

DOCUMENT RESUME

ED 098 397

CE 002 501

AUTHOR Thomas, John C.
TITLE Safety in Trade and Industrial and Technical Education.
INSTITUTION Kentucky Univ., Lexington. Vocational Education Curriculum Development Center.
SPONS AGENCY Kentucky State Dept. of Education, Frankfort. Bureau of Vocational Education.
PUB DATE Jan 74
NOTE 54p.
AVAILABLE FROM Curriculum Development Center, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506 (Single copies only, \$2.00)

EDRS PRICE MF-\$0.75 HC-\$3.15 PLUS POSTAGE
DESCRIPTORS *Accident Prevention; Audiovisual Aids; *Bibliographies; Curriculum Development; Educational Resources; Fire Protection; Industrial Arts; Instructional Aids; *Resource Guides; Resource Materials; Safety; *Safety Education; Secondary Education; Teaching Methods; Technical Education; *Trade and Industrial Education
IDENTIFIERS Kentucky

ABSTRACT

Intended to serve as a resource guide to assist trade, industrial, and technical teachers in maintaining an effective and efficient safety program, the document does not contain information concerning the many specific operations of the various trades. The materials serve as a background for teachers as they develop their own units of instruction on safety. The first section deals with shop and lab safety, presenting specific information related to industrial color coding, fire safety and fire extinguishers, and electrical safety. Safety responsibilities are outlined as they relate to administrators, teachers, and students. Included are a description of safety inspections, sample accident report forms, a list of instructional techniques, and a section on teacher liability. Safety resource listings make up the body of the document, offering a 25-page bibliography of articles, books, catalogs, documents, films, and other instructional aids. A list of addresses of producers and publishers concludes the resource guide.
(MW)

SAFETY
IN
TRADE & INDUSTRIAL AND TECHNICAL
EDUCATION

Prepared
By
John C. Thomas
Curriculum Specialist, Trade and Industrial Education
Curriculum Development Center
University of Kentucky
Lexington, Kentucky 40506

in cooperation with
Bureau of Vocational Education
Unit of Trade & Industrial Education
Fred Martin, Director
Frankfort, Kentucky 40601

1974

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

CE 002 501

FOREWORD

This publication has been developed to serve as a resource guide to assist trade & industrial and technical teachers in maintaining an effective and efficient safety program. It does not contain information concerning the many specific operations of the various trades; courses of study and textbooks are sources of such information. Teachers in the future, as in the past, will develop their own units of instruction on safety. The material in this document should serve as a background in assisting the teacher in this very worthwhile effort.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
SHOP AND LAB SAFETY	2
SAFETY RESPONSIBILITIES	6
SAFETY INSPECTIONS AND REPORTS	7
INSTRUCTIONAL METHODS.	10
TEACHER LIABILITY	12
SAFETY RESOURCE LISTINGS	15
Articles.	15
Books	16
Catalogs	17
Documents	19
Films	24
PUBLISHERS' ADDRESSES	41

INTRODUCTION

A major objective of every instructor must be to prepare his students to work safely in their chosen vocations. Mastery of the skills, techniques, and theory of a trade are important, but not any more important than becoming safety conscious and learning safety procedures.

Instruction in safety must be integrated into the total instructional system rather than just preparing students to pass a safety examination. The results of safety instruction cannot effectively be measured by the number of correct answers on a safety test; rather they must be measured by the proper application of safety practices in the shop each day and in later on-the-job situations.

Students must be safety conscious and alert to dangerous situations. They must know how to prevent accidents from happening.

Safety instruction must not be taken lightly. An organized safety unit should be taught early in the school year. Safety practices should be followed in the shop at all times and reviewed as the necessity arises.

SHOP AND LAB SAFETY

BEST COPY AVAILABLE

1. General Recommendations

- a. Promote safety at all times.
- b. Require active student participation in safety activities.
- c. Never leave a class unsupervised.
- d. Insure that all machinery is properly mounted and that all safety guards are properly and safely installed.
- e. Insure that all machinery is properly wired.
- f. Students should secure approval of instructor before operating power machinery.
- g. Use color coding on machines and hazard stripes on floors. Teach students the meaning and importance of such codes.
- h. Keep the classroom and shop orderly and clean with all tools and materials in the proper place.
- i. Insure that students know procedures to follow in case of fire.

2. Industrial Color Coding

The safety color codes developed by the American Standards Association for industrial use should be taught and used in schools teaching vocational or industrial subjects. Standard color codes are as follows:

a. RED

- (1) identifies FIRE PROTECTION equipment.
- (2) indicates EMERGENCY STOPS on equipment.

b. ALERT ORANGE

designates hazards that might cut, crush, or shock.
Examples: switch box interiors, gears and pulleys cutting edges, presses and transmission cases.

c. HIGH VISIBILITY YELLOW

- (1) indicates CAUTION.
- (2) designates hazards from stumbling, falling, tripping bumping, or collision.

Examples: aisles, handrails, barricades, protruding parts, stair approaches, and floor areas near pits.

d. SAFETY GREEN

identifies first aid and safety equipment.
Examples: first aid kits, stretchers, and personal protective equipment storage.

e. PRECAUTION BLUE

marks equipment controls as a reminder to use caution.
Examples: electrical controls, valves, brakes, and signs indicating that equipment is not to be used.

f. BLACK AND WHITE

indicates HOUSEKEEPING areas.

Examples: locations of waste containers, stair-risers, and food dispensing equipment.

3. Fire Safety and Fire Extinguishers

Knowledge of the classes of fires and the correct types of extinguishers for a given class of fire is extremely important. Using an incorrect type of extinguisher may only create a greater hazard.

a. Classes of fires

<u>Class</u>	<u>Flammable Material</u>	<u>Type of Extinguisher</u>
A	Wood, hay, paper, textiles	(1) Soda-acid (2) Water pump (3) Water from hose or bucket (4) Smother with blanket
B	Oil, grease, gasoline	(1) Pressurized dry chemical (2) Carbon dioxide (CO ₂)
C	Live electrical equipment	(1) Carbon Dioxide (CO ₂) (2) Pressurized dry chemical

b. Characteristics of fire extinguishers:

- (1) Soda-Acid - One of the most common types. This extinguisher contains water, soda, and a bottle of acid. When turned upside down, the acid mixes with the soda water and generates pressure for the stream. Use on Class A Fires Only.

CAUTION: Once turned upside down, this extinguisher cannot be stopped until it is completely discharged. The solution may cause skin burns and is harmful to fabrics. This extinguisher should be pressure tested and recharged by qualified personnel once a year. Dangerous if used on electrical or oil fires.

- (2) Water Pump - The water pump extinguisher is simply a tank with a hose and a hand-operated pump. Use only on Class A fires. Anyone can inspect this extinguisher for correct water level, pump operation, and hose condition.

CAUTION: Dangerous if used on electrical or oil fires.

- (3) Pressurized Dry Chemical - The active ingredient in this extinguisher is ordinary baking soda and is not harmful to humans or fabrics. This type of extinguisher can be used intermittently is necessary.

Use on Class B or C fires. A pressure gauge indicates the condition of the extinguisher. Use of this extinguisher leaves a residue of baking soda which, in some instances, may be difficult to remove. This extinguisher must be recharged by a qualified person.

- (4) Carbon Dioxide (CO₂) - Use on Class B and C Fires. Extinguishers containing carbon dioxide leave no residue.

CAUTION: Effective only at close range. Released carbon dioxide gas (which puts out the fires) can injure a person because of the resulting low temperature (far below 0°). A leaky valve may result in an extinguisher being empty when needed. An experienced serviceman must determine (by weighing) when the extinguisher needs a recharge. Refilling must be done by a qualified person.

- (5) Carbon Tetrachloride - Extinguishers containing carbon tetrachloride are no longer approved for use. Phosgene, a dangerous gas, results when the carbon tetrachloride strikes a hot surface.

The various types of extinguishers are recognizable by their shapes. Everyone should make a habit of knowing where fire extinguishers are located in the school or at work. Never allow a soda-acid or water type extinguisher to be placed in a shop area where there is a possibility of electrical or oil fires. Students should know classes of fires, types of extinguishers and their characteristics. Periodic inspections of buildings, fire protection equipment and procedures in case of fire, should be conducted by qualified personnel.

c. Fire safety practices:

- (1) Provide instruction on fire prevention in the school shop.
- (2) Provide periodic instruction and practice in the proper procedure for evacuating the shop in case of fire or other emergency situations.
- (3) Have fire extinguishers inspected regularly by qualified personnel.
- (4) Flammable liquids, such as gasoline and paint thinner, should be kept in approved cabinets or storerooms.
- (5) Large quantities of flammable liquids should be stored in a proper area away from the main building.
- (6) Store all flammable liquids in approved safety containers.
- (7) Do not use highly flammable liquids for cleaning purposes.
- (8) Inspect all paint and chemical cabinets periodically for fire hazards.

d. Fire on clothing:

If clothing should catch on fire, avoid panic. Smother the flames by wrapping in a blanket, a coat, or by rolling on the ground.

4. Electrical Safety

Electrical equipment is found in every vocational shop. Students should be taught the dangers present in electrical equipment and wiring and how to protect themselves and others from possible injury.

a. General electrical safety:

- (1) Install all electrical wiring in compliance with the National Electrical Code.
- (2) Never use temporary wiring. All extension cords for tools and appliances should be 3-wire parallel ground with grounding lug plugs.
- (3) Teach students to assume that all electrical equipment and wiring is "live" and must be treated as such.
- (4) Students should be taught the importance of safety interlocks and the dangers of by-passing electrical safety devices such as circuit breakers.
- (5) Never work on electrical equipment alone--always have someone else nearby.
- (6) While working on electrical equipment, stand on rubber mats or wooden floors.

b. Rescue from electrical shock:

A person may receive an electric shock by touching a faulty electrical tool or appliance, a bare wire, or an exposed socket. Shock hazards also exist inside various types of electronic equipment and around power lines. The possibility of shock is greatly increased if the person is also in contact with a grounded surface or if the floor or his body is damp.

- (1) If possible, shut off the current quickly.
- (2) If the current cannot be shut off promptly, attempt to move the victim away from the conductor, using some sort of insulated material.
- (3) Do not touch the victim until electrical contact is broken. Use a wooden pole, such as a broom handle, to separate the victim and the conductor. A large cloth, such as a coat, may also be used.
- (4) A live conductor may cling to the victim, making it necessary to pull him (or the conductor) quite a distance away.
- (5) If the victim is not breathing after he has been removed from contact with the conductor, give him artificial respiration.

SAFETY RESPONSIBILITIES

1. The School Administrator

The administrator's safety responsibilities include:

- a. Establishing a safety education program in all program areas of his school.
- b. Promotion of a safety-conscious attitude on the part of all people associated with the school's operations.
- c. Insuring compliance with all local and state safety and health regulations.
- d. The maintenance of safe working conditions as it relates to safeguarding of equipment and the elimination of health hazards in his school.
- e. Maintaining contact with the local, state, and national agencies which provide safety information and services.

2. The Teacher

The teacher's basic safety responsibilities include:

- a. Providing safety education for his students and encouraging student cooperation in all phases of safety.
- b. Maintaining safe working conditions and practices in his shop area.
- c. Keeping up-to-date concerning latest safety developments in industrial education and in industry.
- d. Setting a good example for his students by personally observing all safety rules and practices.
- e. Recommending needed safety improvements to the school's administrator.
- f. Following the recommendations of administrators for the promotion of safe practices and safety education.

3. The Students

All students have safety responsibilities, including:

- a. Obeying safety rules and observing safety practices at all times.
- b. Being considerate of fellow students in order to prevent their injury through unsafe actions.
- c. Rendering the proper attention to safety instruction.
- d. Notifying the teacher of any unsafe conditions observed so that corrective action may be taken.

SAFETY INSPECTIONS AND REPORTS

SAFETY INSPECTIONS:

1. Use the American Vocational Association National Safety Council's "National Standards School Shop Safety Inspection Check List" for shop safety inspections. (Available from American Vocational Association, 1510 "H" Street N.W., Washington, D.C. 20005)
2. Use safety check list to assure that safe conditions exist.
3. Have safety inspections of the shop made by:
 - a. Inspectors from State Department of Labor
 - b. State Fire Inspector
 - c. Student inspector or student inspection team
 - d. Student safety committee
 - e. School administrator
 - f. Bureau of Vocational Education representatives
 - g. Industrial safety engineer
4. Rotate student assignments on shop safety committee.
5. Rotate student assignments as safety inspector and shop foreman.

ACCIDENT REPORTS:

1. Require students to report ALL accidents to instructor.
2. Report ALL accidents to the school administration.
3. Use a printed form to record details of ALL accidents.
4. Keep complete records of ALL accidents on file.
5. Analyze accident reports for the purpose of preventing other accidents.
6. Prepare a summary of all accidents occurring in the school shop for a composite summary of all school accidents.

(See Example of Accident Report Form)

ACCIDENT REPORT FORM

(Example)

1. NAME _____ 2. ADDRESS _____
3. SCHOOL _____ 4. SEX _____ 5. AGE _____ 6. GRADE _____
7. DATE AND TIME OF ACCIDENT, DAY OF WEEK _____
8. NATURE OF INJURY _____ 9. PART OF BODY INJURED _____
10. DEGREE OF INJURY _____ 11. NUMBER OF DAYS LOST _____
12. CAUSE OF INJURY _____
13. JURISDICTIONAL CLASSIFICATION OF ACCIDENT _____
14. LOCATION OF ACCIDENT _____
15. ACTIVITY OF PERSON _____
16. STATUS OF ACTIVITY _____
17. SUPERVISION _____
18. AGENCY INVOLVED _____
19. UNSAFE ACT _____
20. UNSAFE MECHANICAL OR PHYSICAL CONDITION _____
21. UNSAFE PERSONAL FACTOR _____
22. CORRECTIVE ACTION TAKEN OR RECOMMENDED _____
23. PROPERTY DAMAGE _____
24. DESCRIPTION OF ACCIDENT _____
25. DATE OF REPORT _____
26. REPORT PREPARED BY _____ PRINCIPAL _____

INJURY REPORT FORM

(Example)

STUDENT INJURED _____ DATE _____

SHOP IN WHICH INJURY OCCURRED _____ TIME _____

INSTRUCTOR IN CHARGE _____

NATURE OF INJURY _____

FIRST AID ADMINISTERED _____

BY WHOM _____

CAUSE OF INJURY _____

COULD INJURY HAVE BEEN PREVENTED _____ HOW _____

ACTION TAKEN OR RECOMMENDATIONS MADE TO PREVENT RECURRENCE _____

REMARKS _____

SIGNED _____

(Person making report)

INSTRUCTIONAL METHODS

INSTRUCTIONAL TECHNIQUES FOR SAFETY

1. Develop safety consciousness in the students through teacher example--always doing things in the safe way.
2. Develop safety instruction in courses of study for the shop.
3. Teach accident prevention with a positive approach--stressing the correct way to perform an operation.
4. Require all beginning shop students to make a careful study of hazards in the shop during the first few days of the course.
5. Provide detailed instruction as to the procedure to follow in case of a shop accident.
6. Give shop demonstrations stressing safe use of hand tools. Utilize student information sheets in following up the demonstration.
7. Present safety instruction with the following objectives in mind:
 - a. The student will develop a sense of responsibility for his own safety and the safety of others
 - b. The student will know the correct procedure of doing things in the shop
 - c. The student will be aware of hazardous situations
8. Give periodic demonstrations on the proper use and care of personal protective devices.
9. Provide each student with information sheets dealing with the general safety rules for the shop.
10. Require each student to sign information sheets dealing with shop safety rules and regulations to indicate that he has read and understood the regulation. A copy of sheets should be kept on file and the student should keep the original with his other instructional material.
11. Provide instruction as to correct maintenance of shop tools.
12. Provide a bulletin board for safety bulletins, posters, safety rules and regulations, and appropriate safety materials.
13. Provide instructions in the safe method of lifting and/or moving heavy equipment or other loads.
14. Provide a safety suggestion box for student use.

15. Invite outside speaker to talk about the importance of each student acquiring the proper attitude toward accident prevention. Can relate to OSHA (Occupational Safety and Health Act).
16. Take field trips to industrial plants, construction jobs to study on-site safety practices.

STATING ORGANIZATIONAL OBJECTIVES

1. Submit a safety education program to the administration for approval. General goals and specific objectives should be included.
2. Writing organizational objectives. Organizational objectives are predicted measurable achievements within a stated time frame.

Example: Each year a Department of Labor representative will be contacted by the school to speak to the student body about safety.

TEACHER LIABILITY

1. Introduction

The matter of liability is one of many aspects and variables. The topic cannot be covered in detail in this document in that student's can sustain injuries in an infinite number of ways in all sorts of situations.

The information included in this section is for teacher use and is not to be included as part of safety instructional program for students.

The intent of this section is to describe, in general terms, the liability of teachers for student injuries and the elements of proof for negligence which may lead to a teacher's being held liable.

The vocational teacher should familiarize himself with the legal aspects of school accidents and the manner in which he may be held liable. This may be accomplished by attending meetings concerning teacher liability, personal readings, or university classes in school law.

2. School Immunity

School districts and school boards in Kentucky claim "Common Law", or governmental immunity. Common law immunity, originating in England during the middle ages, is based on the doctrine that "The King can do no wrong." This legal tradition, today, is interpreted to mean a sovereign state can do no wrong and cannot be sued without its own consent.

Following this line of reasoning, the school district and the Bureau of Vocational Education, both divisions of the government, are immune to tort action. Schools Boards, an agency of the state is also immune from tort action.

* Tort: "A wrongful act, not including a breach of contract or trust, which results in injury to another's person, property, reputation, or the like, and for which the injured party is entitled to compensation"

The immunity from liability of districts in tort does not extend to employees of the district. Everyone, regardless of his position, is liable for his own torts. In the case of an accident resulting from negligence, this individual directly responsible (perhaps the teacher) may be held personally liable. The fact that the teacher is employed by a governmental (state) agency does not provide him immunity.

*Random House Dictionary, 1967

The teacher's actions are governed by the common law principle that charges every individual to act, or use things under his control, so as not to injure anyone else. A teacher is expected to practice the same degree of prudence and care that any other reasonable person would have practiced in the same situation.

Teachers have an inherent responsibility for the care of students, in that they have been entrusted to him.

3. Types of Accidents

A "pure accident" would be unforeseeable, unavoidable, and as a result, no one could be blamed. No damages are recoverable in a "pure accident."

An accident which results from an unsafe act or an unsafe condition where negligence is evident is not a "pure accident" and damages may be awarded by a jury upon proof of negligence.

4. Negligence

What constitutes negligence is a question of fact in all cases. Negligence, defined as "The failure to exercise due care," is the basic problem in establishing liability. A greater degree of care is required in some situations than in others.

One may be judged liable if it can be shown that the injuries to another were the direct results of improper actions on the part of the defendant. A teacher cannot be held at fault in cases where his own actions had no reasonable connection with the injury.

The best protection from liability a teacher has lies in the conscientious and continuous use of care in all cases in which it is possible for student injury to occur. A safety education program practiced by the teacher and students is the key to avoiding liability cases.

5. Liability Insurance

Liability insurance can be obtained on an individual or group basis. Group liability insurance is usually sponsored by educational or professional associations. One example of such coverage is that available to members of the American Vocational Association.

6. Resources

The following publications are highly recommended for additional information on teacher liability:

Hamilton & Mort. The Law and Public Education. Foundation Press Inc. Brooklyn, New York

Resources (cont'd)

Kigin, Denis J. Teacher Liability in School-Shop Accidents.
Ann Arbor, Michigan: Prakken Publications, Inc. 1963

Kigin, Denis J. Teacher Liability in School-Shop Accidents.
Ann Arbor, Michigan: Prakken Publications, Inc. 1973

Williams, William A. Accident Prevention Manual for Shop
Teachers. Chicago: American Technical Society, 1963

SAFETY RESOURCE LIST

Articles:

Automation in Housing

"OSHA: Do We Really Need It?"

Wayne A. Endicott

February, 1973

Automation in Housing

"Do Your Employees Understand Power Tool Safety?"

The Power Tool Institute

October, 1973

School Shop

"Safety in the Seventies"

April 1972

"Teaching Practices for Accident Prevention," William Williams	p. 48
"Shop Safety Rules and Regulations," William Williams	p. 50
"Shop Safety Devices," John F. Entorf	p. 51
"Shop Safety and New Job Safety Laws," Richard Pfister	p. 58
"Developing Safety Attitudes," Robert V. Krejcie	p. 60
"What's Ahead in School Safety," Charles W. Foster	p. 62
"Eye Safety Legislation," William R. Biggam	p. 65
"PMI for Electrical Safety," John K. Corwin	p. 68
"Liability: Are You Responsible?" Denis J. Kigin	p. 72
"RHAM-Ahead to Safety," David R. Caldwell	p. 76
"The Psychology of Safety," George V. Nichols, Jr.	p. 82
"Shop Safety Check List"	p. 85
"A Shop Accident Reporting Form"	p. 87

Booklets and Bulletins:

Control of the Physical Environment

U.S. Department of Labor, Bureau of Labor Standards
Bulletin 211

bulletin

Health and Safety

National Education Association
1201 16th Street N.W.
Washington, D.C. 20036

booklet

Listing Containing Publications

National Institute for Occupational Safety and Health
Room 10-A-22
5600 Fishers Lane
Rockville, Md. 20853

bulletin

BEST COPY AVAILABLE

Maintenance and Safety

U.S. Department of Labor, Bureau of Labor Standards
Bulletin 246

bulletin

Occupational Health Hazards

U.S. Department of Labor, Bureau of Labor Standards
Bulletin 198

bulletin

A Primer on Grinding Wheel Safety

Norton Company Grinding Wheel Division
Worcester, Massachusetts 01606

bulletin

Safety Education as Your Career

List of Free Materials Available to Educators
J. Clausen
Educational Service Bureau
Dow Jones & Company Inc.
Princeton, New Jersey 08540

booklet

The Shocking Truth About Electrical Accidents

Harry B. Head
Harvey Hubbell, Inc.
320 Wood Road
Louisville, Kentucky 40222

booklet

Books:

Accident Prevention Can be Learned

Metropolitan Life Insurance Company
Metropolitan Life Insurance Company, 1962

Accident Prevention Manual for Industrial Occupations

National Safety Council
425 North Michigan Avenue
Chicago, Illinois 60611

Accident Prevention Manual for Shop Teachers

William A. Williams
American Technical Society, Chicago, 1963

Modern Safety Practices

Russell DeReamer
John Wiley and Sons, Inc., New York 1959

Power Press Safety

Society of Manufacturing Engineers
20501 Ford Road
Dearborn, Michigan 48128

Safety Education

American Technical Society
848 East 58th Street
Chicago, Illinois 60637

Safety in Industry - The Fundamentals of Accident Prevention

U.S. Department of Labor
Occupational Safety and Health Administration
Washington, D.C. 20210
Bulletin #247

Shop Safety

Westinghouse Learning Corporation
100 Park Avenue
New York, New York 10017

Student Accident Reporting Guidebook

National Safety Council
425 North Michigan Avenue
Chicago, Illinois 60611

Teachers Liability...

Prakken Publications
416 Longshore Drive
Ann Arbor, Michigan

Catalogs

The following student materials are made available through the American Medical Association, 535 Dearborn Street, Chicago, Illinois.

Electrical Safety
Electrical Safety/ Catalog #1771-1015

Fire & Explosion
Fire/ Catalog #1771-1002

Hand Safety
Hand Safety/ Catalog #1771-1036

Material Handling & Storage
Moving Things Safely/ Catalog #1035

Psychology of Safety
Courtesy/ Catalog #1771-1806

Your Attitude/ Catalog #1771-1810

Safety Practices

Accident Prevention Checklist/ Catalog #1033

Next Accident/ Catalog #1771-1003

You and Safety/ Catalog #1771-1020

Documents

U.S. Department of Health Education and Welfare
Public Health Service
Consumer Protection and Environmental Management
222 East Central Parkway
Cincinnati, Ohio 45202

Demonstration Guide for Prevention of Electrical Shock Injury

Public Health Service. 1969. 54 pages. By illustrating and explaining basic facts particularly applicable to electricity, electric systems, and electrical cords and appliances in the home, this demonstration guide is intended to prevent injuries associated with the misuse of electrical current.

Educational Resources Information Center (ERIC)
Northern Illinois University
DeKalb, Illinois 60115

ERIC Document Reproduction Service
LEASCO Information Products, Inc.
P.O. Drawer 0
Bethesda, Md. 20014
request: on-demand order blanks

Construction Safety, Site Clearing - Document No. VT 011 074

Safety in Industry Instructor Outline. Bulletin 302. Includes teaching aids and tips.

Find Your Way- Document No. VT 011 550

46 pages. This learning activity is intended to help the new student become familiar with the placement, purposes, uses, and safety rules of power equipment in the shop.

Handling Materials Safely - Document No. VT 011 622

Safety in Industry Instructor Outline. Bulletin 291. Includes teaching aids and tips.

Housekeeping for Safety - Document No. VT 011 624

Bulletin 295. Safety in Industry Instructor Outline. Includes teaching aids and tips.

Construction Safety, Pile Driving, and Cofferdams - Document No. VT 011 692

Safety in Industry Instructor Outline. Bulletin 305. Includes teaching aids and tips.

Safety Handbook: A Guide for Industrial Arts Programs and Transparency Masters - Document No. VT 009 867

1969. 78 pages. Safety unit for junior and senior high industrial arts. First section covers safety material for the teacher and administration; second section is a unit on general safety education.

Safety in Industrial Arts Laboratories - Document No. VT 011 775

Ralph V. Steeb and John J. Geil. May, 1969. 86 pages. Developed by industrial arts consultants to help the teacher develop within each student an awareness of safety that will carry through school, post-school work and recreation.

Safety in Industry (Instructor Outline) - Document No. VT 011 422

Stanley J. Butcher. Department of Labor Safety Training Programs. 1970. 65 pages. An outline designed to aid in planning and presenting on-the-job industrial safety programs.

Safety in the Auto Shop - Document No. VT 011 497

Unit 1 -- lap. No. 1, Edgar Williams, et al. ND. 18 pages. A learning-activity package on safety in the high school auto shop. A self-instructional unit.

Safety, Your Concern and Mine - Document No. VT 011 495

Learning Activity Package, Safety in the Wood Shop. LAP No. 2 by P. M. Shreve. July 1968. 20 pages. Describes safety rules for the high school wood shop. Covers also general safety rules.

Service Station Safety For Young Workers - Document No. VT 010 333

1965. 28 pages. Summarizes safe work habits for service station employees when lubricating a car, changing a tire, or checking the radiator.

Shop Safety - Document No. VT 010 686

1966. 38 pages. Workbook for student use in learning shop safety rules. Explanatory text and line drawings followed by questions which student must answer and check.

Use of Color For Safety - Document No. VT 011 626

Safety in Industry Instructor Outline. Bulletin 298. Includes teaching aids and tips.

Fundamentals of Accident Prevention - Document No. VT 011 343

Safety in Industry Organization and Administration Series. Outlines the basic elements which must be incorporated into every program of accident prevention if maximum results are to be obtained.

Illumination for Safety- Document No. VT 011 625

Safety in Industry Instructor Outline. Bulletin 297.
Includes teaching aids and tips.

Industrial Arts Safety Checklist - Document No. VT 011 074

Washington State Department of Public Instruction 1969.
16 pages. Will serve to: (1) inform, educate, and remind
people of what to look at, (2) train personnel to be observant,
(3) provide a source of feed-back to teachers and administrators,
(4) provide a record of safety items and activities.

Mechanics for the Safety Man - Document No. VT 011 341

Safety in Industry, Mechanics and Physical Hazards. Applies
the laws of mechanics to the daily work of preventing accidents.
Bulletin 239

Operating Engineers: First Course in Apprenticeship, Part I - Document No.
VT 011 242

1965. 148 pages. Includes major study units on: (1) background of
apprenticeship, (2) safety and first aid, (3) orientation to heavy
equipment, (4) planning reading and grade setting. Units divided
into topics containing an introduction, related information, work
assignments and 25 True-False questions.

Preventive Maintenance for Safety- Document No. VT 011 621

Safety in Industry Instructor Outline. Bulletin 290. Includes
teaching tips, charts, and teaching aids.

Promoting Worker Interest in Safety - Document No. VT 011 617

Safety in Industry Instructor Outline. Bulletin 284. Includes
teachings tips, planning procedures, charts, and teaching aids.

Safe Working Surfaces - Document No. VT 011 623

Safety in Industry Instructor Outline. Bulletin 292. Includes
teaching tips and aids.

Recommended Safe Practices for Gas-Shielded Arc Welding - Document No.
VT 011 980

1966. 16 pages. Discusses the potential hazards associated with
the gas shielded arc welding process and gives recommended control
measures.

Rigging and Safety for Apprentice Training in the Plumbing and Pipe
Fitting Industry - Document No. VT 010 015

D. Bart Phipps, August, 1955. 48 pages. Contains instructional
material on rigging and safety -- part of apprenticeship training
for plumbing and pipe fitting industry.

Safe Practices for Welding and Cutting Containers That Have Held
Combustibles - Document No. VT 011 978

1965. 21 pages. Intended as a safe practices guide for persons who weld or cut containers that have held combustibles.

National Office:

Office of Information Services
Occupational Safety and Health Administration
U.S. Department of Labor
Washington, D.C. 20210

Regional Administrator
Occupational Safety and Health Administration
1375 Peachtree Street N.W.
Suite 587
Atlanta, Georgia 30309 (404 526-3573)

Documents:

The Target Health Hazards - OSHA 2051

Trenching and Excavation - A checklist- OSHA 2089

Selected Publications - OSHA 2019

Job Safety and Health - OSHA 2058

All About OSHA - OSHA 2056

Questions and Answers to Part 1910 - OSHA 2095 Department of Labor

15 Questions - OSHA 2087

Know the Answers
Help Prevent Cave-ins

Excavating, Trenching & Backfilling - OSHA 2086

Inspection - OSHA 2026

Dangerous Cargo Labels - 1968: 0-321-482

Guidelines for Setting up Job Safety and Health Programs - OSHA 2072

The Target Industries - OSHA 2034

Profiles of Five Hazardous Occupations

Training Requirements of the Occupational Safety and Health Standards - OSHA 2082

The Principles and Techniques of Mechanical Guarding - OSHA 2057

General Industry Guide for Applying Safety and Health Standards - OSHA 2072

29CFR 1910

Films:

Travelers Insurance Companies
Travelers Film Library
52 Prospect Street
Hartford, Connecticut 06115
"The Challenge"

Union Pacific Railroad
Motion Picture Bureau
"Days of Our Years"

Aetna Life and Casualty Co.
Public Relations and Advertising Dept. Film Library
151 Farmington Avenue
Hartford, Connecticut
"Don't Drop Your Guard"

Travelers Insurance Companies:

"Home Sweet Home"
"Knowing Not Enough"

Aetna Life and Casualty Company

"Lifting, Man's Age Old Problems"
"Safety at Work"

Clark Equipment Company
Industrial Truck Division
Battle Creek, Michigan 49016
"Safety Makes Sense"

Bell Systems Telephone Office
"Slips and Falls"

Aims Instructional Media Service, Inc.
P.O. Box 1010
Hollywood, California 90028
"Safety...a Major Emphasis in Each Instructional Module"

Coronet Films
Coronet
Instructional Materials
65 East South Water Street
Chicago, Illinois 60601
"Safety Practices in the Shop"

Journal Films, Inc.
909 West Diversey Parkway
Chicago, Illinois 60614
"We'll See Tomorrow"

NBC Educational Enterprises, Inc.
30 Rockefeller Plaza Room 1040
New York, New York 10020
"Safety"

Films (Cont'd)

National Institute for Occupational Safety and Health
1014 Broadway
Cincinnati, Ohio 45202

"All in a Day's Work" - motion picture, sound, black & white, 1967

Depicts the various groups that strive to improve the work environment.

Airco Welding Products
Buncher Industrial District
Leetsdale, Pennsylvania

"Always on the Job" - filmstrip, sound, black & white, 20 minutes, 1953

Basic approach to safety in electric arc welding is shown in cartoon style. Shows operations hazardous to the operator if not done properly, and explains safe practices.

Grinding Wheel Institute
2130 Keith Building
Cleveland, Ohio 44115

"American Roulette" - motion picture, sound, color, 28 minutes

This safety film cuts through to operating men, and to the safety drop-out. Shows grinding safety as practiced by good men on the floor today.

Central Office Film Library
Veterans Administration
Washington, D.C. 20420

"Anger at Work" - motion picture, sound, black & white, 21 minutes (1956)

Explains and dramatizes the "headache switch" one of the mental mechanisms of man's personality which induces displacement of anger onto other men and impairs efficiency in everyday living.

Modern Talking Picture Service
Caterpillar Film Library
1687 Elmhurst Road
Elk Grove Village, Illinois 60007

"Best Foot Forward" - motion picture, sound, color, 15 minutes

Entertains workers while emphasizing foot protection and the quality of today's shoes.

Films (Cont'd)

Modern Talking Picture Service, Inc.

"Challenge of Safety" - motion picture, sound, color, 23 minutes

Depicting safe operation of construction equipment

Southern California Edison Company
P.O. Box 800
Rosemead, California 91770

"Climbing with Confidence" - motion picture, sound, color, 28 minutes, 1969

Film discusses the proper form for climbing poles and the care and maintenance of climbing equipment.

Bureau of Mines
Motion Pictures
4800 Forbes Avenue
Pittsburgh, Pennsylvania 15213

"Coal Miner---Today" - motion picture, sound, color, 12 minutes, 1970

Film takes viewer underground, into a coal mine, showing the men and machinery as they perform their various specialized jobs. Reasons for each job are explained; hazards are given; and safety procedures are stressed, emphasizing the correct way of doing the job.

National Society for the Prevention of Blindness
79 Madison Avenue
New York, New York 10016

"Don't Push Your Luck" - motion picture, sound, color, 13 minutes, 1968

Vividly depicts a blinding eye accident in an industrial plant. A dramatic tool for boosting plant safety programs.

Modern Talking Picture Service Inc.

"Everything to Lose" - motion picture, sound, 21 minutes

Shows the terrible consequences of ignoring shop safety rules...of taking foolish chances where there's everything to lose.

Film Distribution Service
Bausch and Lomb
635 St. Paul Street
Rochester, New York 14602

"Expedite-School Eye Safety" - motion picture, sound, color, 12 minutes

Eye hazards in school and college chemistry labs, industrial art classes, and industrial shops - with the specific eye safety equipment recommended.

Bureau of Mines

"Foremanship Training Series" - motion pictures (4), sound, color, 42 minutes (total), 1968

Set of four films covering aspects of the following: (1) Set the Pace, (2) Investigation--A Tool for Accidents, (3) Teach Safety, and (4) Sell Safety.

Thor Power Tool Company
175 N. State Street
Aurora, Illinois 60507

"The Four P's of Safety" - filmstrip, sound (record), 20 minutes

Safety in grinding with portable grinders and shows unsafe and safe practices, analyzing usual causes of accidents and how to avoid them. Shows personal aspects of safety, applicable to almost any safety program.

Film Librarian
Aetna Life & Casualty
151 Framington Avenue
Hartford, Connecticut 06115

"Get the Message" - motion picture, sound, color, 13 1/4 minutes

The film describes how a concerned company discovered that poor safety communications between management and employees was the cause of its poor safety record and how it established an effective safety program.

Creative Communications, Inc.
13900 Panay Way, M-120
Marina del Rey, CA 90291 (loan-free only to qualified organizations)

"Gift of Life" - motion picture, sound, color, 18 minutes

By juxtaposing the rewards life offers when one is sound of mind and limb with the tragedies of accidents and death, the camera gives new meaning to safety practices. This film portrays a wide range of accidents and all of those which happen most frequently to carpenters while they're on the job.

Films (Cont'd)

Airco Welding Products

"Guy Behind Your Back" - filmstrip, sound, black & white, 20 minutes, 1953

The fundamental approach to safety for operators of oxyacetylene welding and cutting equipment. Cartoon style shows operations hazardous to the operator and others if not done properly.

U.S. Steel Film Distribution Centers

"The Handtrap Test" - motion picture, color, 20 minutes

Test on hand and finger injuries and related pinchpoints. Helps create and maintain awareness of potential hazards faced daily.

"The Hard Hats and Thinking Caps" - motion picture, color, 29 minutes

Film was designed to reduce accidents among the structural ironworkers in American Bridge Division by establishing a constant awareness that thoughtlessness causes most accidents and that the "hard hat" must give way to the "thinking cap" as the emblem of future safety accomplishments.

**Employers Insurance of Wausau
2000 Westwood Drive
Wausau, WI 54401**

"The High-Low Bid" - motion picture, sound, color 27 minutes, 1960

Deals with a construction firm that is losing bid after bid because of its high accident costs. Film stresses the important role of the construction foreman in accident prevention and concentrates on major hazards in general construction work.

**Hy-Test Safety Shoes
1509 Washington Avenue
St. Louis, MO 63166**

"Instep Guard Story" - motion picture, sound, color, 8 minutes

Demonstrates the effective laboratory testing of shoes and compares the results of test blows to protected and unprotected foot forms. It is a convincing demonstration of the value of safety shoes.

National Society for the Prevention of Blindness

"It's Up to You" - motion picture, sound, color, 11 1/2 minutes, 1961

Forceful industrial eye safety message, includes eye surgery sequence. Industrial, other adult audiences.

Aetna Life and Casualty

"Lifting, Man's Age Old Problem" - motion picture, sound, color, 12 minutes

Special photographic techniques highlight safe lifting guidelines and other tips for avoiding the back problems that plague millions.

Health & Welfare Division
Metropolitan Life Insurance Company
1 Madison Avenue
New York, NY 10010

"Mr. Finley's Feelings" - animated motion picture, sound, color, 10 minutes, 1957

Illustrates how daily emotional tensions sometimes lead to real trouble. Setting is a work situation. Designed to stimulate questions and comments and provoke an exchange of ideas about ways of meeting stress situations and handling day-to-day relationships. A discussion guide is provided for use with the film.

Foredom Electric Company
Route 6, Stony Hill
Bethel, CT 06801

"A New Approach to Saw Safety" - motion picture, color, 12 minutes, 1958

For carpenter shop workers, the film features sponsor's see-through guard for rip saws.

Central Film Library
Veterans Administration
Washington, D.C. 20420

"No Laughing Matter" - filmstrip, sound (record), black & white, 15 minutes 1949

Explains how to prevent falls on jobs involving trucks and trailers, ladders and scaffolds, elevator shafts, stock piles and stairs.

Films (Cont'd)

Sellstrom Manufacturing Company
Sellstrom Industrial Park
Palatine, IL 60067

"No Second Chance" - motion picture, sound, color, 23 minutes

Makes students and employees realize the importance of eye protection in shop and lab classes. An employee blinded in an industrial accident tells what it's really like to go through life without sight.

Motion Pictures
Bureau of Mines
4800 Forbes Avenue
Pittsburgh, PA 15213

"Oh! My Aching Back" - motion picture, sound, color, 21 minutes 1965

Explains how back injuries occur and how they may be prevented both on and off the job. The anatomy of the human back is shown and also how the bones, muscles, ligaments, and tendons may be injured, using movable parts.

"Orientation and Indoctrination of Safety Workmen" - motion picture, sound, 27 minutes

Follows group of new employees through actual working situations. Job safety is stated as an integral part of production, and the value of accident prevention training for all employees is highlighted.

Sandia Laboratories, Div. 7544
P.O. Box 5800
Albuquerque, NM 87115

"Our Aching Backs" - motion picture, sound, color, 18 minutes

The film deals with everyday hazards and how to prevent injury and take proper care of the back. Uses animated cartoon character as well as "live" talent to discuss back safety.

Modern Talking Picture Service, Inc.

"Playing it Safe with Power Tools" - motion picture, sound, color, 14 minutes

Demonstrates safe procedures in the use of variety of portable power tools for industry, home and lawn and garden. Proper tool application, work preparation, and the use of auxiliary safety equipment are depicted. Film stresses accident prevention by "working defensively."

Films (Cont'd)

Television Film Libraries
107 Dupont Street
Toronto 5, Ontario, Canada

"Principles of Safety" - motion picture, sound, black & white, series of 5/6 minutes each.

No. 1 in the series points out that the same attitude of mind leading to lost production can also contribute to accidents. Nos. 2-5 deal with specific failures on the part of supervision in the following areas: Permitted Occasions, Ineffective Supervision, Incomplete Supervision and Negative Promotions.

Employers Mutual of Wausau
Wausau, Wisconsin 54401

"Proud and Tall" - motion picture, sound, black & white and color, 18 1/4 minutes, 1961

Depicts the rehabilitation of a blinded worker and the preparations made by the employer-company for his rehiring. Made for the President's Committee on Employment of the Physically Handicapped.

J.C. Renfroe & Sons, Inc.
Box 4279
Jacksonville, Florida 32201

"Renfroe Way" - motion picture, sound, color, 18 minutes, 1967.

Describes modern methods for efficient and safe handling of steel in fabricating plants and construction sites.

Central Film Library
Veterans Administration
Washington, D.C. 20420

"Right Dress" - filmstrip, record, black & white, 20 minutes, 1946

Stresses safety clothing in industry.

Reincke-Meyer & Finn
625 N. Michigan Avenue
Chicago, Illinois 60611

"Safe Driving" - motion picture

Demonstrates the proper use of air powered staplers and nailers. The film is an integral part of an overall safety program.

Films (Cont'd)

Central Film Library
Veterans Administration
Washington, D.C. 20420

"Safe Handling of Materials" - filmstrip, sound (record), black & white
15 minutes, 1949

Discusses safety practices in handling materials. Illustrates snagging hands on nails, rough boards, and wire banding; catching fingers in pinch points; lifting objects improperly; dropping objects on toes; carrying heavy objects; and other causes of accidents.

J.C. Renfroe & Sons, Inc.
Box 4279
Jacksonville, Florida 32201

"Safe Hands of Steel"

Aims to improve safety conditions in steel fabricating plants and wherever the handling of metals is a problem. Acquaints men of steel with safe techniques and cost reduction through proper use of steel tools.

Aetna Life and Casualty

"Safety at Work" - motion picture, sound, color, 19 minutes

Viewers tour a diversified manufacturing plant to see a far-reaching safety program in action at every step from raw material to finished product.

"Safety-Everybody's Business" - motion picture, sound, color, 11 minutes.

Shows common causes of accidents in an industrial plant and demonstrates the importance of strong safety supervision.

"To Fall or Not to Fall" - motion picture, sound, color, 9 minutes

Animated cartoon offers precautions against unsafe conditions and actions leading to on-the-job falls, a major cause of occupational injuries.

Gypsum Association
201 North Wells Street
Chicago, Illinois 60606

"Safety Zone" - motion picture, sound, color, 27 minutes

Depicts preventive and corrective action vital to any plant safety program. Drives home safety practices that should be utilized in all industries.

F'lms (Cont'd)

American Optical Corporation
Safety Products Division
Southbridge, Massachusetts 01550

"The Sound of Sound" - motion picture, sound, color, 16 minutes, 1970

Film focuses on industrial noise; its insidious attack on hearing; the permanence of a noise-related hearing loss. Industrial workers speak candidly of their occupational deafness - their loneliness and frustration. These men avidly support the film's basic message, "Keep the hearing you've got. Wear the proper hearing protection."

Bausch & Lomb
Film Distribution Service
635 St. Paul Street
Rochester, New York 14602

"Straight Talk on Eye Safety" - motion picture, sound, color, 12 minutes

Prevention is the key word in this filmed interview. STRAIGHT TALK ON EYE SAFETY sends a plea to schools and industries on the need for eye and face protection.

Motion Pictures
Bureau of Mines
4800 Forbes Avenue
Pittsburgh, Pennsylvania 15213

"Supervisory Training Series - Man and His Habits" - motion picture, sound, color, 12 1/2 minutes, 1969

How man's habits may endanger his safety by becoming routine--when carried over to his work.

"Supervisory Training Series - Man's Shortcomings" - motion picture, sound, color, 12 1/2 minutes, 1969.

Shows how man's personality quirks may endanger his and other worker's safety and how to avoid this mental condition.

"Supervisory Training Series - Motivation - A Means to Accident Prevention" motion picture, sound, color, 11 minutes, 1969

Shows how proper motivation prevents accidents. The reasons that motivate the workmen are presented in a visually interesting manner.

"Supervisory Training Series - Safety Consciousness" - motion picture, sound, color, 10 minutes, 1969.

Various people demonstrate how to develop safe attitudes.

Films (Cont'd)

External Information Department
IBM Corporation
Neighborhood Road
Kingston, New York 12401

"Survival is the First Job" - motion picture, sound, color,
14 1/2 minutes.

Teaches employee awareness of unsafe situations on and off the job.

Central Film Library
Veterans Administration
Washington, D.C. 20420

"Teaching Safety on the Job" - filmstrip, sound (record), black & white,
15 minutes, 1948

Describes accidents due to poor or inadequate training of workers.
Discusses safety analysis of a job and use of the analysis as a basis
for job safety training.

Occupational Safety and Health Administration
Department of Labor
Regional and Area Offices

"This is OSHA" - slide animation motion picture, sound, color, 27 minutes,
1973

Broad overview of OSHA activities -- its standards setting, compliance
inspection, voluntary compliance, training, and State programs.

Modern Talking Picture Service, Inc.

"To Conserve and Protect" - motion picture, sound, color, 14 1/2 minutes

As narrator, James Mason says: "Noise pollution, if allowed to go
unchecked will rob millions of us of our God-given gift - the ability
to hear." This important film covers the different aspects of noise
pollution - its causes, bad effects on human beings, and what can
and must be done to conserve and protect our precious ability to hear.

Mine Safety Appliances Company
201 North Braddock Avenue
Pittsburgh, Pennsylvania 15208

"Way to Live" - motion picture, sound, color, 19 minutes

Explains how a respirator works and how simple it is to wear and
take care of. Stresses the importance of wearing proper
protective equipment.

Films (Cont'd)

Sellstrom Mfg. Company
Sellstrom Industrial Park
P.O. Box 355
Pallatine, Illinois 60067

"Windows of Your Soul" - motion picture, sound, color, 28 minutes

Features the late Senator Everett M. Dirksen in which he points up the importance of wearing face and eye protection in school shops, labs, and industry.

Matheson Gas Products
Box 85
East Rutherford, New Jersey 07073

"Working With Compressed Gases" - motion picture, sound, color, 20 minutes.

Its theme -- compressed gases -- vital, versatile tools for industry and research. How do we handle them safely and productively?

Joseph E. Schmitt & Associates
P.O. Box 180
Fenton, Missouri 63026

"Wrong Place, Wrong Time, Wrong Shoes" - motion picture, sound, color, 15 minutes

This film is worker-oriented and dramatizes actual foot accidents, their consequences and how safety shoes helped avoid serious injury.

Free-Loan Films

Liberty Mutual Insurance Co. Films

Building Construction:

- "If You Took Your Family To Work"
- "Watch the Wires"

Fire and Explosion

- "Flammable Liquid - Fire Safety"
- "Know Your Fire Hazards"
- "Portable Extinguishers"

Machine Operations and Guarding:

- "It Didn't Have to Happen"
- "It's in the Cards"

Material Handling & Storage:

- "Facts About the Back"
- "How to Avoid Muscle Strains"
- "Safety Makes Sense"

Personal Protective Equipment:

- "Be a Pro"
- "Don't Push Your Luck"
- "To Live in Darkness"

Psychology of Safety:

- "Everything to Lose"
- "Growing Pains"
- "Knowing's Not Enough"
- "Safe As You Think"
- "The Trap"

Road Construction:

- "The Gamblers"
- "It Could Happen To You"
- "Matter of Time"

Tool Safety-Hand & Powered:

- "For Safety's Sake"
- "Grinding Wheel Safety" (Norton)

U.S. Steel Corporation Films:

Hand Safety:

- "The Handtrap Test"
- "With These Hands"

Safety Equipment:

- "Hard Hats and Thinking Caps"

Safety Practices:

- "Knowing Is Not Enough"

Rental Films

Electrical Safety:

- "Electricity: Principles of Safety" (University of Kentucky)
- "Safety With Electricity" (Indiana University)

Fire and Explosion:

- "Are You Sure?" (Associated Sterling Films)
- "If You Hear the Explosion, The Danger Has Passed" (New York University Film Lab)
- "In Case of Fire" (University of Kentucky)
- "Safety With Fire" (University of Kentucky)

First Aid:

- "Artificial Respiration" (#191 University of Kentucky)
- "First Aid: Fundamentals" (#5530 University of Kentucky)
- "First Aid Now" (#S-638 University of Kentucky)
- "First Aid on the Spot" (#6204 University of Kentucky)
- "Personnel Damage Control-Wounds" (#HS-324 Indiana University)
- "Rescue Breathing" (#HSC-653 Indiana University)
- "Seconds Count" (#LS-90 Indiana University)

Hand Safety

- "On Every Hand" (Journal Films)

Safety in Industrial Arts

- "Industrial Arts: A Safe Shop" (#LS-94 Indiana University)

Personal Protective Equipment

- "We'll See Tomorrow" (Journal Films)

Safety Practices

- "Factory Safety" (LS-14 Indiana University)
- "Down and Out" (Journal Films)
- "A New Way to Lift" (Journal Films)

Filmstrips

"Electrical Safety"
AIRCO Welding Products, Inc.
Stanley-Bowmar

"First Aid"
First Aid Series
Nine Filmstrips
McGraw-Hill, Text-Film Division

"Safety Practices"
Scott Education Division

"Tool Safety-Hand and Powered"
AIRCO Welding Products Inc.

"Safety at School"
Eye Gate Quickstrips
Eye Gate House
146-01
Archer Avenue/Jamaica, New York 11435

Publications from NIOSH:

The following are publications from the National Institute for Occupational Safety and Health (NIOSH), Office of Public Information Room 10-A022, 5600 Fishers Lane, Rockville, Maryland 20852:

Kit of Basic NIOSH Reference Materials

Basic materials concerning the Occupational Safety and Health Act of 1970 and the NIOSH program. Contains article reprints, fact sheets, and related materials.

Films and Filmstrips on Occupational Safety and Health

Listing of occupational safety and health films and filmstrips compiled to provide interested individuals and groups with a current reference to loan-free audio-visual aids. Includes a listing of organizations that offer rental and purchase occupational safety and health audio-visual aids.

Working With Industrial Solvents

8 pages. For use by workers using organic industrial solvents. Pamphlet includes a discussion of the nature of solvents, health problems, control of exposure, and the actions of employers and employees.

Welding Safely

8 pages. Information pamphlet for welders. Discusses the health aspect of welding operations. Pamphlet includes a discussion of health hazards, control methods, and possible actions by management and workers.

Job Safety and Health Services

4 pages. Discusses the services NIOSH can offer to private industry and other government agencies and where these services can be obtained.

Working With Cutting Fluids

5 pages. Discusses what cutting fluids are, how they are used, how they may affect the worker, and methods for control.

Directory of Governmental Occupational Safety and Health Personnel

Annual listing of local, state and Federal agencies engaged full or part-time in occupational safety and health activities.

A Learning Experience in Occupational Safety and Health

12 pages. Course listing for NIOSH's Division of Training for June 1973 - July 1974.

The President's Report on Occupational Safety and Health

A report on the year's progress by the Department of Labor (OSHA) and the Department of Health, Education, and Welfare (NIOSH) in implementing the Occupational Safety and Health Act of 1970. Available in single copies only.

Annual Report of the Federal Coal Mine Health and Safety Act

This Annual report describes the activities of NIOSH (DHEW) in carrying out health responsibilities under the Federal Coal Mine Health and Safety Act of 1969.

Training Grants

Describes NIOSH supported training grant programs underway in colleges and universities across the nation.

On-The-Job Safety Rules for Power Tools

4 pages. A joint publication by the Power Tool Institute, Inc., National Association of Home Builders, the United Brotherhood of Carpenters and Joiners of America, and NIOSH. Presents through drawings and narration the rules for power tool use in occupational settings.

Protecting the Health of Coal Miners--An Interagency Approach

17 pages. Describes the liaison arrangements of NIOSH and the Bureau of Mines and the principal health protective measure of the Act (respirable dust standards). A review of compensation features of Title IV for disabled miners and their survivors is also presented.

Criteria for a Recommended Standard - Occupational Exposure to Carbon Monoxide

124 pages. Recommends control of worker exposure to carbon monoxide. GPO Order No. 1733 00007, \$2.00 each. NTIS Order No. PB 212629, \$3.00 each, microfiche \$0.95.

Criteria For a Recommended Standard - Occupational Exposure to Noise

152 pages. Recommends control of worker exposure to noise. GPO order No. 1733 00007, \$2.00 each. NTIS Order No. PB 213563, \$3.00 each, microfiche \$0.95.

Annual List of Toxic Substances--1972

572 pages. A listing of potentially hazardous materials. Serving as a guide for research needed in setting new occupational health standards. Publication required annually by the Occupational Safety and Health Act of 1970. GPO Order No. 1719 00006, \$6.00 each.

Miscellaneous Teaching Aids:

"Accident Prevention" Cassettes Unlimited Roanoke, Texas 76262	Cassettes
Safety Charts (10) USGPO	Charts
School Shop Poster Packet 25 Posters Concerning School Shop Hazards 8 1/2 x 11 inches Stock # 189.10 Cost: 1-\$2.50; 2-\$1.95; 10-\$1.65 National Safety Council	Charts
Eye Safety Equipment Fendall Company 2222 W. Diversey Parkway Chicago, Illinois 60647	Charts
National Safety Council Catalog-Poster Directory 625 N. Michigan Avenue Chicago, Illinois 60611	Posters
"Shop Safety" Westinghouse Learning Corporation 100 Park Avenue New York, New York #31-1007	Self-Instructional Course
"Think First Aid" National Safety Council	Slides
"Safety Machine & Power Tools" DCA Educational Products Industrial Education Catalog Warrington, Pennsylvania	Transparencies

Abbott Laboratories
Professional Relations Department
Abbott Park
North Chicago, Illinois 60064

Academy McLarty Productions, Inc.
207 Delaware Avenue
Buffalo, New York 14202

Aetna Life & Casualty
151 Farmington Avenue
Hartford, Connecticut 06115

Aims Instructional Media Service, Inc.
P.O. Box 1010
Hollywood, California 90028

Airco Welding Products, Inc.
P.O. Box 799
Lexington, Kentucky 40501

American Gas Association
1515 Wilson Boulevard
Arlington, Virginia 22209

American Heart Association
Distribution Department
44 East 23rd Street
New York, New York 10010

American Hospital Association
840 North Lake Shore Drive
Chicago, Illinois 60611

American Medical Association
535 Dearborn Street
Chicago, Illinois 60610

American Optical Corporation
Safety Products Division
Southbridge, Massachusetts 01550

American Technical Society
848 East 58th Street
Chicago, Illinois 60637

American Welding Society
345 East 47th Street
New York, New York 10017

Association-Sterling Films
866 Third Avenue
New York, New York 10022

Atchison, Topeka & Santa Fe Railway Co.
80 E. Jackson Blvd.
Chicago, Illinois 60604

Audio Productions, Inc.
639 North Avenue
New York, New York 10036

Audio-Visual Center
Indiana University
Bloomington, Indiana 47401

Audio-Visual Services
Porter Building
University of Kentucky
Lexington, Kentucky 40506

Automation in Housing
300 West Adams Street
Chicago, Illinois 60606

Bausch & Lomb
Film Distribution Service
635 St. Paul Street
Rochester, New York 14602

Bete, Channing L. Co., Inc.
45 Federal Street
Greenfield, Massachusetts 01301

Better Vision Institute
230 Park Avenue
New York, New York 10017

Bowmar, Stanley - Company
4 Broadway
Valhalla, New York 10595

Bray Studios
630 Ninth Avenue
New York, New York 10036

Bureau of Business Practice
24 Rope Ferry Road
Waterford, Connecticut 06385

Bureau of Mines
4800 Forbes Avenue
Pittsburgh, Pennsylvania 15213

Business Education Films
5113-16th Avenue
Brooklyn, New York 11204

CCM Films
34 MacQuesten Parkway, South
Mount Vernon, New York 10550

California State Department of Education
Fiscal Office-Order Section
721 Capitol Mall
Sacramento, California 95814

Cal-Central Press
2629 Fifth Street
Sacramento, California 95818

Cassettes Unlimited
Roanoke, Texas 76262

Central Film Library
Veterans Administration
Washington, D.C. 20420

Clark Equipment Company
Industrial Truck Division
Battle Creek, Michigan 49016

Close Productions, Inc.
2020 San Carlos Boulevard
Fort Myers Beach, Florida 33931

Cornnet Films
Instructional Materials
65 East South Water Street
Chicago, Illinois 60601

Creative Communications, Inc.
13900 Panay Way
Marina del Rey, California 90291

Cummins Engine Company
Columbus, Indiana 47201

DCA Educational Products
Industrial Education Catalog
Warrington, Pennsylvania

John V. Dunigan Studios
208 5th Avenue
New York, New York 10010

Educational Resources Information Center
Ohio State University
Columbus, Ohio 43210

Educational Service Bureau
Dow Jones & Company Inc.
Princeton, New Jersey 08540

Employers Insurance of Wausau
2000 Westwood Drive
Wausau, Wisconsin 54401

External Information Department
IBM Corporation
Neighborhood Road
Kingston, New York 12401

Eye-Gate House
146-01 Archer Avenue
Jamaica, New York 11435

Factory Mutual
1151 Boston-Providence Turnpike
Norwood, Massachusetts 02062

Fearon Publishers, Inc.
6 Davis Drive
Belmont, California 94002

Fendall Company
2222 W. Diversey Parkway
Chicago, Illinois 60647

Fertilizer Institute
1014 18th Street, NW
Washington, D.C. 20036

Foredom Electric Company
Route 6, Stony Hill
Bethel, Connecticut 06801

General Electric Educational Films
60 Washington Avenue
Schenectady, New York 12305

The Greater Chicago Safety Council
10 North Clark Street
Chicago, Illinois 60602

Greater Los Angeles Chapter
National Safety Council
3388 West 8th Street
Los Angeles, California 90005

Grinding Wheel Institute
2130 Keith Building
Cleveland, Ohio 44115

Gypsum Association
201 North Wells Street
Chicago, Illinois 60606

Harry B. Head
Harvey Hubbell, Inc.
320 Wood Road
Louisville, Kentucky 40222

Harvest Films
309 Fifth Avenue
New York, New York 10016

Health & Safety Counselors
P.O. Box 5253
Fort Wayne, Indiana 46805

Alfred Higgins Productions
9100 Sunset Boulevard
Los Angeles, California 90069'

Hyster Company
P.O. Box 2902
Portland, Oregon 97208

Hy-Test Safety Shoes
1509 Washington Avenue
St. Louis, Missouri 63166

Indiana University
Audio-Visual Center
Bloomington, Indiana 47401

Instructional Material Production
Engineering Extension Service Service
F.E. Drawer K
College Station, Texas 77843

International Film Bureau, Inc.
332 S. Michigan Avenue
Chicago, Illinois 60604

International Medifilms
3491 Cahuenga Boulevard
Los Angeles, California 90068

International Brotherhood of Electrical Workers
AFL-CIO & CLC
Washington, D.C. 20005

International Union of Operating Engineers
3515 Prospect Avenue
Cleveland, Ohio

Iowa State University
Fire Service Extension
Ames, Iowa 50010

Journal Films, Inc.
909 West Diversey Parkway
Chicago, Illinois 60614

Lawson Book Company
9488 Sara Street
Elk Grove, California 95625

Liberty Mutual Insurance Company
Bankers Building
Lexington, Kentucky

Lineman's Supply Division
P.O. Box 1690
Binghamton, New York 13902

McGraw-Hill
Text-Film Division
330 West 42nd Street
New York, New York 10036

McGraw-Hill
Webster Division
Manchester Road
Manchester, Missouri 63011

Manufacturing Chemists Assn.
1825 Connecticut Avenue, NW
Washington, DC 20009

Marshall Maintenance
529 South Clinton Avenue
Trenton, New Jersey 08611

Matheson Gas Products
Box 85
East Rutherford, New Jersey 07073

Metropolitan Life Insurance Company
Health & Welfare Division
1 Madison Avenue
New York, New York 10010

Mine Safety Appliances Company
201 North Braddock Avenue
Pittsburgh, Pennsylvania 15208

Middle West Service Company
69 West Washington Street
Chicago, Illinois 60602

Modern Talking Picture Service
Caterpillar Film Library
1687 Elmhurst Road
Elk Grove Village, Illinois 60007

Mogull's
235 West 46th Street
New York, New York 10010

National Association of Automotive
Mutual Insurance Companies
20 N. Wacker
Chicago, Illinois 60606

National Broadcasting Company Educational Enterprises, Inc.
30 Rockefeller Plaza Room 1040
New York, New York 10020

National Education Association
1201 16th Street N.W.
Washington, D.C. 20036

National Educational Media, Inc.
3518 W. Cahuenga Boulevard
Hollywood, California 90068

National Film Board of Canada
Suite 819, 680 Fifth Avenue
New York, New York 10019

National Institute for Occupational Safety and Health
1014 Broadway
Cincinnati, Ohio 45202

National Restaurant Association
1530 North Lake Shore Drive
Chicago, Illinois 60610

National Rural Electric Cooperative
2000 Florida Avenue, NW
Washington, DC 20009

National Safety Council
425 N. Michigan Avenue
Chicago, Illinois 60611

National Society for the Prevention of Blindness
69 Madison Avenue
New York, New York 10016

New York State College of Agriculture & Life Science
Cornell University
Roberts Hall
Ithaca, New York 14850

New York University Film Library
26 Washington Place
New York, New York 10003

BEST COPY AVAILABLE

Norton Company
Publicity Department
Worcester, Massachusetts

Occupational Health Institute
55 East Washington Street
Chicago, Illinois 60611

The Ohio State University Film Library
Dept. of Photography & Cinema
156 West 19th Avenue
Columbus, Ohio 43210

Pennsylvania State University
Audio-Visual Service
6 Willard Building
University Park, Pennsylvania 16802

Prakken Publications
416 Longshore Drive
Ann Arbor, Michigan

Price Filmmakers
3491 Cahuenga Boulevard
Hollywood, California 90068

Reincke-Meyer & Finn
625 No. Michigan Avenue
Chicago, Illinois 60611

J.C. Renfroe & Sons, Inc.
Box 4279
Jacksonville, Florida 32201

Sandia Laboratories, Div. 7544
P.O. Box 5800
Albuquerque, New Mexico 87115

Jospeh E. Schmitt & Associates
P.O. Box 180
Fenton, Missouri 63026

Scott Education Division
Holyoke, Massachusetts 01040

Scott, Foresman and Company
1900 East Lake Avenue
Glenview, Illinois 60025

Sellstrom Manufacturing Company
Sellstrom Industrial Park
Palatine, Illinois 60067

Society of Manufacturing Engineers
20501 Ford Road
Dearborn, Michigan 48128

South Central Bell Telephone Company
P.O. Box 538
Louisville, Kentucky 40203

Southern California Edison Company
P.O. Box 800 Rosemead
Rosemead, California 91770

Special Education Instructional Materials Center
University of Kentucky
Lexington, Kentucky 40506

Stanwix House, Inc.
3020 Chartiers Avenue
Pittsburgh, Pennsylvania 15204

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

TAPPI
1 Dunwoody Park
Atlanta, Georgia 30341

Television Film Libraries
107 Dupont Street
Toronto 5, Ontario, Canada

Thor Power Tool Company
175 N. State Street
Aurora, Illinois 60507

3-M Company
Visual Productions Division
Box 3100A
Saint Paul, Minnesota 55101

Trade and Industrial Education
State Department of Education
P.O. Box 2847
University of Alabama

Travelers Insurance Companies
Travelers Film Library
52 Prospect Street
Hartford, Connecticut 06115

Fern-Tripp
2035 East Sierra Way
Dinuba, California 93618

Universal Education & Visual Arts
221 Park Avenue South
New York, New York 10003

U.S. Department of Labor
Bureau of Labor Standards
Washington, D.C. 20210

U.S. Steel Corporation
Chicago Film Center
208 South LaSalle Street
Chicago, Illinois

University of Michigan
Audio-Visual Education Center
416 Fourth Street
Ann Arbor, Michigan 48103

Visual Education
1425 H. Street N.W.
Washington, D.C. 20005

Vocational Education Media Center
Clemson University
Clemson, South Carolina 29631

Walch, J. Weston Publishers
Box 1075
Portland, Maine 04104

Westinghouse Learning Corporation
100 Park Avenue
New York, New York 10017

John Wiley & Sons, Inc.
605 Third Avenue
New York, New York 10016

Willson Products Division
P.O. Box 622
Reading, Pennsylvania 19603

Xerox Films
245 Long Hill Road
Middletown, Connecticut 06457