GENERAL BUILDING COLLAPSE RESCUE GUIDELINES

May 27, 2021 Posted by: admin Category: Uncategorized (https://pcfsm.org/category/uncategorized/)

No Comments (https://pcfsm.org/general-building-collapse-rescue-guidelines/#respond)

GENERAL BUILDING COLLAPSE RESCUE GUIDELINES

As one might expect, immediately after a collapse, the debris of the building is very unstable and prone to additional movement. Rescuers must assess the nature of the scene and the pattern of the collapse before entering onto a a pile of rubble to insure their own safety and that of those potentially buried in it. Shoring may be necessary to prevent movement, before attempting rescues.

Gather as much information as is possible at the onset of the incident. “Intelligence” regarding the last known locations and activities of those believed to be in the structure will greatly assist in developing a plan for recovery efforts. Concentrate your preliminary efforts on areas where people were last seen or known to be. It is suggested that a “Command” person be designated to interview those that may have escaped the collapse, were eyewitnesses, or were in the building and rescued early in the effort. Obtain a list of the people normally in the building, if one is available.

After ensuring rescuer safety and minimal movement of the debris, send small organized teams to the top of the pile and systematically search the surface in specific grids. Use barricade tape and markers to visually demonstrate the areas that have been searched and those that could potentially contain victims. As many as one half (1/2) of all building collapse survivors have historically been rescued near the surface of the debris and early in the effort. Concentrate your efforts on those areas that are believed to be the last known locations of people, when the collapse occurred.

CALL for Help!! It normally will be necessary to activate some sort of disaster plan for large scale building collapses. This type of rescue is very manpower intensive and may require large numbers of extrication and medical personnel. Call for the “overhead lift” capability that you will need, as soon as it can be determined that people are missing or still trapped. Remember… it is likely you will need some method of “cutting” concrete and the steel reinforcing bars (“Rebar”) that are contained within most modern buildings. (i.e. torches, hydraulic cutting tools, saws)

Explore visually, or with mechanical devices (closed circuit/fiber optic T.V.), all possible “voids” that are open or can be reached by removing surface debris. It is suggested 64 that, at approximately every hour on the hour, all work at the site be shut down for a few minutes to listen for calls for help. During that period, sound detection devices can be used to “listen” for movement or sounds deep within the debris. Call for “Search Dogs” and handlers, as they are available in your area or region. (Have the equipment and dogs on a dispatcher’s resource list with the heavy equipment contractors/operators)

Continue to remove debris… carefully and vertically, searching each “void” or entrance to a “void” as it becomes available to the rescuer. Consideration must be given to the fact that the rescue effort is NOT over until EVERY reasonable effort has been expended. Expect these type of rescues to last days…especially when multiple buildings are involved (earthquake, avalanche, etc). People have CONTINUALLY and HISTORICALLY been found alive many hours and days into the rescue. Have command, media relations, and logistics officers plan for a multiple day operation when people are still suspected of being missing and their bodies have not been recovered.

Great care must be taken when a person is located, either dead or alive, to ensure that additional collapse doesn't occur in the area of their entrapment. Rescuers should use their hands and small tools to remove the remaining debris surrounding a person. The victims condition may dictate the speed with which rescue efforts progress. Consideration should be given to early application of Military Anti-Shock Trousers for viable persons that have "crushing" injuires. Preparation and the beginning of application of them should take place as soon as the entrapment permits. Several instances of complete hemodynamic collapse and death have been noted upon release from confinement. Intravenous solutions can also be administered by qualified EMS personnel as extrication continues. Caution should be urged in the use of morphine or other painkillers.

DO be prepared for the emotional and psychological implications of the incident. Prepare early for Critical Incident Stress debriefing sessions for rescuers, victims and families. It is strongly suggested that mental health professionals and crisis intervention be made available to the families of those 65 believed trapped, at the earliest opportunity. The stress of protracted digging, discovery of disfigured remains, odd smells and sights can affect even the most hardened of rescue professionals. Supervisory personnel may want to set aside a special place for families and psychological care near to, but, off of the rescue site. To do otherwise will invite charges of insensitively, and probably prompt the families to attempt to enter or stay in the rescue area.

Relief for both supervisory and field rescue personnel must be forthcoming. Even though most rescuers will insist in continuing their efforts for many hours, they lose a large part of their effectiveness after 18-24 hours or less. Ensure that all rescuers eat and rest at frequent intervals, as circumstances permit. Prepare to (and do) call in off-duty or mutual aid personnel as they are needed. Stage all extraneous units in a planned way and avoid having more personnel on-site than can effectively work at one time

During long term or at major rescue operations, expect extreme "media" coverage, including the national and international press. Be prepared for analysis and commentary of your every move. It is suggested that this scrutiny can be somewhat averted by appointing a designated Public Information Officer (P.I.O.), and by planning and giving frequent press briefing and updates. Include "front-line" rescuers and technical experts that you may be being utilizing in the effort. During the early stages of the event, give these briefings hourly in an area adjacent to the site and provide as much information as you can actually verify. As the length of the rescue increases, plan a morning and afternoon news conference. It is suggested that someone monitor press activities

on a constant basis, in order to be able to anticipate the questions and concerns of the media. Be as forthcoming as possible, without compromising the integrity of the rescue operation, the victims, or the families of the victims

Anticipate the need for additional resources that you haven't thought of prior to this event. Be prepared to obtain architectural drawings of the building(s) affected. How about gas mains, water pipes, or electrical services that are disrupted? You may want an aerial perspective of the scene…do you know where and how to get overhead photos of 66 the collapse? How are you going to feed "hundreds" of construction workers, rescue workers, families, and others, who may be there for days? Who's going to pay for what? Will you need a city/county purchasing agent on-site to approve the immediate purchase of your needs? Ensure that you have planning and logistics officers who can anticipate these needs and fulfill them within a moments notice. Often… the difference between what is perceived as a completely successful rescue and a "disorganized" one is the quality of your planning and the careful execution of your contingency plans.

Particularly in multi-story buildings, be prepared for the possibility and likelihood of underground or cave- type rescue procedures. This type of specialized rescues requires those experienced with climbing (ascending and descending) manuvers and the use of technical rappeling methods. Each rescue team (minimum of two rescuers) going "underground" should have a safety rope attached and be in constant communications by radio with the surface. They should also possess a minimum of three viable light sources. Hose rollers and other types of "rope slip devices" must be used, as to avoid the sharp edges of concrete that will abrade normal rescue ropes.

It Ain"T Over Until It's Over! Generally speaking, you will be criticized for any early termination of rescue efforts, if there are still people missing or bodies not recovered. A rule of thumb says it's over when every everyone is accounted for or the "field is cleared" (of debris). Practical application says that you will probably scale back the aggressiveness and scope of the effort after several days of rescue, but that you should remain aware of the fact that people have been successfully rescued alive after as much as twelve (12) days… buried in the rubble of an earthquake. In the March, 1992 Turkish earthquake, a 22 year old nurse was pulled from beneath a building collapse after eight days. She was also quoted as saying that she had been "talking with her two friends", who were also buried, for several days after the collapse…until she "didn't hear them anymore". The thought of someone remaining buried alive for several days should be enough 67 motivation for most rescuers to continue with their efforts until every possible hope has been exhausted.

Establish on-scene (and separate) communications (Radio, Data, telephone) connections and expect problems with being able to coordinate with many differing agencies. It might be suggested that a "common" disaster frequency might be designated in preplanning sessions for the initial response to the incident. Once on-scene, the Incident Command team may need to establish several different "nets" of units or agencies and have a common dispatch center at the command post. Anticipate the need to constantly communicate with construction workers (crane operators) and their supervisors, and probably a dozen other agencies that you never thought of. Also remember that the need for coordination with local and state police may become necessary for crowd/access control and other purposes. Often police agencies will become involved in securing the remains of fatal victims in a temporary morgue at the scene.

Expect The Unexpected! Regardless of the thoroughness of your contingency planning efforts and the diligence of all of the people involved in the rescue, something will become a problem that no one has anticipated. This is just another opportunity to demonstrate the quality, committment, and dedication that comprises the makeup of most rescue organizations…let the improvisional ability of the firefighters, EMTs, paramedics, police officers shine through!

Leave a Reply

Name *

E-mail *

Message *

POST COMMENT

ABOUT

Parmanand College of Fire Engineering and Safety Management

POPULAR COURSES

Industrial Safety Management Train...
Members only
BY ADMIN

Industrial Safety- 1 Year
Members only
BY ADMIN

Fire Technology And Industrial Saf...
Members only
BY ADMIN

QUICK LINKS

- Home (https://pcfsm.org/)
- Admission Process (https://pcfsm.org/admission/)
- Enroll Now (https://pcfsm.org/enroll-now/)
- Contact Us (https://pcfsm.org/contact-us-pcfsm/)

CONTACT

Survey num 434, 5th Floor,Landge Landmark,
Kasarwadi, Nashikphata
Near Sagar plaza,
Mumbai-Pune Highway,
Pune 411034,
Maharashtra, India

Tel.: +91 7722033982 / 3

info@pcfsm.org
(mailto:info@pcfsm.org)