

# Support to First Responders – Challenges for the Health Physicist

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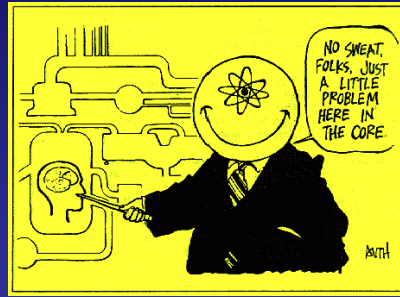
## Opening Doors

- Close knit groups who are leery of outsiders
- You don't need letters behind your name
- Introductions
  - Start in your community
  - Open House
  - Talk to people you know
- Volunteer some time, demonstrate your value
- Most important: become known by sight!



## Opening Doors – Prepare Yourself

- Beyond being technically proficient - understand emergency response
- Professionally consistent but realistic
- Translate science into realistic operations
- Prepare to be a talking head



## Opening Doors – Prepare Yourself

- Learn their language
  - Don't use radiation jargon
  - Analogies don't have to be perfect
- Before you present, understand
  - Their mission
  - Their procedures before you present to them
    - Avoid "I am not sure how you would....."
  - Their training
    - HAZMAT Awareness
    - HAZWOPER
  - Their perceptions

## Opening Doors – Awareness

- Study previous events
- Goiania Brazil, 1987
  - Discovery of incident
  - Scale of response
  - General public lessons
  - Medical management lessons
  - Cleanup lessons



## Fire Services

“The mission of the Arlington County Fire Department is to provide essential emergency and non-emergency services.

We are a quality organization dedicated to answering the needs of the Community with highly skilled people who care. We are committed to eliminating threats to life safety and property through education, prevention, and effective response to fire, medical and environmental emergencies. We will achieve our mission through teamwork, professionalism and a commitment to the people we serve.”



## Fire Services – Planning

- Planning
  - Develop procedures
  - Incorporate radiation into existing plans
- Population protection
  - Start with the ERG
  - Establish action levels beyond the ERG (shelter in place, relocation , evacuation)

## Fire Services – Technical Advice

- Detector Selection
  - Survey (pancake GM)
  - Dose (EPD, exposure rate)
  - Mass decon (portal monitors)
- Best detector or best operations
  - Don't forget to factor in the operator
  - How fast can it be put into operation?
  - Support and maintenance
  - Multiple functions
  - Weight and cube (limited area on rigs)

## Fire Services – Operations

- Response
  - Awareness (take a moment to look around)
  - Size up situation (do I need more resources)
  - Isolate the area (block it off)
  - Evacuate the area (protect the population)
  - Deny entry (who needs to be here)
  - Offensive actions (decontamination, suppression, containment)

## Fire Services – Operations

- Radiation Response
  - Awareness (Is radiation in my area)
  - Size up situation (What are the exposure rates)
  - Isolate the area (What is the standoff distance)
  - Evacuate the area (Shelter in place, relocate, or evacuate)
  - Deny entry (Trained personnel only)
  - Offensive actions (contamination control/cleanup)

## Fire Services – EMS

- Medical management takes precedence over radiological contamination
- Rely on receiving facilities to be able to handle contaminated patients
- On-site decontamination
  - Clothing removal
  - Wash down as medical condition permits

## Law Enforcement

“The mission of the Pentagon Police Department (PPD) is to promote high quality law enforcement and security services, in order to provide a safe and orderly work environment for the Department of Defense community in the National Capitol Region”



## Law Enforcement – Planning

- What constitutes a threat?
  - Legitimate sources
  - Medical patients (0.1% of population)
- Probable Cause
  - Is it legal to initiate a stop?
  - Can a detector provide?
- Alarm levels
  - How far above background?



## Law Enforcement – Technical Advice

- Detector Selection
  - They carry enough on their belt now....
  - False alarms
  - Innocent alarms
  - Detection sensitivity
  - Easy interaction

## Law Enforcement - Operations

- Special Events
  - High visibility targets
  - Security sweeps
- Large populations
  - Protest
  - County Fair
- Explosive distance

## Conclusion

- Your preparation is critical to success
- The support you can provide is greatly needed
- You can serve as a bridge between good science and effective response
- Efficient response early translates into a speedy recovery