UNICEF GLOBAL COVID-19 SPECIAL INTERIM REPORT: SUPPLY

HIGHLIGHTS

- Since the start of the outbreak, UNICEF Supply Division has been one of the largest UN suppliers of PPE to protect health workers, and has procured 18,000 oxygen concentrators.
- Through the COVID-19 Diagnostic Consortium, UNICEF, with WHO and other partners, has contributed to securing 30 million polymerase chain reaction tests for screening, diagnosing and monitoring the spread of COVID-19.

FROM OUTBREAK TO GLOBAL PANDEMIC: UNICEF’S SUPPLY AND LOGISTICS RESPONSE TO COVID-19

In the span of a few weeks, COVID-19 escalated from a localized outbreak in China in late 2019 into a global pandemic by early 2020, affecting nearly the entire world.

As the outbreak worsened across the globe, demand for supplies to combat the virus sharply increased, leading to market constraints, pricing volatility, export bans and logistics barriers.

To navigate these extremely complex challenges, UNICEF mobilized its supply operations to support countries in their efforts to fight the pandemic. With the situation evolving rapidly, flexibility, innovation and adaptability were key components of the UNICEF supply response.

This interim report takes a closer look at UNICEF’s response to the COVID-19 pandemic, focusing specifically on supply and logistics.

<table>
<thead>
<tr>
<th>32M Gloves</th>
<th>79M Surgical Masks</th>
<th>7.6M N95 Respirators</th>
<th>1.9M Gowns</th>
<th>467K Goggles</th>
<th>1.3M Face Shields</th>
<th>6K Oxygen Concentrators</th>
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Shipped by UNICEF for 122 countries between January and August 2020

Source: World Health Organization

Data may be incomplete for the current day or week.
BEFORE THE PANDEMIC

UNICEF works closely with partners and governments to deliver supplies to children and young people in more than 190 countries and territories, including in situations of conflict and disaster.

Delivering supplies for the world’s most urgent needs is a challenge in any setting. Since the new coronavirus (COVID-19) was first reported in Wuhan, China, in December, it has spread to 215 countries and territories (see above graph). With global cases reaching over 23.6 million, and 814,438 deaths, the coronavirus pandemic has put unprecedented pressure on global manufacturer production capacities and global supply chains to respond to the crisis. ¹

UNICEF continues to work with partners to identify innovative solutions to overcome bottlenecks in shipping and logistics, as well as on sourcing of essential and strategic supplies.

COVID-19: OVERCOMING UNPARALLELED LOGISTICS DISRUPTIONS AND MARKET CONDITIONS

As the outbreak unfolded in China in late 2019, it became clear that supplies were a central component of the response, especially personal protective equipment (PPE), to safeguard the health of frontline workers. To support the initial response in China, UNICEF shipped PPE from its global supply hub emergency stocks in Copenhagen, Denmark.

By mid-February, the virus had spread to other countries. UNICEF expanded its supply response to support the growing needs. With much of the world’s PPE manufacturing concentrated in China, the lockdown restrictions impacted production and the global market. As the outbreak in China began to subside, Chinese manufacturers resumed operations, but with limited capacity. Manufacturers who were able to return to work faced backlogs and limited access to raw materials. New policy and export regulations put in place by the Chinese government, as well as by other countries to curtail the spread of the virus, caused clearance and distribution delays of supplies coming from China.

Logistics constraints reached unprecedented levels as countries around the world closed their borders to travel and trade. Options for cargo transportation became very limited, shipments of supplies were blocked in airports and prices for charter flights skyrocketed – reducing air shipments of UNICEF provided supplies.

At the same time, widespread global demand and competition for PPE led to shortages in these critical supplies during the first few months of 2020. As an example of the significant increase in global demand for PPE, in 2019, UNICEF procured 400,000 masks on behalf of country governments. By early 2020, the forecasted demand soared nearly 600-fold to 240 million. Prices of some PPE items surpassing 20 times the cost of historical levels (see graph).

In response to the market situation and to meet the demand, UNICEF worked with existing suppliers and connected with an additional 1,000 companies to obtain PPE at competitive prices and acceptable quality. Coordination efforts among partners also intensified. To support countries with limited buying power to access essential

¹ WHO Coronavirus Disease Dashboard. Accessed 26 August.
supplies, UNICEF worked with governments to consolidate demand and used its procurement expertise and capacity to work with manufacturers to negotiate acceptable pricing, secure supplies and ensure equal access for countries. To mitigate the future risk of supply stock-outs, UNICEF is building relationships with large manufacturers and suppliers of PPE and establishing long-term agreements to secure production capacities as well as to geographically diversify the supplier base.

**Spotlight on the field**

**PPE Making Measles Campaign Safer in Ethiopia**

Despite the ongoing COVID-19 outbreak, UNICEF (with the WHO, the Government of Ethiopia and national and international partners) implemented a measles campaign for over 14 million children aged 9 to 59 months, reaching 96 per cent of the target. UNICEF supported the local production, procurement and delivery of over 450,000 bottles of hand sanitizer to protect health workers during the campaign.

**Supporting Health Workers and Facilities with PPE in Venezuela**

As part of the focus on health and IPC, UNICEF has provided over 47,500 health care workers in Venezuela with PPE, and has trained over 17,000 health care workers in detecting, referral and appropriate management of COVID-19 cases. In addition, UNICEF has reached over 540,000 people with basic Water, Sanitation and Hygiene services at community level, including providing handwashing points in public places, hospital entrances and quarantine shelters.

**Impact on vaccine delivery**

WHO-UNICEF immunization coverage estimates show that vaccine coverage over the past decade had stalled, with approximately 20 million children globally not reached with lifesaving vaccines. The pandemic has made this situation worse. Each year, UNICEF procures over two billion doses of vaccines on behalf of nearly 100 countries, to reach approximately 45 per cent of the world’s children under five years of age. From March to May in a typical year, UNICEF would have made more than 700 shipments of vaccines to countries. In the same three-month period in 2020, this number was nearly halved (see graph).
The decline in available flights, as well as lockdown restrictions imposed at receiving airports, impeded UNICEF’s ability to ship vaccines as per country and supplier shipment plans. Costs also increased significantly above the budgeted estimates for shipments.

As a consequence of the supply disruptions and prohibitive shipping costs, countries across the globe have indicated vaccine stocks reaching critical levels, including for measles. At its peak in May, as many as 103 campaigns involving at least one vaccine had been postponed in 56 countries. The suspension of over 37 measles immunization campaigns has led to approximately 148 million children at-risk of missing out on vaccinations in 35 countries; among these, 16 are experiencing ongoing measles outbreaks.

To overcome these unprecedented vaccine logistics challenges, UNICEF has been working with partners and businesses to increase flight capacity. Land-transit options are also being used where possible. As a result, the number of vaccine shipments delivered weekly has recovered to almost pre-COVID standards and the use of innovative freight solutions has helped reduce the backlog of shipments accumulated through March and April.

**Innovative freight solutions to overcome COVID-19 disruptions**

UNICEF is championing the concept of multi-stop charter flights to get essential vaccines to countries challenged by lockdowns and logistics constraints, particularly smaller countries for which individual charter flights would come at exorbitant costs. Under this approach, several smaller vaccine shipments are pooled into a single aircraft, making stops in several countries.

UNICEF has arranged three such charter operations to date to deliver vaccines to hard-to-reach countries in West and Central Africa – a region with some of the lowest immunization coverage rates in the world. This innovative freight solution substantially decreased the cost of delivery for each country, while supporting access to vaccines in locations that would be otherwise difficult to reach due to pandemic-related lockdowns and lack of commercial freight options.

UNICEF is also working together with partners to carry out dedicated charters for larger countries, consolidating vaccines and other cargo. For example, a collaboration with the European Union (EU) supported UNICEF to send more than 50 tons of vital supplies to Afghanistan, Burkina Faso, the Democratic Republic of the Congo (DRC) and Sudan on board eight EU Humanitarian Air Bridge flights as of mid-July. Similarly, UNICEF has worked closely with the WFP Common Service Provision since its operationalization in May to enable transportation of covid-19 supplies, primarily PPEs ex-China, to more than 100 countries globally.

**Supporting early childhood development (ECD) during times of COVID-19 - Uruguay**

Continuing its support and protection of ECD during the pandemic, UNICEF delivered 300 sanitary kits along with educational materials (crayons, paper and books) to the families of the Canelones Crece Contigo program. The government of Canelones has been conducting this program for 11 years, with UNICEF support. The initiative promotes contact and healthy development for children living in poor conditions.
**Responding to Increased Demand for Education Supplies**

Demand for solar-powered radios has soared 800% when compared to 2019 global demand. These radios are used for remote learning for children while their schools are closed due to COVID-19. In addition, demand for UNICEF tents and tarpaulins has also increased considerably. These are used for multiple purposes, for example children friendly spaces and temporary schools. UNICEF has increased prepositioning of multipurpose tents, which are used for child friendly spaces and temporary schools, given the need for additional space to maintain physical distancing when children return to school.

**Securing diagnostics to mitigate the spread of the virus**

A combination of different test types is needed to facilitate patient management and public health planning for the effective control of COVID-19. The global availability of diagnostics remains constrained. Coordinated efforts by the global health community have improved the availability of polymerase chain reaction (PCR) tests for COVID-19 diagnosis in low- and middle-income countries. However, the availability of PCR tests that can be administered at the point of care and platforms that can process a large number of samples simultaneously remains limited, especially for LICs and MICs.

UNICEF is actively participating in the WHO-led COVID-19 Diagnostics Consortium. UNICEF has contributed to the Consortium successfully securing 10 million automated and 20 million manual PCR tests for low- and middle-income countries from mid-April till mid-August 2020. As of 25 August, UNICEF has successfully shipped over 1.7 million tests to 56 countries. UNICEF has procured 2.1 million COVID-19 molecular tests for a total value of USD 31.70 million for 57 countries.

**PARTNERSHIPS ARE CRITICAL TO A SUCCESSFUL RESPONSE**

Partnership efforts have intensified across the different areas of the response. The GAVI’s frontloading of US$40 million of Health System Strengthening funding with UNICEF allowed GAVI countries to use this financing. UNICEF was able to efficiently use the resources to secure bulk quantities of supplies. The World Bank has been a significant financing partner for both the response delivered via UNICEF programs and its procurement services (see below for additional detail).

**GAVI funding crucial for Myanmar’s effective response**

During the onset of the pandemic, the emergency reallocation of US$8.8 million from the over US$85 million Health System Gavi-funded program was crucial to Myanmar’s effective response to COVID-19. UNICEF and WHO supported the Government with the procurement of testing kits, oxygen concentrators, and laboratory reagents, as well as US$3.75 million worth of PPE. UNICEF and partners supported the dissemination of communication materials in Myanmar and 85 ethnic languages, as well as training of health workers. The support was key in the resumption of routine immunization services after only six weeks of suspension.

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2 Tests that directly detect the virus such as manual polymerase chain reaction (PCR) or antigen (Ag) are necessary for screening, diagnosis and monitoring; while antibody (Ab) tests that detect the immune response to the virus will play an essential role in surveillance to aid the development and deployment of prospective therapeutics and vaccines.
Flexible funds from donors have enabled UNICEF and its partners on the ground to act quickly and respond strategically where the needs are greatest. In this regard, UNICEF is grateful to partners such as DFID, Germany, the Central Emergency Relief Fund, the U.S. Fund for UNICEF, the COVID-19 Solidarity Recovery Fund, Denmark, the Japan Committee for UNICEF, Sweden, Australia and the private sector, which have contributed $122.8 million in flexible or softly earmarked funding towards the COVID-19 response.

UNICEF has also engaged with the private sector in several outreach initiatives, industry consultations and “chamge-maker calls” to help meet the needs for fighting COVID-19. This has resulted in the sharing of expertise, companies scaling up production locally or changing production lines, and cash and in-kind donations to UNICEF equalling US$26 million. Companies have donated hand sanitizers, soap, PPE and hygiene kits to support the effort, as well as donated air transport to support the delivery of supplies.

The engagement with companies has opened opportunities for new partnerships. The inter-agency collaboration led by UNICEF on PPE in response to the pandemic has resulted in interest from private companies to support multiple agencies and companies, leveraging the strength of each actor. One example has been the WEF platform for COVID-19, where a soap producer has linked up with a logistics company and UNICEF - each contributing expertise, thereby optimising the support.

UNICEF has brought its expertise, assets and networks to these collaborations, including the WHO-led COVID-19 Supply Chain System and the ACT-Accelerator initiative – a global collaboration backed by $8 billion in donor funds aimed at developing and accelerating access to COVID-19 diagnostics, therapeutics and vaccines.

**Procurement services**

Significant resources have been mobilized globally to support countries to respond to the COVID-19 pandemic. This includes traditional fundraising, but also domestically-mobilized resources which governments have used to access UNICEF’s Procurement Services (PS). Through PS, countries leverage UNICEF’s procurement expertise and scale to secure essential supplies. Countries use PS while they continue to strengthen their own supply chain systems and procurement capabilities.

The World Bank has been the largest financing source for countries who have accessed UNICEF’s PS during the COVID-19 response. Through 22 July, a total of US$94.6 million procurement services agreements financed by World Bank loans had been signed or supported operationally through UNICEF PS. An additional US$122 million of agreements are under various stages of negotiation. These PS agreements supplement those resources mobilized via UNICEF. UNICEF has partnered with the Global Fund to avail UNICEF’s PS directly to Global Fund Principal Recipients through the Fund’s “wambo” platform. UNICEF has also signed a PS MoU with the African Union Centre for Disease Control to facilitate access to essential supplies.

**Innovative financing**

UNICEF has expanded its revolving fund and other financing tools which allows UNICEF to deliver supplies to countries, while donor or country financing is being mobilized. The Vaccine Independence Initiative, UNICEF’s primary revolving fund, has grown to US$146 million, while the U.S. Fund for UNICEF made available US$10 million of additional bridge financing capacity and also launched its “Fast Fund” (US$3million). These tools accelerated the availability and delivery of US$52 million worth of supplies, including PPE, hospital beds, medical equipment, hand sanitizers and diagnostic tests in more than 13 countries. Additionally, UNICEF has used these financing tools to support the bulk purchase of additional US$280 million of supplies such as diagnostics and PPE, to assure that supply was available and delivery lead times reduced even prior to receiving country orders.

UNICEF has been integrally involved in the design of the COVAX Facility—a global mechanism launched in June 2020 to finance access and prioritize availability of future COVID-19 vaccines. The Facility aims to pool financing for COVID-19 vaccines and will cover costs for the poorest countries. Other upper middle income countries (UMICs) and high income countries (HICs)
can participate and ‘self-finance’ their access to vaccines through COVAX. By encouraging a global scope, the Facility provides a vehicle for solidarity and reduces the chances of widespread ‘vaccine nationalism’.

**Delivering supplies in humanitarian settings – Yemen**

Through existing community networks, UNICEF is supporting over 5 million beneficiaries, PHC, community health workers, vaccinators, volunteers and community midwives with health supplies. Over 12 million people have been supported with WASH supplies. Approximately 82,700 health care workers and communities have received PPE.

While UNICEF continues to maintain the Salalah Hub in Oman as the main transit hub for supplies, Djibouti and the Al Hudaydah port are only open for the movement of supplies. A humanitarian air bridge was established in June, which has facilitated the transport of nearly 424 metric tonnes of UNICEF supplies. PPE supplies will support 400 frontline health workers for three months.

**Supporting vulnerable populations in Bangladesh**

Despite supply constraints, UNICEF has delivered US$11.89 million worth of supplies and medical equipment to the Government of Bangladesh to combat and treat COVID-19, including for the Rohingya population in Cox’s Bazar. In addition, UNICEF is supporting the construction of a temporary isolation and treatment centre for the treatment of severe acute respiratory infections (SARI-ITC) for the Rohingya and host community population in Teknaf area of Cox’s Bazar. UNICEF is also signing an agreement with the World Bank to set up Liquid Medical Oxygen (LMO) plants in 30 selected hospitals.

**INNOVATING FOR AN EFFICIENT RESPONSE**

With high demand and low availability of essential medical supplies, governments are facing considerable challenges to treat respiratory illnesses associated with COVID-19.

COVID-19 causes pneumonia, and approximately 15 per cent of COVID-19 patients are classified as ‘severe’ and require oxygen therapy. An oxygen concentrator takes in air and removes nitrogen from it, leaving an oxygen enriched gas for use by people requiring medical oxygen due to low oxygen levels in their blood.

UNICEF’s biomedical response is concentrating on three categories of commodities: 1) Oxygen Concentrators (from 4 manufacturers supplying to meet the different flow rates, voltage and frequency requirements); 2) Consumables, including piping, nasal cannulas, masks, spares and filters; and 3) Accessories, including flow splitters, humidifying bottles, oxygen analysers and pulse oximeters.

Thanks to the groundwork laid by an innovation project, funded by the Bill and Melinda Gates Foundation, on oxygen therapy between UNICEF and WHO, joint specifications were published in 2019 and tenders were completed just before the emergency response started. This timely intervention allowed the UNICEF team to work closely with manufacturers and suppliers to meet the emerging country demands to respond to COVID-19. In addition to this, an innovative oxygen planning tool has been created to help countries plan and make informed decisions on products and equipment to procure in response to this emergency.
With the successful procurement of close to 18,000 oxygen concentrators, UNICEF has been able to meet the demand from four rounds of product allocations. As of 25 August 2020, UNICEF has delivered over 6,000 oxygen concentrators to 66 countries. The remaining are on order and expected to be shipped in the coming weeks.

UNICEF has also developed a planning tool and an online management interface that helps colleagues across the world efficiently manage the current and future supply of oxygen therapy products. The Oxygen Concentrator Management Interface can be used to make evidence-informed supply and program decisions to improve and maintain access to oxygen for children and adults during the COVID pandemic and after.

UNICEF has been instrumental in procuring critical medical equipment and supplies, and in the training of their proper use, to support the COVID-19 response in Belarus. With funding support from USAID, and the participation of leading experts from the Belarusian Medical Academy as well as WHO Belarus, UNICEF organized two webinar sessions on "the practical use of oxygen concentrators in patients with respiratory disorders in the context of COVID-19." More than 180 health practitioners from Belarus and other countries in the East and Central Asia Region participated in these sessions to learn the proper technique for administering oxygen therapy.

NEXT SITREP: 26 AUGUST


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