For the Janitor and Custodian

A Manual

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Preamble

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Table of Contents

List of Figures

Definition of Terms

Cleaning--Cleaning is removing obvious dirt, debris, and other materials from a surface.

Etiquette—Etiquette refers to rules of acceptable behavior. In other words, etiquette by definition refers to the “rules and conventions governing correct or polite behavior in society in general or in a specific social or professional group or situation.”

Green Cleaning--Green Cleaning is cleaning to protect health without harming the environment.

Falls--

Lockout/Tagout--"Lockout/Tagout (LOTO)" refers to specific practices and procedures to safeguard employees from the unexpected energization or startup of machinery and equipment, or the release of hazardous energy during service or maintenance activities. A lockout/tagout program requires the identification and implementation of practices and procedures necessary to shut down and lockout/tagout machines and equipment. The program requires that certain employees receive training in the lockout tagout procedures and that periodic inspections be conducted to maintain and enhance it.

Safety—Safety as it applies to this manual is relative freedom from danger, risk, or threat of harm, injury, or loss to personnel and/or property, whether caused deliberately or by accident.

Sanitizing--Sanitizing or disinfecting is the actual killing of the microorganisms through heat or chemicals.

Security—Security as it applies to this manual is prevention of and protection against assault, damage, fire, fraud, invasion of privacy, theft, unlawful entry, and other such occurrences caused by deliberate action.

Slips--A slip occurs when there is too little traction or friction between the shoe and walking surface. You slip when you lose your footing or grip on a slippery surface.

Trips and Falls—A trip is a fall or stumble caused by catching your foot on something. Tripping and falling accidents occur when your foot comes in contact with an object, or drops unexpectedly throwing you off-balance. A fall is when someone or something moves downward to a lower position by the force of gravity.

Universal Precautions--Universal precautions refers to the practice, in medicine, of avoiding contact with patients' bodily fluids, by means of the wearing of nonporous articles such as medical gloves, goggles, and face shields.

Chapter 1: Introduction

WHAT IS THE CUSTODIAL OR JANITORIAL INDUSTRY?

A **janitor** or **custodian,** often called caretaker, is a person who takes care of a building, such as a school, office building, hospital, or apartment. Janitors are responsible primarily for cleaning, and often though not always some maintenance and security duties. Similar to the custodian or janitor is the building superintendent. Generally a superintendent has more maintenance and managerial duties.

Janitors and custodians may be required to receive training and licensing in various fields, such as Hazmat, CPR, or Boiler Operations, depending on the employer and the specific nature of the job.

A custodian may be considered to be different from a janitor. In some settings janitors are called housekeepers or housekeeping staff and in other settings they are referred to as maintenance or maintenance staff. Institutions have come up with a number of politically correct alternative job titles, including:

Custodial Services Supervisor

Custodial technician

Sanitation supervisor

Domestic engineer

Guest Service Associate

Environmental Services Associate

Caretaker

Industrial Floor Maintenance Sanitation Engineer

The Crew

General cleaner

Physical Plant and Planning

Janitorial Engineer

PURPOSE OF THIS MANUAL

The purpose of this manual is to acquaint you with cleaning techniques and safety in the Janitorial and Custodial industry. Some typical cleaning jobs may include the following tasks.

Cleaning bathrooms

Sinks

Toilets

Urinals

Cleaning floors

Cleaning carpeting

Cleaning stainless steel and other special surfaces

Clearing tables in lunch room

Emptying trash and recycling bin

Stripping and waxing floors

No matter what job you have as a Janitor or Custodian there are responsibilities associated with your job. One of these responsibilities is safety, safety for you and the safety of your co-workers and guests or patients in your facilities. Over the many years, safety has evolved into a very high profile responsibility. Depending on where you live and work, safety laws and regulations are becoming more stringent and demanding.

Ideally safety is freedom from danger. Of course, every safety topic for the Janitor or Custodian cannot be covered in this one manual. However we will be discussing many safety topics including protection from the risk of harm or injury, safety devices, and responsibilities.

Topics including general information and new employee orientation will be covered. There are sections on accident prevention, bloodborne pathogens, electrical safety, lockout and tagout, safe lifting, and of course cleaning techniques.

Chapter 2: General Safety Rules for Everyone

The Janitors and Custodians may consist of many groups of employees. As indicated by the different job titles mentioned, jobs in this industry are many and diversified. There are general safety rules that apply to everyone. Some of these rules are discussed here.

Horseplay is always prohibited…so don't even think about it!

PERSONAL

Personal Hygiene

Hygiene refers to the set of practices associated with the preservation of health and healthy living. Hygiene is a concept related to medicine, as well as to personal and professional care practices related to most aspects of living, although it is most often associated with cleanliness and preventative measures. In medicine, hygiene practices are employed to reduce the incidence and spreading of disease.

Cleanliness requires a daily bath and a change to clean underclothing. Use a deodorant to prevent body odor. If you are a guy, shave daily. Give teeth and hair proper care, everyday. Keep fingernails short and clean. If you are a gal, use cosmetics in moderation. Refrain from the use of heavy scents.

In order to control cross-contamination, hands should be washed after performing cleaning duties. Before continuing on to the next area, wash your hands. Also, wash before meals and after going to the restroom.

Massage hand cleaner around the fingers, knuckles, and hands. Scrub fingernails with a brush. Keep your hands lower than your elbows when washing. Wash vigorously for two minutes. The tap water should be running during the entire process. Use medicated hand moisturizer when skin becomes dry or chapped.

To protect yourself you should use the proper Personal Protective Equipment or the acronym PPE for each cleaning task you perform.

Report to Work Rested

A first step to safety is to report to work rested, alert, and ready to perform your job. Fatigue may affect your ability to work safely. It may also impair your ability to treat your colleagues with the hospitality consistent with your training.

Wear Appropriate Clothing

Next, you should always wear appropriate clothing for your job. Follow your company's dress code. This includes wearing proper footwear for the job.

If you will be working equipment and machinery, don't wear rings and jewelry that can get caught in the moving parts.

Keep long hair tied back or under a hat. This will avoid having your hair getting caught in machines. Clothing should fit properly allowing room for movement without being so loose it could get caught in machinery moving parts.

Report Accidents

Most companies provide necessary first aid and medical treatment for injuries. If you are injured on the job, report the accident to your supervisor immediately, so that proper medical treatment can be provided.

First aid or professional medical treatment will be given as necessary; however, you must report all accidents and injuries when they occur, even if your injury does not require medical treatment.

PERSONAL PROTECTIVE EQUIPMENT

What is personal protective equipment or the acronym PPE and how does it affect you? Personal protective equipment is equipment that has been designed to protect you from potential injuries. When required for certain job assignments, personal protective equipment will be issued to you. It’s your responsibility to wear it.

Personal protective equipment could include safety glasses when your eyes are exposed to potential injury, gloves to protect your hands, hard hats for head protection, hearing

protection for high noise areas, face shields to protect your face, respirators, specialized shoes…all these and more are considered personal protective equipment.

Wearing personal protective equipment is important to protect you from injury or illness while performing your job. Some of the personal protective equipment you need may include:

Eye Protection

You should choose the proper type of eye protection for the hazard. For example, safety glasses are not appropriate when working with chemicals that may splash in your face or eyes. Goggles and a face shield would be the best choice when working with chemicals.

Skin Protection

You should wear the right protective gloves for the hazard or chemicals. Some products can melt or go through the glove. Also protect your skin by wearing a protective apron or smock. If your clothing is soaked with chemicals, change them immediately to prevent prolonged skin contact.

Hearing Protection

Hearing protection may also be required if you work in a noisy area or with noisy equipment such as vacuums and other tools.

Respiratory Protection

Respiratory protection may be required depending on the job and chemical products being used. You must be trained before using a respirator. Discuss the need for this protection with your supervisor.

ELECTRICAL SAFETY

Electrical safety is another important safety consideration. Naturally, everyone has been exposed to electricity and how dangerous it can be if it's misused.

Generally, in the workplace you should always inspect electrical cables, cords, and plugs for frays, cracks, cuts, or defects before you use them. If the electrical tools or equipment you use do not say "*Double Insulated"* on the manufacturer's tag, then they must be grounded with a 3-prong plug and a grounded cable. This provides some degree of protection from

electrical shock in case of a malfunction or short in the tool. Figure 1 shows a three prong plug and receptacle.

Figure 1 Three prong electrical plug and receptacle.

What this means is there must be a third prong on the plug. The third wire goes to ground. In case of a short or malfunction, the electricity will flow though this third wire to ground and not through the person holding the malfunctioning tool or equipment. Of course, if the ground wire is not properly connected to the system or the third prong is missing from the plug, then there is no electrical shock prevention.

Always check and test your equipment for safety before you use it.

Never allow an outlet to be overloaded.

Figure 2 Example of an overloaded electrical outlet

Don’t overload circuits by plugging in more than the allowed number of electrical power outlets. The use of octopus plugs, as shown here, makes a dangerous situation that could cause a fire.

Electrical hazards can be caused by faulty electrical tools and equipment, appliances and wiring, electrical outlets, switch panels and electric transformers.

Remember to unplug any electrical appliance before you clean it. Working around water and electricity is dangerous.

Make sure that any electrical or other types of cords do not create tripping hazards. Of course, never clean electrical equipment with flammable or toxic solvents and never use flammables near electrical tools. The sparks from the inside of a machine or tool can cause an explosion.

CONTROL OF HAZARDOUS ENERGY/ LOCKOUT TAGOUT

What is Lockout/Tagout or LOTO?

"Lockout/Tagout or LOTO" refers to specific practices and procedures to safeguard employees from the unexpected energization or startup of machinery and equipment, or the release of hazardous energy during service or maintenance activities. A lockout/tagout program requires the identification and implementation of practices and procedures necessary to shut down and lockout/tagout machines and equipment. The program requires that certain employees receive training in the lockout tagout procedures and that periodic inspections be conducted to maintain and enhance it.

Lockout is the practice of using keyed or combination security devices or “locks” to prevent the unwanted activation of mechanical or electrical equipment. Tagout is the practice of using tags in conjunction with locks to increase the visibility and awareness that equipment is not to be energized or activated until such devices are removed. A tagout device is usually a non-reusable type, attachable by hand, self-locking, and non-releasable with a minimum unlocking strength of no less than 50 pounds.

Authorized and Affected Employees for LOTO

Now, before we go much further, let's discuss two categories of employees requiring knowledge and training in lockout/tagout procedures. The first category is “Authorized

Employees". These are maintenance personnel who actually use lockout and tagout procedures while they are repairing or maintaining equipment. The second category is "Affected Employees." This describes any employee who uses or works around equipment and machinery that may be locked out or tagged out. You need to be able to recognize tags used by your employer for LOTO. It's recommended that virtually all employees be in the "Affected Employee" category.

What are Hazardous Energy Sources?

Let's begin with some basics, as you'll need these to understand the program. What are hazardous energy sources?

Electricity is used to provide power to a wide variety of machines and equipment. Locking out of electricity prevents electrical equipment from accidental release of electricity during maintenance or repair. The main problem here is locking out electricity does not guarantee that other energy sources won't be released. There may be a steam valve that requires locking out as well or hydraulic, vacuum, or pneumatic pressure, mechanical motion, springs, thermal energy such as steam or heat, or extremely low temperature liquids or gases.

Releases of chemicals or chemical reactions are other energy sources that must be controlled, dissipated, or shut off. Locking out of electricity may not provide adequate protection during maintenance and repair. Each machine or piece of equipment must be inspected by trained employees to determine adequate lockout procedures for all potential hazardous energy sources. Your organization must have these energy sources identified and listed in the written lockout/tagout policy and procedures.

The first step in all lockout/tagout procedures is to identify the potential energy sources that will require control by lockout or tagout. In general, there are 6 types of energy sources that may be encountered. As we discussed earlier, electrical energy is the first type of energy source for consideration. In addition there is mechanical energy, hydraulic energy, pneumatic energy, thermal energy and chemical energy.

Mechanical energy can present a danger from moving parts such as rotating fans, shafts, gears, grinding wheels, moving packer blades, panels, conveyors, and more. Hydraulic

systems that work using fluid under pressure are candidates for LOTO procedures. An example of pneumatic energy is air pressure stored on Air Brake Systems. Pneumatic pressure may also be present in air accessories and control systems. Thermal energy is heat, heat from fluids such as coolant and lubricating oils and from hot machinery such as engines, exhaust systems, electric motors, and gear cases are sources of potential thermal energy. Finally, potential energy can be released by chemicals when they react with one another, or react with air and/or water.

Now, that we have identified potential energy sources; we have to determine which switch, valve or other isolating device will be operated to isolate these energy sources. Whenever working on equipment in a manner which any potential energy source could be encountered, the appropriate procedures must be followed to isolate or disable the applicable hazards.

Employee Training for LOTO

Employees or any other authorized and affected employees who may be reasonably expected to use the equipment or procedures for LOTO must receive annual LOTO training from the appropriate training staff. Training requirements are outlined under Code of the Federal Register 29 CFR 1910.147 Section (c)(7) (i),(ii), and (iii). These training programs are designed to provide you with a good understanding of lockout/tagout procedures.

Record Keeping for LOTO

Inspection records and training records will be kept by your employer. Training records will be maintained by employer and they will include an outline of topics covered. In addition, a sign in sheet of attendees will be included with training records. Inspection records will also be kept.

Inspection Methods for LOTO

OSHA requires that a LOTO Program be reviewed once a year and that periodic inspections of the procedures are made to ensure that they are being followed correctly. Inspections may be done in the shops in your physical plant. These shops may include auto, central plant, controls, electric, plumbing, and refrigeration. Inspections are designed to include cataloging the general types of hazardous energy and equipment applicable to each area.

Some inspections may involve questions only; some may include demonstrations; and others may occur during actual LOTO activities. General questions that may be asked include:

1. Who are the authorized employees, i.e. those using LOTO)?

2. Who are the affected employees, i.e. who are employees that could be exposed to LOTO hazards?

3. Are procedures for energy control in place?

4. What equipment is subject to LOTO?

5. Do specific written procedures exist, i.e. written procedures for de-energizing and re-energizing equipment?

6. Where are your locks/tags?

7. What if an “Authorized Employee” is not available to remove the lock?

8. What inspection records exist for your Department?

9. Do you know what training records exist?

Who is Responsible?

Each individual must accept the responsibility to know the rules and to follow your organization's policies and procedures exactly. The primary purpose of any LOTO program is accident prevention. It is designed to safeguard you and those around you. Safety is always a team effort and LOTO is no different. The rules are very important and if you're not sure about a particular procedure don’t be afraid to ask questions. Ask your supervisor. Don't take chances! Failure to properly lockout and tagout when necessary can lead to potentially serious injury.

To make sure the machine doesn't start accidentally, all hazardous energy must be locked out. Hazardous energy could be electricity, springs under tension, gravity…where heavy parts could fall down, liquids, or steam under pressure or other hazardous energy sources.

Some common lockout/tagout equipment is shown in Figure 3. The figure illustrates locks with keys and tags.

Figure 3 Lockout Tagout Supplies

Even if you don't work in these areas or you're not a mechanic or machine operator, it's important that you know about these tags and locks.

Never Remove LOTO

Never remove any of these tags or locks, unless you're the person who placed them there. Don't attempt to start any machine that has a lock or tag on it. Lockout and tagout procedures save lives.

EMERGENCY ACTIONS

In case of fire, exit the building by appropriate exits. Remain calm and report to your designated area so your supervisor can account for you. It's important to know if anyone is left inside the building or if anyone is missing.

In case of earthquake or a tornado, it's best not to go outside. Falling electrical lines, broken glass, or other dangerous conditions could exist outside your building. Experts

recommend that you get under a sturdy desk or other heavy object and ***Duck***, ***Cover***, and ***Hold***.

Duck under a heavy object for safety.

Cover your head with your hands.

Hold that position until it's safe to move.

In cases of emergency, you should know elements of your company's emergency plan and be prepared to follow them.

Remain calm and use your good judgment and your training to protect yourself and others.

HOUSEKEEPING FOR EVERYONE

In this case housekeeping means that you should check your work area for materials, cords, cables, or other items that can cause slips, trips, or falls.

Housekeeping is checking your equipment to make sure grease or oil doesn't leak on floors, causing potential slips and falls.

Your housekeeping duties include checking closets in your work area for trash, debris, or other potential hazardous conditions. Then address the issue.

Housekeeping is also taking the time to make sure your entire work area, regardless of your job description, is neat, clean, and organized; including putting tools or utensils where they belong when you've finished using them.

Housekeeping is picking up paper, trash, or debris when you see it…even if it's not in your department.

Housekeeping is your responsibility, no matter where you work.

SLIPS, TRIPS AND FALLS

Slips, trips, and falls are a major cause of workplace injuries. Believe it or not accidents happen. Fall injuries can happen when a janitor simply steps off of a loading dock. Or perhaps, a truck driver breaks his ankle when jumping down from the cab of his truck.

Causes of Slips, Trips, and Falls

Slips happen when there is too little friction or traction between footwear and the walking surface. It is easy to slip on a wet or oily surface.

Slips and falls happen. Jumping from any elevated surface is hazardous. You can fall from ladders, stairs, or curbs. Slippery floors, debris, or uneven surfaces will potentially cause you to trip or slip and fall. The study of slip, trip, and fall accidents and injury statistics help us to understand where we went wrong. We use information from these studies and statistics to determine how to prevent future accidents.

Is there a magic bullet? New floor surfaces, “slip resistant” shoes--what is the answer? We believe the answer is education, greater awareness, and maintaining a good safety attitude. We all must accept responsibility for working and acting safely.

We just can’t run the risk of you, your coworkers, building occupants, vendors, or clients slipping and falling. First, we are going to review some of the ways people trip and fall. Next, we will review basic prevention techniques.

When your foot strikes an object causing you to lose your balance, you trip and then you stumble or fall. Slips, trips, and fall injuries are caused by hazardous conditions. Hazardous conditions may include an obstructed view or poor lighting.

Clutter left in isles, trash left on the floor, and protruding chair legs contribute to hazardous conditions. These conditions will certainly lead to accidents if left unattended. Uneven steps, uncovered cables, and open bottom desk drawers also provide circumstances that may lead to trips and falls. Wrinkled carpeting or rolled corners on rubber mats provide another set of hazardous conditions.

Prevention Techniques

Both slips and trips result from some a kind of unintended or unexpected change in the contact between your feet and your walking surface. Good housekeeping is the first and the most important level of prevention for these accidents.

All spills should be cleaned up immediately, especially those in isles and walkways.

Spills and wet areas should be marked with orange cones or “Wet Floor” signs.

Debris should be mopped or swept from floors, immediately.

Obstacles such as stocking carts, crates, and empty boxes should be removed from walkways. Walkways and isles should be kept free of clutter.

Runners, rubber mats, rugs, and carpets that do not lay flat should always be secured to walking surfaces.

File cabinet and storage drawers should always be left closed.

Remember that wires and cables are potential tripping hazards.

Lighting is important. Be sure to keep work areas and walkways well lit by replacing burned out light bulbs and faulty switches. Replacing burned out light bulbs is often part of a janitor’s job.

All drains must have drain covers that are secured to the floor.

Clean Up!

Cleaning supplies are often dropped and spilled on the floor. It’s not good enough just to wipe them up; you have to actually clean the surface. Let’s say someone knocks a bottle of marble cleaner off the shelf and onto the floor. The bottle hits the floor and goes crash! Wax goes everywhere. We now have a hazardous condition. By definition this is certainly a slip, trip and fall hazard.

First you must mark the hazard with a sign or an orange cone.

Figure 4 Orange Cones

Next you pick up the container and as much of the wax as possible using a broom and dustpan.

Figure 5 A brush and dustpan set

A dustpan is a cleaning utensil commonly used in combination with a brush or broom. Industrial and commercial establishments may provide you with a hinged dustpan on the end of a stick to prevent you from constantly stooping to use it. Handheld dustpans may be used with either a full-size broom or with a smaller whisk broom or brush sometimes called a duster.

Figure 6 Broom and hinged dustpan with handle

Water spills should be mopped, and then wiped dry with a dry rag or towel.

Figure 7 The Mop

Safety awareness is the key to safety.

You will find that there are many hazards occurring in your working environment on a daily basis. Spilled water, ice cubes, broken glass, and food on the floor…all of these things pose special hazards. Of course, you should immediately clean spills or pick up items on the floor or stairs. The only thing that's going to prevent an accident is for you to be aware of potential hazards and pay attention to your walking surfaces.

If you see something on the floor that doesn't belong there, pick it up. It's that simple! Remember, watch where you walk. Be aware of your surroundings. Always wear approved slip resistant footwear at work. When you see water on the floor or some other hazard, clean it up!

To properly clean up a spill that contains oils, you must first wipe it up and then put some abrasive powder on the contaminated surface. Rub the area to remove any remaining oils. Then clean the floor surface with soap and water, rinse it, and make sure the floor surface is not slick.

Without good housekeeping practices, any other preventive measures will never be fully effective.

Footwear

Footwear is important! Footwear is personal protective equipment where floors may be oily, wet or if workers spend considerable time outdoors. In these circumstances, fall accident prevention should focus on selecting proper footwear. Ordinary tennis shoes are popular, but in wet and slippery environments, they can contribute to accidents and injuries. There is compelling evidence that using slip-resistant footwear reduces accidents.

Effectiveness of slip resistant footwear depends on more than just the footwear design. It is also affected by its use, environmental conditions, and the type of floor surface and finish that is in your working environment.

Behaviors that Lead to Falls

In addition to wearing the wrong footwear, there are behaviors which can lead to slips, trips, and falls. For example, a behavior that can cause a hazardous condition is simply walking too fast or running. Other behaviors that may lead to falls include activities such as not watching where you are going; carrying cleaning buckets and supplies which obstruct your view; wearing sunglasses in low-light areas; failure to use handrails, and allowing yourself to be distracted. These and other behaviors, caused by lack of knowledge, impatience, or bad habits can lead to serious accidents. You can eliminate many slips, trips and fall accidents by simply paying attention and watching where you're going.

Warehouse Vehicles

You should never hitch a ride on a forklift, pallet jack, or in the bed of a truck while you're working. Death or serious injury is a potential result of extra riders falling from these vehicles. The safe way is "NO RIDERS".

Vehicles and the "Three Point System"

Janitors and custodians are often moved from one location to another. When getting in and out of vehicles, always practice the "Three-Point System." This is particularly important if you are getting in or out of a truck. This system can significantly reduce the chances of injury through a slip or fall while entering or exiting a vehicle. The Three-Point System means that three of your four limbs are in contact with the vehicle or the ground at all times, either one

hand and two feet, or two hands and one foot. In other words, only one limb is in motion at any one time. When getting out of a truck, step down backward.

It is never safe to ride in the back of a truck--if you must, when getting off the bed, step down backward, never "jump" or "fall" down forward.

Stairwells

Stairwells should be well lit with sturdy handrails on both sides. When you are walking down a stairwell, you should always have one free hand. This will allow you to use the handrail. All the steps must be kept free of grease, oil, and obstacles. Obstacles can increase the probability that you or others will have an accident. You should always avoid carrying heavy or bulky objects up or down stairs. Objects that obscure your vision and/or require the use of both hands are a source of hazards. You should carry smaller, lighter loads and make more trips, or obtain help from a coworker. Use an elevator if one is available.

Ladders

Ladders are often used by janitors and custodians. Appropriate ladders should be used when performing jobs such as changing light bulbs, cleaning wall surfaces that are above arms reach, and storing supplies on top shelves. The "Three-Point System" should also be practiced when you use a ladder. This system can significantly reduce the chances of injuring yourself through a slip or fall while climbing ladders. As discussed earlier, the “Three-Point System” means that three of your four limbs are in contact with the ladder at all times, either one hand and two feet, or two hands and one foot. Only one limb should be in motion at any one time.

Ladders cause a great number of injuries. Make-shift ladders, chairs, boxes, and barrels should never be used as substitutes for a ladder. The risk of injury is far too great.

The area around the top and bottom of ladder must be kept clear.

Never use a ladder for any purpose other than the one for which it was designed.

Self-supporting step ladders and non-self-supporting extension portable ladders must be able to support at least four times the maximum intended load, except extra-heavy-duty

metal or plastic ladders, which must be able to sustain 3.3 times the maximum intended load.

Step Ladders

Figure 8 Example of what not to do. Never stand on the top two steps of a step ladder

Of course, we all know to never stand on the top two steps of a step ladder. That's just too dangerous and it causes an unsafe shift in the center of gravity of the step ladder.

Figure 9 Metal Step Ladder with Locking Device between 3rd and 4th Step

Don't lean past the rails of the ladder as this also creates instability. We call this the belt buckle rule. Don't lean past your belt buckle for safety.

When climbing up or down a ladder, always face the ladder.

Naturally, don't use a metal ladder when doing electrical work. There is a great risk of electrocution or getting a shock that could throw you off the ladder.

Foldout or stepladders must have a metal spreader or locking device to hold the front and back sections in an open position when in use. See the figure above.

Extension Ladders

There are 3 basic requirements for extension ladder setup.

First, the top of the ladder must extend 3 feet or 3 rungs above the point of contact to the structure.

Secondly, it must be setup at the precise angle of 75.5 degrees to provide the proper angle for climbing. The old four to one ratio makes this difficult to achieve, but the correct angle is important. An “extension ladder angle verification device” is recommended to achieve this angle with accuracy.

Figure 10 Extension Ladder

Did you know? The most common reason extension ladder accidents occur is due to ladders set up at an improper angle! Several studies show that when workers attempt to set up a ladder at 75.5 degrees without a measurement device, resulting angles varied as much as 9 degrees.

There are commercially available Ladder Angle Verification Devices that are factory set at the OSHA required 75.5-degree angle for correct ladder set up. These devices are simple to use and easily attached to any ladder.

Lets' face it, without a verification device, how do you know that your angle is correct?

Ladders are to be kept free of oil, grease, wet paint, and other slipping hazards.

Do not stand above the highest "safe standing level: prescribed by the ladder's manufacturer.

Do not extend the center of your body's torso past either side rail of the ladder. In other words, don't overreach.

Face the ladder while ascending and descending.

Don't carry tools in hand, use a tool belt.

Wear proper footwear.

FIRE PREVENTION

Good housekeeping is the first step in fire prevention. If you have poor housekeeping, you don't have good fire prevention.

The second step in fire prevention is to know where fire extinguishers are located and how to use them. Fire extinguishers are often marked with a sign as shown in Figure 3. These signs are usually at eye level.

Figure 11 Sign above a fire extinguisher

If you don't know how to use the extinguishers at your location, learn how before a fire happens. It's not as easy as it looks because in case of fire, everyone is under pressure and it is easy to panic.

As a review of the use of extinguishers, the first rule is: ***Life Safety Is Paramount.*** This means that unless it's safe to do, don't try to play the hero. Don't try to extinguish a fire that could be hazardous for you or others. Remember, your life is more important than property.

The figure below shows a typical fire extinguisher. Fire extinguishers are equipped with a gauge such as the one shown; the needle should be in the green zone - not too high and not too low. There is a nozzle at the end of a hose for aiming. Each extinguisher has a pin to prevent accidental discharging.

Figure 12 A typical fire extinguisher

However, if extinguishing the fire can be done safely, extinguish it. Use a fire extinguisher. Use the key word PASS, as described below, to remember the proper procedures for extinguishing a fire. First, stand about 8 to 10 feet away from the fire. You don't want to be close to the fire because the pressure of the extinguishing agent may spread the fire. Stay at least 8 to 10 feet away.

The PASS Acronym

P A S S is an acronym that can be used as a quick reference for the operation of a fire extinguisher.

P is for **Pull**. First you pull the Pin at the top of the extinguisher. The pin releases a locking mechanism and will allow you to discharge the extinguisher.

A is for **Aim.** Next you aim at the base of the fire, not the flames. This is important-in order to put out the fire, you must extinguish the fuel.

S is for **Squeeze**. And next you squeeze the lever slowly. This will release the extinguishing agent in the extinguisher. If the handle is released, the discharge will stop.

S is for **Sweep**. Finally you sweep from side to side using a sweeping motion. Chase the fire into a corner. You must move the fire extinguisher back and forth until the fire is completely out.

It is often a good idea to aim the nozzle in a neutral direction away from anything, and then lightly squeeze the handle. This will give you a feel for your particular extinguisher.

Be sure to operate the extinguisher from a safe distance, several feet away, and then move towards the fire once it starts to diminish. Since different fire extinguishers have distinct recommendations for operating distances, be sure to know the instructions on your fire extinguisher. These instructions should be reviewed the first time you familiarize yourself with your facility. Remember to aim at the base of the fire, and not the flames. Chase the fire into a corner if possible, away from any concentration of flammable materials with a sweeping, herding motion.

A typical fire extinguisher contains 10 seconds of extinguishing power. This could be less if it has already been partially discharged. Always read the instructions that come with the fire extinguisher beforehand and become familiarized with its parts. It is highly recommended that you get hands-on training.

Once the fire is out, don't walk away. Watch the area for a few minutes in case the fire re-ignites.

The Fire Triangle

The triangle illustrates the rule that in order to ignite and burn, a fire requires three elements: heat, fuel, and an oxidizing agent, usually oxygen. The fire is prevented or extinguished by removing any one of the three. A fire naturally occurs when the elements are combined in the right mixture. A graphic depiction of the fire triangle is given in the figure below.

Figure 13 Oxygen Heat and Fuel Triangle

The Fire Tetrahedron

It has largely been replaced in the industry by the **fire tetrahedron.** The removal of heat explains fire suppression in a majority of cases. However, the suppression effect of Halon, which is a stable halocarbon used to put out fires, cannot be explained completely. It can partly be explained by what is called chemical inhibition. That means that it reacts chemically to reduce the concentration of radicals in the flame. These radicals are essential in the chemical reactions. This has led to development of the **fire tetrahedron** with the bottom representing the sustaining of chemical reactions. This is illustrated in the next figure.

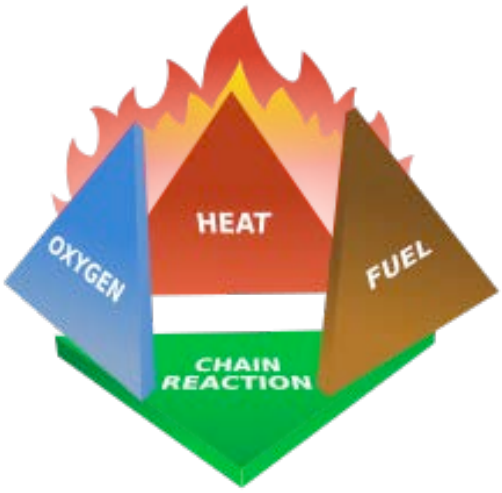


Figure 14 The Fire Tetrahedron

Combustion is a chemical reaction that feeds a fire more heat and allows it to continue. When the fire involves burning metals like lithium, magnesium, or titanium, it becomes even more important to consider the energy release. The metals react faster with water than with oxygen and thereby more energy is released. Putting water on such a fire results in the fire getting hotter or even exploding because the metals react with water in an exothermic reaction. Some metals also burn in carbon dioxide. Therefore, inert agents for example dry sand must be used to break the chain reaction of metallic combustion.

The take home message here is that you must know what kind of fire you are dealing with to know how to distinguish it. If you are not certain, leave it to the professionals.

CAUSES OF ACCIDENTS AND INJURIES

What causes accidents and injuries? Actually, statistics have been maintained by a number of organizations and insurance companies over the years. With millions and millions of accidents and injuries, it's fairly easy to determine the different accident types, causes, and other information. Accidents are investigated to determine what happened, so precautions and safety standards can be implemented to prevent the same type of accident from being repeated.

That's one reason we have so many safety rules and regulations. If people keep falling off ladders, it could reveal that ladders are unsafe to use. Upon investigation of ladder

accidents, professionals can determine how the ladder was used and what actually caused the accident.

In most cases it wasn't the ladder that was unsafe. It was the person using it in an unsafe manner. In fact, this is true of most accidents. You'd be surprised to learn that many ladder accidents and injuries are the result of unsafe acts of people.

That's right, unsafe acts of people.

Not equipment, not floors, not ladders, not machines, but people. How can that be?

People don't try to have accidents and they don't try to injure themselves. We're not saying that physical hazards never cause or contribute to an accident because they do. However, many accidents and injuries are caused by the acts of people…people taking short cuts, not following proper procedures, ignoring safety rules, and just not paying attention. Or not being trained in safety procedures.

We should always consider possible risks before starting any job and consider how our actions might affect the safety of ourselves and others.

Safety is everyone's responsibility; regardless of where you work. Your company has provided you with training and equipment to perform your job safety but safety is really up to you. You need to follow company policies and procedures on every job, every day. If you do that, you'll be doing your part in helping to reduce accidents and injuries in the workplace.

SAFE LIFTING AND BACK INJURY PREVENTION

Safe Lifting

You've probably heard it a million times...bend your legs, not your back. The reason you've heard it so much is back injuries are painful and debilitating and a serious back injury can prevent you from earning a living or enjoying your leisure time. Nobody wants a back injury. What can you do to help reduce your risk?

Never bend your back when lifting. Never bend over and reach to lift anything. Your back is a complex and sensitive structure made up of vertebrae, discs and nerves. The discs are made of

a soft jelly-like substance that acts like shock absorbers between the vertebrae. Bending over and lifting puts pressure on these sensitive discs and greatly increases the likelihood of an injury.

Never twist while lifting. This too can damage your back. You may twist and lift every day and you haven't experienced an injury or back problem ***yet***. If you continue to twist and lift, sooner or later, you will have a back injury. Instead of twisting, lift the item safely, pivot your feet then set the item down. It doesn't take any more time and it could save your back.

If an item is too heavy to lift on your own ask a co-worker to help you. Don't try to lift it yourself. You've been trained and taught proper lifting procedures.

Whatever you lift, keep it close to your body.

Figure 15 Proper lifting

The figure shown above is an illustration of proper lifting technique. You should lower your body by bending your knees keeping your back perpendicular to the floor. You should keep the object as close to your body as possible and then use your leg muscles to lift the object.

But, it's your responsibility to lift safely. Nobody can do it for you, it's your decision. Make the right choice, the safe choice.

Tips to Prevent Back Pain

Back pain is a fact of life. Many of us have suffered back pain and we know that it's something to avoid. Most doctors don't agree upon what treatment for back pain is best. However, they all agree exercise and diet will greatly reduce your chances of back pain or injury. Since we're not doctors, you should get medical advice on diet and exercise that's best for you.

Proper work practices will make a difference.

As described in the previous section, there are some safe lifting techniques you can use to reduce the potential of injuries and back pain.

Don’t lift heavy objects. Get mechanical assistance. Use hand trucks and folding carts as illustrated in the figure below.

Figure 16 Hand Trucks and Folding Cart

When lifting avoid bending and twisting—always use your leg muscles to lift.

Have lumbar support and armrests where you sit.

Change positions frequently.

Safety is a job requirement, but more importantly, safety is a moral obligation to yourself, the company, co-workers, and your family. One accident is simply one too many.

Exits

It is important to know where exits are located and to make sure they're not blocked. Safety awareness will eliminate the vast majority of injuries.

Chapter 3: CLEANING

THREE T'S OF CLEANING

In order to think through the proper steps in cleaning anything, you must first identify the problem, and then select the proper cleaning products and tools to do the job. Having done this, it is important to understand how to properly use these cleaning products and tools. This is an essential element of a successful cleaning job. It is important to know how and why certain procedures and products work and why some do not.

In order to increase the cleaning efficiency of any cleaning chemical, one can utilize what is known as "The Three T's of Cleaning".

The first "T" is for Time. If a cleaning compound stays on a surface longer, the cleaning efficiency of the product is enhanced. This fact explains why a foaming product is better than a pure liquid on vertical surfaces. A pure liquid runs down the vertical surface. The foam tends to remain longer on the surface; thus increasing the cleaning efficiency.

The second "T" is for Temperature. When hot water is used in a carpet extractor, or when hot water is combined with high pressure washing, or "steam cleaning", the product performs better.

The third "T" is for Turbulence or Agitation. Ever wonder why a black or brown stripping pad is used with a stripper to remove floor finish? The Brown Stripping Pad is constructed of polyester fibers in a semi open texture nonwoven fabrication. Abrasive particles are distributed throughout and adhered to the pad with a sturdy adhesive. This turbulence speeds the removal of floor finish.

Have you ever washed your car using a rag or sponge? You were adding turbulence which makes the car get cleaner faster. When hand washing is accomplished, the three "T's" are put to work, and many other cleaning procedures employ the three "T's" of cleaning.

CHEMICALS USED FOR CLEANING AND THE MSDS

Chemicals are a vital part of any cleaning operation. Without them we couldn't clean. But with them, we need to take precautions. If you follow precautions, the chemicals you work with are safe. But you may need to wear personal protective equipment such as gloves in order to ensure your safety.

How do you know what kind of protection is required for each chemical?

The answer is the Material Safety Data Sheets or MSDS. The MSDS contains all the information you need to know about any chemical you work with such as ingredients, hazards, First Aid, personal protective equipment and more. If you're unsure about a chemical ask your supervisor for the MSDS. You can never be too safe or too informed about the chemicals that you use.

Material Safety Data Sheet--MSDS

The Material Safety Data Sheet, commonly called the MSDS, is a component of your University's Chemical Hygiene Plan and Hazard Communication Program. The MSDS contains information provided by the chemical manufacturer and is maintained by the University to inform students and staff of the possible hazards associated with chemicals being used in their laboratory or work area. It is a critical part of any laboratory safety program. The goal of the MSDS is to provide you with a summarized, multi-source resource that informs you of certain basic but necessary pieces of information regarding the substance or chemical you are about to use.

The MSDS informs you about the material's physical properties and related health effects, personnel protective equipment necessary to protect the you, first aid treatment necessary in the event of an exposure, how to respond to accidents, and the planning that may be necessary in order to safely handle a spill.

The MSDS may vary in style and content, but all contain certain required sections. State and Federal law requires that all manufacturers and distributors of chemical products provide the end user with a manufacturer specific MSDS. One method of accessing is through electronic databases. Many employers keep a notebook with MSDSs for the particular cleaning supplies that you will be using in your job.

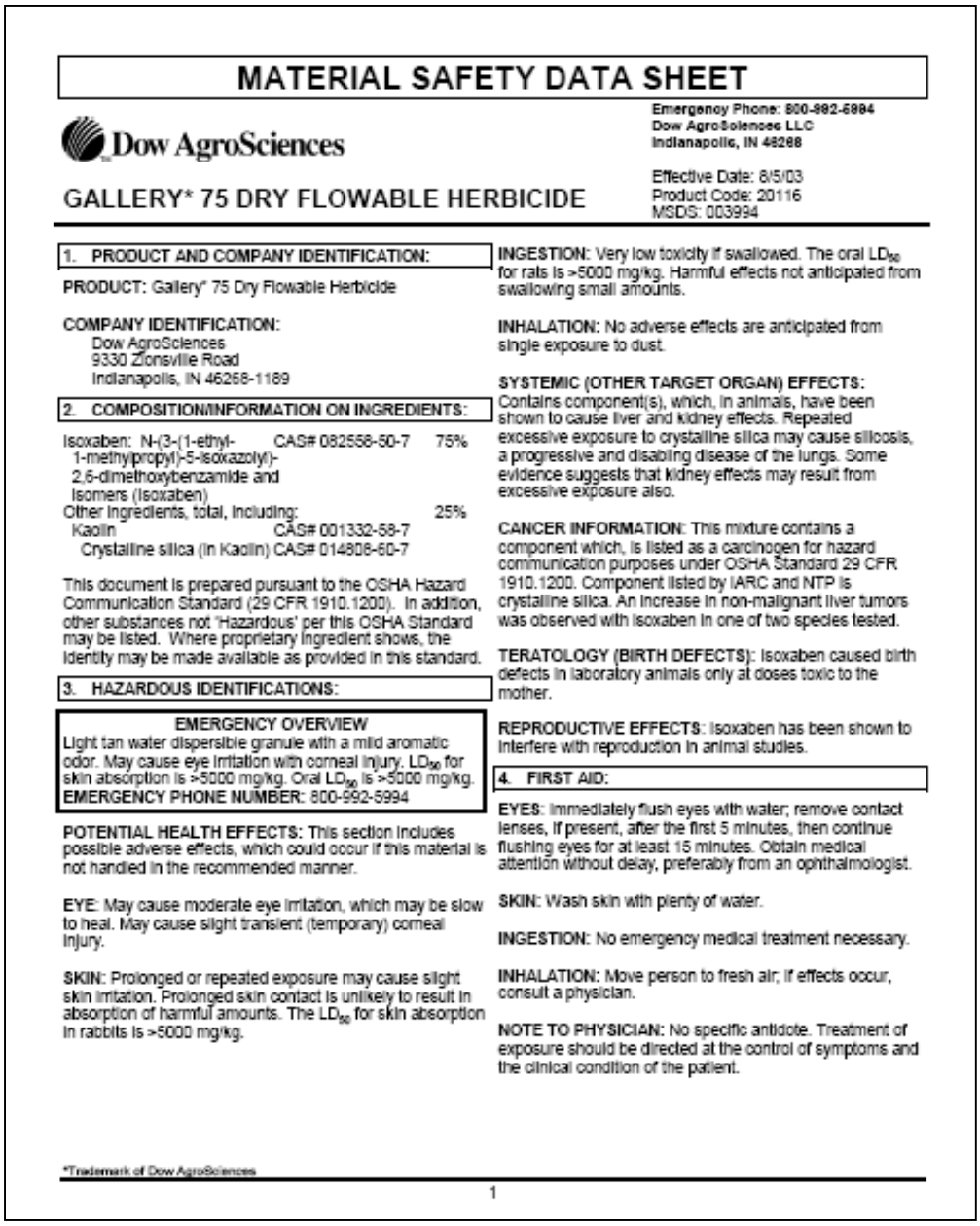
What is a Material Safety Data Sheet?

The MSDS is a widely used system for cataloging information on chemicals, chemical compounds, and chemical mixtures. MSDS information may include instructions for the safe use and potential hazards associated with a particular material or product. MSDS can be found anywhere chemicals are being used.

Figure 17 Sign used to denote harmful substance

There is also a duty to properly label substances on the basis of physico-chemical, health and/or environmental risk. Labels can include hazard symbols such as the European Union standard black diagonal cross on an orange background, used to denote a harmful substance.

The goal of the MSDS is to provide the user with a summarized, multi-source resource that informs the user of certain basic but necessary pieces of information regarding the substance they are about to use. The MSDS informs the user about the material's physical properties and related health effects, personnel protective equipment necessary to protect the user, first aid treatment necessary in the event of an exposure, how to respond to accidents, and the planning that may be necessary in order to safely handle a spill.



MATERIAL SAFETY DATA SHEET

Dow AgroSciences

Emergency Phone: 800-992-5994
Dow AgroSciences LLC
Indianapolis, IN 46268

GALLERY* 75 DRY FLOWABLE HERBICIDE

Effective Date: 8/5/03
Product Code: 20116
MSDS: 003994

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Gallery* 75 Dry Flowable Herbicide

COMPANY IDENTIFICATION:
Dow AgroSciences
9330 Zionsville Road
Indianapolis, IN 46268-1189

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Isoxaben: N-(3-(1-ethyl-1-methylpropyl)-5-isoxazolyl)-2,6-dimethoxybenzamide and isomers (Isoxaben)	CAS# 082558-50-7	75%
Other Ingredients, total, including:		25%
Kaolin	CAS# 001332-58-7	
Crystalline silica (in Kaolin)	CAS# 014808-60-7	

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

3. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Light tan water dispersible granule with a mild aromatic odor. May cause eye irritation with corneal injury. LD_{50} for skin absorption is >5000 mg/kg. Oral LD_{50} is >5000 mg/kg.
EMERGENCY PHONE NUMBER: 800-992-5994

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause moderate eye irritation, which may be slow to heal. May cause slight transient (temporary) corneal injury.

SKIN: Prolonged or repeated exposure may cause slight skin irritation. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD_{50} for skin absorption in rabbits is >5000 mg/kg.

INGESTION: Very low toxicity if swallowed. The oral LD_{50} for rats is >5000 mg/kg. Harmful effects not anticipated from swallowing small amounts.

INHALATION: No adverse effects are anticipated from single exposure to dust.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Contains component(s), which, in animals, have been shown to cause liver and kidney effects. Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs. Some evidence suggests that kidney effects may result from excessive exposure also.

CANCER INFORMATION: This mixture contains a component which, is listed as a carcinogen for hazard communication purposes under OSHA Standard 29 CFR 1910.1200. Component listed by IARC and NTP is crystalline silica. An increase in non-malignant liver tumors was observed with isoxaben in one of two species tested.

TERATOLOGY (BIRTH DEFECTS): Isoxaben caused birth defects in laboratory animals only at doses toxic to the mother.

REPRODUCTIVE EFFECTS: Isoxaben has been shown to interfere with reproduction in animal studies.

4. FIRST AID:

EYES: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

SKIN: Wash skin with plenty of water.

INGESTION: No emergency medical treatment necessary.

INHALATION: Move person to fresh air; if effects occur, consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

*Trademark of Dow AgroSciences

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Figure 18 Sample MSDS Material Safety Data Sheet

Each company can design its own MSDS form, and the sections may be in different order. But, the basic kinds of information on any MSDS will be the same. This is an example of the first page of an MSDS.

Chemical Name

For example, there is always a section that lists the identity of the substance or the chemical name on the label, date the MSDS was prepared, the name and address of the manufacturer, and usually a phone number for emergencies and more information.

Hazardous Ingredients/Chemical Identity

The section on hazardous ingredients and chemical identity includes names of substances in the chemical that might be dangerous, and safe exposure limits such as Permissible Exposure Limit or PEL as set by OSHA or the Threshold Value Limit or TVL. This section also lists common names for the chemical.

Physical Characteristics

The section on physical characteristics describes many physical qualities of the chemical, and lets you know what is usual or safe. For example, it may state how the chemical looks and smells; boiling and melting temperatures--this is important in case a chemical might become a gas you could breathe; evaporation rate; how easily the chemical dissolves; and how heavy it is--this tells you if it will sink, float, or dissolve in water.

Fire and Explosion Data

The section with fire and explosion data provides information on the lowest temperature when the chemical could catch fire or flash point. It also contains flammability data that lets you know if it's flammable; if it catches fire below 100 degrees Fahrenheit; is combustible; or, if it catches fire above 100 degrees Fahrenheit. In addition, this section lists the best way to put out a fire involving that chemical.

Reactivity

The section on reactivity describes what happens if this chemical comes in contact with air, water, or other chemicals. It also describes conditions, like heat, or materials that can cause the chemical to react by burning, exploding, or releasing dangerous vapors. The chemical is called "incompatible" or "unstable" with these conditions or substances. For example, sodium metal is unstable when it comes in contact with water. It explodes!

Health Hazards

The section on health hazards lists ways the chemical might enter your body, like splashing on your skin or being breathed in as vapor. It will also list possible symptoms of overexposure. This section will provide information about how overexposure might make existing medical conditions worse, and it describes emergency first aid procedures.

Usage, Handling, and Storage

The section on usage, handling and storage describes how to clean up an accidental spill, leak, or release. This part will include any special procedures that might be required for clean-up. It will provide you with information on how to handle, store and dispose of chemicals safety. Remember, if there is an accident, you must notify your laboratory instructor or professor immediately. You may take care of it yourself only if you are trained to do so and are wearing the proper personal protective equipment.

Special Protection and Precautions

This section explains special Personal Protective Equipment to use when working with a chemical. It also describes requirements for special procedures, extra health or safety information, signs that should be posted, and other information not covered in other sections.

It is wise to study MSDSs for any chemicals you will work with in your job. MSDSs for a many commercial substances are not primarily intended for use by the general consumer. Material safety data sheets focus on the hazards of working with the material in an occupational setting. For example, an MSDS for a cleaning solution is not highly pertinent to someone who uses a can of the cleaner once a year, but they are extremely important to someone who works with a cleaner or a chemical in a confined space for 40 hours a week.

You may work in many different departments throughout your facility…housekeeping, offices, the kitchen, and others. Employees in each of these departments use different chemicals in the performance of their job responsibilities.

You need to be aware of what chemicals are on what items before you use them. Some chemicals when mixed together can be quite deadly. Let's give you an example. A kitchen

employee may have used ammonia on a rag to clean something in the kitchen. That's perfectly okay as long as there was proper ventilation. Ammonia on its own is perfectly safe when used properly. But if you take the ammonia soaked rag and use it with detergent containing bleach you have just created a very hazardous condition.

Ammonia and bleach, when mixed together, form a deadly combination called chloramine gas. Chloramine gas can kill you. Never mix bleach and ammonia.

Stain removers and certain detergents can also be a hazard. That is why it's vital to your safety and the safety of those around you to always read the chemical label and the MSDS sheet for each chemical that you use and always wear the required personal protective equipment. You can't afford not to!

VENTILATION

Most of today's new office buildings and workplaces are highly insulated and practically air tight. While this is great as far as cost effective energy bills go, the down side to tightly insulated buildings is poor indoor air quality. As windows and doors are typically kept shut throughout the day, moisture, and stale air that can carry contaminants and pathogens. The air circulates inside and gives rise to various problems including mold and mildew, health problems, ruined furniture, and peeling paint. The quality of indoor air can be achieved through mechanical ventilation.

An excellent way to ventilate thoroughly, efficiently, and cheaply is to use exhaust fans.

What Are Exhaust Fans?

An exhaust fan is a mechanical ventilation device that helps to draw out stale and impure air from a room or building and bring in fresh air, thereby improving the quality of indoor air. Exhaust fans are typically ducted to the exteriors, through which bad indoor air can effectively be removed from your work space. Any volatile cleaning supplies will also be vented.

There is a lot of heat and humidity in the bathrooms and laundry rooms and without proper ventilation, mold and mildew can accumulate. Ventilation also keeps the heat down and makes your facility a more comfortable place to work.

Use spray bottles instead of aerosols for applying chemicals if another means is not possible, and make sure you have proper ventilation when using chemicals. When in a commercial building, make sure ventilation systems are turned on. Inadequate ventilation allows chemical by-products to be absorbed into porous items such as ceiling tiles and wallboard.

What to do when there is no exhaust fan

If you are cleaning a restroom with no exhaust system, prop the door open. Place a "Cleaning in Progress" sign in the doorway.

Whenever possible, use mechanical means rather than chemical means for cleaning. For example, use a microfiber cloth instead of a chemical-based dust control product. Also use a microfiber cloth instead of a feather duster, which causes dust to become airborne.

REPORT HAZARDOUS CONDITIONS

We couldn't possibly cover every safety hazard you may encounter on the job. That's why it's up to you to pay attention to safety and do your part to reduce accidents and injuries. You work in the facility every day and no one knows your job better than you.

The training you've received should help you perform your job in a safe manner. But it's really up to you. Obey all posted warning signs. Read and follow all instructions on chemical labels and MSDS sheets. Lift safely. You should always report hazardous conditions to your supervisor, so they can be corrected.

But most of all; use your common sense and good judgment and make yourself personally responsible for a safe and accident free workplace. Take pride in your job and in safety. Nobody can do it for you.

Chapter 4: CLEANING IN THE HEALTH CARE INDUSTRY

Sanitation and good housekeeping can both be defined as the practice of rendering the hospital free from agents injurious to health. Microbiology, the study of microscopic living, plantlike organisms, including bacteria, viruses, yeasts and molds is the biological science on which sanitation is based. There are many communicable diseases known to man. Each one of these diseases or infections is caused by a specific organism. Organisms enter the body through the respiratory tract, digestive tract or through breaks in the skin and multiply, causing tissue injury and body reaction. As the organisms multiply many are shed by the infected person and may be spread to others, thus beginning the cycle again.

BACTERIA

Bacteria are one of the more common microorganisms. Bacteria generally reproduce and multiply by simple division. Each cell reaches maximum size and divides into two parts. The two parts then grow to full size and each divides again. This cycle is repeated again and again.

Food and environmental conditions such as moisture, temperature, light, and degree of alkalinity influence the rate of bacterial growth. Presence or absence of oxygen is also an important factor, because some bacteria require the presence of oxygen for growth and others require the absence of oxygen.

VIRUSES

Viruses are much smaller than bacteria and they are very often too small to retain in filters. Viruses are considered by some to be living organisms, by others to be complex protein molecules that are capable of growth and multiplication only in living cells. Because of their size, they can remain suspended for long periods of time or they can be transplanted from place to place through the hospital's air conditioning system.

INFECTION CONTROL

You know about infection, bacteria, and viruses, but how do you control these potential health hazards? Control of infection caused by these bacterial and viral organisms depends on breaking

what can be called the chain of infection. This chain consists of the reservoir or source of infection, which might be bacteria laden dust, the means of transmission of the infection such as air and finally, the host. The object of infection control is to eliminate reservoirs and to block the means of transmission.

Pathogenic organisms can be transmitted from the reservoir of infection to the new host in four different ways:

1. The first of these is contact, which includes direct contact such as kissing and indirect contact, which means organisms are passed from their reservoir to some object or substance and then to the host.

2. The second type of transmission is sneezing or coughing, which involves droplets.

3. The third type is droplet nuclei, which are the small residue of evaporated droplets that carry pathogenic organisms. These droplet nuclei remain suspended in the air for long periods of time.

4. The fourth type is dust that has become contaminated, which is present on floors, in clothing, and in bedding and when stirred up by normal activities, moves from place to place.

The first step in infection control is to understand the difference between cleaning and sanitizing. Cleaning is removing obvious dirt, debris, and other materials from a surface. Sanitizing or disinfecting is the actual killing of the microorganisms through heat or chemicals.

Disinfectants are very helpful in infection control. There are specific housekeeping procedures essential in controlling the spread of infection.

Top priority should be given to the cleaning of horizontal surfaces, but also give proper attention to the cleaning of walls and other vertical surfaces. Harmful bacteria, which may be introduced into surroundings in a variety of ways, are often airborne for only a short distance. Then they become attached to both vertical and horizontal surfaces, but especially to floors.

Use wet-cleaning methods such as damp wiping, damp mopping, and wet mopping wherever possible. Ordinary dry dusting methods may serve only to redistribute bacteria-laden dust. The use of properly filtered or built in vacuum cleaners is acceptable for dusting and sweeping operations.

Add effective germicides or other pathogen killing chemicals to wet cleaning solutions. Don't mix germicides and detergents because the two ingredients may neutralize each other if the appropriate chemicals are not used. If you want to use a combination of germicide and detergent they should be purchased premixed.

Although, the germicide has some value on the floor itself, its real value is in the reduction of bacterial levels in the mop bucket. Unless checked, bacteria multiply rapidly in the warm, moist environment of mop water and may actually contaminate a floor being cleaned.

Fresh damp wiping cloths, treated dust cloths, and clean wet mops should be used to clean surfaces.

The used wet mops and cleaning cloths must be laundered every day. They should not be left soiled or wet in a work closet overnight. Clean the equipment and storage closet every day.

Separate cleaning equipment should be maintained for newborn nursery, postpartum, isolation nursery, delivery suite, operating suite, and the emergency department. Use plastic film or waxed paper bags for the disposal of infected materials.

THE LAUNDRY

Contaminated linens should be handled in accordance with approved techniques. Handling of linen is a crucial phase in infection control because soiled linen is a source of microbial contamination. Processing of soiled linen begins when the linen is removed from the patient, bed, stretcher, physician, nurse, examining table, or operating table.

Laundering removes pathogens by dilution, acidity, and alkalinity in the washing process and by application of extremely high heat of 345 degrees Fahrenheit or more in the ironing process. There are a variety of linen handling, processing, and disposing procedures, each unique to individual hospitals. Be sure to follow your hospital's policies and procedures because this is

extremely important in infection control. Be sure you've had the proper training and if you're not sure about something, ask your supervisor.

ODOR CONTROL

Odor control is part of infection control. Odor problems arise as a result of poor sanitation in toilet areas, utility rooms and work closets. Deodorizer blocks or sprays that attempt to mask the odors are a mark of poor housekeeping. The most effective way to deodorize these areas is with fresh air, removal of the causes, and frequent cleaning with a detergent-disinfectant solution. Garbage collection areas and soiled linen storage areas may be sites where bad odors arise. Frequent removal of garbage, cleansing of garbage cans, and use of tight lids and the use of waxed paper or plastic liners in garbage cans will help to keep odors to a minimum. Good ventilation is extremely helpful also.

WASTE

Waste constitutes a problem and can be classified into three types:

- Non combustible such as glass, tin, casts, and other materials
- Combustible such as wet tissue, bone, garbage, flowers, or dry combustible such as paper, crates, cartons, and trash
- Chemicals such as acids, flammables, and solvents.

All waste except chemicals can be further classified as infectious or non-infectious. Cartons and boxes are classified as combustible dry waste, but a gift box discarded by a patient in isolation becomes combustible dry infectious waste. The best advice is to follow your hospitals waste handling and disposing procedures.

INSECT AND RODENT CONTROL

Insect and rodent control is very important in infection control as these pests do carry bacteria and other harmful microorganisms; therefore, each individual should take care in their daily work habits, cleanliness, and assisting the hospital in insect and rodent control program.

SUMMARY

Infection control is critical in hospitals due to a wide variety of potential hazards. Follow your hospital's policies and procedures, be aware of the hazards, and do your part in making your hospital as safe and infection free as possible. Employees and patients deserve no less.

BLOODBORNE PATHOGENS

Okay, let's talk about some of the risks and hazards associated with bloodborne pathogens and ways to avoid them. The first place to start is with **training**.

Under no circumstances should anyone be allowed to work with bloodborne pathogens in any form without full and complete training. Although you may have a special certification or other external training, your employer is responsible for providing you with thorough, site-specific training and continued instruction in programs and procedures.

Written standard operating procedures or SOPs must form the basis of your ongoing bloodborne pathogen training program.

Training

If you are likely to be in contact with blood borne pathogens, you will have a program designed to provide a good understanding of bloodborne pathogens, common modes of their transmission, methods of prevention, and other pertinent information.

Bloodborne Pathogen training is required if you can reasonably anticipate facing contact with blood and/or other potentially infectious materials as part of your job duties. All Health Care facilities such as a hospital require bloodborne pathogens training and exposure plans, but there are a wide range of other individuals who may come in contact with blood or potentially infectious materials. These individuals may include industrial nurses, first aid providers, emergency first responders, police, and staff.

Pathogens

The pathogens of primary concern are the human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV). You are urged to take advantage of available engineering controls and work practices to prevent exposure to blood and other body fluids.

BLOODBORNE DISEASES

Bloodborne pathogens are microorganisms such as viruses or bacteria that are carried in blood and can cause disease in people. There are many different bloodborne pathogens

including malaria, syphilis, and brucellosis, but Hepatitis B or HBV and the Human Immunodeficiency Virus or HIV are the two diseases specifically addressed by the OSHA Bloodborne Pathogen Standard. We are going to provide you with information about hepatitis C; this is a bloodborne pathogen that has no cure.

Hepatitis B

In the United States, approximately 300,000 people are infected with Hepatitis B or HBV annually. Of these cases, small percentages are fatal. "Hepatitis" means "inflammation of the liver," and, as its name implies, Hepatitis B is a virus that infects the liver. While there are several different types of Hepatitis, Hepatitis B is transmitted primarily through "blood to blood" contact. Hepatitis B initially causes inflammation of the liver, but it can lead to more serious conditions such as cirrhosis and liver cancer.

There is no "cure" or specific treatment for HBV, but many people who contract the disease will develop antibodies, which help them get over the infection and protect them from getting it again. The Hepatitis B virus is very durable, and it can survive in dried blood for up to seven days.

HUMAN IMMUNODEFICIENCY VIRUS

AIDS, or acquired immune deficiency syndrome, is caused by a virus called the human immunodeficiency virus, or HIV. Once a person has been infected with HIV, it may be many years before AIDS actually develops. HIV attacks the body's immune system, weakening it so that it cannot fight other deadly diseases. AIDS is a fatal disease, and while treatment for it is improving, there is no known cure.

It is good to know that, the HIV virus is very fragile and will not survive very long outside of the human body. It is primarily of concern to employees providing first aid or medical care in situations involving fresh blood or other potentially infectious materials. Because it is such a devastating disease, all precautions must be taken to avoid exposure.

HEPATITIS C

Hepatitis C is a blood-borne infection caused by an RNA virus, hepatitis C virus (HCV). This virus causes damage to the liver that may result in chronic infection and disease. HCV is

unrelated to any of the other known hepatitis viruses (A, B, D and E), and infection is identified by the detection of antibodies to the virus in the blood.

There is no known cure for Hepatitis C.

Risk for exposure

Healthcare personnel are at risk for occupational exposure to bloodborne pathogens, including hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). Exposures occur through needlesticks or cuts from other sharp instruments contaminated with an infected patient's blood or through contact of the eye, nose, mouth, or skin with a patient's blood. Most exposures do not result in infection.

Your employer should have in place a system for reporting exposures in order to quickly evaluate the risk of infection, inform you about treatments available to help prevent infection, monitor you for side effects of treatments, and determine if infection occurs.

How can occupational exposures be prevented?

Many occupational exposures can be prevented. Needle sticks and other cuts can be prevented by using safe techniques. Using appropriate barriers such as gloves, eye and face protection, or gowns when contact with blood is expected can prevent many exposures to the eyes, nose, mouth, or skin.

MODES OF TRANSMISSION

Bloodborne pathogens such as HBV, HCV and HIV can be transmitted through contact with infected human blood and other potentially infectious body fluids. These body fluids include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, and amniotic fluid.

It is important to know the ways exposure and transmission are most likely to occur in your particular situation, whether it is providing first aid to an individual in an emergency, handling blood samples in the laboratory, or cleaning up blood from a hallway.

Bloodborne pathogens are most commonly transmitted through sexual contact, sharing of hypodermic needles, from mothers to their babies at or before birth, accidental puncture

from contaminated needles, broken glass, or other sharps, contact between broken or damaged skin and infected body fluids, contact between mucous membranes and infected body fluids.

Accidental puncture from contaminated needles and other sharps can result in transmission of bloodborne pathogens. Anytime there is blood-to-blood contact with infected blood or body fluids, there is a slight potential for transmission.

Unbroken skin forms an impervious barrier against bloodborne pathogens. Infected blood can enter your system through open sores, cuts, abrasions, acne, and any sort of damaged or broken skin such as sunburn or blisters.

Bloodborne pathogens may also be transmitted through the mucous membranes of the eyes, nose, or mouth.

As an example, a splash of contaminated blood to your eye, nose, or mouth could result in transmission.

PPE, WORK PRACTICES and ENGINEERING CONTROLS

It is extremely important to use personal protective equipment and work practice controls to protect yourself from bloodborne pathogens. "Universal Precautions", also known as “Standard Precautions” is the name used to describe a prevention strategy in which all blood and potentially infectious materials are treated as if they are, in fact, infectious, regardless of the perceived status of the source individual.

In other words, whether or not you think the blood or body fluid is infected with bloodborne pathogens, you treat it as if it is. Appropriate use of Personal Protective Equipment (PPE) is required by engineering and work practice controls. Where occupational exposure remains after standard engineering and work practice controls are implemented, personal protective equipment shall be used.

Impermeable gloves must be worn when hand contact with blood or mucous membranes is possible. Gloves must also be worn when Other Potentially Infectious Material or OPIM is possible. Gloves must be worn when non intact skin is anticipated, when performing vascular access procedures, or when handling contaminated items or surfaces.

You must be able to wash your hands after contact with blood or other potentially infectious materials. OSHA requires that employees wash their hands and any other skin with soap and water or flush mucous membranes with water as soon as feasible after contact with blood or other potentially infectious materials.

Protective clothing must be removed before leaving the room, and disposed of in an appropriately designated area or container for storage, washing, decontamination or disposal. Probably the first thing to do in any situation where you may be exposed to bloodborne pathogens is to ensure you are wearing the appropriate personal protective equipment (PPE). For example, you may have noticed that emergency medical personnel, doctors, nurses, dentists, dental assistants, and other health care professionals always wear latex or protective gloves.

Rules to follow

There are some simple rules to follow. When coming in contact with blood borne pathogens, you should always wear personal protective equipment. You should replace PPE that is torn or punctured. You should remove PPE before leaving the work area. If you work in an area with routine exposure to blood or potentially infectious materials, the necessary PPE should be readily accessible. Contaminated PPE should be placed in appropriately labeled bags or containers until it is disposed of, decontaminated, or laundered.

Gloves

Gloves should be made of nitrile a rubber used especially in latex-free gloves; neoprene rubber, or other water impervious materials. If glove material is thin or flimsy, double gloving can provide an additional layer of protection. You should always inspect your gloves for tears or punctures before putting them on. If a glove is damaged, don't use it!

Figure 19 Nitrile Gloves

When taking contaminated gloves off, do so carefully. Make sure you don't touch the outside of the gloves with any bare skin, and be sure to dispose of them in a proper container so that no one else will come in contact with them.

REMOVE YOUR GLOVES BEFORE DOING ANY OTHER WORK.

Goggles

Anytime there is a risk of splashing or vaporization of contaminated fluids, goggles and/or other eye protection should be used to protect your eyes. Splashing could occur while cleaning up a spill, during laboratory procedures, or while providing first aid or medical assistance.

Face Shields

Face shields may be worn in addition to goggles to provide additional face protection. A face shield will protect against splashes to the nose and mouth.

Aprons

Aprons may be worn to protect your clothing and to keep blood or other contaminated fluids from soaking through to your skin.

Wearing gloves, gowns, masks, and eye protection can significantly reduce health risks. The new OSHA standard covering bloodborne disease requires that you have appropriate personal protective equipment (PPE) and clothing available.

If you follow safe operating procedures and wear proper personal protective equipment the possibility of contracting a bloodborne disease is greatly reduced.

SELECTING PERSONAL PROTECTIVE EQUIPMENT

Janitors and housekeepers working in health care facilities must use personal protective equipment such as gloves. Single use gloves cannot be washed or decontaminated for reuse. Utility gloves may be decontaminated if they have not been compromised. If you are allergic to standard gloves, you must be provided hypoallergenic gloves or similar alternatives.

You should wear eye and mouth protection such as goggles and masks, glasses with solid side shields, and masks or chin-length face shields when splashes, sprays, splatters, or droplets of potentially infectious materials pose a hazard through the eyes, nose or mouth.

More extensive coverings such as gowns, aprons, surgical caps and hoods, and shoe covers or boots are needed when gross contamination is expected.

OTHER PROTECTIVE PRACTICES

If an your skin or mucous membranes come into contact with blood, you are to wash with soap and water and flush eyes with water as soon as feasible. In addition, you must wash your hands immediately or as soon as feasible after removing gloves. If soap and water are not immediately available, your employer may provide other hand washing measures such as moist towelettes. You still must wash with soap and water as soon as possible.

You must refrain from eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses in areas where they may be exposed to blood or other potentially infectious materials.

Normal clothing that becomes contaminated with blood should be removed as soon as possible because fluids can seep through the cloth to come into contact with skin.

Remember to use universal precautions and treat all blood or potentially infectious body fluids as if they are contaminated. Avoid contact whenever possible, and whenever it's not, wear personal protective equipment. If you find yourself in a situation where you have to come in contact with blood or other body fluids and you don't have any standard personal protective equipment handy, you can improvise. Use a towel, plastic bag, or some other barrier to help avoid direct contact.

Hygiene Practices

Hand washing is one of the most important and easiest practices used to prevent transmission of bloodborne pathogens. Hands or other exposed skin should be thoroughly washed as soon as possible following an exposure incident. Use soft, antibacterial soap, if possible. Avoid harsh, abrasive soaps, as these may open fragile scabs or other sores.

Hands should also be washed immediately or as soon as feasible after removal of gloves or other personal protective equipment.

Because hand washing is so important, you should familiarize yourself with the location of the hand washing facilities nearest to you. Laboratory sinks, public restrooms, janitor closets, and so forth may be used for hand washing if they are normally supplied with soap. If you are working in an area without access to such facilities, you may use an antiseptic cleanser in conjunction either with a clean cloth or paper towels or you may use antiseptic towelettes. If these alternative methods are used, hands should be washed with soap and running water as soon as possible.

Decontamination

Decontamination should be accomplished by using a solution of 5.25% sodium hypochlorite or household bleach diluted between 1:10 and 1:100 with water. The standard recommendation is to use at least a quarter cup of bleach per one gallon of water.

Decontamination can also be accomplished by using Lysol or some other EPA-registered tuberculocidal disinfectant. Check the label of all disinfectants to make sure they meet this requirement.

If you are cleaning up a spill of blood, you can carefully cover the spill with paper towels or rags, then gently pour the 10% solution of bleach over the towels or rags, and leave it for at least 10 minutes.

If you are decontaminating equipment or other objects such as scalpels, microscope slides, broken glass, saw blades, tweezers, mechanical equipment upon which someone has been cut, first aid boxes, or other contaminated equipment, you should leave the disinfectant in place for at least 10 minutes before continuing the cleaning process.

Of course, any materials you use to clean up a spill of blood or potentially infectious materials must be decontaminated immediately, as well. This would include mops, sponges, re-usable gloves, buckets, and pails.

For large blood spills, you should generally contact custodial staff for cleanup. They are trained to do this and use disinfectant to decontaminate the area. However, if you are trained to do so, you can cleanup blood spills if the above procedures are followed.

Sterilization

Sterilization can be achieved using a number of techniques such as heat, irradiation; filtration; and chemical sterilization. In the microbiology laboratory, the most widely used sterilizers are autoclaves. Autoclaves eradicate micro-organisms by use of pressurized steam to cause thermal stress. To achieve a sufficient kill rate, it is necessary to raise the temperature such that even the most thermo-tolerant micro-organisms are inactivated.

Sharps

Figure 20 Sharps container

Needles and broken glass must be disposed of in sharps containers. Improperly disposed needles can cause injury.

Needles

Needles should never be recapped.

Needles should be moved only by using a mechanical device or tool such as forceps, pliers, or broom and dustpan.

Never break or shear needles.

Needles shall be disposed of in labeled sharps containers only.

Sharps containers shall be closable, puncture-resistant, leak-proof on sides and bottom, and must be labeled or color-coded.

When sharps containers are being moved from the area of use, the containers should be closed immediately before removal or replacement to prevent spillage or protrusion of contents during handling or transport.

Broken Glassware

Broken glassware that has been visibly contaminated with blood must be sterilized with an approved disinfectant solution before it is disturbed or cleaned up.

Other Sharps

There are safety dangers associated with accidental breakage of glass capillary tubes. These tubes are used for collection of blood in a variety of health care settings, including hospitals; ambulatory care facilities, physicians' offices, blood donation facilities, and blood testing centers.

Accidental breakage of the tubes has been reported when the tubes are inserted into putty for sealing and during centrifugation.

Blood can spatter, potentially exposing personnel to bloodborne pathogens. The broken glass fragments also can injure the user, resulting in exposure to blood. Breakage during use may result in a penetrating wound and blood inoculation to the user.

To reduce the risk, OSHA recommends that users consider blood collection devices less prone to accidental breakage and readily available, including capillary tubes that are not made of glass, glass capillary tubes wrapped in puncture-resistant film, products that use a method of sealing that does not require pushing one end of the tube into putty to form a plug, or products that allow the blood to be measured without centrifugation.

Signs, Labels, and Color Coding

Warning labels need to be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material; and other containers used to store, transport, or ship blood or other potentially infectious materials.

Figure 21 Biohazard Label

These labels are fluorescent orange, red, or orange-red. Bags used to dispose of regulated waste must be red or orange red, and they, too, must have the biohazard symbol readily

visible upon them. Regulated waste should be double-bagged to guard against the possibility of leakage if the first bag is punctured. Labels should display the universal biohazard symbol.

Emergency Procedures

In an emergency situation involving blood or potentially infectious materials, you should always use Universal Precautions and try to minimize your exposure by wearing gloves, splash goggles, pocket mouth-to-mouth resuscitation masks, and other barrier devices.

If you are exposed

If you are exposed, however, you should wash the exposed area, report the exposure, fill out a report form, and request testing.

1. Wash the exposed area thoroughly with soap and running water. Use non-abrasive, antibacterial soap if possible. If blood is splashed in the eye or mucous membrane, flush the affected area with running water for at least 15 minutes.
2. Report the exposure to your supervisor or instructor as soon as possible.
3. Fill out an exposure report form. This form will be kept in your personnel file so that you can document workplace exposure to hazardous substances. This form can be obtained from your Safety Department.
4. You may also request blood testing or the Hepatitis B vaccination if you have not already received it.

Hepatitis B Vaccinations

Employees who have routine exposure to bloodborne pathogens, such as doctors, nurses, first aid responders, and similar occupations, must be offered the Hepatitis B vaccine series at no cost to themselves. The employees have a right to refuse the vaccination but will need to complete a form documenting their decision not to accept the vaccination.

Record Keeping

Medical records are to be retained for each employee with occupational exposure of bloodborne pathogens for the duration of employment plus 30 years. These records must be confidential and must include name and social security number; hepatitis B vaccination status, and results of any examinations, medical testing and follow-up procedures; a copy of the healthcare professional's written opinion; and a copy of information provided to the healthcare professional.

Training records must be maintained for three years and must include dates, contents of the training program or a summary, trainer's name and qualifications, names and job titles of all persons attending the sessions.

Medical and Training Records 83

The Bloodborne Pathogens Standard requires both medical and training records be maintained. For at least the duration of employment plus 30 years, and must be kept confidential not disclosed without written permission of employee, except by law and separate from other personnel records.

Chapter 5: CLEANING PROCEDURES AND TIPS

CLEANING PRINCIPLES

Cleaning can be a rewording and sometimes fun! It helps to know the basic cleaning principles. First look at what it is you want to clean. Do you know where the dirt came from? If not don't worry. I will give you some ideas on how to find out. It's also important to know the different cleaners and when to use them.

Let's get familiar with some basic cleaners!

Abrasives work like sandpaper and physically remove dirt. They come in powders, liquids and tools like brushes, sponges and pads.

Acid is the opposite of alkaline and can be used to remove rust stains, water deposits and even clean clogged pipes. Depending on its pH level the lower from 7 the more powerful. 7 being neutral and anything higher is considered a Alkaline. Some acids include lemon juice, (citric acid) vinegar, (acetic acid) and hydrochloric acid.

Alkaline can be used to remove heavy oil and grease, wash windows. Clean coffee and tea stains and dissolve grease. Alkaline include banking soda, ammonia, TSP, acronym for Tri-Sodium Phosphate, and lye.

Bleaches used to bleach out a discoloration by removing or adding oxygen. Bleaches are also used to disinfect because of their ability to kill germs safely. Bleach types include oxygen bleach which adds oxygen, reducing bleach which removes oxygen, and peroxide.

Detergents have the ability to lower surface tension and of deflocculating soil and dirt clumps and keeping them in suspension, so they can be washed away. Detergents are typically considered to be both water and oil soluble, which serves as an emulsifying agent. Detergents are used to clean both soil and grease. Detergents include laundry cleaners or synthetic detergents and soap.

Solvents are capable of dissolving another substance to form a uniformly dispersed mixture. They are chemically capable of dissolving oily and greasy soils and stain and speed up drying time because they evaporate faster than water. The types of solvents are water miscible or wet solvents like alcohol and butyl cello solve, and water immiscible or dry solvents like OMS, acronym for odorless mineral spirits and kerosene.

Enzymes are microorganisms engineered to break down protein and oil into their basic components. Enzymes are sensitive to pH changes and chemical reactions.

Now you have the knowledge of what the basic cleaners do. So now we need to identify the problem.

Some grime you might already know.

Some might be more complicated.

Food might automatically be considered a protein; some foods like juices and condiments contain dye.

Urine is a protein but it's also very acidic and may require a combination of enzyme and alkaline to completely remove it.

The pH Scale

In chemistry, pH is a quantitative scale for measuring the acidity or alkalinity of liquid solutions. The scale runs from the number 0 to 14. The number 7 on the pH scale is neutral, not acid or base. The number 0 on the pH scale is a strong acid. The number 14 is a strong alkali. In the cleaning industry the word "alkali" is used to denote base. So the pH scale runs from 0 acid to 14 alkali.

On the pH scale each full number increase represents a tenfold increase of the acidity or alkalinity of the solution. It is a geometric progression by the number 10. So pH of 1 is 10 times more powerful than pH of 2. The pH of 3 is 100 times more powerful than pH of 4.

The numbers on the scale denote the “strength” characteristics of the solution not the “quantity” or dilution of the solution. Whether you have a drum of lye or a table-spoon of lye they both have the same strength characteristics pH.

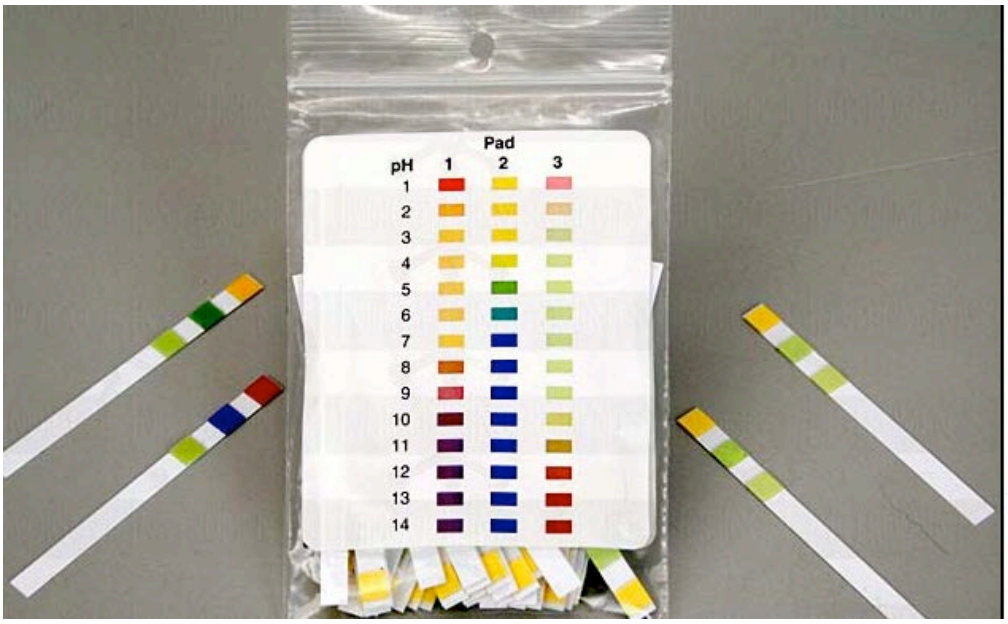

Figure 22 Commercially Available pH Test Strips

COLOR CODING OF CLEANING SUPPLIES

Why Color Coding is Important?

Color coding cleaning supplies improves training and communication. It is an intuitive visual coding system, removing language and literacy barriers when training a diverse workforce in proper cleaning processes. Color coding also provides supervisors with quick visual indicators for monitoring employee activity to prevent tool or chemical misuse.

Examples of the Use of Color Coding of Supplies in Cleaning:

Red: High bacteria areas for example restrooms with toilets and urinals.

Figure 23 Red Color Coding for Cleaning Supplies

Red cleaning supplies are used in areas of the restroom that have higher bacteria concentrations, where sanitation is a priority. Particularly toilets and urinals should have a high priority.

Yellow: Specialty cleaning for gymnasiums and laboratories.

Figure 24 Yellow Color Coding for Cleaning Supplies

Use for sinks and general restroom cleaning, to prevent cross contamination from toilet and urinal areas. May also be used for specialty cleaning activities such as gymnasiums, laboratories and floor-care projects.

Green: Foodservice areas for example cafeterias and kitchens.

Figure 25 Green color Coding for Cleaning Supplies

Green cleaning supplies should be used in areas that come into contact with food, including kitchens, cafeterias and employee break rooms. Or for example, a separate color could be used for food preparation areas for an added degree of safety. For example, in food preparation areas, one color, for example a light lime green, could be used for raw meats and another color for preparation of fruits, vegetables, and lettuces, for example a deep woods green.

Blue: General use for example offices, hallways and classrooms.

Figure 26 Blue Color Coding for Cleaning Supplies

Blue is used for general cleaning in offices, entrances, hallways and reception areas.

Figure 27 Red, Yellow, Green, and Blue Color Coded Microfiber Cleaning Cloths

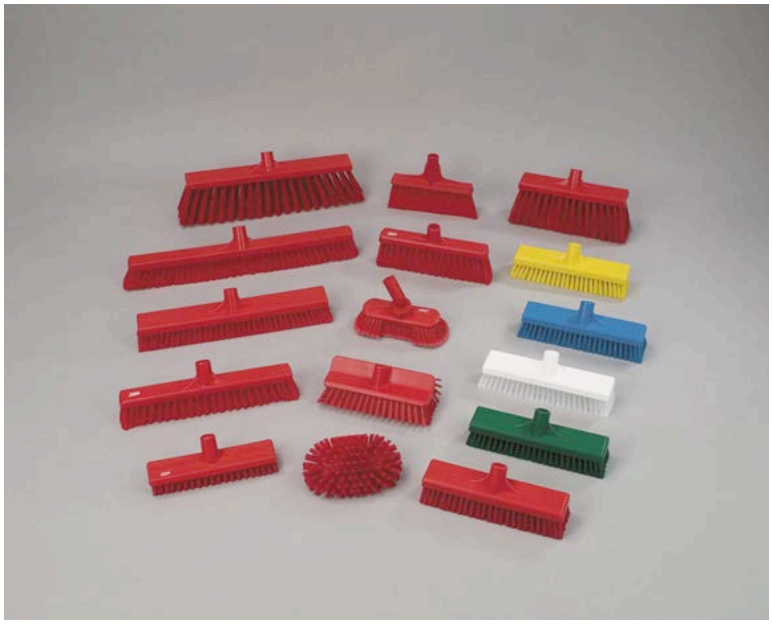

Figure 28 Color coded brushes

Color Coding Prevents the Misuse of Chemicals

The use of color coding for cleaning supplies prevents the misuse of chemicals and reduces the transfer of harmful substances by separating potentially hazardous cleaning chemicals into their appropriate areas. For example, mopping solutions can be coded for a specific floor to avoid the use of caustic chemicals that may permanently damage the surface.

Simplifies Supply Management

By keeping cleaning tools in their proper areas, color coding allows custodial departments to keep better track of their equipment and supplies. Productivity increases when employees no longer have to search for misplaced tools or proper cleaning equipment.

Improves Efficiency

Color coding enhances the professional appearance of employees and increases their efficiency by making it easy to organize the cleaning process.

Of course every facility is unique. The colors discussed here are just the common colors used in color coding. Additional colors may be used for specific applications, such as color coding types of chemicals for use with specific flooring materials or counter tops.

Figure 29 Many different colors for cleaning supplies

In addition, color tape or decals can be applied to your existing or off the shelf cleaning supplies. This gives you the ability to easily change cleaning applications and reassign supplies to different areas or functions as required. For example, color coded decals can be used to change supplies from the general use blue coding to the bathroom red coding.

It is never recommended to reassign any red labeled cleaning supply. Certainly if any red coded supplies are reassigned to any other areas, the supplies must be thoroughly decontaminated, cleaned, and sanitized by disinfection or sterilizing. It would make good sense to dispose of the red supplies and purchase new ones instead of risking cross contamination.

The next figure shows a series of colored and white brushes used in cleaning. Color coded decals or tape can be placed on the handles of the white brushes to achieve color coding.

Figure 30 Examples of colored and white brushes used in cleaning

Chapter 6: Cleaning Office Buildings

As mentioned above there are many different areas in office buildings, hospitals, and schools that require cleaning. Office buildings have restrooms with toilets, urinals, trash cans, and sinks to be cleaned. They also have restaurants, cafeterias, and kitchens that are food service areas. In addition, office areas have entry ways, hallways, and classrooms that must be cleaned. And finally there are specialized areas such as gymnasiums and laboratories that must be cleaned. In this chapter we will address cleaning the areas mentioned above; as well as mirrors, walls, floors, window coverings, upholstery, televisions, and computers.

CLEANING RESTROOMS

We will start with cleaning restrooms. The fact is that at least 50 percent of the public's complaints about buildings concern the upkeep of restrooms. According to industry professionals, there is an increase in public awareness of what one can acquire from dirty restrooms. Because of this, owners, operators, manufacturers, distributors and suppliers are all working hard to come up with systems and processes to make cleaning easier, safer, faster and better.

Restroom Deep Cleaning

Indeed, relatively recent innovations in restroom cleaning range from ergonomically designed toilet-bowl brushes and environmentally safe citrus-based cleansers to color-code and even touch-free cleaning systems.

Combined with old-fashioned common sense and attention to detail, the new cleaning improvements make it easier and safer than ever to leave a restroom spotless.

Because the definition of 'clean' is very subjective and varies from one environment to another, it is important to determine what is required in terms of cleanliness. One definition of clean is "free from dirt or impurities."

With the exception of critical care areas, such as those found in some health care facilities or food service environments there are few, if any, broadly established cleaning standards.

Toilet Cleaning Today

A workable cleaning schedule is important. Most restrooms are cleaned once a day and sometimes monitored throughout the day. Restrooms with high traffic volume, such as those in airports, restaurants and other establishments may need attention hourly. According to experts, managers and operators who thoroughly assess the overall use of each restroom in their facility will have far fewer restroom complaints.

Those who devise cleaning schedules that accommodate the need for regular cleaning and maintenance, as well as incidental and as-needed cleaning will not hear any complaints.

Top Five Restroom Complaints

Once the cleaning basics have been established – how clean and how often – cleaning professionals still face every restroom's "Top Five." These are the five typical restroom complaints and the most common cleaning challenges that workers face. They are:

1) Cross-contamination hazards

2) Soap and towel dispensers that don't work

3) Unsightly garbage

4) Soiled or stained surfaces

5) Persistent odors

CROSS-CONTAMINATION

There are a number of ways to prevent the spread of germs when cleaning a restroom.

Experts say, first kill the germs by using disinfectant solutions properly. In order to achieve disinfection, it is important to carefully follow label directions on the cleaner container.

More often than not, the directions will include specifics on how the cleaner is to be applied, as well as the length of time that it should remain on surfaces in order to achieve the required disinfection levels.

Other recommendations include using a color-coded system when cleaning. With a system like this, tools that are one color can be used for cleaning toilets, while a different color can be reserved for intense work.

This type of system will make sure that management, as well as the cleaning staff, doesn't use any of these tools outside the restroom.

SOAP AND TOWEL DISPENSERS THAT DON'T WORK

This is a case where back-ups make sense.

Managers may want to consider offering patrons both hand towel machines and hand blow dryers. This is an alternative solution if one or the other is out of order. Frequent service, repair, and replacement of machines also help eliminate this common complaint.

UNSIGHTLY GARBAGE

Regardless of whether a restroom is disinfected properly, unsightly garbage can make it appear unsanitary. Studies show that people often use a paper towel on door handles when leaving restrooms. If a garbage receptacle isn't near the door, they often drop the towel on the floor.

Figure 31 Unsightly Garbage Container

Analyzing traffic and these types of use patterns will help determine whether alternate placement or additional receptacles are needed.

SOILED OR STAINED SURFACES

An obvious first step in cleaning would be removal of visible soiled surfaces.

Figure 32 Dirt behind a Toilet

The nature of the surface and the soil will affect which tools and cleansers to use. For instance, degreasers might be just the solution for some of the surface stains found in fast-food restaurant facilities.

Industry manufacturers advise that users proceed with caution when using various cleansers. There are many very aggressive cleaners which can remove soil from surfaces, but will also harm finishes.

Surface damage only makes maintaining cleanliness and appearance that much more difficult in the future. Thus, selection of the mildest, yet effective cleaners is the best approach to balance these factors.

PERSISTENT ODORS

When dealing with this common complaint, building managers are advised to look down – at the grout or the floor drain.

Often times, odor-causing bacteria can be found in grout lines where mops may not reach. If this is the case, it may be helpful to re-evaluate the products used to do this cleaning.

Bacteria must be killed to remove odor. Other times the best thing to do is to look up, because light fixtures and even ceilings can harbor bacteria or mildew spores. It is important to note that thorough ventilation can reduce odors in high humidity areas such as restrooms. Make sure all air vents are cleaned.

Managers dealing with a lot of in and out restroom traffic, such as those found in schools and airports should carefully assess regular cleaning schedules to make sure these problems are addressed.

INNOVATIONS

When it comes to cleaning restrooms, manufacturers found that a thorough assessment of cleaning procedures is what led to some of the best innovations.

After spending many years evaluating restroom cleaning and the various procedures called for, manufacturers found two overall problems.

First, there was a very high turnover among employees and training was an issue within janitorial departments.

Second, many janitorial departments rarely updated the tools they used for cleaning, many of which were not ergonomically designed.

In response, the cleaning supply industry soon introduced various ergonomically designed tools. These were designed to reduce back pain through the use of longer handles, which also kept a worker's face away from the toilet bowl containing chemicals and fumes.

Manufacturers have commented that the use of these types of products will not only make cleaning easier and safer for workers, they will also result in worker retention.

Many of the improvements offered by manufacturers, suppliers, trainers and others in the industry have had a similar value-added impact on restroom cleaning.

Microfiber mop heads and cloths adhere to dirt more efficiently and are easier to lift than traditional “spaghetti” mops because they weigh less.

Figure 33 A Spaghetti Mop

Why use microfiber supplies?

Microfiber cleaning cloths provide a non-toxic and chemical free cleaning solution. They are outstanding for allergy and asthma sufferers, as well as anyone with chemical sensitivities. They also provide a healthier cleaning solution because microfiber cleaning supplies can be used without cleaning agents, soap, or detergents. In addition they are gentle on furniture, mirrors, windows, and porcelain as the fiber is fine and it does not leave scratches, mist or marks.

Microfiber mop heads and cloths are also more environmentally friendly because they use less water; they’re washable and reduce the amount of trash left at the end of the cleaning day.

Figure 34 Micro fiber mop system

Environmentally friendly green cleaning is a trend that has grown stronger in recent years. Many manufacturers have introduced tools that are designed specifically for recycling whenever green cleaning tools wear out. Instead of replacing the entire tool when a part breaks, many manufacturers provide replacement parts.

In addition, many workers use squeegees and water to clean restroom mirrors and windows. The benefit is that departments will use fewer chemicals and will not find trash bins filled with paper towels as a result of cleaning.

Cleaning chemicals should also be considered in green cleaning. There are many manufacturers that provide cleaning products certified with Green Seal.

These new innovations make it easier for companies to accept green cleaning into their programs.

WHAT DOES CLEANING GREEN ENTAIL?

First, a definition Green Cleaning is cleaning to protect health without harming the environment. Basic principles of Green Care are listed below.

Focus on entryways inside and out. An important goal in cleaning green is to trap and remove dirt and pollutants before they enter the building and to frequently clean the entrances and entryway mats.

Minimize particles and chemicals in the air by mechanically capturing dust and dirt, using course spray for chemicals and applying the cleaner to the cloth rather than spraying the surface to be cleaned.

Use chemical management systems for accurate product dilution. Train employees to use chemicals properly to minimize waste and maximize cleaning efficiency, an important element of cleaning green.

You should empty vacuum bags at the end of shifts or when half full for cleaner and more efficient operating.

Ensure proper vacuuming, extraction, rinsing and drying. Carpets can be a host for moisture problems and mold growth. Green cleaning means minimizing these problems.

Focus on preventative measures. Janitorial staff washes their hands and keeps equipment clean and well maintained.

Focus on touch-points. These are door handles, bright work and other areas where people come in contact with the facility or its fixtures. Focusing here makes cleaning green easier.

Apply disinfectant in restrooms properly and make sure the chemical has proper dwell time so that soil is thoroughly removed using less product. Use labels on chemical cleaners for proper use and review the Material Safety Data Sheets.

Promote safety and prevent cross-contamination. Safer products and proper use and storage of chemicals help create a safer environment. As discussed earlier, color-coded tools ensure that pollutants don’t get carried from one area, such as a restroom, to another room.

Whenever possible, use Green Cleaning Chemicals and Products. Green Seal’s Standard for Industrial and Institutional Cleaners (GS-37) certified chemicals for general purpose, washroom, glass, and carpet cleaning.

Figure 35 Green Seal Symbol

Use hand soaps that do not contain antimicrobial agents except where required by law or regulations for example healthcare or food preparation.

Microfiber dusting cloths and flat mops to collect dust and dirt pick up dust with minimal water and chemical use. These out-perform traditional dusting and mopping materials and can often be used to remove soils without the need for chemical compounds. Micro-fiber materials can be washed and reused to minimize paper towel waste.

Use of Effective Janitorial Equipment

One example of effective janitorial equipment that is environmentally friendly is the high-speed burnisher with dust control attachments that captures fine particles.

Figure 36 High Speed Burnisher with dust control

Carpet extractors and automatic floor scrubbers that reduce water consumption are also effective janitorial equipment.

Green cleaning includes the use of “Green” Paper products. These paper products are rated for recycled content in janitorial paper products bleached without the use of chlorine or its derivatives. In addition, paper products dispensed from large rolls to minimize packaging and waste are used in Green cleaning. Folded paper towels are discouraged.

“Hands-free” paper towel dispensers that reduce the potential for cross-contamination and high-capacity dispensers that promote waste-reduction by controlling towel usage are on the list of “Green” Paper products.

For all the innovations in the industry, the need for common sense and attention to detail is as great as ever. Training employees properly is a task that experts say should always be at the top of a building manager’s “to do” list. Industry professionals emphasize that it is important to have the proper tools when cleaning, but it may be even more important to have the proper training.

Attention to Detail

Just look at a restroom, any restroom. The entire area may be clean and sparkling, but what about the dirt build-up around stall posts or behind toilets or baseboards. Everything must be cleaned properly, or the restroom isn’t clean.

When cleaning toilets, one of the most important parts is the underside of the lip of the toilet. This is where urine and feces can be splashed and lime, calcium and rust stains can build up. That’s where bacteria and germs can form quite easily causing a filthy toilet. Cleaning the underside of the toilet is extremely important.

Dusting a restroom is also a critical part of your job. Dust, bacteria and germs can settle in vents, on tops of overhead ledges and, of course, on vents.

Cleaning and Sanitizing

Remember there is a difference between cleaning and sanitizing. Cleaning is washing or wiping a surface. Cleaning removes dirt, dust and debris, but it doesn’t kill bacteria. Sanitizing kills bacteria.

There are two ways to kill bacteria.

1. One is to use high temperature water, similar to very hot water used in a dishwasher. Hot water sanitizes the dishes and kills bacteria. That's not logical for restrooms, but you can use an approved sanitizer after cleaning to kill bacteria. Steam cleaners are commercially available.
2. Another way is cleaning and sanitizing. Cleaning and sanitizing is required in making surfaces free of bacteria. Remember that cleaning and sanitizing are two different systems and both are required when servicing restrooms and other areas.

Some sanitizers are called disinfectants and some products combine cleaning and disinfecting ingredients into one product. These combined products work well only on surfaces that are already relatively clean. For dirtier surfaces it is important to clean first and then apply a separate disinfectant.

For the disinfectant or sanitizer to be effective, it must remain in place for at least 10 minutes.

Deep cleaning of restrooms needs to be done at least weekly. However, a deep cleaning may also be required when cleaning a restroom for the first time, or when you encounter a particularly dirty situation. High traffic restrooms may need a deep cleaning once a day even if routine cleaning is done more frequently.

Most deep cleaning can be done with regular chemicals by mixing with less water so that they are more effective. In addition, it may be necessary to spend more time removing soils using brushes and scrub pads.

Steps to Cleaning a Restroom

Don't allow your restroom to become the source of customer or employee complaints. Adhere to the following guidelines to insure a cleaner, healthier restroom environment.

GET READY TO CLEAN.

When you are preparing to clean a bathroom, first make list of duties and cleaning supplies that will be required for each job. You should make certain the supply closet is clean and contains the proper supplies and equipment. An example list of cleaning supplies is provided below.

1.Disposable Latex Non-Medical Gloves—these gloves come in large, medium, and small sizes.

Figure 37 Gloves for cleaning

2.Safety Goggles or Safety Glasses

Figure 38 Safety goggles

3.Toilet Bowl Swab

Figure 39 Toilet Bowl Swab

4.Microfiber Mop System

5.High Density Trash Liners 32 Gal.

6.General Purpose Cloth

7.Extendible Lamb's wool Duster

8.Glass Cleaner—Windex® is a common commercially available glass cleaner

9.Cleaner/Disinfectant—Lysol® Brand Disinfectant All purpose Cleaner with Bleach and Antibacterial Scrubbing Bubbles® Bathroom Cleaner are common Cleaner/Disinfectants. There are other commercially available Cleaner/Disinfectants for professional cleaning services.

10.Kleenex® Cottonelle Toilet Tissue

11.Health Guards Regular Toilet Seat Cover Refill

Figure 40 Items for cleaning the bathroom

12.Sanitary Napkins or Tampons

13.Paper Towels

14.Hand Soap

15.“Wet Floor” signs

DISINFECT TOILETS, SINKS AND SURFACES

Before disinfecting toilets, sinks and surfaces make sure you are wearing the proper safety items such as gloves and protective eyewear. Be sure to review the MSDS for each chemical that you use. Spray all fixtures with the correct chemicals to allow time to “soak” in. Wipe clean.

RESTOCK EXPENDABLE SUPPLIES

When you are restocking expendable supplies, always make sure you fill the dispenser with the correct size paper or soap product. Be sure to secure the dispenser after it has been filled.

EMPTY, CLEAN AND RE-LINE WASTE RECEPTACLES

The next job will be to empty, clean and re-line waste receptacles. You should make sure all litter is picked up prior to emptying the receptacles. Use the correct size liners and taper the excess liners by tying on one corner.

SWEEP OR DUST MOP FLOORS

Depending on the floor surface, you will either sweep or dust mop the floor.

CLEAN SINK AND COUNTERS

The next job will be to clean the sink and counters. First, remove all debris from counters. Start at the backsplash of the counter and work towards the drain. Be sure to dry all surfaces.

CLEAN MIRRORS

To clean the mirrors, start in one corner and work from right to left. Use circular cleaning motions for best results. Inspect for streaks and smudges.

SPOT CLEAN WALLS, PARTITIONS, BRIGHT WORK

Spot cleaning is the next job. Using the proper chemicals spot clean all vertical surfaces starting at the bottom and working your way up. Clean all bright work. Bathrooms don't just need to be

clean, they need to shine. All that white porcelain, bright work and tile work demands weekly, if not daily attention.

Cleaning Toilets

WHAT YOU NEED:

1. Goggles or glasses.
2. Toilet brush.
3. Gloves.
4. Cleanser for inside of bowl.
5. Cleanser for outside of the toilet.
6. Paper towels or cloths.

REMOVE EVERYTHING FROM AROUND THE TOILET.

Cleaning the toilet is a messy job, and there's always the chance of splashing cleanser or toilet water outside of the actual toilet. Prevent extra cleanup by removing all excess items from around the toilet. Don't forget to remove anything on top of the tank to prevent dropping items into the bowl during cleaning.

FLUSH AND ADD CLEANING SOLUTION.

Flush the toilet with the lid down to prevent splashing or spraying. Add your choice of powdered, liquid, or gel cleanser to the bowl. Try to apply the cleaner as close to the toilet rim as possible to prevent diluted cleanser.

CLEAN THE EXTERIOR OF THE TOILET.

While the cleansing solution soaks into the toilet grime in the bowl, clean the outside of the toilet. Start at the top to prevent dripping on already clean surfaces.

Figure 41 Cleaning a toilet

Spray the tank, handle, and tank edges with cleaner and wipe down.

Next do the outside lid of the toilet.

Finally wipe down the entire bowl. Start with the sides and front before cleaning the bottom edges of the toilet where it meets the floor.

CLEAN THE TOILET SEAT.

The toilet seat should never be neglected. It is the part of the toilet that comes into actual contact with people, and it needs to be cleaned thoroughly. Raise the seat. Spray the seat, inside lid and the rim of the toilet with cleanser.

Figure 42 A urine stained toilet lid

Wipe down the lid, seat, and hinges at the back of the toilet seat. Some toilets have hinges that will pop open to allow better access for cleaning.

CLEAN THE INSIDE OF THE TOILET BOWL.

Begin cleaning the bowl from the top down. Always begin scrubbing under the rim first. Look under the rim to get all the stains and grime scrubbed away.

Figure 43 Cleaning the Inside of the Toilet

Even though there are many commercial products available, Lime-A-Way® is a commercial product that is a concentrated blend of mild organic and mineral acids formulated to remove calcium and other hard water mineral deposits from under the rim of toilets. It has a pleasant fragrance and is easy to use. It removes rust, calcium and lime build up from toilets and it effectively cleans even the toughest hard water stains.

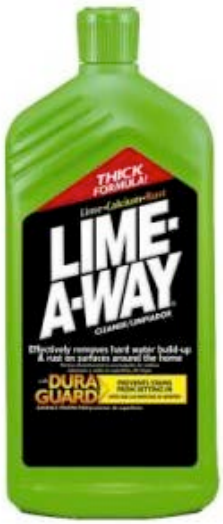

Figure 44 Lime A-Way a product for removing rust and calcium build up under the lip of toilets

Next scrub the bowl. Finally scrub the hole at the bottom of the toilet.

Figure 45 Dirty toilet bowl and hole at bottom

Always flush the toilet with the lid down.

WIPE UP ANY DRIPS OR SPILLS.

Wipe up any drips of cleanser or water that may have occurred.

Put away tools and trash. Replace the items removed at the beginning of the cleaning process.

TIPS FOR CLEANING TOILETS

1. Wear eye protection when cleaning a toilet. It prevents splatters of toilet water and cleaner. You may also want to use gloves to prevent contact with your hands.

2. Flush the toilet with the seat lid down to prevent splattering and splashing.

3. Do not use sponges when you scrub a toilet. Sponges are a great way to breed bacteria, and there are already enough in bathroom. Paper towels are great options because they are thrown away. If you use reusable cloths or microfiber cloths, wash them immediately in their own load on hot water with bleach.

In summary, to properly clean a toilet you should use the appropriate germicide to clean the seat cover top and bottom. Then lift seat cover and clean underside and top of toilet seat, under side and bowl rim, and finally clean the handle and exposed plumbing. Flush toilet with seat down and leave the seat up to indicate you have cleaned commode.

Cleaning Urinals

Some cleaning tools and materials for cleaning urinals are listed below.

1.Bowl swab
2.Trigger sprayer
3.Clean cloths
4.Gloves and goggles
5.Toilet bowl cleaner
6.Cleaner disinfectant, liquid or foam aerosol

In addition to toilets, urinals need to be cleaned, disinfected and deodorized. Disinfecting the urinal reduces the growth and spread of bacteria.

PROCEDURES FOR CLEANING A URINAL

Remember to put on gloves and goggles, and then clean the inside of the urinal.

First, apply 1 to 2 ounces of bowl cleaner evenly onto the bowl swab. Then swab the entire inside surface, under the rim, and where the water outlets are located.

Next, flush urinal and rinse bowl swab thoroughly. Set bowl swab aside, placing it into a carrying container.

Figure 46 A Urinal

Clean and disinfect the flush handle and all the chrome around the urinal. Wipe it dry.

Next, clean the outside of the urinal by spraying with a cleaner disinfectant. Pay special attention to the underside of the outside of the urinal. Wipe with a clean cloth.

Use a new cloth to start the next urinal. Toss used cloth to be laundered.

Mopping Restroom Floors

Cleaning Tools and Materials needed for mopping restroom floors.

1.Pump up sprayer and one bucket with wringer or Two buckets with wringers

2.Wet mop

3.Broom and dust pan

4.“Wet floor” signs

5.Gloves and goggles

6.Cleaner/Disinfectant

7.Cleaning Procedures:

The bathroom floor is mopped to clean and disinfect it and to eliminate odors and bacteria.

PROCEDURE FOR MOPPING A RESTROOM FLOOR

First, put on gloves and personal protection equipment. Remove all movable obstacles from the floor.

Sweep floor and pick up pile with dust pan.

Position the mop bucket or buckets outside door.

Place “Wet floor” sign at the entrance.

Figure 47 Wet Floor Sign

Use either the spray down, mop up method or the two bucket method to get cleaner disinfectant on the floor.

Apply product on floor, starting in the farthest corner.

Work moving backwards towards the door.

Be sure to get disinfectant around toilets, under urinals and under sinks.

Allow to stand amount of time recommended by manufacturer's directions.

Dip wet mop into clean water rinse. Wring out dry.

Start at the farthest corner and pick up disinfectant solution that is on the floor.

Dip mop in rinse water frequently. Continue until all disinfectant solution has been picked up.

CLEAN UP AFTER MOPPING

Always clean up after mopping the restroom floor. Most facilities have a janitor's closet with a deep well sink and cabinets for supplies. Use this sink to empty the bucket or buckets and sprayer should. And then, you should rinse the mop. All of the tools and materials should be stored properly.

Figure 48 Another Wet Floor Sign for Bathroom

REMOVE CAUTION SIGN AND INSPECT WORK

Review all of the jobs that you just completed. Make sure all dispensers are full, mirrors are streak free, and all fixtures are clean.

Cleaning a Laundry

Cleaning Tools and Materials needed are listed below.

1. Vacuum with hospital grade filter, dusting tool

2. Deck brush

3. Mop bucket with wringer

4. Clean cloths

5. Wet/dry vacuum

6. Pump up sprayer

7. Trigger sprayer

8. Clean bucket for rinse water

9. Gloves and goggles

10. Cleaner disinfectant

Laundry rooms must be cleaned to prevent possibility of cross contamination. The laundry is a central location for linen that gets redistributed throughout the facility.

Procedure for Cleaning the Laundry Room

DAILY PROCEDURES

Daily procedures for cleaning the laundry room will include

First put on gloves and goggles.

Next, you should the empty waste receptacles. Remember to tie the liner and dispose of the waste properly. And then, spray the waste receptacles with disinfectant from trigger sprayer, inside and out and wipe them dry with a clean cloth.

Damp dust with a cleaner disinfectant sprayed on a cloth. Rinse used cloth in clear water, reapply disinfectant to continue. All sills and ledges, outsides of wash and drying machines and

loading doors should be cleaned. Tables for folding linens should also be cleaned. Vacuum floor surface to remove all lint.

Using a deck brush and water from the mop bucket, remove any accumulations of soap on the floor surface.

The last job is to damp mop floor with a cleaner disinfectant starting at the back of the room and mopping to the door. Remember to place the “Wet Floor” sign at the door. Pick up solution with a wet dry vacuum.

WEEKLY PROCEDURES

Wash walls completely. To wash the walls fill the pump up sprayer with diluted cleaner disinfectant. And then, spray walls from bottom up. Next, wipe walls dry.

Clean any or all overhead pipes with vacuum dusting tool.

Wash all linen carts. Use trigger sprayer and spray all surfaces with cleaner disinfectant. Let the solution set for a few minutes and then wipe dry.

PERIODIC CLEANING PROCEDURES

The linen storage cupboards should be emptied and cleaned with a cleaner disinfectant.

Washing Walls

Cleaning Tools and Materials needed for washing walls and wall partitions are listed below.

1.Trigger sprayer

2.Clean bucket

3.Clean cloths

4.Gloves and goggles

5.Cleaner disinfectant

6.Cleaning Procedures:

Walls and Wall Partitions are washed because dirty walls are unsanitary. Dirt acts as a breeding ground for bacteria. In addition, dirty walls make the room appear dull.

PROCEDURE FOR WASHING WALLS AND PARTITIONS

Put on gloves and personal protection equipment.

Using a trigger sprayer filled with diluted cleaner disinfectant, spray solution on walls, starting from the bottom and working your way up.

Wipe walls clean from the top down using a clean cloth.

Rinse cloth frequently in clear water rinse.

Thoroughly clean the underside of the partitions. This area becomes dirty from urine splash and needs daily attention.

Window Washing

Cleaning Tools and Materials needed for washing windows.

1.Window squeegee

2.Clean cloths

3.Window tool and bucket or Trigger sprayer

4.Window cleaner

5.Gloves and goggles

6.Cleaning Procedures:

You should pay particular attention to cleaning windows. Clean windows add to the overall impression of cleanliness. More light comes in clean windows, improving the outlook of those inside the building. Windows need to be cleaned more often in colder weather.

Remember, condensation and temperature fluctuations encourage streaking and dust accumulation on windows. In addition, oils in exhaust and cooking deposit on the glass surfaces in colder weather.

PROCEDURE FOR WASHING A WINDOW

Put on gloves and goggles. Open drapes and raise venetian blinds or shades.

Next you should clear window sill of obstructions. Clean window sills inside and out using glass cleaner and a clean cloth.

Cover window with window cleaner solution using a trigger sprayer or window tool.

USING A SQUEEGEE

Remove solution and dirt from window using a squeegee. Move the squeegee from side to side or in a figure eight motion, or move it from top to bottom of the glass. Wipe off squeegee with clean cloth after each stroke.

Figure 49 A Squeegee

After using the squeegee, wipe the glass dry with a clean cloth. When finished, wipe off window sills with a clean cloth. Clean window frames with window cleaner and a clean cloth.

When complete, close drapes and put blinds or shades in place.

Clean and return tools and materials to storage area.

Dusting

Prevent dust by using two entrance mats at each entrance. One just outside the door and one just inside the door will reduce the amount of dust, dirt, and debris that enters your facility.

Check and maintain your air filters to make sure they are functioning properly. Air filters will last between 1-3 months, but should be changed as they become clogged with dirt and debris.

By keeping windows closed, you'll prevent dust and debris from blowing into your home. Double check your window and door weather-stripping to make sure it is still functioning properly.

There are many dusting products on the market, but each one has its own set of pros and cons. Use the right dusting tool for your jobs. Microfiber cloth dusting supplies is a favorite.

If you use a furniture oil or polish, be sure to follow the directions and don't overuse the product. Overuse or improper use can lead to a buildup on your furniture or clouding of the wood surfaces.

Dust from top to bottom to prevent going over surfaces more than once. Sometimes you may need to wet dust after you dry dust. Always dry dust first. Be careful about allowing even a small amount of water on wood surfaces.

CARE FOR FLOORS

CARE FOR WOOD FLOORS

Regular cleaning keeps wood floors and furniture looking their best. All you need is a good vacuum or microfiber dust mop, a soft cloth, and Murphy Oil Soap. It's easy!

Vacuum your floors and dust furniture daily. Gritty dust can scratch wood surfaces. For effective vacuuming, use a Windsor with Sensor technology. It will automatically adjust to your floor type

Figure 50 Windsor® Sensor Technology Vacuum Cleaner

And for effective floor cleaning, use the microfiber mop system for both dry dusting and wet mopping. Mop up spills right away to avoid stains.

Cleaning wood floors regularly with Murphy Oil Soap Original Formula is easy. Dilute Murphy's in a bucket according to directions. Use a microfiber wet mop.

Figure 51 Murphy® Oil Soap

Wipe up any excess water with a soft, dry cloth or dry dust mop.

Murphy's isn't just for wood flooring and furniture. It also safely cleans laminate flooring and many other surfaces.

CLEANING MARBLE FLOORS

Marble is often used for floors in commercial office buildings and hotels in lobbies in entry ways, halls, and lobbies. Janitors are required to maintain these floor materials.

Marble is generally polished, and unless sealed it is porous and easily stained. Marble is also able to be etched by acids. Marble may be stone, but it stains easily, so you need to wipe anything off that is spilled on it immediately, as you would on a wood surface.

Regular cleaning includes washing marble surface with lukewarm water and wipe dry with a clean cloth. Wiping marble surface with a damp chamois is suggested as it will not leave streaks.

Unsealed Marble that has become dull can have a shine brought back to it using a commercial marble cleaner and polish. For badly damaged marble surfaces, if it's scratched or etched by excessive wear, you will most likely need to have it professionally polished. Marble professionals have the right equipment for the job and know how to use their tools properly.

There are different types of stains that can affect marble. Organic stains, such as tea or coffee. These stains will need a poultice soaked with 20% peroxide and a few drops of ammonia.

Stains that are oil based, such as the oils from butter, lotions need attention right when the spill occurs. You can do this by spreading the surface with ordinary household corn starch. Let it stand for a few hours, Scrub with a stiff brush and hot sudsy water. Or wipe with a dampened cloth of ammonia.

A commercial rust remover can be used to remove rust stains from an item such as a metal lamp on the surface or metal container. Acid stains, from citrus fruits juices and carbonated beverages should be wiped up immediately; they can etch and dull the surface. If stains seem to be impossible to remove, your Marble professional will be able to help remove them and bring the beauty back to your surface.

CLEANING LINOLEUM AND VINYL FLOORS

Proper care of your linoleum or vinyl floor prevents damage, extends its life and keeps it looking like new for years. You should always vacuum or dust hard floor surfaces before mopping.

Linoleum floors generally require only warm water for cleaning. Most detergents won't rinse clean leaving behind a sticky residue. That residue becomes a magnet, attracting dirt off the bottom of shoes. It builds up, deteriorating the sealant and leaving you with the hard job of stripping and waxing.

Figure 52 Linoleum Flooring

If you find your floor requires a cleanser, use Ivory® Liquid dish soap or equivalent. Fill your bucket with suds, mop away then rinse. Ivory rinses clean so the sticky buildup never causes problems. Other detergents can be too harsh for the floor so stick to Ivory or an equivalent. Mix dish soap in a spray bottle of water as an all-purpose cleaner. It's inexpensive and quite a good cleaner.

Some linoleum floors have grooves so deep you can sink a submarine. Grab a nylon bristle brush other brushes might scratch the floor. Then, fill your bucket or sink with warm water add a good squirt or two of the dish soap and scrub the floor; and then rinse. Your floor needs this deep cleaning only twice a year.

What to do about black heel marks. Not a pretty sight. Spray a little WD-40® on a towel; lightly rub and they disappear without scrubbing. Rinse thoroughly with sudsy water or the floor might be slick.

Carpet Care

Maintaining carpet through regular vacuuming, deep cleaning, and stain removal has many benefits:

• Extend the life of the carpet as ground in soil particles weaken carpet fibers

• Provide a fresh clean look to a room.

• Making a room smell better.

• Helping allergy and asthma sufferers by removing germs and dust, thus better

• Indoor Air Quality.

VACUUMING

Dirt and grit damage carpet by rubbing against the fibers. Regular vacuuming prevents the deep abrasion that ruins carpet. Remember to change the disposable bags often. Loose threads should be cut off with a scissors.

DEEP CLEANING

Carpet should be deep cleaned with hot water extraction or steam cleaning every 12 to 24 months. Steam cleaning involves spraying a high pressure solution of water and detergent onto the carpet and vacuuming the dirty solution out.

SPOT REMOVAL

It is very important that all stains get prompt attention since stains can be better cleaned right after they happen. Follow these steps when removing a stain.

Remove excess wet stains by blotting with a clean absorbent cloth (use a wet/dry vacuum for large stains) and dry stains by scraping with a dull edge. Always blot or sponge stains, scrubbing can spread stains and damage carpet fibers.

Apply cleaning solution to a clean absorbent cloth or paper towel. Do not soak the carpet. Working from the edges of the stain to prevent spreading, blot until no more stain is absorbed. If necessary, use your fingertips to work the solution to the base of the stain.

Wait 3 minutes for the solution to work

Apply clean water to another cloth or paper towel. Blot to remove any residue.

Carpet fibers may later absorb deep stains. More cleaning may be necessary.

Allow carpet to dry, vacuum or brush carpet to restore its texture.

Blind Cleaning

When it's time to clean your blinds and shades, even your best friend is hard to find. But there are some simple and effective ways to clean blinds and shades with minimal effort.

ALUMINUM MINI-BLINDS

Use ordinary soft, clean dust cloths, chemically treated dust cloths, vacuum cleaner brush attachments, or other available ordinary household aids. The paint surface of the slats is quite smooth and dust is easily brushed off if done at regular intervals.

Figure 53 Vacuum Cleaner Brushes

To vacuum, use the brush dust head attachment and tilt the slats first up, then down but not entirely exposed to reach the entire top and bottom surfaces.

To dust, use a soft clean cloth or chemically treated dust cloth and tilt the slats as above.

To wash, use a damp cloth or sponge and mild detergent. Use warm or cold water - NOT hot water. Tilt the slats as above. Protect the floor or sill from excess water. The blind can also be taken down, placed in a bath tub of mild soapy water, then rinsed clean, wiped dry, or allowed to dry completely in the open air.

WOOD BLINDS

Care must be taken when cleaning real wood blinds. Washing the blind is NOT recommended. Although the wood is sealed, water or even excessive dampness may cause warping or discoloration of the slats.

Figure 54 Wood Blinds

Since the surface of the slats is smooth, dust may be easily brushed off at regular intervals using a clean soft dust cloth or a vacuum cleaner brush attachment. Clean them as described above.

FABRIC PLEATED SHADES

Most of the cellular shades, like the Hunter Douglas Duette shade, are anti-static, and they require very little cleaning. A light sweep with your vacuum cleaner brush attachment is all that is needed to keep them dust free. For a more thorough cleaning, the entire shade assembly may be gently wiped with a soft damp cloth using lukewarm (not hot) water.

Take special care when handling opaque blackout shades to avoid creasing, and do not immerse them in water. For tough stains, spot clean with a mild detergent. Some shades, like the Graber CrystalPleat® have a "soft hand" fabric.

Figure 55 Graber Crystal Pleat Shades

Be very careful when trying to clean these types of shades as they tend to "pill". When a fabric pills it becomes covered in small balls of matted fiber because of rubbing.

Computer Rooms

How to clean computer rooms

Things you will need:

1. Air duster

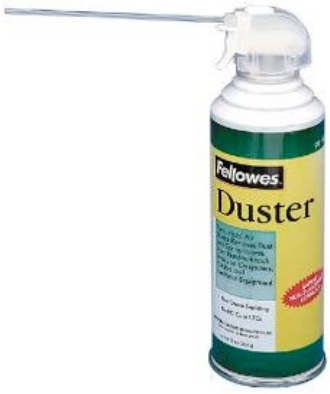

Figure 56 An example of a commercially available air duster

2. Microfiber duster
3. Vacuum cleaner
4. Cotton towel

The flooring beneath our computer desks needs to be cleaned to ensure our computers stay in top working order. Dirt and dust particles building up on the floor below your computer can affect the health of your computer. Clean floors will diminish the risks of fouled circuitry. Regular cleaning of your computer room floors will ensure that your equipment will operate efficiently.

Make sure your computer is turned off before you start. Be careful not to unplug or loosen any plugs.

Spray the cords underneath your desk with an air duster. Get off as much loose dirt and dust particles from the computer cords as possible.

And then, run a microfiber dry duster over any loose cords on the computer room floor. Remove dust from any outlets and the underside of cords.

Use a hose attachment with an angled edge on your vacuum to remove the dirt from your computer floor. Lift up the cords to get underneath. Do not use the vacuum's sweeper brush on the cords.

Immerse your cotton towel in warm water and wring it out. With the barely wet towel, work under your computer desk to remove any last speck of dust particles from beneath your desk. Do not put the wet rag on the computer's cord.

Dust under computer desks every week. On a monthly basis, follow the entire computer floor cleaning routine.

UPHOLSTERY CLEANING

Upholstered furniture can be very expensive. If you have a sofa, chair, loveseat, or some other type of upholstered furniture that is in good condition but just dirty, these upholstery cleaning tips will save money and time.

The key with upholstered furniture is choosing the appropriate type of cleaning method. For example, an antique chair that is hand embroidered would require a different cleaning technique than a sofa that was store bought.

GETTING THE UPHOLSTERY STAINS OUT

Maintaining clean furniture is part of having a facility where people enjoy working or visiting. With furniture, upholstery is just one aspect but an important one. Think about all the times people have eaten on the sofa, dropping bits of food or drink that leave stains. Then you have the dirty feet, dirty clothing, and just everyday wear and tear that can leave upholstery looking dirty and drab. Getting those stains out does not have to be painful.

The most important thing to remember when cleaning upholstery is to consider the fabric. If you are unsure, you can check with the manufacturer’s information. Then, before you start in cleaning a large stain, we recommend you work first on an inconspicuous area to ensure no discoloration

or damage is done. With that done, the following are a few of the more common stains found on upholstery and methods for removing them.

OILY CHEESE STAINS

Cheese is another food product that is seen spilled on upholstery. Again, things like nachos are a favorite snack food but they leave stains. For cheese, mix one teaspoon of mild, ph-balanced detergent with one cup of warm water. With a clean, white towel, blot at the cheese stain. Then mix one tablespoon of regular ammonia with one-half cup of water, again blotting the stain. Finally, blot the stain with clean water to remove any detergent or ammonia and let the area dry.

INK STAINS

Clients or employees may sit down with a pen in their pocket and before you know it, a stain is left. Ballpoint pens, especially blue, are common stain makers. Ink stains can be removed. The key is to be patient and persistent, as ink stains can be stubborn. Just make sure you only blot. Rubbing could cause the ink stain worsen. You have a number of options when removing ink stains.

Spray hairspray onto a clean, white towel and then dab at the stain, followed by blotting with a clean, dry towel

Treat a clean, white towel with isopropyl rubbing alcohol. Again, blot the ink stain, followed by a dry towel

Again, with a clean, white towel, apply nail polish remover or acetone. Blot the ink stain from the outside edges toward the center

Using a clean, white towel, use spirits of turpentine, blotting as with the other treatment options

Commercial products that work well on ink stains include Carbona or Afta; these are extra strength bio-enzyme cleaners that are formulated to get out tough stains. They come with a built-in applicator brush. With both, you would use a clean, white towel, dabbing the affected area.

COFFEE STAINS

Sipping coffee on an upholstered chair or sofa is everyday occurrence. To get rid of a coffee stain, mix one teaspoon of a mild, ph-balanced detergent with one cup of warm water, then blot from the outside in. Follow this with blotting the stain with a mixture of one-third cup white vinegar with two-thirds cup water. When finished, use a clean, white towel to absorb any excess, allow the area to dry.

VACUUM UPHOLSTERY

Upholstery cleaning tips are important since dust settles onto fabric more than hard surfaces. Therefore, regular cleaning to keep your upholstery looking and smelling clean is essential. In fact, we recommend you clean your upholstery furniture once every two months. Typically, you can use your regular vacuum cleaner with the appropriate attachment to keep it clean. Just keeping the dust off will help furniture last much longer.

Carpet Cleaning

Strive to clean your carpet as soon as you notice any spills or spots on you carpet's surface. This action alone can save lots of time and damage, as well.

Before cleaning any surface areas, use a small portion of your cleaning products over a small and hidden area to avoid damage or discoloring of the carpet.

Proper care of your floor prevents damage, extends its life and keeps it looking new for years. How do you properly care for your flooring?

Vacuum carpet regularly, and do not use liquid carpet shampoos to clean them. The shampoo can't be completely rinsed out leaving a sticky residue. That residue acts like a big magnet pulling the dirt from the bottom of your shoes. Use dry carpet cleaners instead. Stores selling vacuum cleaners carry them.

Getting out old shampoo becomes the trick. Rent a shampoo machine that cleans with water. You should mix 1 cup vinegar per 2 ½ gallons of water and clean according to directions on the vacuum cleaner. Go back over the carpet with warm water only. The vinegar pulls out the old

shampoo cleaning the carpet as well. It may take a time or two, but your carpets will be soft and free from grime. The hot water reactivates the shampoo already in the carpet providing the needed cleansing action.

Stains in carpet can be the difficult to remove. Never rub a stain, just blot. Rubbing breaks down the fibers and spreads the stain. Remove most food stains with shaving cream. Spray on and resist the temptation to rub it in then let it set 15 minutes. Rinse with a vinegar and water solution.

Club soda generally removes red wine stains. Remove red dye stains found in drink mixes, Popsicles, dog and cat food with a 30/70 solution of peroxide to water. Remember peroxide is bleach so test an inconspicuous spot first for color fastness. Apply the mixture, wait 30 minutes then remove as much moisture as possible and rinse with a vinegar/ water solution. If the stain remains add a bit more peroxide to the mixture and retreat

Brake cleaner also does a good quick job of removing most food stains. Dab a little on a clean cloth and gently blot the stain. Rinse with soap and water. Brake cleaner contains the same chemical professional dry cleaners use to clean stains in clothing. Do not pour brake cleaner directly into the carpet. It could dissolve the adhesive holding the fibers in the carpet.

Oops, someone's dog had an accident on the carpet and the stain and smell refuse all attempts at removal. First try an enzyme product. Pour on enough to saturate to the pad and treat an area twice as large as the stain. Urine hits the pad and spreads. Let it set a couple of hours. Enzyme products are available at commercial janitor supply stores, Pet stores, RV or marine stores. They are used in the holding tanks to dissolve solid material.

If the enzyme product does not remove all the stain or odor, baking soda and peroxide remain your best chance for success. Mix a 30/70 solution of peroxide to water adding 1/2 teaspoon of baking soda per cup of mixture. It bubbles and fizzles, but not before removing the stain and smell. Always test a spot first for colorfastness. Peroxide is bleach and may discolor the carpet. Blot up what you can with an old towel and rinse well with 1/3-cup vinegar per quart of water.

Oil, grease, magic marker and ink can also be the difficult to remove. Most janitorial companies or WalMart carry a product called De-Solv-it® Cleaner. WD-40® or Orange Clean Degreaser® all work wonders removing these stubborn stains.

Figure 57 Can of WD-40

Rubbing alcohol removes ink. Blot on allow to set 30 minutes and blot to remove. Rinse with sudsy water. Magic marker is generally permanent and you may not be able to remove it.

If you find bubble gum stuck to carpet, freeze it with ice cubes and chip off what you can with the blunt side of a kitchen knife. De-Solv-it® Cleaner removes the rest.

Wax on carpet can also be frozen with ice and chipped off. Wax needs heat for removal. Some newer carpets are quite sensitive to heat and scorch easily. So test an out of the way spot first. You can also use a hair dryer set to the hottest setting. Set your iron to a low to medium heat. The less heat you use, the less chance of scorching your carpet. Take a white paper towel or paper bag with no writing on it as the dye may transfer to the carpet, and then put the towel down on top of the wax. Then iron the towel for no longer than 2 seconds. Move the towel and redo if necessary. Generally once is enough.

Drapery Cleaning

Drapes are notorious for quietly accumulating dirt and absorbing odors, contributing to a room full of grime. In some cases it can aggravate asthma and breathing conditions.

Cleaning the curtains can be a tedious, time-consuming task. To clean drapes, you must haul down the drapes, wash, and re-hang them. Before you start there are some factors you should consider.

- Curtain fabric is rarely pre-shrunk like clothing. There's a risk that the fabric will shrink as it is washed and dried, which results in gaps and shortages when the drapes are re-hung.
- Heavy fabrics can lose shape when washed, turning all those carefully placed creases and pleats into just a memory.
- Rarely color-safe, drapery fabric can fade and lose color after a cycle through the washing machine and dryer.

Your company might consider having the drapery cleaning job done professionally; if one is available in your area.

Water can stain certain fabrics such as silk and alter the texture of others, changing the way the curtains hang and fall at the window

If you choose to rely on professional curtain cleaners, you may hire two types of cleaning companies. The first will remove the drapes to clean them; expect them be returned within three to five days. The second will use a method to clean the drapes while they remain hanging at the windows.

Companies that promise quick, easy service use one of two processes to do so:

1. The dry cleaning method is accomplished by spraying dry cleaning chemicals onto the drapes and vacuuming off the residue and dirt. Though convenient, keep in mind that the cleaning solvents can be extremely flammable, may linger in your facility and should not be inhaled.

2. The steam-cleaning method is when the cleaners use a controlled attachment to run a steam machine over the drapes, steaming away dirt and odors. This process does not work on water-sensitive fabrics such as silk where there is a risk of water damage.

It can be tempting to bring your drapes into local dry cleaners, but keep in mind that dry cleaning yards and yards of fabric can be costly. And since the chemicals used by commercial dry cleaners are designed to clean clothing, the results are never guaranteed when used to clean curtains.

Television Cleaning

TOOLS AND MATERIALS NEEDED

1. Trigger sprayer
2. Clean cloth
3. Gloves and goggles
4. Cleaner disinfectant

In a hospital setting, a television is cleaned and disinfected to reduce the spread of infections that originate in patient contact equipment.

For general public use, televisions are cleaned and kept dust free to increase its life.

PROCEDURE FOR CLEANING A TELEVISION

Put on your gloves and goggles.

Fill trigger sprayer with diluted cleaner disinfectant solution following manufacturer's directions.

Turn off the television. Never clean the television while it is turned on. If the patient/resident is watching it at the time, ask if you may turn it off for cleaning.

Spray disinfectant solution onto clean cloth. Never spray the disinfectant solution directly on the television!

Wipe the front and side vertical surfaces and the top and bottom of the television. Never wipe the back of the unit with a wet cloth!

Chapter 8: Food Service

CLEANING THE KITCHEN FOR THE JANITOR

Kitchen and food service safety is an important topic. Kitchens and food service areas are cleaned by janitors. They must know how to safely clean these areas. They must understand their responsibilities and how they differ from kitchen staff. This chapter covers such topics as slips and falls, cuts, responsibilities for safety, use of wiping cloths, spills, blocking exits, and storage of cleaners.

Slips and Falls

Any spill, especially water spills in the kitchen or food service area should be mopped, and then wiped dry with a dry rag or towel.

When grease, mayonnaise, salad dressing or other items containing oil are involved, after you clean the spill, use an abrasive powder such as a powder cleaner. This removes the oil, under the surface of the floor. This is particularly critical on tile and marble floors. If you don't use the abrasive powder, the floor will remain very slippery.

When cleaning up broken glass, never use your fingers to pick up the glass. Use a small broom and dustpan.

You should use caution signs in the area to alert others. If you see something on the floor that doesn't belong there, pick it up. Always wear approved safety resistant safety footwear in the kitchen. When you see water on the floor or some other hazard, clean it up!

About Cuts

Quite a few injuries occur from people opening boxes with box cutters. Box cutters are often called finger cutters. That's right, finger cutters. Devices such as this are designed to cut. They cut cardboard, skin, fingers, hands, arms, legs…that's their purpose to cut. When using cutters, you must keep your free hand out of the cutting path of the blade.

Responsibilities

Employers have the primary responsibility for protecting the safety and health of their workers by providing them with proper equipment that is working properly, personal protective equipment, and a safe working environment. Employees are responsible for following safe work practices. Basically your safety is your responsibility.

Use of Wiping Cloths

Kitchen staff knows to use separate wiping cloths for cleaning surfaces that come into contact with food from cloths used for equipment, prep tables, or cutting boards.

Janitors and custodians are responsible for general cleaning in kitchens and food service areas. Cloths used for floors, walls, countertops can never be used for items that come in contact with food.

Each type of wiping cloth should be stored in its own separate labeled or color coded container containing sanitizing solution. There are at least two types of sanitizing solutions that may be used. One is a bleach solution with a 50-100 parts per million (ppm) of sodium hypochlorite and the other is a quaternary ammonia solution at 200-300 ppm ammonia. ***Never mix bleach and ammonia!***

Spills on the Floor

Spills on the floor are a workplace hazard that must be cleaned up immediately. Janitors or custodians are usually the first to be called when a spill occurs.

Coworkers should be advised about the spill verbally or with a “Wet Floor” sign to prevent anyone from accidentally walking through the spill.

It is important to identify the nature of the spill. This will aid in determining how to proceed with clean up. A bucket and mop should be used to apply the correct cleaning solution. Directions for proper use on the cleaning solution container should be followed and any remaining moisture should be cleaned up.

Post warning signs or cones should be used to divert floor traffic until the clean-up site is dry.

Cleaning supplies should be put away properly.

STORING CLEANERS

Cleansers and other non-food items are ***ALWAYS*** stored separately from foods. Separate shelves, separate cupboards, sometimes even separate rooms.

Figure 58 Storage Cabinet for Non-Food Items

Chemicals used by janitors are NEVER stored in food containers, nor are foods to be stored in chemical containers.

Chemicals should be kept in their own original packaging or in other break-resistant, clearly labeled containers.

When using chemicals, follow the handling instructions contained in Material Safety Data Sheets or MSDSs that are available in your workplace.

Chemicals should be kept away from food handling areas. If chemicals come into contact with food, throw the food away.

You should always store chemicals below and away from food and utensils and the farther, the better.

Chapter 9: Storing and Handling Garbage

This chapter covers storing and handling garbage.

Never store garbage in your facility, move it promptly to a waste container outside. This is especially important if you are collecting garbage in a food handling area. Make sure that doors and external windows keep out pests, such as flies and rats.

Figure 59 The Common House Fly

Careful storage of waste is also important to avoid attracting pests. You should:

- Not allow food or other waste to gather in food areas.
- Keep the storage area clean.
- Arrange for garbage to be removed regularly.

When you move garbage; wash your hands. Don't wait for garbage to pile up, keep it moving and make regular 'garbage runs' out to the refuse container.

- Place garbage in sturdy, leak-proof plastic or metal containers with tight-fitting lids.

Figure 60 Garbage Can with Lid

- The containers should be lined with clear plastic bags, or with wet-strength paper.
- Clean and sanitize garbage containers frequently to prevent odor and keep from attracting insects and other pests.
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Figure 61 Assortment of Trash Cans

After any kind of garbage duty you must wash your hands.

WASH YOUR HANDS

Washing your hands is simple, right? But are you sure you are doing it the right way? Here are a few tips for washing your hands.

Figure 62 Washing Your Hands

- Wet hands with warm water.
- Apply a generous amount of soap and lather hands well.
- Rub hands together for 20 seconds or the amount of time it takes to sing Happy Birthday; paying special attention to the areas between fingers and under nails.
- Rinse hands thoroughly with warm water.
- Dry hands with a disposable towel.
- Use the disposable towel to turn off the faucet and open the door, if in a public place.

Chapter 10: The End

We have discussed procedures and safety in the Janitorial and Custodial Industry. No matter what occupation you have, remember that there are responsibilities associated with your job.

We have covered many procedures and safety topics. Ideally safety is freedom from danger. As we stated earlier, every topic for the Janitor and Custodian cannot be covered in this one manual. Some of the topics that are covered include protection from the risk of harm or injury, achieving a clean, sanitary environment, procedures for cleaning, safety devices, and responsibilities.

Technology is moving ahead, changes are being made everywhere you go and everyone is busy. Business today is a fast paced no-nonsense environment where productivity and efficiency mean everything.

Each person has the responsibility for safety, not only for yourself and the safety of your co-workers but also for facility occupants.