

THIS SAFETY BULLETIN CONTAINS SAFETY ARTICLES ON A VARIETY OF SUBJECTS, FATAL ACCIDENT ABSTRACTS, STUDIES, POSTERS AND OTHER SAFETY INFORMATION FOR PRESENTATION TO GROUPS OF MINE AND PLANT WORKERS.

AS GROUP SPOKESPERSON, LEADER OR SUPERVISOR, YOU PLAY AN IMPORTANT ROLE IN THE ACCIDENT PREVENTION PROGRAM FOR YOUR COMPANY. THE WAY YOU TALK, THINK AND ACT ABOUT SAFETY DETERMINES, TO A GREAT EXTENT, THE ATTITUDE YOUR COWORKERS WILL HAVE ABOUT SAFETY.

THIS MATERIAL, FUNDED BY THE MINE SAFETY AND HEALTH ADMINISTRATION, U.S. DEPARTMENT OF LABOR, IS PROVIDED FREE AS A BASIS FOR DISCUSSION AT ON-THE-JOB SAFETY MEETINGS. IT MAY BE USED AS IS OR TAILORED TO FIT LOCAL CONDITIONS IN ANY MANNER THAT IS APPROPRIATE.

PLEASE USE THE ENCLOSED GREEN MEETING REPORT FORM TO RECORD YOUR SAFETY MEETINGS AND RETURN TO THE HOLMES SAFETY ASSOCIATION, POSTAGE-PAID.

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LOCATION



### Personal Protective Equipment

#### HARD HATS

Thinking of "customizing" your safety hat or your goggles? "Don't!" says a safety engineer pointing out that "doctoring" hard hats or closed safety goggles is a most dangerous practice that can result in a trip to the hospital for the wearer.

Tests recently conducted in an eastern steel mill revealed that slight "modification" on a hard hat can cut protection by as much as 50 per cent.

In the experiment, two safety hats, one with slits cut in the sides for goggles, and the other with two small holes drilled in back "to improve ventilation," were tested on a tensile strength machine.

The hat with slits withstood a maximum pressure of 250 pounds on the side and 500 pounds on the top. The hat with the two holes withstood a maximum pressure of 500 pounds on the top. On the other hand, two safety hats in their original condition withstood a maximum pressure of 1,000 pounds on the side and 950 pounds on the top.

Safety equipment was carefully designed to give you the best protection possible. Don't take chances. Leave it alone.

The average safety hard hat weighs about 14 ounces. The average man's head weighs 14 pounds. So there's an ounce of safety for every pound of head--provided the head protection is properly worn and maintained.

The brain is the control center of the body. The slightest damage to any part of the brain will cause a malfunction of some area of the body. The skull, under normal circumstances, protects the brain. But, when a possibility of injury from falling or flying objects exists, additional protection is required. This is the objective of hard hats.

Often workers are reluctant to wear hard hats because of an expressed concern of the weight and discomfort of heat during warm weather. Considering the protection afforded, the weight theory is negligible. The average hard hat weighs 14 ounces as compared to three pounds of the helmet used in the army. However, under duress of battle, the helmet afforded a psychological feeling of

security. Why then, in certain areas of employment, shouldn't a hard hat give the same feeling of security in construction?

Regarding the so-called discomfort of heat, a test in temperature of 110 degrees F. show that the inside temperature of a cloth cap and a felt hat were two degrees cooler than the prevailing outside temperature. The same test revealed that the inside temperature of hard hats varied from 5 to 12 degrees cooler. The material, reflection in air space were the governing factors.

#### GOGGLES -- USE AND CARE

- Goggles protect the most important part of your body -- your eyes. Treat them as you would a pair of fine prescription glasses.
- 2. Keep goggles in a substantial clean case or box to prevent scratching. Do not throw them carelessly into tool boxes or onto the bench. Never carry goggles loose in your pocket.
- 3. Keep the goggles in proper adjustment and have pitted lenses replaced before they cause eyestrain.
- 4. Prolong the life of head bands by occasionally washing with warm soapy water, followed by thorough rinsing.
- 5. Keep goggles clean. Wipe lenses carefully with a clean, soft cloth.
- 6. Clean oil, grease, acids or solvents from eyecups, leather, rubber or metal parts. Oil and grease soften rubber parts and take the life off of elastic head bands.

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- 7. Do not stretch elastic or fabric head bands by twisting them, or by hanging goggles on a nail.
- Do not borrow or lend goggles unless they have been cleaned and sterilized.

#### SAFETY SHOES -- USE AND CARE

- Wear safety shoes to protect your feet against falling objects.
- Select the proper type of safety shoes for your job; styles available include anti-spark, anti-slip, molders, oil resistant, acid resistant and shock-resistant.
- 3. Be sure you get a comfortable shoe. A good fitting shoe will not cramp or chafe your feet on the job and it will wear longer.
- 4. Keep shoes in good repair--worn-out soles and run-down heels are dangerous. You will save money by replacing them before they cause an accident.
- 5. Clean your shoes frequently. Dress the leather with oil or a good grease or polish but avoid getting oil or grease on rubber parts.
- 6. Keep your shoes as dry as possible.
- 7. Wear heavy cotton or wool socks which absorb perspiration better and wear longer than thin lisle, silk or rayon socks.
- 8. Avoid stepping on, or kicking against, sharp metal scrap or other material which will damage your shoes or injure your feet.

"You should have a good foundation to stand on".



# H.S.A. SAFETY TOPIC



# **Protect Yourself**

Do your employees recognize the need for personal protective equipment on their jobs? Do they willingly wear such equipment when the job demands it, or do they make all kinds of excuses?

Ideally, all machines and processes should be so engineered that the operator is shielded from injury. If such a completely safe design is not possible, personal protective equipment must be used to keep the operator from harm.

In applying this alternate means of safeguarding workers, the supervisor may find the worker reluctant to use the personal protective equipment provided.

The workers' so-called reasons for not wanting to wear personal protection may be many and varied.

"It's too heavy and inconvenient!" "It gives me a headache!" "They pinch my toes!" "They hurt my eyes!" "They're too hot!" or "too cold!", and so on.

Many plants have successfully sold employees on conscientiously wearing protective equipment when necessary.

Supervisors in other plants say they have been able to enforce the rules when using such equipment is necessary.

Rules are necessary, of course, and must be enforced. But when the success of the protection program is dependent upon enforcement alone, without gaining the willing cooperation of the wearers, just how successful will the program be? Unconvinced of a rule's value, will the worker performing a hazardous task obey when no one is watching?

Supervisors have convinced employees by relating their use of protective equipment in the plant to their choosing to wear protective clothing against rain, sun, or cold.

If in the morning, rain appears likely, would they leave home without hat, raincoat, or umbrella? Although rain did not fall and they had carried protection they didn't need, did they lose anything? Employees will admit they know what it's like to be caught in a rain or snow or in zero weather, so sure, they always dress accordingly. And that is exactly the point you're trying to make!

You have rough castings, splintery crates, or other sharp-edged objects that must be carried by hand. You tell the worker to wear gloves to protect his or her hands. They may come back with the excuse that gloves are too hot, too clumsy, or too heavy.

Chances are your employee is a baseball fan. He/she may even play ball on a team. Ask them how they would like to stand behind the plate and try to catch hot ones from the pitcher with bare hands. They would insist on a catcher's mitt, which is five times as heavy and clumsy as a work glove.

Resistance to personal protective equipment is often based on the complaint that such items are inconvenient, which may be true to a degree. But isn't life full of inconveniences? We learn to adjust and live with them in order to satisfy our needs.

Maybe the employee is right about a hard hat being inconvenient, but so is a cracked skull.

Perhaps the wearing of safety glasses involves a slight inconvenience, but loss of an eye can be very inconvenient.

What's so convenient about lying for endless days in a hospital bed?

Every worker who ever was hurt in this way believed it wouldn't happen--but it did!







## H.S.A. SAFETY TOPIC



### Are YOU Really Safety Minded?

You've heard many talks and read many articles on safe attitudes, safety-mindedness, and safety awareness. As a result of all these topics and the increased emphasis on safety in general, would you if asked "Are you safety-minded?" answer, "Sure, I'm safety-minded. My record proves it because I've never had a lost-time injury."

If you think that merely because you've never had a lost-time injury, you are safety-minded, you're wrong. You may have been more lucky than safe. Being safety-minded is related to how you think and plan for safety in your work and other daily activities.

Planning ahead is part of a job. It means thinking the job through and acting according to those plans. Lack of proper thinking can cause injuries. If you fail to think of the end results of your acts, you're not safety-minded.

One of of the favorite alibi's after an injury occurs is, "I didn't think."

You must plan before doing the job, think of it while doing the job, and act safely until the job is completed. These can also involve another phase of safety, looking for hazards that could cause injury.

Look for conditions in your work that could cause injury, and then plan and think of methods you can use to avoid these conditions.

In addition to the above things already discussed, do you do the following:?

.Do you follow instructions to the letter?
.Do you correct or report unsafe conditions?
.Do you avoid horseplay and distracting others?
.Do you comply with the safety rules and safe practices?
.Do you practice good housekeeping?
.Do you use the right tool for the job?
.Do you lift properly?
.Do you use proper protective equipment?
.Do you operate, adjust, or repair equipment when authorized?

Now, are you safety-minded?

# ABSTRACT From

\*This fatality could be discussed at your regular on-the-job safety meeting.

# FATAL ACCIDENT

Fatal Fall-of Person

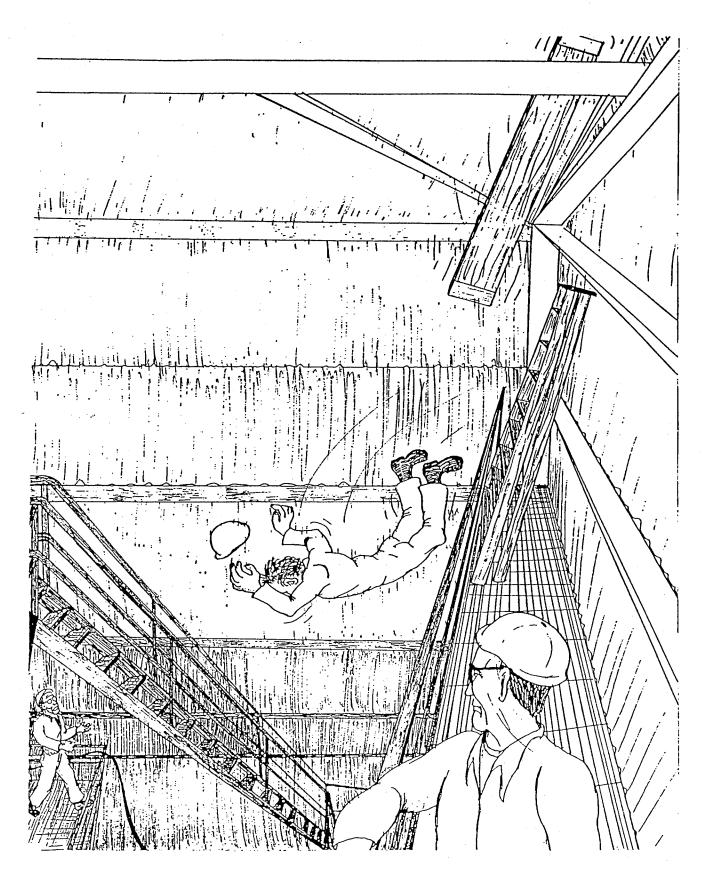


GENERAL INFORMATION: A painter was fatally injured when he fell approximately 38 feet from a handrail and stepladder on a walkway at the top level of a Langbeinite sizing facility. The victim had a total of 12 years mining experience, all with this company as a painter.

DESCRIPTION OF ACCIDENT: The victim reported for work and proceeded to the langbeinite facility to service the compressor and sandblasting unit that would be used that shift.

The victim had been working a full week on the handrails where he had not needed a safety belt or line. A few hours later, the victim was observed heading for the top level carrying an 8-foot plank. When asked by a co-worker what his intentions were, he replied that he intended to lay the plank over the horizontal beams just under the roof purlin so he could lie on the plank and secure an anchor cable to the purlin for the sky climber. Two co-workers told him that this was not necessary as it would be much quicker and easier for one of them, who normally rigged the climber, to tie off on a beam then rig the anchor cable. The victim disagreed and positioned himself to lay the plank. He had his left foot on the third step up from the base of a wooden 8-foot stepladder that was leaning against a wall with its base against the walkway toeboard. His right foot was on top of the handrail. He then hefted the plank up and one end over a main horizontal beam. A co-worker, who was now standing just under this main beam pulling up cable slack with the rope, felt dust trickling down the back of his neck. He then moved several feet to his left, tied the rope to the handrail and asked the victim if he needed help. The victim answered "No". Another co-worker stated that suddenly it looked like the victim's right knee buckled under him and he began to fall. Co-workers stated that they expectantly awaited a jerk as would have occurred if the victim had been wearing a safety belt and line. However, he was not wearing such gear and continued falling. He struck the outer handrail for the staircase, then bounced over and down another 13 feet to the crusher work deck where he hit the handrail full in the chest. He rolled down and through a 35-inch wide space between two support I-beams for this deck and to a walkway about 10-1/2 feet below landing on his back. The victim was transported to the hospital where he later died of injuries received during the fall.

CAUSE OF ACCIDENT: The direct cause of the accident was the victim placing himself in an unsafe position where the potential of falling was great. Contributing to the accident occurrence was failure of the victim to erect adequate temporary means from which to work overhead. Contributing to the severity of the accident was failure of the victim to use a safety belt and line where there existed a potential of falling.







#### Know Your Limit -- Prevent Sprains and Strains

Athletes in training know their abilities and their limitations, because going beyond what is physically possible leads to strained and sprained muscles and ligaments. Those injuries could put the athlete out of competition.

The human body is designed with some very sound mechanical principles. Two of these are the skeletal and muscular systems which physicians refer to as the musculo-skeletal system.

The skeletal system acts as a support for the other systems in the body. It also serves as an anchor for the muscular system. Muscles are the motor that moves the bones and make it possible for the body to move and stand erect.

When doctors talk of sprains and strains, they speak of ligaments and tendons. When a muscle is stretched too much, the ligaments pull and sometimes even tear. Stretched ligaments and tendons are termed strains. A sprain is when tearing has occurred.

A few basic rules to remember are:

- . Understand one's limitations. Don't charge into a job cold. Warm up to it.
- . Do not overextend oneself -- use a stepstool or a ladder when necessary.
- Lift with the legs, not with the back. Keep the load close. Don't twist one's body while carrying a load.
- Be sure there are no slipping or tripping hazards in one's work area or around your home. The sudden jerk caused by a slip or trip can cause a sprain or strain.
- Look into ways to eliminate lifting and carrying or to keep it to a minimum. Is there a better way? Work smarter, not harder; it's easier and safer.

H.S.A. SAFETY TOPIC





# Test Yourself for Safety's Sake

Cood housekeeping gets rid of trash and rubbish, breeding places for thousands of fires which destroy or damage homes each year.

The price for every "yes" answer is more safety for your family--and every "no" answer should be a signal for action.

Here are the questions:

1. Do you dispose of ordinary trash and rubbish regularly?

2. Do you keep attic, basement, and closets free of accumulations of old clothing, mattresses, curtains, drapes, lamp shades, newspapers and magazines?

3. Are your oily mops hung up and oily rags kept in closed metal containers?

4. Do you empty ashtrays only when sure the contents are completely cold and are ashtrays large and deep enough to keep burning cigarettes from falling out?

5. Do you have your heating equipment checked and cleaned at least once a year?

6. Do you check appliance and extension cords regularly for broken and frayed insulation and loose connections and replace them promptly when faulty?

7. Are paints and solvents stored away from heat? Do you dispose of empty and nearly-empty containers promptly?

8. Is the garage kept free of clutter? Do you store gasoline only in tightly-capped, clearly-marked metal cans -- never in glass jars or jugs?

9. Is the kitchen range kept clean of grease spatters? Are exhaust ducts cleaned out so smoke can travel through them easily? Are the fan and suction mechanism and other parts of the exhaust hood over the range kept free of accumulated grease?

10. Have you included the outside as well as the inside of your property in the cleanup schedule?



# Supervisor is

# Key'' in Safety Training

During the initial safety indoctrination and plant orientation of new employees, it is vital that supervisors exert their influence. While the supervisor is introducing the employee to a new job, it is important that instructions be given on how to perform the work safely and efficiently. Employees cannot be expected to work safely if they are not taught the safe way to do their job. Supervisors must recognize that their training responsibilities apply not only to each individual reporting to them, but also, to the work unit as a whole.

How an individual performs--safely or unsafely-depends to a large extent on what the group decides will be acceptable work practices. All groups set standards of conduct for their members. The supervisor has a vital role in getting these informal standards to coincide with management's standards on safety.

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The supervisor should have a program of continual training for both new and experienced workers. Corrective action must be taken when the supervisor sees either an unsafe act or an unsafe condition. When serious problems exist, the supervisor can hold formal training sessions. These can range from the 5-minute safety talk to a special training class of several hours.

#### SAFE WORK METHODS

The supervisor is responsible for determining and establishing safe work methods. In doing so, he/she must learn to watch for two basic things in his/her department:

1. Unsafe Acts--This mean doing something in an unsafe way and consequently producing an injury accident or property damage accident. When an unsafe act is observed, the supervisor should immediately talk with the employee and try to ascertain the reason for the poor work practice. Appropriate action must be taken to eliminate the need for the unsafe act.

2. Unsafe Conditions--Unsafe conditions can be found in almost every workplace. Often they include such things as improper storage of material and improperly maintained tools and/or equipment. They must be recognized and eliminated. The unsafe condition may have been created by lack of space, poor layout, inadequate tooling, or employee inattention. Space problems require management action, but if the unsafe condition was caused by employee inattention, it is something the supervisor can deal with directly.

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#### DEFENSIVE WORK

Supervisors, through proper training techniques, can teach their employees to work defensively. By working defensively, most accidents can be prevented.

Defensive work habits include three basic steps:

1. Identifying the hazard--This means being alert to possibilities.

2. Understanding the defense--After seeing the hazard, the employee must know and understand the proper action that must be taken before the accident occurs.

3. Acting in time--Once the employee sees a hazard and understands the defense, action must be taken. By taking evasive and corrective action, accidents can be eliminated.

When supervisors support safety by positive action, they are meeting their key responsibility. Accidents can be prevented and safety training is one of the sure ways to do so.

\* \* \* \* \* \* \* \* \* \* \*

#### Seven Deadly Sins in Accident Prevention

Call it fatalism or ignorance or what you will, we do meet people who tacitly subscribe to what might be called "THE SEVEN DEADLY SINS AGAINST SAFETY."

1. I'll get it when my number comes up.

2. It can't happen to me.

3. It's all in the law of averages.

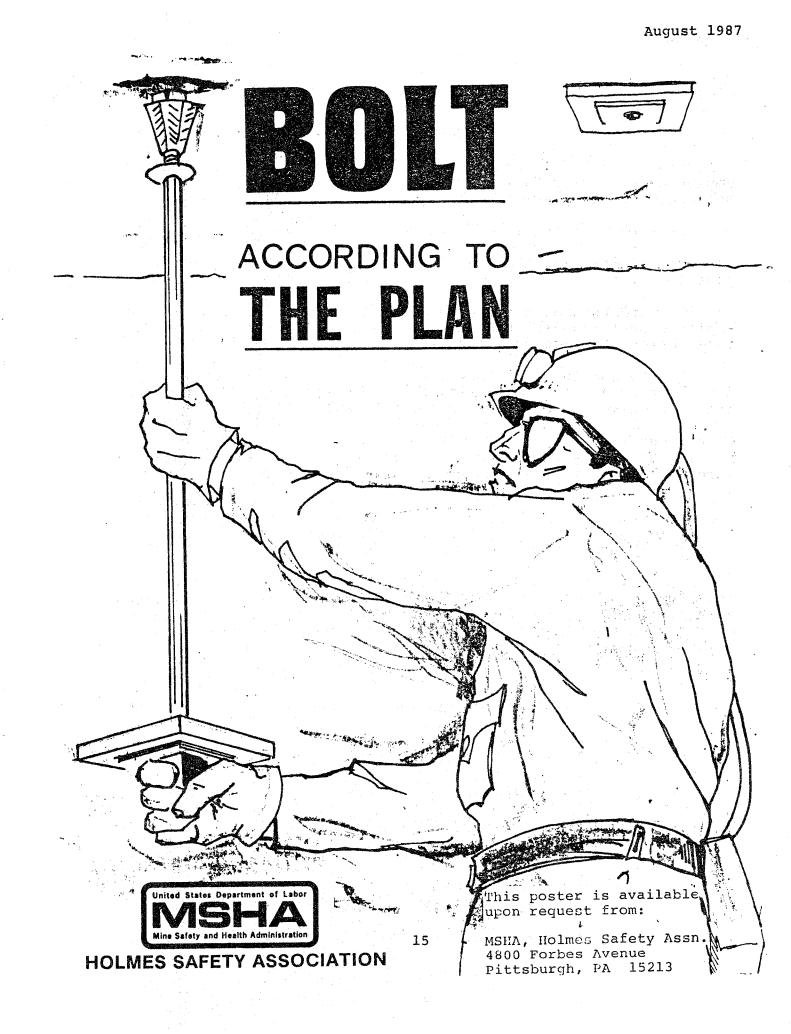
4. Danger is the price of progress.

5. An accident is an act of God.

6. I'm tough, I don't hurt easily.

7. Safety takes too much time.

Root out these fallacies whenever and wherever you find them. An accident most certainly can and will happen if you are not constantly aware of the hazards of almost every undertaking.





## H.S.A. SAFETY TOPIC



#### Safety Pays Its Own Rewards

Safety, like virtue, is its own reward.

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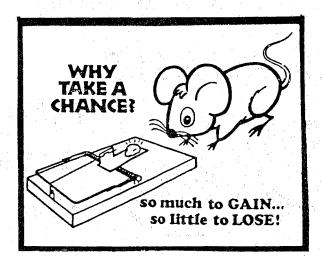
Safety is returned in full value, in coin of the same type as that used to secure it. Safety, therefore, occupies almost the unusual position of both a giver and receiver, or a producer and a consumer.

The safety rewards that are returned are almost in direct proportion to the safety practices that are exerted. Everyone can, therefore, write their own ticket. The reward may be as big, or as little, as desired.

But safety, again like virtue, is also often exposed to many temptations, although not of a similar type. Safety temptations are usually those that occur impulsively, without giving proper thought to the hazards involved.

Some of the most common temptations develop, for example, from haste toward the end of the shift, resulting in failure to install the needed roof bolts or timbers, failure to take the necessary steps to assure proper face ventilation, and failure to clean up excessive fine coal dust and apply sufficient rock dust. In short, chance-taking that usually results in grief.

It is unfortunate, but a fact, that it is easier to gradually drift away from safe working habits and occasionally indulge in some acts that are not conducive to safety, than it is to stand firm and resist such temptations when the occasion arises. Even living is too dangerous a business for there to be much sense in taking chances that are unnecessary, or flirting with danger for any but the most urgent or humane reasons.







### To See or Not To See

The definition of an eye is "a nearly spherical mass, the organ of sight or vision." This is one of the most precious gifts that we possess. Often we take our eyesight for granted, and we reason that it will always be with us. We treat our eyes as though they were worth very little and that replacements are available at the local drugstore. With this attitude, is it any wonder that so many people lose their vision by eye injuries? We could get along without them, but our lives would not have full meaning.

Most workers know that they cannot afford to gamble with their eyesight. The strongest force in human behavior is the instinct for self-preservation. It is a powerful, positive factor in determining our attitude toward safety laws and rules. But are there times when we think that rules are a restraint against personal freedom? Actually, safety laws and rules are nothing more than condensed statements of human experiences. Their sole purpose is to protect conscientious workers and they are not intended to be rules of discipline.

Reports of eye injuries throughout the coal industry make it clear that no one can be absolutely sure that flying particles will not damage their eyesight, unless he protects his eyes at all times. Many companies have made a requirement of employment that proper eye protection be worn by all persons at all times while in or around the mines. Those who have adopted this program are experiencing a frequency rate of almost nil. These companies are to be commended.

Develop the good habit of always using eye protection.

The definition of eyesight is "THE FACULTY OF SEEING." Protect all of your faculties.

GLASS

BETTER GLASSES

# MERIT AWARDEES

Following are the recipients of the Association's highest honor, "The Merit Award," since 1968.

	<u>1968</u>	<u>1974</u>	<u>1980</u>
*	S. Magistrella	J. Callahan	J. Breedon
	H. Potter	C. Davis	M. Childers
*	H. Younker	L. Foltz	W. Craft
		J. McDonald	W. Devett
	1969	V. Null	D. Hazlett
		E. Pauley	W. Hoover
j.	A. Charlesworth	M. Phillips	C. Jones
*	C. Dalzell	C. Speelman *	A. Saunders
	C. Ferguson	and the second secon I have been as a second seco	H. Turner
*	A. GADEIII	<u>1975</u>	and the second second second
	H. Gandy		1981
	M. Jarvie	M. Belski	
*	T. Jones	D. Jones *	W. Arthur
*	C. Maize	E. Rudolph	R. Ashby
~	G. McLellan D. Parry	1070	J. Clem
	W. Rachunis	<u>1976</u>	D. Lilley
*	こうしょう しんしょう しんしょう ひんしょう しんしょう しんしょう しんしょう しんしょう		D. Moore
*	G. Steinhauser	G. Fish, Jr. D. Frailey	S. Socci
*	M. Thomas *	D. Keenan	H. Thompson
*	G. Trevorrow	R. Scott	1982
*	J. Westfield		1502
		1977	R. Arotin
	<u>1970</u>	a ta na sana sa	L. Austin
	and a second	A. Daniels	J. English
	W. Cagley	M. Fowler	R. Flack
	C. Gaskill J. Holcomb	W. Parisi	J. Krolick
*	A. Kott	1978 *	T. Krolick
	D. Walker	1970	r. nenyo
*	M. Yuhase	W. Balitski	R. Morse C. Peters
		R. Banks	L. Walker
	1971	E. Hitchings	D. WUIKEL
	· · · · · · · · · · · · · · · · · · ·	L. P'Pool	1983
*	S. Andrejko	A. Starnes	
	M. Rocco	G. Wiley	J. Bozarth
	W. Thigpen		V. Demish
		<u>1979</u>	C. Dovidas
	<u>1973</u>		B. Gibbs
	E Proten alle alle alle alle	R. Barrett	R. Lang
*	E. Brown L. Evans	D. Huntley	I. Mansell
*	H. Grafton	E. Kaiser	J. Miller
*	S. Groves	W. McCullough E. Onuscheck	R. Nelson
	F. Koza	W. Vicinelly	R. Radakovich G. Swift
		•••• • • • • • • • • • • • • • • • • •	C. DWILL

#### 1984

R. Duran R. Keaton J. Krese J. Lahnstein E. Lamont R. Vines H. Yakimovich

#### 1985

J. Garcia J. Kaiser T. Kessler W. Miller

\*Deceased

#### 1986

- D. Alsop
- G. Bell
- J. Kreutzberger
- D. Zegeer

#### 1987

- J. Barton
- J. DeMichiei
- E. Jones
- B. Lay
- R. Murphy

# TO ALL OF YOU ----

If you missed last months release--- we would like to repeat singularly and collectively your cooperation and support made at the National Council and Joseph A. Holmes meetings in Pittsburgh, May, 1987, a tremendous success. See you in Evansville, Indiana, May, 1988. More news later. Read the Bulletin.





# Fall Protection Systems

This report presents an evaluation of Fall Protection Systems (safety belts and/or harnesses, lifelines or tie-off points and lanyards) used for entry into tanks, bins, hoppers or structures when there is the possibility of falling or the danger of entering bins containing bridged materials, and the individual being carried down by a slide of the loosened materials.

It was concluded that by providing and using a fall protection system, a worker will be arrested in the event of a fall. The system will afford additional protection when designed for securing, suspending or retrieving a worker in or from a hazardous area. The worker, while wearing a safety belt (or harness) and lanyard, must tie off the lanyard to a lifeline or anchorage at or above the worker's eye level.

A review of some past and some recent accident and/or injury data on the subject of fatalities related to safety belts, safety lines or lanyards, indicated that failure to provide and require the use of this type of eqipment results in hazardous exposure to a fall. Many employee accidents could be prevented by the use of a fall protection system.

The design of specific component parts of a fall protection system is covered in the American National Standards Institute (ANSI) A10.14 standard, which defines design and testing criteria. The Occupational Safety and Health Administration (OSHA) standard 1926.104 covers the subject of safety belts, lifelines and lanyards on such issues as use, static loads, securing lifelines and minimum rope sizes. MSHA standard 55.15-5 and standard 55.16-2(c) covers the use and wearing of safety belts.

One of the primary purposes of any fall protection system is to limit the distance a worker can travel after losing his balance or footing. An employee does not generally expect to fall in the performance of a task or job. However, it must be recognized that some work is performed where the potential of a fall exists. Examples include working at elevations, on slopes, in tanks or bins, or other locations where a worker must be suspended because there is no firm place to stand. Therefore, the use of belts, lanyards and lifelines becomes paramount to the worker's safety and will minimize severe injury in the event of a fall. An important consideration in fall protection regards the proper use of safety belts. The belts must be provided to the worker and requirements established that they are worn and used properly. The belt must be buckled securely and properly adjusted to prevent the worker from slipping out of it upon falling.

The lanyard is an integral component of the fall protection system. This is the component that will determine the distance of fall. The lanyard must be as short as conditions permit and must not permit a freefall greater than 6 feet. This lanyard criteria is derived from the following:

1. Maintain a short enough stopping distance to prevent striking any obstructions before stopping.

2. Fasten the lanyard to an anchor point at or above the worker's eye level.

3. Never join two lanyards together to increase length.

4. The amount of impact force developed in arresting a fall depends on three chief elements; the weight of the person, the distance of fall and the period of arrestment.

The lifeline is the third component within the basic system. This component is generally located across structural members and anchored securely at each end. This permits the lanyard to be attached by a snaphook and the worker will have freedom of movement along the length of the lifeline. In some instances, the lanyard is directly attached to independent anchor points. This method somewhat restricts the worker's movement to less than the full length of the lanyard.

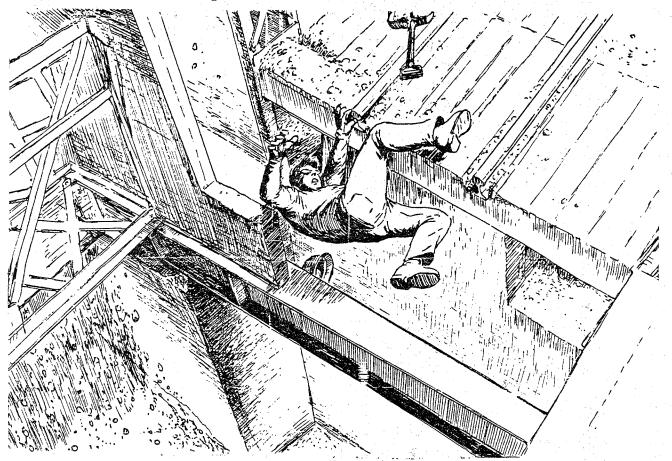
For the most part, the information compiled in this report reflects the viewpoint of manufacturers combined with national consensus standards (ANSI), OSHA and MSHA standards. There are many sources of fall prevention, rescue and restraining devices available for most industrial applications, including the mining industry.

The purchaser or user must consider the selection of appropriate devices so that suitable type of equipment is obtained for the use or application for which it is intended to serve. After the fall protection devices have been obtained, the equipment must be installed and used properly. The parts of the system must be

installed on a permanent or temporary basis, depending on local conditions. After this condition is met, the employee must be required to wear the fall protection equipment properly. This can be accomplished by using established procedures, supervision and training.

Each fall protection system must be designed for local conditions existing at the worksite. For example, a worker wearing a 35-foot lanyard attached to a single point or held by a co-worker enters an enclosed worksite. The worker that enters the enclosure is unprotected when the footing gives way or collapses. The worker falls downward with the 35-foot of lanyard horizontally extended and falls some intermediate distance up to the maximum distance of the extended lanyard.

It was concluded that a fall protection system is a mandatory requirement to protect workers who are required to work in elevated locations, in bins or tanks, or in other situations where there is an absence of firm footing. The fall protection system will arrest a worker in the event of a fall and minimizes the severity of injury and may prevent a fatal accident. The worker must be provided with a positive means of tie-off that is located above the worker to provide a minimum freefall distance.





# THE LAST WORD

#### CORRECTION

We failed to recognize the following donors who helped make our annual meeting a success:

Coal River District Council Cannelton Industries Marrowbone Development Corp.

We apologize for the oversight and thank these donors.

#### CALL FOR SAFETY COMPETITION REPORTS

The second half of the District Council Safety Competition closes on August 31. Let's get all those reports in for a good competition this year! If you have problems or questions contact:

William H. Hoover in the Tucson, AZ office at: (602) 629-6631 or FTS 762-6631

Linda Lofstead in the Pittsburgh, PA office at: (412) 621-4500 Ext. 650 or FTS 721-8650

#### THE BEST SAFETY DEVICE

or

It's a big job on this old earth to get on your own and prove your worth, but it's tougher still to have a mishap and face the world with a handicap. No matter how smart you think you are, you cannot depend on your lucky star to keep your limbs and eyes intact, or to keep your skull from being cracked; it takes constant care and a mind that's alert, to stay on the job and avoid being hurt. A beautiful epitaph can't be read the the one it's written for, after he's dead. The age old plea, "I wish that I had ... " is no relief when you're hurt and sad, and you dream of an eye that used to be. It's worth far more, as the days go by, to give safety a break and honestly try to avoid the cost of careless ways and prove to the world that safety pays.

#### THE BEST SAFETY DEVICE IS A CAREFUL WORKER.

The Joseph A. Holmes Safety Association was founded in 1916 by 24 leading National organizations of the mining industries.

The Joseph A. Holmes Safety Association is named to commemorate the first director of the Bureau of Mines for his efforts in reducing accidents and illness throughout the mineral industries.

The following is the different award criteria:

Type "A" Awards - For Acts of Heroism

The awards are medals with Medal of Honor Certificate.

Type "A" - For Acts of Heroic Assistance

The awards are Certificates of Honor.

Type B-1 Awards - For Individual Workers

(40 years continous work experience without injury that resulted in lost workdays)

The awards are Certificate of Honor, Gold Pins and Gold Decal.

Type B-2 Awards - For Individual Officials

(For record of group working under their supervision) The awards are Certificate of Honor.

#### Type C Awards - For Safety Records

(For all segments of the mineral extractive industries, meeting adopted criteria) The awards are Certificate of Honor.

Other Awards - For Individual Workers

(For 10, 20, or 30 years without injury resulting in lost workdays) The awards are 30 years-Silver Pin and Decal, 20 years-Bronze Pin and Decal, 10 years-Decal bearing insignia.

#### Special Awards - For Small Operators

(Mine operators with 25 employees or less with outstanding safety records) The awards are Certificate of Honor!

Contact: HSA Office

Department of Labor MSHA, Holmes Safety Association 4800 Forbes Avenue, Room A268 Pittsburgh, PA 15213

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