right now to help you get by?' Providing needed support immediately helps individuals to avoid infecting others.

- When individuals and communities with expected distrust see contract tracing as a gateway to meet their basic needs, they become powerful allies and partners to promote protective behaviors and sound public health practice. They help to engage people at greatest risk, such as illegal immigrant who otherwise perceive powerful reasons to avoid traditional contact tracing measures. Such efforts also reflect a timeless insight. Relationships and engagement are necessary initial steps in any effective public health intervention.

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THANK YOU

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