TRENDS AND OBSERVATIONS: MAINTAINING MATERNAL, NEWBORN AND CHILD HEALTH COMMODITY SUPPLY IN THE TIME OF COVID-19

INTRODUCTION

The COVID-19 pandemic is impacting global health supply chains including production and logistics. Maternal, newborn and child health (MNCH) products are produced in several countries that have been impacted by the outbreak and therefore are facing significant challenges to maintain production and export of essential MNCH commodities. To monitor this impact, the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is working closely with suppliers and partners. The overview below presents the information collected to date and trends for potential challenges and constraints on the global supply of MNCH commodities due to COVID-19.

GLOBAL SUPPLY AND LOGISTICS OBSERVATIONS

Production

- The manufacturing situation in India is rapidly changing. Since March, manufacturers have operated at reduced capacity, between 30% to 75%. Production in China is recovering with manufacturers operating slightly lower than full capacity.
- Production lead times for products originating in India have varied since March, increasing by an estimated three to five weeks on average.
- For several months, manufacturers have experienced delays in acquiring active pharmaceutical ingredients and raw materials, adding to the increase in production lead times.

Global freight and logistics

- Logistics providers observe challenges of border closings, limited passenger travel and quarantine of truckers at the country of origin and destination.
- Substantial reduction in availability of air freight and moderate reduction in ocean freight has increased cost and lead times for all transportation modes. Since March, this has increased lead time by approximately three to five weeks.
- Limited freight capacity has also impacted availability of cold-chain transportation options, particularly from European suppliers.

GLOBAL MNCH PRODUCT SUPPLY OBSERVATIONS

GHSC-PSM is collecting high-level market data on select MNCH essential commodities, in particular data on increases to product price and lead times. This information was collected during the month of May 2020 and is subject to change.

FORECASTING ESSENTIAL SUPPLIES FOR COVID-19 INCLUDES MNCH COMMODITIES

The World Health Organization (WHO) has developed a forecasting tool to assist governments, partners, and other stakeholders to estimate potential requirements for essential supplies. GHSC-PSM designed a similar forecasting tool intended for use by USAID missions and GHSC-PSM field offices to support documentation of total known commodities demand and quantification against orders for commodities within pre-defined budgets. The following table is a summary of select MNCH essential commodities in the *WHO COVID-19* Essential Supplies Forecasting Tool and in the *GHSC-PSM COVID-19 Commodity Quantification & Budget Calculator*.

SUMMARY OF GHSC-PSM DATA FROM SELECT SUPPLIERS

Product	Impact	Average lead times (weeks)	Average increase in lead time	Average prices	Average percent increase in price	Manufacturer country of origin	Comments
Oxytocin injection 10 IU in 1-mL, , 100 ampoules		13		$6.74		India, China, Indonesia	
Magnesium sulfate injection 500 mg/mL in 10-mL ampoules, 10 ampoules		16	+ 8 weeks	$2.50		India, Germany	
Gentamicin injection 40 mg/mL in 2 mL ampoule, 100 ampoules	Price	14	+ 2-10 weeks	$13.27	15%	China, Nigeria	Production and raw material cost
7.1% chlorhexidine digluconate gel, 1x3 gm tube	Price & lead time	15	+ 3 weeks	$0.22	20%	India	Increased demand
Amoxicillin, 250 mg dispersible tablets, 10x10 blister pack	Price & lead time	12	+ 1 week	$1.85	20%	India, China	Increased demand
Oral rehydration solution, 10.25 gm/500 mL or 20.5 gm/L dispersible powder, 20 sachets		16		$1.26		India, China, Nigeria	
Zinc sulfate, 20mg dispersible tablets, 10x10 blister pack	Price & lead time	13	+ 1 week	$1.94	25%	India, China, Kenya	Increased demand

INCLUSION OF MNCH PRODUCTS IN FORECASTING TOOLS				
Product	In WHO forecasting tool?	Other formulations and/or pack sizes in WHO forecasting tool	In GHSC-PSM forecasting tool?	Other formulations and/or pack sizes in GHSC-PSM forecasting tool
Magnesium sulfate injection 500 mg/mL in 10-mL ampoules, 10 ampoules	✓		✓	
7.1% chlorhexidine digluconate gel, 1x3 gm tube		chlorhexidine digluconate 1.5% + cetrimide 15%, solution, 1000ml, bottle		
Amoxicillin, 250 mg dispersible tablets, 10x10 blister pack		Amoxicillin 250 mg tablet		Amoxicillin 250 mg tablet, 1000 tablets
Oral rehydration solution, 10.25 gm/500 mL or 20.5 gm/L dispersible powder, 20 sachets	✓		✓	Oral Rehydration Salts 20.5 gm/L + Zinc Sulfate 20 mg tablet, 2 Sachets + 10 tablets
Zinc sulfate, 20mg dispersible tablets 10x10 blister pack	✓		✓	Zinc Sulfate 20 mg tablet, 100 tablets

CONSIDERATIONS TO MITIGATE IMPACTS

- **Inventory management:** Immediately assess MNCH commodity stock levels. Increase minimum inventory of MNCH commodity stock at various levels of the supply chain as appropriate.
- **Supply Planning:** Conduct reviews of supply plans and inventory data to identify and respond to urgent needs. Advance or postpone shipments of MNCH essential commodities taking into consideration any potential price and lead-time increases. Substitute products and formulations and diversify supply base (e.g. engage with suppliers from China and Europe). Trends as of March 2020 from select countries indicate an increase in demand for amoxicillin, zinc and chlorhexidine.
- **Data:** Prioritize data collection, data quality and stock monitoring at various levels of the supply chain to effectively track needs and continually inform decision making. Observations from select countries indicate a decrease in the frequency and quality of data reporting.
- **Distribution:** Consider advancing any planned procurements and revising distribution schedules (before distribution and importation policies become more restrictive).
- **Logistics:** To reduce the number of shipping routes required, consolidate shipments when feasible.
- **Coordination:** Increase coordination with other supply chain and service delivery partners to explore innovative methods to ensure continued access to commodities.
- **Service Delivery:** Monitor any changes in service delivery programs and adjust commodity management strategies accordingly. For example, health facilities may provide advance disbursements of iron, folic acid, and calcium supplements to pregnant women so they can reduce their facility visits to obtain supplies.

FURTHER READING AND RESOURCES

From UNICEF, WHO and other global partners:

- *Country & Technical Guidance - Coronavirus disease (COVID-19), WHO*
- *Emergency Global Supply Chain System Catalogue, WHO*
- *COVID-19 Essential Supplies Forecasting Tool, WHO*
- *UNICEF alerts and information on COVID-19 impacts on supplies and logistics*
- *The Partnership for Maternal Newborn and Child Health (PMNCH) compendium of COVID-19 related partner resources on women's, children's and adolescents' health*
- *UNFPA COVID-19 Technical Brief for Maternity Services*
- *Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic: Interim Guidance May 2020, WHO*

GHSC-PSM resources:

- *Emergency Supply Chain Preparedness and Response*
- *COVID-19 Commodity Quantification & Budget Calculator*
- *GHSC-PSM Product E-Catalog*
- *Manual for Procurement and Supply of Quality-Assured Maternal, Newborn and Child Health Commodities*

For further guidance and support, contact *PSMTO4Core@ghsc-psm.org*.