

Basic Decontamination Before EMS Arrives



**CAPTAIN STEVE KELLY
WEST CHESTER FIRE DEPARTMENT
EMERGENCY MEDICAL SERVICES**

MAY 2011

Let's put this into context



“It’s right here Ray...it’s looking at me....”

Bill Murray “Ghostbusters

0:59

<http://www.youtube.com/watch?v=j2nYqyfDMnQ>

What is “contamination”?



- Webster's tells us its:
 - To soil, stain, corrupt, or infect by contact or association
 - To make inferior or impure
- We know it's even more simple than that:
 - If it's wet, sticky, gross, or not yours.....get it off of me!!!



How did we get here?



- Accidents do happen
 - Something gets spilled, leaks, or ruptures
 - Someone gets into something they shouldn't have
 - Someone gets hurt resulting in an exposure to blood or other bodily fluids

- First things first....
 - 1) Make sure it is safe for you to enter the area
 - 2) Make sure you don't become exposed or involved
 - 3) Try to get the person out of the environment and to a safer area

It would be nice to know....



- What the person was exposed to or contaminated by
 - MSDS forms are a great resource for you and EMS/Fire
- How they were exposed or contaminated
- Any medical problems they might have
 - Medical history
 - Current history related to this event/exposure
- Any steps you've taken to remove the contamination

So let's decontaminate.....

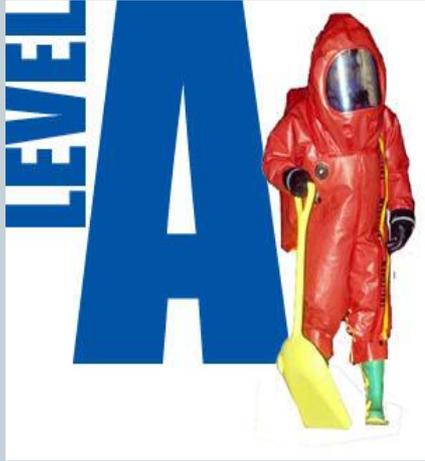
- Removal of the contaminating substance in a safe and effective manner for everyone involved
- Get the MSDS



Put on some appropriate protection

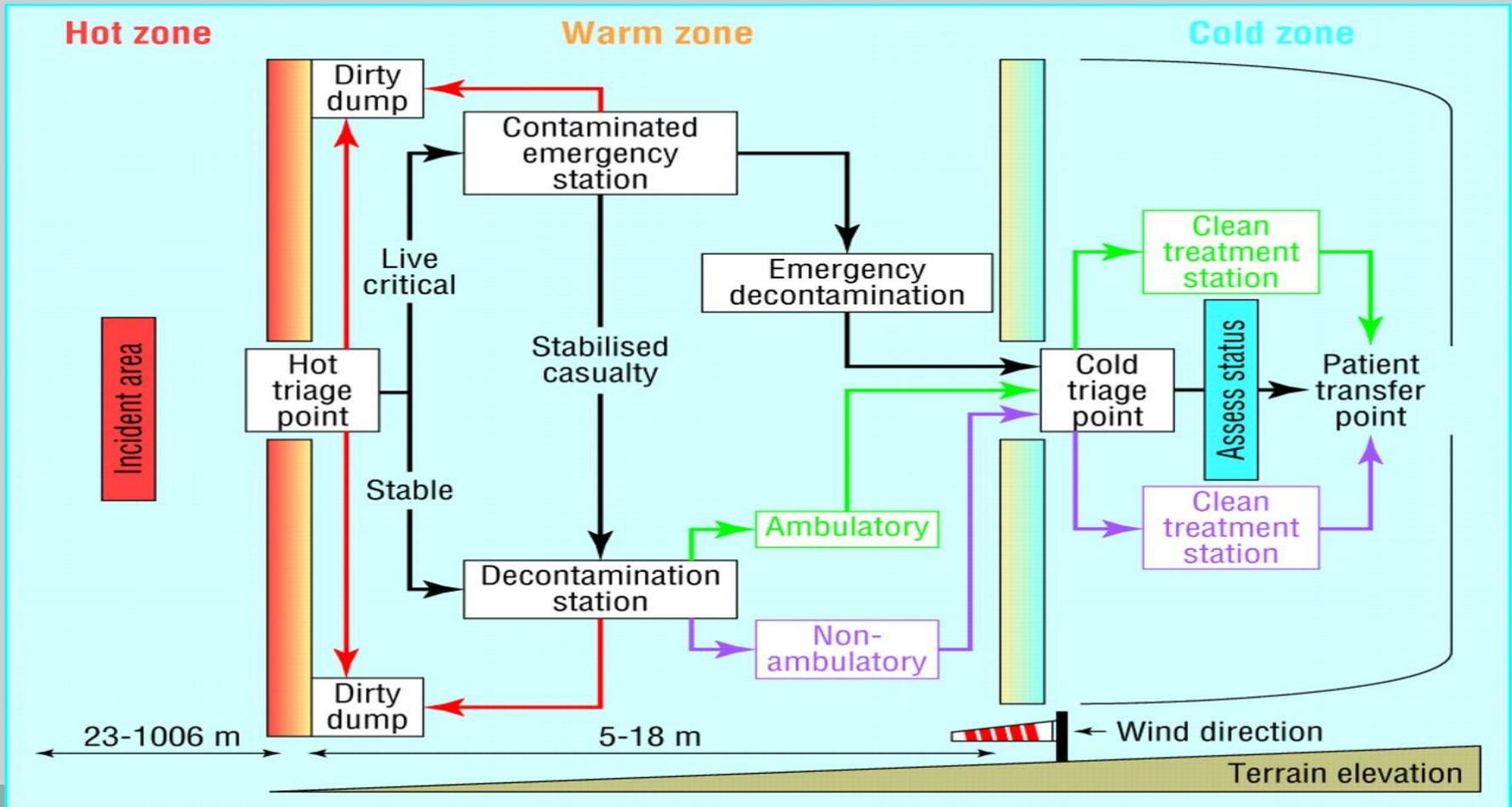
PPE for the substance or circumstances

Personal Protection



How do we do it?

It's this simple:



It really is relatively simple...



1. Get the person out of the substance/environment
2. Remove any product with simple wiping or brushing
3. Have them remove any contaminated clothing if needed
 - ✦ Be careful not to get it in their eyes, nose, mouth
4. Check the MSDS for reactivity to water
5. Flush the affected area with large amounts of water

How much water should I use?



- There is never too much, just make sure they can breathe.....
- “The solution to pollution is dilution”
- Any contaminated person should be flushed for 10 -20 minutes
 - Eye flush for 15-20 mins

Commercial Systems



Ok, they're clean. Now what?

- Dry them off
- Wrap them up!
 - Keep them warm
- Attend to any secondary injuries
- Gather additional info for EMS



Wash your hands!



- Above all else, wash your hands thoroughly
- Hand cleansers are ok for temporary cleaning, but you ultimately need to wash properly



FIGHT GERMS BY WASHING YOUR HANDS!

1 Wet your hands

2 Soap

3 Lather and scrub - 20 sec

4 Rinse - 10 sec

5 Turn off tap

6 Dry your hands

DONT FORGET TO WASH:

- between your fingers
- under your nails
- the tops of your hands



Cleaning Solutions



- Simple Bleach Mixture
 - Mix 1/4 cup of bleach to one gallon of water
 - ✦ Great for heavier decontamination
- Use a commercial kit, if available



Disinfection



- Surface puddles or large amounts
 - Clean, scoop, or wipe up as much as you can



- Apply disinfectant liberally to the area and let stand
 - ✦ Average time to kill most germs is 10 minutes
 - ✦ Wipe down area after 10 minutes
 - ✦ If area became dry, reapply disinfectant lightly and then wipe down again

Use whatever you can find that kills nasties



Sharps & Biohazard Waste

- Make sure anything sharp goes into the proper container



- If you're not sure what to do with it, give it to EMS

- Infectious waste must be disposed of properly
 - Contaminated by blood or other bodily fluids



- Dispose of according to your company's policies & procedures

Last but not least.....



- Document, document, document
- Someone is going to come along to ask questions at some point
- Write down:
 - ✦ what happened (objectively, no opinions please)
 - ✦ what you did
 - ✦ who was there (including witnesses)
 - ✦ any other important information
- Write everything like you have to read it in a few years and these are your notes

Summary



We talked about:

Contamination

Decontamination

Proper protective equipment

How to decontaminate

How to clean up and disinfect

The need to document everything

Are there any questions?

