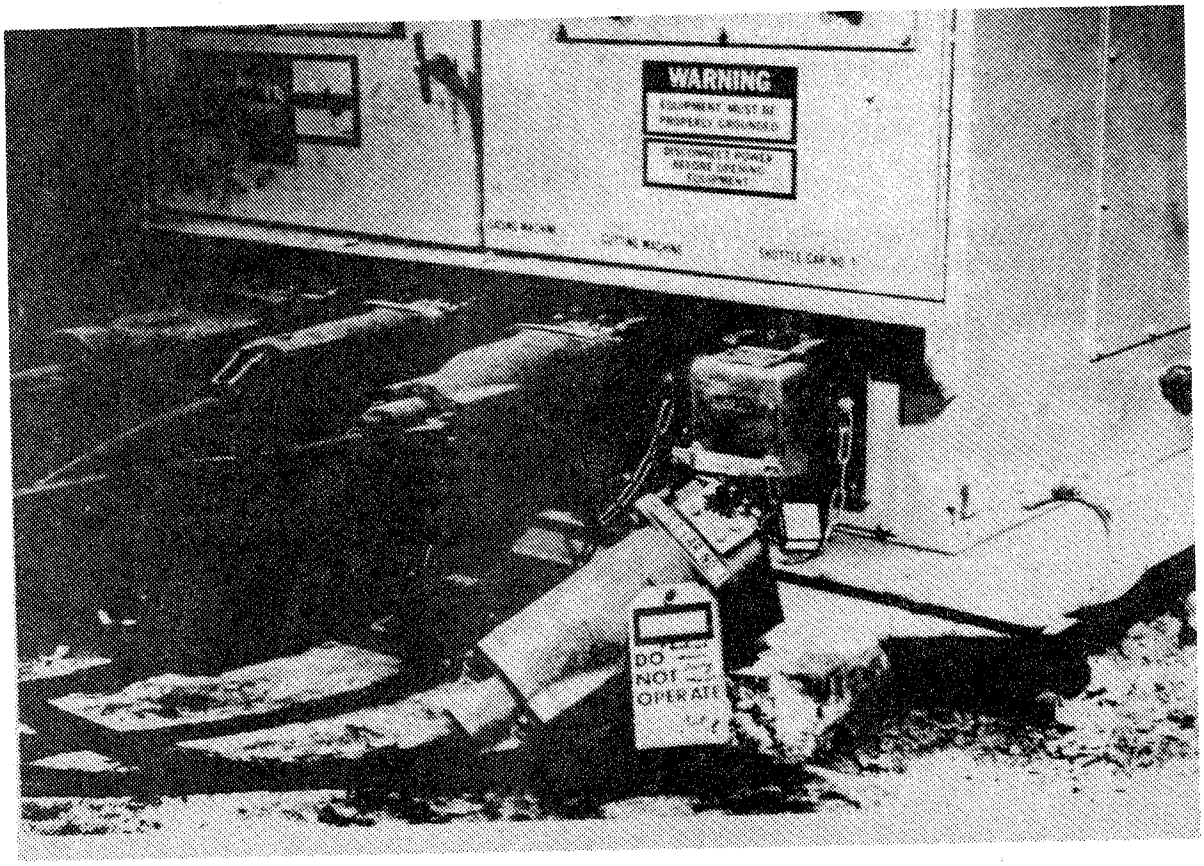
BULLETIN

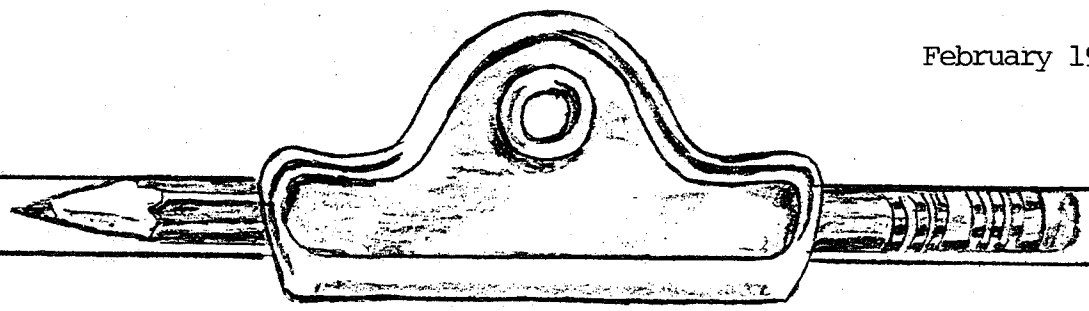
February 1988

HOLMES SAFETY ASSOCIATION

A TAG AND LOCK MEANS NO SHOCK



United States Department of Labor
MSHA
Mine Safety and Health Administration



IN THIS ISSUE...

THIS SAFETY BULLETIN CONTAINING 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 IS PROVIDED FREE AS A BASIS FOR DISCUSSION AT ON-THE-JOB SAFETY MEETINGS.

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

COMPANY	CHAPTER NO.	LOCATION
Ashland Materials Inc.	7435	Catlettsburg, KY
Little Fork Resources & Devel.	7436	Switzer, WV
N. H. Dept. Of Labor	7437	Concord, NH
Westcon	7438	Pleasant Grove, UT
Torno America Inc.	7439	Heber City, UT
W. W. Clyde & Co.	7440	Springville, UT
Aggregate Plant Products Co.	7441	San Antonio, TX
Industrial Specialists	7442	Lake Jackson, TX
Casanova Industrial Insulation	7443	Corpus Christi, TX
Specialty Coatings	7444	Corpus Christi, TX
Pearson's E. F. & C. Inc..	7445	Corpus Christi, TX
Keibler Thompson Corp.	7446	Ingleside, TX
F & E Erection	7447	Port Lavaca, TX
Electric Construction Co., Inc.	7448	Corpus Christi, TX
Scott Electric Co.	7449	Corpus Christi, TX
Plant Fabricators	7450	Floresville, TX
Cox Tank Construction Inc.	7451	Taft, TX
J. M. Davidson Inc.	7452	Corpus Christi, TX
Yeager Electric & Plumbing Co.	7453	Aransas Pass, TX
Sullinger & Sullinger	7454	Corpus Christi, TX
Lankford Co., Inc.	7455	Corpus Christi, TX
PAL Energy	7456	Corpus Christi, TX
Shirley Bros. Gen Construction	7457	Aransas Pass, TX
Henry S. Branscome, Inc.	7458	Williamsburg, VA
Robinson Coal Company	7459	Clarksburg, WV
Star Rt. Spring Church	7460	Clarksburg, WV
J & B Coal Company	7461	Clarksburg, WV
B & B Welding Company	7462	Lost Creek, WV
Winn Construction Co., Inc.	7463	Oklahoma, KY
Green River Mine	7464	Poverty, KY
Croner Incorporated	7465	Garrett, PA
Bromely Coal Company, Inc.	7466	Paxinos, PA
Rocky Creek Mining Inc.	7467	Stirrat, WV

H.S.A. SAFETY TOPIC

Electrical Maintenance Accidents

by

William A. Mason1/

There were 684 injury accidents, including 28 fatalities during a four-year period that occurred during electrical maintenance activities in U.S. coal mining. Performing work on power cables and conductors, power panels, connection boxes, etc. accounted for 45.3 percent of the accidents. Testing and checking of circuit breakers and fuses resulted in 12.9 percent of the injuries; use of tools near energized circuits, 7.1 percent; inspection of cables, 5.8 percent; and testing and changing batteries, 2.8 percent. Other maintenance activities accounted for 20.6 percent.

DISCUSSION

Working on power cables and conductors, power panels, connection boxes, distribution boxes and other electrical components where wiring is terminated, spliced or interconnected, was the most common activity. Locating faulty circuits, at times, is quicker and easier with the circuit energized. While this is a valid technique, it appears that maintenance is being done on energized circuits, as an expedient, exposing personnel to hazards. Failure to deenergize circuits, where voltage was not required to perform the work, resulted in 21.3 percent of the electrical accidents. Excerpts from the accident reports illustrate the problems: "Removing piece of energized switch gear and failed to deenergize the feeder circuit;" "Failed to lock-out high voltage sectionalizer before repair work;" "Failed to deenergize and tag out disconnects;" "Trying to change out 480 V.A.C. breaker without killing power."

Failure to deenergize cables prior to cutting into them for repairs resulted in 42 of the accidents. In 29 of these incidents, the cable was not disconnected and in 13, the wrong cable was disconnected. One of the accidents resulted in a fatality.

Working on a deenergized circuit does not always assure that a shock hazard doesn't exist. Accidental contact with energized electrical circuits adjacent to the one under test or repair caused 11.6 percent of the accidents. Since it is not always feasible to deenergize a complete power panel or junction box during maintenance activities, caution must be used when working close to energized circuits. A supplementary temporary insulation shield should be installed.

1/ Electrical Engineer, Division of Mining Hazard Analysis and Forecasting, Safety and Health Technology Center, Denver, Colorado

Typical accidents of this type included: "Working on a circuit that was deenergized when his hand came in contact with an energized control transformer;" "Changing fuse in power supply when hand slipped and hit main supply of power in top of the box;" "Replacing an insulator in a line power center and accidentally touched a live lead;" "Made contact with an energized 480-volt AC phase conductor while he was reaching toward the back side of a linestarter." (This accident resulted in a fatality.)

The use of voltmeters, ammeters and ohmmeters, accounted for 7.3 percent of the accidents. Wrong settings on the meters caused them to arc or explode. Test probes touching each other where a circuit was under test, or a probe touching ground during tests caused flash burns. Two accidents involved the victim touching one test probe while it was off the circuit, while the other one was on the circuit under test. Both accidents resulted in shocks.

The accidental energizing of circuits while under repair resulted in 1.8 percent of the accidents. Failure to lock-out or tag the circuit under repair contributed to this type of accident.

The single most frequent electrical items or components involved in electrical accidents in underground coal mines were circuit breakers, and were involved in 9.8 percent of the injuries. Since most of these accidents involved exploding breakers, it appears that they were being opened or closed under load. The trip current on a properly set circuit breaker is usually at a high enough value to prevent nuisance tripping. If a circuit breaker performs its function in a safe, proper manner, it can be assumed that the circuit it protects is in an overload or fault condition if the breaker trips. To attempt to close a circuit breaker without first removing the condition that caused it to open is inviting an accident. Again, using excerpts from the accident forms: "The power on the loader knocked at the power center breaker. The injured was putting it back on and it blew up;" "Employee was resetting circuit breaker and it blew up;" "Man was putting the breaker in for the Galis 300 roofbolter. He tried it twice and it wouldn't stay. The third time it blew up;" "Worker attempted to reset the miner breaker when an electric arc occurred."

Using tools near energized circuits resulted in 7.1 percent of the electrical maintenance accidents. Using screwdrivers to pry and probe wiring, and wrenches to loosen nuts and bolts near energized circuits caused most of the accidents in this category. Typical tool accidents are: "Employee contacted an energized terminal with a wrench causing electrical burns." "Employee contacted an energized receptacle with a wrench;" "While adjusting under voltage release on breaker, a screwdriver touched two phases in a breaker which resulted in an arc;" "Checking for loose connections, power wire loose from starter, coming in contact with screwdriver;" "Working on the belt starter box and short circuited two phases with a screwdriver;" "Pliers came in contact with power."

The inspection of cables for damaged insulation and splices resulted in 5.8 percent of the accidents. Pinhole defects in the cable can result in shock. These holes normally are created as a result of prior testing by pushing a test probe or driving a nail through the insulation in order to check for voltage on the circuit. Since trailing cables are also subject to damage from being run over or pulled apart by excessive tension, the handling of cables with tongs, insulated gloves or other means, should be a matter of routine safety procedures. Accidents representing these injuries are: "Inspecting near a splice that blew up;" "Attempting to check a cable splice with a voltage tester when the cable blew up;" "Checking splice in cable, pulling on splice, and came in contact with bare wire;" "Was examining a trailing cable and it blew up;" "Checking cable when it blew up at anchor point."

Testing and charging batteries resulted in 2.8 percent of the accidents. Seven of the accidents occurred when tools used to remove and replace the battery cables shorted the terminals to ground or to each other. In one accident, the battery exploded. Removing the grounded battery conductor first is an accepted work practice which would have prevented several of these occurrences.

Removing and inserting catheads resulted in 3.3 percent of the accidents. In all of the accidents, power had not been removed from the plug and cable serving the equipment. In two accidents, the catheads blew up. In each case, the breaking or making of the circuit resulted in heavy arcs. The arcs and heat generated caused burns.

Removing and replacing fuses resulted in three fatalities when the miners touched the energized fuse holder. In twelve of the accidents, the fuse blew up and in five, the fuse arced during installation indicating that the circuit was still under fault conditions or that equipment was still online. All of the accidents could have been prevented had the circuit protected by the fuse been deenergized prior to removing or replacing the fuse.

RECOMMENDATIONS

More than 40 percent of the injuries that occurred from electrical maintenance activities could have been prevented if proper safety precautions had been taken prior to beginning the work. Circuits under repair must be locked out and tagged if voltage is not needed during the repair work.

When work within an enclosure does not require power, all circuits within the enclosure should be deenergized to prevent inadvertent contact with live circuits. Locking devices and lockout procedures should be used to prevent circuits from being energized without the knowledge of the person working on the circuit. Locking devices

should be installed by the person doing the work and should only be removed by that person. If adjacent conductors cannot be deenergized, supplemental temporary insulation such as hoses, blankets, or hoods should be used.

When testing live circuits to locate a problem, the testing should be performed by a person who has experience in electrical troubleshooting techniques and the knowledge needed to safely accomplish the task. Safety procedures should be developed and distributed to all personnel. Such subjects covered should be (1) Startup procedures: Proper startup and operating procedures should be posted at all equipment. (2) Operation of circuit breakers, switches and disconnects: Always remove or reduce the load wherever possible before opening or closing circuits. Do not attempt to interrupt full-load, locked rotor, or short-circuit currents unless the interrupting device is rated for such duty. (3) Fuse pulling and replacement: Fuses should be pulled or installed with approved-type nonconducting fuse pullers with the circuit deenergized. (4) Prohibition of work on live circuits: Work shall not be done on live circuits unless absolutely necessary. (5) Determination to assure the power is off: A check should be made with a voltage tester to determine definitely that the circuit is deenergized, and (6) Lockout of switches: Where work is performed on a machine or device, the switch should be opened and locked in the open position. While these procedures are not all-inclusive, they are representative of the types needed to reduce electrical maintenance accidents.

Protective equipment and apparel should be available for use when needed. Examples of some of these items include: rubber gloves with leather protectors, rubber sleeves, rubber mats and blankets, insulating platforms, fuse tongs or pullers and switch hooks.

Safe clothing and handtools should be used when performing electrical maintenance work. Shoes should be of nonconducting type. Handtools such as pliers, cutters, screwdrivers, nut drivers and test leads should be insulated as much as possible. Rings and watches should not be worn during electrical work.

Dead front panels should be installed in all new installations. Dead front panels should be designed so that if any work is required inside the panel, removal of the dead front automatically deenergizes all circuits within the frame except busses located in the rear of the frame.

Care should be taken in the use of meter test leads to prevent accidentally touching them to ground or adjacent circuits while testing another circuit. Short tipped probes, or probes that require exposure by mechanical action on the probe by the repairman, should reduce this type of accident.

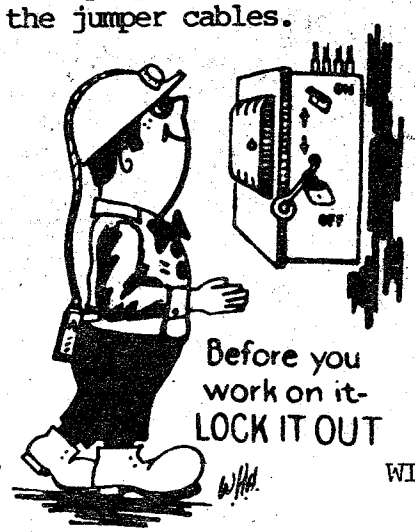
When setting the scale on meters, unless the approximate range of the parameter under test is known, start with the highest scale and reduce the setting until an accurate reading can be obtained. Care must be taken not to use the ohmmeter setting when testing for voltage or current.

Circuit breakers should not be used as switches to remove or apply power directly to equipment. If a circuit breaker has tripped, all equipment being supplied power by that breaker should be deenergized by the switch on the equipment before resetting the breaker. In this manner, if a breaker or fuse does explode when power is returned to the equipment, no one will be operating the breaker at that time. By applying power to each individual piece of equipment, any faults on the line can be isolated, if the tripping was not caused by "nuisance" tripping or voltage variations, etc.

Tools, particularly screwdrivers, should not be used to probe around energized circuits. When nuts or bolts must be loosened or tightened in the vicinity of energized circuits, all power should be removed from the power panel, distribution box, bus bar, etc., and the conductors grounded to prevent accidents caused by accidental touching of these circuits with the tool. The same rule applies when using pliers.

The inspection of energized cables for breaks or pinholes in the insulation, or for the integrity of splices, should be done while wearing insulated gloves and eye protection. Cables should be lifted and moved with insulated hooks, tongs, gloves, mitts, aprons, or other safety equipment designed to protect against shock or an arcing or exploding cable splice. Splices should be made in accordance with 30 CFR 75.603 and 75.604. To verify the absence or presence of voltage on a cable, a voltage sensing device should be used on unshielded cables as an initial test.

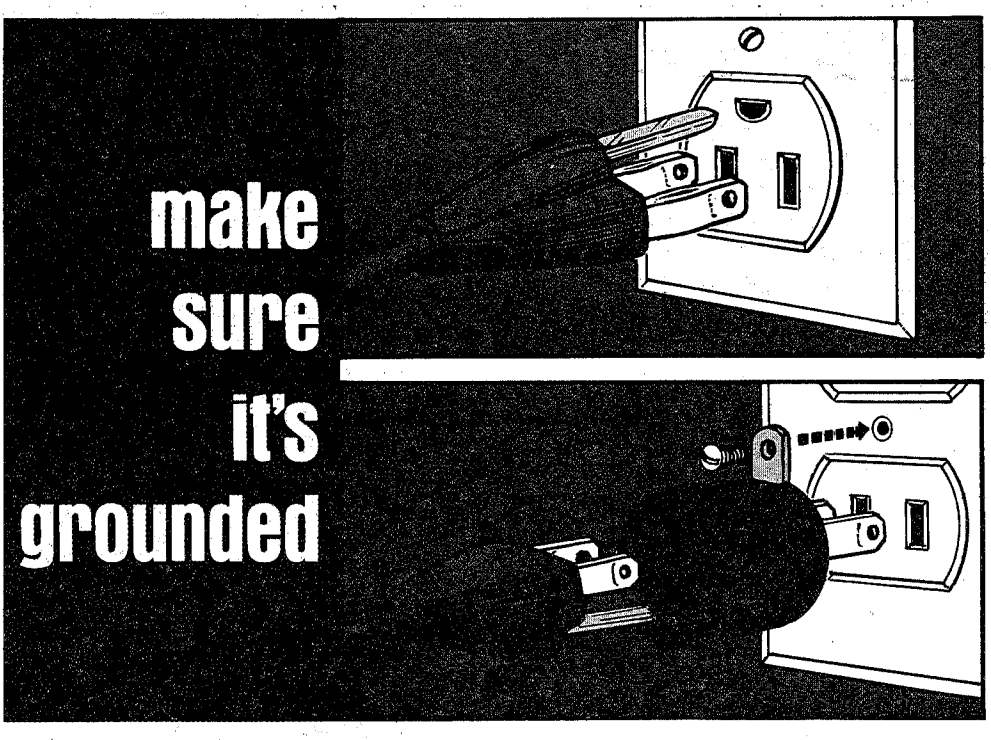
When testing batteries or connecting them to a battery charger, protective clothing and a face shield should be worn in case the battery explodes or hot electrolyte erupts from the cells. When batteries are installed in vehicles, all switches in the vehicle should be off to prevent a sudden flow of current when connecting the battery. When "jumping" batteries, proper safety procedures should be followed when connecting the jumper cables.



To jump-start a vehicle from another vehicle, the following rules apply:

1. Put out all cigarettes and matches.
2. Shield eyes and face from the battery at all times.
3. Vehicles should be close, but not touching.
4. Turn off ignition in both vehicles and place transmission in park or neutral with the parking brake applied.
5. Connect the red jumper lead to the positive terminal (large diameter terminal) of the dead battery.
6. Connect the other end of red jumper lead to the positive terminal of the booster battery.
7. Connect the black jumper lead to the negative terminal of the booster battery.
8. Connect the other end of the black jumper lead to the engine block, away from the battery (in case of spark).
9. Start the engine of the booster vehicle and then the engine of the stalled vehicle.
10. After starting, remove the jumper leads in the reverse order.

Power switches on equipment supplied power through catheads should be turned off before inserting or removing the equipment catheads from their power sources, to prevent the sudden starting or stopping of current flow at the cathead. If equipment switches are on, the current flow at the cathead can cause arcing or an explosion.



ABSTRACT FROM FATAL ACCIDENT

February 1988

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

FATAL ELECTRICAL ACCIDENT

GENERAL INFORMATION: An electrical accident occurred in an underground coal mine resulting in the death of a timberman with 9 years mining experience.

Routine coal production activities were underway until the mine manager instructed several timbermen to timber around the power box and finish some cribs in the belt entry. Upon running out of timbering material in the belt entry, they began timbering around the power box. The victim went to the intake entry to get an extension cord for the electric power saw to extend from the power box to the area to be timbered in the belt entry. When he didn't return, one of the timbermen went to look for him and found him face down in 3 inches of water. The coworker saw the 120-volt female plug in the victim's hand and kicked it free.

FINDINGS OF FACT: The male plug on the first section of the extension cord which was connected to the power supply had been improperly wired. When the victim came in contact with the energized female receptacle, it resulted in a fatal shock. A violation of 30 CFR Section 75.701.

FATAL ELECTRICAL ACCIDENT

DESCRIPTION OF ACCIDENT: The day the accident occurred was a scheduled maintenance day at this open-pit phosphate operation. The victim was instructed to repair a faulty connector on the No. 1 secondary circuit at the transformer substation. He and an electrician/line worker went to the substation and upon visual examination detected a discoloration of the third of the nine connectors which indicated that it was the one to be repaired. They deenergized and locked out the No. 1 secondary circuit. The victim then climbed the framework of the structure to the top of the substation and stood with one foot on the resistor box frame and the other foot on the steel superstructure to position himself in front of the first three connectors.

The victim removed the connecting bolt and incoming power line to the faulty connector and indicated that these two parts would have to be replaced. A few moments later, the victim's right shoulder came in contact with the energized fourth connector and he fell about 4 feet from the superstructure to the top of the substation.

CAUSE OF ACCIDENT: The accident was caused by the victim's apparent failure to recognize the hazard of working near the energized connector and failure to deenergize or isolate the adjacent circuit.

A possible contributing factor was the victim placing himself in an unsafe position on top of the station instead of using the insulated bucket on the truck or a ladder. Both were readily available.

February 1988

ABSTRACT FROM FATAL ACCIDENT

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

FATAL ELECTRICAL ACCIDENT

GENERAL INFORMATION: An electrical accident occurred in an underground coal mine resulting in the death of a qualified electrician with 15-1/2 years mining experience.

DESCRIPTION OF ACCIDENT: Several miners had been attempting to remove the section power center but were having difficulty disconnecting the high-voltage cable coupler from the input end of the power center. One end of a wire rope was attached to the output end of the power center and the other end was attached to a 20-ton locomotive. The wire rope broke several times because the output end power center kept plowing into the mine floor.

They contacted the victim for assistance and asked him if there was another way of removing the coupler. He said he could disconnect the cable leads from the inside of the power center and remove the cable coupler. The victim raised the cover of the input end of the power center and prepared to disconnect the lead wires. Moments later, he yelled and slumped to the mine floor.

CONCLUSION: The accident and resultant fatality occurred because management failed to assure that proper deenergizing procedures were being followed and the victim's failure to deenergize, disconnect, lock out, tag, and ground the affected portion of the underground high-voltage circuit before working in and around the section power center. Contributing factors were management's failure to establish a suitable procedure for moving section power centers and failure to examine and maintain the equipment in safe operating condition.

FATAL ELECTRICAL ACCIDENT

DESCRIPTION OF ACCIDENT: A slurry operator was electrocuted when he grasped a damaged electrical conductor where insulation was missing. Another employee had locked out power for an adjacent circuit the day before believing that the damaged wire was a phase conductor of the deenergized circuit. When the victim prepared to repair the wire, he assumed that his fellow employee had locked out the right circuit, and after taking the precaution of pulling the fuses for the phase conductors, proceeded and attempted to repair the damaged wire, which was still energized.

RECOMMENDATIONS: 1. Lockout procedures for electrical-type work should include use of methods and equipment required to determine when any circuit components might still be energized before any work is started, and all personnel as appropriate, should be trained to follow completely safe lockout procedures.

2. Only personnel qualified to maintain electrical systems and circuits should be permitted to do electrical maintenance work.

TYPICAL MINING OF THE ERA GONE BY:

No. 2 RELEASE

THE HIGH GRADERS

When free gold appeared after the blast, the High Grade boss supervised the moiling and chiseling of the high grade ore. This was done to discourage high grading among the miners.

HOLMES SAFETY ASSOCIATION

MAKE PLANS NOW— to attend the Holmes Safety Association Annual meeting. This year we are holding our meeting in the heartland of America, southwest Indiana.

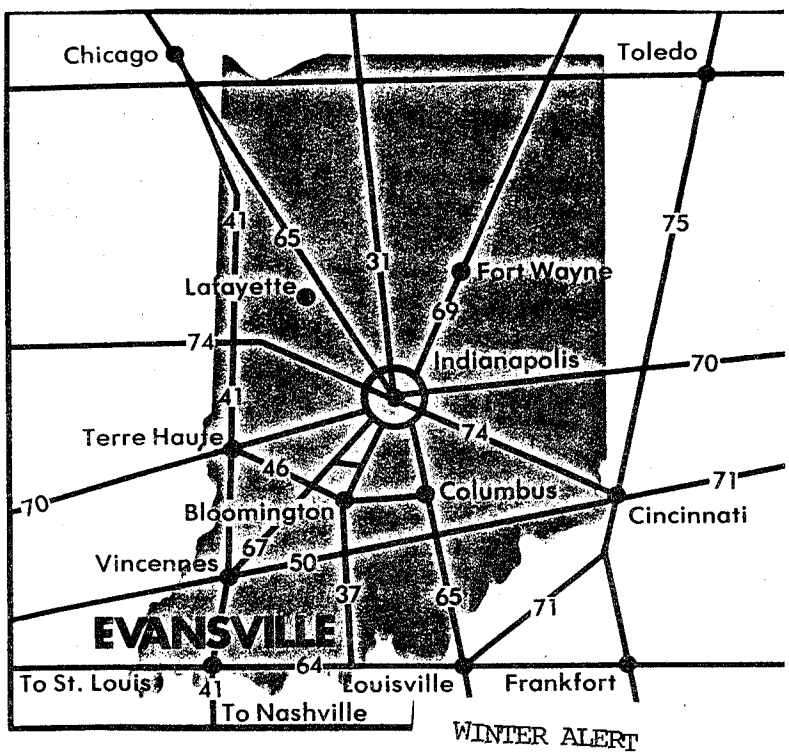
There will be a host social hour on Wednesday evening, May 18, beginning at 5 p.m. The meetings will begin on Thursday, May 19, with the executive committee meeting at 9 a.m. and the regular meeting of the body at 10 a.m. The Joseph A. Holmes Safety Association will hold its meeting at 2 p.m. that afternoon. Thursday evening will feature a social hour beginning at 4:30 followed by the safety awards banquet at 6:30.

National Council president James Clem extends a warm welcome to all members to attend this meeting. He is looking forward to a good turnout from the various companies and district councils in Indiana, Illinois and Kentucky.

We have a block of rooms available at the Sheraton Inn Evansville Airport, 5701 U.S. Highway 41 North, Evansville, Indiana, (812-464-1010). Please make reservations early.

Driving Distance And Times From Major Cities

City	Distance	Time
Atlanta	400 miles	7½ hrs.
Chicago	300 miles	5½ hrs.
Cincinnati	220 miles	4 hrs.
Columbus	324 miles	6 hrs.
Dayton	274 miles	5 hrs.
Huntingburg, WV	308 miles	5½ hrs.
Indianapolis	177 miles	3¼ hrs.
Louisville	110 miles	2 hrs.
Kansas City	423 miles	7¾ hrs.
Memphis	283 miles	5¼ hrs.
Milwaukee	364 miles	6¾ hrs.
Nashville	145 miles	2¾ hrs.
Pittsburgh	508 miles	9¼ hrs.
St. Louis	172 miles	3¼ hrs.
Washington, DC	720 miles	13¼ hrs.



Registration ..... Registration ..... Registration

HOLMES SAFETY ASSOCIATION and
JOSEPH A. HOLMES SAFETY ASSOCIATION
ANNUAL MEETINGS
MAY 18-19, 1988
EVANSVILLE, INDIANA

Room Reservation:*

Sheraton Inn - Evansville Airport---Price per night:
$34 - Single ( ) No. of Rooms Required ( )
$39 - Double ( ) No. of Rooms Required ( )

Arrival Date _____ Departure Date _____

*** Room payments due on DEPARTURE AT HOTEL DESK.**

Buffet Dinner Tickets -- $16.00 (includes tax and gratuity.)
Featuring: Baked ham, Roast Beef au Jus, Turkey w/ dressing, Broccoli Spears w/ sauce, Carrots Vichy, Whipped Potatoes, Garden Salad and Dessert.

No. of Banquet Tickets @ $16.00_____*

***PAYMENT OF BANQUET TICKETS MUST ACCOMPANY REQUEST.** Make checks payable to William H. Hoover, National Treasurer, HSA.

Name _____ **Phone**_____

Representing_____

Address_____

City_____ **State**_____ **Zip Code**_____

Please return reservation by May 6 to:

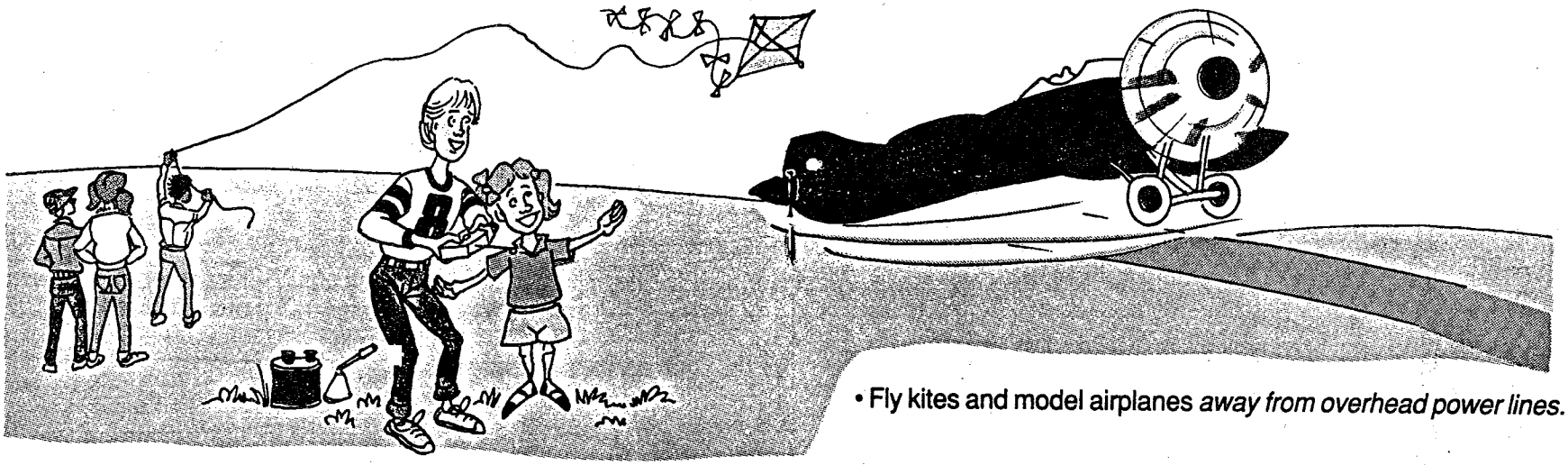
MSHA, Holmes Safety Association
4800 Forbes Avenue
Pittsburgh, Pennsylvania 15213

* *

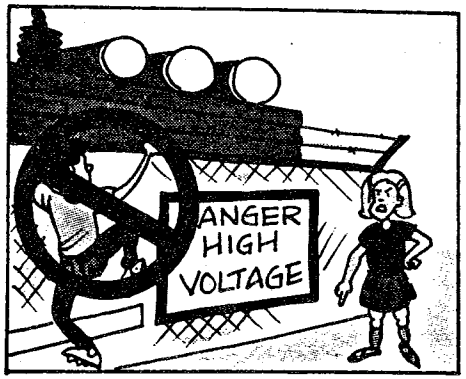
The President of the National Council, James Clem, has finalized arrangements for a tour on May 19 sponsored by Peabody Coal Co. and the HSA National Council. It will include a tour of a strip mine, an energy center, a wilderness area and the Rockport Museum. This is one trip you do not want to miss. The tour will be free of charge, but seats are limited; please make plans and return this form as soon as possible. Further information will follow in the March Bulletin.

Please reserve_____(#) seats on bus tour.

WHAT CHILDREN SHOULD KNOW ABOUT ELECTRICAL SAFETY



• Fly kites and model airplanes *away from overhead power lines.*

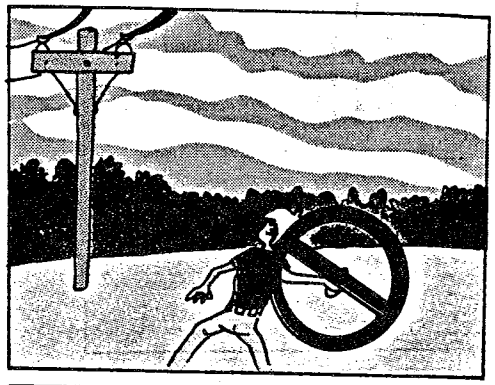


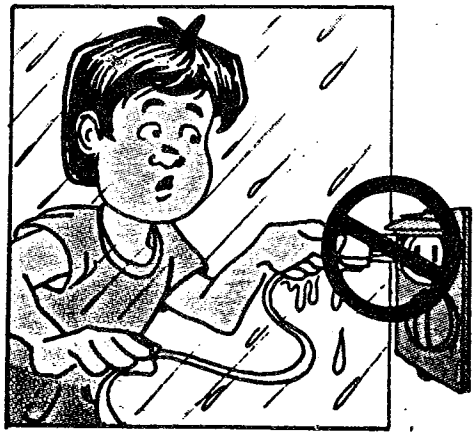
• *Play* in an open field--not near overhead lines.

• You're asking for trouble if you climb utility poles - stay away!

• *Stay away* from substation fences or electrical equipment.

• *Don't* break insulators on electrical equipment.





• *Electrical* outlets are for electric plugs *only.*

• *Water* and electricity *don't mix.* Don't become a conductor.

• *Climb* trees only where there are *no* electrical wires.

H.S.A. SAFETY TOPIC

ELECTRICAL EMERGENCIES*

Handle electrical emergencies properly.

Electrical fires and injuries from contact with electricity are emergencies you should be ready to deal with.

Electrical and other fires may appear the same, but there's a major difference between them: you shouldn't use water to extinguish an electrical fire. You could receive a dangerous shock. If you know a fire's source is electrical, turn off the power or pull out the plug as a first step. If the fire is small, put it out but be prepared to get everyone to safety and call the fire department if you can't handle it within the first few seconds. If you can't turn the power off, use a multi-purpose, dry chemical fire extinguisher or one with a "C" rating on the label.

If someone has been shocked and is still in contact with the electrical source, the victim will need your help. Quick action is necessary. Electricity can damage the heart and respiratory system and cause severe burns. Once the heart stops beating, irreversible brain damage can occur in less than six minutes. Don't touch the victim! You could get severely shocked as well. Shut off or disconnect the current and yell for help! Send another person to call the paramedics, telling them the nature of the injury and location of the victim. If you're alone and can't shut off or disconnect the current, move the victim away from the power source, or remove the power source. Do this only with a dry insulator such as a wooden board or a plastic pole. Then, if the victim has stopped breathing, apply artificial respiration. If there is no pulse, cardiopulmonary resuscitation (CPR) is needed, but don't attempt this unless you have qualified by taking an approved course. While waiting for the ambulance, don't leave the victim alone and try not to move him. Keep him quiet, warm and comfortable, lying with his head lower than his feet.

There's one emergency you can manage by not taking any action. Should a downed power line fall onto your car, don't panic and don't get out until someone from the utility gives you the all clear. While you remain inside the car, the energy has no path to the ground. The moment you place your foot on the ground, however, the electricity can flow from the car through you to the ground. A person outside the car is also in danger if he touches the car or gives you a hand to help you out.

*Courtesy National Safety Council

H.S.A. SAFETY TOPIC

We Can't Bring Them Back

The following are brief descriptions of a few 1987 Underground and Surface Coal mine fatal accidents. There is a lesson to be learned in each accident. Take time out to review at your safety meetings:

1. **POWERED HAULAGE:**

A trip of empty mine cars entering the mine, with one lead and one trail motor, had one motor breakdown. A spare locomotive was brought in from the surface supply yard and the broken-down locomotive was placed in a switch. The same locomotive crew, leaving the mine with a trip of loaded mine cars, entered the switch, colliding with the broken-down locomotive and a jeep. The foreman and one mechanic repairing the locomotive sustained injuries while the other mechanic was fatally injured.

Fatal Case #43

2. **POWERED HAULAGE:**

The victim was tramming a Caterpillar Model 966C front end loader from the newly constructed E-3 mine sight to the mining company's shop facility located 2.5 miles away. After having traveled .8 miles along the elevated roadway, the front end loader left the roadway and traveled over the outer edge of the roadway, overturning onto its rightside. The front end loader slid down the embankment and came to rest after returning to an upright position. The victim either jumped from, or was thrown from, the overturned front end loader and received fatal crushing injuries. There were no eyewitnesses to the occurrence. Fatal Case #44

3. **POWERED HAULAGE:**

The victim was cleaning the roadway in a crosscut between the Nos. 1 and 2 entries, approximately 800 feet outby the 002 section. The diesel scoop came in contact with the right rib of the crosscut dislodging a piece of rib rock. The rock struck the victim in the head. Fatal Case #45

4. **ROOF FALL:**

The victim was scaling loose roof in order to establish a new haulage road approximately 135 feet inby No. 3 portal when a portion of roof approximately 20 feet by 4 feet-7 inches, by 10 inches, fell causing injuries which resulted in death.

Fatal Case #46

5. **POWERED HAULAGE:**

The victim was operating the lead locomotive of a trip consisting of one supply car and one trail locomotive. As the trip was traveling through the bottom switch near the underground maintenance shop, a derailment occurred causing the lead locomotive to go off track and come in contact with a masonary block wall along the wide side of the track haulage. As the locomotive struck the wall, two large pieces fell from the top area of the wall, pinning the victim in the kitchen of the locomotive. The operator of the trail locomotive summoned help and the victim was removed from the mine. Fatal Case #47

6. **ROOF FALL:**

Victim was operating a roof-bolting machine in the left crosscut of the No. 3 entry on the 001-0 working section when he was struck by a section of falling roof approximately 3 feet by 19 feet, 8 to 19 inches in thickness. Fatal Case #48

7. **MACHINERY:**

The accident occurred when the victim was trouble shooting a replaced hydraulic oil boom hose for leaks while standing between the counterweight and a hydraulic oil pipe on a G-1000 Gradall machine. As the rear portion of the boom was lowered, the victim's head was caught and crushed between the boom and the pipe. The victim was working in the 001 pit service area. Fatal Case #49

8. **MACHINERY:**

The victim was fatally injured when the jib on the PH65-ton crane knocked him into the shieve wheel on the dragline D&E 1570W. The victim was on the boom of the dragline hooking up the hoist ropes from the PH65 crane to the dragline cable so that the cable could be hoisted off of the shieve wheel to allow the shieve wheel to be removed so that bearings could be replaced. At this time for some unknown reason, one of the stabilizing ropes holding the jib in place broke, allowing the jib to fall, knocking the victim into the shieve wheel of the dragline which resulted in fatal injuries. Fatal Case #50

9. **POWERED HAULAGE:**

A powered haulage accident occurred as the victim was repairing a mine track rail. A runaway supply locomotive with five loaded supply cars struck a personnel carrier near the accident scene and then struck the victim crushing him against the corner of the No. 3 belt overcast. Fatal Case #51

10. **MACHINERY:**

While core drilling during a quality control testing operation, the drill steel on the 16C 600 Gardner Denver Drill became frozen in the hole. The victim had a cheater bar on the stem wrench attempting to free the frozen steel. The steel broke free and rotated. The cheater bar also rotated pinning the victim between the cab and the wrench causing fatal crushing injuries.
Fatal Case #52

11. **ROOF FALL:**

The victim trammed the roof-bolting machine into the No. 2 entry and was apparently in the process of marking roof-bolt centers, when a roof fall occurred causing fatal injuries.
Fatal Case #53

12. **POWERED HAULAGE:**

The victim was performing greasing duties along the stoker coal conveyor belt when he apparently fell onto the conveyor belt and was transported through the loadout chute into a coal gondola, causing fatal injuries. Fatal Case #54

13. **FALL OF MATERIAL:**

The victim was one of four employees who were dismantling a three-section coal stacker at an abandoned coal handling site which was in a raised position. The victim was positioned beneath the stacker burning the bolt heads off which hold the stacker sections together. The stacker sections separated unexpectantly, pinning the victim between the ground and the structure. The stacker structure assembly had been partially blocked to prevent falling.Fatal Case #55

14. **FALL OF HIGHWALL:**

The victim was in the process of drilling a 25 to 30 foot deep blast hole when earthen highwall approximately 35 feet high collapsed covering the Gardner Denver vertical drill. The victim was fatally injured. Fatal Case #56

15. **MACHINERY:**

While using a winch to remove the crane motor from an overhead hoist inside a Model 7800 dragline, the victim was struck by a wire rope and propelled into the wall of the dragline when the slack in the wire rope tightened suddenly, causing fatal injuries.
Fatal Case #57

16. **HAULAGE:**

The victim was in the process of mounting the operator's deck of a 3-wheel Mescher tractor when the tractor moved forward, fatally crushing the victim between the mine roof and the fender of the tractor. Fatal Case #58

17. **FALL OF HIGHWALL:**

The victim was installing auger flights on a Salem 1600 skid-mounted auger machine, drilling a 51 inch hole approximately 120 feet deep, under 75 foot high highwall. Approximately 7 to 8 feet of the highwall, 75 feet high by 300 feet long, collapsed, covering the auger machine and catching the victim, causing fatal crushing injuries. Fatal Case #59

18. **ROOF FALL:**

The victim was fatally injured in the intersection of the last open crosscut in the No. 3 entry. The victim was struck by a roof fall which measured approximately 20 feet in width, 20 feet in length, and 6 to 7 feet thick. The victim was under supported roof. The fall was above the bolt anchorage zone. Fatal Case #60

19. **ROOF FALL:**

The victim was operating a S&S Model UAT-86 battery-powered scoop loading coal out of a pillar block which was being split for a proposed conveyor-belt entry on the 001-0 section. The section was advancing through previously mined workings. Roof material from above the advancing cut in the pillar block rolled out into the high-top area of the previously mined workings and struck the victim, resulting in fatal injuries. The victim was under supported roof at the time of the accident. Fatal Case #61

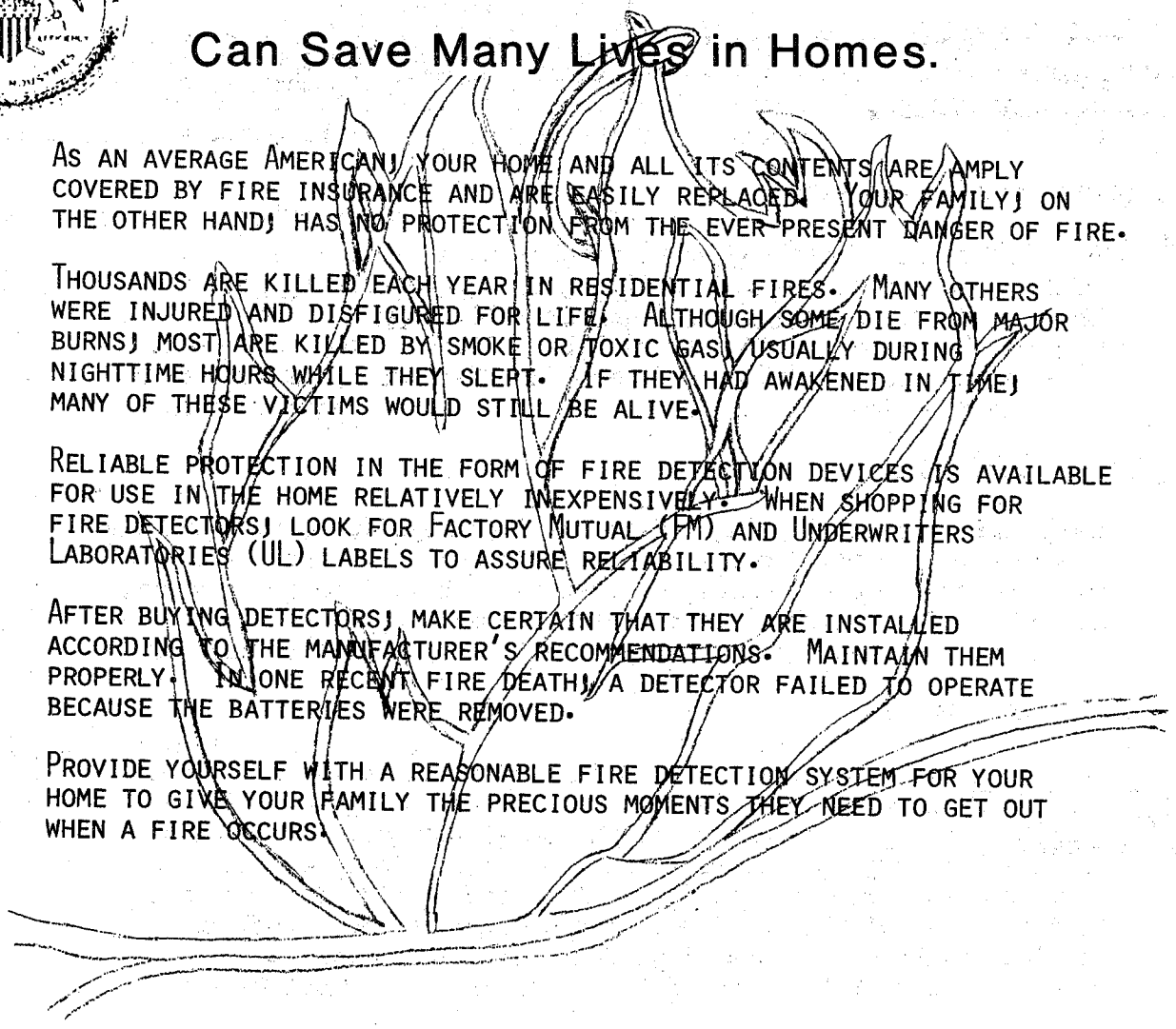
20. **ROOF FALL:**

While mining the first cut from the right pillar off the No. 3 entry, the continuous-miner crew became aware that the roof in the immediate outby intersection had begun to show signs of falling. The continuous-miner crew attempted to escape through the right crosscut of the intersection. The continuous-miner helper made it to safety into the No. 4 entry. The continuous-miner operator was caught and fatally injured by the roof fall which measured approximately 75 feet long by 20 feet wide by 1 to 36 inches thick. Fatal Case #62

H.S.A. SAFETY TOPIC

Use of Fire Detection Devices

Can Save Many Lives in Homes.



AS AN AVERAGE AMERICAN, YOUR HOME AND ALL ITS CONTENTS ARE AMPLY COVERED BY FIRE INSURANCE AND ARE EASILY REPLACED. YOUR FAMILY, ON THE OTHER HAND, HAS NO PROTECTION FROM THE EVER-PRESENT DANGER OF FIRE.

THOUSANDS ARE KILLED EACH YEAR IN RESIDENTIAL FIRES. MANY OTHERS WERE INJURED AND DISFIGURED FOR LIFE. ALTHOUGH SOME DIE FROM MAJOR BURNS, MOST ARE KILLED BY SMOKE OR TOXIC GAS, USUALLY DURING NIGHTTIME HOURS WHILE THEY SLEPT. IF THEY HAD AWAKENED IN TIME, MANY OF THESE VICTIMS WOULD STILL BE ALIVE.

RELIABLE PROTECTION IN THE FORM OF FIRE DETECTION DEVICES IS AVAILABLE FOR USE IN THE HOME RELATIVELY INEXPENSIVELY. WHEN SHOPPING FOR FIRE DETECTORS, LOOK FOR FACTORY MUTUAL (FM) AND UNDERWRITERS LABORATORIES (UL) LABELS TO ASSURE RELIABILITY.

AFTER BUYING DETECTORS, MAKE CERTAIN THAT THEY ARE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. MAINTAIN THEM PROPERLY. IN ONE RECENT FIRE DEATH, A DETECTOR FAILED TO OPERATE BECAUSE THE BATTERIES WERE REMOVED.

PROVIDE YOURSELF WITH A REASONABLE FIRE DETECTION SYSTEM FOR YOUR HOME TO GIVE YOUR FAMILY THE PRECIOUS MOMENTS THEY NEED TO GET OUT WHEN A FIRE OCCURS.

HATS OFF....

To: District Managers
Subdistrict Managers
Supervisors
Especially and most of all to those Federal Mine Inspectors

who have been carrying the ball in promoting new safety chapter members making 1987 another great outstanding year.

VIIth INTERNATIONAL PNEUMOCONIOSES CONFERENCE

August 23 - 26, 1988

Pittsburgh, Pennsylvania

Organizers:
National Institute for Occupational Safety and Health (NIOSH)
International Labour Office (ILO)

THEMES OF THE CONFERENCE:

Evaluation of dust hazards in the working environment through environmental, epidemiological, and medical surveys.

Progress in dust control and dust suppression technologies for mining and industry.

Progress in prevention, early diagnosis, and medical control of occupational lung disease.

Progress in pathogenesis of respiratory disorders due to occupational exposure to mineral and organic dust.

ILO International classification of radiographs of pneumoconioses, 1980.

Pathology standards for the pneumoconioses.

Silica as a carcinogen/co-carcinogen.

Lung diseases—asbestos; asbestos substitutes; man-made fibers.

TEACHING DEMONSTRATION:

Use of ILO classification system of radiographs.

For further information on the **VIIth International Pneumoconioses Conference**, please complete and return the attached card.

Additional Sponsors:
Occupational Safety and Health Administration (OSHA)
Mine Safety and Health Administration (MSHA)
Bureau of Mines (BOM)

VIIth INTERNATIONAL PNEUMOCONIOSES CONFERENCE

Name: _____

Position: _____

Organization: _____

Address: _____

_____

Telephone: _____

☐ Place my name on Mailing for additional information

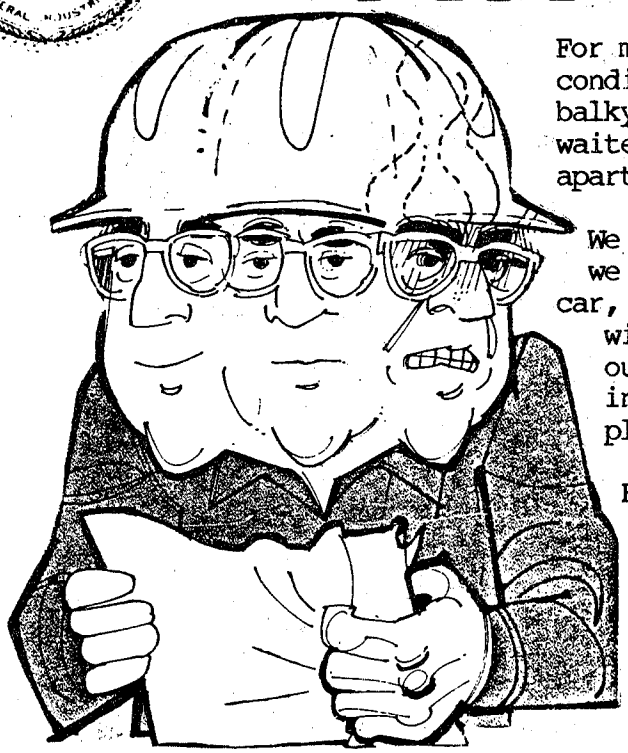
☐ I am interested in presenting a paper

MAIL TO:

Robert E. Glenn
Conference Chairman
National Institute for
Occupational Safety&Health
944 Chestnut Ridge Road
Morgantown, West Virginia
26505-2888

H.S.A. SAFETY TOPIC

ANGER



For most of us, anger is a temporary condition, brought on by anything from a balky car on a cold morning to a rude waiter to a loud radio blaring in the apartment upstairs.

We deal with that anger in whatever way we think is appropriate -- kick the car, leave no tip, bang on the ceiling with a broomstick -- and go on with our lives. In most cases, the incident that provoked us in the first place is soon forgotten.

But for thousands of people, anger is a chronic condition. With little provocation, these men and women can explode with rage, venting their anger verbally and physically, endangering their own lives and the lives and property of those around them.

How to best deal with anger is a difficult question. Though no concrete answers have emerged from studies, there have been some interesting theories.

Most people tend to look at anger in terms of one simple question: Is it better to let your anger out or keep it in? But researchers and clinicians agree that the question of how best to control anger is far more complex.

Because human beings are capable of generating unlimited amounts of anger, some researchers argue that the answer to anger control lies not in letting it out or keeping it in, but in keeping the anger from developing in the first place. University of California psychologist Ray Novaco is one of those who believes in this "preventive medicine" form of anger control.

1. **When you feel yourself getting angry, concentrate on constructive actions that can help alleviate that anger.** Frequently, provocation makes you defensive and ready to fight. But if you recognize that you are becoming angry, you can focus your thoughts on alleviating that anger. It's then easier to resolve the problem successfully.

2. **People with high self-esteem tend to anger more slowly than people with low self-esteem.** Though you cannot program yourself to have high self-esteem, you'll be less likely to get mad if you think positive, self-assured thoughts in the face of provocation.

3. **A person with the skills to respond peacefully to provocation is less likely to become angry than someone who lacks those skills.** Novaco says that one function of anger is to restore a sense of "taking charge." A person who learns to handle provocation without anger develops a greater feeling of confidence and is thus able to "take charge" without getting angry.

4. **By being aware of your anger, you can increase the probability of controlling it.** Too often people fail to recognize the internal and external signals of anger until it is too late. By learning to recognize the internal and external signals that anger is building, you can improve your ability to control that anger.

5. **Anger arousal can become a cue to initiate "coping strategies."** Rather than merely function as a trigger for acts of antagonism, anger can serve as a signal to act in ways that have proven effective at resolving conflicts in the past. When you feel the symptoms of anger coming on -- knotted stomach, blood rushing to your head -- let that be your cue to try one of the coping techniques mentioned in this article.

6. **If you perceive yourself as being in control of an anger-provoking situation, it will decrease the probability of your becoming angry.** Anger triggers disruptive and defensive reactions. By perceiving yourself as "in control," you eliminate the need for these reactions.

7. **By learning to break provocation into stages, and then reacting in a positive way to each of those stages, you can increase your chances of controlling your anger.** Nearly every task becomes more manageable when it is broken down into small parts. Anger control is no exception. When you learn to look at each major provocation as a series of small provocations, you may find it easier to deal with than the whole.

8. **You tend to become more effective at controlling anger as you experience some success for having done so.** Each time you control your anger in a situation in which you would normally lose control, you receive much-needed positive reinforcement, which increases your self-esteem and your chances of coping successfully with similar situations in the future.

9. **Controlling tension and arousal states through relaxation training can increase the probability of controlling emotion.** Relaxation techniques teach you to identify the tension that accompanies the onset of anger. But more importantly, they teach that you can control and regulate that tension. This control can lessen the chances of anger occurring.

STOP AND THINK

As with all anger control techniques, these are not guaranteed to work for everyone. But consider that the underlying purpose of these techniques is to make you stop and think in the face of provocation.

HOLMES SAFETY ASSOCIATION
SORTED BY STANDING
COAL-UNDERGROUND
SAFETY COMPETITION REPORT

QUARTER 3 — YEAR-TO-DATE: JANUARY THRU SEPTEMBER 1987

COUNCIL NAME	CNCL NUM	WORK HOURS	LOST TIME ACC	FTLS	INCI-DENCE RATES	NO MTGS	NO CHAP	STD	WORK HOURS	LOST TIME ACC	FTLS	INCI-DENCE RATES	TOT NO MTGS	AVG NO CHAP	STD
GROUP I															
WILLIAM "SCOTTY" GROVES COUNCIL	PA06	1,391,141	81	0	11.65	3	17	1	4,476,232	215	0	9.61	8	13.5	1
JOHN E. JONES	IL02	2,652,131	159	0	11.99	1	14	2	8,303,196	424	0	10.21	3	10.5	2
COAL RIVER COUNCIL	WV02	1,053,533	73	0	13.86	2	55	3	3,621,741	203	1	11.27	5	42.8	3
INDIANA COUNCIL	PA07	1,592,117	224	0	28.14	1	17	4	5,120,803	596	0	23.28	6	12.8	4
TOTAL		6,688,922	537	0	16.06	7	103		21,521,972	1438	1	13.37	22	79.5	
GROUP II															
SOUTHEAST OHIO COUNCIL	OH02	883,551	21	0	4.75	3	7	2	2,825,531	79	0	5.59	9	5.3	1
NORTH CENTRAL COUNCIL	WV11	0	0	0	.00	0	0	1	2,075,759	83	0	8.00	2	2.3	2
WALTER W "KINGFISH" KESSLER	IL07	782,839	64	0	16.35	1	5	3	2,711,635	144	0	10.62	3	3.8	3
KASKASKIA VALLEY	IL03	926,823	97	0	20.93	1	1	5	2,895,465	162	0	11.19	3	3.3	4
NEW RIVER VALLEY COUNCIL	WV10	1,402,849	129	0	18.39	2	40	4	2,913,625	201	0	13.80	3	20.0	5
TOTAL		3,996,062	311	0	15.57	7	53		13,422,015	669	0	9.97	20	34.5	
GROUP III															
WINDBER COUNCIL	PA11	55,606	1	0	3.60	1	7	4	193,285	5	0	5.17	3	5.3	1
N COLO/S WYOMING HSA DISTRICT COUNCIL	WY02	194,551	8	0	8.22	2	5	5	659,368	23	0	6.98	3	3.8	2
KANAWHA VALLEY	WV07	0	0	0	.00	0	0	1	708,368	33	0	9.32	2	50.0	3
CLYMER COUNCIL	PA04	0	0	0	.00	0	0	1	141,688	7	0	9.88	5	3.0	4
POTOMAC VALLEY	MD01	445,764	28	0	12.56	1	7	6	1,372,779	81	1	11.95	4	5.5	5
KISKI - TRI-COUNTY COUNCIL	PA08	103,288	7	1	15.49	1	5	7	316,082	20	1	13.29	6	3.8	6
MON VALLEY COUNCIL	WV08	0	0	0	.00	0	0	1	113,246	8	0	14.13	1	2.5	7
JOHN O MILLER COUNCIL	PA09	303,462	29	0	19.11	1	2	8	968,009	96	1	20.04	6	1.5	8
TOTAL		1,102,671	73	1	13.42	6	26		4,472,825	273	3	12.34	30	75.3	

HOLMES SAFETY ASSOCIATION
SORTED BY STANDING
METAL-UNDERGROUND
SAFETY COMPETITION REPORT

QUARTER 3 — YEAR-TO-DATE: JANUARY THRU SEPTEMBER 1987

COUNCIL NAME	CNCL NUM	WORK HOURS	LOST TIME ACC	FTLS	INCI-DENCE RATES	NO MTGS	NO CHAP	STD	WORK HOURS	LOST TIME ACC	FTLS	INCI-DENCE RATES	TOT NO MTGS	AVG NO CHAP	STD
GROUP I															
N COLO/S WYOMING HSA DISTRICT COUNCIL	WY02	1,181,355	20	0	3.39	2	5	1	3,968,426	52	0	2.62	3	3.8	1
TOTAL		1,181,355	20	0	3.39	2	5		3,968,426	52	0	2.62	3	3.8	

HOLMES SAFETY ASSOCIATION
SORTED BY STANDING
COAL-SURFACE
SAFETY COMPETITION REPORT

QUARTER 3 — YEAR-TO-DATE: JANUARY THRU SEPTEMBER 1987

COUNCIL NAME	CNCL NUM	WORK HOURS	LOST TIME ACC	FTLS	INCI-DENCE RATES	NO MTGS	NO CHAP	STD	WORK HOURS	LOST TIME ACC	FTLS	INCI-DENCE RATES	TOT NO MTGS	AVG NO CHAP	STD
GROUP I															
SOUTHERN INDIANA JT SAFETY COM & HSA	IN02	880,885	12	0	2.72	0	6	2	2,655,622	26	0	1.96	3	4.5	1
N COLO/S WYOMING HSA DISTRICT COUNCIL	WY02	1,218,157	10	0	1.64	2	19	1	3,807,136	44	0	2.31	3	14.3	2
SOUTHERN ILLINOIS OPEN-PIT	IL06	727,317	14	0	3.85	1	10	3	2,729,745	41	0	3.00	3	8.8	3
TOTAL		2,826,359	36	0	2.55	3	35		9,192,503	111	0	2.42	9	27.5	
GROUP II															
GROVE CITY/CLARION COUNTY COUNCIL	PA05	406,786	5	0	2.46	0	14	1	1,182,679	13	0	2.20	1	10.5	1
SOUTHEAST OHIO COUNCIL	OH02	629,227	12	0	3.81	3	12	3	1,590,184	26	0	3.27	9	8.5	2
N. INDIANA JT. COMM. FOR COAL MINE SAF	IN01	496,450	9	0	3.63	1	6	2	1,387,586	23	0	3.32	4	4.5	3
COAL RIVER COUNCIL	WV02	641,299	20	0	6.24	2	35	4	1,700,308	61	1	7.29	5	26.3	4
TOTAL		2,173,762	46	0	4.23	6	67		5,860,737	123	1	4.23	19	49.8	
GROUP III															
KISKI - TRI-COUNTY COUNCIL	PA08	30,642	0	0	.00	1	2	1	100,534	0	0	.00	6	1.5	1
CLYMER COUNCIL	PA04	0	0	0	.00	0	0	2	33,130	0	0	.00	5	1.0	2
MON VALLEY COUNCIL	WV08	0	0	0	.00	0	0	2	275,634	2	0	1.45	1	11.3	3
WESTERN MARYLAND	MD02	143,618	2	0	2.79	1	5	5	581,376	7	0	2.41	3	12.0	4
NEW RIVER VALLEY COUNCIL	WV10	280,307	8	0	5.71	2	45	7	645,115	12	0	3.72	3	22.5	5
SHAWNEE OPEN-PIT	IL05	381,354	9	0	4.72	1	5	6	767,505	15	0	3.91	2	2.5	6
KANAWHA VALLEY	WV07	0	0	0	.00	0	0	2	510,091	16	0	6.27	2	50.0	7
INDIANA COUNCIL	PA07	144,485	5	0	6.92	1	5	8	472,431	18	0	7.62	6	3.8	8
JOHN O MILLER COUNCIL	PA09	39,529	3	0	15.18	1	1	9	123,570	6	0	9.71	6	.8	9
WINDBER COUNCIL	PA11	12,828	2	0	31.18	1	1	10	40,154	3	0	14.94	3	.8	10
TOTAL		1,032,763	29	0	5.62	8	64		3,549,540	79	0	4.45	37	106.0	

THE LAST WORD

GO head first...
into every job by working out safe procedures before you begin. You'll make a safety record.
as we see it: it's all wet to plunge into a job without observing complete safety precautions.

An accident is no circus...
get on the bandwagon with a perfect safety record.
as we see it: if you clown around on the job, you're riding for a fall.

Don't take a chance...
it's never smart to gamble on your health and safety.
as we see it: you're always a winner when you follow good safety rules.

Time to move on...
to better and safer ways to do your job.
as we see it: it's never old fashioned to maintain a safe speed.

A difficult choice...
it's worth determining the difference between doing a job safely and risking life and limb.
as we see it: it's a dog's life being disabled. Don't choose the unsafe way to do a job.

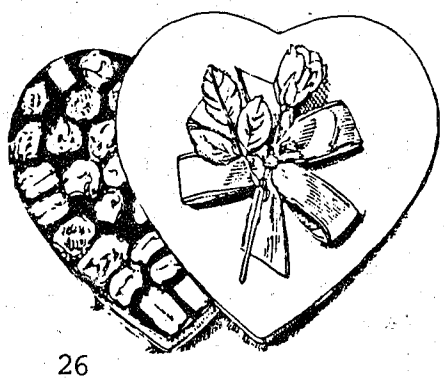
Money alone can't buy safety...
good health and well-being are priceless.
as we see it: your health and safety must be paid for with time and care.

Keep on learning...
better and safer ways to do your job.
as we see it: you don't have to be in school to learn to change bad habits.

Ready * Aim * Fire...
Are you READY for work with correct clothing and equipment? Do you AIM to do the best and safest job possible? Will you FIRE away at your job until completed satisfactorily?
as we see it: a perfect safety record is the bulls-eye on the target.

Go for it!
unless you chase down the safest way to do a job, you run the risk of being caught in an accident.
as we see it: a perfect safety record is worth pursing.

Don't be left out in the cold...
whether you're at home or on the job, build good safety habits.
as we see it: it's no fun to have an accident.



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Educational Policy & Development
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Pittsburgh, PA 15213

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(Rev. 12-78)

United States Department of Labor

MSHA

Mine Safety and Health Administration

HOLMES SAFETY ASSOCIATION MEETING REPORT FORM

For the month of _____

TOTAL meetings held this month _____

TOTAL attendance this month _____

Chapter Number _____ (See address label, if incorrect, please indicate change.)

_____
(Signature)

_____
(Telephone No.)

_____
(Title)

FILL OUT - FOLD AND STAPLE - FREE MAIL-IN

NOTE: BE SURE OUR ADDRESS SHOWS

If you do not care to receive this Bulletin, please check here ☐ and return this form.

Please include any change of address below:

Joseph A. Holmes Safety Association

Awards Criteria--Outline

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 continuous 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
Pittsburgh, PA 15213

COME *Grow* WITH US