

When a Disaster Strikes: Access to Medications?

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Conflicts of Interest

- Dr. Ehret has no actual or potential conflicts of interest and no relevant financial interests associated with this presentation.

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Pharmacist and Technician Objectives

- Describe pre-disaster planning for healthcare professionals, in particular for pharmacies
- Review medication supply chains and consider weak points in the chain
- Describe a needs assessment for a patient prior to a disaster
- Outline a disaster planning guide for a pharmacy setting

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What type of practice setting are you currently working in?

- A. Community Pharmacy
- B. Hospital Pharmacy
- C. Advance Practice/Clinical Setting
- D. Academia
- E. Industry
- F. Government
- G. Veterans Affairs
- H. Other

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Types of Events



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"Drug Refugee"

- Minor Disaster
 - Power Outage
 - No pharmacist today
 - Evacuation
 - Riots/Protests
- Major Disaster
 - Flooding
 - Hurricanes
 - Earthquake
 - Tsunami



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Minor Disaster Question

- Thunderstorm with major wind damage in a local town. Power is out at one of the major hubs and the independent pharmacy that everyone in town uses is closed. A major retail chain in the next town over has power.
- Patient presents to the major retail chain with a bottle for warfarin from the independent and states, "I am out of medication and my pharmacy is closed."
- What do you do?

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Minor Disaster Question

- A. Turn the patient away- you can't call for a transfer due to the independent being closed
- B. Provide the patient with 3 days worth free of charge
- C. Provide the patient with an entire refill- worry about the transfer when the independent reopens
- D. Call the provider to obtain a new script for the medication to fill

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Minor Disasters



- Pharmacies might not be open
 - Can I fill my prescription at any pharmacy that is open in town?
 - I don't have my insurance card
 - I lost my prescription in the process
 - My pharmacy filled it, I didn't pick it up yet, now they are not open
 - My medications were left out of the fridge, can I get new ones?
 - I am due for an injection, but my provider is not open or only doing telehealth

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Major Disasters

- No medications available
 - Pharmacies are closed
 - Specialty medications- mail is slowed or stopped
 - Medications are expired- no fridge services available
 - No medications coming into area
 - Disruption in supply chains
- Back order of medications
 - Medication is unable to be made- example IV fluids/sterile water Hurricane Maria
 - Concerns over raw ingredients and drug supply manufacturing locations
- No providers to prescribe medications
 - Provider may not know medication history
 - Provider may be uncomfortable with certain medications (e.g. could a psychiatrist prescribe oncology medications?)

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Supply Chains



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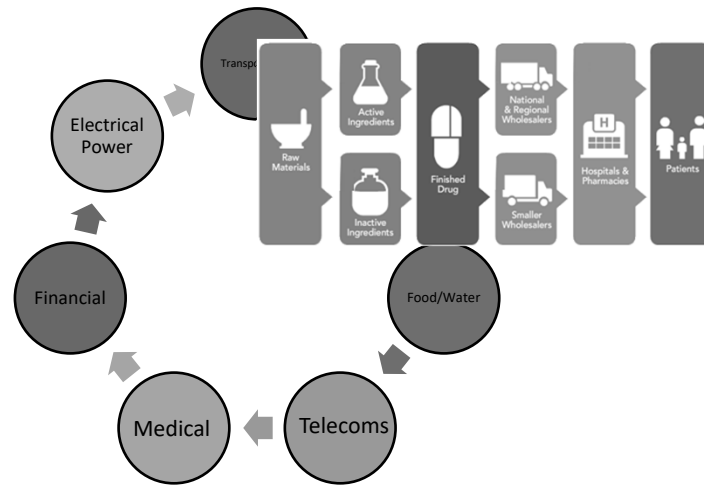
Supply Chains

- Social and technical system by which demand is identified, targeted, and fulfilled
- Process of deciding what, when, and how much is to be moved where

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Commercial Supply Chain



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Disaster Occurs



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Questions to Consider

- Do I have a clear understanding of what medications would be available through relief efforts? What is expected timetable would be for their restoration?
- What basic formulary should I anticipate?
- In case of an interruption in medication supply, which of my patients are likely to have the most severe discontinuation syndromes?
- What are my ethical and professional duties?

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Questions to Consider

- Should I be considering maintaining a supply of certain medications? How do decision?
- If I opt to maintain a small supply of certain medications, do I know what I need to know to execute that plan? (e.g., securing of pharmaceuticals, expiration, temperature)
- For long-term stability-maintenance patients, what is a reasonable degree of disaster planning education/discussion?

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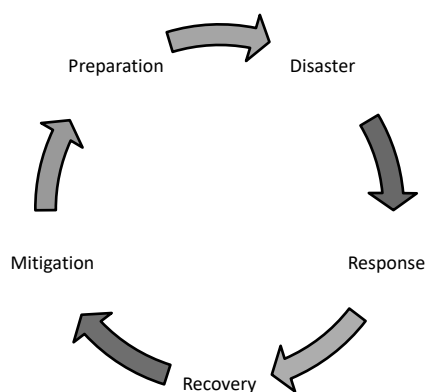
Questions to Consider

- What could be the short-term and mid-term impacts of not having access to the electronic medical record be in may particular practice?
- How have other providers dealt with these questions in previous disasters?

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Assessment of Where You Stand



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Reasons to do an Assessment

- Develop a strategic plan
- Reports to command, families, media
- Apportion resources
- Target interventions

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Needs Assessment

- Individual
- Group
- Population
 - Consider vulnerable populations
 - Chronically mentally ill
 - Physically ill
 - Disabled

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Basic First Assessment of Physical Needs

- Number affected
- Shelter
- Food
- Wounds/Illnesses
- Infectious Disease
- Medications available
- Fuel
 - Heating
 - Cooking
- Continued violence
- Mass fatalities

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Assessment of Health Needs

- Vulnerable populations
 - Mentally ill
 - Children
 - Prisoners
 - Wounded
 - Bereaved
- Medications
- Hospital Beds
 - General
 - ICU
 - Medical surge
 - Psychiatry

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Assessment of Health Needs

- Try to gain as much information as possible before departure to affected site
- On the ground assessment usually necessary
- Persons to talk to
 - Schools
 - Hospitals
 - Clergy
 - Community leaders
 - Shelters

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Assessment Question

- In your current place of employment, have you ever had training in disaster planning?
- A. Yes
- B. No
- C. I might have, but I can't recall

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Completing the Assessment

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Disaster Assessment

- Identify your team
- Identify risks and needs (SWOT)
 - Access to regional healthcare resources
 - Prioritize resource gaps and mitigation strategies
 - Consider vulnerable populations
 - Regulatory compliance

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Disaster Assessment

- Develop Preparedness Plan
 - Healthcare and medical response coordination
 - Emergency operations plan
 - Communications
 - Essential functions
 - Different for each setting
 - Supply chains
 - Finance functions
 - Sheltering in place
 - Protecting healthcare information systems and networks
 - Protecting responders' safety and health
 - Healthcare evacuation and relocation

Medical Surge
Alternative Care Systems-
Telemedicine/Virtual

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Disaster Assessment

- Recovery Plan
- Train and prepare the healthcare medical workforce
- Ensure preparedness is sustainable

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Examples/Thoughts for Discussion

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Psychiatric Issues-Acute

- Stress as a reaction
- Additional fear of unknown with CBRNE
- Changes in mental status secondary to any agents
- Medical triage
- Quarantine, reverse isolation
- Loss, grief
- Under-reactions

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“Drug Refugees”

- Limited to no medications
- Withdrawal symptoms
- Symptoms return
- Self inflicted harm
- Psychosis
- Cravings



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Opioid Withdrawal



Early

- Watery eyes
- Runny nose
- Sweating
- Anxiety/Irritability
- Poor sleep
- Muscle pain

Later

- Cramping
- Diarrhea
- Vomiting
- Increased heart rate and blood pressure
- Restlessness
- Shakiness
- Chills
- Sweating
- Goose bumps
- Dilated pupils

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Katrina Behavioral Health Needs

- Chronically mentally ill off medications
 - Note: psychiatric medications not in stockpile
- Displaced psychiatrists and populations
 - Volunteers needed
 - Issues of housing, transportation
- Louisiana National Guard
 - All flooded to the “crash site”
- Importance of pets
- Long term issues of “diaspora”

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Solutions

Patient

- Refills prior to disaster (personal stockpile)
- Emergency kit prepared to grab if you need to go quickly
- Stock medications in multiple places- office, home, family members house
- Carry medication list with current and past medications, allergies, and provider contact information

Provider

- Develop emergency plans for injections, blood draws, and other time sensitive monitoring
- Provide patients with medication lists
- Discussions with patients to be prepared

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Resources



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Preparedness and Response
Capabilities

Office of the Assistant Secretary for Preparedness and Response

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Oath of a Pharmacist

I promise to devote myself to a lifetime of service to others through the profession of pharmacy. In fulfilling this vow:

I will consider the welfare of humanity and relief of suffering my primary concerns.

I will apply my knowledge, experience, and skills to the best of my ability to assure optimal outcomes for my patients.

I will respect and protect all personal and health information entrusted to me.

I will accept the lifelong obligation to improve my professional knowledge and competence.

I will hold myself and my colleagues to the highest principles of our profession's moral, ethical and legal conduct.

I will embrace and advocate changes that improve patient care.

I will utilize my knowledge, skills, experiences, and values to prepare the next generation of pharmacists.

I take these vows voluntarily with the full realization of the responsibility with which I am entrusted by the public.

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