



## Supply Chain Interruption

### February 2023

#### Medical Supply Shortages - 2022

- CT contrast media in short supply due to the shutdown of plant that manufactures the contrast because of a strict COVID lockdown in Shanghai, China
  - Half the market gets their contrast from GE Healthcare, which sources most of its product from Shanghai
  - Prioritization protocols implemented on what tests were allowed to use available contrast, alternative tools to use instead, scans without the use of contrast
- Amoxicillin shortage driven by increased use for RSV and influenza cases early in the season
- Albuterol inhaler shortage due to supply chain issues and increased use in COVID 19 patients – predicted to last until May-June, 2023
- Adderall shortage due to shortage of the compounds used to make up the drug
- Tamiflu shortage due to increase in demand to treat the high number of influenza cases
- Currently more than two dozen medical items in short supply, including PPE (surgical gloves and gowns), reagents for lab testing, several dialysis related products
- Health systems are experiencing 8-10 times higher shortages than they were pre-pandemic
- Often shortages are exacerbated by regional disasters that disrupt the supply chain
- War in Ukraine has potential to increase shortage of helium, which is used in MRI's and CT scans, and neon, which is used for making semiconductors needed in MRI's, pacemakers, blood pressure monitors, and other common medical devices
- Shortage of skilled workers at medical supply manufacturing plants does not meet the demand
- Disruption of imports
- Changes in supply and demand - COVID lockdowns halted many procedures, and then when services re-opened a huge influx of demand caused shortages

#### Impacts:

- Requires development of protocols on how to use limited supplies
- Geopolitical issues' effect on the supply chain
- Magnitude of disease/illness aligns with product availability

#### Preparedness:

- Track where materials needed for manufacturing are coming from, conduct risk assessments and diversify
- Be aware of geopolitical unrest

- Natural disaster awareness
- Try to source products closer to home - United States, Canada, and Latin America and limit reliance on countries where there may be more political issues (i.e. China, India)
- Reconsider stockpiling strategies
- Contract with suppliers that reduce risk of complete disruption
- Demand transparency from suppliers
- Predict potential shortages and plan accordingly (i.e. ways to reduce waste, alternative procedures, alternative medications)
- Explore opportunities for cooperative buying to ensure a steadier supply
- Be adaptable

Congressionally mandated report released from the National Academies of Sciences, Engineering, and Medicine calls for:

- Food and Drug Administration to make information on medical product sourcing, manufacturing capacity and quality publicly available for all medical products approved or cleared for sale in the U.S.
- Office of the Assistant Secretary for Preparedness and Response to develop ways to better manage the SNS and convene a stakeholder group to improve medical product allocation and delivery during shortages
- Health systems to incorporate quality and reliability into their contracting, purchasing and inventory decisions
- Countries to negotiate an international treaty that prohibits export bans on critical products

#### Sources:

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