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## **HAZMAT MASS DECONTAMINATION (1.1)**

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### **TASK SKILL DESCRIPTION AND DETAILS**

**Definition:** Mass decontamination (decon) is a gross decontamination process that relies on the use of water or soap and water solutions to flush the majority of the contaminant from individuals.

**Task:** To safely and effectively decon a large quantity of people utilizing the Decon Trailer, the DRASH Unit or multiple apparatus with hose lines. In this training manual page, we will discuss utilizing the DRASH unit and apparatus.

#### **Participation:**

The first step in mass decontamination is determining the appropriate level of protective clothing for first responders. Typically, structural bunker gear and SCBA suffice but the use of Level B splash protective clothing with SCBA is also an option. Consult with the Hazmat Technical Reference Officer and the Decon Officer.

The second step in a mass decon scenario is crowd control and decon prioritization.

- The use of law enforcement and EMS for crowd control is a great tool for us to use initially so that we can focus on the decon setup and process. Establishing an area of safe refuge and maintaining effective site management control is critical until the decon corridor is setup.
- Those individuals showing signs and symptoms of exposure should be the first ones through the decon process. Those who still have material on them or who are severely symptomatic should be decontaminated in a timely manner.
- Injured or contaminated patients need to be sorted into ambulatory and nonambulatory groups. Emphasis on decontaminating nonambulatory patients quickly needs to be addressed so they can seek medical attention as soon as possible.
- Thought and consideration for where the decontaminated patients will go will also need to be addressed. An area big enough to hold all the patients, typically indoors should be a priority.
- Cold weather operations should not curtail the use of mass decon as long as the patients are moved somewhere warm as soon as possible.
- Providing patient modesty should also be considered during and after mass decon, but it's not the top priority. There are patient garments on the hazmat truck to be used in such instances.

Blankets from ambulances and tarps from apparatus may also be used. Utilizing the DRASH unit and the decon trailer provide better patient modesty than the apparatus approach.

### **DRASH Unit Operation:**

- 1) Establish decontamination corridors and contain all the potentially contaminated individuals.



- 2) Position at least one fire apparatus near the spot you want to set up the DRASH unit. Securing a water source will most likely be needed.

- 3) Locate the DRASH unit and all its components on the Hazmat Truck.



- 4) Set up DRASH unit containment pool with the tarp underneath it. Use ground stakes to secure it if possible. Install plastic grates inside the pool.



5) Unfold and erect blue DRASH unit tent and place inside containment pool.



6) Install the privacy curtain and all water connections to the DRASH unit. Ensure proper flow (starting at 50 PSI) and function of spray nozzles.



7) Set up parking cones and/or caution tape to funnel contaminated patients to decon in the DRASH unit. Also make trash bags readily available for patients to throw clothes away once undressed and patient garments and blankets once they are through decon. All decon personnel should be properly dressed at this point and ready to go.



8) Once everything is ready and operational, instruct patients to approach the DRASH unit, funneling through the cones in an orderly fashion. Once they are close to the DRASH unit, instruct the patients to undress until they are at least in their underwear, if not completely naked and pile or bag their clothes.



- 9) Instruct the patients to enter the DRASH tent, one at a time on each side of the curtain, and thoroughly rinse themselves from head to toe then exit the other side (walk-through).



- 10) As the patients exit the DRASH tent, a decon member needs to be there to provide the outer garments or blankets and provide modesty to them. Once they are covered, have someone escort them to the EMS area so they can be observed/treated as necessary.

#### **Multiple Engine Company Mass Decon Procedure Steps:**

- 1) Establish decontamination corridors and contain all the potentially contaminated individuals.
- 2) Position apparatus and secure a water source. Ensure side mount pump panels are facing away from each other and place engines 15-20 feet apart.

- 3) Attach nozzels on opposite sides of the pump panel that face the decon corridor. If unable to attach nozzles directly to the side discharge, use a short section of hose and secure the line to the side of the engine or to the front or rear bumper. Also ensure the nozzles are set on a fog pattern (starting at 50 PSI again).



- 4) Set up parking cones and/or caution tape to funnel contaminated patients to decon between the engines. Also make trash bags readily available for patients to throw clothes away once

undressed and patient garments and blankets once they are through decon. All decon personnel should be properly dressed at this point and ready to go.



5) Once everything is ready and operational, instruct patients to approach the decon corridor between the engines, funneling through the cones in an orderly fashion. Once they are close to the fire engines, instruct the patients to undress until they are at least in their underwear, if not completely naked and pile or bag their clothes. The multiple engine decon setup provides some modesty to the patients due to the engines providing some cover.

6) Instruct the patients to enter the decon corridor, one at a time, and thoroughly rinse themselves from head to toe then exit the other side (walk-through).





7) As the patients exit the decon corridor, a decon member needs to be there to provide the outer garments or blankets and provide modesty to them. Once they are covered, have someone escort them to the EMS area so they can be observed/treated as necessary.

### **Using Aerial Devices with Engines:**

Setup the engines as stated above, then position the aerial apparatus behind one of the engines, preferably uphill. Raise, rotate and extend the aerial device so that the aerial master stream nozzle is directly over the two streams coming from the sides of the two engines. The nozzle should be pointed down and set on a fog stream that intersects with the two other streams from the engines.



### **References:**

IFSTA Hazardous Materials – Managing the incident, Third Edition