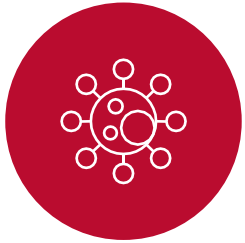


**USAID GLOBAL HEALTH
SUPPLY CHAIN PROGRAM**
Procurement and Supply Management

EMERGENCY SUPPLY
CHAIN PREPAREDNESS
in the Context of
COVID-19



Welcome, introductions, and objectives of today's session



Review of the **global supply chain impact of COVID-19**



Function and **highlights of the Emergency Supply Chain Playbook** with COVID-19 country updates and a **deeper dive into components of emergency supply chain response**



Questions and discussion around **emergency supply chain response**

WELCOME!

Your presenters today

Presenters:

Netsy Woldesemait, GHSC-PSM Burundi Manager and PSM ESC Playbook Coordinator

Matt Craven, MD – Partner & Infectious Diseases Lead, McKinsey & Company

Voice from the field – Parfait Edah, GHSC-PSM Burkina Faso Country Director

Global supply chain impact of COVID-19

Global Pharmaceutical Supply Chain Impacts of COVID-19

Supply

Reduced manufacturing output

Hoarding of key starting materials and finished pharmaceutical products

Quality testing backlogs

Transportation

Increasing competition between health supply chains and commercial demands for transport

Reduction in airline operations

Congestion and delays at ocean ports

Resulting Impact

If COVID-19 continues to spread, delays and shortages of pharmaceuticals are likely, given lean supply chains globally and minimal storage of key inputs in factories

The U.S. FDA has announced the first drug shortage due to COVID-19

GHSC-PSM Supply Chains

In-country stock levels remain secure for all GHSC-PSM commodities.

Headquarters and country offices are working to shift delivery methods and/or arrival dates.

Manufacturing & supply chain

Critical medical supplies manufacturers face challenges scaling up production to match demand



There is a major supply shortfall in affected areas, where healthcare needs are compounded by general public ordering surgical masks, seeking to maximize preventive measures

- Frontline response requires 7% to 10% of total market capacity to protect China's healthcare workers
- Stockpiles of advanced medical masks (N95 masks) are depleted; there is a 4- to 6-month backlog as global stocks are insufficient to meet the needs of frontline healthcare workers
- City of Xiaogan - the second-worst hit city in Hubei - faces a shortfall of 24,000 protective gear, 60,000 masks, as well as 15,000 goggles and face shields

100x

Higher demand for PPE



Typical supply is from China and Taiwan, but many factories in affected areas have not yet reopened due to restrictions

- Governments have restricted exports of masks, instructing companies to prioritize domestic need
- Prestige Ameritech, a Texas company, received orders from governments of Hong Kong, Singapore, and Taiwan
- Chinese and Taiwanese manufacturers typically source parts for masks and respirators from variety of countries so limitations on transport in and around China will prevent quick turnaround
- Some companies have taken the decision to only supply masks to medical professionals, given limited stock of PPE and high demand among non-medical staff

20x

Increase in price



Alternative supply is from Western companies in USA and Europe, but are facing challenges to ramp up their production

- Small players are ramping up production and using automation (e.g., Pardam, Czech company sold out of entire stock of 2000 masks in 1 week)
- Case study: Kolmi Hopen, a manufacturer in France, makes about 170 million masks a year, but received orders for a half a billion in first week of February

4-6 mths

Backlog for advanced medical masks

Source: Press research

A strong supply chain is a prepared supply chain while COVID-19 presents unique challenges

Major areas of ESC preparedness and response. Under these areas are key elements involved in building in-country emergency supply chain preparedness capability. The journey of implementing this capability will involve doing work across each of these elements.

People and processes

Clear structures of governance, accountability, and processes that enable the esc to function



Governance and organizational structure: Need for cross border collaboration

Triggers: Clear protocols to provide guidance needed
Workers instructions on how to protect themselves

Financing: Pressure test scenarios to define resources needed in this situation, inc. potential budget items to deprioritize

Commodity planning

Pre-defined commodities that the esc will be responsible for and plans for how to get them



Commodity forecasting: New commodity list required
Case forecasting difficult rapid evolution of spread

Procurement and sourcing: Potential global stock-outs due to higher demand
Supply chain disruption from China factories shutdowns

Stockpiling: Risk of panic behavior depleting initial stockpiles

Logistics and transport

Systems for how to store, move, and track commodities to get them where they need to go



Warehousing and storage: Logistical challenges may occur due to the increasing number of travel restrictions, increasing costs, labor shortage (e.g. staff not presenting because of fear of contagion), etc.

Transport and logistics:

Data visibility: Rapidly changing nature of the epidemic

Transition & other special considerations

Plan for end of the response and additional considerations



Transition: Long term consequences of COVID-19 unknown – Tracking of routine services disruption needed

Displaced populations: Risk of discriminatory behaviors

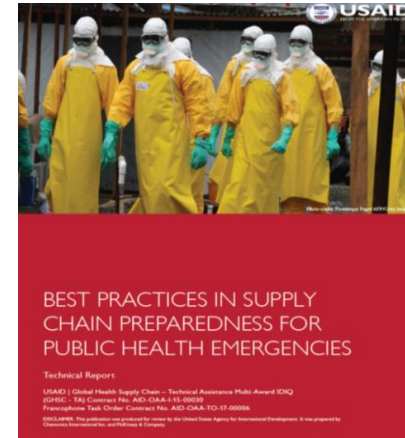
Highlights of the emergency supply chain materials

Emergency Supply Chain (ESC) materials

1. Best Practices Report
2. ESC Playbook
3. Simulation Exercise

Best practices in supply chain preparedness for public health emergencies

- A review of best practices in preparedness from historical health events, based on case studies, literature, and interviews from technical experts
- Topics include:
 - *One health* - human, animal, environmental considerations
 - Country-centric approaches
 - Landscape assessments
 - Governance, financing, and personnel
 - Emergency protocols
 - Emergency procurement and supply chain
 - Pitfalls to avoid
 - References to resources



Welcome to your Emergency Supply Chain Playbook!



One size does not fit all: The playbook was designed for customization

Variations of the Playbook:

1. *General Playbook*: A baseline set of materials to cover **essential competencies** in emergency supply chain management.
2. *Customized Country Playbook*: 16 countries have **customized the baseline materials** for their supply chain and public health contexts to facilitate implementation and eventual **country ownership and adoption**.

ESC Playbook materials

PREPAREDNESS

Outbreak

RESPONSE/ACTION

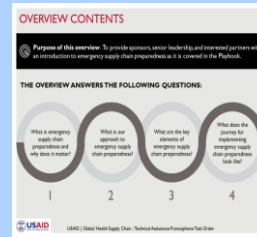
A

Management Checklist for ESC lead, summarizing key outputs from each part of the emergency supply chain to track completion and to maintain preparedness



B

ESC Preparedness Overview for senior leaders, providing introduction to emergency supply chain concepts and what the work of preparing emergency supply chains entails



C

Technical User Guide providing detailed technical instructions and templates to assist the ESC core team members, summarizing all the content necessary to strengthen the emergency supply chain over ~4-6 months. The manual provides step-by-step implementation guides and tools to support capability-building across each of the emergency supply chain functions. *Tools are in Excel on Memory Key.*

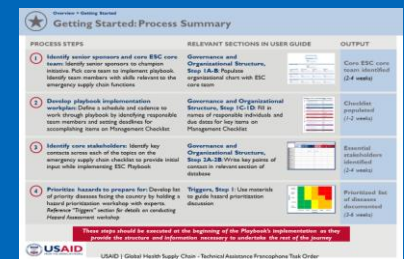
D

Response Job Aids for any actors involved in a response, providing a “crash course” on disease overview, supply chain considerations, and response protocol for priority diseases



E

Response Quick Guide for all ESC core team members, summarizing response protocols under each supply chain function to put in action when an outbreak OCCURS




Response components

Disease Job Aids: Disease-specific cards to help ESC staff prepare supply cards at the outset of a disease outbreak. Includes checklist of commodities for each disease, ESC protocols, and contact information. To be used by all levels of ESC staff during an emergency response effort.

Example below.

Ebola Supply Chain Job Aid



Description: Ebola is a severe form of hemorrhagic fever. Outbreaks have originated in rural areas but can spread to urban centers. Several potential treatments for Ebola have been tested and supportive care with fluid replacement can be effective, especially if initiated early. Nevertheless, the disease possesses a high mortality rate and can spread quickly once introduced. Infection prevention and control, safe burial, contact tracing and surveillance are all key to controlling an outbreak.

Mode of transmission: Human to human transmission; direct contact with blood or body fluids; objects contaminated with body fluids, infected bats or primates.

SUPPLY CHAIN CONSIDERATIONS


- PPE needs will be high because Ebola is highly transmissible through physical contact
- Various new Ebola-related technologies are being tested so supply chain needs may evolve in the next few years
- Safe burial is an important part of Ebola control so supply chain must cover safe burial commodities (e.g., body bags)
- Supply chain personnel should follow PPE protocols if entering treatment red zones or in contact with suspected cases

SUGGESTED COMMODITY LIST

<p>LABORATORY TEST EQUIPMENT AND REAGENTS</p> <ul style="list-style-type: none"> <input type="checkbox"/> ELISA and RT-PCR Laboratory equipment and reagents <input type="checkbox"/> Packaging/transport substance, class 6.2 <input type="checkbox"/> Rapid diagnostic testing kit for malaria (used also to rule out malaria in other outbreaks) <input type="checkbox"/> Rapid test for Zaire ebolavirus <input type="checkbox"/> Sample collection tubes <input type="checkbox"/> Swabs for bacterial sample collection 	<p>MEDICAL EQUIPMENT</p> <p>PERSONAL PROTECTIVE EQUIPMENT (PPE)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Apron, disposable <input type="checkbox"/> Apron, heavy-duty, reusable <input type="checkbox"/> Boots, rubber <input type="checkbox"/> Goggles, full-coverage, disposable, with elastic wrist, ankle and foot <input type="checkbox"/> Isolation gown <input type="checkbox"/> Full-face shield <input type="checkbox"/> Goggles <input type="checkbox"/> Gown, fluid-resistant, disposable, with elastic wrists <input type="checkbox"/> Gloves, heavy-duty <input type="checkbox"/> Hood <input type="checkbox"/> Mask, surgical, flat rectangular with folds <input type="checkbox"/> Surgical N95 respirator 	<ul style="list-style-type: none"> <input type="checkbox"/> Incinerators for contaminated wastes <input type="checkbox"/> NADCC tablets <input type="checkbox"/> NADCC granules (Ag) <input type="checkbox"/> Safety biohazard container (must be labeled "Biohazard") <input type="checkbox"/> Set hand gel and soap for targeted population - hemorrhagic fever <p>DRUGS AND MEDICAL CONSUMABLES</p> <ul style="list-style-type: none"> <input type="checkbox"/> Essential drugs and consumables to support general health facilities <input type="checkbox"/> Infusion giving set <input type="checkbox"/> Infusion (Bayer's lactate - liter) <input type="checkbox"/> Syringe: 0.1 ml autoinjector (AZ) and 5 ml reuse prevention (RUP) <input type="checkbox"/> Oral Rehydration Salts (ORS)
<p>HEALTH FACILITIES INFRASTRUCTURE AND EQUIPMENT</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ambulance with air isolation system for transport of contagious patients <input type="checkbox"/> Essential hospital and medical equipment to support health facilities: adjustable hospital beds, examination table, foldable stretcher, pulse oximeter, portable ECG/ECG, centrifuge, ultrasonography <input type="checkbox"/> Medical triage/assessment/consultation facilities <input type="checkbox"/> Chlores beds 	<p>DISINFECTION CONSUMABLES/BIODANGEROUS WASTE MANAGEMENT</p> <ul style="list-style-type: none"> <input type="checkbox"/> Alcohol hand/wash rub <input type="checkbox"/> Bag, disposable for biohazardous waste PPE and clinical waste without sharps <input type="checkbox"/> Body bags (suitable for burial or cremation) 	<p>MISCELLANEOUS</p> <ul style="list-style-type: none"> <input type="checkbox"/> Caps <input type="checkbox"/> Masks <input type="checkbox"/> Tape

SOURCE: Ebola National Taskforce in Liberia (November 2017), Expert Interviews; Centers for Disease Control and Prevention, Former Epidemic Intelligence Service Officer (November 2017), Expert Interviews; IRC, Former Global Emergency Health Advisor (November 2017), Expert Interviews; World Health Organization, Emergencies Program Logistics Expert (November 2017), Expert Interviews

Response Quick Guide: Reference for ESC staff protocols to respond during an outbreak and/or emergency. Includes the action and checkbox, person responsible, and timeframe. To be used by all levels of ESC staff during an emergency response effort. *Example below.*

COMMODITY PLANNING RESPONSE QUICK GUIDE			
	ACTION	RESPONSIBLE	TIME FRAME
PROCUREMENT AND SOURCING 	<input type="checkbox"/> Get input from the EOC Planification section regarding the list of commodities required and their quantities	Procurement team	Day 1
	<input type="checkbox"/> Reach out to the Stockpiling team to know which quantities of which commodities they can supply	Procurement team	Day 1
	<input type="checkbox"/> Identify the needs for procurement, based on the gap between the input from the EOC Planification section and the Stockpiling team	Procurement team	Day 1
	<input type="checkbox"/> Contact all suppliers identified in "Supplier Database" to activate agreements and order the adequate quantities	Procurement team	Day 1
	<input type="checkbox"/> Work with suppliers to identify any potential gaps or bottlenecks, in terms of available quantities and supplying delays	Procurement team	Day 2, Ongoing
	<input type="checkbox"/> Refer to the 'International Partners Sourcing Database' to mobilize the remaining commodities among international partners in case of capacity gap with the suppliers	Procurement team	Day 2
	<input type="checkbox"/> Provide suppliers with necessary customs protocols to follow	Procurement team	Week 1
	<input type="checkbox"/> Maintain clear documentation of all steps in the procurement process, including inspection and documentation of goods received	Procurement team	Week 1, Ongoing
	<input type="checkbox"/> Increase limits of approval and authorization and checks signatory limits for purchases	Procurement team	Week 1, Ongoing
	<input type="checkbox"/> Suspend the requirement for multiple quotes, public bidding procedures and authorize single source purchase	Procurement team	Week 1, Ongoing
	<input type="checkbox"/> Update the 'Procurement Database' tracker in the playbook, to document any additional information that you gathered on suppliers	Procurement team	End of crisis

Supply chain protocols and contacts

Essential ESC Protocols

IMMEDIATELY

-  **Activate emergency supply chain organizations.** Contact all people identified on emergency supply chain organization chart
-  **Arrange a meeting with all stakeholders.** Make contact with emergency supply chain partners and regional counterparts
-  **Hold initial meeting with EOC logistics function** to make sure the emergency supply chain lead and the EOC logistics function coordinate
-  **Plan emergency supply chain response.** Technical leads for procurement, transport, and storage should make detailed plan for their areas and coordinate with relevant partners
-  **Activate transport.** Contact emergency transporters to activate agreements in place on emergency supply chain transport
-  **Eliminate customs bottlenecks.** Contact customs to activate emergency customs procedures expediting emergency supplies
-  **Use stockpiles.** Release stockpiled commodities to affected areas
-  **Contact suppliers and resupply.** Contact suppliers to activate agreements in place and immediately begin replenishing stocks
-  **Prioritize emergency over routine supply chain.** Follow protocol that emergency supply chain takes precedence over routine
-  **Liaise with leadership and partners to secure funding.** Secure funding for emergency supply chain from response reserve fund
-  **Ensure ESC safety.** Follow security and safety protocol for all supply chain operators
-  **Dispose carefully.** Follow waste management protocol
-  **Resupply stocks.** Contact suppliers to replenish stocks
-  **Update plans for emergency supply chain response.** Technical leads for procurement, transport, and storage should continually update plans with new information

ONGOING

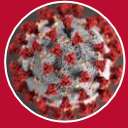
In-country ESC contacts



Response Quick Guide – Examples of developed protocols

	ACTION	RESPONSIBLE	TIME FRAME
COMMODITY FORECASTING	<input type="checkbox"/> Identify necessary commodities based on disease specifications and commodities database, confirming with experts, and determine “indicator” commodities	EOC Operations Section	Day 1
	<input type="checkbox"/> Use the ‘Response Scenario’ tracker to forecast initial quantities required depending on the type of outbreak (disease, number of projected cases)	EOC Operations Section	Day 1
	<input type="checkbox"/> Convene the EOC Operations Section to validate the forecasted quantities and make any adjustment, if necessary	EOC Operations Section	Day 2, Ongoing
PROCUREMENT AND SOURCING	<input type="checkbox"/> Get input from the EOC Planification section regarding the list of commodities required and their quantities	Procurement Lead	Day 1
	<input type="checkbox"/> Reach out to the Stockpiling team to know which quantities of which commodities they can supply	Procurement Lead	Day 1
	<input type="checkbox"/> Increase limits of approval and authorization and checks signatory limits for purchases	Procurement Lead	Week 1, Ongoing
WAREHOUSING AND STORAGE	<input type="checkbox"/> Identify the relevant permanent and temporary storage and warehouses to use, depending on their geographical location, their capacity characteristics (e.g. cold chain)	Logistics & Transport team	Day 1, Ongoing
	<input type="checkbox"/> Call identified permanent & temporary warehousing and storage contacts to share emergency response plan and ensure they are properly preparing capacity (e.g., clearing waste and designating emergency storage space) and get their available capacity	Logistics & Transport team	Day 1, Ongoing
TRANSPORT AND WASTE MANAGEMENT	<input type="checkbox"/> Prepare the distribution plan based on the needs expressed by the planning section and procurement leads	Logistics & Transport team	Day 1, Ongoing
	<input type="checkbox"/> Contact Customs office to activate agreements for expedited goods	Logistics & Transport team	Day 1
	<input type="checkbox"/> Activate coordination mechanisms with other relevant sectors (e.g. Ministry of Transport, Ministry of Defense, etc) to help unload cargo at airport/seaports	Logistics & Transport team	Day 1

COVID-19 Supply Chain Job Aid



COVID-19

Description: Clinical presentation among reported cases of COVID-19 varies in severity from asymptomatic infection or mild illness to severe or fatal illness. Some reports suggest the potential for clinical deterioration during the second week of illness. Acute respiratory distress syndrome (ARDS) developed in 17–29% of hospitalized patients, and secondary infection developed in 10%. Among hospitalized patients with pneumonia, the case fatality proportion has been reported as 4–15%. No specific treatment for COVID-19 is currently available. COVID-19 is caused by infection with SARS-CoV-2 virus, which is a beta-coronavirus, like MERS-CoV and SARS-CoV. Frequently reported signs and symptoms include fever, cough, myalgia or fatigue, and shortness of breath at illness onset. Data from human infection with other coronaviruses (e.g. MERS-CoV, SARS-CoV) suggest that the incubation period may range from 2-14 days.

Mode of transmission: Based on current information it is assumed that COVID-19 is transmitted through respiratory droplets. Airborne and fecal-oral transmission are likely but the clinical significance in the context of an outbreak is unknown.

SUPPLY CHAIN CONSIDERATIONS

- Supply chain personnel should follow PPE protocols if they are entering treatment red zones or coming into contact with suspected cases
- Respiratory support is recommended for patients with severe respiratory distress

SUGGESTED COMMODITY LIST

DIAGNOSTICS

- ELISA and RT PCR Laboratory equipment and reagents

HEALTH FACILITIES INFRASTRUCTURE AND EQUIPMENT

- Ambulance with air isolation system for transport of contagious patients
- Mobile, basic diagnostic X-ray system
- Portable ultrasound
- Resuscitator
- Medical triage/treatment/isolation facilities
- Packaging transport substance for viral sample transport
- N95 respirators
- Surgical masks
- Ventilators with portable and back-up power supply

MEDICAL EQUIPMENT

- Infrared thermometer
- Laryngoscope, adult, child set
- Endotracheal tubes

- Oxygen concentrator
- Oxygen face mask with reservoir bag, disposable
- Pulse oximeter, portable
- Sample collection tubes
- Swabs for buccal sample collection
- Swabs for nasal sample collection
- Syringes: 0.5 ml autodestruct (AD) and 5 ml reuse prevention (RUP)
- Infusion setup including pump

PERSONAL PROTECTIVE EQUIPMENT

- Gloves
- Goggles
- Gown, disposable, with elastic wrists
- Medical mask
- Eye/face shield
- Safety box/sharps container (must be labelled "Biohazard")
- Scrubs

DISINFECTION CONSUMABLES/BIOHAZARDOUS WASTE MANAGEMENT

- Alcohol based hand-rub
- Bag, disposable for biohazardous waste PPE and clinical waste without sharps
- Body bags (suitable for burial or cremation)
- Disinfectant
- Soap, surgical
- Set: mask, gel and soap for targeted population
- Chlorine

DRUGS AND MEDICAL CONSUMABLES

- Paracetamol
- Oxygen
- Infusion compound (Ringer's lactate)
- Antibiotics (for secondary infections)

ADVANCED

- Home Care Kits for home isolation of asymptomatic cases or mildly symptomatic
- Antivirals/vaccines (under review/in development)

SOURCE: Adapted from job aid for Respiratory/ Droplet-borne disease, supplemented with information from WHO Disease Commodity Package (Feb 7 2020), CDC Coronavirus (Feb 27, 2020) and McKinsey supply chain and infectious disease expert interviews

Voices from the field
Latin America and Caribbean Region
Burkina Faso



LAC Region – Impact during COVID-19

Select country examples

Honduras



Honduras’ Ministry of Health (SESAL); Honduran Social Security Institute (IHSS); Permanent Contingency Commission (COPECO); and Armed Forces (FFAA)

Paraguay



Paraguay’s Ministry of Health (MSyBS); Instituto público de salud; Secretariat Nacional de Emergencia (SEN); SENEPA

Guatemala



Guatemala’s Ministry of Health (MSPAS) and the Guatemalan Social Security Institute (IGSS)

Dominican Republic



The Dominican Republic’s Ministry of Health (MSP); Servicio Nacional de Salud (SNS); Programa de Medicamentos Esenciales/Central de Apoyo Logístico (PROMESE/CAL)

Stakeholders

Examples of perceived impact

“Being exposed to uncommon scenarios in the simulation, like Ebola, allowed us to problem solve different alternative approaches, outside the scope of our immediate roles and responsibilities”

“Responding now to the COVID-19 epidemic, we are thinking about the 10 levers constantly – it feels like this work was meant to prepare us for this”

“We have identified open contract databases as a unique way to virtually stockpile the supplies we need going forward”

“This is the first time all of our organizations collaborate together – just understanding each others’ roles is key here”



Additional supply chain considerations

5 key additional considerations

Themes

Governance and organizational structure



Refugee/IDP emergencies may be more politically charged than natural disasters or other types of epidemics

Triggers



There is higher likelihood risk of infectious diseases spreading between displaced and national populations due to immunity differences (i.e., different endemic diseases, variation in vaccination rates, etc.)

Commodity forecasting



Significant forecasting difficulty given two layers of uncertainty: type of epidemic and number affected across both host and displaced population

Data visibility



Difficulty tracking supply and demand due to rapid changes (e.g., locations in need, number of stakeholders involved); displaced population's distrust of authority may further limit visibility

Transition



There is no initial "status quo" for displaced populations in the host country, leading to long-term planning needs (e.g., integration, settlements, etc.) with potential transition points identified for displaced population to be served by routine supply chain

Expert input

- “ **It is important to consider the role of the MoH in coordinating various stakeholders.** At times, multiple bodies are tapping into the same supply chain but coordinating independently.”
- Humanitarian Supply Chain Expert
- “ **One incident in Guinea can lead to 20,000 deaths** in Sierra Leone and Liberia in our new globalized world [...] Each nation has different immunity patterns so spread can occur.”
- Emergency Supply Chain Consultant, Academic Think Tank
- “ **Budgeting experts often allow for surge capacity of 10 to 15%** but more robust methods may include tracking vaccination rates, water sanitation, etc. to understand which outbreaks are likely.”
- Emergency Response Expert, Professor
- “ **It's hard to know what the situation might be.** There are instances where the displaced are integrated and don't want to be identified, don't want to be known for disease.”
- Regional Logistics Coordinator, Non-Profit
- “ The transition happens when the **burden of disease in the displaced population matches the one of the host population.** Then, you need to move from an emergency supply chain to strengthening the routine supply chain.
- Emergency Response Expert, Professor

Key lessons to date

Scope and value



Lesson 1

ESC capability building has significant benefit



Lesson 2

ESC preparedness can reveal routine supply chain inefficiencies



Lesson 3

Preparedness is a state to maintain rather than a one-time activity to complete

Stakeholder engagement



Lesson 4

Partner organizations will remain critical in supporting ESC response over the medium-term



Lesson 5

Countries value peer learning and support from colleagues in other countries



Lesson 6

ESC preparedness typically requires participation across entities and can serve as chance to build or strengthen inter-departmental cooperation

ESC playbook implementation



Lesson 7

Preparedness activities may fall outside the core job responsibilities of relevant government personnel



Lesson 8

Preparedness training is highly technical and can seem dry for adult learners



Lesson 9

Diagnosing challenges with the ESC requires the triangulation of information from multiple sources



Lesson 10

An effective national preparedness plan should combine external best practices with existing protocols and structures



Lesson 11

The transition from emergency to routine supply chains is an especially important area of focus

This COVID-19 outbreak is a unique time to assess the preparedness of countries and value of this training

Burkina Faso – In the context of COVID-19

Key Stakeholders: USAID; National Emergency Supply Chain team - ESC-NT (Includes representatives of Ministries of Health, Animal Resources, Environment and Agriculture, National Defense, Finance & Economy, and National Solidarity); CAMEG (central medical store)

ESC Playbook modules and activities in response to COVID-19

People and Processes

- ✓ **Governance** - The Health Emergency Response Operations Centre (CORUS) has set up an Incident Management System (IMS) for COVID-19. GHSC-PSM is represented in the Incident Management Team and assisted in developing two documents:
 - The Preparedness and Response Plan to the COVID-19 outbreak
 - National guidelines for COVID-19 medical treatment.
- ✓ **Triggers** - The ESC-NT decided to immediately take COVID-19 into account in the list of **priority diseases** treated under the emergency Supply Chain.
- ✓ **Financing** – GHSC-PSM Burkina Faso has Global Health Security Agenda (GHSA) funding which is being used to provide technical support to COVID-19 activities with prior USAID approval.

Activities supported:

Technical support to the logistics committee of the COVID-19 management commission set up by CORUS under Prime Minister Leadership for the development of:

- Supply management plan for certain commodities (plan is updated daily)
- SOPs for COVID-19 supply management (under development/ongoing)
- Google drive database to facilitate online collaboration for the logistics committee

Burkina Faso – In the context of COVID-19

Commodity Planning

- ✓ **Commodity Forecasting** - The ESC-NT held several meetings to **identify health commodities for COVID-19** management. The list of commodities was cross-referenced with the WHO and national guidelines for a consolidated list of health commodities for COVID-19 management.
- ✓ **COVID-19 Disease Job Aid** : GHSC-PSM and the ESC-NT worked closely with the CORUS and other key stakeholders on the job aid; completed on March 19th .
- ✓ **Next steps:**
 - Integration of the developed commodities list into the Playbook templates (to be ongoing)
 - Quantification of the required commodities

Successes

- *One health* coordination and collaboration (human, animal, environment) has been achieved amongst the Burkinabe stakeholders which enables joint preparedness efforts to tackle all forms of disease outbreaks (human and zoonotic)
- The setup of the IMS with the logistics committee of the emergency supply chain national team which enables designated staff to utilize equipment and communications to effectively respond to the disease outbreak

Challenges

- Initial challenges with obtaining collective buy-in from the pertinent ministries
- Current lack of interface amongst the stakeholders due to current isolation measures to prevent spread; stakeholders are working remotely

Burkina Faso – In the context of COVID-19

Quotes from Burkinabe stakeholders

Governance

“It is good to see that the system in place is adaptable. After the identification of commodities for the 10 priority diseases, we decided to extend the list to 5 other diseases. To rapidly respond to the COVID-19 outbreak, the ESC-NT quickly took the lead in integrating this new disease in the Playbook.” ~ Dr. Pascaline Sanou, ESC-NT lead

Logistics

“GHSC-PSM helped us to set up a supply management plan for COVID-19 commodities. This tool is crucial because it helps to determine a weekly average consumption to guide the resupply of COVID-19 treatment sites.” It also helps us to better control the commodities stocks, to follow up on commodities acquisition and to identify the gap for each commodity on daily basis. ~Dr. Robert Sawadogo, COVID-19 Logistics Committee

Simulation Exercises

“These exercises allowed us to move away from theory to practical way of handling diseases outbreaks ... Today, with the playbook, we are prepared to react to an emergency.” ~Dr. Haoua Ouedraogo, from CAMEG, Head of Logistics Section, ESC-NT



Simulation exercise opening session in the presence of the USAID Health Office Director (Photo credit: GHSC-PSM)



COVID-19 Logistics Committee working session at CORUS office (Photo credit: GHSC-PSM)

GHSC Program countries – In the context of COVID-19

Project	Playbook Module: People and Processes				Playbook Module: Commodity Planning			Playbook Module: Logistics and Transport		Other/ Simulation /Training/ STTAs
	Governance	Financing	Triggers	Data visibility	Commodity forecasting	Stockpiling	Procurement & sourcing	Warehousing & storage	Transport & waste Mgmt	
GHSC-TA FRANCOPHONE TO CAMEROON (Activity Ended)	✓				✓					
PSM TASK ORDER 4 LATIN AMERICA & CARIBBEAN (Active)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PSM ETHIOPIA (Active)	✓	✓			✓	✓	✓	✓	✓	✓
PSM BURKINA FASO (Active)	✓	✓	✓		✓					✓
PSM SIERRA LEONE (Active)	✓		✓							✓
PROJECT LAST MILE (PLM) LIBERIA (Activity Ended)	✓		✓							

Additional available tools that can be implemented now

- 1. Actions to Take Now to Ensure Routine Supplies Are Available***
- 2. Questions to Consider to Maintain Routine Supply of Health Commodities during COVID-19***
- 3. Keeping Supply Chain Workers Safe During a Pandemic***
- 4. Use of Containers for Temporary Emergency Storage: Tips to Mitigate Temperature Management***
- 5. Tips to Optimize Storage During Emergencies***

Questions and Discussion