

DISASTER PREPARATION DOES NOT START ON THE FIRST DAY

Your role in your facilities preparation process

LETS START OUT LOOKING AT SOME OF THE FACTS FIRST

- On average, U.S. Hospitals only own 20 full featured ventilators per 100,000 people in the population ¹ ... Or Less
- In the face of a people public health emergency, the need will be greater.
- An estimated 865,000 people would require hospitalization in a moderate pandemic in the United States
- This number would increase to 9.9 million in a severe pandemic emergencies ²

1. Rubinson, L., Vaughn, F., Nelson, S., Giordano, S., Kallstrom, T., Buckley, T., . . . Branson, R. (2010). Mechanical Ventilators in US Acute Care Hospitals. *Disaster Medicine and Public Health Preparedness*, 4(03), 199-206. doi:10.1001/dmp.2010.18.

2. Huang H, Araz OM, Morton DP, et al. Stockpiling ventilators for Influenza Pandemics. *Emerg Infect Dis*. 2017;23(6):914-921. doi:10.3201/eid2306.161417

LETS START OUT LOOKING AT SOME OF THE FACTS FIRST

- Looking at even 10% of those patients requiring ventilators the numbers would be overwhelming
- Moderate levels would require 86,500 ventilators nation wide
- Severe levels we would be looking at 900,000 ventilators
- Now these are projected numbers but these are items you can not just run out and get
- A study reported in this week's issue of [MMWR](#) found that in 2017, a provisional total of 9,093 TB cases were reported in the United States (rate of 2.8 cases per 100,000 persons), a decrease from the 2016 case count and rate and the lowest rate and number of TB cases on record since reporting began in 1953. Increased diagnosis and treatment of latent TB infection remains important for eliminating TB in the United States.

THIS IS JUST A VERY CLEAR EXAMPLE OF THE NEED FOR PRIOR PLANNING

- So lets look at some of the items required for Proper planning
 - Equipment
 - Medications
 - Staff
 - Therapist
 - Managers/ Directors
 - Senior Management Teams



EQUIPMENT

- Ventilators: always a prime subject
- Oxygen Delivery Devices: the most frequently used items
 - BVM
 - Masks
 - Cannulas
- Medication Delivery Devices
- O2/ Helium cylinders
- It is difficult to do any effective work if you don't have the proper equipment



MEDICATIONS



- We all know the most frequently ordered medications and the ways to dispense them
- But the Pharmacy and Central Supply ordering process is much more difficult
 - How much do we keep on stock
 - What are the expiration timeframes
 - Who is responsible for the ordering process

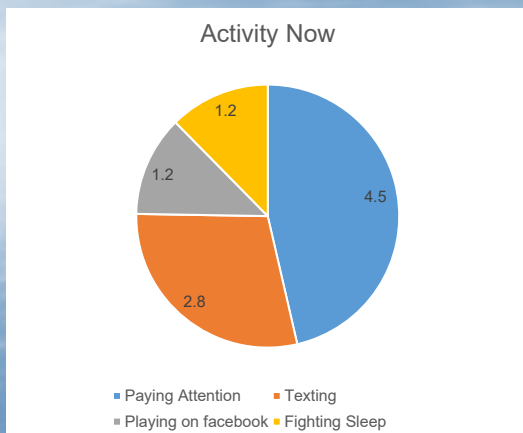
STAFF

- As always having the right trained staff to do the job is important
- Just as important is to be sure that you have the right number of people to back up the initial staff
- Your knowledge is your greatest asset please share it with the younger therapists
- Groom and train your junior therapists someday they will be taking care of us



USELESS INFORMATION

... BECAUSE EVERYBODY LIKES CHARTS IN A PRESENTATION



NOW THAT YOU HAVE THE REQUIREMENTS LETS LOOK AT THE PLAYERS INVOLVED

- **Front line Staff Members**
 - Who knows better what is needed and how it needs to be done than the people that do it every day
- **Managers and Directors**
 - This is your guidance team to help you through the processes of getting what you need to do the job
 - Staff and Stuff
- **Senior Management Team**
 - Hey Someone has to pay for all this stuff

PLAYERS OUTSIDE YOUR DEPARTMENT THAT WILL BE INVOLVED

- **Other Players involved in the planning for disasters**
- **Medical Staff Members**
 - Since these will be the folks issuing the orders we will need to have their buy in for alterations in daily services
- **Pharmacy and Supply Chain Directors and Managers**
 - These will be the folks handling the medication and supplies that will be needed

PLAYERS OUTSIDE YOUR DEPARTMENT THAT WILL BE INVOLVED

- **Ethics Committee Membership**
 - The makeup of this of course will vary by the facility and its governance body
- **Emergency Preparedness Coordinator and EP Committee**
 - This would be the person/ persons in your facility that has the access to outside resources and assistance (that is me)
- **Area Public Health Department**

NOW THAT YOU HAVE YOUR TEAM WHAT ARE SOME THE EVENTS YOU MIGHT FACE

- In 2017 the influenza outbreak brought into focus the need for additional respiratory resources
- In California there was a call put out to the public health departments to do a “have available” count for ventilators and trained staff
- How would your team respond to a “all hands on deck” call for a pandemic exposure
- What would you use for criteria to decide who would and who would not be given the ventilator option

NOW THAT YOU HAVE YOUR TEAM SET WHAT ARE SOME THE EVENTS YOU MIGHT FACE

- In July of 2011 there was a Subcommittee created by the CDC
- The question that was presented was “How would we expect the community to respond to a pandemic respiratory disease outbreak?”
- What legal, ethical, and medical conditions would be involved in the decision making process

CDC FINDINGS

- They produced a paper titled, “Ethical Considerations for Decision Making Regarding Allocation of Mechanical Ventilators during a Severe Influenza Pandemic or Other Public Health Emergency”
- The conclusion of the committee responded, “Development of these plans will require input from a variety of stakeholders, including public health, medical, legal experts and representatives from those who will be impacted by the plans”

WHAT YOUR FACILITY SHOULD BE DOING

- Your Facility should be establishing disaster management plans
 - These plans should include
 - Management of internal resources
 - Management of external requests for assistance
 - Ethical considerations for decision making process
 - Communication resources and techniques

OK THEY HAVE DONE THEIR PART NOW IT IS UP TO YOU

- You need to go to your leadership and become involved
- They need your direct patient interactions to plan for the facilities next moves
- Become an active member in the planning



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WHAT CAN I BRING TO THE TABLE



- Your thought process is the best thing to offer
- How many times do we get out of issues every day with our thoughts
- Remember that when dealing with Emergencies to think outside of the box

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PERSONAL PREPARATION

- For your personal protection go to www.ready.gov and look up instructions on how to build a go bag
- Keep updated on the current disease outbreaks and how to treat and prevent them



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IN CONCLUSION

- Planning is something that takes place behind the scenes but can serve as a foundation for disaster training, and actions
- The better you see the roadblocks by planning the easier they are to maneuver around during practice
- There are many moving parts to any emergent response, be part of the solution not the problem
- No one knows your world better than you don't be afraid to speak up

A PARTING THOUGHT THIS IS MY IDEA OF PROPER PREPARATION



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