

## Human Mobility in the context of the COVID-19 Pandemic

TRACKING MATRIX — Capturing key information on human mobility during the pandemic (2020 – 2021)

#### At the border

IOM has developed a Global Mobility Database in response to COVID-19 to map, track and analyse the impact of the pandemic. The Points of Entry (PoEs) Baseline workstream tracks operational status of PoEs worldwide. There are a number of different types of PoE analytical reports aiming to inform insights at the global, regional and country level.

#### On international air travel

The Travel Restrctions Tracking workstream captures various air travel restrictions related to the COVID-19 pandemic, covering a large range of countries, territories and areas (C/T/As). It focuses on the changes to preexisting immigration and border management measures affecting migrants and travellers travelling on specific routes or with specific travel documentation. The database and ensuing analysis of collected data highlight emerging changes of mobility requirements.

#### Within the country/territory/area

The Global Mobility Database also tracks key locations of internal mobility and internal mobility restrictions. This includes tracking restrictive measures such as national lockdowns and school closures, identifying locations with high level of mobility restriciton, and sites where stranded migrants are present.

#### The impact on migrants

IOM is tracking information on the impact on vulnerable populations (including stranded persons, returnees/ repatriations, affected populations in transit centres and camps/camp like settings) that have been affected by mobility restrictions imposed by countries, territories and areas as a result of the COVID-19 outbreak.

#### Analytical Products and Datasets







DTM conducts indepth analyses for all data collected, including regular reports, travel restrictions matrix, interactive maps, dashboards and many more. Datasets are publicly available for all interested parties. To view the methodology, analytical products and download the datasets please visit migration.iom.int

Information included in DTM's COVID-19 workstreams, March 2020 – March 2021:

4,384 PoEs

across 182 C/T/As

227 C/T/As

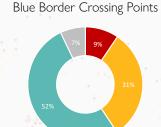
issuing international air travel restriction

150 reports

on impact on migrants

#### Operational status of PoE globally by type, as of March 2021\*







Click to view the latest full report on global Points of Entry

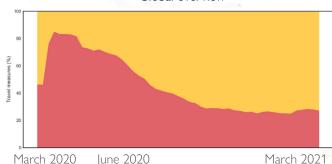
#### Defining and quantifying air travel restrictions throughout the pandemic

Entry restrictions: These are total restrictions which do not allow the entry of passengers of a given country, territory, or area (C/T/A).



Conditions for authorized entry: These are partial restrictions in the form of specific requirements upon which entry is incumbent. These conditions include public health measures, new requirements on visa/travel documents or other specific requirements for entry.

#### Entry restrcitions vs. conditions for authorized entry - Global overview



Click to view the latest report on international air travel restrictions

<sup>\*\*</sup> The background map is an overview of all Points of Entry assessed by DTM across the globe. For the full map please refer to the latest report on PoEs.



<sup>\*</sup> Data is updated and compiled every other week.

## Human Mobility in the Context of the COVID-19 Pandemic 2020 - 2021

### - Comparing the pandemic and human mobility

#### Guidance on International Travel Restrictions

On 30 January 2020, the World Health Organization (WHO) declared COVID-19 as a Public Health Emergency of International Concern (PHEIC)<sup>1</sup>. Following the declaration, travel restrictions were issued across the world in hope of containing the spread of the virus.

On 29 February 2020, WHO published recommendations on travel restrictions, advising against the application of long-term travel or trade restrictions to countries experiencing COVID-19 outbreaks.<sup>2</sup> Evidence shows that restricting the movement of people and goods during public health emergencies is ineffective in most situations and may divert resources from other interventions.<sup>2</sup>

DTM's global COVID-19 workstreams witnessed a broad adoption of strict long-term (more than 24 hours) international air travel restrictions, as well as the complete shutdown of Points of Entry in many countries, areas and territories (C/T/As).

## Relationship between international travel restrictions and infectious disease – What we know so far

Numerous travel and border measures were developed in 2020 – from entry and exit screening, health declaration forms to quarantine and other measures. However, many interventions were experimental and lacked an evidence base, or were based on evidence from previous epidemics that lacked key features of COVID-19.<sup>3</sup> For example, thermal screening on passengers at airport exit and entry is unlikely to be effective at detecting infected travallers.<sup>4</sup>

#### Historically...

A study that reviewed 3 influenza pandemics in human history have found that international travel restrictions might be able to delay the arrival of a pandemic by a few days or weeks. However, they showed limited effect on reducing the final pandemic size or mortality.<sup>5</sup>

#### Read More

#### On COVID-19...

A review that examined existing studies on travel-related control measures to contain the COVID-19 pandemic identified the need for more substantial evidence, as a lot of current studies advising on travel measures were derived from models with potentially missing parameters.<sup>6</sup>

#### Read More

#### On Ebola...

Study on the risk of Ebola virus disease (EVD) found that travel restrictions were not effective enough to expect the prevention of global spread of EVD.<sup>7</sup> Another study showed that entry screening at airport for countries with active tranmission of Ebola may not be an effective strategy.<sup>8</sup>

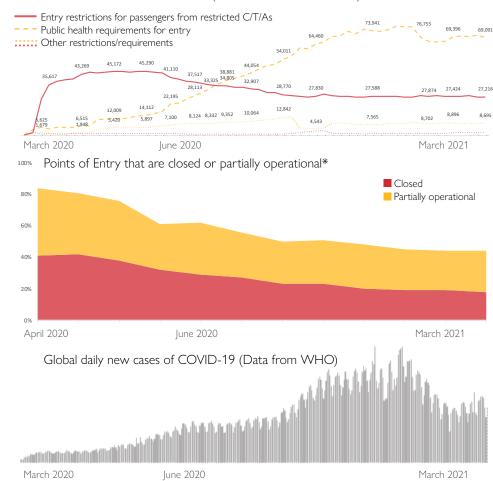
Ebola risk study Ebola screening

#### Overview of the Pandemic and Mobility Restrictions (March 2020 – March 2021)

Based on data collected by DTM, a large number of prolonged entry restrictions were issued in the first half of 2020, following an increased adoption of public health measures (i.e. quarantine, medical certificate, test upon arrival, health declaration forms etc). By March 2021, almost half of the Points of Entry assessed by DTM in the world are closed or just partially operational.

A causal relationship cannot be established through the information provided in this report. Instead, the report aims to provide insights for further studies.

Evolution of air travel restrictions (number of measures issued)\*



\* Figures are based on DTM data collected through 2020–2021

# Human Mobility in the context of the COVID-19 Pandemic 2020 – 2021 – DTM will continue to support the next phase using real-world evidence

#### Re-opening borders

With various public health measures taking effect and vaccines against COVID-19 being rolled out, many countries have been planning to lift restrictions and reopen borders. WHO published the "Considerations for implementing a risk-based approach to international travel in the context of COVID-19" to advise on considerations to be made when lifting measures. The recommendations include priortising emergency and essential international travel, conducting risk assessment for mitigation measures and focusing on the health and well-being of communities when deciding on travel-related restrictions.<sup>9</sup>

Below are three potential areas which DTM's data can support in the next phase.

#### **Understanding Capacity**

As the DTM Global Mobility Database grows larger and attracts more participants, DTM and IOM Immigration Border Management (IBM) launched an additional module – a survey that assesses the PoEs' preparedness and capacity to respond to COVID-19.

With input from national border authorities, the IBM module provides high-quality, detailed information on PoEs. Stakeholders can use this information to identify regions where PoEs are not fully operational because of the lack of capacity to respond to COVID-19, and plan accordingly.

#### Preparedness of currently closed PoEs as of March 2021\*

■ Fully prepared ■ Partially prepared ■ Not prepared ■ Unknown



\*Among 306 assessed PoEs in the IBM module

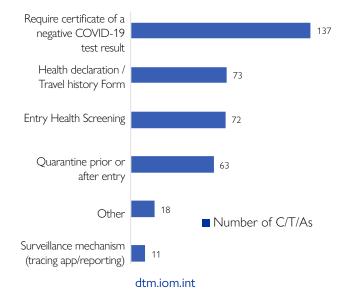
#### Research and Analysis

Existing evidence for the effect of travel-related measures on controlling COVID-19 were mainly derived from modelling studies. There is a lack of "real-life" evidence.<sup>6</sup> More and more countries are now implementing a mixture of entry restrictions and public health measures, however, little effort was put into developing a strategic framework.<sup>3</sup> The dynamics between entry restrictions, public health measures and the spread of COVID-19 need to be closedly examined to inform evidence-based decisions.

The rich and detailed data from DTM's COVID-19 Global Moblity Database and the Mobility Tracking Database provide a solid foundation for further research and analysis.

#### Mostly adopted pubic health measures on incoming travellers

Among the C/T/As that are currently open or partially open for entry (As of 29 March 2021):



#### Health and Well-being of Communities

The overall health and well-being of communities should be at the forefront when considering the implementation of travel restrictions. Migrants constitute an essential part of most communities, and are among the groups that are most likely to be negatively affected by strict travel restrictions. DTM has been tracking and monitoring the impact on migrants to better understand the challenges they face.

Some reported examples of these challenges include:

- Hindered mobility
- · Cost and logistics of travel to return home
- Xenophobia, discrimination and stigmatization
- Immigration (legal) status of migrants
- Stranded at sea due to a combination of port closures, disembarkation restrictions, and travel bans
- Increased risk of contracting COVID-19 due to precarious working and living conditions



Photo: Migrants stranded at the border of Thailand because of COVID-19 related restrictions. (©IOM/2020)



## Human Mobility in the context of the COVID-19 Pandemic 2020 - 2021

#### References

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- 2. <u>Updated WHO advice for international traffic in relation to the outbreak of the novel</u> coronavirus 2019-nCoV
- 3. COVID-19 and the State of Global Mobility in 2020
- 4. Effectiveness of airport screening at detecting travellers infected with novel coronavirus (2019-nCoV)
- 5. Global Mobility and the Threat of Pandemics: Evidence from Three Centuries
- 6. Travel-related control measures to contain the COVID-19 pandemic: a rapid review
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- 8. <u>Airport Entry and Exit Screening during the Ebola Virus Disease Outbreak in Sierra</u> Leone, 2014 to 2016
- 9. Considerations for implementing a risk-based approach to international travel in the context of COVID-19

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This publication has not been formally edited by IOM.

Please send any feedback, comments and suggestions related to this report to the DTM COVID-19 Team at dtmcovid19@iom.int

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