Incidents which produce multiple human casualties are somewhat rare but do occur and must be planned for. A multiple or mass casualty incident can be defined as any incident in which more casualties are present than an initial response assignment can reasonably handle. More assets are required for triage, treatment, and transport than can arrive in a timely fashion. Responders are also tasked with assuring and/or rendering the incident scene safe as well as dealing with the casualties. First in companies can become swamped by people presenting with all levels of injury from scrapes and bruises to mortal injury. In these cases we must resist running up to the bloodiest patient, or the one who is screaming the loudest, and sort these patients by some objective criteria. Multiple casualty incidents can be as simple as an overturned school bus on a limited access highway with 5 passengers, to a more complicated scenario such as the collapse of a parking garage after a professional sports contest, a hazmat, or even a WMD terrorist explosion or event. Learn this simple system of sorting or “triaging” patients in a rapid, yet effective way and you will do the greatest good for the greatest number of injured.

**SORTING**

By using START triage, patients are sorted based on objective criteria on how they present. The severity of injury and therefore treatment and/or transport priority in START triage is sorted by color code. Triage tags contain these colors so treatment and transport crews can see at a glance which patients have been triaged to which level.

**COLOR CODES**

GREEN - Minor injury (walking wounded)
YELLOW - Delayed- can wait
RED - Immediate!
BLACK - Deceased

**SCENE SIZE UP**

1. Conduct a scene size up.
   a. Assure well being of responders
   b. Determine if (or render as possible) the scene safe prior to entering
   c. If there are several patients with the same medical complaints consider hazmat, WMD, or CO poisoning. Call for the appropriate assets.
2. Take BSI
3. Determine the number of patients. If there are multiple or mass casualties, communicate that fact through the proper channels, establish command, and establish a medical officer and triage officer.
Note: Be as precise as possible in communications. “Multiple casualties” can mean different things to different people. Provide a number (even an estimate) of patients to the proper entity to aid them in sending correct numbers and disciplines of resources. The actual number can be updated if more victims are found or more precise information becomes available.

Now it’s time to start “triage”.

You may encounter people self evacuating the scene as you arrive. That is ok - although remember you don’t know if there was a release of some kind. If so, the self evacuating victims could be contaminated (refer to your department’s decontamination procedures). Direct these people to an appropriate area of refuge so they can be monitored and evaluated. These people would be considered non-injured or “walking wounded”.

As you approach the actual scene, you may encounter people with a variety of injuries from superficial to life threatening.

Your first step is to clear out the remaining “walking wounded”.

Do this by simply announcing “if any of you are well enough to stand up and walk out of here, do so now.” Do not let them wander aimlessly on the scene but direct them to an area of refuge.

These victims shall be categorized GREEN. If you believe some of the uninjured victims are capable of assisting you, keep them near you to help if needed.

Now all you should be left with are those victims who are injured severely enough to not be able to get up and walk out on their own. But where do you start? Who do you go to first? The loudest? The bloodiest? The youngest? None of the above.

START WHERE YOU STAND.
Regardless of what is going on around you, assess the first patient you encounter first.

We use three objective assessment criteria to triage from this point. The criteria can be remembered by the acronym RPM.

Revved up? Take a breath and remember…

R. P. M.
R = Respiratory
P = Perfusion
M = Mental Status

Respiratory
The first thing we check for is presence of respiration.

Respirations:
NONE?
Open the airway
Still none?
Tag BLACK, deceased
Were respiration restored?
Tag RED, immediate
Respirations:
PRESENT?
Assess respiratory rate
RATE ABOVE 30 breaths per minute?
Tag RED, immediate
RATE BELOW 30 breaths per minute?
Move on to assess perfusion criteria

PERFUSION
Radial Pulse Absent or Capillary Refill > 2 seconds
Tag RED, immediate
Radial Pulse Present or Capillary Refill < 2 secs
Move on to assess mental status

MENTAL STATUS
Cannot follow simple commands? (unconscious or altered mental status)
Tag RED, immediate
CAN follow simple commands.
Tag YELLOW delayed

Remember that if your patient falls into the RED TAG category on your first assessment, STOP right there, TAG them and move on to the next patient. Attempt only to correct airway problems or uncontrolled bleeding before moving on to the next patient. For this you may be able to use the “walking wounded” that appeared capable of assisting mentioned earlier. Some of these victims may be nurses, EMTs, or otherwise be capable of assisting by maintaining head position to keep an open airway or keep direct pressure on a large wound. These people assisting should be protected from exposure to blood or other bodily fluids.

Now that the patients have been triaged, more focused treatment can begin. Moving victims to treatment areas may be needed. Those tagged RED or immediate are treated (or moved to treatment areas) first, followed by those tagged YELLOW or delayed. Patients tagged BLACK can be left in place.

Further assessment of your patients will be done at various sectors or treatment areas as they are deployed on scene. Patients need to be monitored in their treatment area(s) for changes in their condition. Patients can be up triaged or down triaged as their conditions dictate.

Using START Triage can make sense and bring control to a charged, seemingly overwhelming situation. START Triage is the most widely used triage method in use today.
JUMPSTART, PEDIATRIC PATIENT MCI TRIAGE

JumpSTART is an objective pediatric patient MCI triage tool developed specifically for the triage of children in the multi-casualty/disaster setting. JumpSTART was developed in 1995 to be used along with the START triage system and mirrors the structure. JumpSTART objectives:

1. Optimize initial triage of children in the MCI setting
2. Enhance the effectiveness of resource allocation for all MCI victims
3. Reduce emotional burden on personnel assigned to initial the triage of Children

JumpSTART provides an objective structure to help assure responders triage injured children with their heads, not their hearts. This can reduce the possible over-triage that may siphon resources away from other patients who may need them more, and result in physical and emotional trauma to children from unnecessary painful procedures and separation from loved ones. Under-triage is addressed as well by recognizing key differences between adult and pediatric physiology, and using appropriate pediatric physiological parameters at triage decision points.

JumpSTART is rapidly gaining popularity and has become widely accepted in many national and state venues. It has also been incorporated into pediatric education and is included in the curriculum of Advanced Pediatric Life Support (APLS) and Pediatric Disaster Life Support (PDLS).

Note: JumpSTART was designed ONLY to be used in the MCI/disaster setting not for routine EMS or hospital triage. See the algorithm below.
JumpSTART Pediatric MCI Triage

Able to walk?
- YES → MINOR → Secondary Triage
- NO

Breathing?
- NO
  - Position upper airway APNEIC
  - Palpable pulse?
    - NO → DECEASED
    - YES
      - Sustained breathing APNEIC
      - DECEASED
      - BREATHING IMMEDIATE

Respiratory Rate
- <16 OR >45 IMMEDIATE
- 16-45

Palpable Pulse?
- NO IMMEDIATE
- YES

AVPU
- "" INAPPROPRIATE POSTURING OR "" IMMEDIATE
- "", "", OR "" (APPROPRIATE) DELAYED