

# COVID-19 situation and response in northeast Syria



Syria, like any country in the world, has been affected by the COVID-19 pandemic. The pandemic has burdened a health system which has already been severely disrupted through the long years of the crisis. In northeast Syria (NES), volatile security situation, access constraints, and the presence of multiple health authorities and actors have collectively imposed extra challenges for maintaining functional and responsive health infrastructure to prevent and control COVID-19.

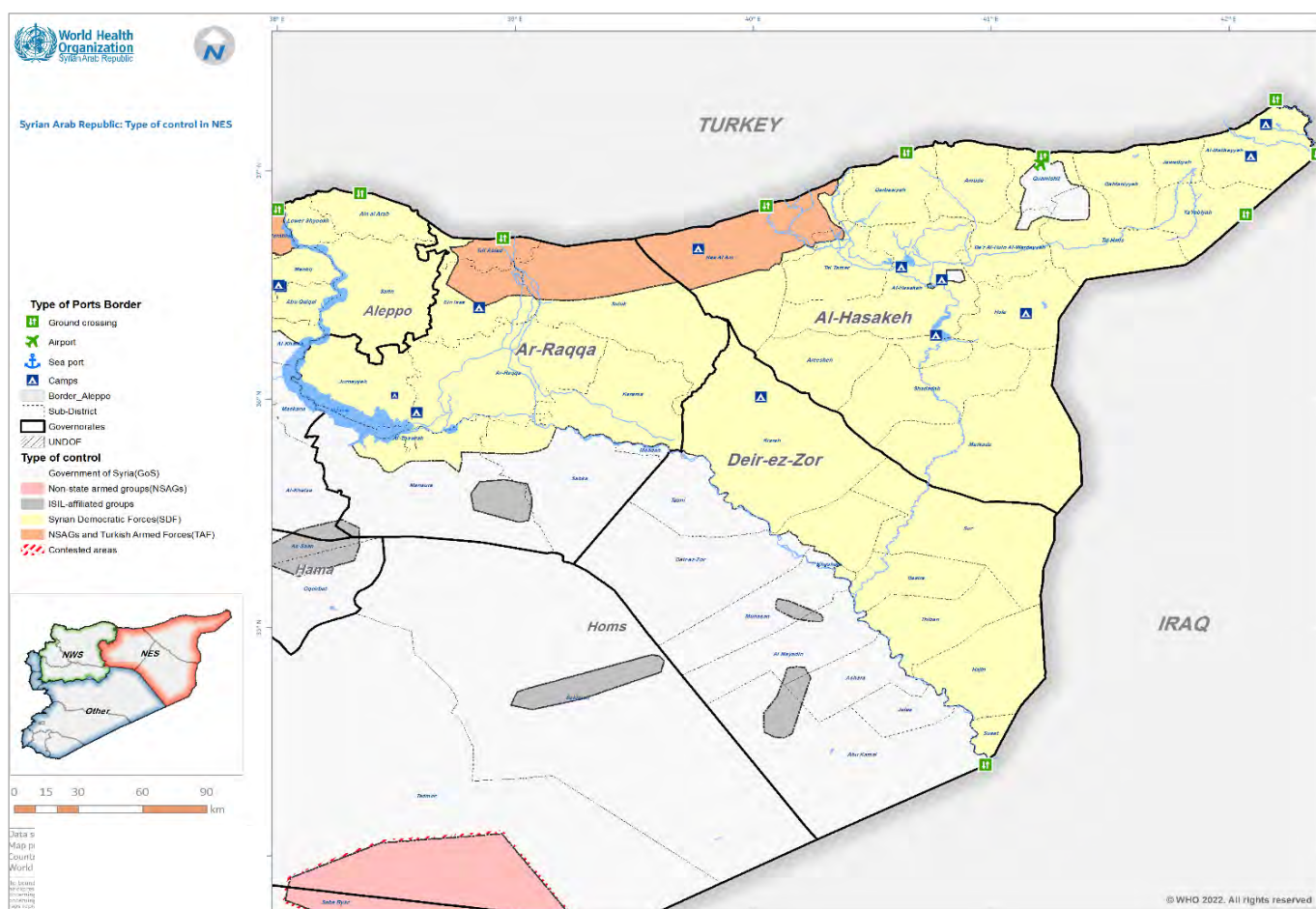
The current report reflects WHO’s response to the COVID-19 pandemic in NES in 2021, providing the overall annual epidemiological analysis and response interventions by pillars, such as leadership and coordination, risk communication and community engagement, surveillance, laboratories and diagnostics, infection prevention and control, case management, operational support, supplies and logistics, as well as vaccination.

## Background

Northeast Syria consists of three governorates: Al-Hassakeh, Ar-Raqqa, and Deir-ez-Zor. The security situation in NES remained volatile and unpredictable in 2021, which is mainly attributed to the political dispute and presence of multiple authorities on the ground (*Figure 1*) creating significant challenges in delivering humanitarian assistance.

According to OCHA, the population of the three governorates of NES is more than 3 million.<sup>1</sup> There are five formal and seven informal camps, as well as several other collective shelters. The total number of camp residents is around 135 000, comprising Syrian internally displaced people (IDPs), Iraqi refugees and third-country nationals residing mostly in Al-Hol and Al-Roj camps.

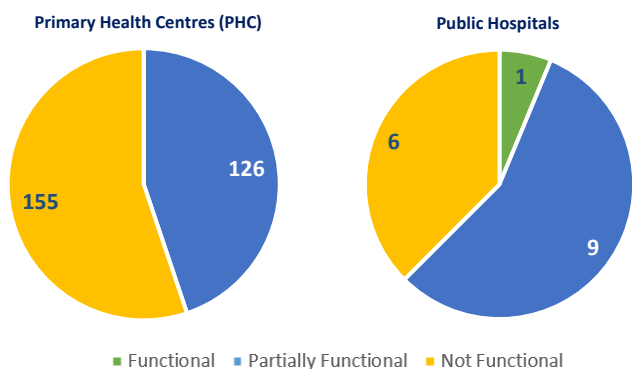
**Figure 1: Northeast Syria map**



<sup>1</sup> OCHA population data, 2021

As per HeRAMS<sup>2</sup> report, in 2021, only one out of 16 public hospitals fully functioned in NES. Out of 281 public health centres (PHCs), 44.8% functioned partially, and 55.2% did not function at all. None of the districts in NES met the emergency threshold of at least 10 hospital beds per 10,000.

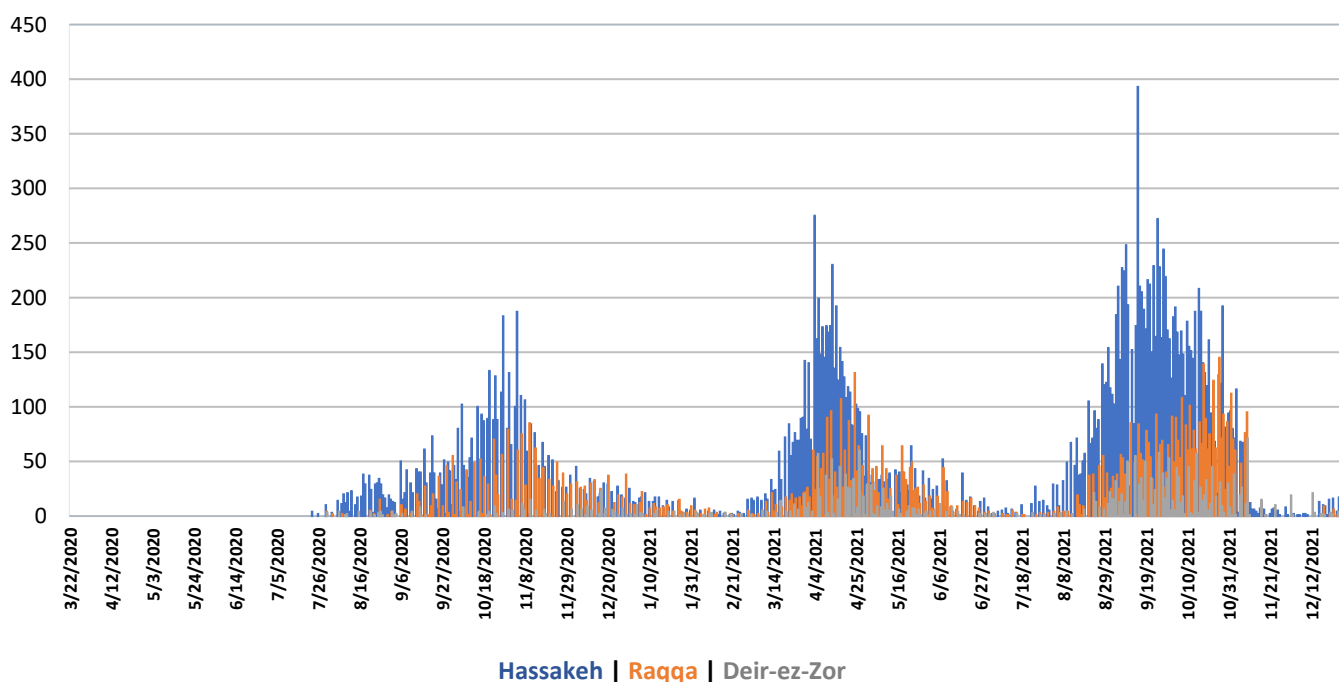
The provision of health services in NES is complicated due to several factors, including multiple health authorities, lack of human resources, unstable security, complexity related to the supply chain, and lack of sustainable and predictable funding to support the health system.



From 22 March 2020, when the first case was reported in Syria, until the end of 2021, the number of confirmed cases in the three governorates was 30 680 as reported by NES health partners, while the number of COVID-19-related deaths amounted to 1 339.

Three major waves were recorded: in late October-early November 2020, in late March-early April 2021, and in late August-early November 2021.

**Figure 2:** Trend for COVID-19 confirmed cases in NES by week (from week 13/2020 to week 52/2021)



## WHO Response

Committed to extending the maximum support possible to the most affected populations in NES (Annex 2, KPI NES 2021), and within the context of the COVID-19 pandemic, WHO was able to respond to the crisis within the following COVID-19 response pillars:

<sup>2</sup> 2021 data from Health Resources Availability Mapping System (HeRAMS)

## 1. Leadership and Coordination

WHO took the leadership and coordination role in ensuring rapid COVID-19 response and rollout of COVID-19 vaccination in NES, including in vulnerable settings, such as camps and camp-like settings.

Throughout the year, WHO carried out the leading role in coordination meetings, including sub-national health sector coordination meetings, camp-level health sector coordination meetings for informal camps, inter-hub calls and other meetings, which brought together over 40 health sector partners (health authorities, local and international NGOs and UN agencies), camp-level authorities and humanitarian partners. Overall, the sub-national health sector hosted and facilitated around 85 meetings on various levels in NES with COVID-19 as a standing agenda point.

In addition to sharing information through health sector meetings, WHO also provided regular inputs, including information on COVID-19, through more than 55 meetings hosted by other agencies.

Knowledge and information sharing has been essential component under the coordination pillar. As the health sector lead, WHO regularly circulated evidence-based information on the COVID-19 epidemiological situation and regular updates on COVID-19 vaccination in NES, including on vaccination teams. The sub-office produced six situation reports since the initial roll-out of vaccines in NES. Responses to partners' queries on the overall COVID-19 situation and COVID-19 vaccination in NES were provided timely through bilateral communication and various coordination platforms.

As negotiations on the delivery of COVID-19 vaccines, as part of the COVAX mechanism were launched in close consultation with UNICEF and other health partners, WHO developed the COVID-19 vaccination plan for NES, which served as an overall operational plan for rolling out COVID-19 vaccines in northeast Syria.

In addition to coordinating efforts to implement and communicate the COVID-19 response across multiple partners, WHO also took the lead in ensuring duty of care for the staff of the UN field offices based in Qamishli and provided recommendations to UN agencies on a range of issues, including referral mechanisms, medical evacuation and COVID-19 vaccination.

## 2. Risk Communication and Community Engagement (RCCE)

While UNICEF has been leading the RCCE pillar within the COVID-19 response in Syria and in NES, WHO spearheaded the technical pillar of the RCCE response, supporting communication, engagement and outreach efforts through technical expertise and mobilization of its network of health partners.

Managing misinformation and rumours, evidence generation, message development, and support for vaccination campaigns in collaboration with health authorities and health partners, were all essential components to ensure effective, consistent and impactful communication and engagement with people in northeast Syria.

WHO communicated the importance of vaccination through providing information materials and facilitating workshops for healthcare professionals and key influencers, conducting meetings with community leaders, religious leaders, media professionals, and health cluster partners providing ongoing medical services to people in NES.



Conducting an information and awareness-raising session on COVID-19 vaccination with religious leaders at Al-Hol camp

During the implementation of the first COVID-19 vaccination campaign in May 2021, vaccine hesitancy and low demand rates significantly impeded vaccine uptake for people in the most vulnerable settings.

In Al-Hol camp, WHO conducted awareness-raising sessions targeting healthcare workers, community health workers, and religious leaders. WHO also supported a joint community rapid assessment of healthcare professionals' knowledge of COVID-19 preventive measures and enabled tracking of false information through social media.

Despite increased RCCE efforts of WHO and partners, vaccine hesitancy remained an issue in NES. Promoting to intensify RCCE and extending technical support are required. Moreover, to increase the coverage rate, it is essential to advocate for increased geographical coverage, regularity of health services, and maximum utilization of upcoming vaccine doses through the implementation of a relevant plan with the Directorates of Health.

### 3. Surveillance



*Following up on COVID-19 surveillance at a health facility in Al-Areesh Camp in Al-Hassakeh governorate*

WHO monitored COVID-19 incidence rates, focusing on camps and camp-like settings, and assessing the

availability and responsiveness of health facilities to COVID-19 cases. The Organization ensured equitable access of vulnerable populations to testing and management of COVID-19 cases in treatment facilities in NES, also monitoring the occupancy rates at hospitals.

Reporting of suspected COVID-19 cases for EWARS (Early Warning Alert and Response System) was updated. This assisted the physicians to be more vigilant and increased the sensitivity of the surveillance system, eventually increasing the number of reported cases through the EWARS system.



*Conducting a visit to COVID-19 treatment facility at Al-Hol camp in Al-Hassakeh governorate*

WHO supported the Rapid Response Teams in Al-Hassakeh for surveillance activities by providing technical and logistical support, including training on surveillance forms, data management and communication, transportation, printable items, and rapid diagnostics tests (RDTs). The surveillance data were regularly collected and shared with WHO country and regional offices, as well as health partners in NES for a better understanding of the COVID-19 situation, trends, testing, and Case Fatality Ratio (CFR); and to inform about the strategic decisions.

**Table 1:** COVID-19 cases in NES – 2021

	Suspected cases	Confirmed cases	Samples tested	Death cases	Cases among health workers
NES	77,031	30,680	77,024	1,339	657

**Table 2: COVID-19 EPI indicators in NES – 2020/2021**

NES	Samples	Attack rate	Positivity rate	CFR	Cases among health workers
2021	77,024	1,023	40%	4.3%	2.1%
2020	20,020	269	40%	3.4%	9.2%

**Table 3: COVID-19 cases in Al-Hassakeh camps, 22 March 2020 - 31 December 2021**

Camp	Confirmed cases	Recoveries	Active cases	Death cases
Al-Hol	252	233	0	19
Al-Areesha	210	202	0	8
Tal Aswad/ Al-Roj	187	187	0	0
Ain Al-Khadra/ Newroz	57	57	0	0
Tweina/ Washukani	35	26	0	9
Talaea/ Serekani	57	52	0	5
<b>TOTAL</b>	<b>798</b>	<b>757</b>	<b>0</b>	<b>41</b>

#### 4. Laboratories and diagnostics

WHO donated over 14 850 COVID-19 rapid diagnostic tests (RDT) to health partners in NES, which effectively closed the gap during PCR lab suspension and enhanced the testing capacity without the need to transfer samples to Damascus. In that regard, WHO provided operational and technical support to different health partners who are using RDTs.

WHO donated different types of lab supplies to the PCR laboratory in Qamishli, sufficient to cover 25 000 tests, including extraction kits, tubes and other consumables. (See Annex 1).

WHO supported the Directorate of Health (DOH) in Al-Hassakeh to establish a new PCR laboratory through the provision of rehabilitation services, equipment, as well as the needed training for staff. Moreover, WHO advocated with the Ministry of Health to empower DOH in Al-Hassakeh to perform RDTs across the main five health districts in Al-Hassakeh governorate.

Because more needs to be done to expand the COVID-19 testing capacity in NES, WHO supported the Qamishli National Hospital to establish a testing lab through the installation of a GeneXpert device.



Observing COVID-19 testing at the WHO-supported PCR lab in Um al-Fursan in Qamishli city

#### 5. Infection prevention and control (IPC)

##### 5-1. Capacity Building

Sustaining safe health care delivery in the context of the COVID-19 pandemic is one of the top priorities to be maintained at the health facility level. This means that WHO updated recommendations are regularly shared with targeted healthcare providers who respond to COVID-19 cases at all health care levels, from health facilities to communities.

The overall objective of the Infection Prevention and Control (IPC) capacity development is to address strategies to prevent or limit transmission in

healthcare settings with a focus on implementing, maintaining, and monitoring standards such as:

- ensuring triage, early recognition, and source control,
- applying standard precautions for all patients,
- implementing additional precautions for suspected cases of COVID-19,
- implementing administrative controls, and
- using environmental controls.

In 2021, with the support of donors, WHO was able to strengthen the IPC capacity of NES healthcare workers and front-liners in health facilities, including those in isolation centres, public and private hospitals, school health centres, private sector and NGOs.

To ensure adequate knowledge and standard practice of IPC measures within the context of COVID-19, and in coordination with Qamishli Sub-Office, WHO implemented IPC training workshops as follows:

- I. Eleven virtual workshops in partnership with the Directorate of Hospitals targeting HCWs, healthcare managers, resident doctors and IPC teams from the Directorate of Health (DOH) in Al-Hassakeh, Qamishli National Hospital, Dentists' Syndicate, Doctors' Syndicate, five private hospitals in Al-Hassakeh (Al-Hikmah, Al-Hayat, Al-Rajaa, Al-Nejmeh, Shabo), NGOs in Al-Hassakeh city, and IDP camps in Al-Hassakeh and Ar-Raqqa (Al-Hol, Al-Aresha).



*Training on COVID-19 infection prevention and control measures for the Syndicate of Doctors in Al-Hassakeh governorate*

A total of 273 healthcare workers were trained on decontamination of reusable medical devices, IPC surveillance at hospitals, safe injection,

prevention of acquired hospital infections, isolation precaution, medical waste management, occupational safety and environmental cleaning.

- II. Six training workshops with the Primary Health Care (PHC) Directorate, targeting 225 healthcare workers at the PHC level in Aleppo, Al-Hassakeh and Deir-ez-Zor, including nurses, public health technicians, midwives, administrative staff, health promoters with a focus on IPC measures, within the context of the COVID-19 pandemic. The trainees' knowledge was strengthened in triage, IPC quality control standards, PPE donning and doffing, hand hygiene (the 6 WHO steps), standard environmental cleaning, occupational safety, as well biosafety at laboratories and dental clinics. In addition, the IPC standards, health promotion messages on COVID-19 infection prevention, safe waste management and disposal of sharp needles were updated as per WHO guidance.
- III. Six training workshops in coordination with the Ministry of Education, targeting 150 school health educators from the three NES governorates (Al-Hassakeh, Deir-ez-Zor and Ar-Raqqa) on safe return to schools in the context of the COVID-19 pandemic.
- IV. Four workshops with the Central Public Health Laboratory, targeting 100 laboratory doctors and technicians from Al-Hassakeh Directorate of Health and Qamishli National Hospital on laboratory biosafety measures, IPC standards and quality control, patient safety, as well as practical sessions on lab techniques.

## 5-2. Monitoring and follow up

WHO Qamishli sub-office and health partners in NES coordinated the selection of trainees based on capacity development objectives and relevance to participants. Onsite follow-up visits were conducted by WHO, and the required SOPs and references were shared with trainees to support the provision of quality and safety of healthcare services at all levels within the context of COVID-19. Trained healthcare professionals, together with WHO public health officers, trained other healthcare workers on updated WHO IPC guidance.

## 6. Case management



*Training on COVID-19 case management*

The WHO sub-office in Qamishli built the capacity of 50 physicians for COVID-19 case management. In addition, the WHO focal point regularly supervised and provided on-job training for health professionals in camp isolation centres. Two joint assessments on COVID-19 treatment facilities in Al-Hol and Al-Areesh camps were conducted.

## 7. Operational support, supplies and logistics

WHO's 24 tons of donated medical supplies were essential in supporting the COVID-19 response activities. The WHO Sub-Office distributed PPEs, medical equipment, as well as COVID-19 consumables (*Annex 1*).



*Humanitarian shipment arriving at Qamishli warehouse*

To support the vaccination efforts in northeast Syria, WHO coordinated the air shipment of COVID-19 vaccines from Damascus to Qamishli and further delivery to Deir-ez-Zor and Al-Hassakeh warehouses.

The Office supported delivering vaccine supplies to districts and health centres in NES, printed vaccination forms (cards, daily reports, surveillance forms, registration forms...) and provided transportation for vaccination mobile teams.

## 8. Vaccination

WHO is one of the main co-leads of the COVAX platform dedicated to supporting and enhancing the COVID-19 vaccination in fragile settings throughout the world.

WHO, in collaboration with the Ministry of Health and UNICEF, took the lead in implementing and following up on the COVID-19 vaccination activities in Syria, including in northeast Syria, and expanding the coverage to hard-to-reach areas.



*Mobile team at Al-Hol, in Al-Hassakeh governorate, providing COVID-19 vaccination services*

Despite the limited number of COVID-19 vaccine doses initially allocated to Syria in April 2021, WHO managed to advocate for increased delivery of vaccines to Syria through the COVAX facility. Subsequently, NES governorates equitably received a proportion of COVID-19 vaccines by October 2021.

### 8-1. Health diplomacy

COVID-19 vaccination in northeast Syria started as soon as the first vaccines were delivered to Syria, giving people hope to end the pandemic. WHO, in partnership with the Directorate of Health, led the COVID-19 vaccination process and ensured access to hard-to-reach areas, despite the challenges experienced at the initial stages of vaccination. However, due to the volatile security situation, some areas in NES remain inaccessible for vaccination.



WHO was able to secure the necessary approvals for safe transportation of vaccination teams throughout NES. The Organization also ensured equitable access to vaccines including the population in hard-to-reach areas, such as camps and camp-like settings. Given the specificity of the local context, WHO was able to waver pre-registration conditions in NES.

### 8-2. Human resources

WHO supported the Directorate of Health with operational costs related to COVID-19 vaccination, including incentives for fixed and mobile teams during the regular vaccination campaigns. Support was also rendered to supervisory visits within the framework of the immunization programme.

### 8-3. Training, workshops and meetings

In 2021, eleven training workshops were conducted in Al-Hassakeh, targeting 260 DOH and private sector health workers, on topics related to COVID-19 immunization such as vaccine-preventable diseases surveillance, service delivery, pharmacovigilance, technical knowledge, technical skills, safe injection, etc.

In addition, WHO provided operational support for DOH participants attending the central workshops in Damascus.



Targeting healthcare workers in Al-Hassakeh through a training on COVID-19 infection prevention and control measures

### 8-4. Planning

WHO effectively integrated COVID-19 vaccination in northeast Syria within the National Deployment and

Vaccination Plan (NDVP) as well as the micro-planning with the Directorate of Health.

### 8-5. Cold chain

WHO addressed the shortage of cold chains in the eastern side of Deir-ez-Zor by supporting three main powered storage facilities.

### 8-6. Monitoring and evaluation

WHO focal points in the field monitored the vaccination process and ensured smooth implementation. WHO and DOH jointly participated in the Monitoring and Evaluation (M&E) activities, addressing challenges and gaps, such as activating all teams, increasing working days for vaccinators, expanding the number of mobile vaccination teams to reach more people and facilitating unhindered access to hard-to-reach areas.

### 8-7. Figures

WHO supported the routine immunization and COVID-19 vaccination through more than 25 fixed centres and 55 mobile teams distributed across NES.



Routine immunization activities continued in NES during the COVID-19 pandemic

In 2021, with WHO and partners' support, DOH administered the COVID-19 vaccine to fully vaccinate almost 1.3% (37 424) of northeast Syria's population, and partially vaccinate 2.2% (63 924) of the NES population with one dose.

130,132 doses of COVID-19 vaccines were delivered to NES through WHO, including 82 732 doses of AstraZeneca, 41 400 doses of Sinopharm, and 6 000 doses of Sinovac). (Table 4).

**Table 4:** COVID-19 vaccination data for NES, 2021

NES Area	Vaccine amounts received			Total vaccinated	
	AstraZeneca	Sinopharm	Sinovac	1st Dose	2nd Dose
Al-Hassakeh	39,480	41,000	0	40,917	25,321
Ar-Raqqa SA	15,072	0	6,000	11,236	4,618
Eastern Deir-ez-Zor	28,180	400	0	11,771	7,485
<b>Total</b>	<b>82,732</b>	<b>41,400</b>	<b>6,000</b>	<b>63,924</b>	<b>37,424</b>

## Annexes

### ANNEX 1: WHO COVID-19 supply contributions, 2021

Viral RNA extraction kit (QIAamp), for RNA preps, kit-250	100
SD biosensor - standard Q COVID-19 Ag	5,250
Disposable sampling kit	30,000
Sample tubes CB (2ml)	5,000
Sample tubes RB (2ml)	5,000
Elution tubes (1,5ml)	10,000
Fingertip oximeter	342
Nebulization device	31
Oxygen concentrator O2, portable, with accessories (8L)	28
Patient monitors	27
ICU beds	5
Surgical suction units	29
Oxygen cylinders 40L	60
Surgical masks, non-sterile, disposable	140,200
Gloves	123,600
Headcovers	80,100
Sanitisers	28,838
Gowns	1,515
Coveralls	1,830
Protective goggles	725
Face shields	50
Infrared thermometers	18

### ANNEX 2: NES Key Performance Indicators 2021:

<http://www.emro.who.int/syria/information-resources/summary-of-key-indicators>

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