SITUATIONAL BRIEF: IMPACT OF COVID-19 ON FORCIBLY DISPLACED PERSONS INSIDE SYRIA

Authors: Ms Manar Marzouk[1]; Ms Diana Rayes[2]; Dr Yazan Douedari[3]; Dr Tayseer Alkarim[4]; Dr. Naser Mhawish[5]; Dr Aula Abbara[6]

CONTEXT: SYRIAN CONFLICT, COVID-19 AND FORCIBLY DISPLACED PERSONS

Over nine years of protracted and violent conflict in Syria has **decimated its health system,** killed an estimated 586,000 people and forcibly displaced more than half the 22 million pre-war population from their homes[7]. As of June 2020, a total of 6.2 million Syrians (of whom 40% are children) are internally displaced (IDPs) and 5.5 million are refugees[8,9]. **Over half of Syria's population (11.7 million) are in-need of humanitarian aid across the whole of Syria**[10]. The provision of healthcare to the population is challenged by the multiple health systems functioning within Syria's borders[11]; there are currently at least four main health systems which include opposition-controlled areas in the North West Syria (NWS), Turkish controlled areas in the north, autonomous self-administration controlled areas in North East Syria (NES) and government of Syria (GoS) controlled areas in the center. **NWS** is composed of large parts of Idlib and Aleppo governorates and is home to 4.17 million people, of whom 2,832,998 (70%) are IDPs[12]; this includes areas under Turkish control. **NES** currently consists of parts of the governorates of al-Hassakah, Raqqa, Aleppo and Deir ez-Zor in an area which extends over 25% of the total geographic area of Syria and hosts 3.2 million people[13]. As of April 2020, there are approximately 100,000 people living in camps in NES and tens of thousands of detainees in crowded conditions[14]. **IDPs** throughout the country have numerous vulnerabilities which leave them susceptible to COVID-19. The partial renewal of the UN Security Council resolution on **cross border aid** on 10th January 2020 left two border crossings between Turkey and NWS open for six months only but led to the closure of the crossings on the Iraqi-Syria (Yaroubieh) and Jordanian-Syrian borders (Ramtha)[15]. This has particularly affected NES where border restrictions have affected COVID-19 response as humanitarian assistance had mostly flowed across the Iraqi-Syria border crossing rather than cross-line from GoS controlled areas[16]. The upcoming decision to renew cross-border aid on 10th July 2020 will have significant implications on the continued provision of humanitarian assistance to northwest and northeast Syria.[17]

1.1. **Drivers of forced displacement** in Syria are multiple but key drivers include violence against civilians, such as the use of indiscriminate weapons and arbitrary arrests which mainly perpetrated by the GoS and its allies[18]. Other drivers include political (including "forced reconciliation" or "surrender" agreements), social, ethnographic and economic factors[19]. Some are forcibly displaced in search of basic services including health and humanitarian aid. Forced displacement often occurs at short notice and many have been displaced more than once (some as many as 25 times) in order to reach safety or access basic services[20]. **Ongoing aerial strikes and hostilities,** predominantly by the GoS and its allies, which have increased significantly in NWS since December 2019, have resulted in wide-scale damage to civilian homes, schools, marketplaces, hospitals, and IDP camps, and resulted in death and injury of civilians[21,22,23,24]. Some IDPs in NWS have been forcibly displaced either within their local

[1] Programme Manager, Valid International Limited.
[2] Researcher, School of Public Health, University of Berkeley, CA, USA. Syria Public Health Network, UK.
[3] Researcher, Syria Research Group (SyRG), London School of Tropical Medicine and Hygiene, UK.
[4] Physician and Humanitarian, Paris, France.
[5] Surveillance Coordinator, EWARN, Assistance Coordination Unit, Gaziantep, Turkey.
[6] Infection Consultant, Imperial College, London and Co-chair, Syria Public Health Network, UK [abbara15@imperial.ac.uk].
[7] http://www.syriahr.com/en/?p=157193
[8] https://data2.unhcr.org/en/situations/syria
[9] https://www.unhcr.org/sy/internally-displaced-people
[10] https://hno-syria.org/#key-figures
[11] Douedari, Y., Howard, N. Perspectives on Rebuilding Health System Governance in Opposition-Controlled Syria: A Qualitative Study. International Journal of Health Policy and Management, 2019; 8(4): 233-244. doi: 10.15171/ijhpm.2018.132
[12] https://reliefweb.int/sites/reliefweb.int/files/resources/Humanitarian%20Needs%20Assessment%20Programme%2C%20Mobility%20and%20Needs%20Monitoring%2C%20North-west%20Syria%20%28March%202020%29.pdf
[13] https://op.europa.eu/en/publication-detail/-/publication/b656d0fe-5c3b-11ea-8b81-01aa75ed71a1/language-en/format-PDF
[14] https://reliefweb.int/report/syrian-arab-republic/syria-al-hol-field-hospital-introduces-COVID-19-preventative-measures
[15] https://reliefweb.int/report/syrian-arab-republic/avoiding-midnight-deadline-security-council-extends-authorization-cross
[16] https://www.hrw.org/news/2020/04/28/syria-aid-restrictions-hinder-covid-19-response
[17] https://reliefweb.int/report/syrian-arab-republic/un-security-council-should-reauthorize-cross-border-aid-syria
[18] https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)30741-9/fulltext
[19] cic.nyu.edu/publications/last-refuge-or-last-hour-covid-19-and-humanitarian-crisis-idlib
[20] https://handicap-international.de/sn_uploads/de/document/study_qasef-syria-2016_web_finale.pdf
[21] Orcutt, M., Rayes, D., Tarakji, A., Katoub, M., Spiegel, P., Rubenstein, L. S., Jabbour, S., Alkhalil, M., Alabbas, M., & Abbara, A. (2019). International failure in northwest Syria: humanitarian health catastrophe demands action. The Lancet, 394(10193), 100-103. https://doi.org/10.1016/S0140-6736(19)31564-8
[22] https://www.reuters.com/article/us-syria-security/air-strikes-hit-hospitals-camps-in-northwest-syria-turkey-demands-pull-back-idUSKBN20C1P3
[23] https://www.nytimes.com/2016/05/06/world/middleeast/airstrikes-kill-more-than-30-in-syrian-refugee-camp.html
[24] https://www.reuters.com/article/us-syria-security/air-strikes-hit-hospitals-camps-in-northwest-syria-turkey-demands-pull-back-idUSKBN20C1P3

governorates or further afield towards the Syrian-Turkish border. Seventy percent of shelters in this area are considered inadequate as IDPs shelter in various public or unfinished buildings (e.g. schools), emergency shelters (open air settlements or tented camps); others are co-hosted, are squatting, or renting/co-renting their current shelters.[25] Significant protection challenges remain unaddressed.

1.2. In 2018 alone, there were 1.6 million new displacements of whom 870,000 IDPs were living in 'last resort' camps[26]. Between December 2019 and March 2020, more than 960,000 new displacements occurred in **NWS**[27], of whom 81% are women and children.[28] In **NES, Al-Hol camp** is the largest camp in the area; it was initially established for a maximum of 10,000 people but currently shelters around 68,000 IDPs (mostly women and children) who are living in uninhabitable conditions[29]. The military operations by Turkish armed forces (after the withdrawal of US forces) in October 2019 forcibly displaced more than 200,000 from their homes in NES[30]. Additionally, near the southern Syrian border, there are 10,000 forcibly displaced people in the informal **Rukban** settlement in a demilitarized zone between Syria and the extreme north east of Jordan. IDPs in this area have had restricted humanitarian aid which has been further exacerbated by the closure of borders due to COVID-19[31].

1.3. The **first case of COVID-19 in Syria was declared in Damascus by the GoS on 22nd March 2020.[32]** This raised concerns around underreporting and delays in reporting as i)countries with whom Syria shares borders (Lebanon, Jordan, Iraq) reported cases as early as February 2020 and ii) Iran, with whom Syria has strong geopolitical alliances with many Iranians (including militiamen) travelling to and residing in Syria reported their first case on 19th Feb 2020.[33] As of 27th June 2020, 254 laboratory confirmed cases (with 7 fatalities) have been reported across Syria; 7 of these confirmed cases are in the NES with no cases in NWS confirmed[34,35]. On 16th April 2020, WHO EMRO reported a positive test for a patient who had died in Qamishli in NES two weeks prior; the Syrian Ministry of Health was criticised for the perceived delay in informing NES' authorities of the positive result[36]. This event also highlighted concerns about the turn-around of test results and their potential impacts on public health measures including quarantine and contact tracing. In this brief, we focus on NWS and NES where the risks to IDPs from COVID-19 spread and the health and humanitarian needs are greatest. See Figure 1.

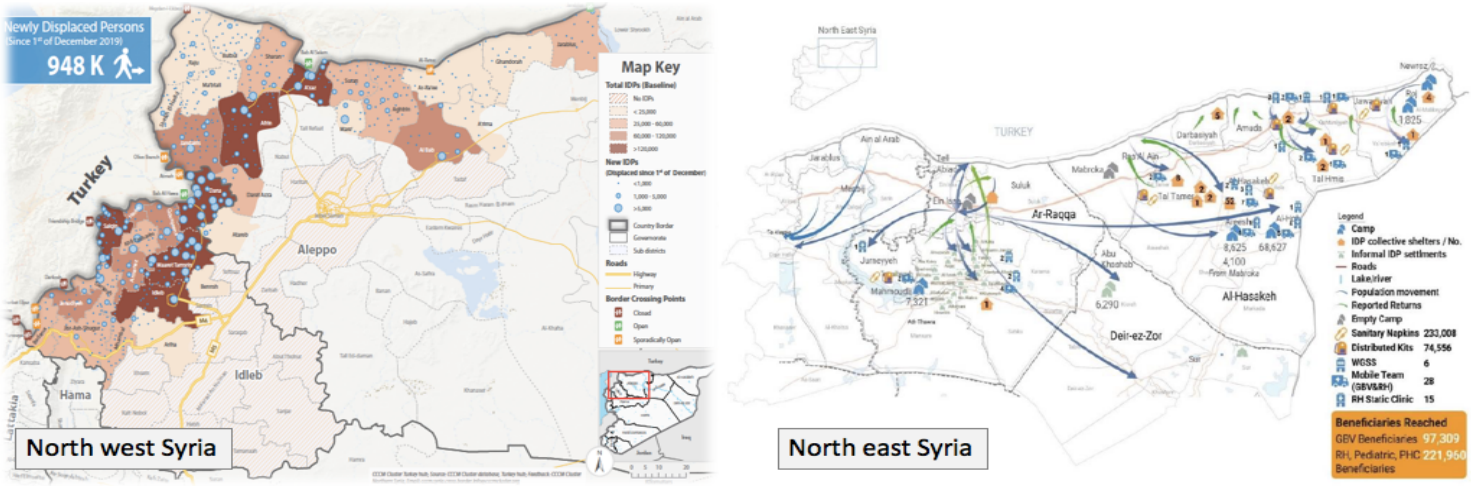

Figure 1: This figure shows the IDP camps and shelters in north west Syria *(map adapted from the UNOCHA Humanitarian Needs Assessment Program Snapshot of IDPs in north west Syria from February 2020)*[37] and north east Syria[38] *(map adapted from the UNFPA north east Syria Flash Update #13 from February 2020)*

[25] http://syriahealthnetwork.org/attachments/article/37/PolicyBrief_NWSyria_28.2.20.pdf
[26] https://reliefweb.int/sites/reliefweb.int/files/resources/2019_Syr_HNO_Full.pdf
[27] ttps://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/nws_flash_update_20200305_final.pdf
[28] https://www.bmj.com/content/368/bmj.m451
[29] http://www.emro.who.int/syr/syria-infocus/situation-reports-on-al-hol-camp-al-hasakeh.html
[30] https://reliefweb.int/map/syrian-arab-republic/syrian-arab-republic-north-east-syria-displacement-18-december-2019
[31] Syrian Arab Republic: COVID-19 Update No. 06 - 17 April 2020 - Syrian Arab Republic
[32] https://sana.sy/?p=1126906
[33] https://www.ijidonline.com/article/S1201-9712(20)30308-8/fulltext
[34] https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200627-covid-19-sitrep-159.pdf?sfvrsn=93e027f6_2
[35] https://reliefweb.int/report/syrian-arab-republic/humanitarian-update-syrian-arab-republic-issue-11-30-may-2020
[36] https://www.nytimes.com/2020/04/17/world/coronavirus-news-updates.html?smid=fb-share&fbclid=IwAR2epO6OHM9eaLymE_vxtGMlL_cMywvVrpRn-hMFbCiAWuPJC0nkPVBBZDQ
[37] https://reliefweb.int/sites/reliefweb.int/files/resources/idp_map_23-02-2020.pdf
[38] https://reliefweb.int/sites/reliefweb.int/files/resources/North_East_Syria_Humanitarian_Response_Flash_update_13_-_1st_-_29th_of_February.pdf

CONDITIONS FOR SARS-COV-2 SPREAD FOR IDPS IN NW AND NE SYRIA

2.1 Health systems weakened by protracted conflict:

a. Syria's health system has been increasingly **fragmented and politicised** with different governance structures, processes, resources and preparedness across regions. Between March 2011 and February 2020 there were 595 attacks on at least 350 separate facilities and the killing of 923 healthcare workers; the GoS and Russian forces have been implicated in more than 90% of cases[39]. This and the exodus of more than 70% of the healthcare workforce have debilitated the health system.[40] Nearly 41% of hospitals across Syria are considered non-functioning, and unable to meet basic health needs of the population[41]. In NES, 26 (9%) of 270 public healthcare facilities are functioning and health and humanitarian aid have been adversely affected by the closures of border crossings[42].

b. Poor **leadership and coordination** among health actors affect healthcare delivery and COVID-19 response planning in both NWS and NES. In NWS, health delivery is coordinated by the Health Cluster in Gaziantep, Turkey and is usually implemented inside Syria by Syrian humanitarian organisations. Health directorates e.g. Idlib Health Directorate are not well recognised within this system[43].

c. COVID-19 is characterized by a relatively high proportion of **patients requiring respiratory support** and prolonged ventilation.[44] As such, insufficient numbers of ventilators (and healthcare workers trained to use them) will rapidly consume available resources[45]. In the NWS, it is estimated that around 40% of the adult population have comorbidities and around 76,000 people are over 60 years old; these factors could increase their risk of COVID-19 and the risk of poor outcomes[46]. Similar estimates for NES are not available. Based on international estimates, around 15% of the COVID-19 affected population will develop moderate-severe disease (requiring ward-based hospital care with oxygen and medical support) and 5% will develop critical disease requiring intensive care admission (which includes ventilation, cardiac and renal support;) however different populations may have different proportions of moderate-severe or critical cases[47].

d. Insufficient **laboratory capacity** is leading to delays in testing, underestimates of reported cases, poor contact tracing measures, and poor coverage rates. In NWS, one PCR machine has been available since 24th March 2020 with plans to provide another; this gives a capacity of up to 100 tests a day. As of 23rd June, 1409 tests have been performed given an estimate of 338 tests per million in NWS.[48,49] The Syrian Ministry of Health has not provided testing capacity in NES where recommendations were to send samples to government controlled areas for testing however the Kurdistan Region of Iraq has donated two PCR machines to NES[50]; as of 12th June 2020, 197 tests have been performed in NES giving a ratio of 52 tests per million[51]. In GoS controlled areas, 5833 tests have been performed as of 13th June 2020 for a population of around 10.6 million giving a ratio of 550 tests per million.[52]

e. There are insufficient numbers of **healthcare workers remaining** and fewer still of the right specialties e.g. pulmonology, intensive care, infectious diseases, infection prevention and control to meet the healthcare needs of IDPs and host populations NWS and NES[53]. Some training has been provided to a few hundred healthcare and support workers however further up-skilling and measures which support skill substitution are needed.

2.2. Dire shortage of WASH (Water, Sanitation and Hygiene)

a. **WASH is a luxury for IDPs** in NWS and NES where latrines and showers do not meet SPHERE standards of at least one toilet and one shower per 20 people[54,55]and access to safe potable water is interrupted. There have been numerous attacks on water pumping and electricity stations; examples include 8 attacks on water pumping stations in Idlib in summer 2019 by GoS forced (NWS) and interruption of Allouk Water Station by Turkey which has affected water access of 0.5 million people in Hassakeh

[39] https://phr.org/our-work/resources/medical-personnel-are-targeted-in-syria/
[40] https://phr.org/our-work/resources/medical-personnel-are-targeted-in-syria/
[41] https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/herams_1st_quarter_2020_v2.pdf
[42] https://www.hrw.org/news/2020/04/28/syria-aid-restrictions-hinder-covid-19-response
[43] https://conflictandhealth.biomedcentral.com/articles/10.1186/s13031-019-0207-z
[44] https://www.nejm.org/doi/full/10.1056/NEJMp2005492
[45] https://eprints.lse.ac.uk/103841/1/CRP_covid_19_in_Syria_policy_memo_published.pdf
[46] https://www.medrxiv.org/content/10.1101/2020.05.07.20085365v2.full.pdf
[47] https://jamanetwork.com/journals/jama/fullarticle/2762130
[48] https://reliefweb.int/sites/reliefweb.int/files/resources/nw_syria_sitrep16_20200626.pdf
[49]https://www.humanitarianresponse.info/en/operations/stima/document/northwest-syria-health-taskforce-covid-19-sitrep
[50] https://tande.substack.com/
[51] https://reliefweb.int/sites/reliefweb.int/files/resources/covid-19_update_no.6.pdf
[52] https://reliefweb.int/report/syrian-arab-republic/syrian-arab-republic-covid-19-response-update-no-06-19-june-2020
[53] https://www.medrxiv.org/content/10.1101/2020.05.07.20085365v2
[54]https://reliefweb.int/sites/reliefweb.int/files/resources/reach_syr_factsheet_northeastsyria_campandinformalsiteprofilesround4_allprofiles_feb2019.pdf
[55] https://spherestandards.org/handbook-2018/

governorate (NES)[56]. Delivery of hygiene kits which include soap to IDPs is infrequent and subject to bureaucratic and politicised approval processes affecting availability[57].

2.3. Overcrowded shelters and poor living condition

a. Overcrowded and inadequate housing in IDP settlements and camps make standard social distancing and self-isolation measures are impossible to implement[58].

b. In the NWS, after the latest wave of displacement which began in December 2019 and has displaced 960,000 people, **living conditions have deteriorated significantly**[59]. An estimated 327,000 live in tents or camps, 165,000 in unfinished buildings, 93,000 in collective shelters and 366,000 live with host families or in rented properties[60,61]. As a result, intergenerational living is common leaving elderly or immunocompromised persons at risk of SARS-CoV-2 infection.

c. In the NES, of the 200,000 people forced from their homes in October 2019, 129,041 have since returned. The total number of displaced is 780,950 (as of 18th December 2019.) The majority of IDPs in NES are hosted within the local communities however 91,000 IDPs live in five camps (Al Hol, Areesha, Mahmoudli, Newroz and Roj), while 28,000 people live in 58 collective shelters and 5,940 IDPs live in informal settlements (Tweineh, Tal-Samen, and Daham)[62,63].

2.4. Vulnerable populations

a. COVID-19 mortality is highest among the elderly, those with non-communicable diseases (NCDs) particularly those with diabetes, obesity and pulmonary conditions[64]. Though Syria's population and the IDP population is comparatively young, a number have conditions which put them at higher risk of COVID-19 disease or poorer outcomes. Internationally, case fatality ratio is around 5% though this varies with context. In under-resourced settings, delays to healthcare access, inadequate resources or costs of care could lead to progression of cases from moderate-severe to critical or fatal. In NWS, it is estimated that 118,423 IDPs are high risk including those with NCDs, physical or mental disabilities, pregnant women and the elderly[65].

b. Anxiety related to COVID-19, its socio-political effects and inability of the health system to cope could **exacerbate existing psychosocial stresses and potentially SGBV**, particularly where lockdown measures are stringent. WHO surveys report that 21% in Idlib governorate (in NWS) and 14% in Raqqa (in NES) have daily feelings of anxiety or depression even preceding the threat of SARS-CoV-2[24]. For children, the effects of being off school (due to repurposing schools as collective shelters, insufficient numbers of teachers and now COVID-19) could have a negative impact on their mental health and reduce opportunities for interventions.

2.5. Resources

a. The funding gap for Syria's humanitarian response is vast and directly impacts the preparedness and resilience of Syria's health system. UN OCHA reports that in 2019, $2.13bn of $3.29bn has been received for the overall Syria Humanitarian Response Plan (HRP)[66]; this shortfall has disproportionately affected critical sectors including WASH (received 34.5% of required funding,) shelter/ NFI (14.9%,) health (38.6%,) and nutrition (73.6%)[26]. As of 14th June 2020, the Health Sector's 2020 Humanitarian Response Plan appear is only 5.7% funded with a gap of more than 425 million USD.[67] WHO's COVID-19 Task Force has put forward a $31 million COVID-19 preparedness and response plan for NWS of which 40% remains unfunded.[68]

b. Syrian humanitarian organisations who work in NWS and NES are key to preparedness and response to COVID-19 with already established relationships with the communities; however, **restrictions on direct funding** disproportionately affects their work. This adversely affects areas where international humanitarian organisations do not have access[69].

[56] https://www.hrw.org/news/2020/03/31/turkey/syria-weaponizing-water-global-pandemic
[57] https://www.unhcr.org/sy/wp-content/uploads/sites/3/2019/04/201801-NFI-Monthly-Issue-No.01.pdf
[58] https://reliefweb.int/report/syrian-arab-republic/displaced-syrians-face-overcrowded-latrines-and-limited-access-safe
[59] http://syriahealthnetwork.org/attachments/article/37/PolicyBrief_NWSyria_28.2.20.pdf
[60] https://reliefweb.int/sites/reliefweb.int/files/resources/Humanitarian%20Needs%20Assessment%20Programme%2C%20Mobility%20and%20Needs%20Monitoring%2C%20North-west%20Syria%20%28March%202020%29.pdf
[61] https://reliefweb.int/report/syrian-arab-republic/recent-developments-northwest-syria-situation-report-no-10-12-march-2020
[62] https://reliefweb.int/sites/reliefweb.int/files/resources/04.10.20%20-%20USG%20Syria%20Complex%20Emergency%20Fact%20Sheet%20%236.pdf
[63] https://reliefweb.int/map/syrian-arab-republic/syrian-arab-republic-north-east-syria-displacement-18-december-2019
[64] https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html
[65] https://www.medrxiv.org/content/10.1101/2020.05.07.20085365v2
[66] https://reliefweb.int/report/syrian-arab-republic/syrian-arab-republic-2019-humanitarian-response-plan-monitoring-report
[67] https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/critical_funding_gap_june2020.pdf
[68] https://reliefweb.int/report/syrian-arab-republic/coronavirus-disease-2019-covid-19-nw-syria-task-force-situation-update-0
[69] https://reliefweb.int/report/syrian-arab-republic/2019-syria-humanitarian-response-plan-hrp-funding-overview-8-april-2020

Table 1: Summarises key aspects of the COVID-19 response in north west and north east Syria

Preparedness for COVID-19 among forcibly displaced people in Syria	North West Syria (includes areas under Turkish control)	North East Syria
Demographics	2,832,998 IDPs[12] Total: 4.17 million people	780,950 IDPs[63] Total: 3.2 million people
Key stakeholders	NWS: Health taskforce COVID-19 run from Health Cluster Gaziantep hub. Includes WHO and humanitarian organisations	Kurdish-led Autonomous Administration of NES
# of COVID-19 cases (confirmed)	0 cases; 0 deaths	7 cases; 1 death
Testing	Testing began on 24th March 2020 with one PCR machine; testing capacity is up to 100 tests per day. 5900 testing kits have been made available to NWS. As of 23rd June 2020, 1409 tests have been performed.[70,71]	Syrian Ministry of Health did not provide capacity to NES with plans to send samples to government-controlled areas. The Kurdistan Region of Iraq donated two PCR machines to NES to allow local testing; 1500 testing kits were supplied[71]. As of 12th June 2020, 197 tests have been performed.[71,72]
Lockdown Measures (including borders)	Measures initially introduced include complete border closure with the GoS and partial closure with the Turkish borders. Self-isolation advisories as well as closure of schools, mosques and markets for non-food items. However, as of 23rd April 2020 (start of Ramadan) these measures were not strictly enforced.	On 23rd March 2020, closure of restaurants, cafes, markets, public gatherings and small private clinics started. A mandatory curfew was introduced for all citizens except for medical personnel, international staff, grocery store workers and food delivery drivers. As with NWS, these measures were relaxed by the start of Ramadan on 23rd April 2020.
Supporting Existing Healthcare system capacity	As of the end of May 2020, there are 104 adult ventilators and 48 paediatric ventilators. 17 community-based isolation centers were established with a capacity of 1400 beds[72,73]. There are plans to support three hospitals to treat COVID-19 patients; this includes 30 ICU beds, 30 inpatient beds and 10 beds for patients awaiting discharge; this gives a total of 210 extra beds. Funding is available for 3 months[72]	Amuda Public Hospital has been assigned to receive suspected cases.

URGENT HEALTH AND HUMANITARIAN NEEDS FOR IDPS IN SYRIA DURING COVID-19: BROAD RECOMMENDATIONS

1. Cessation of hostilities and renewal of cross border aid

a. Preventing further displacement and allowing IDPs to return to their homes will alleviate pressure on host communities and infrastructures. For this to occur, a cessation of attacks, recovery of relevant infrastructures and facilities e.g. WASH, electricity, health are essential.

b. The renewal of the UN Security Council resolution on cross-border aid to its previous terms (four border crossings) is essential to ensuring health and humanitarian aid as well as COVID-19 support reaches civilians and IDPs. Renewal for an indefinite period is essential to provide a sense of stability and security for IDPs and other vulnerable people.

[70] https://reliefweb.int/sites/reliefweb.int/files/resources/nw_syria_sitrep16_20200626.pdf
[71] https://tande.substack.com/
[72] https://reliefweb.int/sites/reliefweb.int/files/resources/covid-19_update_no.6.pdf
[73] https://reliefweb.int/sites/reliefweb.int/files/resources/nw_syria_sitrep16_20200626.pdf

c. Holding perpetrators accountable will help to reduce future hostilities and increase adherence to international humanitarian law. Achieving accountability and justice is the cornerstone for psychosocial healing and sustainable peace.

2. Prioritise measures which limit human to human transmission

a. Increased monitoring of borders and crossings.

b. Ensure measures which support social distancing, quarantine, community isolation centers and shielding which are appropriate to the shelter and WASH situations and dignity of IDPs. Support local planning which could enable shielding of vulnerable IDPs e.g. separate areas in accommodation or separate areas in camps. However, the latter may not be culturally accepted.

c. Scale-up of **hygiene education and awareness activities** for IDPs must be complemented by increasing the presence of handwashing stations and water facilities, particularly in camp areas. This also includes distribution of soap and other cleaning materials[74]. Public health safety and awareness messaging which is culturally sensitive and informed by local practicalities for IDPs is required.

e. Sustained provision of sufficient quality and quantity of PPE (personal protective equipment) and hygiene products with local procurement where possible.

3. Strengthen and reinforce local capacity and activities

a. Decentralising testing capacity with a 'hub and spokes' approach could improve accessibility, equality and efficiency of testing. This should include provision of enough test kits, labs, and training to laboratory staff.

b. Local health directorates/committees and leaders should be empowered and supported to initiate locally implementable measures which address the identification and management of suspected cases.

c. Establish efficient triage and referral systems across available facilities.

d. Restructure healthcare service delivery to minimise duplication, support the postponement of non-essential medical services and strengthen mobile models of delivering health or humanitarian care while avoiding the disruption of **essential services** e.g. vaccinations, sexual and reproductive health, chronic diseases management and mental health and psychosocial services. Alongside this, there should be **clear messaging** which ensures IDPs (and other patients) are not afraid to access healthcare for both COVID-19 or non-COVID-19 conditions.

e. Support efficient coordination with decision makers e.g. task force, health directorates and implementers of services and between implementers to avoid duplication of services and ensure widespread healthcare access for IDPs. And EWARN and EWARS to increase the overall surveillance coverage in the North of Syria.

e. Ensure health facilities are supplied with essential equipment, medicines and consumables, oxygen supplies and PPE appropriate to the setting e.g. for community isolation centres, primary healthcare centres, hospitals, and intensive care units.

f. Provide locally relevant training for healthcare workers on the diagnosis and management of COVID-19, infection prevention and control.

g. Culturally and contextually appropriate awareness campaigns by community actors working with IDPs can support preventative measures and de-stigmatization of IDPs and of patients with suspected COVID-19. Community and religious leaders, community healthcare workers and local organisations.

4. Utilise digital innovations for communication and case monitoring

a. Real-time modelling of a COVID-19 outbreak among IDPs in Syria based on up to date information and which relies on accurate information on the vulnerability of the population and population density is needed for effective planning.

b. Utilise digital technologies for public health messaging, awareness raising campaigns, and for developing better surrogate markers for assessing impact e.g. all cause mortality, respiratory illness requiring hospitalization, healthcare staff illness (nosocomial indicators and warnings).

5. Funding and resources

a. It is recommended that funding for COVID-19 mitigation strategies should be embedded within the overall Syrian humanitarian response as a number of COVID-19 related measures could strengthen local health systems for the longer term. A comprehensive and coordinated multi-sectoral strategy supported by sustained and accelerated provision of funding and resources is essential to mitigating and responding to a COVID-19 outbreak among IDPs in Syria.

[74] https://reliefweb.int/report/syrian-arab-republic/camp-management-guidance-notes-covid-19-outbreak-9-april-2020-enar

Organisations and acknowledgements

This situational brief was authored by Ms Manar Marzouk[75]; Ms Diana Rayes[76]; Dr Yazan Douedari[77]; Dr Tayseer Alkarim[78]; Dr. Naser Mhawish[79], Dr Aula Abbara[80] ; and expert reviewed by Professor Richard Sullivan MD PhD [81] and Dr Abdulkarim Ekzayez MD MSc[82]. Overall direction and review on behalf of the Lancet Migration global collaboration was provided by Miriam Orcutt and editorial review by Elspeth Carruthers. This situational brief represents the views of the authors. This series of situational and policy briefs summarises key aspects of the COVID-19 response in relation to migrants and refugees at country or regional level. They include public health and policy recommendations and perspectives and build on the Lancet Migration Global Statement recommendations to ensure migrants and refugees: have access to healthcare; are included in prevention, preparedness and response; and are part of responsible and transparent public information strategies, during the COVID-19 pandemic. They are intended to be short briefs providing key information on particular migrant and refugee contexts and thematics, rather than fully comprehensive country or regional overviews. Situational briefs have been authored by experts working in academia, operational, or clinical areas of migration and COVID-19, and are hosted on the Lancet Migration website (www.migrationandhealth.org). They are up to date at the time of writing. Lancet Migration is a global collaboration between The Lancet and researchers, implementers, and others in the field of migration and health that aims to address evidence gaps and drive policy change building on the recommendations of the UCL-Lancet Commission on Migration and Health published in December 2018.

[75] Programme Manager, Valid International Limited.
[76] Researcher, School of Public Health, University of Berkeley, CA, USA. Syria Public Health Network, UK.
[77] Researcher, Syria Research Group (SyRG), London School of Tropical Medicine and Hygiene, UK.
[78] Physician and Humanitarian, Paris, France.
[79] Surveillance Coordinator, EWARN, Assistance Coordination Unit, Gaziantep, Turkey.
[80] Infection Consultant, Imperial College, London and Syria Public Health Network, UK [abbara15@imperial.ac.uk].
[81] Institute of Cancer Policy, King's Health Partners Comprehensive Cancer Centre and Conflict & Health Research Group, King's College London
[82] Conflict & Health Research Group, King's College London