

June 1979

CONTENTS

1.	Safety ${f T}$ opic, "UPDATE" - Reports of Training
2.	Safety Topic, "The Jackleg-Drill Operators, Part I"
3.	Cartoon, "Four Letter Words"
4.	Safety Topic, "Five Steps to Safety"
5.	Safety Topic, "Safety and Waste"
6.	Safety Topic, "Temporary Trailing Cable Splices"
7.	Safety Topic, "What's Your Choice?"
8.	Tables, "Number of Injuries by Mineral Industry, Work Location, and Accident Classification, January - December 1978"
9.	Chart, "Number of Fatal Injuries in the U.S. Mining Industries in each Quarter of 1976, 1977, and 1978"
10.	Safety Topic, "The Last Word"

11. Meeting Report Form



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC



OOO UPDATE OOO

Reports of Training

In order to eliminate unnecessary training record reporting requirements for all coal operators, surface and underground, we have reviewed records being submitted to the MSHA Training Centers on Form 5000-1 (Health and Safety Individual Training Record).

It is no longer necessary for operators to report records of training to MSHA on Form 5000-1 for the following training:

- CH Gas Dectection
- GA Required Training for Certified Person (underground)
- GB Required Training for Certified Person (surface)
- FA First Aid (except for selected supervisory employees under 75.1713-3)
- HT Hoistman
- AN Self-Rescuer
- AM Roof-and-Rib Control
- MR Mine Rescue Training
- AP Accident Prevention
- IN Instructor Training

In those instances where certification or qualification is based on an examination (gas detectors or electrical qualification), we will continue to use Form 5000-17, and this will be completed by the MSHA or State examiner.

(For underground and surface coal-mining operations)

Where temporary certification or qualification is based on experience, the appropriate MSHA form (Forms 5000-4 or 6-1455B) must be submitted.

The <u>only</u> item the Form 5000-1 is to be sent to the Training Center is for:

- CI Dust Qualification (underground) initial training only 70.202(e)
- CS Dust Qualification (surface) initial training only 70.102(d)
- CJ Noise Qualification initial training only 70.504(c)
- EB Electrical Qualification training (underground) 75.153
- EC Electrical Qualification retraining (underground) 75.153
- ED Electrical Qualification training (surface) 77.103

EE Electrical Qualification retraining (surface) 77.103

These records are needed so that we may issue Qualification cards for your personnel.

This information in no way reduces training required by Parts 75 and 77. You may keep records of that training in any manner that is compatible with your recordkeeping procedures.

We are continuing to review administrative and regulatory requirements relative to certification and qualification record

submission. unites

Robert B. Lagather Assistant Secretary for Mine Safety and Health



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

The Jackleg-Drill Operators Part I

We will talk briefly about another important function performed underground, that of the jackleg-drill operator. The job is not new, but when compared to other job classifications, it has its problems, some more pronounced than others.

During January through December 1978, there were 17 serious lost-time drilling injuries reported in metal, nonmetal, and stone underground mines.

Discussion with Jackleg-Drill Operators

Discussions were held with groups of miners on procedures followed in jackleg drilling and hazards associated with operating jackleg drills. The groups consisted of two or more jackleg-drill operators at three mines in three geologically and geographically different locations in the United States. Experience of the miners ranged from one man with less than 1 year of operating experience to miners with approximately 30 years experience operating jackleg drills. Following is a summary of concepts discussed by the miners during these talks.

Most miners collar holes with the length of steel used to complete the hole. For example, where the final depth of hole is 6 feet,

(For underground mining operations--metal and nonmetal and stone)

they use 6-foot steel to collar the hole. Six feet was the usual depth of hole.

For collaring holes, contract miners working in hard rock generally steady the steel with their left hand while operating machine controls with their right hand. Other mines, where helpers are used on jackleg drills, have the helper steady the steel until it is collared. Some miners, working in softer ground, are able to collar holes while standing behind the drill with no support given directly to the steel. Where ground is not too hard, it was suggested that a pick be used to make notches in the face. The notches assist an inexperienced jackleg driller in collaring holes. A "trick of the trade" that sets a professional miner apart from a novice is the ability to get the correct angle on the leg and drill combined with the correct leg pressure. Where the angle and leg pressure are nearly optimum, the drill works for the miner without the need for useless energy expenditure on the miner's part. The drill is most efficient under those conditions and essentially works alone.

Some miners put a foot on the stinger to steady the drill while drilling downholes. All miners are warned against using a foot to steady the steel on downholes. A real hazard would exist of getting the steel through the foot.

When changing to a longer steel, one approach was to put the longer steel in the machine and then maneuver the steel into the hole, using leg pressure. A second approach was to put the longer steel into the hole and then maneuver the machine into the steel. Those using

2

the second approach believed that maneuvering steel and machine was excessive and unnecessary work. However, those who moved steel and machine at the same time believed their procedure gave them more control over the machine.

Miners were unanimous in stating that, where steel breaks while drilling, the operator should turn loose of the machine. Such a procedure requires that the drill operator not maintain a "white-knuckle" grip on the machine. If the operator does hold onto the machine after the steel breaks, the sudden machine movement gives him no opportunity to turn off the air to the machine or leg, and he will be pulled forward. The forward pull may impale the miner on the broken steel in the hole, or he will at least be slammed into the face. Some miners with many years of experience on the same machines said that they could guide the drill down, after the steel broke, if the leg pressure was low enough. This procedure could not be recommended to anyone else.

When steel is stuck in the face, some miners attempt to pull it with air-leg pressure, pushing against the face area. Such attempts are often futile, and the procedure is not considered safe by many miners. Where stuck steel is blasted out, some means should be provided to insure that miners on the following shift are aware that steel is in the muck pile, so they do not injure themselves while loading out the much. The miners on the following shift need a warning of the hazard, and some standard procedure should be available for such warning.

We will discuss additional features of the job as jackleg-drill operator next month. Part II to follow.

3

HOLMES SAFETY ASSOCIATION



Four Letter Words

(For underground and surface mining operations)



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Five Steps to Safety

Today we want to discuss five items so very important in our safety efforts and the fact that all are necessary if our achievements for reducing accidents are to be reached.

The story of safety and what it can accomplish for humanity has been told numerous times, but it still needs frequent repetition. We are aware that the majority of injuries result from unsafe acts of individuals rather than from any other source, which puts safety on a very personal basis. I believe that by diligently using the five steps, as listed below, each of us will become safer and therefore more efficient workers.

Knowledge

Knowledge in safety is knowing the difference between right and wrong. Knowledge of the safe methods connected with your duties and their proper application helps you avoid confusion and possible suffering. Safe work methods should be so important to you that you would not willingly do otherwise. You, of course, recognize that a serious injury may result when you fail to follow safe and established work practices.

Attitude

Safety is a way of life and must be studied and lived. It is the quality of living that is expressed in safe business and industry, home, and community. Being a way of life must come from within people, individuals like you and me. We must put feeling into our jobs, become idealists if you will, if we are to have a marked degree of success. You must not relax your thinking on safety to the point of disregarding safe methods and practices.

Observation

Numerous people are injured each year because they fail to observe hazards. For some reason, they fail to see the things at which they are looking. Even more tragic, many hazards that are observed may, at times, appear complicated, which is seldom true, and corrective measures are not undertaken. One good point to remember is that the old expression concerning the acorn and the oak tree has a parallel when referring to the correction of so-called minor safety problems. In all too many instances, small items have been allowed to grow out of proportion, and there is a rude awakening when an individual is injured.

(For underground and surface mining operations)

Cooperation

As we have stated in previous safety meetings, cooperation is necessary in our safety activities, for injuries cannot be stopped by just a few people. Everyone must get into the act, completely and wholeheartedly. We need each others' help.

Consideration

Naturally, we must give consideration to our fellow workers and give a helping hand whenever it is needed. We, of course, take pride in the fact that we are civilized persons and should also give warnings of any hazards encountered in our daily activities.

June 1979



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Safety and Waste

Our subject concerns a viewpoint that is not emphasized enough and often deliberate on the part of supervisors and other people directly connected with the safety movement.

I am referring to the waste that is created when an unsafe act, whether performed knowingly or unknowingly, is committed by an individual, and an accident results.

There is one word in this last sentence we need to explore for a better understanding of my thoughts. This word is "waste" and definitely not "cost."

By waste, I am referring to such incidents as supplies that are delivered to our section and then, because of a failure to use them or possibly misuse them, a roof fall develops in which no one is injured, but a piece of machinery is caught beneath the roof fall. Naturally, we have to recover the equipment in order to operate our section and, time and money must be spent in order to return to normal productive activities. Many of us have worked on recovery operations, and they are very ticklish situations, requiring considerable skill and judgment.

Try as we may, we can seldom make working conditions during recovery operations as safe as they would be during normal production activities. This situation is not good, and we do not want you to be exposed to hazardous conditions. When working conditions are normal and safe, you can efficiently and safely perform your duties.

Naturally, we are concerned with production, we make no attempt to conceal or deny that. During a recovery operation, production is ceased but costs continue, and our company's ability to compete with other producers is lessened, and the stability of our jobs is also weakened.

What happens when a roof support is accidentally dislodged by a piece of equipment? Isn't it true that both safety and waste are involved in this careless act? The operator of the equipment involved has created a situation that could develop into an injury for himself or maybe someone else in our crew. The timber that is dislodged could very well be the key support in the area. A large fall might easily result, and if circumstances are in

(For underground mining operations)

our favor, we would be involved in only opening up a runway for our equipment to use, but it is certain that if such acts are continued, we will not always be so fortunate, and we might be involved in something much more distasteful than just opening a haulageway or recovering a piece of equipment.

Still another item that we often overlook in our discussion on injuries is that the accident-potential of the replacement for the injured person is quite often increased, since the replacement is seldom as familiar with the work area or equipment as the injured person.

Naturally, we can expect our production to drop during the time the replacement is becoming acclimated to new surroundings, and even though we do not always emphasize the fact, this loss in production must be considered as a portion of the cost of an injury production, even though it may be, at times, difficult to measure.

There are numerous side issues of an injury, but time will not permit us to discuss them in detail. The main thought that I would like for you to always keep in mind is that accidents, whether or not they result in injuries, are wasteful in time, money, and humanity; only by our concentrated efforts can we reduce their toll and subsequent costs.



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

TEMPORARY TRAILING CABLE SPLICES

Our message for today concerns splices in trailing cables and why they should be made in a workmanlike manner, mechanically strong, and well insulated.

A trailing-cable failure interrupts the operation of a mining unit, reduces the life of the cable, and is a constant threat to our lives. When a trailing cable failure occurs, someone should go immediately to the nipping station and disconnect the electric power from the cable. You must use caution in removing a fuse nip because, if the cable failure is a short circuit, you can be severely burned or your eyes can be damaged. Guard your eyes against possible arcing. Splices in trailing cables can only be made safely when the electric power has been disconnected from the cable.

Naturally our jobs require that we produce coal, and only by keeping our equipment in good condition can we produce in a safe and efficient manner. An ideal splice is one in which all the characteristics equal or exceed those of the original cable and can be made in the following manner:

- 1. Remove the cable jacket by a pencil cut to the desired length of cable ends.
- 2. Cut the conductors in such a manner so that the joints will be staggered.
- 3. Remove enough insulation from the ends of the conductors so that a splice ring can be applied.
- 4. Ground wires must be separated from the electric power conductors and connected in each splice so that the frames of the electrical equipment will be grounded effectively.
- 5. Each conductor must be reinsulated with a moistureresistant, self-sealing tape, such as rubber, plastic, or neoprene. Sufficient tape should be applied to restore the insulation to its original diameter.

(For underground coal-mining operations)

 After each conductor is reinsulated, sufficient tape should be applied around the entire splice until the applied insulation provides the same insulating protection as the original outer jacket.

Only well-made temporary splices will provide protection for the continuous operation of the equipment. A poorly made splice will heat under load, cause a short circuit, or fail. Every time a cable failure occurs, the potential for a serious incident is set into motion. If the failure is a short circuit that occurs inby the last open crosscut, you are subject to being trapped in smoke and fumes. Also, any time an electrical short circuit occurs, we are faced with a possible mine fire that could endanger the life of every person in the mine. The frames of the equipment can become energized when ground wires are left unconnected and electrical shock hazards are introduced. Therefore, each of you should make a special effort to do a good job when making a cable splice.

June 1979



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

What's Your Choice?

Let us relax for a few minutes and start our safety meeting. Some people wonder if safety meetings are a waste of time; time which could be used to better advantage. We get out of safety meetings what we put into them, and nothing more. They are of no value unless you and I practice what we discuss. If we practice safety, then such meetings are worth every minute.

It is hard for me to understand why persons work in a careless manner. We are paid to work safely and efficiently, and not to take chances. Usually, we have everything required to make the job safe. If we do not have everything needed to make the job safe, you are not assigned to do it. We can danger off the area until something can be done to make the area safe. We get paid for working safely--why not do it?

Have we made the improvement in safety as has been accomplished in production during the past 20 years? No! The accident record is still out of line, and it is up to us to do something about the situation.

I once heard a man say, "I would be a good workman if I were as good as I know how to be." This man was admitting that he had the knowledge, but lacked the willpower to use it. Putting our knowledge to practical use is quite different than just having knowledge, since this requires a keen sense of duty and practice in self-discipline.

It is difficult to discipline yourself, but no one can do a better job than yourself. You would certainly correct your child for running across the street in front of automobiles or for playing with matches. On the other hand, as a miner, do you take chances in the mine, knowing that what you are doing is unsafe? Maybe we should practice more of what we preach.

I dislike to use the word, "DON'T," but sometimes it is the best way to explain a situation. Think about these "DON'TS."

1. Don't fail to examine the roof or back often.

- 2. Don't work beyond the last support.
- 3. Don't fail to set that safety post or prop.
- 4. Don't fail to notify me of any danger.

(For underground mining operations)

5. Don't work with equipment that isn't safe to operate.

6. Don't forget that safety is your responsibility.

7. Don't forget that your life and the happiness of your family depends upon your safety.

You can forget the "DON'TS" if you will remember: DO BE CAREFUL!

To summarize, a safety program, (if it is carried out) saves persons from much suffering. It prevents many of us from being killed. It allows us to work regularly and to earn more money, making it possible to raise and educate a family, buy food, clothing, a home, and an automobile as well as many other items.

Do you agree then that we can have any amount of safety that we want? How much safety do you want? Which of these records do you want: Excellent, good, medium, poor, or terrible? <u>Remember, our safety program and record are going to be just</u> as good or as poor as we want them to be.

June 1979

											·								
•			н 1997 - А. А.		. (C O A	L							M	ETA	L			
, c	A C C I D E N T L A S S I F I C A T I O N	UND	ERGR	OUND	S	URFA	CE		PARA PLANT	ł	UND	ERGR	OUND	S	URFA	CE		MILL	S
		FATAL	NFDL	NÖL	FATAL	N P ⁴ D L	NDL	FATAL	NFOL	NOL	FATAL	NFDL	NDL	F, A T A L	NFDL	NDL	FATAL	NFDL	MÍDL
				T						· · ·									•
ELE	CTRICAL	8	192	42	1	18	10	4	13	3	-	10	8		: 7	4	1	$^{\circ}$ = 11	6
EN.	RAPMENT	-	2	-	-	·	-	-	-	-		· -	1		. –	-	-	<u> </u>	-
	LODING VESSELS												1 A A						
	IDER PRESSURE	· -	30	7	-	19	17	-	1	6		12	12	1	3	4	· -	5	10
-	LOSIVES AND BREAKING		í	1.	Í													:]	
	ENTS	2	35	. 91	·-	12	3	-	-		3	18	17	1	1	· -	· · -	1	; -
	LING, ROLLING, OR									_				· _		l			29
	LIDING MATERIAL	, - 1	238	80	1	33	16	1	. 8	- 4	-	81	46	-	15	· 11	-	28	29
	L OF FACE, RIB, SIDE	5	265	37	2	23	6					105	66	2					,
	L OF ROOF (UNDER-	5	205	31	· · · ·	23		-	_	-	1 -	.105	00				-		12 E -
	OUND MINES ONLY)	28	590	119	·				1 · ·	_	10	132	91	-			_		
	E	1	16	2	1 : I '	16	5	_	6	. 1	1.10	2			3	- 3		. 5	. 3
	DLING MATERIAL	i	3.567	841	-	575	430	·	336	190	1 1	638	495	· _	285	255	1	446	462
	ID TOOLS		7.05	509	1 - L	156	241	-	74	91	1 2	173	224	· · · _	82	125	-	114	199
	POWERED HAULAGE	-	42	3	-	4			6	3		8	3	<u>`</u>	4	1	- 1	11	11
	ERED HAULAGE	21	1,405	221	6	246	104	. 4	58	17	5:	181	84	. 7	108	45	2	55	32
ł	AULAGE TRUCKS		15	4	4	131	56	2	7	2	1	22	16	: 4	: 68	24	°{: -	10	· . 7
1	RONT-END LOADERS	2	16	: 2	1	52	14	- 1	8	3	1	12	6	÷	8	4	- 1	7	: 8
1 I	LL OTHER POWERED		1.1.1	1 3 3	3.1	11.1	* i			100 0		· · · · · · · · · · · · · · · · · · ·			1.1	1 m		1.1.1.1	
	HAULAGE	. 19	1.374	215	. 1	63	34	2	43	12	3	147	62	3	32	17	2	38	. 17
	ST ING	2	28	9	i	7	9	- 1	- 7	2	2	35	18	I	. 7	: 5	l:} −	- 13	7
	ITION OR EXPLOSION				1.11					f		100 A.A.			1990 - 1990 1	5 A. 200	1.1		
	GAS OR DUST	1 - 1 - 1	3	1 1 4 1 1		3	1	-	-	2	1.05	1.57	5 3 A.T.	. –	. .	1 - E		200 T	$1 \ge 1$
	OUNDMENT		1	1	-		. 1	-		-	1		-	- : -	-		1 1 -	-	-
	INDATION	4	3	1		- 201		-	-	57	· · ·	2	1 207	- ``					
	CHINERY	- 1	1,413	380	· 4 3	301 50	275 36	2	88 1	5/	-	334	307		99	101	3	126	ł
	02ER	-	1 15	5	[24	. 7	1	1.	· · · · · · · · · · · · · · · · · · ·	[<u>.</u> .	···· 11	16		8	8	[2	18 2 C
	LL OTHER MACHINERY	1	1.397	375	1			- 1	87	56		322	291		88	92	3	121	150
	PS OR FALLS OF	'	1.39/	3/5	. d''	A 441.	232	-1	87	56	14 AT	322	291	-	.00	92	1 3	121	150
	RSON		,1, 163,	179	3	5,83	210	2	188		6	369	161	l' _	265	104	1	281	132
	PPING OR KNEELING	n en standelige	1, 1, 1, 2, 3,	. s : s : • 6 ? , .	1.000		· · · · ·	1 <mark>. 2</mark> .	188	st	6. AC 6.:	16 303	161		205	104	N State	į 201	1 132
	OBJECT	-	315	51	- 1	66	23		16	9	- 1	77	39	l · -	26	14	- 1	55	19
	IKING OR BUMPING	-	211	82	- 1	26	50	-	13	21	· - '	27	27	-	10	18	- 1	25	35
	ER	-	292	77	-	99	64	-	37	27	1	59	49	- 1	46	55	- 1	55	95
				1										1			· ·		
	TOTAL	74	10.516	2,650	17	2,187	1,465	13	851	489	28	2,263	1,650	11	961	745	10	1,231	1,194
				1			· ·							}		· .			

TABLE 4. - NUMBER OF INJURIES BY MINERAL INDUSTRY, WORK LOCATION, AND ACCIDENT CLASSIFICATION, JANUARY - DECEMBER, 1978

(REFER TO NARRATIVE FOR LIMITATIONS AND SCOPE OF DATA)

(For underground and surface mining operations)

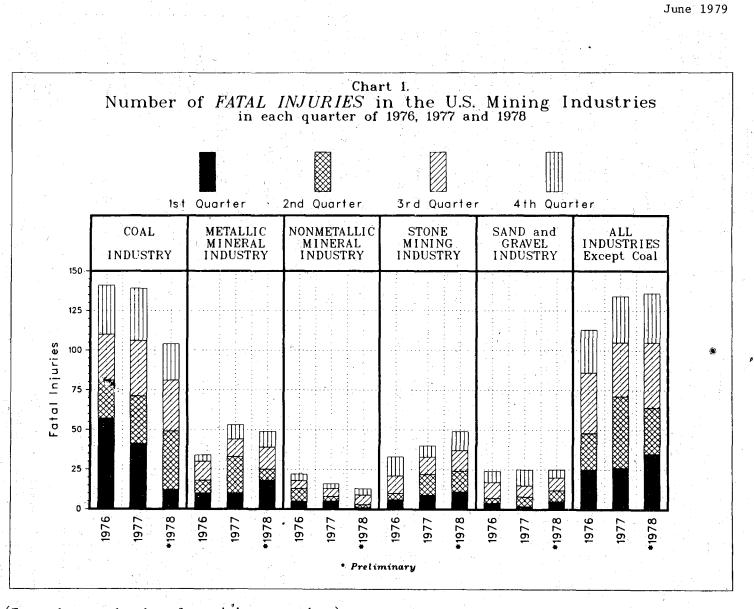
CLASSITICATION FATAL MTOL FATAL FATAL MTOL FATAL					NÖN	IME.	TÀI	L				,		S	TON	E				4	AND GRAV		
LECTRICAL		UND	ERGRO	DÜND	sı	JRFAC	ε	, 1	WILLS		UNDI	RGRO	UND	· S (JRFAC	£	1	WILLS		5	SURFACE		
NTRAPMENT - - - - - - - - - 1 1 - 1 1 - 1 1 - 1 1 - 1 1 - 1		FATAL	NFDL	MDL	FATAL	NFDL	NDL	FATAL	NFOL	NOL	FATAL	NFDL	NDL	FATAL	NFDL		FATAL	NFOL	MOL	FATAL	N F D;I		
TTRAMENT - - - - - - - - - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 1 - 1 1 - 1 1 - 1<																			<u>.</u>		1		
PLOD ING VESSELS - - 3 2 - 3 1 8 5 - - 2 - 13 9 - 11 6 - 6 PLOSIVES AND BREAKING GENTS	ECTRICAL	1	7	2	· 1	6	2	-	14	3	-	1	1	1.	12	7	2	30	9	2	17	7	
NDER PRESSURE	TRAPMENT		/ -	1	-	-	-	-	-	-		-].	-	- 1	-	_ 1		1				1	
PLOSIVES AND BREAKING GENTS	PLODING VESSELS															· ·					1.1		
GENTS	NDER PRESSURE	-	3	2	. –	- 3	3	1	8	- 5		-	2	-	13	9	- 1	. 11	6		1 ' e	5	
Ling, POLLING, OR - - 7 5 1 24 9 - 4 3 - 30 22 4 51 28 1 18 LI OF FACE, RIB, SIDE - 1 - - - 1 - - - 7 3 4 8 3 - - - 5 1 RH GHWALL - 1 -	PLOSIVES AND BREAKING			1										1									
SLIDING MATERIAL	GENTS	2	· 2	1	-	1	-	-	-	-		-	- '	1,	9	3	- 1	3	1	- 1	1 1	.	
LL OF FACE_RIB_SIDE LL OF CONC <thl conc<="" of="" th=""> LL OF CONC <thl co<="" of="" td=""><td>LLING, ROLLING, OR</td><td></td><td></td><td></td><td></td><td></td><td>î.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td></thl></thl>	LLING, ROLLING, OR						î.														1		
LL OF FACE. RIB. SIDE RH GHMALL	SLIDING MATERIAL	- 1	10	9	-	7	5	1	24	9	-	4	3		30	22	4	51	28	1	1. 18	3	
R H (GHWALL	LL OF FACE, RIB, SIDE		1		(I																		
LL OF RODF (UNDER- ROUND MINERD FAILT	R HIGHWALL	1	13	2	-	1		·	-	1		7	3	4	. 8	3	- 1	-	- 1	5	1		
ROUND MINES ONLYY 1 11 9 - <td>LL OF ROOF (UNDER-</td> <td></td> <td></td> <td>1</td> <td>1 1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td>_</td> <td></td> <td></td> <td>1 · 1</td> <td></td> <td></td> <td></td>	LL OF ROOF (UNDER-			1	1 1								-		-	_			1 · 1				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		1	11	9	-	_ 1	_	-	_	_		10	1	-	-	-	-	_		I _	1	.	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			1	_		3	1	· -	2	2		1	-	-	9	8	-	7	- a	·	1 .		
NO TOOLS - - 43 45 - 91 136 - 14 13 - 143 196 - 215 201 - 100 NPOWERED HAULAGE - 2 - 1 1 - 14 33 - - 4 2 1 32 8 - 1 100 NPOWERED HAULAGE - 16 68 168 79 4 12 3 3 95 39 - 25 12 3 51 HAULAGE TRUCKS - 1 2 1 - 4 2 - 11 5 1 4 1 4 26 17 1 11 10 2 2 3 83 38 2 50 HAULAGE - - - 1 - - 1 - 1 1 10 2 2 3 83 38 2 50 ISTING - - - - -			138	59		149	96		521	296		48	20	1	-	_	3						
NPOWERED HAULAGE - - 1 1 - 14 3 - - - - - - 4 2 1 32 8 - 1 WERED HAULAGE - 51 18 - 113 49 4 23 6 8 168 79 4 119 60 7 125 FROMT-END LOADERS - 1 2 1 - 4 2 - 11 5 1 4 1 4 26 17 1 11 10 2 24 ALL OTHER POWERED - 59 20 - 18 10 - 93 39 1 6 2 1 47 23 3 83 38 2 50 INTION OR EXPLOSION - 1 - - 3 - 7 7 - 1 - - 3 1 - 2 2 10 125 36 11 1 - - 3 <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>43</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td>		-				43					-												
WERED HAULAGE		-			1 1	1		· _			-		<u> </u>										
HAULAGE TRUCKS		1	69	24	- 1	51	18		113	49	4	23	6										
FRONT-END LOADERS 1 2 1 - 4 2 - 11 5 1 4 1 4 26 17 1 11 10 2 24 ALL OTHER POWERED - - 59 20 - 18 10 - 93 39 1 6 2 1 47 23 3 83 38 2 50 DISTING		_		3	t _	29					2												
ALL OTHER POWERED - 59 20 - 18 10 - 93 39 1 6 2 1 47 23 3 83 38 2 50 INSTING - 10 2 - 3 3 - 7 7 - 1 - 2 17 6 - 31 21 - 6 INTION OR EXPLOSION - - - - - - - - 1 - - 31 21 - 6 IPOUNDMENT - 1 1 - - - - - - - - - - - - <td></td> <td>1</td> <td>2</td> <td>1 i</td> <td></td> <td>4</td> <td>2</td> <td></td> <td>11</td> <td>5</td> <td></td> <td></td> <td>5</td> <td></td> <td></td> <td></td> <td>1 1</td> <td></td> <td></td> <td></td> <td></td> <td></td>		1	2	1 i		4	2		11	5			5				1 1						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		-		_			_					-	-	· · ·			· ·		1	· ·		'	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		-	59	20	_	18	10	-	93	39	,	6	2	1	47	23	2	83	39		50		
Inition or Explosion -					_			_					1				· · ·			4 .			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				-		, , , , , , , , , , , , , , , , , , ,	, J					•						31		-		°	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		1 _	l- 1		_			-	3	_	1]	_	_			- I	1			1			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			-									-			•			3	'	1 -	1 1	۰ I	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		-		1								_					-	-	1 1		'	-	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			-	1		51	26		101	84		12	111		170	176		100	1.2			5	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				1						<u> </u>								108		4	1		
ALL OTHER MACHINERY 1 47 35 - 46 22 1 99 83 - 11 10 1 152 152 3 187 165 3 140 IPS OR FALLS OF - 59 24 - 83 22 1 298 95 - 41 12 3 333 136 5 462 156 4 236 EPPING OR KNEELING - 14 1 - 11 4 - 39 12 - 3 2 - 27 24 - 64 24 - 200 RIKING OR BUMPING - 3 5 - 6 14 - 22 24 - - 1 - 16 28 - 32 30 - 16 NO 09 JECT - 3 5 - 6 14 - 22 24 - 1 - 16 28 - 32 30 - 16 HER		1		1						1	1 1					-				1 .	1 4	°	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1							00									-			1.		
ERSON		I '	1 7	1 33	ļ -	"	· "	1	39	03	-1		1.0	· · · •	192	152	3	18/	102	1 3	1 140)	
EPPING OR KNEELING - 14 1 - 11 4 - 39 12 - 3 2 - 27 24 - 64 24 - 20 NN OBJECT - 3 5 - 6 14 - 22 24 - 1 - 16 28 - 32 30 - 16 HER - 19 11 - 13 17 - 48 59 - 5 2 - 58 53 - 102 78 - 41			50	24			22		200	6		A 1	1.2			1.20	<u> </u>			1 .		.	
N OBJECT		1 -	59.	24		03	~ ~ ~	1	298	30	1 - 1	41	12	3	553	136	5	462	156	4	236	2 I	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			1	Ι.	· ·	I								· *						1			
HER		-	2 .									3		-									
												-		-									
TOTAL7 459 246 1 432 257 5 1.305 785 4 170 77 23 1.431 0 051 22 2 118 282 25 1.057	HER	- 1	19	1 11	-	13	17	-	48	59	-	5	2	-	58	53	-	102	78		41	i [
	10TAL	7	459	246	. 1	432	257	5	1,305	785	4	170	77	23	1,431	1,051	22	2,118	1,282	25	1,057	, ,	
																			· · -		1		

TABLE 4. - NUMBER OF INJURIES BY MINERAL INDUSTRY, WORK LOCATION, AND ACCIDENT CLASSIFICATION, JANUARY - DECEMBER, 1978 - CONTINUED

(REFER TO NARRATIVE FOR LIMITATIONS AND SCOPE OF DATA)

(For underground and surface mining operations)

50



(For underground and surface mining operations)

The Last Word HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

JUNE

Three Roman origins have been suggested for the name of this month--in honor of the goddess, Juno, the queen of heaven; from the Latin word which means "to join;"and from juniores, the young people as opposed to the older ones, to whom some say it was dedicated. Any of the origins seem reasonable enough, for it is the queen of months, since "then if ever come perfect days." It is the month of weddings, and the tides of youth beat fullest and strongest when we are "knee-deep in June." The summer solstice occurs in June. Before Julius Caesar reformed the calendar, June had only 29 days; he added the 30th.

The shortest nights of the year occur during June, but that is no reason to shorten your quota of "sack time." The increased amount of daylight will give you more time for off-the-job activities, so you will need plenty of "shuteye" to keep you alert and efficient both at work and play. Let us join during this month of uniting in our dedicated war against accidents both at home and at work.

THE LAST WORD

If cleanliness is a virtue, I'm twice blessed: With the high prices and high taxes, I'm always cleaned and pressed.

Usually, things work out pretty well. Our dreams may seldom come true, but then neither do our nightmares.

Our home may not be much, but the same comforts and conveniences in a resort would cost \$250 a week.

Hard work--an accumulation of easy things you didn't do when you should have. Alarm clock--a mechanism used to scare the daylight into you.

A student when asked where the English channel was, replied, "I don't know. We probably can't get it on our cheap set."

(For underground and surface mining operations)

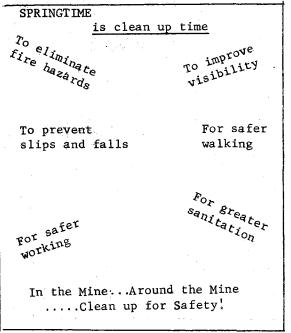
VACATION TIME

We again approach the time of year. "THE MINERS' VACATION PERIOD." Soon our miners, many of our supervisors, and others who give outside service to the industry will put into action well-laid plans, formulated during the past year, for this time of enjoyment and leisure.

Contrary to popular belief, this period presents problems which are recognized as hazardous by people interested in safety. In many instances, these hazards involve not only an individual, but groups, such as families, friends, and in many instances strangers. We earnestly solicit our membership to give serious thought toward including safety and good judgment in carrying out their vacation plans. Failure to recognize the hazards incident to highway travel, boating, fishing, and even household chores cause loss of life and injury of many industrial workers and others each year.

It is the desire of everyone that our workers and their families enjoy their vacations, return to their homes and jobs safety, work and live safety to enjoy another vacation next year.

> THE BEST SAFETY DEVICE



GPO 851 - 106

5000-22

(Rev. 12-78)



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)

DETACH - FILL OUT - FOLD AND STAPLE - FREE MAIL-IN NOTE: BE SURE OUR ADDRESS SHOWS

For uninterrupted delivery, please include any change of address below:

POSTAGE AND FEES PAID U.S. Department of Labor

LAB 441

ś

Ť

MSHA, Office of Holmes Safety Association Education and Training P.O. Box 25367 Denver, Colorado 80225

an agus an a sa bhan gu