

SOUTHERN Pulse



JUNE 2021



TABLE OF CONTENTS

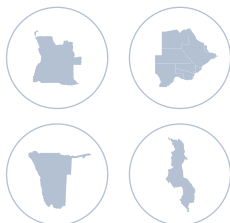
- 1 In Malawi, COVID vaccine distribution
- 3 Botswana's emergency supply chain framework
- 4 In Zambia, advanced analytics for decision-making
- 6 Namibia and Angola partner to support HIV/AIDS clients
- 8 In Angola, multi-month dispensing (MMD) reduces risk of COVID
- 9 In Eswatini, MMD and decentralized drug distribution to reduce COVID risk
- 11 Industry news
- 11 Upcoming events
- 12 Resources

WELCOME

Welcome to the first edition of Southern Pulse, a quarterly newsletter from the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project. For the past year, COVID-19 has changed our lives in more ways than we can count. Public health supply chains have adapted to support COVID-19 response and, at the same time, maintain a reliable supply of other vital public health commodities.

Despite the many challenges of COVID-19, public health supply chain professionals rose to the task. We hope you enjoy reading about the many examples provided in these pages.

ANGOLA, BOTSWANA, MALAWI, NAMIBIA



COVID-19 VACCINE DISTRIBUTION REPRESENTS THE NEXT BIG STEP IN FIGHTING THE PANDEMIC, WITH MALAWI LEADING THE WAY

Through USAID, the U.S. government is supporting COVID-19 vaccine distribution through the COVAX Facility, a global pooled procurement mechanism of the World Health Organization; Gavi, the Vaccine Alliance; the Coalition for Epidemic Preparedness Innovations; and other organizations committed to ensuring fair and equitable access to vaccines for all 190 participating economies.



In Malawi, GHSC-PSM has helped distribute 350,000 COVID-19 vaccines and related supplies. Photo: GHSC-PSM

In March 2021, GHSC-PSM supported distribution to various vaccination sites of more than 350,000 doses of COVID vaccines donated through the COVAX facility and by the Indian government and the African Union.

In support of COVAX, USAID is funding GHSC-PSM in 12 countries—including Angola, Botswana, Malawi, and Namibia—to ensure a reliable supply of COVID-19 vaccines to the last mile, including remote health facilities. Work is just beginning in most of the 12 countries.

However, in Malawi, GHSC-PSM received early funding to support the Ministry of Health in rolling out COVID-19 vaccines. Four key areas of support in Malawi are typical of the kinds of support other countries will receive:

- Strengthening data management systems for commodity tracking and reporting
- Warehousing and distributing vaccines—including cold chain requirements—and non-vaccine supplies to health facilities
- Developing an effective waste management plan to manage vaccine-related waste
- Coordinating vaccine rollout activities through participating in various technical working group meetings

In March 2021, GHSC-PSM supported distribution to various vaccination sites of more than 350,000 doses of COVID vaccines donated through the COVAX facility and by the Indian government and the African Union. The project printed data collection tools to support commodity tracking and enhance accountability at vaccination sites. To support waste management, GHSC-PSM is developing training, guidelines and procedures for health care workers, distributing biohazard bags for district health offices, and supporting collection of unused and expired vaccines.



BOTSWANA

BOTSWANA EMBRACES THE EMERGENCY SUPPLY CHAIN FRAMEWORK TO MANAGE SUPPLY AND PROCUREMENT DURING COVID-19



Handover of the ESC Playbook with the Botswana Minister of Health and Wellness Honorable Dr. Edwin Gorataone Dikoloti and the U.S. Ambassador to Botswana, His Excellency, Mr. Craig Cloud.

Like health sectors in other countries, Botswana’s health sector has been affected by the COVID-19 pandemic, with its supply chain management facing challenges with procuring and ensuring delivery of needed commodities. To avoid disruptions in supply, the Ministry of Health and Wellness (MoHW) and GHSC-PSM led the development and initial roll-out of the Emergency Supply Chain (ESC) Framework, which is based on GHSC-PSM’s ESC Playbook that provides an essential competencies framework for ESC management to help countries effectively prepare for and respond to epidemic/pandemic threats.

The primary objective of the ESC Framework is to have in place the governance and organizational structures, funding and finance, identification of specific diseases and their triggers, commodity forecasting and supply planning, procurement and sourcing of commodities, warehousing and distribution of the commodities, transportation and logistics, data availability/visibility for real-time decision-making (by the relevant authorities) and monitoring and evaluation to enable the country to adequately respond to health emergencies and other potential disasters.

After launch of the framework at the national level at a ceremony in March 2021, the development and customization process flowed down to districts, with the District Health Management Teams (DHMTs) supported to spearhead the exercise and become custodians of emergency preparedness and response. So far, two DHMTs from the Southern and Kweneng East districts implemented the framework.

At the framework handover ceremony, the U.S. Ambassador to Botswana vowed support from the U.S. government to ensure access to essential medicines and related commodities despite COVID-19 disruptions. When receiving the ESC Framework, the MoHW thanked the U.S. government for its continued support to strengthen Botswana’s health systems. The Minister also pledged the ministry’s dedication to own and use the ESC framework initiative across the country and pledged support for smooth adoption at district levels. The plan to continue rolling out the framework to other districts is ongoing, with the MoHW and GHSC-PSM partnering to monitor progress and ensure ownership of the framework at all levels of the health system.

ORGANIZATIONS INVOLVED IN DEVELOPING BOTSWANA’S EMERGENCY SUPPLY CHAIN FRAMEWORK:

Ministry of Health and Wellness, World Health Organization, Botswana Defence Force, Botswana Medicines Regulatory Authority, Botswana Police, Botswana Post, Botswana Vaccines Institute, Central Medical Stores, Department of Veterinary Service, Botswana Red Cross Society, GHSC-PSM, U.S. Centers for Disease Control and Prevention, and USAID.

ADVANCED ANALYTICS: COVID-19 REVEALED WEAKNESSES IN EXISTING SYSTEMS, THEREBY ACCELERATING TRENDS TOWARD USE OF ANALYTICAL TOOLS

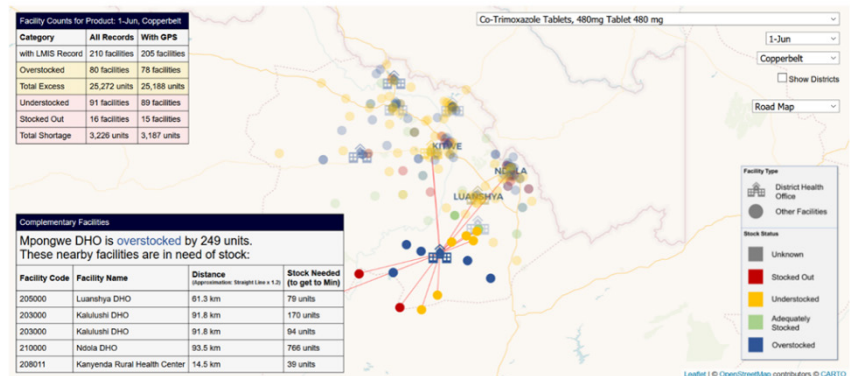


Advanced analytics supports decision-making through access to near-real-time data and analysis. The past 10 years have brought a significant change in the ability to exchange and analyze data. Internet and cellular connectivity have improved. File-sharing platforms have replaced email attachments. Daily, computer-driven, automatic downloads of data have replaced monthly or quarterly, people-driven manual transactions.

The speed at which the COVID pandemic spread also accelerated the demand for supply chain data insights in USAID-supported countries. It exposed the weaknesses of existing data systems that could not respond to basic questions like, “How much space is in our warehouses now, and how much will there be when large shipments of personal protective equipment arrive?”

In Zambia, GHSC-PSM designed and deployed four customized advanced analytics tools through a remote engagement model that allows work to continue uninterrupted and without the need for international travel. In addition to replacing time-consuming manual processes, the tools enable more timely action to prevent supply risks. These remote solutions are ideal for supply-chain management during the COVID-19 pandemic and for years to come. These tools were designed to be automated and easily deployable in other country contexts. The tools include:

- STOCK RE-DISTRIBUTION TOOL.** In April 2019, GHSC-PSM implemented the Zambia stock re-distribution tool, a map-based interface for making stock re-distribution decisions remotely from any location. The tool pulls



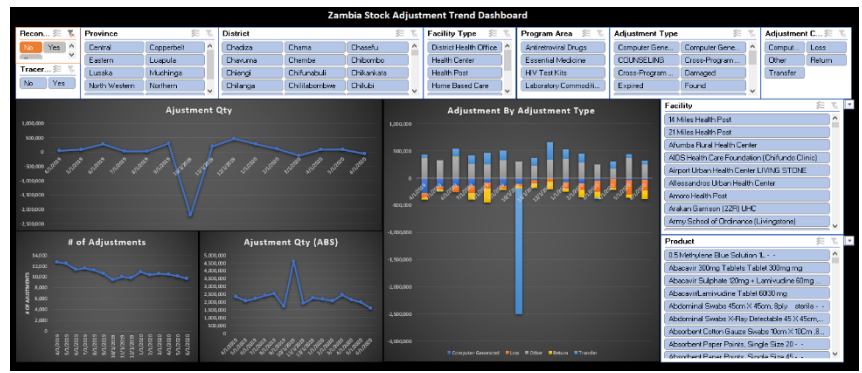
Zambia's stock redistribution tool.

data from the existing logistics management information system and automatically analyzes it to identify stock transfer opportunities to support timely decision-making at the provincial health offices. The tool uses color-coding and other visual cues to recommend possible transfers to mitigate any facility's stockout risk. From May to August 2020, remote use of the tool helped resolve multiple supply risks and prompted the re-distribution of antiretroviral (ARV) medicines, essential medicines, viral load reagents, and other lab commodities in the Western Province, re-distribution of Depo Provera in Chilanga District, and re-distribution of malaria medicines in Luangwa District.

By revealing risks, COVID has accelerated the trend toward automated, remote data sharing and analysis by making online exchange the only viable option both internationally and within a country's borders.

CONSUMPTION ANOMALY DETECTION TOOL.

Identifying consumption anomalies is vital to determine supply-chain risks, but these anomalies were difficult to pinpoint amidst the



The dashboard for the consumption anomaly detection tool.

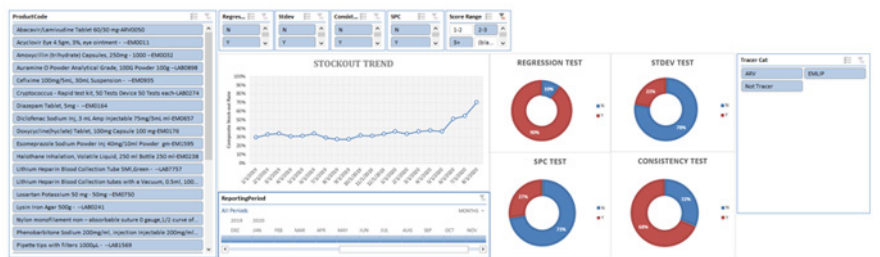
large volume of information in Zambia. GHSC-PSM designed and implemented an automated consumption anomaly detection tool in early 2019 by adapting a private-sector Statistical Process Control for the supply chain. In 2020, project staff used the consumption anomalies tool monthly (and by remote) to check more than 200,000 records at more than 2,900 facilities to detect and call to the attention of the MOH Pharmacy Unit and chief provincial pharmacists any abnormalities in consumption. This report supports the National Drug Theft Task Force in intelligence gathering, while provincial task forces use the tool to conduct audits and determine supportive supervision needs.

HUB CAPACITY TOOL.

GHSC-PSM developed an Excel-based analytics tool in June 2020 to help the Zambia Medicines and Medical Supplies Agency (ZAMMSA) make strategic decisions about which commodities to store in a provincial hub. To reduce the number of commodities managed at the central level and move key commodities closer to facilities, ZAMMSA used the hub tool in selecting 40 critical public health commodities that could potentially be stored in provincial hubs instead of the central warehouse, reducing the delivery time and improving the reliability of supply. With remote support from GHSC-PSM in June, ZAMMSA used the hub capacity tool to determine that the Luanshya Hub (Copperbelt Province) could store only 15 of the potential 40 commodities because of storage constraints—with a two-month stock holding—allowing ZAMMSA to refine its distribution strategy for this province. With lessons learned from Luanshya, ZAMMSA used the tool to determine which commodities can be stored at all the other hubs.

STOCKOUT TREND DETECTION TOOL.

Because of international supply interruptions caused by



Zambia's stock-out trend detection tool.

COVID-19, GHSC-PSM expanded routine monitoring of stockout trends from tracer commodities to all 1,000 commodities to prevent supply risks for non-tracer products. The project developed and deployed a stockout trend detection tool to analyze this much larger data set. It simultaneously runs multiple tests to determine whether stockouts are showing an increasing trend. Then, it alerts GHSC-PSM and the project's counterparts in ZAMMSA when stockouts of certain commodities are on the rise.

Zambia is just one example of a larger trend in advanced analytics. Pre-pandemic, social contact during formal and informal meetings and exchanges had helped mask the silos in which data have been kept, but social isolation created by COVID helped identify and then bridge unnecessary separations.

By revealing risks, COVID has accelerated the trend toward automated, remote data sharing and analysis by making online exchange the only viable option both internationally and within a country's borders. Where governments once resisted providing access to their data, many are now more open to doing so.

Enabled by the continuous, free flow of data, advanced analytics can shift from just high-level strategic analysis—where it has historically operated—to operational and tactical considerations, including order management, distribution, warehousing, commodity consumption trends, expiry management, and early warning systems.



NAMIBIA AND ANGOLA

PARTNERING TO MAINTAIN ART SERVICES FOR CROSS-BORDER PATIENTS DURING COVID-19



A Namibian health worker prepared ARVs to be sent across the border to Angolans.
Photo: Annastasia Siremo

The COVID-19 pandemic has brought challenges to most health care systems in the delivery of antiretroviral treatment (ART) services, especially to cross-border patients. A silent movement of HIV/AIDS patients has been taking place between the Angola-Namibia border. For various reasons, including limited supplies of ARVs in remote areas of Angola, some 4,000 Angolans seek and receive ART services in Namibia's Kavango East and Kavango West regions, whose health facilities have ensured Angolans access to ART as part of Namibia's commitment to universal access to health care and global HIV/AIDS goals for epidemic control.

However, the closure of borders and restriction of movement to prevent the spread of COVID-19 greatly restricted Angolans' access to ART services they were receiving in Namibia. Senior Registered Nurse, Sister Annastasia Siremo from the Ministry of Health and Social Services (MoHSS) Rundu District Office, emphasized that these patients cannot be neglected: "We already have them on our records. Despite the challenges posed by COVID-19—such as restricted movement between borders—through coordinated efforts we have ensured that they receive medication on time to maintain continuity of treatment."

"The situation of the Angolan patients has also necessitated us to scale up on the ART multi-month-dispensing (MMD), as most of these patients now receive three to six months of medication," she said.

The whole process of ensuring the Angolan patients receive their ARVs begins with Angolan and Namibian health care workers communicating through phone calls and WhatsApp to exchange patient information. Angolan health care workers

check patients' basic health parameters and record them on what is known as health passports. After collecting a large quantity of health passports, they notify their Namibian counterparts and arrange a time to meet at the Angola-Namibia border post to deliver them. Using the health passports, the Namibia health care workers then dispense ARVs and return to the border within a week to deliver them to their Angolan health care counterparts, who in turn distribute them to their ART clients.

These efforts start with accurate data. Staff of the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project based in the Kavango



A transfer of ARVs at the Angola-Namibia border. Photo: Annastasia Siremo

regions have played key role in supporting this cross-border solution by mentoring the regions' health facilities to provide accurate and timely data needed at the national level for decision-making. The project also ensures that two pharmaceutical management stock and patients work efficiently and effectively and supports various patient and stock management tools used for supply chain decision-making, including the Electronic Dispensing Tool for ARV patients and the Facility Electronic Stock Card for inventory management.

Leveraging the available data—long before patients in Angola receive their ARVs—GHSC-PSM works with Namibia's central medical stores to make decisions about the quantities needed to support multi-month dispensing across the border in Angola's public health facilities in Kavango East and Kavango West regions.

During a year marked by great uncertainty, one can only imagine the concern of ART clients in Angola who rely on Namibia for lifesaving medicines. The two countries and their health workers are committed to providing Angolan patients with an uninterrupted supply of ARVs, as demonstrated by all parties involved.

GHSC-PSM staff based in the Kavango regions have played key role in supporting this cross-border solution by mentoring the regions' health facilities to provide accurate and timely data needed at the national level for decision-making.



A NEW COUNTRY DIRECTOR FOR NAMIBIA

Ryno Badenhorst joined GHSC-PSM in May 2021 as the new country director for Namibia, bringing a wealth of experience in public-sector and private-sector supply chain management in Africa and Europe. Before joining GHSC-PSM, Mr. Badenhorst served as the director for pharmaceutical services and management in charge of Namibia's Central Medical Stores (CMS) and was involved in authoring and implementing phase two of the organization's key turnaround transformation strategy of the CMS.

Mr. Badenhorst will focus on advancing the partnership with the Ministry of Health and Social Services on a broad range of issues as part of the project's objectives to support the country's procurement and supply of pharmaceuticals.

"Throughout my career, the subject of giving back and making positive contribution in people's lives is my biggest motivation and of great interest to me. This position offers me a unique opportunity to make a positive contribution toward the lives of Namibian people," Mr. Badenhorst said.



A provincial team makes a delivery in Angola. Photo: GHSC-PSM

ANGOLA

COLLABORATION AMONG PARTNERS HELPED PEOPLE LIVING WITH HIV STAY HEALTHY DESPITE COVID-19



In addition to its coordination with Namibia from the story above, Angola has formed strong partnerships within its borders to serve people living with HIV. In the early months of 2020, COVID-19 threatened to disrupt Angola's transition to fumarate, lamivudine, and dolutegravir (TLD)—the preferred first-line ARV. In response, GHSC-PSM worked closely with the Angolan government and partners to hold the first-of-its-kind remote, online quantification exercise to support the transition to TLD, including 90-count bottles to support MMD.

COVID-19 increased the urgency for MMD as an approach to reduced patient trips to health care centers and slow the spread of the virus. After the quantification exercise, all government and donor products coming into the system from that point forward were automatically MMD compliant. The World Bank endorsed the quantification exercise and committed to supporting the MOH National Institute of HIV with \$8.5 million for ARVs over a three-year period and related in-country logistics to meet some of the identified need. The Global Fund and other national stakeholders have

also referenced the quantification outputs for planning ARV and HIV rapid test kits procurement.

At the same time, GHSC-PSM heightened the early warning system to identify supply risks and provided provincial-level support to move products closer to patients across supported facilities, all to ensure a reliable supply of HIV/AIDS commodities to people who need them.

The project made possible 100 percent MMD data visibility and use—from a baseline of zero—through biweekly, labor-intensive data gathering, validation, analysis, and transmission to inform clinical and other programmatic decisions. A monthly inventory management report produced in collaboration with provincial governments informed stock status at provincial, municipal, and health facility levels.

Since implementation of MMD in July 2020, some 8,000 patients are on three-month MMD at sites supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), and commodity availability has increased across the board. Moreover, patients have enjoyed a reliable supply of ARVs.

For most of last year, the most-used first-line ARVs were at more than 90 percent availability at PEPFAR-supported sites. Availability of the most-used pediatric ARVs improved from 74.3 percent in December 2019 to more than 90 percent in December 2020.

In the year ahead, GHSC-PSM plans to advocate for inclusion of pregnant and breastfeeding mothers—as well as children—in MMD. More broadly, the project will work with the MOH and other in-country partners to build standardized processes, build capacity, and advocate for increasing investment toward minimizing (and where possible, eliminating) barriers to the comprehensive rollout of the MMD to more people living with HIV/AIDS.

For most of last year, the most-used first-line ARVs were at more than **90 percent availability** at PEPFAR-supported sites in Angola.

ESWATINI

ADAPTATIONS TO SUPPORTIVE SUPERVISION HELPED SUPPORT MULTI-MONTH DISPENSING AND DECENTRALIZED DRUG DISTRIBUTION OF HIV/AIDS COMMODITIES TO REDUCE COVID-19 RISK



During supportive supervision—an essential element of pharmaceutical quality assurance—technical experts visit health facilities to improve public health supply chain performance at health facilities. Supervision visits provide the opportunity to review supply chain achievements; address challenges; provide on-the-job training, coaching, and mentoring; and identify solutions for problems encountered at health facilities. Also, supportive supervision helps to improve system performance and alert managers to potential supply chain risks, including waste, expiry, and stockout.

Supportive supervision requires close observation onsite and interaction with facility staff, so the effectiveness of conducting the activity remotely can be limited. Also, many are in rural or remote areas with little or no access to the Internet or cellular connectivity, making remote support impossible. To maintain the safety of project staff, health facility staff, and patients, GHSC-PSM adapted its programming in many countries to incorporate COVID prevention strategies.

In Eswatini, GHSC-PSM adapted supportive supervision to reduce the risk of transmission of COVID-19 through the project's four regional logistics officers, who are embedded within the MOH Regional Health Management Teams to support health facility pharmacies and laboratories. The program, which began in November 2019, currently focuses on 80 (of 250 total) hospitals, health centers, and high-volume clinics, which handle a large proportion of the stock distributed from the central medical stores and constitute more than 60 percent of patient attendance nationally.

The logistics officers reduced the frequency of visits and conducted some work through voice calls and text messages where connectivity allowed. When conducting site visits, they wore masks and observed social distancing guidelines and good hygiene practices.

In March 2020, the project provided a dedicated vehicle to conduct the quarterly visits, spending one week per month in each of the four regions, and incorporated key COVID-19 commodities—including gloves, masks, hand sanitizer and personal protective equipment (PPE)—into the routine supportive supervision activities site visit schedule. Regional clinical implementing partners provided additional transportation support as needed, and the project provided a second vehicle to support ad hoc orders for medicines and PPE.

To reduce congestion at facilities and reduce the spread of COVID-19 for clients of HIV/AIDS programs, Eswatini expanded multi-month dispensing (MMD) and decentralized drug distribution (DDD) of ARVs.

Delivery disruptions from international suppliers caused by COVID-19 increased supply risks at all levels of the supply chain. At the same time, to reduce congestion at facilities and reduce the spread of COVID-19 for clients of HIV/AIDS programs, Eswatini expanded multi-month dispensing (MMD) and decentralized drug distribution (DDD) of ARVs. The supportive supervision program provided close monitoring of supplies to identify supply risks for all commodities and, at the same time, support scale-up of MMD and DDD to ensure availability of ARVs to patients.

Also, in support of MMD and DDD, the supportive supervision program closely monitored data in the logistics management information system to verify accuracy of reports submitted to the central medical store and promoted good record keeping, updating of stock cards, and conducting of monthly physical stock counts.

Because the existing routine reporting through the commodity tracking system allowed only for monthly status updates, GHSC-PSM developed a regional facility-level stock status monitoring tool to provide near-real-time data on stock status of commodities in short supply at the central medical stores. This tool leveraged the regional teams' mobility and clinical mentors who would collect the stock status—using Google Forms—during scheduled visits at facilities. Regional logistics advisors and regional pharmacists use the resulting data analysis to make decisions about re-distribution to effectively prevent stockouts and, most notably, treatment interruption for patients taking ARVs.

Product name	Number of facilities supported	Patient-months re-distributed
Abacavir 300mg; 60 tabs	3	48
Atazanavir/ritonavir (300/100mg)	2	84
Tenofovir/lamivudine/efavirenz (300/300/600mg); 30 tabs	1	108
Tenofovir/lamivudine (300/300mg); 30 tabs	4	200
Lopinavir/ritonavir (200/50mg); 120 tabs	5	52
Lamivudine (150mg); 60 tabs	3	45
Zidovudine syrup 50mg/5ml; 240ml	1	15
Zidovudine/lamivudine (300/150mg) 60 tabs	2	432
Total	21	984

INDUSTRY NEWS

COVAX is perhaps the most important COVID-19 story right now in Southern Africa. Gavi, the Vaccine Alliance, provides regular news updates on its COVAX page at <https://www.gavi.org/covax-facility#key>. Recent stories include:

- With 47 African countries now rolling out COVID-19 vaccines and over 17 million doses given on the continent, early insights from Africa's largest-ever immunization drive offer hope, inspiration, and early, yet vital, lessons. <https://www.gavi.org/vaccineswork/emerging-lessons-africas-covid-19-vaccine-rollout>
- Over half a million doses of COVID-19 vaccines arrived in Angola in March, delivered through the COVAX initiative. <https://www.gavi.org/vaccineswork/covax-rolls-out-angola>
- Samantha Power, USAID administrator, wants to restore U.S. prestige by getting American-made vaccines "into arms" around the world. https://www.washingtonpost.com/national-security/samantha-power-usaid-vaccine-diplomacy/2021/05/10/69fd20d2-af7c-11eb-b476-c3b287e52a01_story.html

UPCOMING EVENTS

ASLM

ASLM (African Society for Laboratory Medicine) 2021

Responding to outbreaks through resilient laboratory systems: Lessons learnt from the COVID-19 pandemic. Virtual Conference November 15–18, 2021
<https://aslm.org/event/aslm2021/>



Kigali Summit on Malaria and NTDs

Deliver the Promise: End Malaria & Neglected Tropical Diseases. Kigali, Rwanda, June 24, 2021
<https://malariantdsummit.org/>



ICASA (International Conference on AIDS and STIs in Africa) 2021

Africa's AIDS response: The race to 2030 – Evidence. Scale Up. Accelerate. Hybrid/Virtual Conference, December 6–11, 2021
<http://icasa2021.saafrica.org/>



American Society of Tropical Medicine & Hygiene 2021

#Courage #Compassion #Culture Hybrid/Virtual Conference, Maryland, USA, November 17-21
<https://www.astmh.org/annual-meeting>

RESOURCES

ESC Playbook

Adverse events have widespread ripple effects, stressing supply chains and health programs and putting patients at risk. These events present unique supply chain challenges: unpredictable demand and strained logistics systems along with complex and expensive resource requirements. The USAID Global Health Supply Chain Program created a series of emergency supply chain resources to assist countries and organizations in preparing for and responding to infectious disease outbreaks.

<https://www.ghsupplychain.org/ESC-Preparedness-Response>

Recovery Strategies for Public Health Supply Chains Post-Black Swan

A black swan event, so named because of the rarity of black swans, is an unpredictable and extremely rare episode with severe systematic consequences. These events, such as a pandemic, have devastating consequences for fragile public health supply chains. This new publication discusses using scenario mapping—predicting what might happen in the future and how a program/supply chain might operate—to help decision-makers plan for recovery, weigh the information and advice they have received, and make informed decisions.

<https://www.ghsupplychain.org/recovery-strategies-public-health-supply-chains-post-black-swan-event>

WHO COVID-19 Mask Guidance for Health Workers

The World Health Organization's new aide memoire provides mask guidance for community outreach interventions and provides important information “on use of medical and non-medical/fabric masks during the COVID-19 pandemic for health workers... involved in community outreach activities, especially those against malaria, neglected tropical diseases, TB, and HIV/ AIDS...”

<https://apps.who.int/iris/bitstream/handle/10665/341570/WHO-2019-nCoV-IPC-Masks-Comm-health-care-2021.1-eng.pdf>

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM

Procurement and Supply Management

ABOUT US

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project enhances the health care experience in the communities we serve through transformative supply chain solutions. GHSC-PSM purchases and delivers health commodities, strengthens national supply chain systems, and provides global supply chain leadership to ensure lifesaving health supplies reach those in need, when they need them. By working closely with country partners and suppliers worldwide, the project aims to promote wellbeing and help countries develop sustainable supply chain systems. GHSC-PSM has programs in nine countries of Southern Africa: Angola, Botswana, Eswatini, Lesotho Malawi, Mozambique, Namibia, Zambia and Zimbabwe. For more information go to <https://www.ghsupplychain.org/PSM>.