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Issue 1, July 1985



Recognizing Health Hazards

Guidelines for
Telephone Company Supervisors

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Guidelines for
Telephone Company Supervisors

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Contents

Preface	v
Introduction	1
Types of Hazards	6
• Chemical Hazards	6
• Physical Hazards	13
• Biological Hazards	15
• Ergonomic Hazards	16
Health Hazards at Telephone Company Locations	19
Health Hazards at Customer Locations	23
• What to Look For	24
• Corporate Policies	25
Dictionary of Hazards	26
• Asbestos	26
• Compressed Gases	30
• Lasers	40
• Lead	45

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iii

SWBT 002262

Dictionary of Hazards (cont.)

- Noise - 49
- Polychlorinated Biphenyls (PCBs) 51
- Radiation 56
- Solvents 60
- Other Hazardous Materials 64

Glossary 66

Preface

These *Guidelines* are not a substitute for the professional training required to evaluate and control health hazards. They are intended only to help you *recognize* the potential sources of health hazards. The expertise and responsibility for evaluation and control reside with your company's Safety and Medical departments. You should always consult them when questionable cases arise.

For easy reference in an emergency, fill in telephone numbers below for the Safety and Medical contacts in your company.

Safety _____

Medical _____

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iv

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Introduction

Telephone company people work at a wide variety of locations and under a wide variety of circumstances. There are the typical telephone company sites — switching centers, outside plant locations, general office areas, garages, warehouses. And then there is the almost infinite number of work situations found at customer locations. Since the places that telephone company people work vary so greatly, the kinds of health hazards they encounter can be equally varied. In the case of customer locations, health hazards can be unpredictable, as well. Wherever telephone company people work, though, they should always be assured of a safe and healthy workplace. And it is your responsibility, as a telephone company supervisor, to see to it that your employees are protected from the health hazards around them wherever they work.

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1

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Responsibilities of the Telephone Company Supervisor

Actually, you have several important obligations in regard to work-related health hazards. In addition to the moral obligation you have to your employees and their families, you also have a legal obligation to promote safe and healthy work conditions. This obligation is prescribed by the Occupational Safety and Health Act (OSHA). And, you have an obligation to your company to prevent work-related illnesses and accidents, which can lower your company's productivity while they raise the cost of health care.

To fulfill these obligations, you must be aware of the health hazards that may exist at a work location, whether it is on telephone company premises or not. As a supervisor, you are the first line of defense for your employees.



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You should carefully examine the locations at which your employees work and alert the Safety and Medical departments to potential hazards. You are also responsible for informing your employees of the health hazards they may have to deal with and the precautions they should take.

This is a serious responsibility. Careless exposure to health hazards can result in temporary or permanent disability for your employees or, in some cases, death.

A Note on Legal Requirements – Although you're not responsible for knowing all the detailed legal restrictions that apply to working with health hazards, you should be aware that various federal and state agencies regulate hazardous materials and processes. For example, the Occupational Safety and Health Administration (OSHA) has primary responsibility for protecting the employee in the workplace. The main concerns of the Environmental Protection Agency (EPA) are the environment (clean air, clean water, etc.) and protecting the general public. The Department of Transportation regulates transport of hazardous materials on the nation's highways.

In addition, there is a federal occupational safety and health standard, commonly known as "right-to-know," which requires that certain industries assess the hazards of chemicals they produce or use and provide their employees with information concerning those hazards. Many states have passed their own versions of "right-to-know" laws.

Contents of These Guidelines

These guidelines will help you be more aware of the health hazards your employees are likely to be exposed to at telephone company locations and also help you recognize potential hazards at customer locations.

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In addition to this *Introduction*, the guidelines contain the following sections:

- Types of Hazards
- Health Hazards at Telephone Company Locations
- Health Hazards at Customer Locations
- Dictionary of Hazards
- Glossary.

Types of Hazards describes the basic types of work-related hazards: chemical, physical, biological, and ergonomic. This section gives you background information on hazards in general so that you can more readily identify potential problems.

Health Hazards at Telephone Company Locations contains a table that you can use to associate specific health hazards with typical telephone company locations and activities. The purpose of this table is to alert you to the hazards that your employees are likely to encounter in the typical telephone company operations.

Health Hazards at Customer Locations gives you the telltale signs of health hazards at customer locations. Since you can't be familiar with the environment at each and every customer location, you'll have to be especially attuned to the signs of potential problems. This section also defines the action you must take in the event you discover a health hazard at a customer's location.

The *Dictionary of Hazards* describes in more detail those health hazards that your employees

are most likely to encounter on the job. The *Dictionary* lists the hazards alphabetically so you can easily locate a specific hazard. Also, the table in *Health Hazards at Telephone Company Locations* cross-references page numbers in the *Dictionary* with the hazards listed for each activity.

The *Glossary* defines terms related to the regulation of health hazards at work locations. For example, it includes definitions of various government agencies responsible for protecting the health and safety of workers.

How to Use These Guidelines

To make the best use of these guidelines, first read the sections on *Types of Hazards*, *Health Hazards at Telephone Company Locations*, and *Health Hazards at Customer Locations*. The information in these sections will give you the foundation you need to more easily recognize the signs of health hazards. You can use the *Dictionary of Hazards* as a reference. As daily work situations require, you can consult the individual descriptions to learn about specific hazards in more detail.

It should be emphasized that these guidelines are not a substitute for the professional training needed to evaluate and control health hazards, which are the domains of the Safety and Medical departments in your company. You should always consult them when questionable cases arise. They can advise you on how to proceed when you or your employees must deal with situations that pose health hazards.

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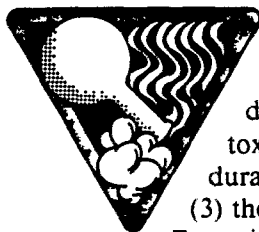
Types of Hazards

Hazards can be grouped into four general types: chemical, physical, biological, and ergonomic hazards.

NOTE - The graphical symbols you see associated with each hazard type in this section are used again in the *Dictionary of Hazards* section. For example, on the page that describes asbestos, you'll see the symbol for chemical hazard; the description of noise is marked by the symbol for physical hazard. This technique is intended to cross-reference information in these sections.

Chemical Hazards

Since there are virtually thousands of chemicals, they represent the largest type of hazards you will find in the workplace.



The *degree* of hazard that each chemical presents depends on (1) its level of toxicity, (2) the amount and duration of exposure to it, and (3) the individual's susceptibility.

Excessive amounts of chemicals can be dangerous. And even very small amounts can be considered excessive if the chemicals are especially toxic.

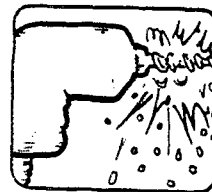
Although you will have to depend on specially trained people to identify chemicals and guide you on how to protect yourself and your employees, it is still important for you to be aware of them and the conditions under which potential hazards may exist.

When you visit a work site that produces chemicals or uses them, be observant and ask

questions. Check any obvious labels on drums and containers and get more specific information from the supervisor of the operation. Also, be aware of signs of the various forms that chemicals can take, which are described below.

Forms of Chemicals

Chemicals can take a number of different forms: dusts, fumes, smoke, mists, gases, vapors, and liquids.



- **Dusts** - Solid particles generated by crushing, grinding, impacting, exploding, or breaking apart by heat. Particles that can't be seen in the air can get deep into the lungs and do damage. A visible layer of dust indicates that ventilation exhaust systems aren't working properly.

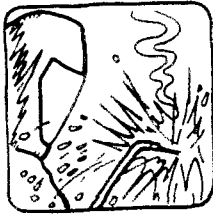
Dust can enter the air in a number of ways. For example, dumping bags of dry material and the mechanical action of drilling, grinding, blasting, or shaking all put dust in the air.



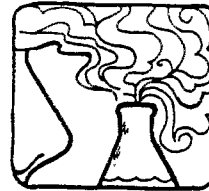
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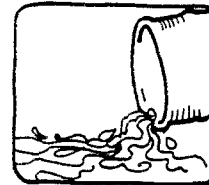
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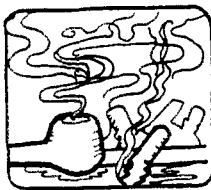
- **Fumes** – Solid particles usually condensed from heated metal operations like welding, soldering, melting, or smelting. In most cases, the hot material reacts with the oxygen in the air to form an *oxide*. Lead oxide fumes, for example, can be formed during smelting and iron oxide fumes from arc welding. The particle size in fumes is small enough to be deposited deep in the lungs, causing possible damage.



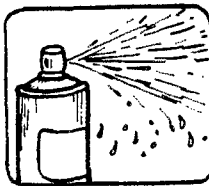
- **Vapors** – Gaseous form of substances that are normally in the solid or liquid state. For example, solvent vapors evaporate from some solvents, such as acetone, at room temperature.



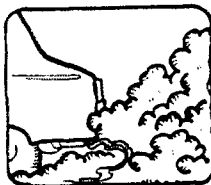
- **Liquids** – Formless fluids that flow according to the laws of gravity.



- **Smoke** – A mixture of small solid particles of carbon or soot and droplets (such as tar droplets in tobacco smoke). Smoke particles are generally even smaller than fume particles and can also go deep into the lungs.



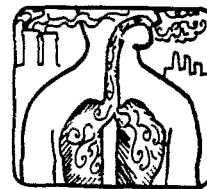
- **Mists** – Liquid droplets suspended in the air. A mist is formed by breaking up a liquid, such as by splashing, foaming, or atomizing. Examples would be the oil mist produced during cutting and grinding, acid mists from electroplating or acid pickling, or paint spray mist from paint spraying.



- **Gases** – Formless fluids (as air) that occupy the space in which they are enclosed. Oxygen is a gas. Carbon monoxide, found in the exhaust of internal combustion engines, is also a gas.

How Chemicals Enter the Body

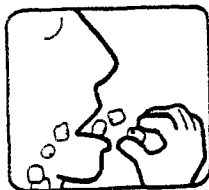
There are three "routes of entry" into the body for chemicals: inhalation, skin absorption, and ingestion. Some chemicals can get in by all three routes, others only by one.



- **Inhalation** – Most chemicals enter the body by being breathed in through the lungs. Chemicals like chlorine or ammonia can irritate the nose, throat, and lungs. Other chemicals are absorbed through the lungs into the blood and, in this way, do damage to other organs in the body. And chemicals in dust form, such as silica and asbestos, tend to lodge in the lungs and remain for a long time. These dusts can cause immediate reactions or reactions that occur many years after the initial exposure.



- **Skin Absorption** – Chemicals that are absorbed through the skin are usually liquids. They can cause either a localized reaction, like a rash or some other form of dermatitis, or they can be absorbed through the skin into the body and affect internal organs. Some examples of chemicals that can be hazardous if absorbed through the skin are methanol, toluene, zylol, aniline, arsenic, nitroglycerine, and some pesticides like parathion.



- **Ingestion** – The third route of entry is ingestion, or swallowing. Although most people do not deliberately swallow dangerous chemicals, eating lunch in a contaminated work area or neglecting to wash contaminated hands can result in swallowing chemicals with food. These chemicals are then absorbed through the stomach into the blood and may affect other organs in the body.

How Chemicals Affect the Body

The body's reaction to chemicals may be either *acute* or *chronic*. (The other types of hazards — physical, biological, ergonomic — can also produce both acute and chronic effects.)

An acute reaction occurs immediately upon

exposure to the hazard — for example, a skin rash from getting solvent on unprotected skin. A chronic reaction is damage to the body that occurs over a period of time — for example, lung diseases that take such a long time to develop that the employee may not know he or she is sick for many years.

Chemicals are classified by the effects they have on the body. The classifications are as follow:

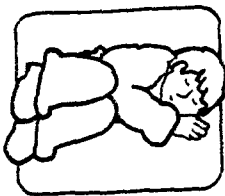


- **Irritants** – Chemicals whose main effect on the body is one of irritation. Irritant gases irritate the nose, airways, eyes, mouth, or lungs. They can produce acute as well as chronic irritation. Irritation can cause overproduction of mucus, chronic cough, and consequently make a person more susceptible to infection. Examples of irritant gases include phosgene, chlorine, ozone, nitrogen dioxide, and ammonia.

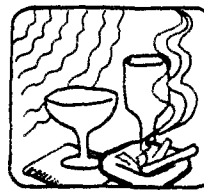


- **Asphyxiants** – Chemicals that replace the oxygen in the air, causing death by suffocation. Examples of asphyxiant gases are propane, butane, argon, methane, neon, helium, carbon dioxide, hydrogen cyanide, carbon monoxide, hydrogen sulfide, and acetylene. These gases can also be poisonous.

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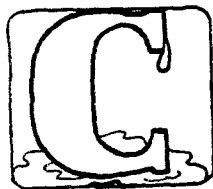
- **Anesthetics or Narcotics** – Chemicals that make you drowsy, sleepy, or produce a mild drunkenness. Large amounts of these chemicals can cause a person to go into a stupor or a coma, or cause convulsions or death. Examples include the chlorinated hydrocarbons, which are the solvents used so widely in industry such as methylene chloride, trichloroethylene, and perchloroethylene. Alcohols such as methanol, ethanol, and butanol are also narcotics.



- **Teratogens** – Chemicals that cause abnormal changes in the fetus during pregnancy, resulting in birth defects. Examples are nicotine, alcohols, and radiation.



- **Systemic Poisons** – Chemicals that interfere with normal body functions within a single organ or system or in multiple organs or systems. Lead is an example.



- **Carcinogens** – Chemicals that cause cancer. Some well-known carcinogens are asbestos, benzene, nitrosamines, coke oven emissions, vinyl chloride, benzidine dyes, chromium, arsenic, and coal tar pitch volatiles.



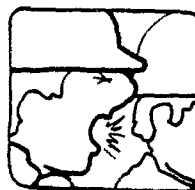
- **Mutagens** – Chemicals that cause changes in the sperm or egg cells. The changes could ultimately cause cancer in the exposed person or birth defects in his or her offspring. Examples are ozone and radiation.

Physical Hazards



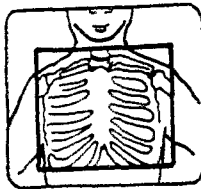
Physical hazards include noise, radiation, and temperature extremes. These hazards can have immediate or cumulative effect on the health of employees.

Noise



Noise is unwanted sound. It is a widespread problem throughout industry that can affect the body in a number of ways. Hearing loss can result if employees are continually exposed to it above certain levels. Continually high levels of noise on the job can also cause sleeplessness, nervousness, fatigue, faster heart rate, and higher blood pressure. It can cause nausea or pain in the ears. And it can make it hard to hear instructions or warnings on the job.

Radiation



There are two types of radiation: *ionizing radiation* and *nonionizing radiation*. Common forms of ionizing radiation include X-rays, gamma rays, neutrons, and alpha and beta particles. Types of nonionizing radiation include infrared, ultraviolet, microwave, radiofrequency, and visible light. Nonionizing radiation is found more commonly in industry than ionizing radiation. The effects of exposure to nonionizing radiation are not nearly as severe as those associated with ionizing radiation because nonionizing radiation is not capable of producing cellular changes, or ionization, in matter such as human tissue.

Temperature Extremes

Extremes in temperature are common in industry, particularly heat extremes. Employees who work in excessive heat become acclimatized after a while. But even acclimatized employees can be affected seriously by heat.



Extreme Heat – Heatstroke, or sunstroke, is the most serious heat condition. It happens when a person's exertion level is too high, the temperature is too hot, or a combination of both occurs. The body can no longer cool itself and stops sweating. Symptoms include: hot, dry, and flushed skin; high fever; mental confusion; fainting; convulsions and coma.

Heat cramps occur when a person has been working hard in extreme heat, has been sweating profusely, and has lost too much salt.

Heat exhaustion can occur after someone has been working hard in the heat. The person is pale

dizzy, has cool, moist skin and sweats profusely. The person might also feel giddy, have a headache, or faint.



Extreme Cold – Extreme cold can cause problems, too. The body can take very little exposure to cold without the protection of appropriate clothing. *Hypothermia* and *frostbite* are acute reactions to the cold.

Hypothermia occurs when the body loses heat faster than it can produce it. Involuntary shivers are the first real warning sign of hypothermia. If heat loss continues, the person becomes disoriented. Coma and death can follow very quickly.

Frostbite occurs when the hands and feet actually freeze with crystals of ice forming in the tissues and damaging them. Chronic symptoms such as pain, numbness, or abnormal color may continue for years. In extreme cases, gangrene may set in and amputation may be necessary.

Biological Hazards



Biological hazards can occur from exposure to certain plants and animals, molds, fungi, bacteria, grain dusts, and insects. People who work outdoors, or with plants or animals or their products are most likely to be exposed to biological hazards. Hospital workers and laboratory employees may also be exposed. Biological hazards can produce both acute and chronic infections, allergic reactions, dermatitis, or parasitic infections.

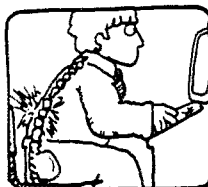
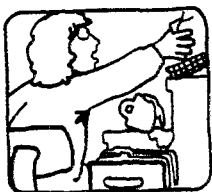
Ergonomic Hazards



Ergonomics is concerned with designing the job to fit the worker and fitting the worker to the job. This involves all aspects of a job, including possible stresses on muscles, nerves, eyes, bones, and joints.

Ergonomic hazards usually cause chronic reactions that develop gradually with continued exposure. For example, eye strain can result from working continually at a visual display terminal (VDT) whose screen brightness is not adjusted properly. Also, various muscles can become sore when they are used in awkward positions for extended periods of time.

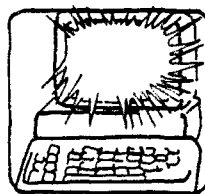
The following list includes ways to minimize or eliminate ergonomic stresses:



- Properly designed hand tools
- Adjustable chairs and workbenches
- Adequate lighting, without glare
- Moderated heat and humidity
- Reasonable noise levels
- Training in proper lifting techniques
- Sensible design of physical tasks so as to avoid muscle fatigue
- Design and positioning of visual displays and controls to prevent eye strain.

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Visual Display Terminals



Visual display terminals (VDTs) are commonplace in almost every office location today. This indispensable tool of the Information Age poses its own set of unique challenges to job designers.

Many users of VDTs spend extended periods of time doing their jobs at a terminal. As with any workers who must repeat the same motions over a long period of time, VDT users can be subject to certain kinds of fatigue.

Visual discomfort is a common complaint of VDT users. However, there is no evidence that VDTs, in and of themselves, present a real hazard to vision. In fact, VDT users shouldn't experience any visual discomfort if they work under suitable conditions (i.e., wear necessary corrective glasses, use proper lighting, position terminals in relation to light so as to avoid glare, take rest breaks). No special glasses are needed to work at a VDT. However, people who wear bifocals may need different glasses since the viewing distance for working on a VDT can be different from the normal reading distance for bifocals.

Musculo-skeletal problems can occur as a result of the posture required to view the screen. These problems can be remedied by adjusting the position of the terminal screen and designing the workstation to allow for a more comfortable posture.

Some VDT users also have expressed concern about the amount of radiation that terminals emit. A number of important organizations have conducted radiation studies on visual display terminals, including the following:

- National Institute for Occupational Safety and Health

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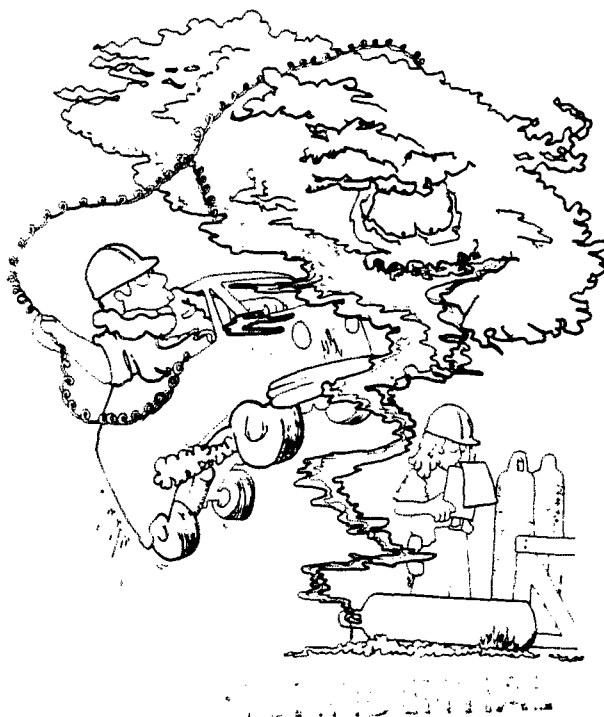
- AT&T Bell Laboratories
- American Medical Association
- Canada's Department of National Health and Welfare, Health Protection Branch.

In all cases, test results have shown that people who work with VDTs are not exposed to harmful radiation levels. The amount of radiation from VDTs is very small and comparable to the radiation we receive from TV sets and household appliances. It is well below the most stringent standards set by any government. In addition, all current scientific research in this area shows no connection between VDTs and miscarriages or birth defects.

Health Hazards at Telephone Company Locations

Health hazards exist virtually everywhere and telephone company workplaces are no exception. Traditionally, the Bell Operating Companies have been actively committed to employee safety and health. And, as a consequence, telephone company workplaces are generally less hazardous than those of many other industries.

Because the locations (and the activities performed there) are familiar, it is usually easier to predict the health hazards that may exist at the locations. In fact, it is possible to associate specific hazards with certain locations and activities. The table on pages 21 and 22 can help you be more aware of the health hazards associated



activities that your employees typically perform at telephone company locations.

The table lists typical telephone company locations and the work activities commonly performed at those locations. The table then lists the health hazards that are associated with each work activity.

To use the table, identify in the first column the location in which your employee works. Then, for that location, select the activity or activities that your employee will be performing. The third column lists the hazards that may accompany each activity. Then, to learn more about a particular hazard, turn to the page listed in the last column.

For example, if one of your employees will be handling materials in a warehouse, the table tells you that possible hazards include *solvents* and *compressed gases*. You then could turn to the pages that describe those hazards in detail to learn more about them and what must be done to protect your employee.

The table is not meant to be an exhaustive list of all the hazards that could exist in each situation. Therefore, you should be on the lookout for all potential hazards, even if they don't appear on the list.

In any case, if you encounter a situation you think may be hazardous for your employees, consult your company's Safety or Medical departments for guidance on how to proceed.

If your employee works in this location:	And performs this activity:	Expect these hazards:	See page:
General office environment	Mailroom services, operator services, coin counting	Noise	49
	Reproduction services	Noise, solvents	49 60
Warehousing site	Material storage and handling	Solvents, compressed gases	60 30
	Material recycling	Lead, PCBs, noise, other hazardous materials	45 51 49 64
Switching center	Equipment maintenance	Solvents	60
	Auxiliary power room activities	Noise	49
	Battery handling and testing	Other hazardous materials	64
	Maintenance of lightwave transmission systems	Lasers	40
	Handling transformers and capacitors	PCBs	51
	Equipment removal	Other hazardous materials	64

(Table continued on following page)

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If your employee works in this location:	And performs this activity:	Expect these hazards:	See page:
Outside plant	Cable splicing and repair	Solvents, lead, compressed gases	60 45 30
	Cable removal and rearrangement	Lead	45
	Operation of heavy equipment	Noise	49
	Maintenance of lightwave transmission systems	Lasers	40
Garage	Motor vehicle maintenance	Asbestos, solvents	26 60
	Material storage	Compressed gases, solvents	30 60
All indoor locations	Building maintenance (e.g., work with heating, ventilation, and air conditioning systems)	Noise, asbestos	49 26
	Janitorial services	Solvents	60

Health Hazards at Customer Locations

The telephone company employee can be exposed to health hazards on company premises as well as at customer locations. However, those hazards that employees will encounter on company premises are usually more predictable since the work environment is more familiar. Consequently, telephone company employees are better prepared to handle safely potential hazards that exist on company premises.

Hazards at customer locations, however, pose more of a challenge. They aren't always predictable since employees can't be familiar with all the possible work environments. You, as a supervisor, therefore, must think about and plan ahead for hazards at customer locations. Also, since the hazards exist on a customer's premises, protecting your employees may require negotiations with the customer.



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What to Look For

Certain industrial environments entail obvious health hazards and require special protective equipment and/or work procedures. Typical examples include:

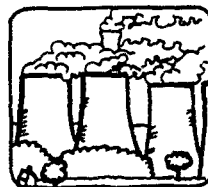
- Nuclear generating stations
- Chemical manufacturing facilities
- Laboratories
- Refineries.

In addition, special hazards exist in places where paint spraying, welding, plating, abrasive blasting, and machining are done.

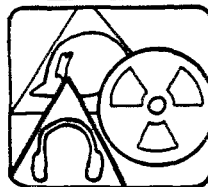
Many work situations, however, harbor health hazards that are more subtle and may require some "detective" work to identify. The following list includes environmental conditions that should "clue" you that a potential health hazard may be present:



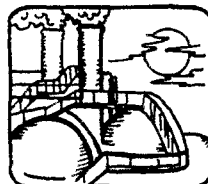
- Noise levels that require voices to be raised to be heard



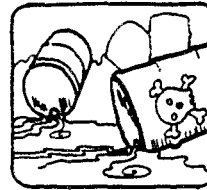
- Strong odor noticed upon entering an area
- Eye irritation upon entering an area
- Visible fumes or dust
- Ineffective exhaust systems
- Stiffness or poor ventilation



- Dust or chemicals on workers' clothing
- General clutter and poor housekeeping



- Notoriously highly toxic chemicals in use
- Worker comments of discomfort



- Warnings on posted labels, signs, or placards
- Mishandling of waste materials
- Special protective equipment that is readily available.

Corporate Policies

In any situation that poses a potential health hazard, telephone company employees must perform their jobs in a manner that protects them from hazards and at the same time does not constitute a hazard to noncompany people or property.

Local telephone company policies may vary in dealing with health hazards at a customer's location. However, if you learn of a potential health hazard at a customer location, your company policy will likely dictate that you comply with the following as minimum requirements:

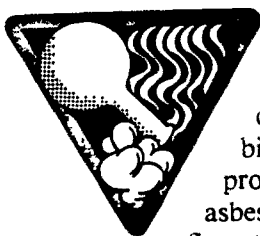
1. Have your company's Safety and Medical departments evaluate whether the hazard might jeopardize the safety and health of a telephone company employee working at the customer location.
2. With the help of your company's Safety and Medical departments, establish procedures to protect the employee while working at the customer location.
3. Ensure that telephone company work does not begin until methods of operation have been established that are acceptable to both the customer and your company.
4. Attempt to recover costs directly from the customer of any training, equipment, or work procedures that are required as a result of the hazardous environment.

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Dictionary of Hazards

This section contains detailed descriptions of those health hazards your employees are most likely to encounter on the job. Each description lists the possible sources of the hazard, the health implications of exposure to the hazard, legal requirements, corrective action that should be taken to protect employees, and references you can consult for assistance.

Asbestos



Almost a million tons of asbestos are used in the United States each year. The construction industry is the biggest user of asbestos products, most of which contain asbestos in a *bonded* form (e.g., floor tiles, asbestos cements, roofing shingles). A small percentage of products, however, use asbestos in powder form, such as insulation materials, acoustical products, brake linings, clutch facings. It is these materials that generate the airborne asbestos fibers that are breathed in and lodge in a person's lungs, causing diseases such as asbestosis and lung cancer.

Possible Sources

Studies have shown that Bell Operating Company workplaces generally do not expose employees to hazardous concentrations of asbestos fibers. In fact, less than one percent of company-owned and leased buildings were suspected of containing asbestos substances. And where asbestos products do exist, exposure levels are well below those permitted by the current OSHA standard.

The potential sources that the studies identified were results either of earlier use of asbestos (e.g., fireproofing; insulation for buildings, steam pipes, boilers, air plenums) or of existing uses of asbestos for which there were no suitable substitutes (e.g., automobile brake linings, clutches).

The following list includes the operations or locations that are most likely to involve potential asbestos exposure:

- Building maintenance and repair operations, including renovation and demolition
- Tasks that require working above hung or drop ceilings, which may enclose old ceilings containing sprayed-on asbestos
- Work with boilers and steampipes
- Motor vehicle work operations on brake and clutch linings
- Industrial manufacturing of asbestos products.

Health Impact

Asbestos fibers can enter the body by inhalation or ingestion. The fibers remain in the body indefinitely and may move from the lungs to almost any other part of the body, including the brain and sex organs.

Asbestosis is a chronic disease of the lungs that makes breathing difficult and can cause death.

Cancer of the lungs, esophagus, stomach, intestines, and rectum can be induced by asbestos fibers.

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In addition, asbestos can cause *mesothelioma*, a cancer of the membranes that line the chest and abdomen. It is always fatal.

Legal Requirements

Occupational Safety and Health Administration (OSHA) Asbestos Standard Section 29, Code of Federal Regulations, imposes strict regulations designed to protect employees from exposure to asbestos in their workplaces.

- Exposure is limited to two asbestos fibers (longer than five micrometers) per cubic centimeter of air, averaged over an eight-hour period.*
- A ceiling limit has also been set, which states an employee may not be exposed to more than ten fibers per cubic centimeter of air for any period of time.*
- **Action Level** – A minimum of 0.1 asbestos fibers longer than 5 micrometers per cubic centimeter of air. Medical examination is required for any 7- to 8-hour exposure to asbestos fibers above this level.*

The major provisions of the OSHA standards define the following responsibilities for management:

- Identify those portions of the workplace that contain asbestos
- Provide environmental monitoring and controls to ensure employees are not exposed above the permissible limits
- Provide a medical surveillance program

* These are the exposure limits as of this printing. Future OSHA actions are likely to enforce even stricter limits.

for those employees exposed above the permissible limits

- Provide personal protective equipment, where it is required
- Provide for disposal of asbestos materials according to EPA requirements.

Corrective Action

- Strictly enforce work practices that protect employees from exposure to asbestos above the permissible limits.
- Encourage affected employees to participate in medical surveillance programs.

References

- OSHA:29 CFR 1910.1001
- OSHA Program Directive #300-16
- AT&T Letter, GL 77-07-024, Motor Vehicle Maintenance – Brakes and Clutches
- AT&T Letter, GL 78-08-054, Motor Vehicle Maintenance – Protection Against Exposure to Asbestos Fibers
- AT&T Letter, SR 79-05-398, Occupational Safety and Health – Exposure to Airborne Asbestos Fibers – Request for Survey
- AT&T Letter, RL 79-07-254, Asbestos Hazards in Leased Buildings
- AT&T Letter, SR 80-06-010, Occupational Safety and Health – Sprayed-on Asbestos in Company-owned and Leased Buildings
- AT&T Letter, PL 80-07-216, Occupational Safety and Health