ACCESSING SAFETY KNOWLEDGE (ASK) SHEET:

POST-FALL RESCUE

In a 1987 United States Air Force/OSHA study regarding prolonged motionless suspension, the average amount of time that test subjects could hang motionless in a full-body harness before experiencing nausea, tingling or numbness was 14.38 minutes; in the commonly used "safety belt," 1.63 minutes. These are sobering statistics when one realizes the force of a fall was not even considered.

OSHA Appendix C to Section 1910.66
Section I. Paragraph (e) (8) mandatory requirement states: The employer shall provide for prompt rescue of employees in the event of a fall or shall assure the self-rescue capability of employees. OSHA comments regarding the ruling state: The intent of this provision is that the employer evaluate the potential for fall arrest and that rescue support be provided in a timely manner to avoid long periods of post-fall suspension. When it is not possible to evaluate self-rescue capability in advance, prudent employees will need rescue assistance and accordingly be prepared to offer it.

Planning ahead

1. Develop a post-fall recovery plan. Post fire/rescue phone numbers, and plan an easy access route for outside response teams.
2. Inventory useful tools (ladders, scaffolds, man-lifts, hoists, rescue winches, etc.) and their location before a fall occurs.
3. Avoid further injuries and falls by providing fall protection for both rescuer and subject.
4. Minimize risk and communication problems by limiting the number of well-intentioned rescuers.

Several safe rescue techniques can help both non-injured and injured post-fall victims. They include belaying (protecting the rescuer and subject with rope), aerial traversing, controlled rope descent and mechanical advantage systems. These techniques use a simple and effective safety system to minimize risk; the personnel performing these rescues are usually a small, well-trained in-house group that is also available to management and fellow workers for the correct rigging of fall protection systems. Fire brigades are ideal as they are already emergency response oriented.

As with fall protection installation, confined space entry and post-fall recovery, preplanning is the key ingredient to a safe and cost-efficient operation. With the value of human life, being dictated by soaring insurance, litigation, and medical costs, preplanning and prevention has become very cost effective.

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1 Orzech, Goodwin, Brinkley, Salerno, Seaworth, Air Force/OSHA, Test Program to Evaluate Human Response to Prolonged Motionless Suspension in Three types of Fall Protection Harnesses, Sept. 1987, p. 19.