

Hello! This is pharmacy, what is your emergency...

Anitha Nagelli PharmD, MPH-HPA
Clinical Assistant Professor, UI College of Pharmacy, Coordinator Clinical Pharmacist UI TEAM RX, UI Health

Monazzah Sarwar PharmD, BCSCP
Clinical Assistant Professor, UI College of Pharmacy, Assistant Director, UI Health

Christina Godwin PharmD
Clinical Assistant Professor, UI College of Pharmacy, Clinical Pharmacy Coordinator, UI Health



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Learning Objectives:

1. Define and describe emergency preparedness
2. Describe the role of the pharmacist and technician in emergency preparedness and response.
3. Describe strategies for managing disasters, including the use of technology.
4. Identify next steps and future direction



SIX DOMAINS OF PREPAREDNESS

The **Public Health Emergency Preparedness Program** works to advance six main areas of preparedness so state and local public health systems are better prepared for emergencies that impact the public's health.

- Community Resilience:** Preparing for and recovering from emergencies
- Incident management:** Coordinating an effective response
- Information Management:** Making sure people have information to take action
- Countermeasures and Mitigation:** Getting medicines and supplies where they are needed
- Surge Management:** Expanding medical services to handle large events
- Biosurveillance:** Investigating and identifying health threats

www.cdc.gov/cpr/readiness



Graphic by Michael Carroll and Rosemary Katz and Carol Walker, in Service of Preparedness, Division of Global Emergency Preparedness, August 7, 2012





- What are the 4 phases of emergency preparedness?
- A. Forecasting, emergency, report and plan
 - B. Emergency, react, relay, report
 - C. Preparation, response, recovery and mitigation



Disasters

Natural

Man Made



Response

Response happens at different levels

Federal - National Response Framework, policies, procedures process:
Federal Emergency Management Agency (FEMA)
National Incident Management System (NIMS)



Center for Disease control and prevention (CDC)
Strategic National Stockpile (SNS)
Antibiotics, antidotes, antitoxins
Medicines
Devices
Supplies

Typical response time of federal government is 72 hours
So, the **critical first response** is local and state level



Response

Local response includes:

1. Acting as the primary "first provider" of emergency response services.
2. Activating the Emergency Operations Center (EOC) and Comprehensive Emergency Management Plan.
3. Coordinating the response with public and private organizations and agencies.
4. Notifying the State Emergency Management Agency of the situation by regularly submitting Situation Reports (SITREP).
5. Activating necessary local governments and organizations that are signatory to mutual aid compacts.
6. Activating response agreements with State and Federal departments or agencies.
7. Proclaiming a local state of emergency to authorize: = Using local resources; = Expending local funds; and = Waiving the usual bidding process for goods and services.
8. Requesting the State Emergency Management Agency to provide State and/or Federal assistance



U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), National Incident Management System (NIMS), National Response Framework (NRF)
Revised: September 2017
<https://www.fema.gov/national-incident-management-system-nims>
<https://www.fema.gov/national-response-framework-nrf>

Response

State response includes:

1. Monitoring the situation
2. Reviewing and evaluating local: = SITREPs = Response efforts = Requests for assistance
3. Activating the State EOC to coordinate available State assistance.
4. Determining if the situation is beyond the capability of the State and if Federal assistance is needed.
5. Proclaiming a state of emergency by the Governor that: = Activates the State Disaster Preparedness Plan; = Provides for the use of State assistance or resources; and = Begins the process for requesting Federal assistance.
6. Requesting Federal assistance. Requests can include: = A request for "emergency" or "major disaster declaration" under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; or = A request to Federal agencies under their own authorities from existing or emergency programs, such as the Small Business Administration (SBA) or the Department of Agriculture (USDA).



U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), National Incident Management System (NIMS), National Response Framework (NRF)
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What we can do

During emergencies pharmacy teams contribute to public health in many ways:

- ✓ Immunizations
- ✓ Health promotion
- ✓ Health education
- ✓ Patient Counseling
- ✓ Medication Counseling
- ✓ Disease self-management training
- ✓ Point-of-care testing
- ✓ Screening
- ✓ Emergency preparedness and response
- ✓ Disaster management



Anuru M, Truong HA, Clark S. Pharmacy Emergency Preparedness and Response (PEPR): a proposed framework for expanding pharmacy professionals' roles and contributions to emergency preparedness and response during the COVID-19 pandemic and beyond. Res Social Adm Pharm. 2021 Jun;17(1):1567-1577. doi: 10.1016/j.sapharm.2020.04.002. Epub 2020 Apr 10. PMID: 32389631; PMCID: PMC7148711. <https://pubmed.ncbi.nlm.nih.gov/32389631/> accessed 4.29.2022

In January of 2022, a paper was published that proposes a Pharmacy Emergency Preparedness and Response (PEPR) Framework for pharmacists.

Goal was to integrate pharmacists into public health and recognition of the skills and roles they play that can impact the preparedness and response.

Five key focus areas:

1. Emergency preparedness and response
2. Operations management
3. Patient care and population health interventions
4. Public health pharmacy education and continuing professional education
5. Evaluation, research, and dissemination for impact and outcomes



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July 6, 2022 - **Emergency Use Authorization (EUA)** Authorizes state-licensed pharmacists to prescribe Paxlovid to expand access to timely treatment for some patients who are eligible to receive this drug for the treatment of COVID-19.

The 9th amendment (effective August 2022) to the **COVID-19 Public Readiness and Emergency Preparedness (PREP) Act** Declaration provides:

- **Expanded scope of authority for licensed pharmacists** to order and administer select COVID-19 therapeutics to populations authorized by the FDA
- for **pharmacy technicians and pharmacy interns** to administer COVID-19 therapeutics to populations authorized by the FDA
- for liability immunity
- when certain criteria are met



What **we did** last year

- ✓ Administering COVID-19 Tests and Vaccines
- ✓ Digital Access to Care
- ✓ Conducting Remote Order Verification
- ✓ Overseeing Compounding
- ✓ Reimbursement of Pharmacy Services
- ✓ Pharmacy Technicians as Extenders and Technology Experts

*generally **did not** place orders in community pharmacy settings*

<https://www.premierinc.com/newsroom/blog/five-ways-pharmacy-expanded-its-role-during-covid-19>





The following are what pharmacist and technicians did last year except:

- A. Administering COVID-19 Tests and Vaccines
- B. Conducting Remote Order Verification
- C. Overseeing Compounding
- D. Pharmacy Technicians as Extenders and Technology Experts
- E. Ordering of COVID treatment in community pharmacy settings

Center for Disease Control and Prevention
State and Local Health, by Bureau of Population,
Dynamics and Statistics
August 7, 2020



Role of Technology

- Analytics
- Decision Support Systems
- Business Intelligence Systems
- Big Data
- Data Processing tools
- Disaster Collaboration Tools
- Information & Communication tools



It happened...is happening there & everywhere

March 15, 2021

April 4, 2022

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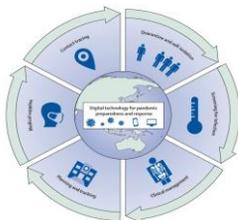
John Hopkins <https://coronavirus.jhu.edu/map.html>



Mitigation



Role of Technology



S. Whittaker, M.A. Haynes, G. Tatem, M.G. Simons
 Spatial Applications of digital technology in COVID-19
 pandemic: planning and response
 Lancet Digit Health. 2020; 4(10):e541-548
[https://doi.org/10.1016/S2666-054X\(20\)30020-2](https://doi.org/10.1016/S2666-054X(20)30020-2)
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Pharmacy and COVID+ Patient Clinic Visits

Clinics and Pharmacy working together to mitigate transmission:

- Emergent/urgent patient appointments for COVID-19 patients will occur Friday afternoons
- Appointments will be scheduled for any clinic between 3pm and 5pm
- Prescriptions will be e-prescribed via Cerner (former software) to OCC Pharmacy
 - nurse will alert Pharmacy of prescription order, which will be delivered to the involved clinic
- Prescriptions will be filled using patient's prescription benefit information (if prescription has a copay and/or prescription cannot be filled – Pharmacy staff will contact involved clinic)
- COVID-19 patient should NOT be sent to the Pharmacy to pick up medications



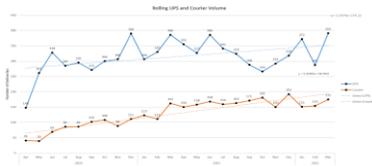
**Challenge of patient and team safety:
UI Health Team Safety**

- ❑ **Communication**
 - Senior management
 - Departmental management
- ❑ **Temperature testing**
 - Staff
 - Patients and visitors
- ❑ **Disinfecting**
 - Contact surfaces
 - Setting up regularly scheduled cleaning cycle
- ❑ **Physical barriers to protect staff and patients**
 - Plexiglass
 - Closure of Pharmacy waiting room area
 - Limited access points with patient direction signage
- ❑ **Staff social distancing and staffing insufficiencies**
 - Limiting staff
 - Remote workflows



**Challenge of patient and team safety:
UI Health Team Safety**

- > **Exploration of other options**
 - Mail order
 - Delivery
 - Syncing patient medication orders to once monthly pick-up
 - Scheduling Compound patient



Inventory Considerations:

Supply chain and inventory management is **ESSENTIAL**

- Handling
- Storage
- Regulations
- Cost
- Stability
- Supply Chain issue
- Panic buying/access priorities (ex: Hydroxychloroquine)

Everyone has a role: manager/pharmacist/tech roles purchaser, lead tech

Ongoing issues

- National shortages
- PPE shortage detrimental at compounding pharmacy
 - Extending use of PPEs
- Strike at warehouse of distributor
- Managing hydroxychloroquine inventory



Preparation



Lessons learned

- Empathy is key – put people first
- Clear, transparent and direct communication
- Aim for simplicity
- Lead by example
- Send a consistent message
- Create an FAQ – accessible on intranet
- Have huddle calls with other operational managers
- Assign someone to look-up changing COVID guidelines
- Establish surplus pool of employees
- Cross-training in specialized areas
- Request clear guidance from HR



NEXT 

- Re-group on Lessons learned
- What worked what did not
- Staffing sufficiency
- Workflows
- Emergency Operational Plan – start/ re-visit/amend/update
- Who, what, where, how
- Continued Awareness
- Staff Education
- Academic – Remote classes
- Technology – address sufficiency of access to Laptops, Virtual call Jabber lines, central call systems, network, IT tech support



NEXT 

- Documentation: of P & P lessons learned, evidence-based practices, enhanced pt care services to meet pt needs, prep and training for expanded scope and top or licensure practice
- SPACE considerations
 - Air quality
 - Staff safety
 - Burn out
- Clarify technician role in different codes
- Clarify deployment of pharmacy Technicians to areas
- Clarify role for pharmacy technicians in assisting in distribution of medications to patients
- Clarify the pharmacy Technician's role in assisting pharmacists in the administration of emergency vaccinations
- Explore and engage the culture locally and at state level regarding expanded technician roles.





The most important and the most difficult next step may be:

- Clarifying deployment of pharmacy technicians
- Clarifying pharmacy technician role is distribution
- Clarifying pharmacy technician role in vaccine administration
- Exploring and engaging local and state culture regarding expanded technician roles



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