

Cover Photo: The intensive care unit of Al-Thawra
Hospital in Taiz, Yemen in 2015.
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Acknowledgments

We are extremely grateful to the medical providers, journalists, activists, and humanitarian workers inside and outside of Yemen who shared their insights and experiences with us. We also wish to thank the Norwegian and Netherlands Ministries of Foreign Affairs for supporting this research. The views expressed in the report, and any errors, are solely our own.

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Abbreviations

AWD Acute watery diarrhea **CFR** Case fatality rate

GDP Gross domestic product Intensive care unit ICU

IDP Internally displaced person Middle East and North Africa **MENA MSF** Médecins Sans Frontières

Non-governmental organization NGO

OCHA Office for the Coordination of Humanitarian Affairs

Personal protective equipment PPE Southern Transitional Council STC

UAE **United Arab Emirates**

United Nations UN

UNDP **United Nations Development Programme**

UNHCR United Nations High Commissioner for Refugees

United Nations Children's Fund UNICEF

US **United States**

WASH Water, sanitation, and hygiene

World Food Programme WFP WHO World Health Organization

I. Introduction

The Yemeni civil war is an extraordinarily complex conflict—with the involvement of regional and international players adding to an increasing number of local antagonists—that has left nearly 30 million civilians suffering the consequences. The conflict ignited in March 2015, when a coalition of states led by Saudi Arabia and the United Arab Emirates (UAE), with support from the United States (US), intervened at the request of interim president Abdrabbuh Mansur Hadi. This intervention occurred after Houthi armed groups from northern Yemen and the armed forces aligned to former President Ali Abdullah Salih had seized and consolidated control over the capital, Sana'a and other parts of the country.

Five long years later, the conflict continues without an end in sight. Nor is it now just a battle between the internationally recognized interim government and the Houthis. In August 2019, the secessionist Southern Transitional Council (STC), backed by the UAE, drove Hadi loyalists out of Aden, triggering a civil war within a civil war. The situation is further compounded by the presence of al-Qaeda in the Arabian Peninsula and the Islamic State, which control territories in the east and along the coast and carry out attacks elsewhere in the country. Although fighting abated somewhat at the end of 2019, the first half of 2020 has seen a marked increase in airstrikes and deaths. Seven new battlefields have opened up since the beginning of the year, bringing the total number of active frontlines to a staggering 42.1

As has been the case throughout the war, the civilian population continues to bear the brunt of the carnage. In May, over half of bombings with identifiable targets struck civilians or civilian infrastructure.² Fully 80 percent of the population now depends for survival on humanitarian assistance. Starvation, disease, and displacement are rampant. Millions of families have been torn apart and an entire generation of children has been traumatized. The country's social infrastructure, including its health system, is all but destroyed, its economy has collapsed, and lawlessness and violence dominate the rhythm of daily life throughout the country.

It is this tragic context into which the coronavirus pandemic has descended. Although the first case of COVID-19 in Yemen was not confirmed until April 10, infections have multiplied at an alarming

¹ UN Office for the Coordination of Humanitarian Affairs (OCHA), "Yemen Humanitarian Response Plan Extension," June 2020, hereafter "OCHA Plan Extension." Accessed July 16, 2020: https://reliefweb.int/sites/reliefweb.int/files/resources/Extension%20Yemen%20HRP%202020_Final%20%281%29.pdf,

² International Rescue Committee, "Disease, death and destruction: Yemen is experiencing an unimaginable nightmare, warns the International Rescue Committee," June 19, 2020. Accessed July 16, 2020: https://www.rescue.org/pressrelease/disease-death-and-destruction-yemen-experiencing-unimaginable-nightmare-warns.

rate since then. They are likely to continue doing so, with devastating consequences: few countries on earth are as ill-equipped to suppress the pandemic or as vulnerable to the effects of its unchecked spread. In the absence of a ceasefire and a surge in international support, the health impacts alone may well be unfathomable. Secondary effects—including famine³—may prove even more deadly. As the World Health Organization (WHO) has warned, "The risk [COVID-19] poses to public health in Yemen is unparalleled."4

This report firstly addresses the factors that have allowed this unparalleled state of affairs to come about. These include not only the conflict, but poor governance, corruption, food insecurity, poverty, disease, climate shocks, and, crucially, the absence of effective, sustained international leadership and support. The paper also identifies which groups are most threatened by the pandemic: internally displaced persons (IDPs); refugees and migrants; prisoners; and women, children, and persons with disabilities. It then assesses the devastating impact that the virus has had on these communities and the wider population thus far.

If allowed to take hold, COVID-19 threatens the lives of nearly 30 million people who are already suffering through the world's worst humanitarian crisis

To assess that impact, we spoke to a number of medical personnel, activists, journalists, and aid workers inside and outside of Yemen. Given the sensitivity of the subject matter, and the ongoing efforts to suppress vital information about the true impact of COVID-19 on Yemenis, most of those interviewed requested to remain anonymous. We have gladly adhered to their request.

Finally, the report urges the international community to pay far closer attention to the situation in Yemen and to provide much greater, more coherent, and more conflict-sensitive support to the war-torn country. Such support is now more urgent than ever. If allowed to take hold, COVID-19 threatens the lives of nearly 30 million people who are already suffering through the world's worst humanitarian crisis. Nor is the risk posed by COVID-19's spread in Yemen limited to Yemenis. A pandemic that recognizes no borders or fault-lines cannot fester anywhere without threatening health security everywhere. Yet, thus far, the international response has been both muted and slow. A new approach is urgently needed—one that aims not only to address the immediate threat that the coronavirus poses, but to tackle the underlying conditions that have left Yemen so uniquely vulnerable to the dual crisis of conflict and COVID-19 in the first place.

³ Food and Agriculture Organization, "Addressing the Impacts of COVID-19 in Food Crises (May Update)," May 15, 2020. Accessed July 16, 2020: http://www.fao.org/emergencies/appeals/detail/en/c/1276086/.

⁴ World Health Organization (WHO), "Health care workers face a double battle-COVID-19 in a conflict zone," July 2, 2020. Accessed July 16, 2020: http://www.emro.who.int/yem/yemen-news/health-care-workers-face-a-double-battle-covid-19-ina-conflict-zone.html.

II. A country unprepared for a pandemic

By far the main cause of the unparalleled crisis in Yemen is the conflict that remains ongoing there. It is among the deadliest wars in the world. The country ranks in the top-five least peaceful nations worldwide, along with Afghanistan, Syria, Iraq, and South Sudan. More than 100,000 people have died directly from airstrikes and bombings since 2015. In addition to combat deaths, fatalities due to the war's knock-on effects, including hunger and disease, exceed 130,000, and children account for one in four deaths. Yet the conflict alone cannot explain Yemen's singular vulnerability to the present pandemic. The following factors are sure to act as additional accelerants.

The crisis of governance

Even before the war, the track record of authorities in Yemen has been characterized by poor and corrupt governance. The chronic lack of responsible leadership has helped to splinter the nation into pieces, with internal borders constantly re-drawn through corruption and bloodshed. Indeed, in addition to the main conflicting parties, the country is gradually but steadily dividing into many separate fiefdoms, each more immiserated than the next. Insufficient resources, acute polarization, an insecure operational environment, bureaucratic dysfunction, and economic decline all contribute to this governance crisis. As a consequence, even areas still untouched by active warfare lack the leadership, delivery mechanisms, and resources necessary to safeguard the public good.

An unprecedented humanitarian situation

For several years running, the humanitarian crisis in Yemen has been the world's worst. Even before the COVID-19 pandemic struck, some 24 million people (out of a total population of roughly 30 million) were in need of humanitarian aid and protection. Today, around 20 million Yemenis are food insecure, while a staggering 50 percent of the population does not know how they will obtain their next meal.8 One in four Yemenis, including 2.1 million children and 1.2

⁵ Institute for Economics & Peace, "Global Peace Index 2020: Measuring Peace in a Complex World," June 2020. Accessed July 16, 2020: https://reliefweb.int/sites/reliefweb.int/files/resources/GPI 2020 web.pdf.

⁶ Armed Conflict Location and Event Data Project, "Over 100,00 Reported Killed in Yemen War," 31 October 2019. Accessed July 16, 2020: https://acleddata.com/2019/10/31/press-release-over-100000-reported-killed-in-yemen-war/.

⁷ United Nations Development Programme (UNDP), Assessing the Impact of War on Development in Yemen, 2019, hereafter "UNDP 2019." Accessed July 16, 2020: https://www.arabstates.undp.org/content/rbas/en/home/library/crisis-responseo/assessing-the-impact-of-war-on-development-in-yemen-.html.

⁸ UN News, "Waiting to declare famine 'will be too late for Yemenis on brink of starvation", July 10, 2020. Accessed July 16, 2020: https://news.un.org/en/story/2020/07/1068101.

million pregnant and lactating women, are either moderately or severely malnourished. More than 3.5 million people have been forcibly displaced. Ten million are just one step away from famine.9

Economic collapse

Yemen was already the poorest country in the Middle East and North Africa (MENA) region before the conflict began. The war has turned a dire situation into an economic catastrophe. The country has lost nearly US \$90 billion in economic output. Gross domestic product (GDP) has declined by 50 percent, one of the sharpest freefalls anywhere in the world. GDP per capita has plummeted to a level not seen by Yemenis since before 1960, trapping 75 percent of the country's nearly 30 million people in extreme deprivation. ¹⁰ Waves of currency depreciations in 2018 and 2019 have created inflationary pressure that has exacerbated the humanitarian crisis, and disruptions to public infrastructure and financial services have severely impaired private sector activity. The years-long nonpayment of civil servants, including health workers, has added to the poverty crisis while crippling essential service

If the war continues through 2022, Yemen will no longer only be the poorest country in MENA—it will become the poorest country on earth

delivery. According to the United Nations (UN), even if the war were to end now, recovery would take decades. ¹¹ If the war continues through 2022, Yemen will no longer only be the poorest country in MENA—it will become the poorest country on earth. ¹²

Health services deterioration

Protracted conflict, together with the prolonged economic emergency, has pushed Yemen's health system to the brink of collapse. There are just three doctors and seven hospital beds for every 10,000 people. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at all. Almost one-fifth of the country's 333 districts have no doctor at

⁹ OHCA Plan Extension 2020; Office of the Resident Coordinator and Humanitarian Coordinator for Yemen, "Yemen in the Eye of a COVID-19 Perfect Storm," April 28, 2020. Accessed July 16, 2020: https://reliefweb.int/report/yemen/yemen-eye-covid-19-perfect-storm-enar.

¹⁰ UNDP 2019.

¹¹ OCHA, "Yemen Situation Report, May 6 2020." Accessed July 16, 2020: https://reliefweb.int/report/yemen

¹² UNDP, "Prolonged conflict would make Yemen the poorest country in the world, UNDP study says," September 26, 2019. Accessed July 21, 2020: https://www.undp.org/content/undp/en/home/news-centre/news/2019/Prolonged conflict would make Yemen poorest country in world UNDP.html.

¹³ Auke Lootsma, "Conflict, poverty and inequality undermine COVID-19 fight in Yemen," UNDP, April 19, 2020. Accessed July 16, 2020: https://reliefweb.int/report/yemen/conflict-poverty-and-inequality-undermine-covid-19-fight-yemen.

¹⁴ WHO, "Health care workers, a fragile health system and the looming spectre of COVID-19 in Yemen," May 27, 2020. Accessed July 16, 2020: http://www.emro.who.int/yem/yemen-news/the-looming-spectre-of-covid-19-in-yemen.html.

 $^{^{15}}$ Middle East Monitor, "A third of all Saudi coalition air strikes in Yemen targeted civilians," March 26, 2020. Accessed July 21, 2020: https://www.middleeastmonitor.com/20200326-a-third-of-all-saudi-coalition-air-strikes-in-yemen-targeted-civilians/.

across the country. As a result, about 20 million Yemenis—67 percent of the population—lack access to minimal healthcare services and thousands continue to die from preventable and treatable diseases every year. 16

The collapse of other social and physical infrastructures

The health sector is not the only one to meet the COVID-19 challenge in a state of utter disrepair. Yemen's water infrastructure is extremely degraded, operating at less than 5 percent efficiency. Yemen's water infrastructure is extremely degraded, operating at less than 5 percent efficiency. More than 20 million Yemenis lack access to clean water or adequate sanitation, of which more than 11 million are in acute need of water resources and require life-saving assistance. Only about 30 percent of Yemenis have access to safe and sufficient water, while roughly 70 percent lack soap for handwashing and personal hygiene. Meanwhile, teachers in Yemen have not been paid since 2016. Even prior to COVID-19, one-third of schools were no longer functioning and one-third of school-age children were out of school. Roads have also been badly damaged and are no longer able to support the levels of transport required to sustain adequate supplies of basic goods.

Rampant disease

As a consequence of the above conditions, Yemen is struggling with many infectious diseases beyond COVID-19. In June, the UN warned that countless lives are at risk as a result of malaria, dengue fever, and other diseases. ²⁰ Most concerning, the country is in the midst of the largest cholera outbreak ever recorded. Since its emergence in 2016, cholera has affected 22 of Yemen's 23 governorates. Suspected cases total more than 2.2 million, including nearly 4,000 deaths, more than half of whom were children. Just between January and June 2020, more than 137,000 cases of cholera and acute watery diarrhea (AWD) have been recorded. Over 5 million children under the age of five in Yemen are currently facing a heightened threat of cholera and AWD, as the country continues to experience increased heavy rains since mid-April. ²¹

Climate shocks

Last, climate change has greatly increased the suffering and vulnerability of Yemenis. At an accelerating rate, the country is experiencing rising temperatures and decreasing average rainfall.

¹⁶ IFRC, "Yemen's healthcare system on the brink of collapse," October 15, 2019. Accessed July 21, 2020: https://media.ifrc.org/ifrc/2019/10/15/yemens-healthcare-system-brink-collapse/. ¹⁷ OCHA Plan Extension 2020.

¹⁸ Global WASH Cluster, "Advocacy Brief: A Water Crisis in the Time of COVID-19," June 2020. Accessed July 16, 2020: https://reliefweb.int/sites/reliefweb.int/files/resources/advocacy-brief-wash-in-yemen-14062020-fv.pdf.

¹⁹ OCHA Plan Extension 2020.

²⁰ Office of the United Nations High Commissioner for Human Rights, "Press briefing note on Yemen," 12 June 2020. Accessed July 16, 2020: https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25950&LangID=E.

²¹ OCHA, "Yemen: Fastest growing cholera epidemic ever recorded brings number of cases to 895,000," November 2, 2017, accessed July 16, 2020: https://www.unocha.org/story/yemen-fastest-growing-cholera-epidemic-ever-recorded-brings-number-cases-89,5000; UNICEF, "Geneva Palais Briefing on the Humanitarian Situation for Children in Yemen," June 12 2020, accessed July 16, 2020: https://www.unicef.org/press-releases/geneva-palais-briefing-note-humanitarian-situation-children-yemen; UNICEF, "Over 5 Million Children Face the Threat of Cholera and Acute Watery Diarrhea in the Midst of COVID-19 As Yemen Gets Heavy Rains," 29 April 2020, accessed July 16, 2020: https://www.unicef.org/yemen/press-releases/over-5-million-children-face-threat-cholera-and-acute-watery-diarrhea-midst-covid-19.

The agriculture sector, which employs half the workforce, is highly dependent on rain streams, meaning that droughts have a devastating effect on food supply and employment. As rains fail, groundwater is rapidly being depleted, causing mounting tensions over water resources. Moreover, while rainfall is declining on average, the rains are also becoming increasingly unpredictable. Parts of the country have been ravaged by torrential downpours. This year, unseasonable rains have created ideal breeding conditions for locusts, triggering an unprecedented outbreak across the region that has greatly exacerbated food insecurity. The downpours are also wreaking havoc in urban areas. In April, Aden experienced flash floods that caused significant damage to the city's infrastructure and increased risks of water-borne illnesses.

III. Particularly vulnerable groups

COVID-19 poses a threat to the entire population of Yemen. But particular groups are especially vulnerable to the impact of the disease and its second-order effects.

Internally displaced persons

Yemen is home to the world's fourth-largest conflict-induced internal displacement crisis. ²² In the last five years, nearly four million people have been uprooted, with an estimated one million struggling to survive in makeshift, overcrowded, and unsanitary camps. ²³ Conditions in these camps are considered among the worst in the world: IDPs lack adequate shelter, healthcare, education, and protection services and, as the UN has warned, social distancing in the camps "appears impossible." ²⁴ Unfortunately, the number of inhabitants only continues to grow, with 85,000 newly displaced in the first few months of 2020. For IDPs living outside of camps, meanwhile, conditions are also dire. Areas of displacement tend to be among Yemen's poorest and least secure, and pressure on struggling relatives to accommodate IDPs has only compounded these economic and security woes. IDPs without relatives to take them in face an even more precarious situation. Thousands are at high risk of losing their rental accommodations just as the pandemic takes hold. ²⁵ Untold numbers have already been thrust out onto the streets.

Refugees and migrants

Despite dire conditions in the country, the absence of alternatives (such as passage across the Mediterranean) has made the journey from the Horn of Africa to Yemen the world's busiest maritime migration route. ²⁶ As a result, Yemen is home to 281,000 refugees and asylum-seekers, mainly from Somalia and Ethiopia. The refugees—50 percent of whom are based in Aden and 40 percent in Amanat Al Asimah—are in principle registered and provided with documentation, assistance, and referrals to other services, including health and cash assistance to meet their basic needs. However, Human Rights Watch has reported many violations against migrants and asylum-seekers: "Government officials have tortured, raped, and executed migrants and asylum seekers from the Horn of Africa in a detention center in the southern port city of Aden. The authorities

²² OCHA Plan Extension 2020.

²³ UNHCR, "Critical Funding Needs: Yemen," April 23, 2020. Accessed July 16, 2020: https://reporting.unhcr.org/sites/default/files/UNHCR%20Yemen%202020%20Critical%20Needs%20-%2023APR20_0.p.df.

²⁴ Lootsma, 2020.

 ²⁵ UNHCR, "Operational Update: Yemen," June 11, 2020. Accessed July 16, 2020: https://reporting.unhcr.org/sites/default/files/UNHCR%20Yemen%20Operational%20Update%20-%2011JUN20.pdf.
 ²⁶ Bethan McKernan, "Yemen's hidden migrants risk conflict and coronavirus in fight for survival," *The Guardian*, June 2 2020. Accessed July 16, 2020: https://www.theguardian.com/global-development/2020/jun/02/yemen-hidden-migrants-risk-conflict-and-coronavirus-in-fight-for-survival.

have denied asylum seekers an opportunity to seek refugee protection and deported migrants en masse to dangerous conditions at sea."27 The pandemic has exacerbated their plight. The first confirmed case of COVID-19 in Sana'a was a Somali refugee, and since then migrants have been stigmatized and scapegoated as vectors of disease. 28 Violence and harassment against foreigners have increased, and many have been forced into quarantine, denied services, or been stranded in desert areas without food or water.29

Prisoners and detainees

Since the conflict broke out in early 2015, an untold number of people—among them journalists, academics, and members of minority religions—have been forcibly abducted, disappeared, and detained in Yemen.³⁰ Conditions of detention are "abysmal," particularly in unofficial detention sites.31 Overcrowding, ill-treatment, and the absence of basic services ensure that diseases and ill health are rife. For instance, in one prison in Aden, as many as 44 detainees are confined to a room of just 10 square meters.³² As the International Committee of the Red Cross has warned, "In an overcrowded prison, once one person has COVID-19 it's likely that hundreds of people will have it."33 To forestall such a travesty, the UN Group of Eminent International and Regional Experts has urged all parties to the conflict in Yemen "to immediately release all detainees and political prisoners being held in political, security and military detention facilities, official and secret alike, in order to prevent and mitigate the risks of COVID-19 contagion in the whole of Yemen, in line with their obligations under international law."34

Women and children

Yemen is one of the most dangerous places on earth to be a woman or a child.35 More than one million pregnant women are malnourished. Children are especially vulnerable in the war-torn country; almost every child (over 12 million in total) is already in need of humanitarian assistance. Seventy percent of them have no access to clean water and sanitation, while 10.3 million do not

²⁷ Human Rights Watch, "Yemen: Detained African Migrants Tortured, Raped," April 17, 2018. Accessed July 16, 2020: https://www.hrw.org/news/2018/04/17/yemen-detained-african-migrants-tortured-raped.

²⁸ WHO, "WHO, IOM raise concern over COVID-19 discrimination against migrants in Yemen," May 10, 2020. Accessed July 16, 2020: http://www.emro.who.int/yem/yemen-news/who-iom-raise-concern-over-covid-19-discrimination-againstmigrants-in-yemen.html?format=html.

²⁹ Reuters, "The African refugees and migrants trapped inside Yemen's war," June 20, 2020. Accessed July 16, 2020: https://news.trust.org/item/20200620071548-n6e6x/.

³⁰ Amnesty International, "Yemen: Illegal detention remains rife after five years of war," March 24, 2020. Accessed July 21, $\textbf{2020:} \ \underline{\text{https://www.amnesty.org/en/latest/news/2020/o3/yemen-illegal-detention-remains-rife-after-five-years-of-war/.} \\$ 31 Mwatana for Human Rights, "Yemen: Urgent Measures Needed to Protect Civilians from COVID-19," April 28, 2020. Accessed July 16, 2020: https://mwatana.org/en/protect-civilians-from-covid19/.

³² Human Rights Watch, "Yemen: Aden Detainees Face Dire COVID-19 Risk," July 2, 2020. Accessed July 8, 2020. https://www.hrw.org/news/2020/07/02/yemen-aden-detainees-face-dire-covid-19-risk.

³³ International Committee of the Red Cross, "COVID-19: Protecting prison populations from infectious coronavirus disease," March 11, 2020. Accessed July 16, 2020: https://www.icrc.org/en/document/protecting-prison-populations-infectiousdisease.

³⁴ UN News, "Release inmates in Yemen to avert nationwide coronavirus outbreak, experts urge," March 30, 2020. Accessed July 16, 2020: https://news.un.org/en/story/2020/03/1060642.

³⁵ International Organization on Migration, "Statement on Yemen by Principals of the Inter-Agency Standing Committee," May 28, 2020. Accessed July 16, 2020: https://www.iom.int/news/statement-yemen-principals-inter-agency-standingcommittee.

have enough food to eat and 7.8 million are unable to access education.³⁶ Furthermore, an estimated 2 million children are acutely malnourished, of which roughly 360,000 are at risk of dying, ³⁷ As noted above, children account for roughly one in four combat deaths. It has been estimated that 85,000 children with severe acute malnutrition may have died between April 2015 and October 2018.38

Persons with disabilities

The current conflict in Yemen has had a disproportionate impact on persons with disabilities, who are estimated by WHO to be at least 4.5 million Yemenis, or 15 percent of the population. On a daily basis, they face additional barriers to accessing health services, education, and employment opportunities. According to Amnesty International, both the affordability of health care and the distance to and from health services are major impediments to accessing medical care.³⁹ Persons with disabilities living in displacement face additional and specific challenges, including difficulties in fleeing violence, accessing aid, and securing adequate living conditions and access to sanitation facilities, compromising their ability to practice self-care.

³⁶ UNICEF, "Yemeni children face deadly hunger and aid shortages as COVID-19 pandemic spreads-UNICEF," 26 June 2020. Accessed July 16, 2020: https://www.unicef.org/press-releases/yemeni-children-face-deadly-hunger-and-aidshortages-covid-19-pandemic-spreads.

³⁷ UN News, July 10, 2020.

³⁸ Save the Children, "Yemen: 85,000 Children May Have Died from Starvation Since Start of War," November 20, 2018. Accessed July 16, 2020: https://www.savethechildren.org/us/about-us/media-and-news/2018-press-releases/yemen-85000-children-may-have-died-from-starvation.

³⁹ Amnesty International, "Yemen: Excluded—Living with Disabilities in Yemen's Armed Conflict," 3 December 2019 (hereafter "Amnesty International, 2019." Accessed July 16, 2020: https://www.amnesty.org/en/documents/MDE31/1383/2019/en/.

IV. Developments since the pandemic took hold

The above factors have left Yemen, and especially its most marginalized communities, uniquely vulnerable to COVID-19. A catastrophe within a crisis is now unfolding, as the pandemic sows further havoc.

A mounting case count

The first confirmed case of COVID-19 in Yemen was announced in Hadhramout on 10 April 2020. Since then the disease has spread rapidly through at least 10 governorates. As of 16 July, confirmed COVID-19 cases in Yemen have reached 1,530, with 434 related deaths. 40 All indications are that these numbers reflect just a fraction of the true spread, which is unknown due to inadequate testing (the country has just six labs equipped with testing capacity, only one of which is in the north), poor data collection, and efforts by various entities to conceal the extent of the threat. Houthi authorities, in particular, have gone to great lengths to keep confirmed cases under wraps. In the south, testing is hampered by the ongoing divisions between the STC and the internationally recognized government. In the absence of credible data to the contrary, as of early May, the UN has been operating under the assumption that the COVID-19

According to one model, millions of Yemenis will ultimately be infected, nearly 300,000 will likely require hospitalization, and more than 42,000 could die

crisis in Yemen is "full-blown."⁴¹ Indeed there is a widespread belief that the virus is spiraling out of control.⁴² According to one model, millions of Yemenis will ultimately be infected, nearly 300,000 will likely require hospitalization, and more than 42,000 could die from the disease,

⁴⁰ WHO COVID-19 Dashboard: Yemen. Accessed July 16, 2020: https://covid19.who.int/region/emro/country/ye.

⁴¹ UN Humanitarian Country Team in Yemen, "COVID-19 Preparedness and Response Monthly Report," June 2020. Accessed July 16, 2020: https://reliefweb.int/report/yemen/yemen-covid-19-preparedness-and-response-monthly-report-inne-2020-enar.

while another model warns of up to 85,000 deaths.⁴³ Nor do these figures take into account the pandemic's extraordinary secondary effects.

Alarming death rates

With the conflict ongoing, COVID-19 remains only one source of unnatural fatalities in Yemen. Throughout May 2020, five civilians were killed or injured every day on average, one in three of whom were children. 44 Nevertheless, the threat of death from COVID-19 may quickly overtake that of the war. According to the UN's head of humanitarian operations in Yemen, the death toll from the pandemic could "exceed the combined toll of war, disease, and hunger over the last five vears."45

Indeed, although the official death count remains low by international standards, the overall case fatality rate (CFR) is roughly 25 percent, five times higher than the worldwide observed CFR. 46 As noted below, some of this may be due to inadequate testing. But figures from local authorities, activists, journalists, and physicians point to an alarming death toll. In Taiz, for instance, "Although the official reports indicate only 40 confirmed cases (with 10 fatalities) so far, we know that real numbers are much higher, people are dying before they make it to hospitals," according to Dr. Mokhtar Almoliky, head of the Isolation Center at al-Joumhouri Hospital in Taiz. Elsewhere, burial prices have surged to seven times their normal rates,⁴⁷ and local health authorities insist that death rates are soaring. A doctor based in Sana'a has described the city as being "haunted by death" for the past two months. 48 In one week in May, in Aden, 500 people were reported to have died with coronavirus-like symptoms, according to the city registrar.⁴⁹ According to another estimate, the first half of May saw four times as many deaths in the city as the whole month of March. 50 Another concerning data point: the COVID-19 treatment center run by Medicines Sans Frontières (MSF) in Aden admitted 173 patients between the end of April and the middle of May, almost 40 percent of whom subsequently died. 51

⁴³ OCHA Plan Extension 2020; IRC, "Disease, Death and Destruction: Yemen is Experiencing an Unimaginable Nightmare," Press Release, June 19, 2020. Accessed July 16, 2020: https://www.rescue.org/press-release/disease-death-and-destructionyemen-experiencing-unimaginable-nightmare-warns.

⁴⁴ OCHA, "Under Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, Mark Lowcock, Briefing to the Security Council on the humanitarian situation in Yemen, 24 June 2020," (henceforth "Lowcock briefing, June 24, 2020"). Accessed July 16, 2020: https://reliefweb.int/report/yemen/under-secretary-general-humanitarian-affairs-andemergency-relief-coordinator-mark-28.

⁴⁵ Sam Kiley, "Experts fear nation could suffer one of the world's worst outbreaks," CNN, June 4, 2020. Accessed July 16, 2020: https://www.cnn.com/2020/06/04/middleeast/yemen-coronavirus-intl/index.html.

⁴⁶ OCHA, "Daily Noon Briefing Highlights: Yemen," July 2, 2020. Accessed July 16, 2020: https://www.unocha.org/story/daily-noon-briefing-highlights-yemen.

⁴⁷ Lowcock briefing, June 24, 2020.

⁴⁸ Ben Farmer and Ali Mahmood, "War, starvation, disease...now COVID-19: Yemen 'haunted by death' as coronavirus cases climb," The Telegraph, July 13, 2020. Accessed July 16, 2020: https://www.telegraph.co.uk/global-health/science-anddisease/war-starvation-disease-now-covid-19-yemen-haunted-death-coronavirus/.

⁴⁹ Mark Stone, "Coronavirus will 'delete Yemen from maps all over the world'," Sky News, May 18, 2020. Accessed July 16, 2020: https://news.sky.com/story/coronavirus-will-delete-yemen-from-maps-all-over-the-world-11989917.

⁵⁰ Sarah El Sirgany and Sam Kiley, "Coronavirus death rates in Yemen's Aden could exceed its wartime fatalities," CNN, June 12, 2020: https://www.cnn.com/2020/06/12/middleeast/yemen-coronavirus-deaths-intl/index.html.

⁵¹ Médecins Sans Frontières, "Catastrophe unfolding in Aden's only COVID-19 treatment centre," May 21, 2020. Accessed July 16, 2020: https://www.msf.org/aden's-only-covid-19-treatment-centre-we-are-seeing-catastrophe-unfold.

Beyond the overall surge in deaths, an alarming indicator of the spread and impact of COVID-19 is the loss of public servants and health practitioners that appears to be underway. From late April 2020 to now, local activists have reported the deaths of dozens of prominent medical workers, judges, lawyers, politicians, artists, officials, and military personnel, likely from COVID-19. In June, Yassin Abdul Wareth, one of the country's most prominent infectious disease experts, succumbed to the virus.⁵² Local unions report that more than 46 medical workers, 28 judges, and 13 lawyers died just in the three weeks between mid-May and early June. 53 At least three World Food Programme (WFP) staff have also died of the virus.⁵⁴

A campaign of concealment

Despite the alarming trends, there is a campaign to suppress vital information about the true impact of COVID-19. Houthi authorities have implausibly announced just a handful of cases and one death in the north, and have threatened and detained doctors, nurses, and others who speak out about the virus. 55 Meanwhile, in the south, according to a local journalist we spoke to, "In the last couple of weeks before COVID-19 attacked the city, the Civil Registry Office in Aden used to report all deaths in the city to news agencies, but with the very high number of obituaries recently, they stopped reporting under political pressure from the Ministry of Health. Early in June leaked data reported more than 1,820 deaths in Aden only." It has also been widely reported on social media and by aid workers that infected people are avoiding local hospitals, fearing isolation or stigmatization. 56 The conflict has exacerbated the situation. The same journalist who expressed concerns about the data in Aden relates that "the recent conflict in the city between the Southern Transitional Council and the Internationally Recognized Government has made the situation much worse. Now we lack public services and feel we do not even have leadership in our community...the information is much less than before." Another activist who declined to be named said, "Many parts of the country have entered a vicious cycle of poor conditions making them less accessible for receiving support. The lack of information has raised the concerns of people, they do not trust that they will be properly treated in the hospitals and they prefer to die at home."

A health system on the verge of collapse

The campaign of concealment is abetted by the lack of testing capacity in Yemen. To date, there are only six labs with COVID-19 testing capacity across the country, scattered in Aden, Sana'a, Hadhramout, Taiz, and Al Hudaydah. Dr. Abdulaziz Shadadie, the Head of Marib Department of

⁵² BBC, "Coronavirus: Five reasons why it is so bad in Yemen," June 21, 2020. Accessed July 16, 2020: https://www.bbc.com/news/world-middle-east-53106164.

⁵³ Associated Press, "Yemen's Rebels Crack Down as COVID-19 and Rumors Spread," June 9, 2020. Accessed July 16, 2020: https://www.voanews.com/middle-east/yemens-rebels-crack-down-covid-19-and-rumors-spread.

⁵⁴ Annie Slemrod, "UN appeals for Yemen aid amidst growing pandemic, donor doubts," The New Humanitarian, June 2, 2020. Accessed July 16, 2020: https://www.thenewhumanitarian.org/news/2020/06/02/Yemen-UN-coronavirus-aid.

⁵⁵ Sudarsan Raghavan, "Rebel threats, secret burials and shuttered hospitals mask spread of Yemen's epidemic," Washington Post, June 3, 2020. Accessed July 21, 2020: https://www.washingtonpost.com/world/middle_east/rebel-threats-secretburials-and-shuttered-hospitals-mask-spread-of-yemens-epidemic/2020/06/03/76583a68-a034-11ea-be06af5514ee0385 story.html.

⁵⁶ Médecins Sans Frontières, "As COVID-19 spreads, fear drives people away from hospitals in Yemen," July 9, 2020. Accessed July 16, 2020: https://www.msf.org/covid-19-spreads-fear-drives-people-away-hospitals-yemen.

Health and Population, said in a personal interview in May 2020, "Because there is no PCR available, Marib governorate has no ability to test suspected cases; our frontline doctors have no choice but to diagnose patients based on symptoms or occasionally radiologic diagnosis." This is all the more concerning given the large and growing number of IDPs concentrated in Marib.

Even if adequate diagnostics were available, as noted above, Yemen's health system has deteriorated markedly due to the conflict. The facilities that remain functional are by no means equipped to handle a crisis like COVID-19. Just one oxygen cylinder per month is available for every 2.5 million people.⁵⁷ The entire city of Aden, with a population of 800,000, has just 60 hospital beds dedicated to COVID-19 and only 18 ventilators. 58 Across the country, most health providers have not been paid salaries for years. 59 They lack access to basic equipment such as protective gear, leaving doctors, nurses, and aid workers especially vulnerable to contracting the virus. Dr. Ahmad Mansour, from the Central Laboratory in Taiz, told us: "Despite the dangerous work environment, we do not have enough personal protective equipment (PPE) or the essential materials to manage biomedical waste, and this critically risks our lives." As a result, many health workers are not reporting for duty. Others, as noted above, are dying on the job. Meanwhile, overburdened medical facilities are rejecting patients; the UN has received reports of hospitals turning away people with tell-tale COVID-19 symptoms like difficulty breathing. 60

Dire economic repercussions

In addition to imperiling the health of Yemenis, post-pandemic events have only hastened Yemen's economic collapse. The global crash in oil prices has struck a major blow to the country's economy, with hydrocarbon revenues shrinking to half of what they were in 2019. Meanwhile, another financial lifeline—support from Saudi Arabia, which has provided \$2.2 billion since 2018—may soon come to an end, as Saudi Arabia battles its own recession and contends with the fighting between the government of Yemen and the STC. A recent analysis has warned that a suspension or reduction of Saudi aid would trigger an unprecedented rapid depreciation of the Yemeni riyal, crippling the country's ability to import food. 61 Already, food prices have risen by between 10 and 20 percent,62 with some areas seeing rises of as much as 35 percent.63

No less worryingly, Yemen has seen an unprecedented drop in the inflow of remittances since the pandemic began. In 2019, remittances totaled \$3.8 billion. 64 According to Oxfam, between

⁵⁷ Associated Press, June 9 2020.

⁵⁸ Sirgany and Kiley, CNN, 12 June 2020.

⁵⁹ UNICEF, "Yemen Country Office Humanitarian Situation Report," June 30, 2020. Accessed July 21, 2020: https://reliefweb.int/sites/reliefweb.int/files/resources/UNICEF%20Yemen%20Sitrep%20-%201-30%20April%202020.pdf.

⁶⁰ Office of the United Nations High Commissioner for Human Rights, "Press briefing note on Yemen," June 12, 2020.

⁶¹ ACAPS, "Yemen Scenarios: End of Saudi Financial Support," June 9, 2020. Accessed July 16, 2020: https://www.acaps.org/country/yemen/special-reports#container-1494.

⁶² Lowcock briefing, June 24, 2020.

⁶³ OCHA, "Yemen: COVID-19 Preparedness and Response Monthly Report," June 2020. Accessed July 16, 2020: https://reliefweb.int/report/yemen/yemen-covid-19-preparedness-and-response-monthly-report-june-2020-enar. 64 Ibid.

January and April, inflows may have shrunk by as much as 80 percent, as Yemenis working in the US, the United Kingdom, and the Gulf states have seen their incomes plummet due to lockdowns. This is ruinous for a country where remittances account for 13 percent of GDP and where one in ten Yemenis rely wholly on money transfers to meet their essential needs.

Waning prospects for a ceasefire

For five long years, progress towards peace in Yemen has remained utterly elusive. At first, the sudden shock of the pandemic provided welcome new grounds for, at least, a temporary humanitarian truce. On March 23, 2020, UN Secretary-General António Guterres called for such a ceasefire to be implemented globally so as to allow humanitarians to reach the people most vulnerable to the spread of COVID-19. Two days later, Guterres made a specific call to the parties fighting in Yemen to end hostilities and ramp up efforts to counter a potential outbreak. The various sides appeared initially to welcome the call. Saudi Arabia went so far as to announce a unilateral ceasefire in April, which it extended until the end of May to coincide with the holy month of Ramadan. Nevertheless, all parties in Yemen continued to fight, adding to the civilian causalities, impeding COVID-19 responses, and further damaging the social infrastructure. Indeed, in some ways the conflict has only grown more entrenched in recent months, as the division in southern Yemen has created a new, lethal fault-line within an already fractious civil war.

V. An inadequate international response

Already stretched too thin prior to COVID-19, the international aid system in Yemen is buckling under the added weight of a once-in-a-century global pandemic. The support it has thus far provided, while vital, has been woefully insufficient. Programs aimed at preventing or treating coronavirus infections remain alarmingly underfunded. Just as lopsided is the ratio of needs to funds for addressing the pandemic's broader knock-on effects. Ongoing insecurity and a reduced physical presence have further diminished international organizations' ability to assist populations in need. Then there are the constraints internal to the organizations themselves, which continue to cut against an adequate, coordinated multidimensional response.

Insufficient COVID-19 assistance

The surging health crisis in Yemen has galvanized international attention toward the need to increase health capacity on the ground. Thus far, the UN and its partners in Yemen have supplied thousands of metric tons of medical supplies, expanded hospital capacity in major population centers, established new intensive care units (ICUs), and deployed mobile field hospitals.⁶⁵ Local and international partners have also provided healthcare workers and community health volunteers with personal protective equipment, including face masks, disposable gloves, hand sanitizers, and soap.

These and other efforts are vital but they are not enough. The health response to COVID-19 has raised just \$48.6 million of the \$179 million required, while UN-supported health services have actually declined in nearly 200 hospitals countrywide. As one example, due to dwindling funds, UN agencies had to end their support powering a hospital in Hudaydah, which serves over 600,000 people. 66 Meanwhile, WHO, facing a \$150 million shortfall in Yemen, has had to reduce top-up payments to thousands of healthcare workers in the country and cut support for health centers just as COVID-19 has begun to spread. 67

⁶⁵ UN Humanitarian Country Team in Yemen, "COVID-19 Preparedness and Response Monthly Report as of 13 June 2020." Accessed July 16,

^{2020:} https://reliefweb.int/sites/reliefweb.int/files/resources/Yemen COVID Weekly Snapshot 14%20June%20V4.pdf

⁶⁶ Norwegian Refugee Council, "Yemeni groups and INGOs renew call for pause in USAID suspension to fight Covid-19 in Yemen," April 15, 2020. Accessed July 16, 2020: https://www.nrc.no/news/2020/april/yemeni-groups-and-ingos-renewcall-for-pause-in-usaid-suspension-to-fight-covid-19-in-yemen/.

⁶⁷ Annie Slemrod and Ben Parker, "UN cuts extra pay for health workers in Yemen just as COVID-19 hits," The New Humanitarian, May 7, 2020. Accessed July 16, 2020: https://www.thenewhumanitarian.org/news/2020/05/07/coronavirus-health-yemen-unpaid-world-healthorganisation-cuts.

Uneven burdens on the medical system

The lack of adequate international support has dramatically shifted the burden of response to a few designated hospitals, which are severely understaffed and under-equipped, risking total collapse.

- In Sana'a, local authorities have designated two hospitals to respond to COVID-19: Sheikh Zayed Hospital for Motherhood and Children and al-Kuwait Public Hospital. The former deals with grave cases, while critical cases are moved to the latter. Neither hospital is sufficiently prepared to deal with the outbreak, according to local frontline physicians. A physician interviewed by one of the authors of this report stated, "We have been under an inhumane land, sea and air blockade for years, we lack capacity and resources to deal with all the challenges we face in healthcare facilities...there are only 6 ventilators in Zayed Hospital, but not all of them are functioning yet; indeed Zayed Hospital is still considered a triage center while critical cases are transferred to Kuwait hospital where they can be admitted." He added, "WHO and the UN promised they will supply our health facilities with equipment, kits, PPE and other supplies but all this is still on paper."
- In Aden, the situation is even more concerning. According to Mr. Abdul Hakeem Ba Qais from Aden University, "There are only two isolation centers in the city, Al-Amal Hospital, which is run by MSF, and one department at al-Jomhouri Public Hospital. Both of them are ill-equipped and lack resources...people in Aden believe that if one arrives to these centers, most likely he or she will not survive."
- In Taiz governorate, which has been under siege since 2015, al-Joumhouri Public Hospital receives only critical cases, while Shifak Charity Healthcare Center takes care of severe cases. Between the two centers, there are only 16 ICU beds with 13 ventilators, according to Dr. Mokhtar Almoliky, who said: "We created the isolation center from scratch using whatever materials and equipment were available. Fewer than 30 percent of the needed medical personnel are still working. Most of them don't have sufficient experience and skills to deal with the novel virus." There are only three CT scan machines in Taiz, all of them in private hospitals, he noted: "We lack the critically needed diagnostic procedures in our hospital, and this affects our ability to diagnose and follow-up with our patients... al-Joumhouri hospital had an old and broken machine; WHO sent a new machine which still needs to be installed." Dr. Ahmad Mansour, from the central laboratory in Taiz, likewise noted: "WHO supplies us with an insufficient amount of testing kits. Due to the acute shortage of testing materials, we are able to work only on few patients who have critical symptoms and could make it to the hospitals...thank goodness local NGOs have supplied the isolation centers with some consumables."

Disruption in other health services

As medical service providers struggle to contend with COVID-19, they are having to reduce or divert resources and attention away from other critical health needs. According to Save the

Children, there has been a staggering 81 percent drop in the number of people accessing child health services since the beginning of the year. 68 The utilization of reproductive health services has decreased by 42 percent in the same time period. 69 With therapeutic feeding and health facilities being used for COVID-19 response, the UN Children's Fund (UNICEF) reports that an estimated 13 percent of outpatient sites have seen a major decrease in attendance. 70 The agency, which has had to discontinue vaccination campaigns, has warned that thousands of children could die before the end of 2020 from preventable diseases due to lack of health services, and tens of thousands could develop life-threatening severe acute malnutrition.

Dwindling support for other humanitarian interventions

It is not just with regards to the health sector that the international response has been woefully inadequate and slow. In early June, donors pledged \$1.35 billion in humanitarian funding for Yemen—\$1 billion short of the minimum amount needed, and only about half of what was provided in 2019, even though the crisis in Yemen is worse than ever. By mid-July, the Humanitarian Response Plan for Yemen was just 18 percent funded.⁷¹ Meanwhile, much of what was pledged has yet to be disbursed.⁷²

The funding shortfalls have forced the UN to shutter or reduce fully 75 percent of its programs.⁷³ The impact, especially on the most vulnerable, is difficult to comprehend. For instance:

- Due mainly to funding shortages, aid agencies managed to reach just 9.5 million people with emergency aid in April 2020, down from 15.6 million in December 2019.⁷⁴
- Even as early warning systems raise alarms about a potential famine, the WFP has had to halve its food deliveries.⁷⁵
- Despite the dire conditions in which refugees, migrants, and IDPs are living, as of early
 June, the United Nations High Commissioner for Refugees (UNHCR)'s Yemen operation
 was just 30 percent funded, leaving the agency scrambling to avoid cutting off critical aid

⁶⁸ Save the Children, "Yemen: Thousands of children's lives at risk as healthcare services plummet," July 5, 2020. Accessed July 16, 2020: https://reliefweb.int/report/yemen/yemen/yemen-thousands-children-s-lives-risk-healthcare-services-plummet.

⁶⁹ Yemen Health Cluster, "Protecting essential health services in Yemen," July 8, 2020. Accessed July 21, 2020: https://www.who.int/health-cluster/news-and-events/news/essential-health-vemen/en/.

⁷⁰ UNICEF, "UNICEF Yemen Country Office Humanitarian Situation Report (Reporting Period: 1 - 30 April 2020)," June 15, 2020. Accessed July 16, 2020: https://reliefweb.int/report/yemen/unicef-yemen-country-office-humanitarian-situation-report-reporting-period-1-30-april.

⁷¹ OCHA, "Yemen 2020 (Humanitarian response plan)," July 2020. Accessed July 16, 2020: https://fts.unocha.org/appeals/925/summary.

⁷² OCHA, "Yemen: Aid agencies continue to scale up the response to COVID-19," June 12, 2020. Accessed July 16, 2020: https://www.unocha.org/story/yemen-aid-agencies-continue-scale-response-covid-19.

⁷³ Associated Press, "Last Batch of Joint Aid Lands in Yemen Amid UN Funding Cuts," June 19, 2020. Accessed July 16, 2020: https://www.voanews.com/middle-east/last-batch-joint-aid-lands-yemen-amid-un-funding-cuts.

⁷⁴ Amnesty International 2019.

⁷⁵ McKernan 2020.

for nearly one million displaced Yemenis and refugees. 76 The agency has warned that it has already had to stop providing cash transfers to vulnerable households so that they can purchase medicine and clothing, and will soon run out of basic shelter equipment.

- As of mid-June, UNICEF's appeal to sustain essential basic services for children during 2020 was just 38 percent funded. The agency has warned that 2.4 million Yemeni children—including one in two children under five years old—could be pushed to "the brink of starvation" because of ongoing shortfalls in aid.77
- With less than 4 percent of needed funding, the Water, Sanitation, and Hygiene (WASH) sector has been particularly hard-hit. UNICEF has urged that, unless it receives \$30 million, it will soon have to shut down water, sanitation, and hygiene services for 4 million people. Sector-wide, WASH services for 6 million people, including 3 million children and 400,000 of the most vulnerable IDPs, could end before August and water supply to nine major cities may be shut off completely.⁷⁸

Ongoing barriers to access

The dire lack of funding and delivery capacity is only part of the challenge. Access constraints continue to multiply. Fully 200 of Yemen's 333 districts are currently classified as "hard-toreach."79 The number of disruptions to aid delivery—including interference in aid shipments, restrictions on movement of aid workers, and attacks on aid workers and relief facilities—in the first quarter of 2020, 1,810, is significantly higher than that reported in any quarter in 2019.80 Conflict remains a major factor, affecting hundreds of humanitarian programs in recent months. In Marib, according to Dr. Abdulaziz Shadadie, "Transferring patients to one of the hospitals with CT-Scan machines risks transmitting the virus between hospitals...in specific cases, at best, we send collected samples to the neighboring governorate Hadhramout for testing, but with tens of armed checkpoints, and security challenges on the roads between these two governorates, this process is extremely difficult and rarely clinically useful; patients are dead or recovered before results are available."

Beyond active insecurity, other obstacles have long constrained humanitarian aid operations in the country, including visa restrictions, bureaucratic requirements, resistance to neutral/independent monitoring systems, and levies of "shares" on humanitarian partners before they are allowed to operate. COVID-19 has only complicated the situation, making it even more difficult than before for aid agencies to "stay and deliver." Indeed, the country's humanitarian footprint has shrunk, dramatically. Since the pandemic struck, the UN has withdrawn half of its international staff from

⁷⁶ Shadi Abusneida, "For Yemenis on the brink, aid funding gap spells disaster," UNHCR, June 2, 2020. Accessed July 16, 2020: https://www.unhcr.org/en-us/news/stories/2020/6/5ed631574/yemenis-brink-aid-funding-gap-spells-disaster.html.

⁷⁷ UNICEF, Geneva Palais briefing, June 26, 2020.

⁷⁸ Global WASH Advocacy 2020.

⁷⁹ OCHA Plan Extension 2020.

⁸⁰ OCHA Plan Extension 2020.

Sana'a.81 The total number of NGOs present in Yemen has fallen from 128 in the last three months of 2019 to 118 in 2020.82 It is not clear if other organizations will continue to withdraw from the world's largest humanitarian crisis, which undoubtedly will only increase the pressure on vulnerable local communities and may ignite further conflicts.

The situation in the north is especially concerning. The UN has previously accused the Houthi authorities in control of northern Yemen of obstructing aid, including diversion of World Food Program food assistance, 83 demanding a 2 percent cut from the entire UN-led aid budget, 84 refusing biometric registration conditions to reduce corruption, and otherwise unnecessary restrictions on northern Yemen relief operations. Houthi officials have retaliated, accusing aid agencies of corruption and mismanagement. 85 Such tensions and interference has only intensified in recent months, prompting aid agencies and donors to withdraw just as international support is most desperately needed. In May, WHO suspended its operations in the main Houthi-held northern areas, due to risks to staff as well as on suspicions that the Houthis were withholding information about COVID-19.86 The US Agency for International Development withdrew at least \$73 million of \$85 million for humanitarian programming in the Houthi-controlled north. After an outcry, the US announced \$225 million in emergency food aid for Yemen on May 6, 2020. Similarly, after temporarily suspending funding over Houthi obstruction, Sweden's International Development Cooperation Agency recently resumed its funding.

The problem is not restricted to the north—throughout the country, 9 million at-risk people have already been denied assistance due to delays and denials of aid projects this year, almost double the number during all of 2019.87 Meanwhile, regardless of the underlying reasons, the overall contraction of humanitarian access and assistance to Yemen is likely to further degrade resilience, costing lives and causing suffering among the most vulnerable populations, including the children, elderly, patients with chronic disease, prisoners and detainees, IDPs, and refugees.

Limitations of the global aid regime

In addition to inadequate funding and limited access, challenges internal to the international system continue to hamper the aid effort. As elsewhere, the multilateral system in Yemen deploys

⁸¹ Ben Parker, "UN pulls half its foreign aid staff out of Yemeni capital as COVID-19 spreads," The New Humanitarian, May 20, 2020. Accessed July 16, 2020: https://www.thenewhumanitarian.org/news/2020/05/20/un-yemen-pullout-staffsafety-covid-19.

⁸² OCHA, "Humanitarian Update (Issue 5, May 2020)." Accessed July 16, 2020: https://reliefweb.int/sites/reliefweb.int/files/resources/May%20Humanitarian_update_2020_Final.pdf.

⁸³ World Food Programme, "World Food Programme (WFP) Executive Director addresses UN Security Council on Yemen," June 17, 2019. Accessed July 16, 2020: https://insight.wfp.org/world-food-programme-wfp-executive-director-addressesun-security-council-on-yemen-88ba18622ea.

⁸⁴ Human Rights Watch, "Yemen: Displaced at Heightened Covid-19 Risk," May 22, 2020. Accessed July 16, 2020: https://www.hrw.org/news/2020/05/22/yemen-displaced-heightened-covid-19-risk.

⁸⁵ Yemen Online, "Yemen: World Food Programme to cut aid by half in Houthi-controlled areas," April 10, 2020. Accessed July 16, 2020: https://www.yemenonline.info/special-reports/3308.

⁸⁶ Voice of America, "WHO Suspends Operations in Much of Yemen," May 10, 2020. Accessed July 16, 2020: https://www.voanews.com/covid-19-pandemic/who-suspends-operations-much-yemen.

⁸⁷ OCHA Plan Extension 2020.

humanitarian and development assistance mainly through its own assets, frequently bypassing local systems and institutions. While this is often efficient in the immediate term, in the long term it is costly, because national infrastructure and human capital are not built up to deal with shocks of conflict and disease, not to mention reconciliation and recovery. There is also an ongoing challenge of coordination in the country, made more difficult by the withdrawal of international staff since March of this year. Even so, local institutions are often not included in coordination and decision-making mechanisms and are treated mainly as subcontractors rather than as partners.

Those interviewed expressed particular concerns about the lack of a transparent, holistic approach to supporting local responders. The absence of a significant international footprint outside of major cities is a challenge in this regard. In the north, interviewees also spoke of broken promises,

As elsewhere, the multilateral system in Yemen deploys humanitarian and development assistance mainly through its own assets, frequently bypassing local systems and institutions

such as medical deliveries dating as far back as 2017 not materializing and health centers waiting years to receive a fraction of the promised equipment. In the south, they described examples of equipment being provided but without consideration to the need for spare parts or for training of technicians to operate machines and carry out repairs. Others highlighted a lack of transparency within recruitment and delivery processes, leading to growing mistrust, for instance after medications have been delivered that were well past their sell-by dates.

COVID-19 has compounded these and other challenges while creating new ones. For instance, although progress had been made in recent years in terms of linking up humanitarian, development, and peacebuilding efforts, 88 such comprehensive approaches are more difficult to implement—but also more necessary—in the midst of a sudden new emergency on top of a protracted crisis. There is instead a tendency among international actors to respond to new shocks by reverting to an emergency-only mode, which risks a reversal in progress on longer-term issues such as peacebuilding, livelihoods, agriculture, and social protection—areas of support made even more crucial by the political and economic dimensions of COVID-19.89 Indeed, a frequent complaint among those interviewed was that international interventions do not take sufficient account of local partisan realities and social cleavages, and that projects remain unduly influenced by political considerations.

⁸⁸ Center on International Cooperation, "The Triple Nexus in Practice: Toward a New Way of Working in Protracted and Repeated Crises," 2019. Accessed July 16, 2020: https://cic.nyu.edu/sites/default/files/triple-nexus-in-practice-nwow-full-december-2019-web.pdf.

⁸⁹ Food and Agriculture Organization, "Revised humanitarian response Coronavirus disease 2019 (COVID-19): Yemen, May–December 2020." Accessed July 16, 2020: https://reliefweb.int/sites/reliefweb.int/sites/reliefweb.int/files/resources/cb0200en.pdf.

Other challenges facing the system include difficulties operating in contexts of fragmented governance; 90 capacity constraints, for instance in areas of political economy analysis and conflict sensitivity; limited presence outside of major cities; high rates of staff turnover; competition between aid organizations for funding and prestige; turf battles; top-down management styles; and cultural divides between humanitarian and development agencies. These and other challenges are not necessarily unique to Yemen, but the extent of the crisis there exacerbates their effects.

⁹⁰ World Bank Group, "Building for Peace: Reconstruction for Security, Equity, and Sustainable Peace in MENA," 2020. $Accessed\ July\ 16, \textbf{2020:}\ \underline{https://reliefweb.int/sites/reliefweb.int/files/resources/Building-for-Peace-Reconstruction-for-Peace-Reconstruc$ Security-Equity-and-Sustainable-Peace-in-MENA.pdf.

VI. A new strategy and scaled-up support

There is no magical cure for Yemen's protracted plight, but the current response could be better tailored to address the devastating situation. A new approach is urgently needed to avert the catastrophe that is already unfolding—one that not only tackles the immediate health crisis but also addresses the preexisting inequities that have left Yemen so uniquely vulnerable to COVID-19 in the first place. Essential elements of such a strategy must include the following.

Enforcing a national ceasefire

Little if any durable progress can be made against a pandemic like COVID-19 in the midst of active warfare. In addition to all the other hardships it imposes, continued conflict risks accelerating wider transmission of the virus by displacing people between different areas of the country, which will only further undermine the capacity of local health services. To prevent such outcomes, and to give Yemenis the reprieve they so desperately need, parties to the conflict must immediately halt the bloodshed and agree to work together and with local and international aid actors to suppress the pandemic; or at least to refrain from interfering in efforts to that end. Indeed, the cessation of hostilities and the implementation of measures to protect air, land, and sea access from the restrictions imposed by the warring parties are essential to prevent further deterioration in the humanitarian situation, more disruption of humanitarian aid distribution, and further displacement. To ensure that such a ceasefire can be made durable, all stakeholders must also do their utmost to support the efforts of the UN Special Envoy to reinvigorate the overall peace process. A Security Council resolution to this effect would be immensely valuable.

Ramping up local healthcare service delivery

After five years of war and economic collapse, the national health system in Yemen is profoundly degraded. But local health services do remain functional in many parts of the country, and these must be supported as the first line of defense against the virus. In particular, critical shortages of essential resources and supplies, which are threatening to derail the COVID-19 response throughout the country, must be urgently addressed.

The lack of testing capacity is especially acute and requires immediate attention: there is no other way to track and therefore to suppress the virus. In particular, the number of PCR machines and test kits must be increased, and more lab technicians must be trained and deployed. The dearth of testing also has a gendered dimension that must be rectified. While globally roughly 51 percent of COVID-19 cases are male, in Yemen, men account for 75 percent of confirmed infections, suggesting that women are massively under-tested.⁹¹

- The dearth of PPE and other vital equipment is also profound. It is leading to the death of untold numbers of health workers, as well as contributing to their rising absenteeism, while jeopardizing the health of COVID-19 patients. Provision of PPE, oxygen containers or generators, consumables, and other essential supplies must be scaled up. Distribution should not be limited to medical teams but expanded to cover other humanitarian providers, social workers, public servants, high-risk groups such as the elderly, the displaced, and patients with chronic diseases. In this context, it is also vital to pursue active infection control measures in all healthcare facilities.
- The acute shortage of funds to pay health workers must be addressed. It is vital that Yemeni healthcare workers—who have not received their salaries for several years—be paid promptly and in full. Medical staff cannot and should not be expected to continue risking their lives on the frontlines of COVID-19 if they cannot earn a living doing so.

Extending support beyond major cities

In taking these and other steps to strengthen healthcare capacity in Yemen, it is critical that international assistance not be limited to essential support for a small number of overwhelmed isolation units and supportive care in the epicenter cities. The reality is that the vast majority of Yemenis are unlikely to make it to such centers and will stay at home hoping for recovery or coping with fatal symptoms. Managing mild and moderate cases locally will prevent further pressure on the designated isolation centers and hospitals—which are already overwhelmed with critical cases—and may also avoid unnecessary complications and deaths experienced en route to such facilities. As such, all public healthcare facilities that remain operational should be encouraged to contribute to this strategy for combating the COVID-19 outbreak and receive support to do so. As the capacity of private healthcare facilities is relatively better than the public facilities, their engagement in combating the COVID-19 outbreak should also be supported. Strong coordination between the various facilities will be critical. The more well-staffed and well-equipped facilities involved, the better the country will be able to absorb the shock of COVID-19. Involving private facilities will reduce the pressure on dedicated hospitals and allow detection of cases early before they become severe or critical. Supporting an active and efficient referral system is imperative.

Increasing public awareness

In addition, to ensure appropriate responses to the containment and mitigation measures, sufficient, timely, and accurate information and instructions about COVID-19, including social distancing and hygiene protocols, must be provided to the public, and communicated in a clear

⁹¹ International Rescue Committee, "COVID-19 testing and cases among women in conflict settings may be underreported, new IRC analysis finds," June 24, 2020. Accessed July 16, 2020: https://www.rescue.org/press-release/covid-19-testing-and-cases-among-women-conflict-settings-may-be-underreported-new-irc.

and credible way to avoid spreading fear and panic. As COVID-19 threatens the entire country, areas with few reported cases should not be excluded from such awareness campaigns. Digital innovations for collecting data, case monitoring, and sharing of up-to-date information should be considered to promote community compliance with the containment and mitigation measures. To ensure better compliance, community and religious leaders, public figures, healthcare providers, local humanitarians, and civil society organizations must be involved in these campaigns.

Addressing the broader humanitarian-development situation through a comprehensive and risk-sensitive approach

In addition to a ceasefire and critical support for local health services, it is vital that international organizations and donors pursue a comprehensive strategic response to prevent further deterioration in the overall humanitarian and economic situation in Yemen. Such a strategy must be conflict sensitive and must concentrate on addressing the preexisting vulnerabilities—such as poverty and lack of essential services—that have left so many so vulnerable to the virus in the first place. In civil war zones such as in Syria and Yemen, the accomplishments of international organizations and donors continue to fall short in these regards. Current approaches must be reevaluated and new ones developed. In particular, the following elements must be prioritized.

Increasing trust and improving coordination

A central aspect of a new approach must be increased trust and improved coordination among international actors and local governmental and non-governmental actors, at least within the north and south. Ensuring greater communication among local authorities, communities, and international partners could be achieved by increasing transparency, further decentralizing decision-making, and including more local organizations and community leaders in coordination structures. This expanded engagement would not only facilitate more efficient collaboration, but would also make it possible to redirect efforts to serve a collective strategy and avoid duplicating resources. The involvement of local institutions is also crucial for ensuring that the response is sufficiently attuned to and informed by fast-evolving local realities.

Looking beyond the medical dimensions of the health crisis

It is of the utmost importance that the response to COVID-19 does not detract from efforts or capacities to address other critical health needs or take an overly medicalized approach to what is plainly a multidimensional health crisis. While non-essential medical services may need to be suspended to reserve maximum capacity for the pandemic response, services aimed at addressing malnutrition, reproductive and child health, serious diseases, and other sources of ill health must be maintained. It is equally crucial that both COVID-related and non-COVID-related health interventions take due account of the structural determinants of ill-health. For instance, the current COVID-19 response for Yemen does not cover access to soap and water, despite the

importance of basic hygiene to any suppression or mitigation strategy. 92 This and similar oversights should be rectified.

Enhancing the international humanitarian footprint, especially in areas where local service delivery is absent, overwhelmed, or partisan

The lack of funding for the overall humanitarian operation in Yemen is a crisis in its own right. Donors must swiftly fund the overall humanitarian response plan for Yemen—not only its COVID-19-related programs, but also efforts to combat food insecurity, water scarcity, flooding, and violence. In turn, aid agencies must do all they can to scale up their physical presence in Yemen, especially in places where local providers are absent, overwhelmed, or implicated in the conflict. All parties to the conflict must be urged to refrain from interfering in or obstructing the movement of aid workers and the provision of essential aid and supplies. Warring parties and their allies must end blockades and seizures, stop imposing arbitrary bureaucratic requirements, desist from efforts to tax aid, and refrain from any other undue restrictions. International actors must redouble their efforts to negotiate access to vulnerable and conflict-affected areas.

Scaling up development support

It is by now well understood that the COVID-19 pandemic is as much an economic crisis as a health crisis. In countries such as Yemen, which were already facing profound economic calamity, the need for socioeconomic support to complement the health response is especially vital. Indeed, the health response cannot succeed in the absence of an effective economic response (and vice versa): economic factors are known to hamper wide application of social distancing, self-isolation, and hygiene measures. Cash transfers, support to livelihoods, and aid to local welfare institutions must be increased so that the pandemic's economic knock-on effects do not plunge Yemen into a deeper economic crisis. It is vital that international actors and local authorities protect and facilitate the flow of remittances.

Prioritizing the most vulnerable

The entire population of Yemen is threatened by COVID-19 and its devastating knock-on effects. But some communities are especially vulnerable and must be prioritized in the response. First, it is vital that conditions in IDP camps and settlements housing migrants and refugees be swiftly improved. Supporting healthcare services in camps and rural and hard-to-reach areas is critical to avoiding a high rate of mortality and morbidity, which will save more lives and decrease the pressure on the major hospitals. This approach could be achieved through a mobile model of healthcare and humanitarian aid provision, including mobile healthcare consultations and distribution of medications. Refugees and migrants also need additional support to prevent them from being stigmatized. Within these groups, the particular plight of women, children, and disabled persons must be front and center.

⁹² Global WASH Cluster, 2020.

Safeguarding the welfare of prisoners must also be at the forefront of the response. As of yet, there is no information on whether COVID-19 has appeared in Yemen's prisons and detention centers. What is clear is that preventing a COVID-19 outbreak in prisons and detention centers is not a current priority. Local authorities must implement preventive measures in these facilities and supply them with the necessary means to improve conditions in order to prevent or contain any possible outbreak. As in other countries, large-scale releases of prisoners and detainees should be swiftly undertaken, prioritizing vulnerable prisoners such as women, children, the elderly, the sick, and the disabled, as well as those with less than a certain number of years left on their sentences, and those sentenced to short terms for low-risk crimes or misdemeanors. Other necessary steps include improving the healthcare services in detention facilities and supplying them with hygiene facilities and adequate food and water.

Ensuring conflict sensitivity

As noted above, a national ceasefire is of paramount importance when it comes to responding to COVID-19 in Yemen. Regardless of whether and for how long such a ceasefire takes hold, however, the response framework must ensure that conflict sensitivity informs all planning and programming. The social fractures which have splintered Yemen into militarized fiefdoms are deeply rooted and will not disappear on their own. Failure to take such divisions into account can easily lead to more violence, more strongly-held grievances, and greater levels of mistrust-all of which will greatly undermine the response. To avoid such a scenario, it is vital that aid agencies and their partners continually analyze the impact of their interventions on existing societal divisions and adapt accordingly. In delivering aid, they must prioritize "doing no harm". Equally, all stakeholders should seize upon new opportunities for peacebuilding as they arise. The call for a global ceasefire constitutes one such opportunity. The growing momentum to "build back better", as well as efforts to foster greater collaboration between humanitarian, development, and peacebuilding actors, provide additional entry points.

VII. Conclusion

While many countries have started to ease their quarantine measures, Yemen finds itself in the eye of the COVID-19 storm. The impact of the five-year conflict has left the country's ability to cope with a pandemic utterly diminished, and the economic footprint of the crisis is particularly devastating. To prevent the situation from deteriorating further, it is critical that all actors comply with the Secretary-General's call for a ceasefire.

Profound questions must also be asked about dwindling international assistance and funding in the face of skyrocketing needs. Such assistance must be urgently scaled up, and all necessary steps must be taken to prevent it from being coopted by warring parties or otherwise diverted away from those most in need. But it is equally critical that international support be (re)designed not only to address the immediate crisis but to combat the underlying inequities that have left Yemen so uniquely vulnerable to the dual emergency of conflict and COVID-19 in the first place. While the health response must be front and center, it must not come at the expense of other critical needs, not least the accelerating hunger crisis and the ongoing collapse of incomes and livelihoods, both of which are major drivers of both violence and despair. An overarching goal must also be to avert the further disintegration of Yemen's own welfare institutions and service delivery capacities. Otherwise, the cycle of crises that

The unparalleled threat of COVID-19 in Yemen will be a test of the international community's ability to recognize that fact and respond to it effectively

has inflicted such unimaginable suffering on Yemenis will remain unbroken.

If Yemen becomes an epicenter of the COVID-19 outbreak, as looks likely, it will threaten regional and global health security, as well as causing further suffering and death in a country already stretched to its limits. The unparalleled threat of COVID-19 in Yemen will be a test of the international community's ability to recognize that fact and respond to it effectively.

Center on International Cooperation

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