MCI: School Bus Accident
Simulation Notes & Control Sheet
Fire Engineering Simulations

This scenario depicts an overturned school bus on the Northbound lane of Interstate-95 in the late afternoon. Responders arrive at the rear of the bus (on the Northbound side), but can navigate through and around the bus, as well as onto the Southbound side.

As the instructor, you can decide how intense you want to make this scenario. You may elect to simply use this simulation to practice triage, or you may decide to practice a full-scale MCI exercise with or without smoke and flame impingement.

The scenario provides the ability to present 13 victims (12 teenagers/children and 1 driver), as well as various states of smoke and fire, including none at all. You the instructor provide the background information about current traffic patterns, companies dispatched and their roles, and proper department procedures for handling this situation.

The following are two excellent reference articles from Fire Engineering magazine and FireEngineering.com regarding School Bus Emergencies (may require registration or subscription):

- School Bus Incidents: Are You Really Ready?, by Leigh Hollins, June, 2007

- Train for School Bus Emergencies, by Paul Hasenmeier, Sept, 2009

Victim Information and Triage

By default, we supply a set of victim descriptions and complaints, as well as a "correct" answer for the triage tag assigned to each victim. At any time, the participant can click on the words "CLICK HERE TO CHECK IF TAGGED CORRECTLY". The computer compares the participant's answer with the stored result, and reports whether any victims are misidentified.

While there are always 13 victims, you can use the control panel (press "c") before beginning the exercise to change the victims' descriptions, complaints, and correct triage tags. Furthermore, when you change victim information and choose to save it, the program stores those changes on your computer such that when you return to the scenario at a later time, your information is intact. In that way, you can set up your exercise well in advance of its use, and periodically change the descriptions and correct tagging for the victims. You always have the option of restoring the default set of victim information.

For example, if you might run the exercise first without smoke or flames, and second or subsequently, with smoke and flames. Obviously, many victim descriptions will be affected by the presence or lack of smoke and flame.

Keystroke Controls

Keystroke/State	Snapshot	Your Notes
0 All clear: no smoke or fire present		
1 Light, medium-grey smoke from engine compartment, light, medium-grey smoke in driver and passenger areas		
2 Knockdown smoke from engine compartment and in driver/passenger areas		

3 Turbulent smoke issuing from the front & rear of the bus, with visible fire in the front		
4 Knockdown from turbulent smoke & fire		
C Brings up the control panel to change victim information for next exercise		
R Resets the scenario		

Triaging the Victims

By default, the 13 victims are located inside the bus (12 in the rear, 1 driver in front). The Victim Bar (top left) appears whenever there is at least 1 victim in the current location. The participant can Expand (open) the bar to reveal the victims and their injury descriptions, to begin triage/tagging and movement.

Responders perform triage on the patients by selecting the appropriate color (green, yellow, red, or black).

The white box indicates the total number of patients in a given area, which have not been triaged. As you begin to triage patients, you will see the number decrease.

Responders can also use the special victim's box to sort the victims based on tag color and to move victims to other locations, simulating moving a victim to a treatment or transport area.

A victim outside of the bus will appear as a generic person icon on the bottom of the screen. Just as inside the bus, the participant can click on the icon to open the Victim Bar.

CREDITS

The scenario and accompanying materials have been designed by Lieutenant Jim Murphy, (Ret.) Orange County Fire Rescue (Orlando, FL). The technical development and production was created by CommandSim.

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