Access speaker bios here: https://files.asprtracie.hhs.gov/documents/dash-webinar-speaker-bios.pdf

Access the recording here: https://attendee.gotowebinar.com/recording/7878817075750706957

Access the FAQs here: https://files.asprtracie.hhs.gov/documents/dash-tool-faqs.pdf

Access the transcript here: https://files.asprtracie.hhs.gov/documents/aspr-tracie-dash-webinar-transcript.pdf

TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY

Introduction to the Disaster Available Supplies in Hospitals (DASH) Tool

August 15, 2022

ASPR

Administration for Strategic Preparedness and Response

Unclassified

The opinions expressed in this presentation and on the following slides by non-federal government employees are solely those of the presenter and not necessarily those of the U.S. Government. The accuracy or reliability of the information provided is the opinion of the individual organization or presenter represented.

TRACIE

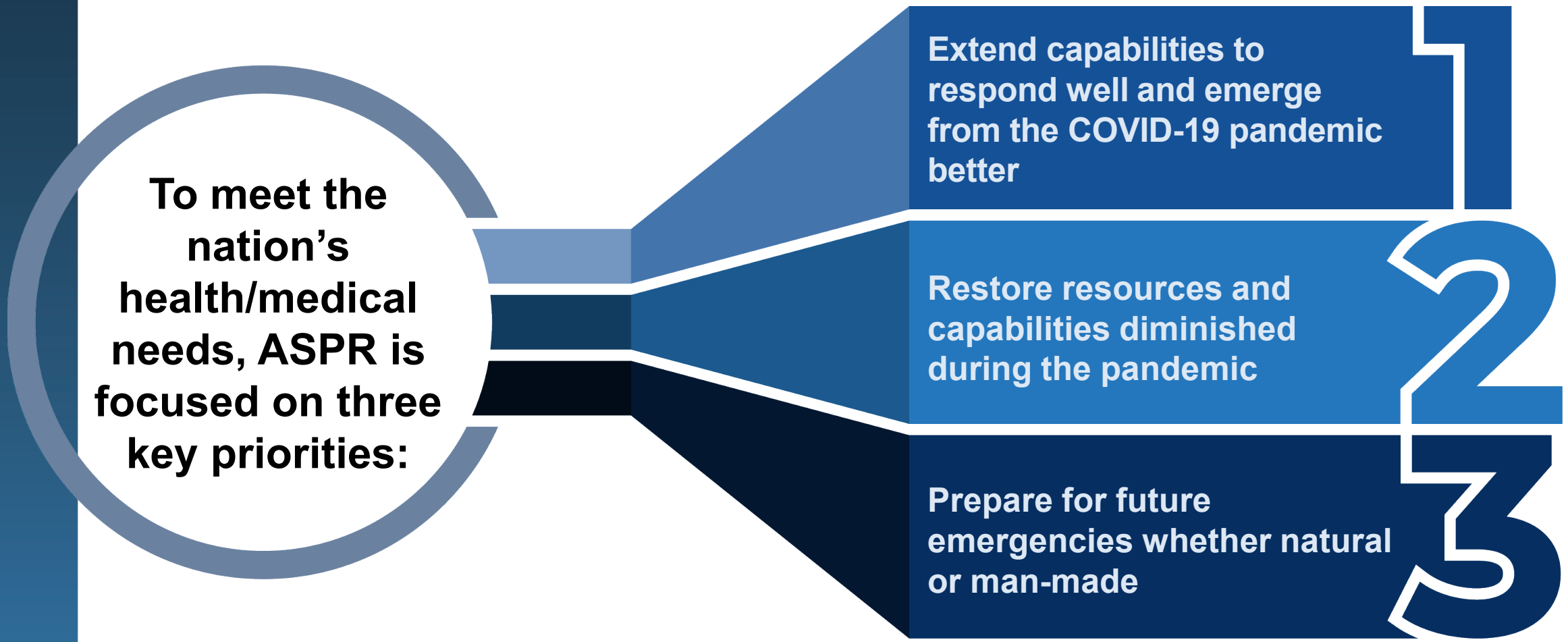
HEALTHCARE EMERGENCY PREPAREDNESS
INFORMATION GATEWAY

Shayne Brannman, MA, MS
Program Director, ASPR TRACIE

ASPR
ADMINISTRATION FOR STRATEGIC PREPAREDNESS AND RESPONSE

Unclassified

ASPR Key Priorities



Unclassified

ASPR TRACIE: Three Domains

TECHNICAL RESOURCES

- Self-service collection of audience-tailored materials
- Subject-specific, SME-reviewed "Topic Collections"
- Unpublished and SME peer-reviewed materials highlighting real-life tools and experiences

asprtracie.hhs.gov

ASSISTANCE CENTER

- Personalized support and responses to requests for information and technical assistance
- Accessible by toll-free number (1844-5-TRACIE), email (askasprtracie@hhs.gov), or web form (ASPRtracie.hhs.gov)

1-844-5-TRACIE

INFORMATION EXCHANGE

- Area for password-protected discussion among vetted users in near real-time
- Ability to support chats and the peer-to-peer exchange of user-developed templates, plans, and other materials

askasprtracie@hhs.gov

TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY

Meg Sullivan, MD, MPH
Chief Medical Officer, ASPR

ASPR
Administration for Strategic Preparedness and Response

Unclassified

TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY

Shelly Schwedhelm, MSN, RN, NEA-BC
Executive Director, Emergency Management & Biopreparedness, Nebraska Medicine and Executive Director, Emergency Management & Clinical Operations, Global Center for Health Security

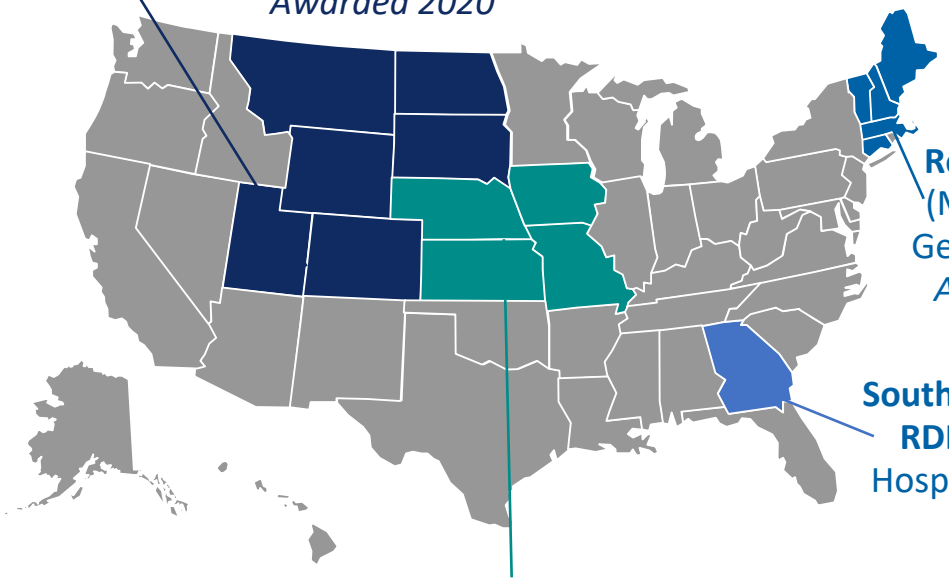
ASPR
Administration for Strategic Preparedness and Response

Unclassified

Regional Disaster Health Response System

ASPR awarded four disaster response sites to address health care preparedness challenges, establish promising practices for improving disaster readiness across the health care delivery system, demonstrate the potential effectiveness of an RDHRS, and make progress toward building a national system for readiness built on regional collaboration.

Mountain Plains Region VIII RDHRS
(Denver Health and Hospital Authority)
Awarded 2020



Region I RDHRS (Massachusetts General Hospital) *Awarded 2018*

Southern Region IV RDHRS (Emory Hospital) *Awarded 2021*

Region VII Disaster Health Response Ecosystem (RDHRE)
(Nebraska Medicine)
Awarded 2018

REGION VII DISASTER HEALTH RESPONSE ECOSYSTEM

Building health response systems that exhibit the following capabilities:

- **Improve** statewide and regional situational awareness
- **Develop** readiness metrics and conduct an exercise to test capabilities
- **Build** a partnership for disaster health response
- **Align** plans, policies, procedures related to clinical excellence in disasters
- **Increase** statewide and regional medical surge capacity

The DASH TOOL – “Our Healthcare Why?”

- DASH Tool = Mitigation & Preparedness
- Nationally accessible tool that uses hospital characteristics and scenarios to help provide visibility on the supplies needed during various types of incidents.
- The DASH Tool provides an opportunity to help mitigate facility supply shortages by identifying estimates during the preparedness process to help save lives during response.

Hospital Pharmacy Module

Estimates supplies of medications a hospital should have in its pharmacy to meet seriously injured patient needs for 48 hours following an MCI.

USE THE MODULE

Personal Protective Equipment Module

Estimates minimum personal protective equipment (PPE) needed by hospital personnel managing patients suspected or known to be infected with a special pathogen.

USE THE MODULE

Burn Supply Module

Estimates supplies needed to care for critical burn patients with an average 40% burn surface area for the first 48 hours after a burn incident.

USE THE MODULE

Trauma Supply Module

Estimates supplies needed to care for seriously injured trauma patients for the first 48 hours after an MCI.

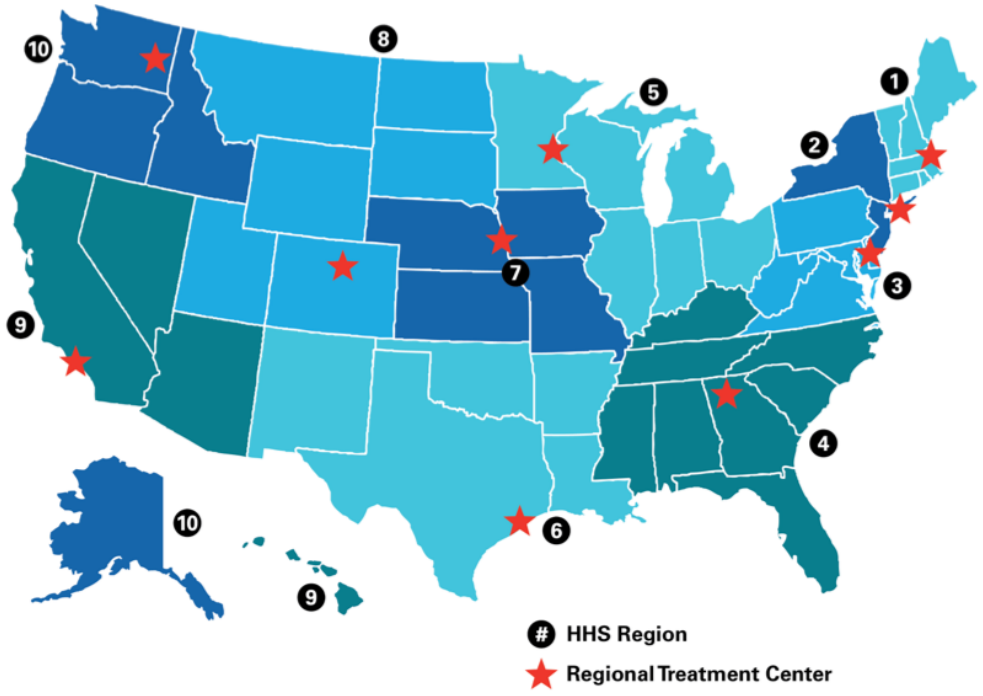
USE THE MODULE

The DASH TOOL – Key Points

- Four modules complement each other.
- Intended to be used for *PRE*-incident planning and not during an incident.
- The module outputs may be used to determine reasonable stock levels for facilities to have available.
- DASH does not address staff, space, systems, or education.
- To Save Your Results: Download (save/print) or Share URL.

NETEC & Regional Special Pathogen Treatment Centers

PPE Module Input



Regional Treatment Centers

1: Massachusetts General Hospital
2: NYC Health + Hospitals - Bellevue
3: Johns Hopkins Hospital
4: Emory University Hospital and Children's Healthcare of Atlanta-Egleston Hospital
5: University of Minnesota Medical Center
6: University of Texas Medical Branch at Galveston
7: University of Nebraska Medical Center/ Nebraska Medicine
8: Denver Health Medical Center
9: Cedars-Sinai
10: Providence Sacred Heart Medical Center and Children's Hospital

NETEC

NATIONAL EMERGING SPECIAL PATHOGENS TRAINING AND EDUCATION CENTER

PPE Supply Module

- The PPE DASH module was developed by experts in Emergency Preparedness and Infectious Disease to provide a means for all facilities to have an informed estimate on how much inventory is needed
- Three scenario-based events in this module: 1) Airborne & Droplet special pathogen (e.g., MERS), 2) Contact special pathogen (e.g., VHF), 3) Pandemic

The PPE DASH module will assist:

Health Systems:

- Inform facilities on items needed to prepare for a special pathogen or a pandemic type event.
- Assist facilities to be prepared with adequate inventory for the fall surge in COVID.

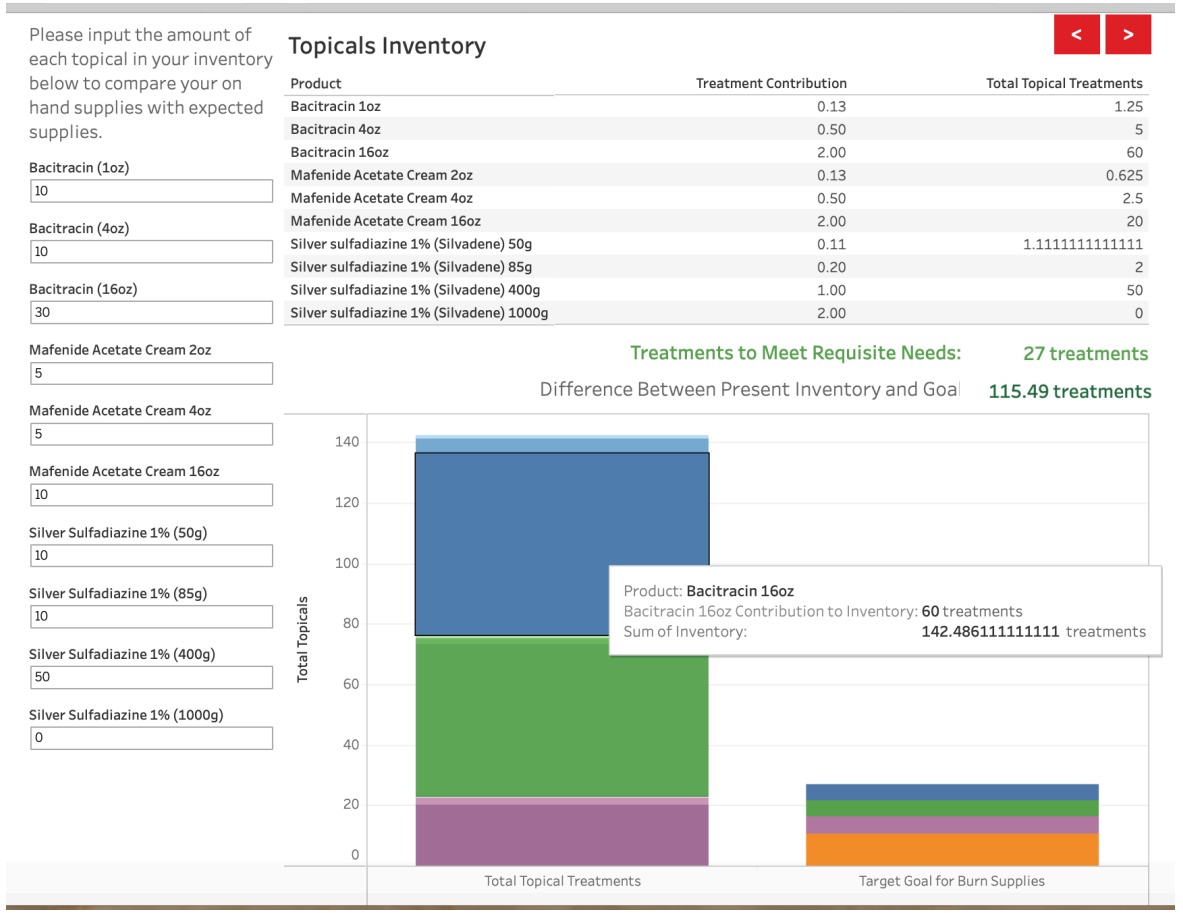
Coalitions:

- Collate information on how much the health systems need aggregately to better inform coalition response.
- Conduct similar strategy to inform region response.
- Identify gaps where the Strategic National Stockpile might be requested.

Burn Supply Module

Estimates supplies needed for:

- Initial dressings
- Topical treatments
- Patient care



Burn Care Assumptions

Patient Considerations

- Note that patients are assumed for dressing purposes to be 75kg and have a 40% burn surface area (BSA) burn for inpatients and 5% BSA burn for outpatients. Thus, each outpatient “counts” as 1/8 inpatient dressing supply needs.
- Note that calculation of analgesia requirements, airway management, and number of urinary catheters, etc. needed has been validated against the number of trauma patients receiving those interventions to ensure adequate projected supply.
- The assumptions for number of burn patients are:

Hospital Trauma Level	Default Number of Patients
• Burn Center	• 25 inpatients and 75 outpatients
• Level 1 and Level 2	• 15 inpatients and 45 outpatients
• Level 3, Level 4, Level 5, and Not Designated Hospitals	• 5 inpatient/stabilization patients and 20 Outpatients

Pharmacy Module

- The Pharmacy Module is a unique planning tool to assist hospitals with assessing the number of pharmaceuticals by category that would be needed to treat patients for up to 48 hours following mass casualty incidents.
- The Hospital Pharmacy Module Methodology (PDF) document contains a “Further Medications for Consideration” section, which provides a helpful overview of additional pharmaceuticals that hospitals may want to consider stocking or having available within their health care coalitions.

Trauma Module

In consultation with subject matter experts and review of mass trauma incidents (with a focus on penetrating trauma that generates a higher degree of severe injuries and surgical volumes compared to “conventional” mass casualty incidents), the following assumptions for seriously injured casualties (i.e., Injury Severity Score 15 or higher) are applied:

Hospital Trauma Level	Default Number of Patients
Level 1 and Level 2	50 seriously injured patients
Level 3	20 seriously injured patients
Level 4, Level 5, and Not Designated Hospitals	10 seriously injured patients

TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY

Linda Rouse O'Neill
Vice President of Supply Chain Policy and Executive Branch Relations, Health Industry Distributors Association (HIDA)

ASPR
ADMINISTRATION FOR STRATEGIC PREPAREDNESS AND RESPONSE

Unclassified

HEALTH INDUSTRY DISTRIBUTORS ASSOCIATION

Advancing the value of distribution in healthcare

- *119 Distributor Members*
- *76 Million Sq. Ft of Warehouse Space*
- *650 Million Orders Annually*
- *Delivering to 560,000 Healthcare Provider Locations*

HIDA EDUCATIONAL FOUNDATION

Continuously improving the healthcare supply channel

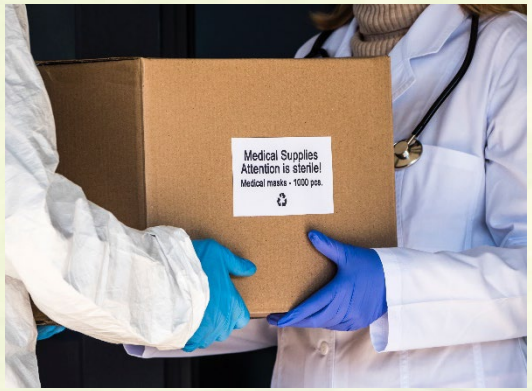
- 137 Members
  - 134 Manufacturers
- *Distributors Carry 550,000 FDA-Approved Products from 5,500 Medical Manufacturers*

Diverse Distributor Membership

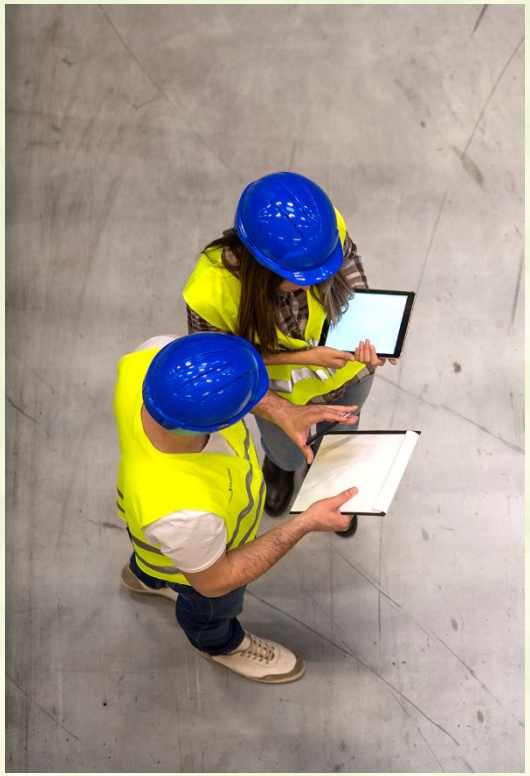
Leading Manufacturers Across Categories

Response to COVID-19 Includes

Vetted and onboarded new suppliers



Expedited shipping and delivery to hotspots to all healthcare provider settings



Coordinated with current suppliers to ramp up production

Identified appropriate product substitutions

Helped healthcare providers determine supply availability and delivery dates

Partnerships Help Navigate Beyond The Pandemic

- HIDA has ongoing public/private partnership with federal agencies
- HIDA Member Councils and Work Groups Provide Subject Matter Expertise:
  - **PPE Council**: *Manufacturers and Distributors who make and distribute PPE across all markets*
  - **Acute Care Council**: *Distributors and Manufacturers with core competency in serving hospitals*

DASH Tool and Supply Chain Partners

Hospital Pharmacy Module + Personal Protective Equipment Module + Burn Supply Module + Trauma Supply Module =

- More informed discussions with supply chain
- Opportunities to discuss product availability as well as options for substitutions and alternatives
- Improved scenario planning and coordination with supply chain

TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS
INFORMATION GATEWAY

Ryan Dadmun
Technical Specialist, Healthcare Ready

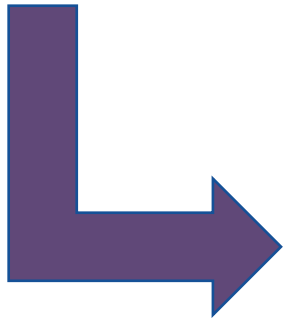
ASPR
Administration for Strategic Preparedness and Response

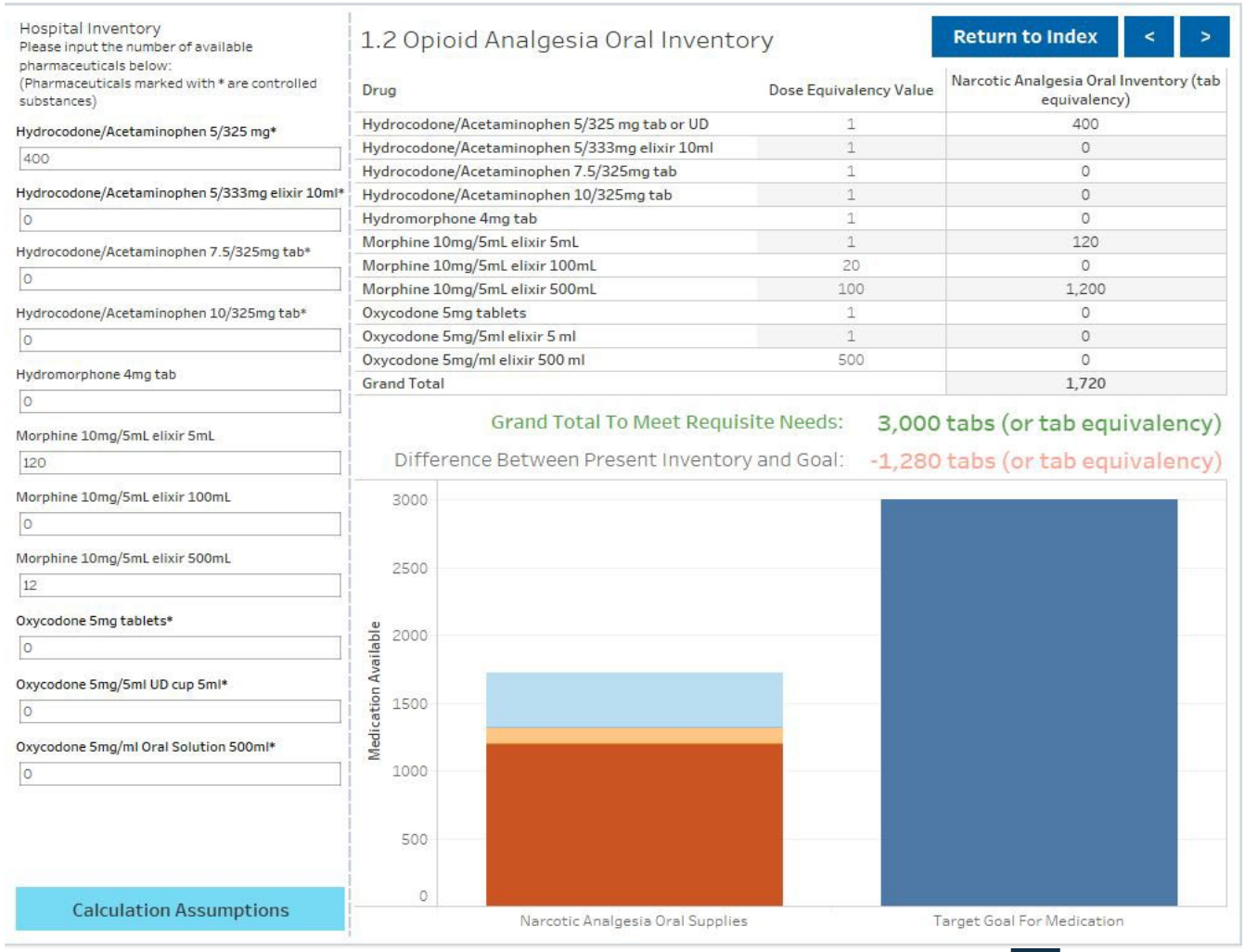
Unclassified

Healthcare Ready focuses on health preparedness and response, serving as a linkage point for the health sector and government partners at the federal, state, and local governments. Our goal is to facilitate the planning and response coordination that improves our ability to respond to threats that disrupt patient access to healthcare during crises.

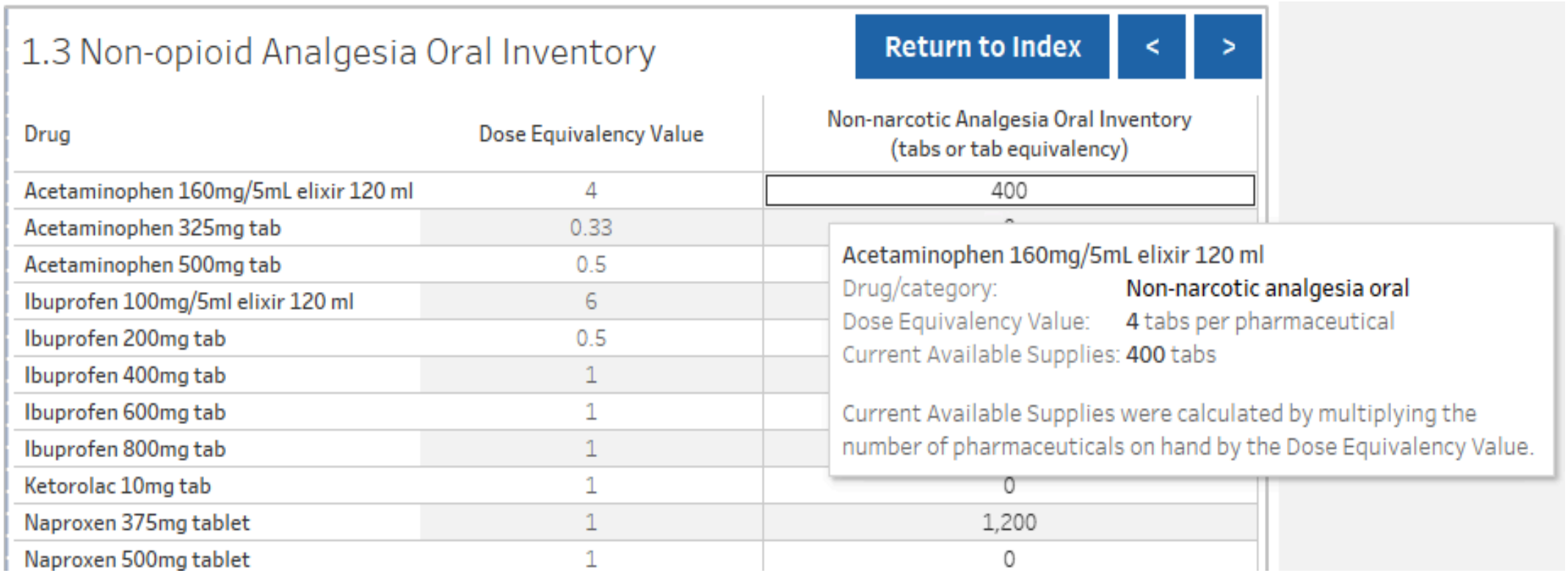
DASH Evolution

Part 1: Hospital Assessment			
Goal:	This worksheet generates overall planning numbers by category of drug that can then be compared to the numbers on the Disaster Inventory to assure adequate on hand. The inventory may be modified by the hospital to suit its usual practices and vendors. The calculations are for seriously injured patients only.		
	Step 1:	Enter the number of emergency department beds	20
	Step 2:	Enter trauma level	3
	Step 3:	Do all major trauma patients get transferred to another facility?	Yes
	Step 4:	Enter the value of designated burn beds	5
	Step 5:	Is this hospital at high risk to receive disproportionate number of casualties?	No
	Step 6:	Is the hospital at risk to be isolated by natural disaster / disrupted infrastructure?	No





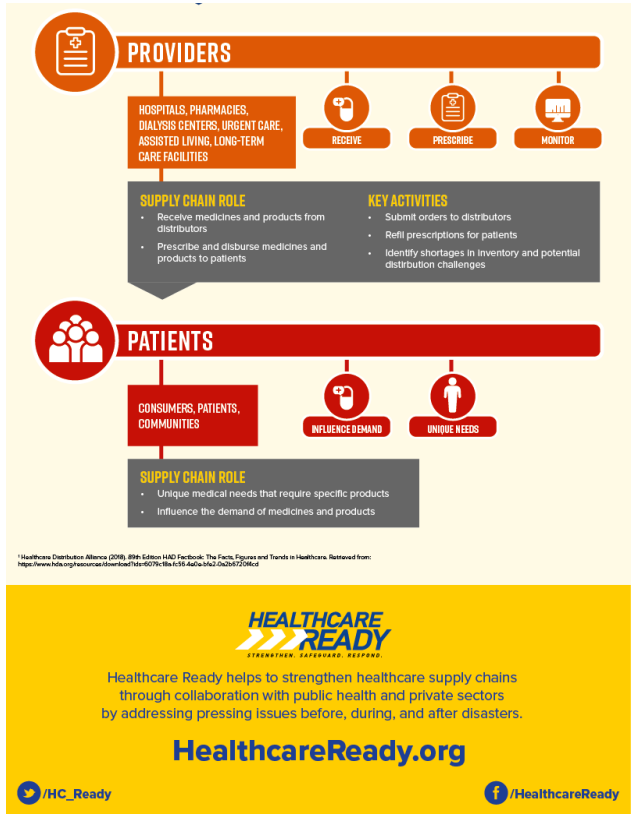
DASH Tooltip – Clear Communication



Drug	Dose Equivalency Value	Non-narcotic Analgesia Oral Inventory (tabs or tab equivalency)
Acetaminophen 160mg/5mL elixir 120 ml	4	400
Acetaminophen 325mg tab	0.33	
Acetaminophen 500mg tab	0.5	
Ibuprofen 100mg/5ml elixir 120 ml	6	
Ibuprofen 200mg tab	0.5	
Ibuprofen 400mg tab	1	
Ibuprofen 600mg tab	1	
Ibuprofen 800mg tab	1	
Ketorolac 10mg tab	1	0
Naproxen 375mg tablet	1	1,200
Naproxen 500mg tablet	1	0

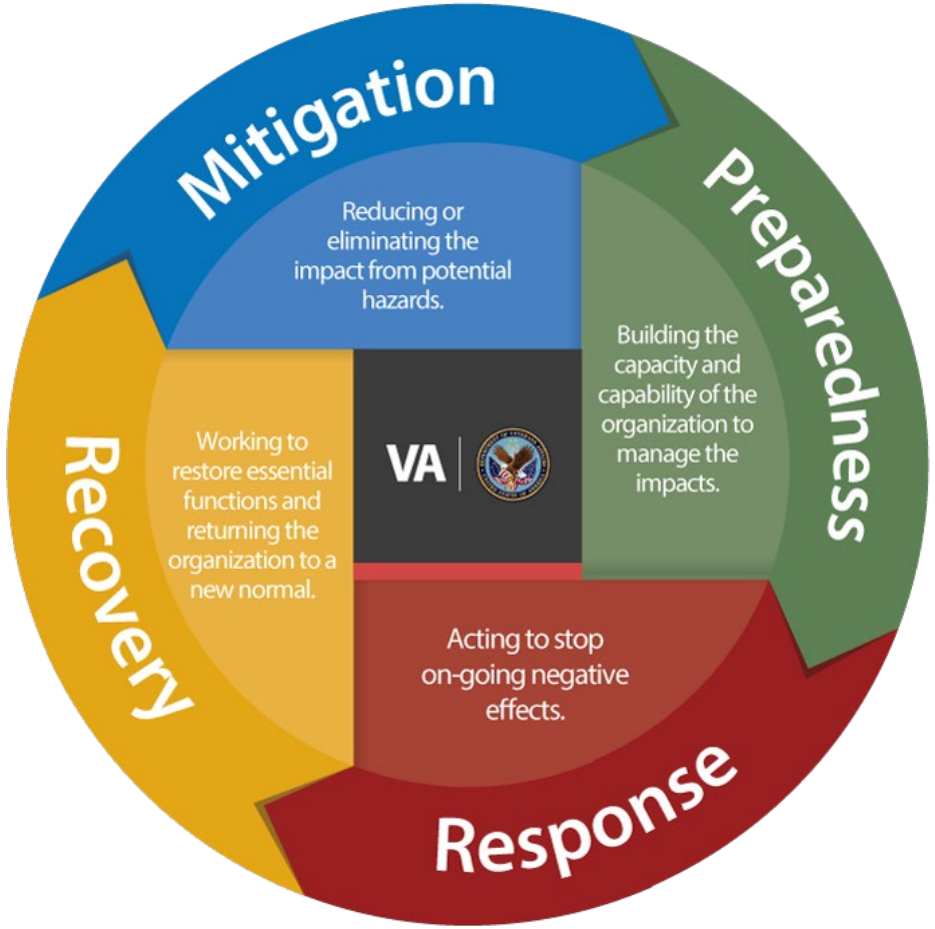
Healthcare Supply Chain

Healthcare Supply Chain



More information on the medical supply chain can be found at https://healthcareready.org/healthcare-supply-chain/

Preparedness vs Response



DASH DISASTER AVAILABLE SUPPLIES IN HOSPITALS

TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS
INFORMATION GATEWAY

John Hick, MD
Hennepin Healthcare and ASPR TRACIE Senior Editor

ASPR
Administration for Strategic Preparedness and Response

Unclassified

DASH Website (dashtool.org)

Four Modules

Hospital Pharmacy Module

Estimates supplies of medications a hospital should have in its pharmacy to meet seriously injured patient needs for 48 hours following an MCI.

USE THE MODULE

Personal Protective Equipment Module

Estimates minimum personal protective equipment (PPE) needed by hospital personnel managing patients suspected or known to be infected with a special pathogen.

USE THE MODULE

Burn Supply Module

Estimates supplies needed to care for critical burn patients with an average 40% burn surface area for the first 48 hours after a burn incident.

USE THE MODULE

Trauma Supply Module

Estimates supplies needed to care for seriously injured trauma patients for the first 48 hours after an MCI.

33

USE THE MODULE

Landing Page for Each Module

Hospital Pharmacy Module (HPM)

The DASH Hospital Pharmacy Module (HPM) is intended to provide estimates of pharmaceuticals and intravenous fluids that may be required at a facility for the first 48 hours after a mass casualty incident occurs. The HPM should be completed to complement both the Burn and Trauma Modules. Based on hospital characteristics, the module will offer baseline inventories for categories (e.g., analgesia, antibiotic). The user will input inventory information for common drug formulations in stock within these categories and see immediately whether the hospital has adequate or inadequate stocks of medications in that category. Dosing is based on adult (i.e., higher) requirements, though pediatric formulations are included where available.

The DASH HPM is not proscriptive nor definitive. It is intended as a starting point for facility planners to estimate the minimum quantities that may be needed based upon the role the hospital has in the community. The module is meant to be considered in conjunction with other planning tools, resources, information, and facility and community-wide preparedness efforts. It is not intended as a clinical tool and should be used for pre-incident planning and NOT during an incident.

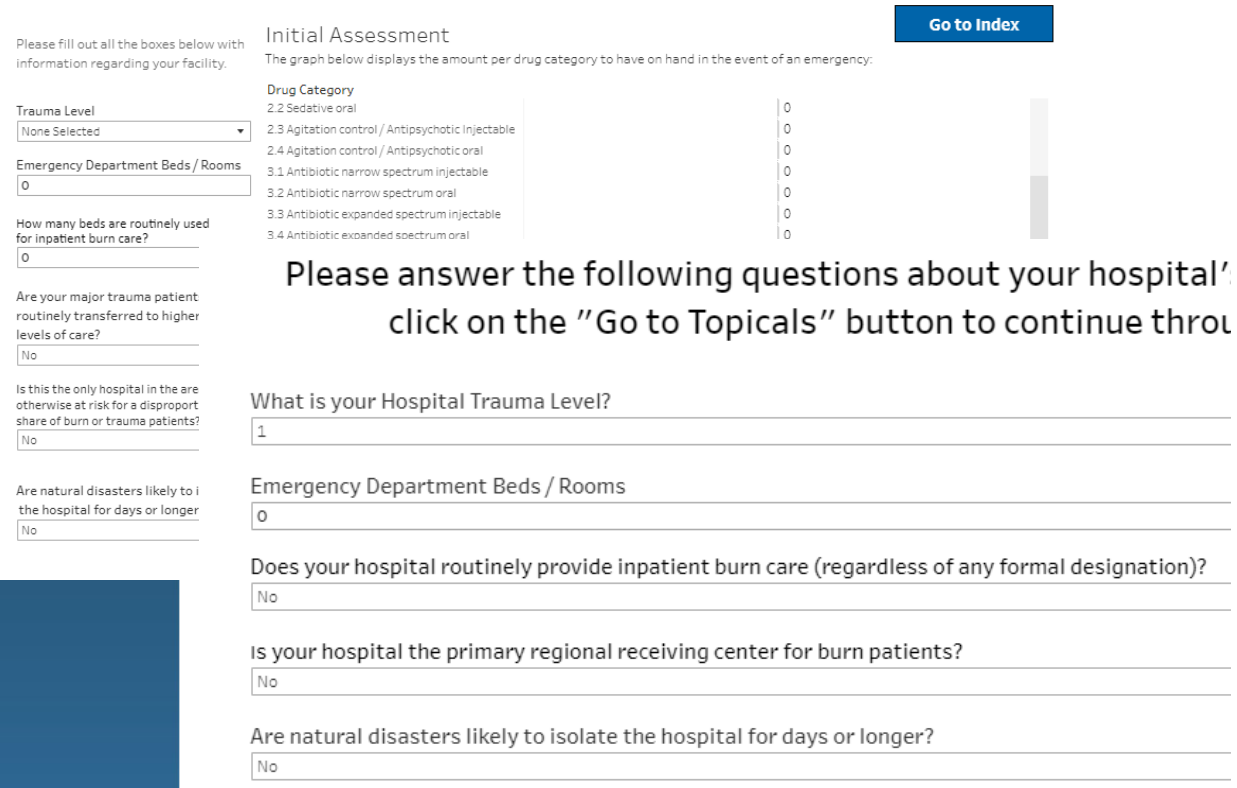
For detailed information on the purpose of the DASH HPM Module, related planning considerations, and additional resources, click on the **"HPM Methodology (PDF)"** button. For detailed instructions, click on the **"HPM Instructions (PDF)"** button. Most users will find it helpful to have the HPM Instructions open in a separate browser window to follow along as they navigate through the module.

34

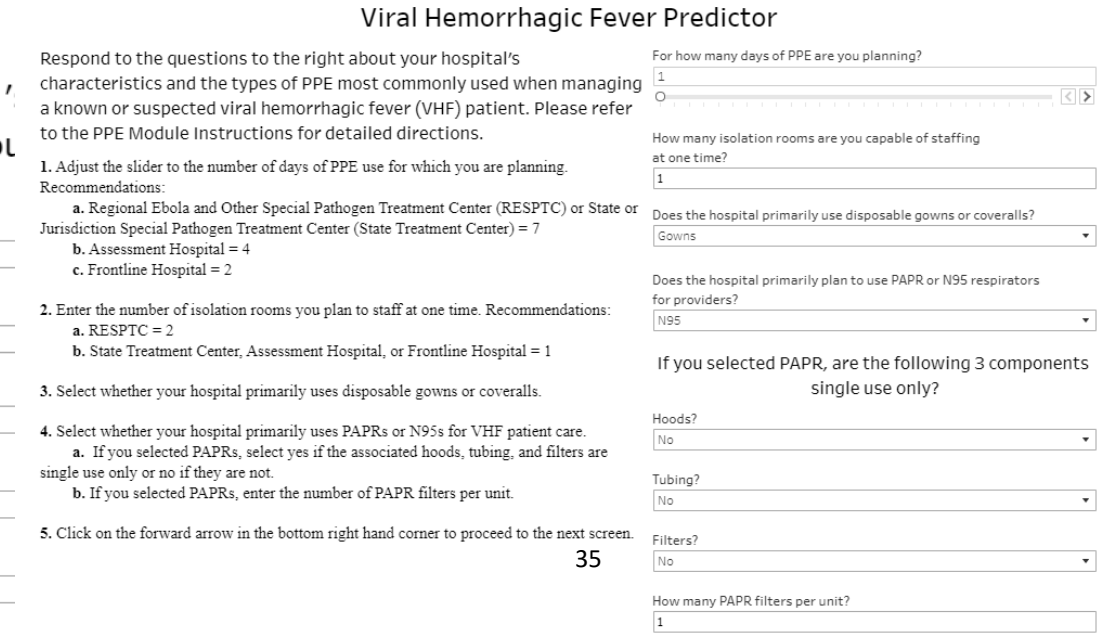
HPM Instructions (PDF) HPM Methodology (PDF)

User Inputs About Hospital Characteristics

Begin by entering your hospital's characteristics on the Initial Assessment screen below. Then click on the "Go to Index" button to navigate to any Individual Drug Category where you will enter your inventory.

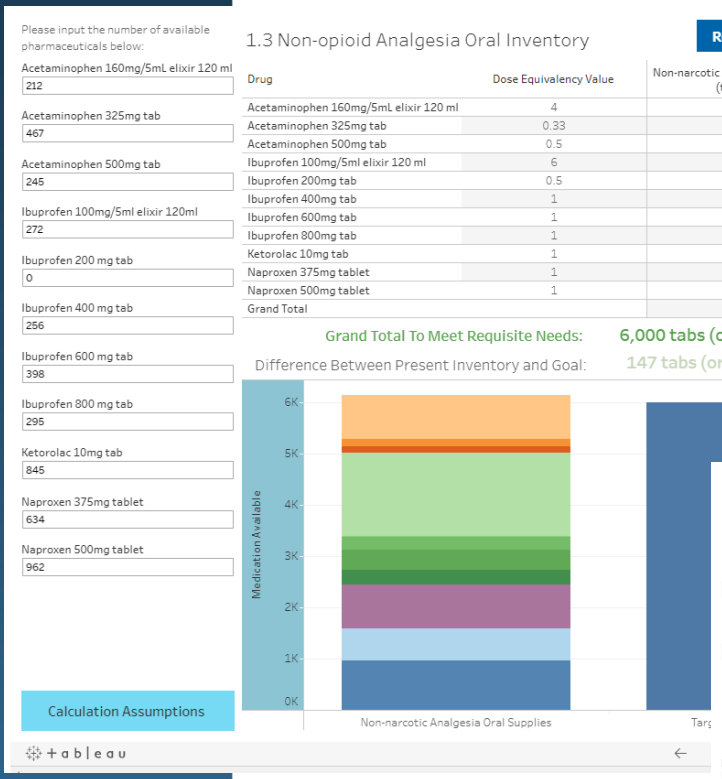


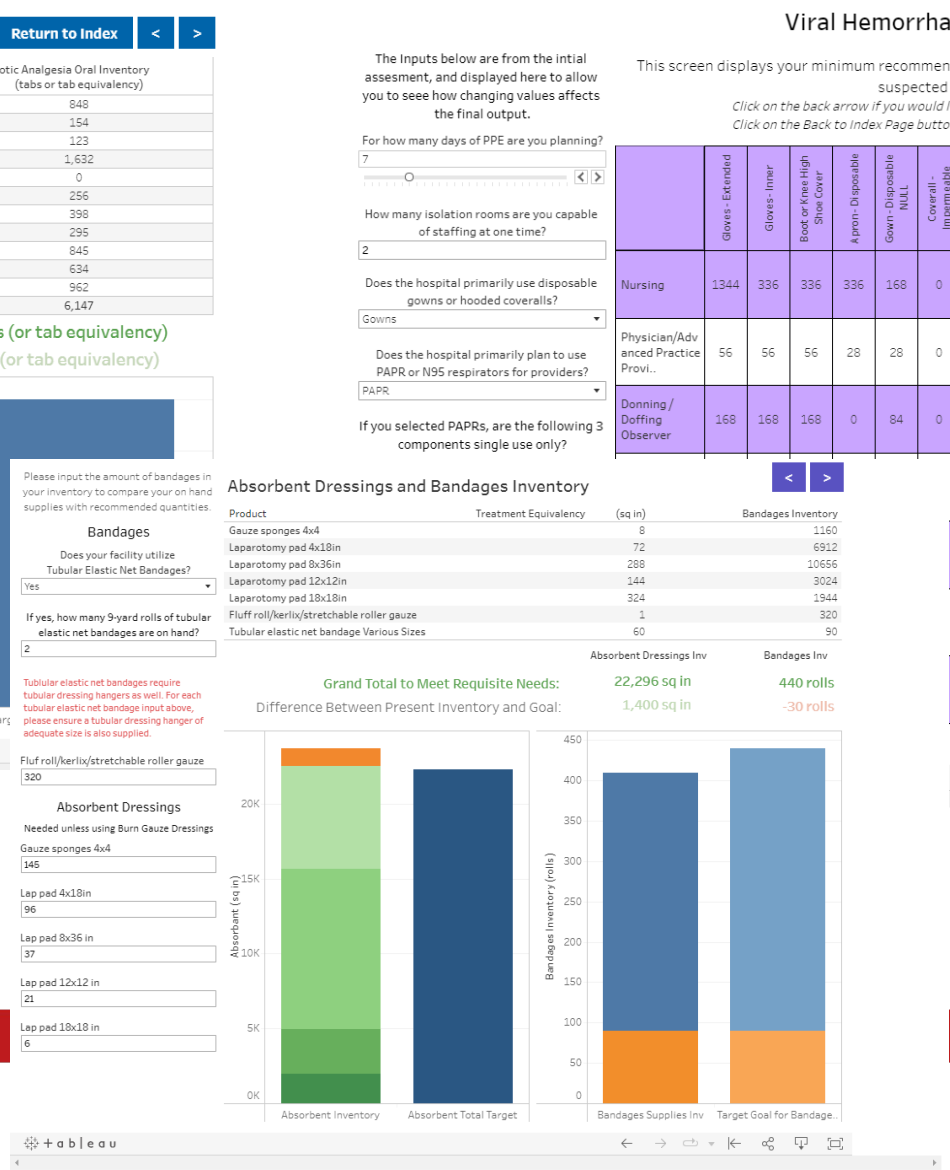
Begin by selecting your pathogen of interest on the Index page below. You will then answer questions about your hospital's characteristics. Once your outputs are displayed, you can return to the Index page to select a different pathogen.



Unclassified

Recommended Quantities of Supplies





Unclassified

Question & Answer

Contact ASPR TRACIE

asprtracie.hhs.gov

1-844-5-TRACIE

askasprtracie@hhs.gov