Community Preparedness and The Physician Assistant

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Tucson, Arizona

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Disaster Management Assistance Team FEMA (candidate AZ-1)
- Arizona - Medical Reserve Corps
- MESA, AZ – CERT (Community Emergency Response Team)
- Maine Medical Strike Team-Founding member
- Medical Representative- Regional Preparedness Team-Northern Maine
- Emergency Management Director- Jackman Maine
- Director Disaster Preparedness Chair MDI Hospital

Today

- Introduce
- Highlight
- Increase awareness
- Offer resources
- Encourage engagement
- Reinforce efforts in play.
• Disasters can be global, international, national, state or local in scope

Define Preparedness
• [https://youtu.be/-nGqVnPccRw](https://youtu.be/-nGqVnPccRw)

Community
• Home- Church
• Neighbors-
• Practice Site
• Town/section of City
• City
• State
• Region
• Nation
Essential Elements of Disaster

• Intentional
• Unintentional
• Natural /man

A Major Disaster Declaration

• usually follows these steps:
  • Local Government Responds, supplemented by neighboring communities and volunteer agencies. If overwhelmed, turn to the state for assistance;
  • The State Responds with state resources, such as the National Guard and state agencies;
  • Damage Assessment by local, state, federal, and volunteer organizations determines losses and recovery needs;
  • A Major Disaster Declaration is requested by the governor, based on the damage assessment, and an agreement to commit state funds and resources to the long-term recovery;
  • FEMA Evaluates the request and recommends action to the White House based on the disaster, the local community and the state’s ability to recover;
  • The President approves the request or FEMA informs the governor it has been denied. This decision process could take a few hours or several weeks depending on the nature of the disaster.

Arizona Disasters
Arizona Risk ....

- Dust Storms
- Earthquakes
- Extreme Heat
- Flash Flood
- Landslides
- Sirens
- Thunderstorms
- Tornado
- Wildfires
- Winter Weather

Least At risk

- 1. Mesa, AZ
- 1. Milwaukee, WI
- 3. Cleveland, OH
- 3. Phoenix, AZ
- 3. Tucson, AZ

Arizona Disasters....

- High winds and heavy snow led to significant flooding and record snowfall, posing extreme danger to public health and safety in northern Arizona in January 2010. (Federally declared)
- Freezing temperatures from an arctic air mass in December 2012 caused severe damage to the Navajo Nation's potable water infrastructure, impacting human lives, public facilities, educational facilities, housing and businesses.
- A lightning-caused wildfire consumed 1,800 acres in Yavapai County in June 2013, damaging over 100 homes and public infrastructure.
- In September 2013, heavy rains eroded roadways and infrastructure, and isolated residents in Apache and Greenlee counties.
- Hurricane Norbert combined with a monsoon storm, causing record rainfall and severe flooding in September 2014. Transportation infrastructure was impacted significantly, multiple roads were impassable, and homes were inundated with floodwaters. (Federally declared)
Arizona ongoing emergencies ..

- Arizona has been in a drought emergency since 1999. Lack of precipitation continues to reduce surface and ground water supplies and stream flows, endangering crops, property and livestock.

- Winter storms caused flooding to multiple counties in February 2005. (Federally declared)

- Multiple monsoon storms in summer 2006 brought hail, damaging winds and flash floods to southern and northern Arizona. (Federally declared)

- In October 2010, three days of heavy rain generated flooding in the Havasupai Indian Reservation, making the main route into Supai village impassable. (Federally declared)

Preparing for a Pandemic

- A pandemic is a global disease outbreak. It is usually caused by a new version of a virus (like the flu) that affects humans. If this situation occurs, the outbreak could require changes in many areas of society that may last for some time.

Declared vs Undeclared

- Governor requests a presidential declaration via FEMA Regional Office
Be Prepared

• http://www.justincasearizona.com/resources/DHS00075%20Go.pdf
Competencies

- Hsu et al. developed a set of cross-cutting competencies for training healthcare workers about disasters, or critical events.
- These competencies, which may apply to any group of providers who have the potential to respond to a disaster, include:

Guidelines

- The Physician Assistant in Disaster Response: Core Guidelines (Adopted 2006 and amended 2010)
- Executive Summary of Policy Contained in this Paper
- Summaries will lack rationale and background information, and may lose nuance of policy.
- You are highly encouraged to read the entire paper

Guidelines for PAs responding to disasters

- PAs should participate in disaster relief through established channels.
- PAs should support comprehensive, team-based health care.
- PAs should prepare for and expect the possibility of scarce medical resources and non-medical assignments in disaster situations.
## Guidelines

- **PAs should be prepared to provide documentation of their qualifications at any disaster site.**
- **PAs involved in medical relief efforts should be familiar with standards of disaster response.**
- **PAs should maintain a high degree of cultural sensitivity when working with ALL populations.**

## AAPA Summary

- In summary, AAPA endorses the following statements to promote and support disaster preparedness and response activities and the integration of PAs as key personnel in mitigating the impact of disasters.
- AAPA condemns all forms of terrorism and encourages PA involvement in coordinating efforts to improve the medical and public health response to terrorism and other disasters.
- AAPA shall support educational activities that prepare the profession for participation in planning, coordinating, delivering, and evaluating emergency and public health services in disaster situations.

## AAPA—the PA and Disaster

- AAPA believes PAs should participate directly with state, local, and national public health, law enforcement, and emergency management authorities in developing and implementing disaster preparedness and response protocols in their communities, hospitals, and practices in preparation for terrorism and other disasters.
- AAPA recognizes the National Disaster Medical System (NDMS) as an exemplary model for PA participation in disaster response.
- AAPA supports the imposition of criminal and civil sanctions on those providers who intentionally and recklessly disregard public health guidelines during federal, state, or local emergencies and public health crises.
Who are you?

- Team members should explain their training and skills to one another and talk about how they will share responsibilities.
- The PA needs to be able to communicate the concepts of physician-PA team practice. The physician and PA should talk together about their respective disaster roles and who will supply what levels of emergency care. For example, who is best prepared to suture lacerations? Set a broken arm? Insert an emergency chest tube? Participants should discuss these issues as their team begins working together.

Competencies

AAPA adopted the following competencies for disaster preparation and response in 2005. Accordingly, all PAs should:

- Be alert to the occurrence of unexplained illness and death in the community;
- Be knowledgeable of disease surveillance and control capabilities for responding to unusual clusters of diseases, symptoms, or presentations;
- Be knowledgeable of procedures used to collect patient information for surveillance as well as the rationale and procedures for reporting patients and patient information;
- Be familiar with the clinical manifestations, diagnostic techniques, isolation precautions, decontamination protocols, and chemotherapy/prophylaxis of chemical, biological, and radioactive agents;

Competencies (cont.)

- Recognize a potential critical event and implement initial action
- Apply the principles of critical event management
- Demonstrate critical event safety principles
- Understand the institutional emergency operations plan
- Demonstrate effective critical event communications
- Understand the incident command system and your role in it
- Demonstrate the knowledge and skills needed to fulfill your role during a critical event
PA Role

• Utilize appropriate procedures to prevent exposure to themselves and others;
• Prescribe treatment plans that may include management of psychological and physical trauma;
• Understand the essentials of risk communication so that they can communicate clearly and non-threateningly with patients, their families, and the media about issues such as exposure risks and potential preventive measures;
• Understand the role of the public health, emergency medical services, emergency management, and incident management systems in disaster response and the individual health professional’s role in these systems.

Role

• Understand the essentials of risk communication so that they can communicate clearly and non-threateningly with patients, their families, and the media about issues such as exposure risks and potential preventive measures;
• Understand the role of the public health, emergency medical services, emergency management, and incident management systems in disaster response and the individual health professional’s role in these systems.
• Be familiar with public health laws, and state and federal resources that contribute to emergency management and response at the local level.

PA- Knowledge expectations

• Be knowledgeable of public health interventions that must be considered following the onset of a mass casualty incident including:
  - mass triage;
  - quarantine and movement restriction options;
  - mass immunization/chemoprophylaxis;
  - environmental decontamination and sanitation
32-2535. Emergency medical care; supervision

ARIZONA RULE:
A. Notwithstanding the requirements of this article, in response to a natural disaster, accident or other emergency, a physician assistant who is licensed pursuant to this chapter, licensed or certified by another regulatory jurisdiction in the United States or credentialed as a physician assistant by a federal employer may provide medical care at any location and with or without supervision.
B. A physician who supervises a physician assistant who is providing medical care pursuant to this section is not required to comply with the requirements of this article relating to supervising physicians.

What to learn?

• Triage
• Incident Command
• Specific “Improvised Medicine “

TRIAGE- “To sort”

• START-Simple triage and Rapid Treatment
• Jump START(Children)
• SAVE-
• Israeli Method- continuous triage - $% loss from 50%
TRIAGE

CATEGORIES:
• RED (P1) = 1-5%
• YELLOW (P2) = 5-10%
• GREEN (P3) = 80%
• BLUE (P4) = 1-5%

Triage

• "RED CODE / Immediate" ("P1") = The horizontal & groaning / gurgling patient (ABCD) seriously affected / malfunctional:
  – A life threatening condition requiring immediate treatment:
    • Airway obstruction
    • Inadequate ventilation / tension pneumothorax
    • Active bleeding
    • Shock

Triage

• "YELLOW CODE / Urgent" ("P2") = The horizontal but ABCD intact patient who is demanding:
  – An injury which requires complex care but is not an immediate threat to life:
    • Fracture of a long bone
    • Spinal lesion
    • Abdominal injuries without shock
    • Vascular injuries
    • Large burns 20-60% BSA
Triage

• "GREEN CODE / Delayed" ("P3")
  = The walking talking but very demanding in terms of resource:
  -- Patients with minor injuries
  treatment:
  • Small lacerations
  • Burns <20% BSA
  • Musculoskeletal injuries without shock
  • Stunned!

Triage

• "BLUE CODE / Expectant" ("P4") = The gasping / agonal or obviously dead:
(sometimes called black or grey codes):
  -- Patients who are obviously dead or who have apparently mortal injuries.

Triage - Reality Check - KISS!!!!

• To summarise - Keep it simple stupid!! :
  -- remove the walking ABCD intact green codes = +/- 80%
  -- the +/-20% left behind are all horizontal -
    • horizontal and gurgling with ABCD compromised = red codes = 1st priority
    • horizontal with intact ABC so are able to cry for help = yellow codes = 2nd priority
    • and the horizontal with ABCD foo- baa and dead or dying = blue codes = leave alone
Triage Tag - fold to show appropriate colour on outside

- P1 Immediate A B C
- P2 Urgent D
- P3 Delayed or walking wounded
- P4 Dead or Expectant

Triage

START Triage

1) Simple triage and rapid treatment
2) Limited assessment of patient’s ability to walk, respiratory status, hemodynamic status, and neurologic status
JumpSTART Triage for Pediatric Patients

3) Hemodynamic status—no distal pulse, immediate priority
4) Neurologic status
   a. responses will vary based on development
   b. unresponsive or responding to pain by posturing or with incomprehensible sounds or unable to localize pain in an immediate priority
   c. alert or able to localize pain is a delayed priority

Triage Special Considerations

1) Hysterical and disruptive patients
   a. immediate priority to be transported out of the disaster site
   b. Panic breeds panic
2) A sick or injured rescuer
   a. immediate priority to be transported
3) Hazardous materials and weapons of mass destruction incidents

Transportation of Patients

1) Immediate (red) or delayed (yellow) should be transported by ambulance
2) With extreme situations, “walking wounded” are transported by bus
3) Immediate priority patients are transported two at a time until they are all transported
4) Delayed are transported two or three at a time
5) Slightly injured are transported
6) Expectant patients who are still alive would receive transport and treatment
Who is In charge

• Incident Command System

Volunteer vs professional

Incident Command Training

• National Incident Management System - All providers and hospital management personnel:
• ICS 100- 1CS 200 (Incident Command System)
• NIMS 700

Access through your local Emergency Management Agency/Director or at FEMA Site
Communication

- Language
- Phones
- Radio
- Runners
- Horseback
- Bikes
- Motor Bikes

Volunteer

Red Cross
Salvation Army
Boy /Girl Scouts
“Civil Defense” – Emergency Management
Church/faith Based Organizations (LDS)
volunteers

Professional

- Emergency Management-Director EM is boss with official declaration
- Fire (EM may be a division of the fire department in many municipalities)
- Police
- EMS (often a separate division of Fire/rescue)
- Military (Army, Navy, Air, Marines Coast Guard) strict usage rules,
  - National Guard, reserves (Governors Control)
  - Civil Air Patrol
- Public Health - CDC, UPHS, DMAT,
- *note all of these may have volunteer components. During emergency they become authorized

Ethic and Law

Understand the ethical and legal issues in disaster response. These include:
- (a) their professional and moral responsibility to treat victims (including those with potentially contagious conditions);
- (b) their rights and responsibilities to protect themselves from harm;
- (c) issues surrounding their responsibilities and rights as volunteers, and
- (d) associated liability issues.
Organizations/Credentialing

- Most medical relief workers participate via non-governmental organizations (NGOs),
- on Disaster Medical Assistance Teams (DMATS) through the U.S. National Disaster Medical System (NDMS), or
- through other teams organized by charities or state and local governments.
- Volunteering through established emergency response organizations helps to ensure verification of all responders’ credentials in advance. In addition, all workers should carry copies of their license and certification to present when they report, or when asked to verify their status.

State Laws/Federal Exemptions

- DMAT members are required to maintain appropriate certifications and state licensure.
- When a DMAT is federally activated, its members become federal employees and are exempt from state licensure requirements. In addition, as federal employees they are protected by the Federal Tort Claims Act, under which the federal government becomes the defendant in the event of a malpractice claim.
- It should be noted that DMATS are primarily a domestic asset and, with the exception of the International Medical-Surgical Response Team (IMsURT) component of NDMS, their preparedness, training and credentialing is limited to the continental United States. In contrast, members of the Medical Reserve Corps may be deployed internationally or domestically.
• Cultural beliefs, governmental regulations, political instability, and lack of established standards of health care may pre-date the incipient disaster event.
• PAs need to investigate international disaster relief standards and response organizations before volunteering.
• PAs also need to consider the possibility that host countries may refuse foreign assistance, and should be respectful of that decision.

“T’m a Physician Assistant.”

Medical and Public Health 34
• 11/30/2007
• U.S. Department of Homeland Security
• Federal Emergency Management Agency
30. Physician Assistant
• DESCRIPTION:
• A physician assistant is a health care professional trained in health promotion, disease prevention and comprehensive health care in collaboration with licensed independent providers.
Do Not just “show up”-

• One of the simplest things a PA can do as an individual to lessen the burden is to resist the urge to simply show up at a disaster site.

• To contribute productively to disaster relief, individual PAs must plan in advance by joining a competent, organized relief organization.

BUT.....

• Community response..
• Time till organized help arrives
• Expectations of leadership
• Size and location of “Community”

Be Prepared

• Ill-prepared relief workers compound disaster by increasing demands on potentially limited resources. They may need water, food, and shelter;
• have incompatible radio systems that complicate communications, and be unwilling to accept unexpected assignments as necessary.
• These responder-generated demands can be somewhat alleviated with foresight, preparedness courses, and individual preparation for role variation found in complex situations.
• Responders may need to be fully self-sufficient so as to not drain precious limited infrastructure resources and further deplete supplies for
• Relief workers participating in multi-organizational efforts often find themselves in situations ranging from “overload” to “hurry-up-and-wait.”
• PA relief workers need to prepare themselves for the possibility of non-medical assignments and try to remain flexible in the midst of chaos. That chaos may come in the form of unanticipated roles, non-medical assignments, or a lack of law and order.
• PA relief workers should assess the safety issues of a given area and check to see if the agencies they are working with have adequate security. Those traveling into non-secure arenas must be aware of the presence of danger and the availability or lack of assistance.

• The Haiti Water issue
Military responders set up a camp with improper sanitation and contaminated a major water source

FEMA Training
• Incident command
• http://www.training.fema.gov/is/courseoverview.aspx?code=IS-100.b

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- Dayton, Ohio Area Hospital & Health Care
- Current Kettering Medical Center
- Disaster Medical Assistance Team Ohio 5,
- Department of Health and Human Services
- Previous Springfield Emergency Physicians, Inc.

CBRNE training
- Healthcare (HC)
- Individuals who provide clinical, forensic, and administrative skills in hospitals, physician offices, and clinics including surveillance (passive and active), diagnosis, laboratory evaluation, treatment, mental health support, epidemiology investigation, evidence collection, along with fatality management for humans and animals. This category includes: Hospital Administrators/Executives, Physicians, Dentists, Nurses, Physician Extenders (Physician Assistants and Nurse Practitioners), Veterinarians, Pharmacists, and Technicians, Medical Examiners/Coroners, Therapists, Epidemiologists, Facility Management, Security, Environmental Investigators, and Medical Records
• https://ein.az.gov/

• http://www.emergencykitcookoff.org/
A string of thoughts
Shelter in Place
• What do you need to stay where you are for:
  • 12 hours
  • A day
  • 3 days
  • A week
  • ......What if you had to leave where you are?
• What do you take?

Consider in your Office
• Items to share ’
• N95 masks
• Gloves
• Emergency Medications

• Eg: Bethel Alaska: “We are out of Tylenol”
Communication Plan

- Pre determined
- Tested

Use of Phones

- Text, don’t talk!
- Unless you are in danger, send a text.
- Texts may have an easier time getting through than phone calls, and you don’t want to tie up phone lines needed by emergency workers.

Phone Lines

- Fax line may work when others are down
Emergency Contact List

- Create a contact list of all the phone numbers of family, friends and especially work supervisors. Print it on a business card and laminate it. Provide to all family members.

Pre plan equipment

- WHO standard diagnostic medical Equipment

- Improvisation

The Prepared Office

- Grab and go Bag(s) – service the area outside office
- Communications- FRS Walkie talkies
- Water- Bottled , portable
- Lighting Portable- Head lamps preferred
- Food
- Key medications
- Key medical materials
Rehearsal

• Clear expectations for office personnel
• Training and practice
• Mutual aid agreements in the office “community “ complex

Improvised medicine

• Sterilization
• Clean make do
• Wound closure
• Super glue
• 1001 uses for duct Tape
• Cardboard
• Magazines
• Paper Mache (water and flour)

Improvised medicine

**Oral rehydration Solution:**
• 1 L (1 quart)=5 cupfuls clean water (filter or boil)
• 1 level teaspoon of salt
• 8 level teaspoons of sugar
• Add .5 cup orange juice or half of a mashed banana=Potassium and improved taste
Boiling Water

- Clean water 100 degrees Celsius (212 F) x 10-30 minutes AT SEA LEVEL (Colorado...or mtns above 7000k...longer
- 5 minutes for each 500 meters (theory)
- Boil cool Boil method

Improvise

- Wire hanger Bed Linen tent (Burns)
- Wooden Chair Back Rest (COPD)
- Window Box cooler
- Window Box IV Heater
- Newspaper-Cones for Bedside trashcan, Vomit Basin
- Insulation for delivery

Disinfectant

- Household chlorine bleach and medicine dropper
- When diluted nine parts water
to one part bleach, bleach can be used as a disinfectant.
- Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
Toilet

- Hole in Chair with Bucket
- Screening
- Do not contaminate water/food
- Odor control

Foods

Where
- For the office/Workplace
- For the home
- In your car

- ......YOU HAVE A CAN OPENER IN YOUR KIT?

What kind of training?

[Image of FEMA group]
CERT

Awareness and Prevention

Summary

• Disasters Happen- Big or small
• PA- Be prepared you WILL be looke to for leadership and response
• And be expected to know what to do...and how to do it, after all.......  
• PA's Know everything don't they??
Resilience

- According to a 2012 National Research Council report modified definition, “individual, community, and national resilience is the ability to prepare and plan for, absorb, respond, recover from, and more successfully adapt to adverse events.
- No person or place is immune from disasters or disaster-related losses. Infectious disease outbreaks, acts of terrorism, social unrest, or financial disasters as well as natural hazards can all lead to large-scale consequences for the nation and its communities.
- Enhanced resilience allows better anticipation of disasters and better planning to reduce disaster losses, rather than waiting for an event to occur and paying for it afterward” (NRC, 2012, p.16). Individuals and communities that are more resilient fare better in disasters (NRC, 2012; Plough et al., 2013).

Resources/Training

- CDC-office of public Health Preparedness and Response
  - http://www.cdc.gov/phpr/
- Clinician Outreach and Communication Activity (COCA)
  - http://emergency.cdc.gov/coca/trainingresources.asp

Resources /Training

- https://cdp.dhs.gov/training/resident
- http://training.fema.gov/is/
**F4ree course**


- [https://cdp.dhs.gov/videos/healthcare-leadership-for-mass-casualty-incidents.mp4](https://cdp.dhs.gov/videos/healthcare-leadership-for-mass-casualty-incidents.mp4)

- [https://cdp.dhs.gov/training/courses/emo](https://cdp.dhs.gov/training/courses/emo)


**HERT**

Specific Health Courses and manuals

- http://mwperlc.arizona.edu/training-information

Influenza Community Handbook: From Basics to Prevention
Points of Dispensing: A Pocket Guide

12 Steps to Conducting an Outbreak Investigation: A Wallet
Guide for public Health Professionals

Mass Fatality Planning Reference Guide

University of Arizona-Mountain West
Preparedness & Emergency Learning Center

- http://mwperlc.arizona.edu/Mass Fatality Planning Workshop
- Forensic Epidemiology: Joint Training for Law Enforcement & Public Health Professionals
- Active Shooter: How to Confront the Unthinkable Seminar
- Role of Environmental Health Professionals in Public Health Emergencies Workshop
- Multi-Jurisdictional Response Planning Forum