

Preparedness

For EMS Providers and Their Families
during Emergencies and Deployments
(Course Outline)



2009
Office of Emergency Medical Services
Virginia Department of Health
Richmond, VA

I. COURSE OUTLINE

- A On completion of this briefing students will be able to:
- 1 Increase their knowledge of Emergency Preparedness and what it means to the EMS First Responder
 - 2 List statistical and other reasons why people don't prepare
 - 3 Be aware of situations that might cause an emergency or disaster situation in Virginia
 - 4 Discuss preparedness elements and what it means for them and their families
 - 5 Be familiar with some elements of agency/family deployment planning
 - 6 Be familiar with elements of a family disaster kit

II. TYPES OF EMERGENCIES AND DISASTERS

- A Disasters are not new to the 20th or 21st century.
- B But there are a lot more people effected in a more confined space
- C There are all types of events, natural and manmade, that can cause a disaster situation for EMS providers and our families



1871 Chicago Fire

III. NATURAL DISASTERS

- A Flooding and Flash Floods
- 1 **Flash floods** are the #1 killer in natural disasters in the US
 - 2 **Just 2 feet of moving water will have enough force to lift up an SUV size vehicle and carry it away!**
 - 3 From 1996-2005 Virginia experienced 14 flood related declared disasters (including flooding from Floyd, Jeanne, Isabel, Bonnie, Fran, Dennis and TS Ernesto and Gaston)
 - 4 Storm surge is what flooded Gulfport and other Gulf cities during Hurricane Katrina (up to 26 ft. of water 2 miles inland) (*Major coastal cities (Norfolk, Newport News, Virginia Beach, Chesapeake) in VA are on the average around 15 feet above sea level*)
- B Hurricanes
- 1 In addition to damage from flooding there is the danger from damaging winds, high straight winds and individual tornados formed from the counter clockwise rotation of the storm.



2008 Suffolk Tornado

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- 2 Colorado State University, Department of Atmospheric Science 2009 Atlantic Hurricane prediction model predicts 12 named tropical storms with 6 turning into hurricanes. This is around average probability
- 3 They also predict a 54% chance of a major hurricane (CAT. 3, 4, or 5) coming ashore on the East Coast of the US (slightly above average)
- 4 Full report <http://hurricane.atmos.colostate.edu/forecasts/>

C Tornados

- 1 Associated with Hurricanes but commonly occur with severe thunderstorms
- 2 In VA likely between April and October (most common in July)
- 3 Generally in VA 70-100 mph winds (but can be higher)
- 4 Last from few seconds to over an hour
- 5 1950-2000 Virginia experienced 376 documented tornados (some may be undocumented – does not include straight-wind activity)
- 6 65 deaths since 1916, but much damage to property and many injuries
- 7 April 2008
 - a Hanover (EF-0) \$100,000
 - b Colonial Heights (EF 3?) ≈\$2 million (18 injured)
 - c Suffolk (EF 3)>\$23 million (200 injured)

D Thunderstorms

- 1 Year round
- 2 Produce lightening, hail, or tornados
- 3 35-45 per year
- 4 Danger from power outages and minor flooding
- 5 Down-burst winds from 50-70 mph



Thunderstorm over Arlington

E Winter Weather

- 1 Damage from falling trees, flooding and icy conditions
- 2 May not be able to leave the house
- 3 Deaths and injuries most often come from temperature, accidents, and overexertion
 - a Utility outage
 - b Medical Problems

F Wild Fires

- 1 **DO** occur in Virginia
- 2 Most damaging in Wildland-Urban Interface (WUI) area
 - a Greatest risk for human interaction
- 3 Probably not that many more than in the past – but more dangerous because of larger WUI
- 4 Because of rural nature harder to contain and control
- 5 2008 45-year record set
 - a Most acreage since 1963 (25,700 not including Federal land)
 - b State spent \$793,818.00
- 6 Wildfires in Virginia 2009 (as of June)
 - a Arlington
 - b Virginia Beach
 - c Ruckersville
 - d Afton/Nelson County
 - e Chesterfield
 - f Goochland
 - g Suffolk

IV. MANMADE

- A Manmade threats are categorized based on the intent of the aggressor
- 1 Unintentional hazards are those that are accidental, caused by human errors and omissions, or technological, caused by equipment failure.
 - 2 Intentional hazards are the result of coercion, manipulation, or social influence.

B Technical

- 1 HAZMAT
 - a Chemical in nature
 - b Can happen during production, storage, transportation, use, or storage
 - c VA has over 2000 calls per year
 - d Release of flammable liquids most common
 - e Homes, businesses, schools, and other infrastructure can be affected –especially if release is airborne



HAZMAT clean up after flooding in SW VA

- 2 Building Collapse
 - a Could cause HAZMAT
 - b Other things that can affect your neighborhood
 - c Fires
 - d Excessive debris
 - e Closed roads
 - f Other
 - g Picture of Eggleston Hotel at Jackson and Lee Street in Richmond (April 2009)



Eggleston Hotel collapse in Richmond
April 2009

- 3 Transportation
 - a Can cause HAZMAT threat to near by neighborhoods
 - b Fire danger
 - c Debris problems
 - d Collapsed structure and transportation accidents always include EMS
 - e Become big multiagency events very fast
 - f Local, State and Federal investigations (State Police, NTSB, FAA, etc.)
 - g If you are a responder there may be several days of response before all persons are accounted for

V. OTHER EMERGENCIES

A Civil or Political Disorder

- 1 First Amendment right to peaceable assembly and to petition government to address grievances
- 2 Sometimes line is crossed
 - a “Hot Topics”
 - b Racial tensions
 - c Abortion Clinics
 - d Research Labs
- 3 Might not be “negative”
 - a Major sporting events
 - b Concerts
 - c Block parties

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- d Political events
- 4 Often product of “group-think” situation
- 5 Examples in VA
 - a Coal mine strike 1980 and 1989 (work conditions and pay)
 - b Virginia Beach Riots 1989 (too much partying)
 - c Alexandria City Disorders 1970 (over taxation)
 - d Motormen’s Riot 1903 (over work conditions)
- 6 States around us have their fair share to which VA responders may be called to assist in
- B Terrorism
 - 1 Generally politically motivated crime to elicit fear, panic, or disorder
 - 2 May require responders and their families to evacuate or shelter-in-place
 - 3 May set up a “deployment” situation for responders
 - 4 Common methods
 - a Releases
 - (i) CBRN (Chemical, biological, radiological, nuclear)
 - (ii) Examples – Anthrax attacks – Florida/New York/DC after 9/11, Risin Attacks – South Carolina 2003
 - 5 Bombs/Explosions
 - a Large (OK City) or Small (Atlanta Olympics)
 - b Commercial or handmade
 - c Can be dirty (radioactive material mixed with conventional explosives)
 - 6 Even if your family is not directly impacted by event, they may be indirectly impacted by contaminated water or food supplies or the collapse of other delivery or social structures
- C Pandemics
 - 1 Communities (will effect both families and whole communities)
 - a More people
 - b More mobile



Pentagon –September 11, 2001

- c Global economy
- 2 Health care workers including first responders and other public safety personnel may be at higher risk from repeated exposure
- 3 How can we protect our families while doing our job?
 - a PPE
 - b Planning (Workplace/personnel)
- D Even if your family is not directly impacted by event, they may be indirectly impacted by contaminated water or food supplies or the collapse of other delivery or social structures
- E The question is: Is your family ready?
- F Communities generally have emergency response plans, but it is your responsibility to make sure your family is as ready as they can be.

VI. WHY DON'T WE BETTER PREPARE?

*"We as human societies have yet to understand . . . that nature doesn't care.
And for that reason we must care."
Kathleen Tierney (National Hazards Center)*

- A The real challenge in the U.S. today is not predicting catastrophes. We can do that. The challenge that apparently lies beyond our grasp is to prepare for them.**
- B We as individuals under-perceive risks**
- C Bad things can happen . . . they are made much worse by our own lack of ambition—our willful blindness to our actual risk
- D 91% of Americans believe it is important to be prepared for emergencies
- E But; only 55 % have reported that they have taken steps to prepare (Ad Council)

In times of crisis, our greatest enemy is rarely the event itself. More often, it is ourselves.

- F 2006 analysis of state and urban emergency plans around the country conclude that most "cannot be characterized as fully adequate, feasible, or acceptable."**
- G Not just bureaucrats who are unprepared. Regular people are even less likely to plan ahead.

H 2006 TIME poll:

50% had experienced a natural disaster or public emergency
16% felt “very well prepared” for next one.

I Fact:

91% of Americans live in places at a moderate-to-high risk for earthquakes, volcanoes, tornadoes, wildfire, hurricanes, flooding, high wind damage, or terrorism.

J Americans have a tendency to be die-hard optimist (literally!)

K Part of what makes America great.

L Four stages of denial in emergencies and disasters:

- 1 Stage 1 – It won’t happen**
- 2 Stage 2 – It won’t happen to me (or my family)**
- 3 Stage 3 – If it happens to me, it won’t be that bad**
- 4 Stage 4 – If it happens to me and it’s bad, there’s nothing I can do to stop it anyway.**

M Not only poor fail to evacuate in an emergency

N Survey of 2,000 people in eight hurricane-prone states

- 1 33% would not leave - 39% of those were homeowners
- 2 68% believed that their homes were build well enough to survive the storm
- 3 66% were confident that if they stayed at home they would eventually be rescued (a faith hardly justified by Katrina)

O More than 50% of Americans live in coastal areas (most of you are considered to live in a coastal area)

P Federal system is not build to plan for—or respond to—massive disasters

- 1 Not how Founding Fathers designed the system
- 2 Cannot easily force/compel states or companies to act**

VII. BEATING THE ODDS

A Why should we prepare?

- 1 Emergencies and disasters can strike anyone, anytime, and anywhere. The can happen quickly and without warning, and they can force you and/or your family to evacuate your neighborhood or require you to stay in your home.**

- 2 Traditionally people tend not to think about disasters until they are in the middle of one
- B What should EMS responders do additionally to prepare themselves and their families for emergencies?
 - 1 **Preparation reduces fear, confusion, and loss. It can also prepare you family for your role as an emergency responder and coping successfully without you during your absence.**
 - 2 **Responders should ask themselves these questions:**
 - a How would my family cope if basic services like water, gas, electricity, or telephones were disrupted?
 - b Often help does not come right away – or cannot help all who need help. Can your family cope?
 - c What if your family became separated during an emergency – Would they be able to find one another?
 - d If you have to go to work or are deployed out of the area, does your family know what to do? Can they do it without you?
- C Find out what could happen to you or your family in **your** community
- D Make sure everyone understands that they each have a role to play during an emergency.
- E Make sure your family knows your role in your agency and community. Help them understand your job
- F **One of the lessons learned from 9/11 is that families of public safety workers who had an effective plan to deal with the emergency and the absence of their responder loved ones generally managed better than those without one**
- G Not only must you be prepared to deal with the emergency, but loved ones must be prepared to deal with the household, finances, etc and do it without you until you return. **AND... you must feel that that can happen to make you an effective EMS responder.**
- H Responders who know that their families are secure and taken care of in their absence will be better able to concentrate on the tasks at hand. – Necessary to do their job and prevent injury

VIII. HOW DO WE PREPARE?

- A We prepare our family!!
- B For emergencies and possible deployments!
 - 1 Develop a kit of emergency supplies
 - 2 Make a plan for what your family will



Take three easy steps
to protect your loved
ones in an emergency.

www.ready.gov OR www.readyvirginia.gov

do in an emergency

- 3 Be informed about what might happen in your area
- 4 If possible, have your family get involved in preparing your community

IX. FAMILY DISASTER KIT

- A Having a disaster supply kit is essential to making it through a disaster safely
- B Make sure to have supplies on hand to last each person for at least 5 days
 - 1 Think first about fresh water, food, and clean air
 - 2 Then include the things that will make you comfortable
 - 3 You may see 3 days quoted on some lists, but we suggest 5 days
- C More information at end of presentation
- D Considering making 2 kits
 - 1 One for sheltering in place
 - 2 One for evacuation



Family Disaster Kit

X. HAVE A PLAN

- A Every family should have a plan
- B Talk to your children's school and other employers about emergency plans
- C Talk to your neighbors about how your families might work together in times of emergency or disaster
- D **Example:** The likelihood of you and your family surviving a house fire depends as much on having a working smoke detector and an exit strategy, as much as on a well-trained fire department. The same is true for surviving other emergencies.

XI. PLANNING ELEMENTS

- A Your family may not be together when disaster strikes, so it is important to plan in advance: how you will contact one another; how you will get back together; and what you will do in different situations
- B Meeting Place
 - 1 Choose them in different directions
 - a In the neighborhood
 - b Outside the neighborhood
 - 2 **Make sure everyone in the family know where each meeting place is located**

- 3 If you have children, make sure it is clear who is responsible for getting them to the meeting sight or make sure they know how to get there and have the means to do so. (bus tokens, bike, car, etc.)

C Communications

- 1 Consider a plan where each family member calls, or emails, the same friend or relative in the event of an emergency.
- 2 It might be easier to make a long-distance phone call than to call across town, so an out-of-town contact may be in a better position to communicate among separated family members
- 3 Be sure each person knows the phone number and has coins, a prepaid calling card, or know how to make a collect call (if ok with recipient)
- 4 Use common sense and information you know about the situation to determine if there is immediate danger. **Watch TV or listen to radio for official instructions.**

D Special Needs

- 1 Do you have family members that rely on special supplies/devices or require special diets or medication
- 2 How and where will you get these things during an emergency

E Pets

- 1 Remember to include any pets you have in your plan (including large animals)
- 2 Where will they go
- 3 Who will take care of them
- 4 How will you transport them
- 5 Remember if you have to evacuate and go to a shelter or hotel, not all of them accept pets
- 6 Pack for your pet in your emergency kit, include their food and medications also.
- 7 Remember to have copies of all of their shots and licenses if you have to evacuate.
- 8 Include pictures of your pets in case they become separated from you.
- 9 Plan ahead if you need to board your pet.

F Stay or Go

- 1 Make sure your plans cover “Staying” (Sheltering-in-place) AND “Going” (Evacuating)

- 2 Each situation will require different things, e.g. plan for sealing house vs. different routes for leaving area.

XII. STAY INFORMED

- 1 Before, during and after an event, it is critical that you and your family listen for the most local, up-to-date information from emergency officials.
- 2 Local media will convey instructions from local, state, and federal government partners, such as:
 - a Orders to evacuate
 - b Details about evacuation routes
 - c Locations of evacuation shelters
 - d How to safely stay where you are
 - e Where to find assistance
 - f Weather warnings and watches

XIII. WHAT MAKES IT SO IMPORTANT FOR EMS RESPONDERS TO PREPARE?

- A Responders should ask themselves the following questions:
 - 1 Does my family know how to survive a disaster or my deployment to a disaster without me?
 - 2 Have I/we done everything I/we could to prepare the family?
- B If you have to answer “no” or “I don’t know” to either of these questions then you need to go back and look at how you have prepared your family for emergencies or your deployment to an emergency
- C EMS first responders both career and volunteer will be needed in times of disaster
- D We can be both responder and victim at the same time and this is a very stressful situation to be in
- E Because we may not be with our family during an event, our part in our family’s plan must be pre-done or taken care of another way if we are not there.
- F Specialized planning helps families and responders prepare for and cope with challenges they may face while apart during deployments
 - 1 Family roles may change during an emergency or disaster – especially if one of the key family member is away

XIV. WHAT DO WE AS EMS PROVIDERS NEED TO PLAN FOR IN ADDITION TO OUR BASIC FAMILY PLAN?

- A In the event of a large scale emergency it’s not if you will respond, it’s when you respond.

B Hopefully your agency has an emergency plan that includes your family – but, ultimately it is up to you to take care or make sure they are taken care of during the emergency

C Pre-Incident/Pre-Deployment Plan

1 Why?

a Several good reasons:

(i) While most families plan to avoid disasters, families of public safety workers must prepare for loved ones to head directly into one

(ii) Most families work together as a unit – families of public safety workers may have to operate without their loved ones, and have the added worry of their safety

(iii) A deployment pre-plan can help families prepare for and cope with the challenges they may face while their loved ones are responding

(iv) Public safety workers must equip their families with the tools they need in such a difficult time. Education and pre-planning can be some of the best tools



Deployment
(Hurricane Katrina)

2 Plan Elements

a Obtain Information

(i) about disasters or other large-scale incidents that might impact your family (and how it might impact your family)

b Hold Family Meeting

(i) Talk to members about steps in developing plan and why it's important.

(ii) Use scenarios, and talk about family member roles and how the family might be affected

c Develop Your Family's Plan

(i) Tailored to your family's needs

(ii) Involve the entire family (including children).

(iii) Make sure everyone knows their role or roles and how they might change if the family first responder is called away.

d Practice the Plan

(i) Several times to make sure everyone understands their jobs.

(ii) Review and/or practice about every 6 months.

e Modify and Update Your Plan

(i) Especially as situations change in the family, adding or subtracting members living in the household, etc.

3 Make sure your family's plan is:

- a Simple and easy to follow
- b Flexible and allows for change
- c Comprehensive and covers both short- and long-term deployment situations
- d Accounts for the absence of both parents (if applicable)**
- e Accounts for the care of all dependents (children, pets, elderly)
- f Supports practical matters (bills, legal matters, medical care, emergency access to cash)
- g Identifies where/how family members will get information about the incident and their responder's status
- h Allows for normal routines as much as possible (especially for children)
- i Includes activities that allows for children to contribute (allows for sense of security and control)
- j Identifies all responsibilities and participants (names, contact information, identified responsibilities)

4 When developing your plan, it will help to:

- a Make a list of needs the family may have in the event of deployment and identify areas where back-up assistance may be necessary
- b Create a list of helpers (trusted extended family, friends, and/or neighbors) who are willing to be assigned responsibilities
- c Identify potential back-ups for every essential role (e.g., picking up kids from school, feeding pets)

5 After the plan is complete:

- a Provide a copy to all plan participants
- b Keep copies in easy-to-find places
- c Keep a separate, update list of relevant resources and contact information, in the event of an emergency

XV. WHAT OTHER RESPONDERS AND FAMILY MEMBERS SAY

- A Responder (from DC, Maryland, and Virginia) comments about 9/11 response to the Pentagon
- 1 *“Not being able to communicate with family members is very hard . . . It was very tough the whole day.”*
 - 2 *“I was worried about the kids, like everybody else . . . you didn’t know what to do with the school, the kids. Did the school keep the kids?”*
 - 3 *“It is all about pre-incident education, understanding. I mean that is everything. It’s all about what happens before the incident. You’re too late if you’re first identifying an issue after the event’s occurred and you’ve been through the event. It’s too late to maximize the positive.”*
- B Family member comments
- 1 *“The worst part was that [my husband] and I couldn’t even talk to each other. So I didn’t know where he was, if he was okay. I had no idea . . . Just the thought that I didn’t know if he was alive or not . . . it was nerve-wracking. You know, I was just really devastated.”*
 - 2 *“I had absolutely no idea where to go to get . . . help. [My husband] would usually be my help if I was feeling in crisis. So I was feeling in crisis, but I had no idea . . . where to go or who to talk to. So I was feeling very lost.”*
 - 3 *“Systems of support [for] families [are] an opportunity to kind of share the wealth, because it goes both ways. I can maybe be supportive of other people, but they can also support me as a sounding board or just to be there so I know somebody else has walked in my shoes.”*
- C While all families worry about the well-being of their loved ones, families of responders who were deployed have their own set of challenges.
- D Families are not alone. The families of other responders are going through many of the same challenges. Supporting and assisting one another is a tool families have to ensure their well-being while their loved ones are away.
- E Some agencies have established formal family support networks. These networks were instrumental in keeping families informed about the activities of their loved ones while they [are] deployed. . .
- F The tragedies of the 1995 Oklahoma City Bombing, the September 11, 2001 terrorist attacks, and the hurricanes of 2005 underscore the need for all public safety personnel, their families, and their departments to better prepare for the possibility of personnel being involved in deployment to a large disaster

XVI. THINK ABOUT THIS . . .

- A While most families plan to avoid disasters, families of public safety workers must prepare for their loved ones to head directly into one
- B Most families work together as a unit – families of public safety workers may have to operate without their loved ones, and have the added worry of their safety
- C A deployment pre-plan can help families prepare for and cope with the challenges they may face while their loved ones are responding
- D Public safety workers must equip their families with the tools they need in such difficult times. Education and pre-planning can be some of their best tools

XVII. FINALLY . . .

- A Planning and preparing are vital parts of making sure our families are ready for any type of emergency that might happen in our area
- B Responders who know their families are secure and taken care of in their absence will be better able to concentrate on the tasks at hand
- C Once you have a plan commit a weekend at least once a year to updating telephone numbers, buying emergency supplies, and reviewing your emergency plan with everyone who has a part. (family, friends, neighbors)

Acknowledgements and Sources

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