July 29th, 2020

Responding to the Impact of COVID-19 on Refugees

Shaun Truelove, PhD, MPH

Paul Spiegel, MD, MPH

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Infectious Disease Dynamics, Johns Hopkins Bloomberg School of Public Health

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International Vaccine Access Center

Our Speakers

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Paul Spiegel, MD, MPH
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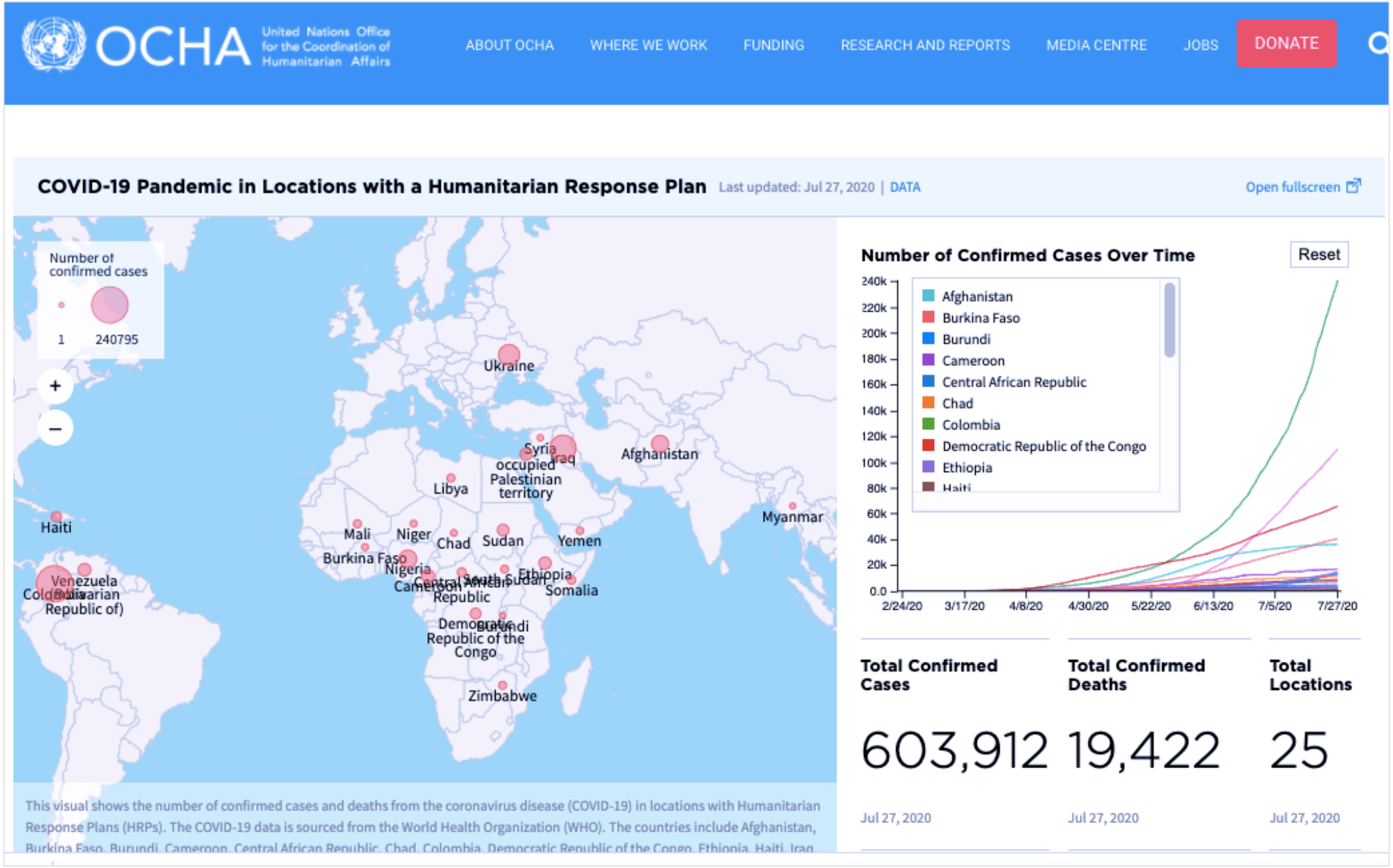
Professor of the Practice

IVAC

Poll

Have major outbreaks of SARS-CoV-2 been occurring among refugee populations around the world?

- ❑ Yes
- ❑ No
- ❑ Not known



OCHA COVID-19 website https://www.unocha.org/covid19, accessed Jul 27, 2020

VULNERABLE PEOPLE

DISPLACED PEOPLE

80% of refugees
≈100% of IDPs
live in countries with **weak** economic and **health systems**

167 states **closed** their **borders**
57 of them are not accepting people **seeking asylum**

REGIONAL FOCUS

EAST AFRICA

Ongoing desert **locust outbreak**

Recovering from **drought** and **floods** in 2019

15M food insecure people

37% of displaced children in the Horn of Africa do not have access to facilities to **wash themselves**

SOUTHERN AFRICA

15.6M food insecure people

SAHEL

3.9M food insecure people/**5.5M** projected

MIDDLE EAST AND NORTH AFRICA

1.7M jobs may be **lost** in 2020

ASIA

125M jobs may be **lost** in the second quarter of 2020

LATIN AMERICA

Affected by the **exodus** of about **5M people** from Venezuela

REQUIREMENTS (US$)	FUNDING RECEIVED (US$)*	COUNTRIES
$10.3B	$1.64B	63

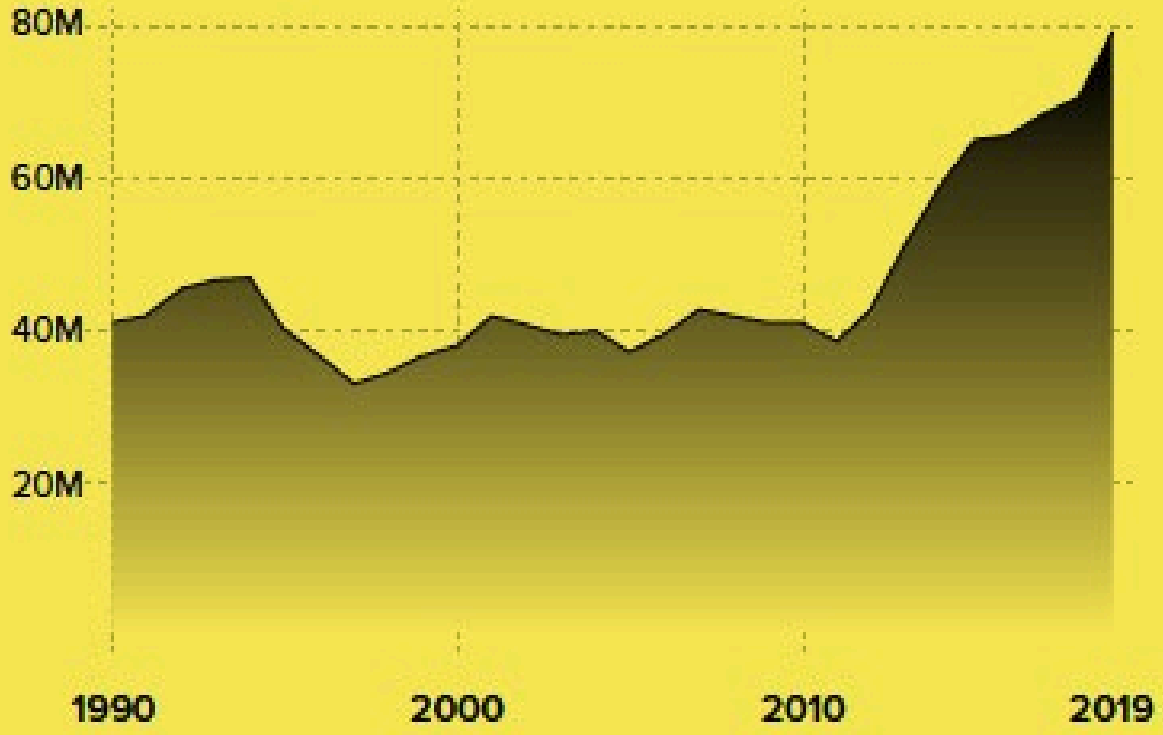
*As of 12 July. Funding does not reflect amounts received for new intersectoral plans. Refer to FTS for latest figures.

https://www.unocha.org/sites/unocha/files/GHRP-COVID19_July_update.pdf, accessed Jul 27, 2020

79.5 MILLION

FORCIBLY DISPLACED WORLDWIDE

at the end of 2019 as a result of persecution, conflict, violence, human rights violations or events seriously disturbing public order.



26.0 million refugees

20.4 million refugees under UNHCR's mandate

5.6 million Palestine refugees under UNRWA's mandate

45.7 million internally displaced people[1]

4.2 million asylum-seekers

3.6 million Venezuelans displaced abroad

UNHCR Global Trends, 2019 https://www.unhcr.org/en-us/statistics/unhcrstats/5ee200e37/unhcr-global-trends-2019.html

Phase 1: Preparing for a Pandemic among Humanitarian Populations - Sounding the Alarm

PLOS MEDICINE

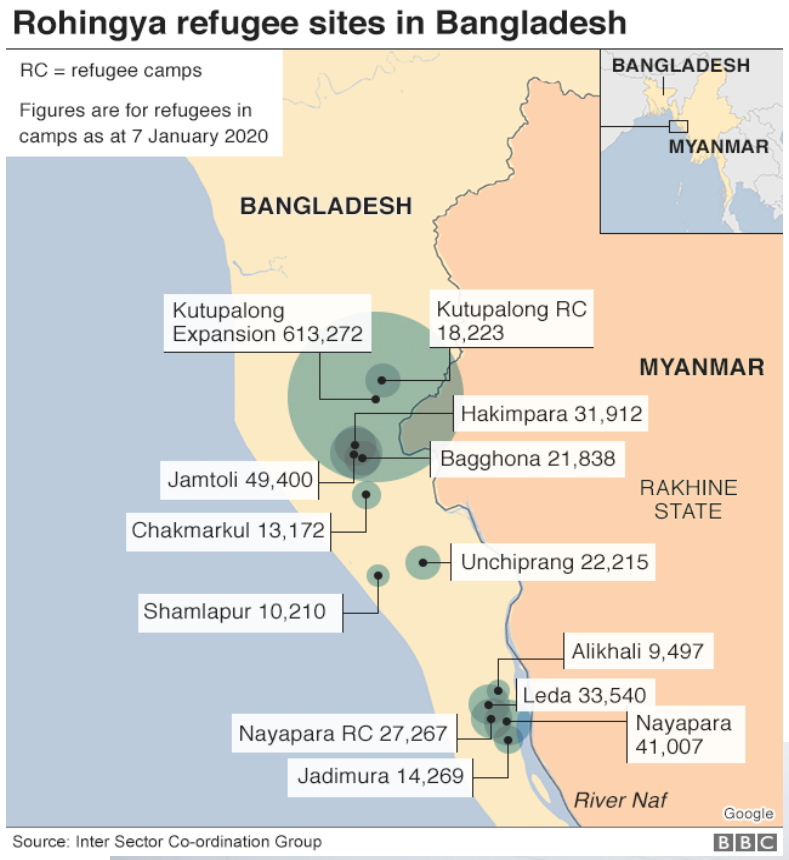
RESEARCH ARTICLE

The potential impact of COVID-19 in refugee camps in Bangladesh and beyond: A modeling study

Shaun Truelove[1,2,3,4], Orit Abrahim[1,3], Chiara Altare[1,3], Stephen A. Lauer[1,2], Krya H. Grantz[1,2], Andrew S. Azman[1,2,3], Paul Spiegel[1,3]*

1 Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States of America, **2** Infectious Disease Dynamics Group, Baltimore, Maryland, United States of America, **3** Center for Humanitarian Health, Baltimore, Maryland, United States of America, **4** International Vaccine Access Center, Baltimore, Maryland, United States of America

https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1003144, published Jun 16, 2020



Almost a million Rohingya refugees from Burma are living in camps in Bangladesh Credit: Mohammad Ponir Hossain/Reuters, 2018

COVID-19 Risk to Rohingya Refugees

High potential for transmission:

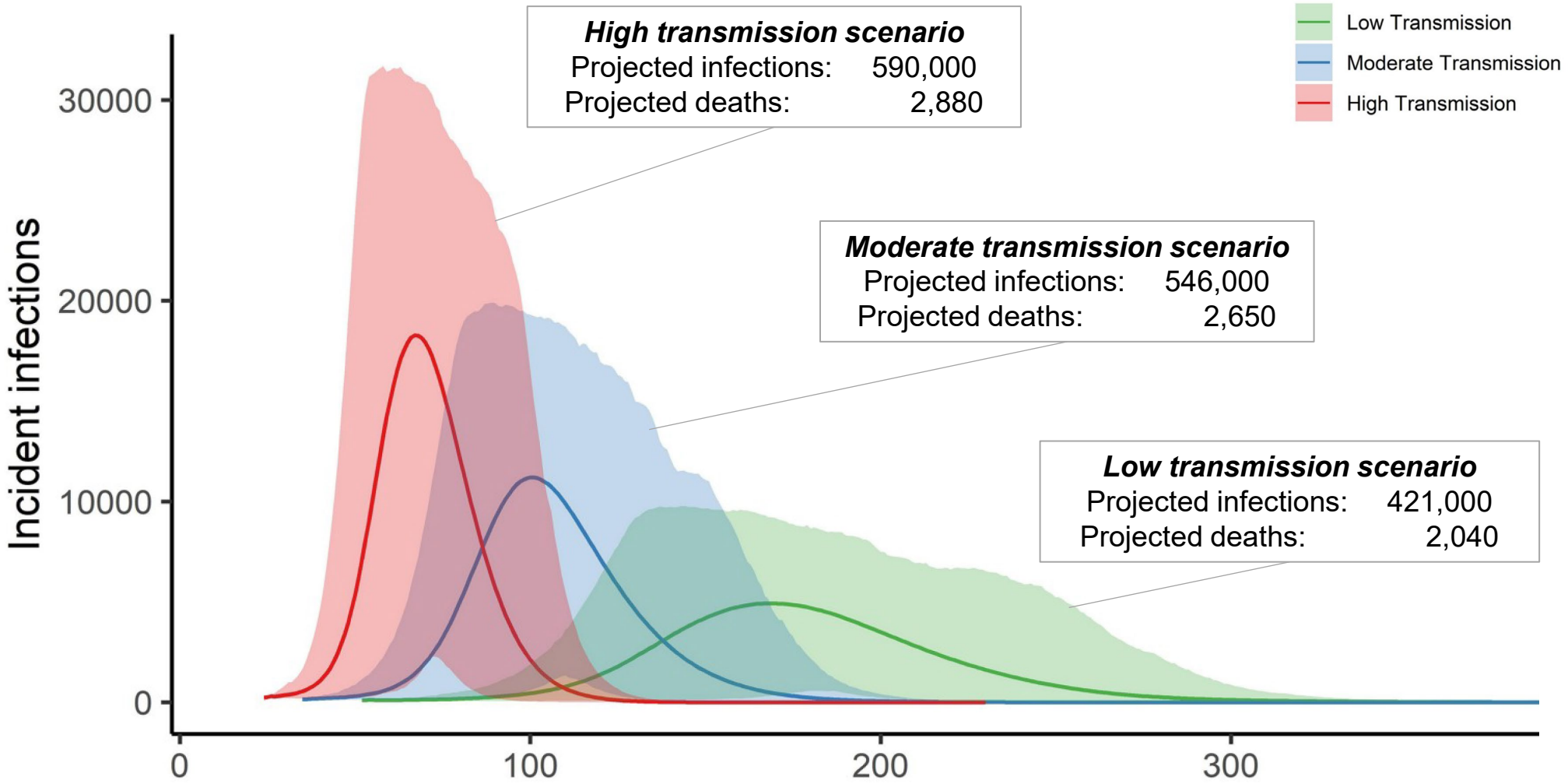
- Population: 600,000 main "mega-camp", >1,000,000 total
- Density: 46,000/km^2 *(NYC: 10,431/km^2)*
- Elevated transmission previously (diphtheria)

Low capacity to treat:

- Hospital beds: 340
- Beds/1000 pp: 0.57 *(NYC: 2.74)*

What does this mean in terms of the potential impact of COVID-19?

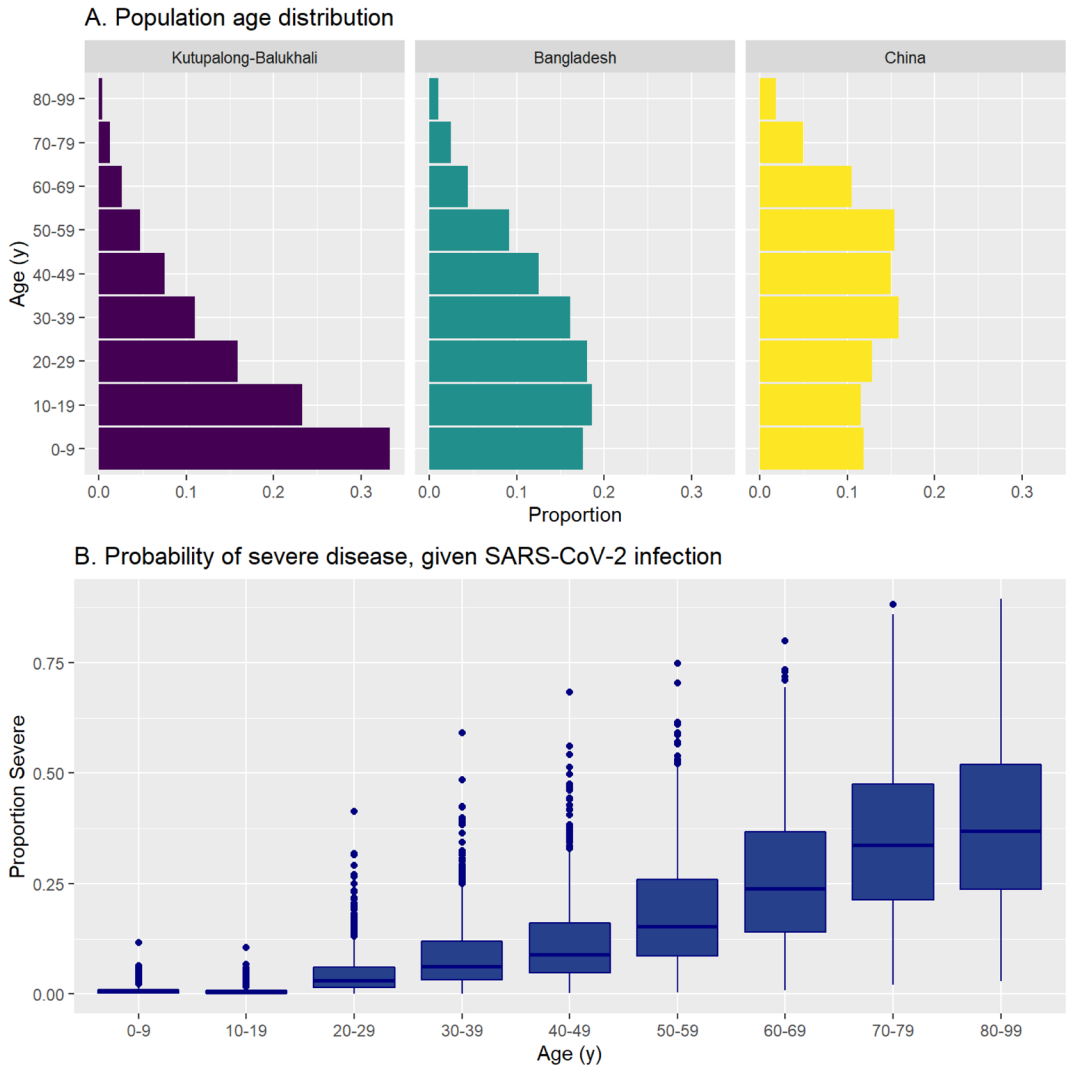
Kutupalong-Balukhali: High Potential for Transmission



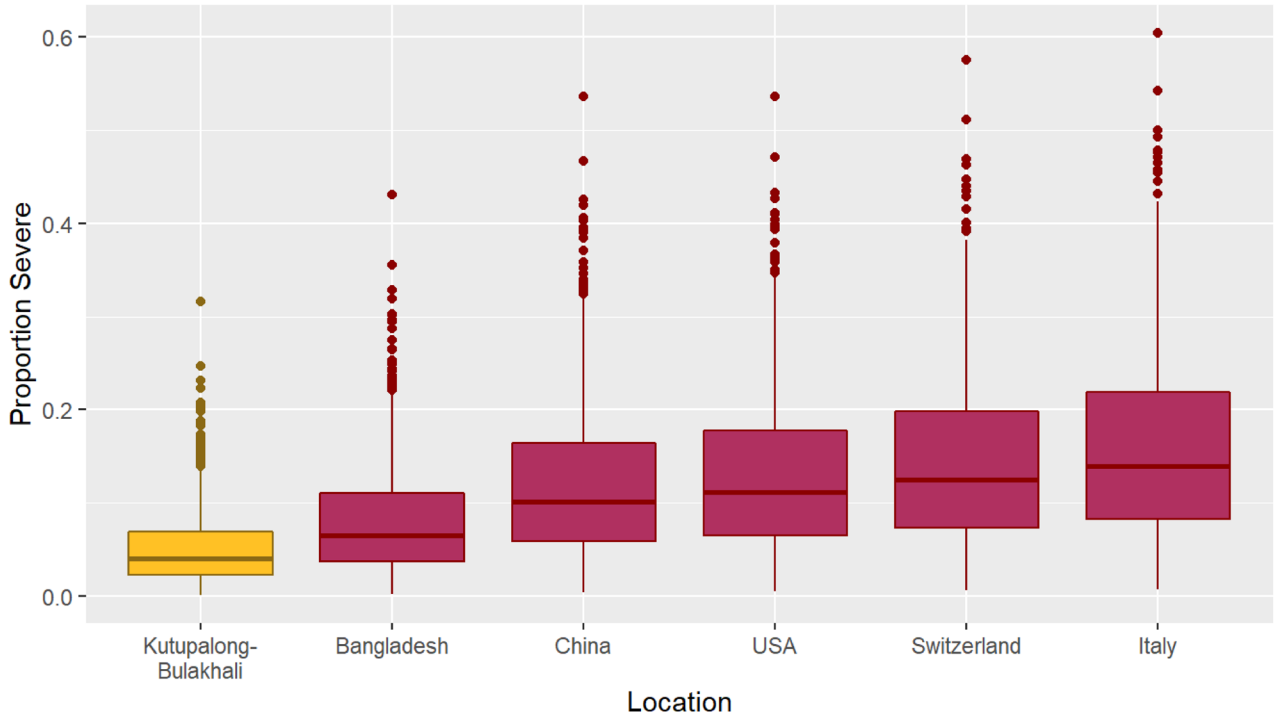
**Cumulative at 12 months*
Population: 600,000

Truelove et al, 2020, *PLOS Med*

Estimating Disease: Age and Severity



S2 Fig. (A) Age distribution comparison between Kutupalong-Balukhali Expansion Site, Bangladesh overall, and China, and (B) the estimated probability of severe disease given infection with SARS-CoV-2, by 10-year age group.



S3 Fig. Comparison of the expected overall proportion of infections that will result in severe disease, as estimated through adjustment for population age distribution.

Truelove et al, 2020, *PLOS Med*

Need for Increased Health Care Capacity

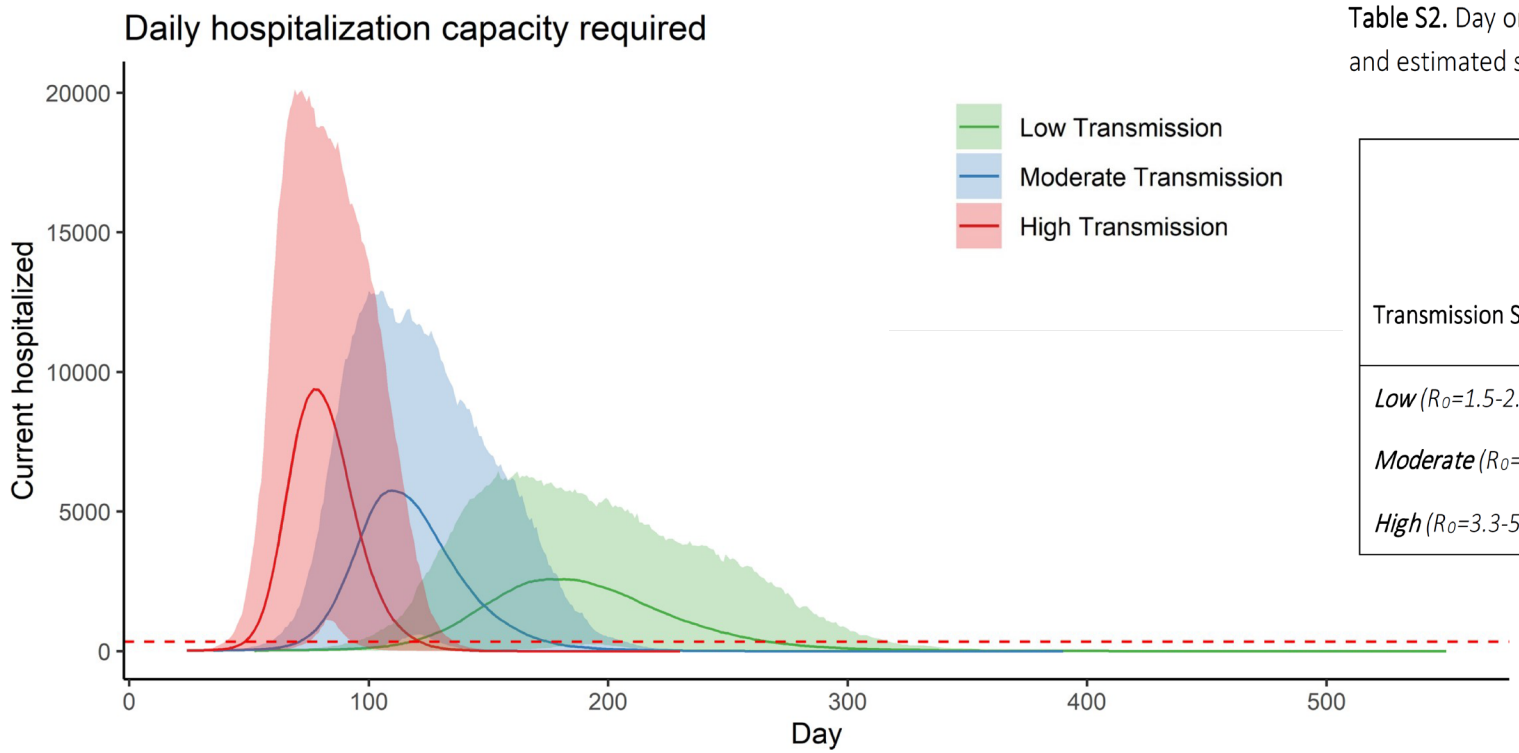


Fig 2. Hospitalization capacity requirements for an outbreak of SARS-CoV-2 in the Kutupalong-Balukhali camps, under three transmission scenarios: low transmission (R_0 = 1.5–2.0), moderate transmission (R_0 = 2.0–3.0), and high transmission (R_0 = 3.3–5.0). The solid lines represent the mean outbreak trajectories and the shading represents the 95% PIs of each scenario. The dashed red line represents the 340-bed surge capacity currently believed to exist in the population. PI, prediction interval; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

Table S2. Day on which hospitalization requirements exceed current estimated bed capacity (340 beds) and estimated surge capacity (630 beds) in the Kutupalong-Balukhali Expansion Site.

Transmission Scenario	Day on which Hospitalization Need Exceeds Capacity	
	Standard Capacity, 340 beds	*Surge Capacity, 630 beds*
	mean (95% CI)	*mean (95% CI)*
Low (R_0=1.5-2.0)	139 (99-198)	149 (108-206)
Moderate (R_0=2.0-3.0)	85 (63-126)	90 (66-131)
High (R_0=3.3-5.0)	58 (43-79)	61 (46-82)

Truelove et al, 2020, *PLOS Med*

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NEWS · 24 APRIL 2020

‘Distancing is impossible’: refugee camps race to avert coronavirus catastrophe

From Bangladesh to Somalia, researchers and aid workers are taking different steps to protect people among the most vulnerable to the pandemic.

Nidhi Subbaraman

An aid worker provides protective face masks to migrants in Greece. Credit: Manolis Lagoutaris/AFP/Getty

PDF version

RELATED ARTICLES

Coronavirus latest

The simulations driving t world's response to COVI

Refugees and displaced highly vulnerable to COV 19

https://www.nature.com/articles/d41586-020-01219-6, accessed Jul 27, 2020

Isolation, treatment centres open in Rohingya camps

Tribune Desk

Published at 07:33 pm May 21st, 2020

Severe Acute Respiratory Infection Isolation and Treatment Centres (SARI ITCs) of Covid-19 at Rohingya camp in Cox's Bazar **UNHCR**

https://www.dhakatribune.com/bangladesh/rohingya-crisis/2020/05/21/isolation-treatment-centres-open-in-rohingya-camps, accessed Jul 25, 2020

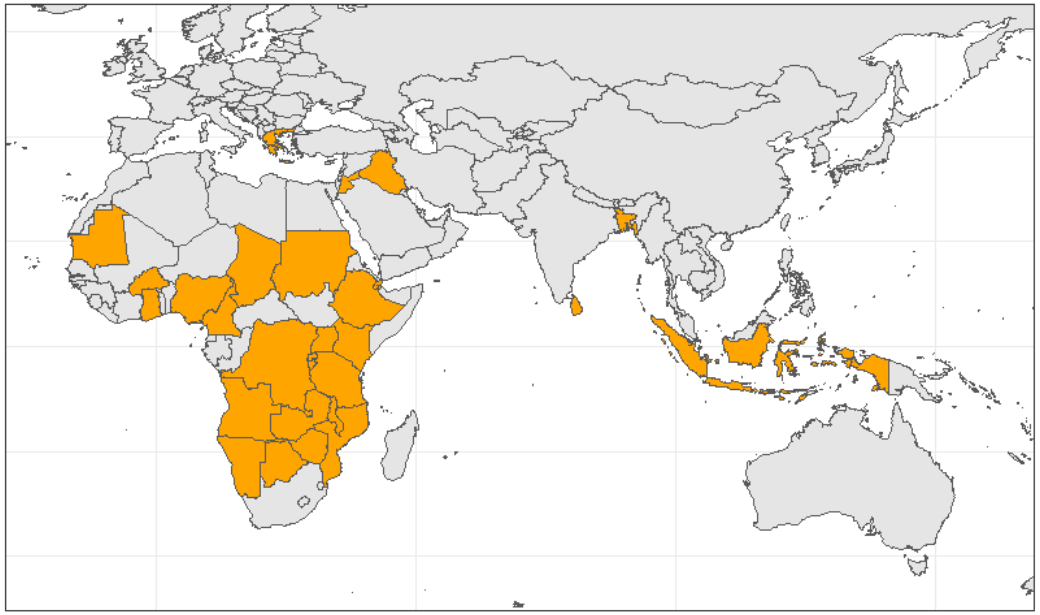
What About Other Populations?

- Providing scenario projections for **>200 refugee and IDP camps** in **29 countries** in collaboration with **UNHCR, OCHA, and MSF**

- Using ***COVID Scenario Pipeline***

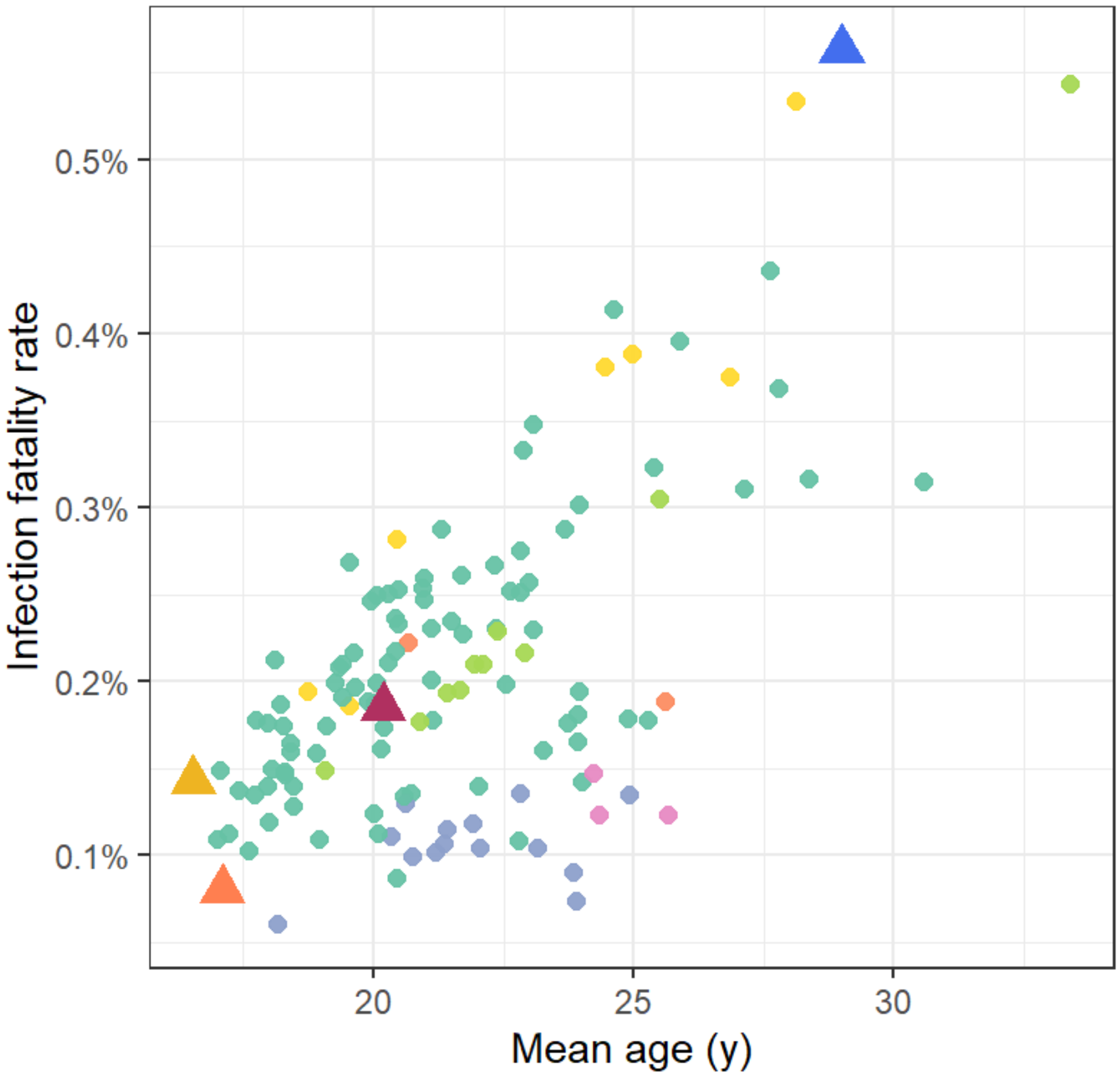
  https://www.medrxiv.org/content/10.1101/2020.06.11.20127894v1

  https://github.com/HopkinsIDD/COVIDScenarioPipeline



Heterogeneity in Expected Outcomes

Infection fatality rate vs **mean age** among 128 refugee camps



Heterogeneity in Expected Outcomes

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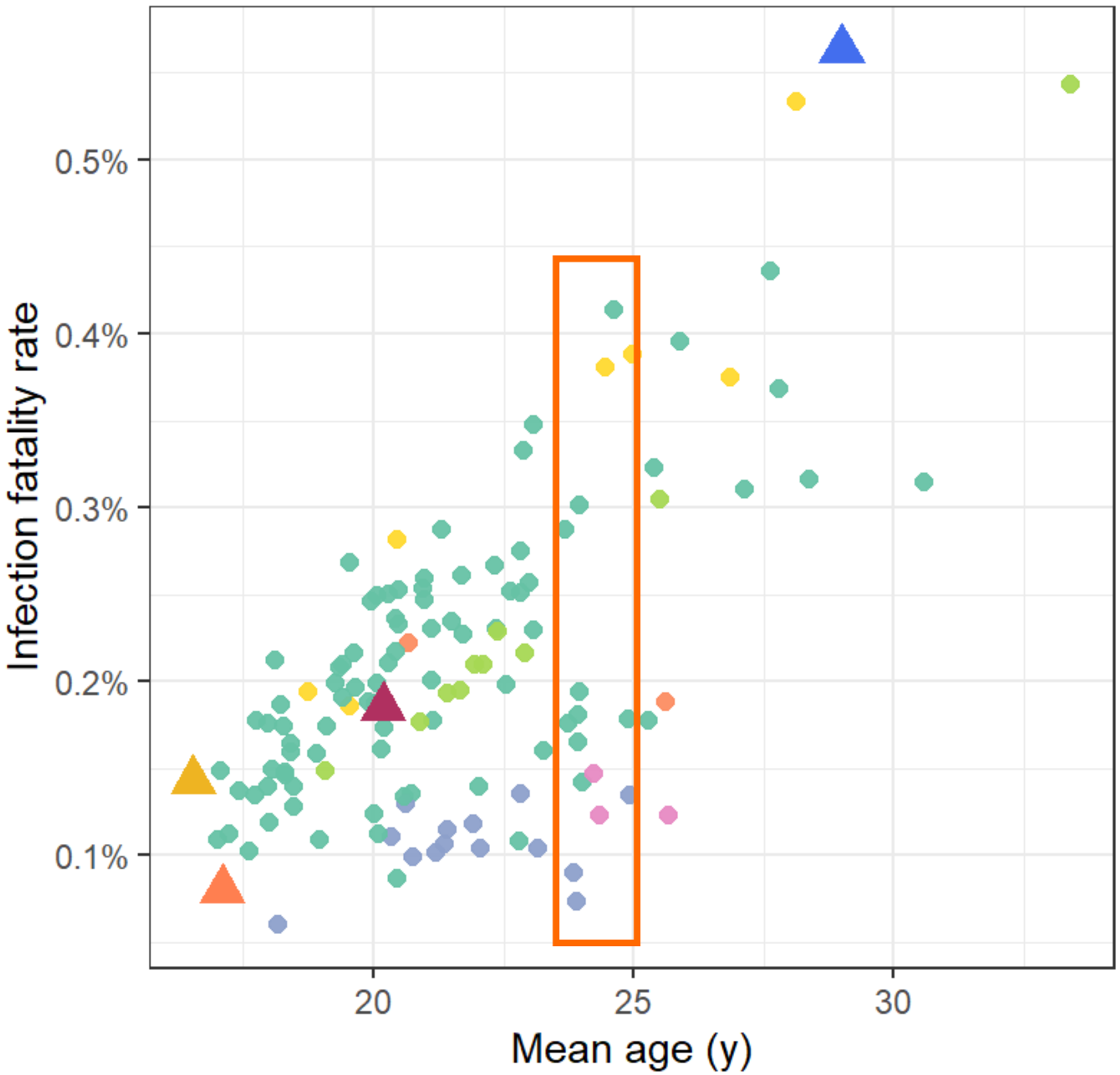
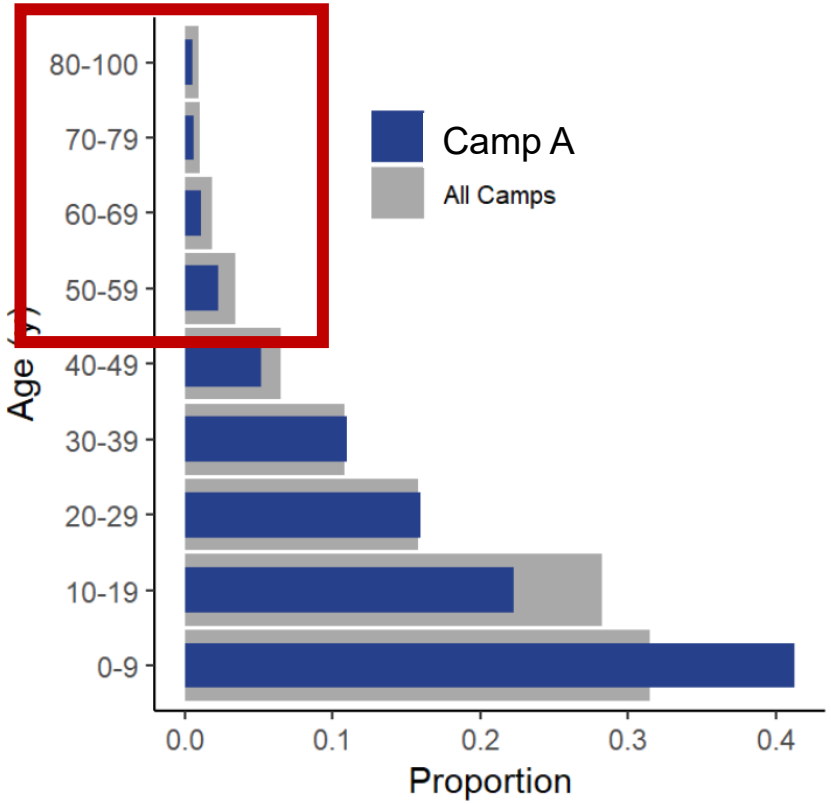


Heterogeneity in Expected Outcomes

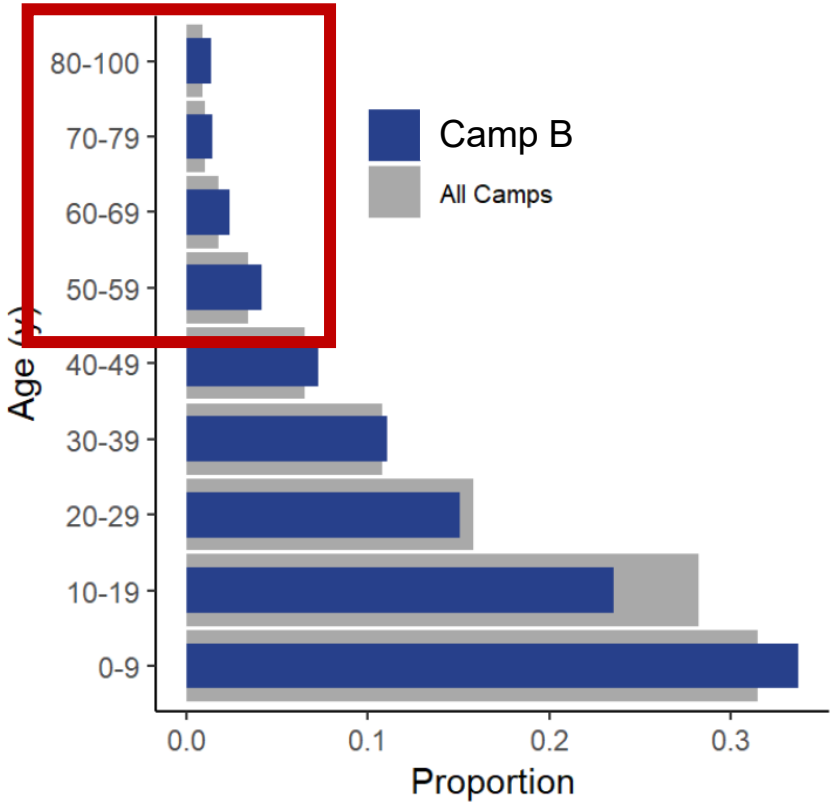
***Camp A**, Country X*
Population: 26,000

A. Age distribution



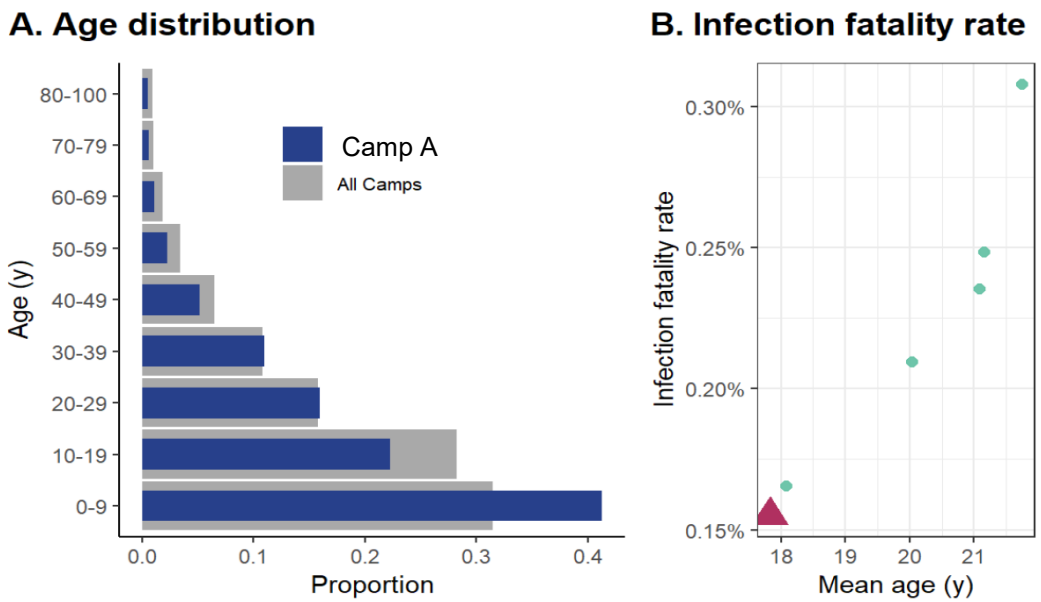
***Camp B**, Country X*
Population: 31,000

A. Age distribution

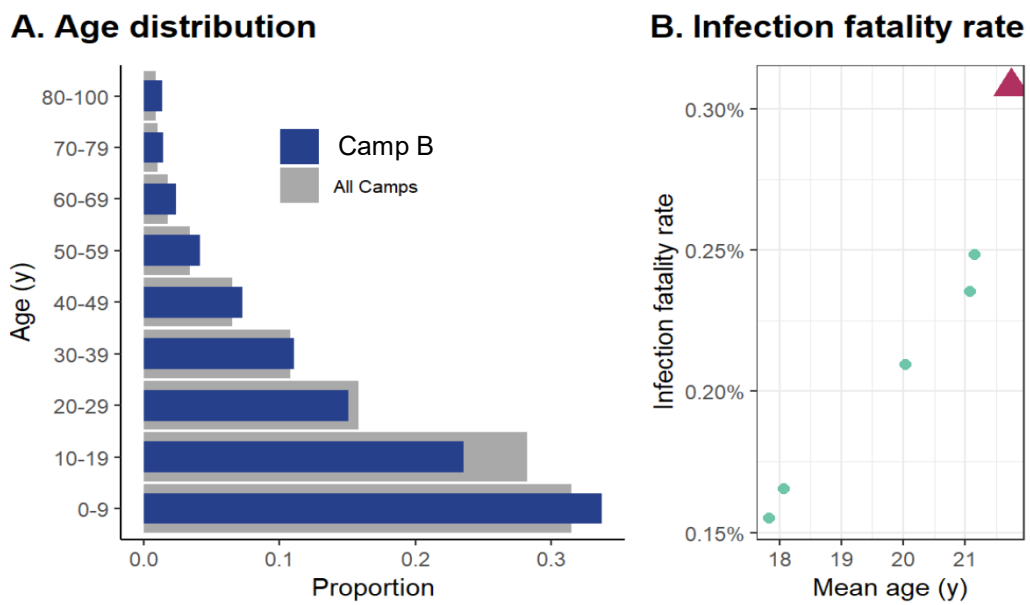


Heterogeneity in Expected Outcomes

***Camp A**, Country X*



***Camp B**, Country X*



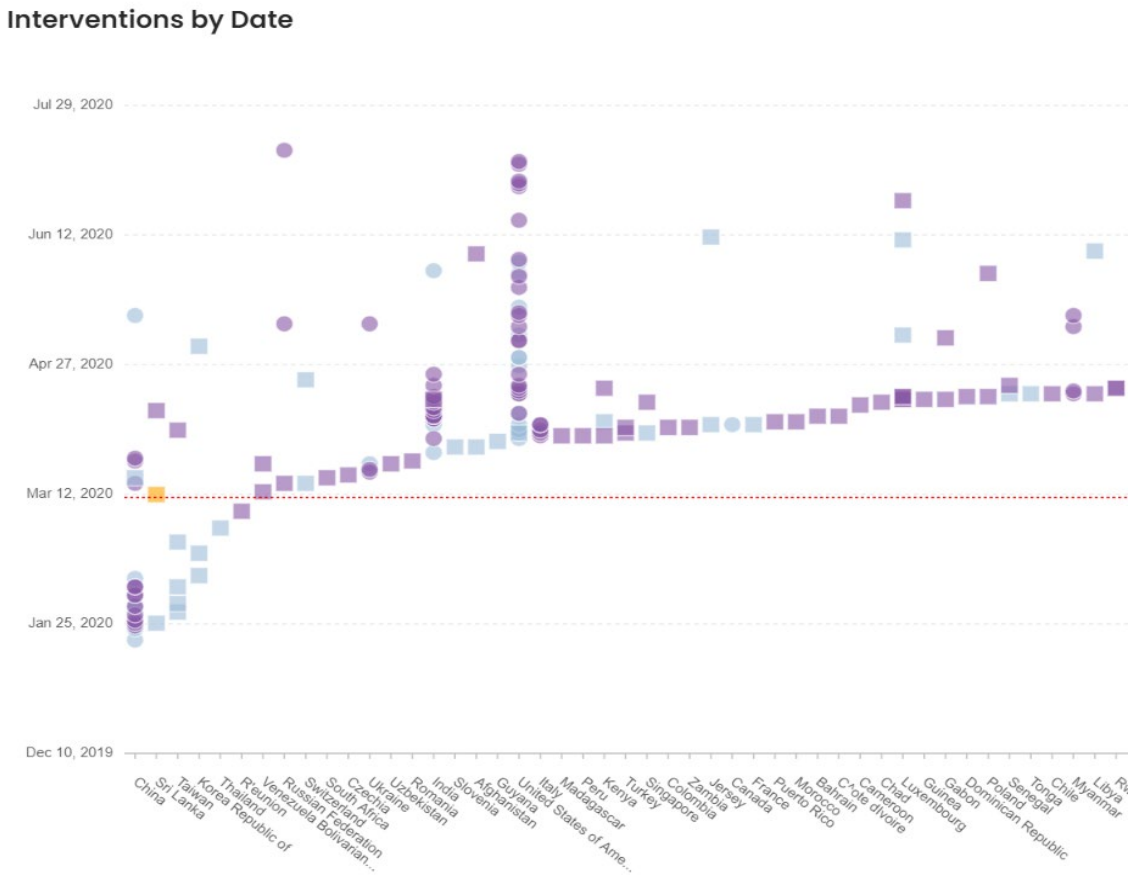
Phase 2: Control (Non-pharmaceutical Interventions)

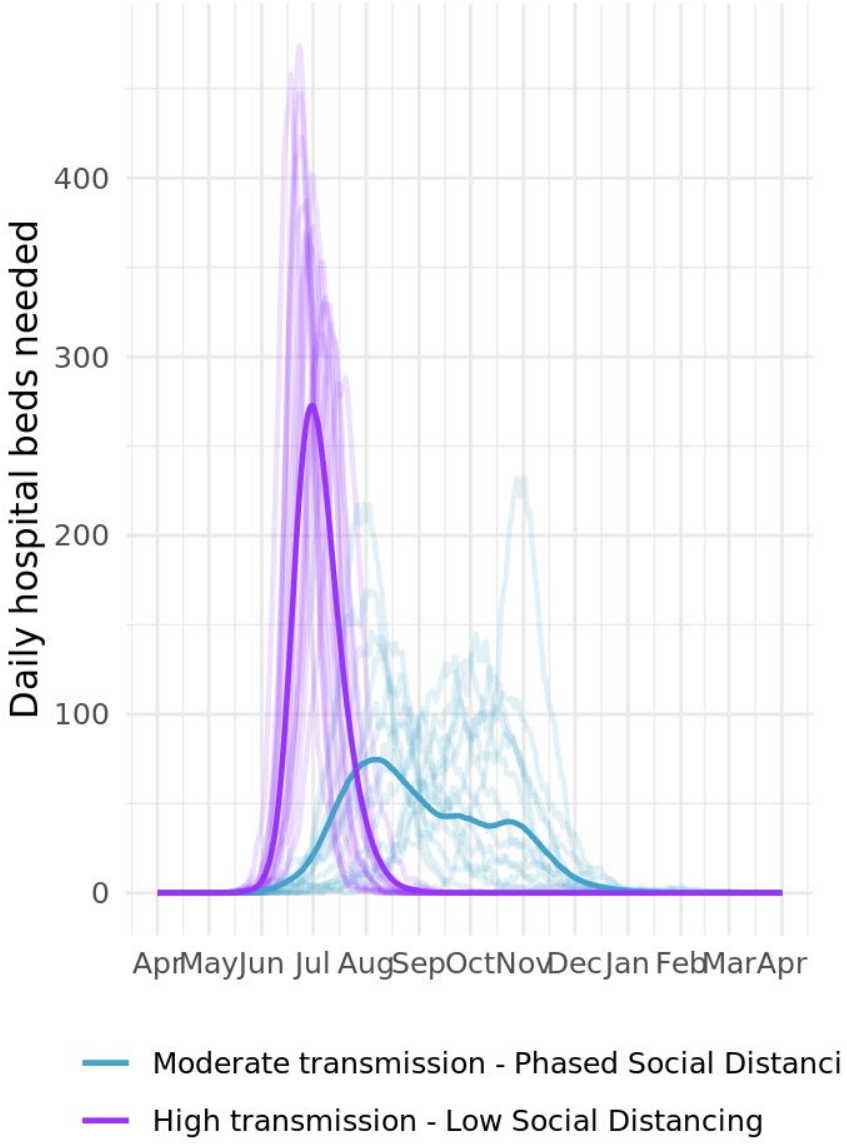
What interventions are feasible in these settings, and how effective are they?

- Social distancing
- Quarantine
- Home isolation
- Shielding
- Masks
- WASH
- RCCE

Migrants from the Moria camp in Lesbos, Greece, sew handmade protective masks. Photograph: Elias Marcou/Reuters

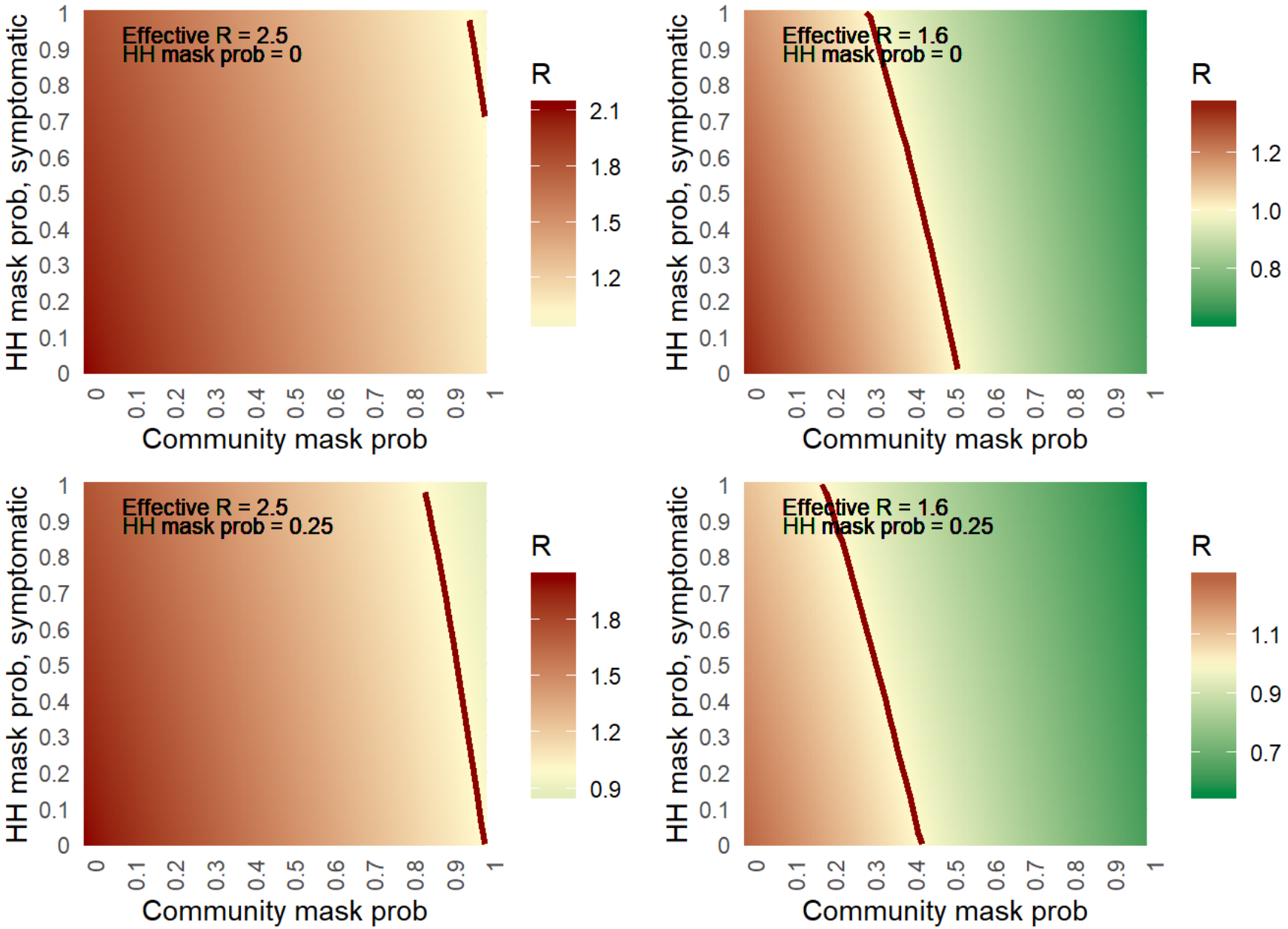
Scenarios





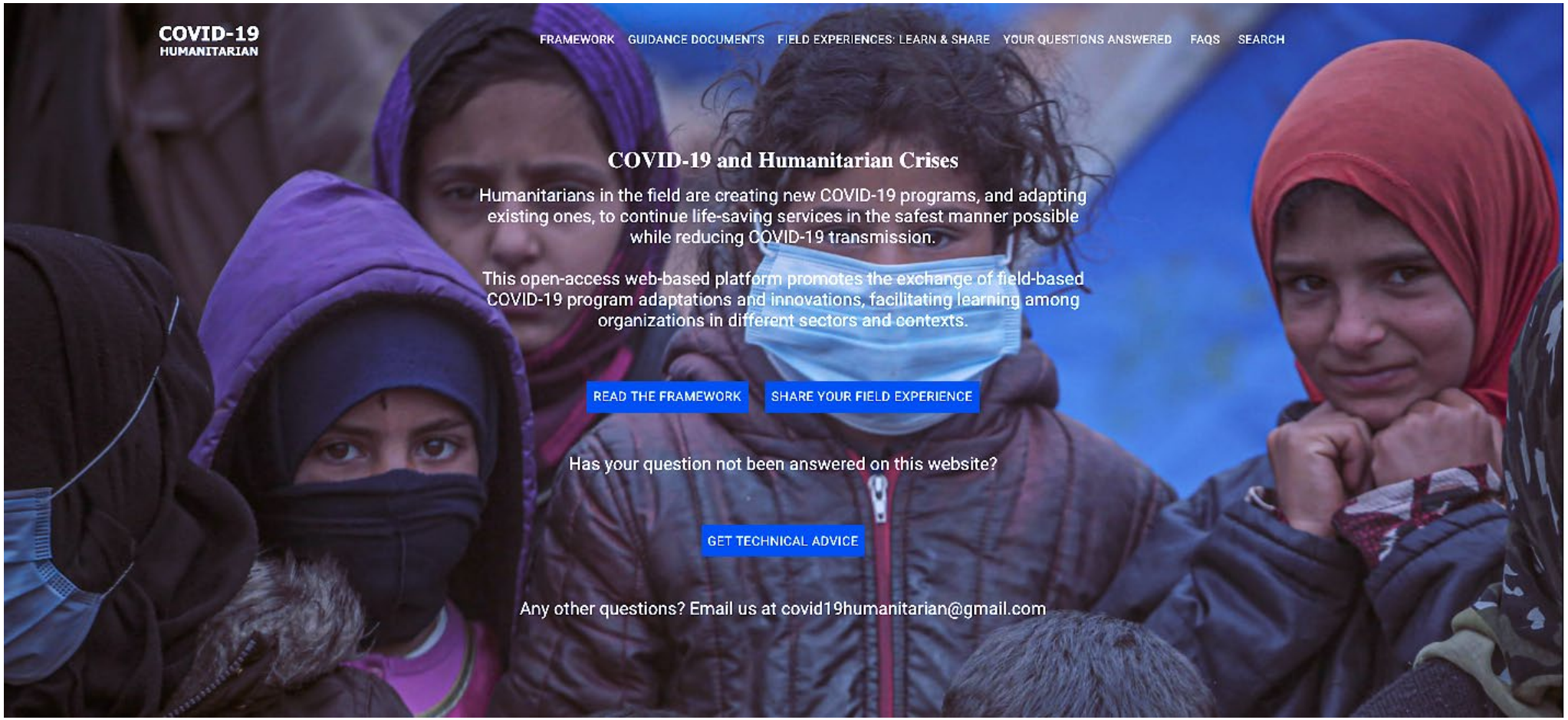
Source: HIT-COVID
(https://akuko.io/post/covid-intervention-tracking)

Masks, Household Transmission, and Humanitarian settings



Phase 3: What's Next?

Assessing future infection risk, treatments, vaccination strategies, and what we have learned



https://www.covid19humanitarian.com/, accessed Jul 27, 2020

Field Experiences

Since March 2020, we have been documenting how humanitarian programmes are changing in light of COVID-19. These field experiences, as reported by humanitarian actors, are collated on this page, and can be searched via the map or search menu.

*Please note that all relevant field experiences are displayed as dots on the map. Please click on the dot to see a list of relevant field experiences from that location below the map.

Choose Country

Choose Setting

Choose Target Population

Choose Category

Choose Section

Choose Area

SEARCH RESET

Contact
COVID-19 HUMANITARIAN
covid19humanitarian@gmail.com

Team
Johns Hopkins Center for Humanitarian Health
Health in Humanitarian Crises Centre, London School of Hygiene and Tropical Medicine
Geneva Centre of Humanitarian Studies, The Graduate Institute of International and Development Studies and the University of Geneva

As U.S. buys up remdesivir, 'vaccine nationalism' threatens access to COVID-19 treatments

July 5, 2020 6.46am EDT

Vaccinating Vulnerable Populations

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JUNE 18, 2020

How 'vaccine nationalism' could block vulnerable populations' access to COVID-19 vaccines

by Ana Santos Rutschman, The Conversation

Credit: CC0 Public Domain

Stigma & Discrimination

Aid and Policy News feature 27 July 2020

COVID-19 fuels tensions between Rohingya refugees and Bangladeshi hosts

'They feel like their lands and opportunities have now been permanently lost.'

The New Humanitarian | 25 years of journalism from the heart of crises

Traders sell their goods at Whykong fish market, near the Rohingya refugee camps. Income has fallen and prices have risen since the refugee crisis began in August 2017. (Zakir Hossain Chowdhury/TNH)

AZM Anas

Economics editor and journalist covering international development, migration, poverty, and the environment.

https://www.thenewhumanitarian.org/, accessed Jul 27, 2020

United Nations | COVID-19 Response

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Thousands of jobless migrant workers from Myanmar return home from Thailand. Photo: The International Organization for Migration (IOM)

BY THE DEPARTMENT OF GLOBAL COMMUNICATIONS

COVID-19: UN counters pandemic-related hate and xenophobia

"We must act now to strengthen the immunity of our societies against the virus of hate." – United Nations Secretary-General António Guterres

11 May 2020 — As instances of hate speech, stigma, discrimination and xenophobia continue to rise as a result of COVID-19, the United Nations and its partners are working to ensure that solidarity prevails during the pandemic. Migrants and refugees are among those who have falsely been blamed and

About the author

Department of Global Communications

The United Nations Department of Global Communications (DGC) promotes global awareness and understanding of the work of the United Nations.

"We must act now to strengthen the immunity of our societies against the virus of hate." – United Nations Secretary-General António Guterres

https://www.un.org/en/coronavirus/covid-19-un-counters-pandemic-related-hate-and-xenophobia, accessed Jul 27, 2020

Public Health Orders and Asylum Law

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Migration News 29 June 2020

Briefing: Coronavirus and the halting of asylum at the US-Mexico border

'Even if the coronavirus abates, we don't really expect the administration to lift these restrictions.'

Eric Reidy

Freelance journalist focused on migration

US policies put in place during the pandemic have effectively cut off access to asylum at the US-Mexico border. (Eric Reidy/TNH)

https://www.thenewhumanitarian.org/news/2020/06/29/Mexico-US-coronavirus-mass-expulsions-asylum-halt?utm_source=twitter&utm_medium=social&utm_campaign=social, accessed Jul 25, 2020

Poll

Have major outbreaks of SARS-CoV-2 been occurring among refugee populations around the world?

- ❑ Yes
- ❑ No
- ❑ Not known

No Major Outbreaks Thus Far (?)

- Is transmission in these populations somehow different?
- Are we just not seeing it?
- Is it just delayed?
- Is an outbreak not going to happen?

INSIDE DEVELOPMENT | COVID-19

As COVID-19 deaths rise in Cox's Bazar, is increased testing enough?

By **Jenny Lei Ravelo** // 10 June 2020

Humanitarian Aid | Global Health | UNHCR | Food for the Hungry | Coxs Bazar, Bangladesh

Our COVID-19 coverage is free. Please consider a Devex Pro subscription to support our journalism.

Ahead of screening, a woman goes through a hygiene and sanitation procedure at Camp 12 Primary Health Center in Kutupalong Refugee Camp, Bangladesh. Photo by: Nihab Rahman / Food for the Hungry

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https://www.devex.com/news/as-covid-19-deaths-rise-in-cox-s-bazar-is-increased-testing-enough-97412, accessed Jul 25, 2020

The Stories being told: Rohingya report on the epidemic

Edition 7, 13th July 2020

COVID-19 Explained

The prevalence and impact of COVID-19 in the camps today remains unclear and different sources of information paint different and conflicting pictures of the situation. Official numbers of positive COVID-19 cases and deaths confirmed through testing suggest the virus is yet to spread across the camps and that its peak lies ahead. This is reinforced by the fact that medical facilities have not experienced a surge in people seeking treatment, nor a surge in the use of quarantine facilities. There has also been a low number of reported deaths. However, research conducted by CwC Rohingya researchers between 25 May and 25 June 2020 suggest widespread illness moving quickly through communities and an increase in deaths during that time. These reports were corroborated by other sources within the response and discussed in sector meetings. Symptoms reported included fever, coughing, and severe aches and pains, as well as deaths, primarily among older people. Whether these symptoms were COVID-19 or a flu is unclear and has yet to be determined.

The volume of these reports combined with reluctance among the Rohingya to visit health facilities during this time merit their further consideration. Engaging with these reports in a genuine and sensitive manner is important for building trust and can reveal new ways to learn about how people share information. Although recently there has been a slight increase in Rohingya consenting to testing and reporting symptoms, this does not address the reason behind the delay in support from the camps. Exploring why the Rohingya were initially reluctant to engage with the response will help understand how to better improve response messaging and planning moving forward.[1]

This edition of COVID-19 Explained explores these reports to better understand how the Rohingya understand their experiences. It is both an exploration of what it could mean if the reports are true and what it means that the reports are *believed* to be true. The emphasis is on experiential understanding – people's lived experiences – rather than scientifically verifiable data through a method such as testing. The testimonies are from researchers, their relatives, community leaders, and key contacts in the camps. Whether or not the illness is COVID-19, the exercise unveiled issues within the current response that discourage the Rohingya from seeking testing and treatment for COVID-19 symptoms and explains these fears.

[1] According to the Health Sector led by WHO in Cox's Bazar, the number of individuals consenting to testing in the camps has jumped from an estimated average of 8 per day in June to a minimum of 25 and a maximum of 57 tests per day from the 1st to the 12th of July. https://www.humanitarianresponse.info/en/operations/bangladesh/health
Any questions? Please contact us at Daniel Coyle (dcoyle@iom.int) and Candice Holt, (ch@acaps.org)

IOM UN MIGRATION

acaps NPM ANALYSIS HUB Cox's Bazar, Bangladesh

'In the first week after Eid, Rohingya researchers began reporting deaths from COVID-19 related symptoms across the Kutupalong portion of the camps (northern part of KBE).'

'One volunteer said, "several funeral processions passed in front of my house down the main road of Kutupalong every day.'

'People shared and remarked openly that they no longer fear the virus because they were sick during this time.'

'When people were asked about symptoms or deaths, they simply reported symptoms or causes unrelated to COVID-19.'

https://www.acaps.org/sites/acaps/files/products/files/covid-19_explained_-_edition_7_the_stories_being_told.pdf, accessed Jul 26, 2020

How Can We Know What's Really Happening?

- Mortality data
- Studies on Risk Communication and Community Engagement
- Serology
- Structured and protected data sharing agreements
- Indirect health consequences of the pandemic

Acknowledgements

Johns Hopkins Center for Humanitarian Health

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- Marian Schilperoord
- Stephen O'Malley

IOM

- Rizki Muhammad
- Gretchen Bueermann

Save the Children

- Catherine McGowan
- Rachael Cummings

Public Health England

- David Kennedy

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Médecins Sans Frontières

Thank You!

Q&A