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Occupational Falls Raise Safety Concerns

Between September 1997 and October 1998, five Alaska workers suffered severe injuries and one worker died due to falls. Two common factors were found in these incidents: a fall protection system was not installed or, if installed, the worker did not use it. Fall protection systems and training in their use are readily available. The following cases illustrate the potential of severe or fatal injury due to falls. All could have been prevented if fall protection systems were used properly.

Case 1: On September 29, 1997 at approximately 9:00 AM, a roofer slipped on an icy surface. He was not using fall protection and fell two stories. He suffered a broken pelvis, several broken ribs, and skull fractures.

Case 2: On April 8, 1998 a maintenance worker was bolting down grating on a mezzanine when he stepped onto an unsecured piece of grating. He fell 10 feet. The worker was wearing a harness and lanyard but had not secured it. He suffered a back injury.

Case 3: On June 20, 1998 an inspector was climbing down a scaffold ladder and lost his balance. He fell 20 feet. He was wearing but not using fall protection. He suffered numerous bone fractures to the face, knee, wrist, and elbow.

Case 4: On September 22, 1998 a pipefitter who had lost radio contact with a crane operator climbed a roof in an attempt to direct the crane operator. The worker went to the peak of the metal roof, tripped, and slid down the opposite side. He fell 40 feet to the ground and died from the injuries. He was wearing a harness and lanyard, but no anchoring line was present on the roof.

Case 5: On October 19, 1998, a carpenter was installing a metal roof on a new residential structure. He slipped and fell off the roof. Fall protection was provided and installed but was not used by the worker. He suffered a broken back and fractures in the heels of his feet.

Case 6: On November 16, 1998 a laborer was working on a roof. After unclipping his harness, he slipped and slid off the roof. He fell 24 feet to the ground. His injuries included a broken hip.

Nearly 700 American workers died from falls in 1996, and 715 workers died from fall injuries in 1997.¹ In March 1997, the Alaska Interagency Working Group for the Prevention of Traumatic Occupational Injuries designated a construction sub-group to review injury data and to develop prevention strategies to help reduce the rate of construction-related injuries and promote safe working practices.

During 1991-1995, 11 Alaska workers died as a result of falls,² and fall injuries accounted for 49% of all construction-related injuries in the state.³ Among construction-related falls during 1991-1995, the most common types were from or out of a structure (67), while using a ladder (52), while using scaffolding (36), from one level to another (18), and slipping or tripping (10). The upper extremities were the most common body region injured followed by the head. The most common injury was a musculoskeletal injury -- usually a broken bone.

Construction takes place throughout the year in Alaska, and the Alaska environment can be challenging, introducing factors that can interfere with worker safety. The following recommendations can prevent falls:

- 1) Employers should provide a fall prevention system for their workers *whenever* walking or working on a surface with an unprotected side or edge that is 6 feet or more above a lower level.**
- 2) Employers should ensure that workers stay within guardrails or a fall protection system. When workers must work outside of such protective devices, they should use a personal fall arrest system.**
- 3) Employees in work environments where there is a potential for a fall injury should receive specific and adequate training in fall prevention.**
- 4) Employees are responsible for following the practices outlined in their employer's safety program. Employees should be aware of their work environment.**

The Department of Labor, Consultation and Training provides fall prevention classes free-of-charge. For a schedule of classes, call 907-269-4940.

For more information about fall prevention, contact the Occupational Injury Prevention Program, 907-269-8000.

References:

1. US Bureau of Labor Statistics, National Census of Fatal Occupational Injuries, 1996 and 1997.
2. Alaska Trauma Registry.
3. Alaska Fatality Assessment and Control Evaluation Program.