

Vaccinating Africa: solving logistical challenges of COVID-19 vaccine distribution

Less than a year after the World Health Organization declared the novel coronavirus (COVID-19) outbreak a global pandemic, and with more than 3.9 million confirmed cases on the continent, the first vaccine deliveries started reaching Africa.

Africa: an under vaccinated continent

As of November 2021, Africa is the least vaccinated continent for COVID-19. In many African countries, the share of the population who have received at least one shot is below 10 percent, compared to more than 70 percent in high-income countries.

While wealthier countries have ordered a steady supply of vaccine doses directly from manufacturers, the availability for lower-income countries can be unpredictable, making planning more difficult.

In early 2021 South Africa received a batch of one million doses from the Serum Institute of India and was ready to roll out a vaccination program. However, following a small trial, the data suggested the shot offered minimal protection against a recently discovered strain of the virus, and the government put the brakes on the program. World Courier was tasked with redistributing those doses to 14 African countries.

Redistributing a million vaccines

We received the consignment in early March 2021, and time was of the essence, as the doses were due to expire in just six weeks. Quick thinking and planning were necessary to get these vital vaccines to people.

From a logistics perspective it required unprecedented levels of planning, coordination, resources and funding, as well as careful considerations of new regulations which impacted manufacturing and distribution best practice.

The continent's infrastructure in terms of electricity and cold storage also presented challenges. Although those doses were not of the RNA vaccine type (that require storage at -70 and -20 degrees), they did need to be stored between 2 and 8 degrees at all times, and in countries with tropical climates and in isolated regions.

With the fast-approaching expiry date, plus the added complication of a maximum of 96 hours in transit*, the clock was ticking. Choosing the right packaging solution was critical to ensure the much-needed doses remained within range for the required period of time.

Key facts



2-8°C

Temperature requirement

14 countries

Destination

1 million doses

Volume

96 hours

Timeframe

* 96 hours is the maximum amount of time the temperature of the vaccines can be kept stable in transit.



Early March 2021, while 1.27 percent of the world population had received at least one dose of a COVID-19 vaccine, the rollout was only just starting in Africa.

"The vaccines needed to be transported and stored between two and eight degrees."

**Remo Hanselmann, Managing Director,
South Africa and Kenya**

Local knowledge. International experience

We worked quickly to plan the shipments and procured the required packaging from our worldwide network, as there was insufficient inventory in Africa at the time.

Flight delays threatened to sabotage the mission, but the vaccines made it to Mauritania, their final stop in Africa, with just hours to spare. The temperature monitor results proved stability of the shipments at all times during the 4 day transfer, so the vaccines were then safely transported to temperature-controlled facilities. They were then sent to local vaccines centers where they would be administered to local populations.

Speed is essential, as is ensuring shipment integrity. It is critical to work with a trusted partner with infrastructure and experience, with an established chain of custody. This ensures everybody handling the shipment works to the same regulatory and good practice standards, and follows the same standard operating procedures (SOPs). A partner with local knowledge and people on the ground to handle customs requirements is essential to protect the shipment in case it is delayed or must be re-routed.

World Courier has supported the distribution of COVID-19 vaccines to more than 30 countries worldwide. To learn more, [access the recording of our panel on vaccine distribution in emerging economies](#) or [read the key learnings](#).