

Technical Notes: Critical Care Supplies Detail

What is being measured

- **Types of critical care supplies tracked include:**
 - Face masks (not including cloth, handmade, or other similar items)
 - Face shields* (includes other kinds of eye protection such as goggles and glasses)
 - Gloves (not including latex gloves)
 - Gowns* (includes gown alternatives such as ponchos and aprons)
 - N95 respirators (including other FDA and/or NIOSH approved respirators for use in medical settings)
- **Average 10-day usage**
 - Hospitals report daily usage rates for each critical care supply item twice weekly (Mondays and Thursdays).
 - This metric takes the average of the previous 3 reports (approximately 10 days of data).
 - Data from all reporting hospitals and systems are aggregated to produce a daily hospital usage rate.
 - These values should represent approximately how many of each type of item Minnesota hospitals consume each day.
- **Current inventory: hospitals**
 - Hospitals report approximate inventory for each critical care supply item twice weekly (Mondays and Thursdays).
 - Data from all reporting hospitals and systems are aggregated to produce an approximate inventory of what is held in Minnesota hospitals.
- **Current inventory: warehouse**
 - The warehouse reports inventory daily by sending an extract of its inventory management system.
 - The current warehouse inventory represents items obtained through:
 - Procurement efforts
 - Creative partnerships
 - Strategic National Stockpile (SNS)
 - FEMA
 - Minnesota National Guard
 - Large donations of PPE
- **Procurement: awaiting delivery**
 - The procurement team on the Critical Care Supplies work group tracks the purchases made daily, and the warehouse staff track the quantity delivered against each order.
 - This metric sums all purchases by item type and reports how much is still awaiting delivery.

- There could be a 24-48 hour lag as items may be delivered to the warehouse and inventoried before being entered against the purchase order.
- **Days-on-hand**
 - This metric takes the inventory (hospital, warehouse, or awaiting delivery) and divides it by the 10-day average hospital usage rate.
 - The values represent the approximate number of days the inventory would last if all of it were to be used by hospitals at the current usage rate.
 - A “2x current usage” provides the number of days the inventory would last if all of it were to be used by hospitals at double the current average usage rate.
- **Obtained**
 - The quantity obtained is the sum of all critical care supply items that have passed through the warehouse, and is equal to the current inventory plus the total amount of items that have been distributed over time
 - This only includes items procured by the state, donated to the state, or from the SNS; it does not include items bought by hospitals directly or donated through regional or local centers
- **Distributed**
 - This is the total amount that has been distributed out from the warehouse to facilities in need
 - This only includes items procured by the state, donated to the state, or from the SNS; it does not include items bought by hospitals directly or donated through regional or local centers
- **Quantity ordered**
 - This is the total amount of each critical care supply item that the Critical Care Supplies work group has procured and is scheduled to be delivered to the warehouse
 - This does not include items purchased directly by hospitals and it also does not include donations or orders from the federal government
- These metrics do not include:
 - Critical care supply items that are donated directly to county Emergency Managers, other health care settings besides hospitals, or other local or regional organizations.
 - Any donations of critical care supplies in the warehouse or hospitals that do not meet specifications for donations to hospitals (cloth masks, hand-made masks, etc.)

Visualization-specific information

- **What we have or have ordered and how long it may last**
 - “Days-on-hand in stock” includes only items that are in hospital or warehouse inventory (not procurement awaiting delivery)
 - “Days-on-hand awaiting delivery” only includes items that are on order and have not yet been delivered. Once orders are delivered, they are captured in the warehouse inventory until they are distributed
- **What we’ve obtained, what we’ve distributed, and where it has come from**
 - This visualization *only includes* items that have at some point moved through the warehouse. It does not include items that are in hospital inventory
 - The quantities under “Procurement” show the amount of items that the Critical Care Supplies work group has purchased

- The quantities under “Federal government” show the amount given to the state of Minnesota by FEMA or the Strategic National Stockpile. This does not include shipments from the federal government directly to counties or hospitals.
- The quantities under “Donations” show the number of items that have been donated directly to the state in large quantities through the Salvation Army drop sites or other methods. This value also includes what was provided to the state warehouse from the Minnesota Army National Guard. It does not include items donated directly to counties or other regional/local centers.
- **What we’ve ordered and when it may arrive**
 - This visualization only includes items that have been procured by the Critical Care Supplies work group.
 - Delivery dates are estimates as delays are common in the current environment.
 - “Unclear” items are those for which we don’t have a clear sense of delivery date yet, or they are items that are outstanding from previous deliveries

Data quality information

- Data in the procurement and inventory details may not match daily due to the timing of reporting and logging data.
- Hospital data is collected twice weekly through MDH, but response rates are typically below 100%. Hospital usage and inventory rates are thus approximate values that will shift over time.
- “Days-on-hand” is a useful metric to understand the scale of the amount that is in inventory or has been procured, but usage may change rapidly over time. It is intended to support a sense of scale, but it should not be assumed that we have