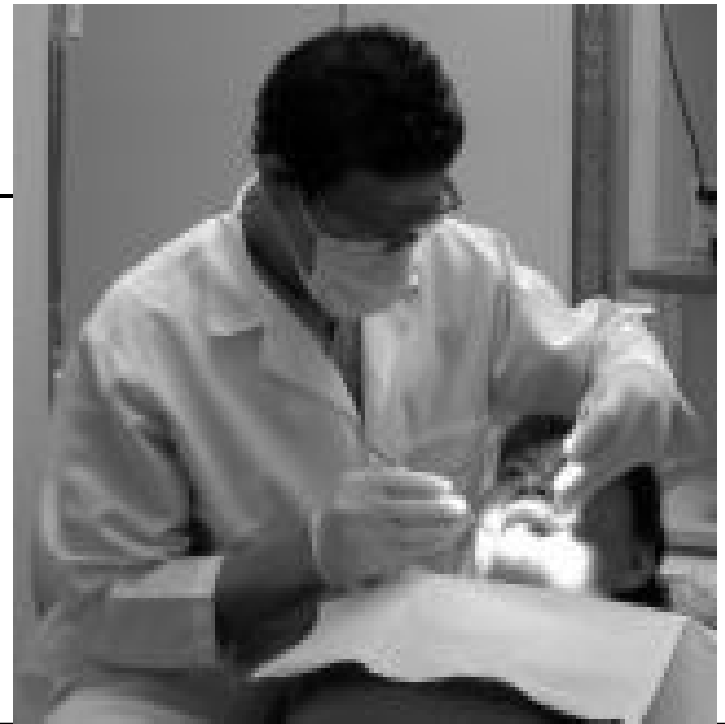


# TOSHA Compliance for Dental Offices

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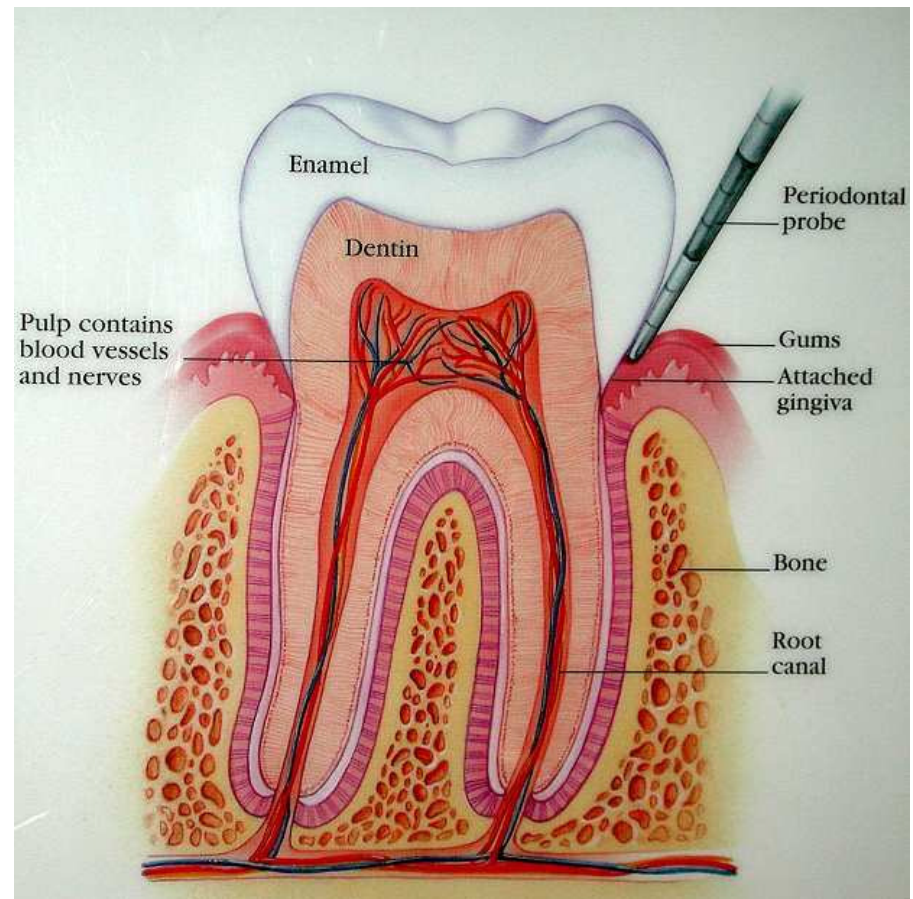




TOSHA believes the information in this presentation to be accurate and delivers this presentation as a community service. As such, it is an academic presentation which cannot apply to every specific fact or situation; nor is it a substitute for any provisions of 29 CFR Part 1910 and/or Part 1926 of the Occupational Safety and Health Standards as adopted by the Tennessee Department of Labor and Workforce Development or of the Occupational Safety and Health Rules of the Tennessee Department of Labor and Workforce Development.

# TOSHA required: Safety & Health Programs For Dentistry

- **Bloodborne Pathogens**
    - Exposure Control Plan*
    - Sharps Injury Prevention*
    - Sharps Injury Log*
  - **Hazard Communication Plan**
  - **Hazard Assessment for Selection of PPE**
  - **Emergency Action Plan**
- <http://www.osha.gov/SLTC/dentistry/control.html>





# Bloodborne Pathogens

1910.1030

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**Written Exposure Control Program (ECP) – Example at**  
[http://osha.gov/OshDoc/Directive\\_pdf/CPL\\_2-2\\_69\\_APPD.pdf](http://osha.gov/OshDoc/Directive_pdf/CPL_2-2_69_APPD.pdf)

- ☐ Engineering Controls (safer medical devices)
- ☐ Personal Protective Equipment
- ☐ Hepatitis-B vaccine and Antibody Test
- ☐ Confidential Follow-up (Exposure Incident)
- ☐ Bio-Hazard Labels
- ☐ Initial and Annual Training
- ☐ Sharps Injury Log / Sharps Injury Prevention

<http://osha.gov/SLTC/bloodbornepathogens/index.html>



# Bloodborne Pathogens

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- ☐ Hepatitis B
- ☐ Hepatitis C
- ☐ HIV
- ☐ Syphilis
- ☐ Malaria
- ☐ Brucellosis
- ☐ Babesiosis
- ☐ Leptospirosis
- ☐ Arboviral Infections
- ☐ Relapsing Fever
- ☐ Creutzfeldt-Jacobs Disease--Mad-cow
- ☐ Viral Hemorrhagic Fever--Ebola

# Other Potentially Infectious Materials--OPIM

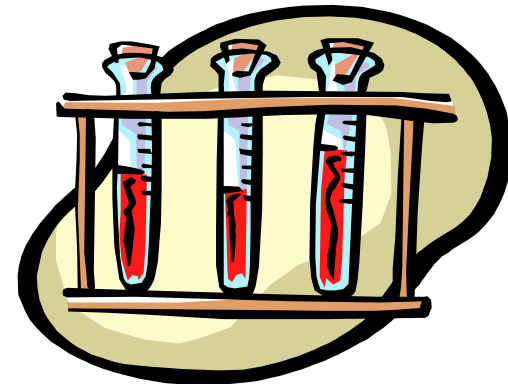
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- ☐ Semen
- ☐ Vaginal secretions
- ☐ Cerebrospinal fluid
- ☐ Pleural fluid
- ☐ Pericardial fluid
- ☐ Peritoneal fluid
- ☐ Amniotic fluid
- ☐ Saliva in dental proc.
- ☐ Any visibly contaminated body fluid
- ☐ Any body fluid where differentiation is difficult
- ☐ Any unfixed tissue or organ

# Universal Precautions

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- ❑ Must be observed
- ❑ Include in Exposure Control Plan
- ❑ What is/are universal precautions?
  - All blood and body fluids are treated as if known to be infected with HIV, HBV, HCV, etc.





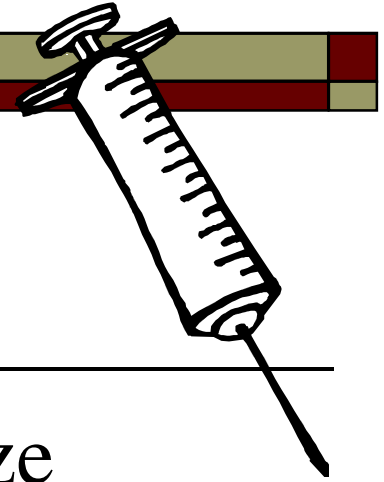
# Exposure Control Plan

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- ❑ **Must be in writing**
- ❑ **Must include Exposure Determination**
- ❑ **Must be reviewed and updated annually**
  - **Plan must be updated to reflect changes in technology that eliminate or reduce employee exposure; list of devices used.**
  - **Plan must document consideration and implementation of appropriate, commercially available and effective engineering controls**
  - **Document front line employee input**



# Engineering Controls



- ❑ Shall be used to eliminate or minimize employee exposure
- ❑ This is where the bloodborne pathogen standard already requires you to **evaluate and use safer needle devices**
- ❑ Failure to use engineering and work practice controls will result in a citation



# Safer Medical Device Websites

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- ❑ **International Health Care Worker Safety Center, University of Virginia:**
- ❑ <http://www.healthsystem.virginia.edu/internet/epinet/safetydevicenew.cfm> and  
<http://healthsystem.virginia.edu/internet/safetycenter/internetsafetycenterwebpages/SafetyinSurgery/SafetyinSurgery.cfm>
- ❑ **International Sharps Injury Prevention Society:**
- ❑ <http://www.isips.org/>

# Sample Sharps In Use List

SAFETY SHARPS IN USE LIST				
Type of Device and Sizes	Manufacturer	Procedures Used On	Date Reviewed	Next Review Date
Lever Lock Cannula	BD	Multiple Procedures	3/26/2007	09/07
Threaded Lock Cannula	BD	Multiple Procedures	3/26/2007	09/07
Blunt plastic cannula	BD	Multiple Procedures	3/26/2007	09/07
Vial Access cannula	BD	Vial Access	3/26/2007	09/07
Monoject Magellan Safety needle 18g x 1 1/2"	Kendall	Multiple Procedures	3/26/2007	09/07
Monoject Magellan Safety needle 22g x 1 1/2"	Kendall	Multiple Procedures	3/26/2007	09/07
Monoject Magellan Safety needle 25g x 5/8"	Kendall	Multiple Procedures	3/26/2007	09/07
Monoject Magellan Safety needle 23g x 1"	Kendall	Multiple Procedures	3/26/2007	09/07
Monoject Tuberculin Safety syringe	Kendall	TB skin test administration	3/26/2007	09/07
Monoject Insulin Safety syringe 1/2 cc, 29g x 1/2"	Kendall	Insulin administration	3/26/2007	09/07
Monoject Insulin Safety syringe 1 cc, 29g x 1/2"	Kendall	Insulin administration	3/26/2007	09/07
Monoject Magellan syringe with safety needle 22g x 1 1/2"	Kendall	Multiple Procedures	3/26/2007	09/07
Monoject Magellan syringe with safety needle 23g x 1"	Kendall	Multiple Procedures	3/26/2007	09/07
Monoject Magellan syringe with safety needle 25g x 5/8"	Kendall	Multiple Procedures	3/26/2007	09/07
Blood Collection Assembly	BD	Blood Collection	3/26/2007	09/07
Blunt plastic cannula with 3 cc syringe	BD	Multiple Procedures	3/26/2007	09/07
Interlink vial access cannula with 3 cc syringe	BD	Vial Access	3/26/2007	09/07
Posiflush normal saline flush syringe with blunt plastic cannula 10 cc	BD	Flushing IV sites/lines	3/26/2007	09/07
Posiflush normal saline flush syringe with blunt plastic cannula 5 cc	BD	Flushing IV sites/lines	3/26/2007	09/07

SHARPS EXCLUSION LIST [Compatibility Mode] - Microsoft Word

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**SHARPS EXCLUSION LIST – PROACTIVE MEDICAL CENTER**

Type of Device and Sizes	Device ID	Procedures Used For	Reason Safer Device not used and Work Practice Control to Minimize Exposure	Date Reviewed And Comments	Next Review Date
Spinal needles 27 gage, 3.5" Quicke	Bard Dickson 405181	Pain Management	No safer device available at this time. After use the physician will place in a needle foam lock found on the universal block tray and dispose of in a sharps container	1/25/08 – A safer device has been developed and we will try to evaluate it asap	6/01/08
Arthroscopy Pack	DeRoyal 50-13584	Orthopedic Procedures	These packs contain #15 and #11 scalpel blades and 18 gage 3.5" and 22 gage 1.5" needles not equipped with engineered sharps injury protection. DeRoyal has been contacted to replace these items. Until then they will be replaced by staff with safer devices before use.	1/25/08 . DeRoyal has been contacted to replace these items.	6/01/08
Special Technique Needle 18 gage 6"	Sherwood Medical 8881-224003	Percutaneous drainage of Gall Bladder	No safer device available at this time. After use the physician will place in a needle foam lock found on the universal block tray and dispose of in a sharps container	1/25/08	6/01/08
Glass Culture Tubes	Fisher 14-961-26	Clotting Times	Plastic will not activate the coagulation factors.	1/25/08	6/01/08
#10	BD	Hemia	Used for obese patients when the plastic sheath on	1/25/08	6/01/08

Page: 1 of 1 Words: 289 100%

# Other Engineering and Work Practice Controls

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- ❑ Handwashing facilities
- ❑ Recapping, bending, breaking, shearing, etc. of needles 
- ❑ Eating, drinking in the workplace
- ❑ Handling, storing, transporting reusable sharps
- ❑ No hand to hand passing of sharps







# Personal Protective Equipment

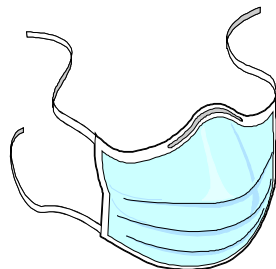
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- ❑ Must be appropriate to the task--prevent blood or body fluids from getting on employee's clothes, skin, underclothes, etc.
- ❑ Provided at no cost to the employee
- ❑ Employer must enforce the use
- ❑ Must be removed prior to leaving the work area and placed in designated area

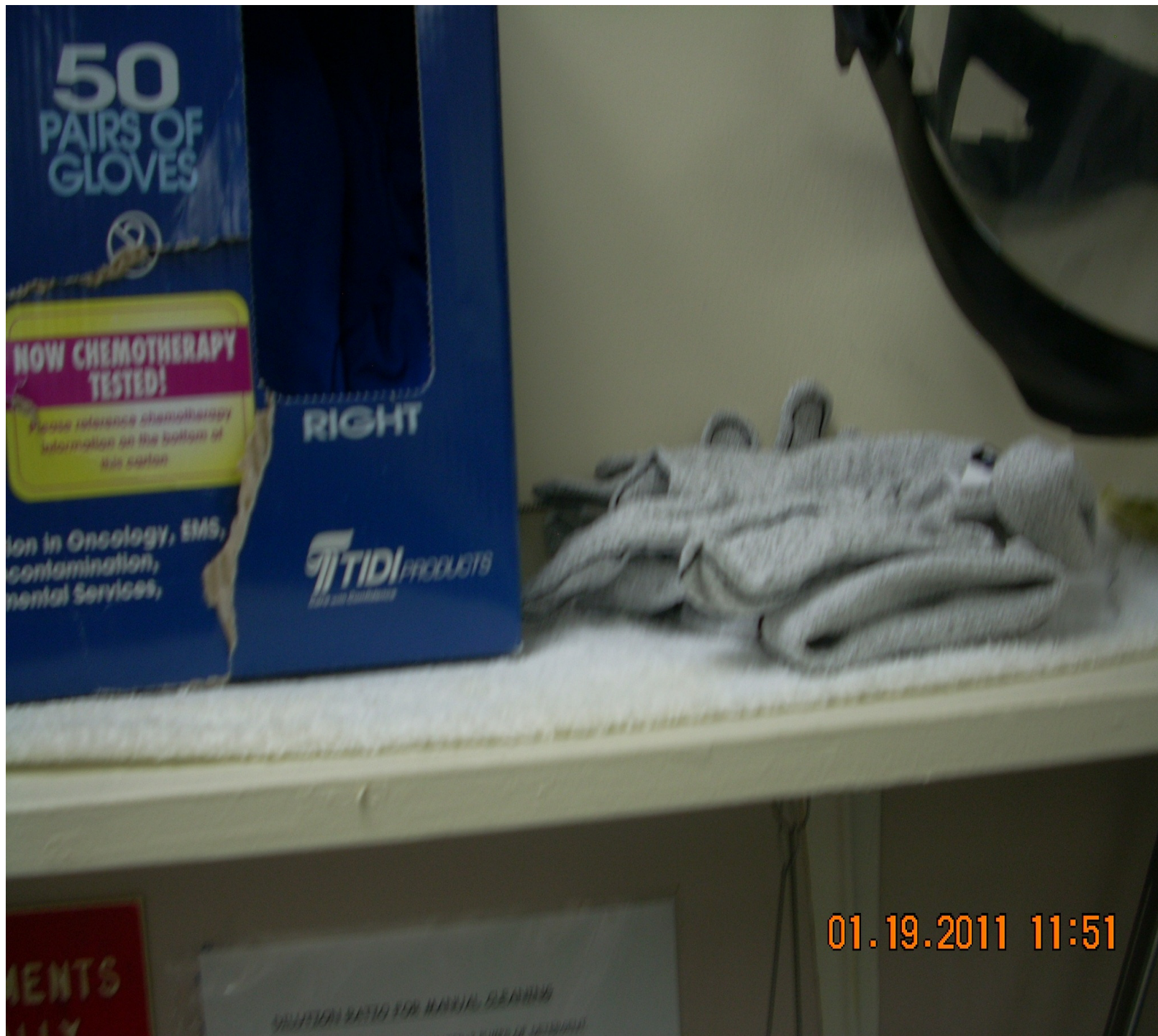
# Personal Protective Equipment

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- ☐ Parental exposure
  - stick or cut
- ☐ Mucous membrane
  - splash
- ☐ Non-intact skin
  - spill or splash
- ☐ Gloves – puncture and cut resistant
- ☐ gowns
- ☐ glasses/ goggles
- ☐ masks
- ☐ pocket masks







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2 11:31



# Housekeeping

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- ❑ **Written cleaning schedule**
- ❑ **Decontaminate with appropriate disinfectant (EPA or FDA)**
  - EPA registered list A (Sterilants), B (Tuberculocidal), D & E (Disinfectant with label stating it is effective against HIV and HBV) <http://www.epa.gov/oppad001/chemregindex.htm> or
  - FDA approved sterilants list at <http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/ReprocessingofSingle-UseDevices/UCM133514>
  - **Household bleach, diluted 1:10-1:100, made fresh daily**
  - **Ensure correct contact time (let air dry w/bleach)**

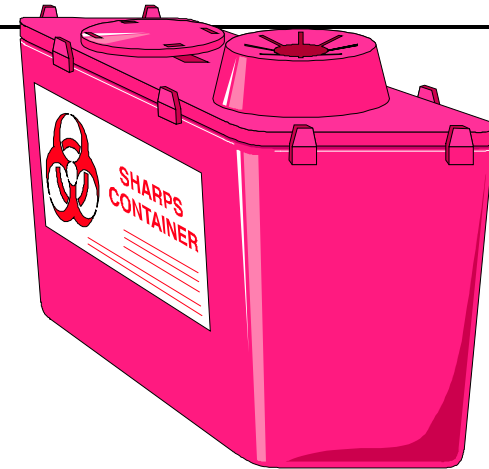
# Regulated Waste

- ❑ Sharps containers

- Needles
- Blades
- One per operator

- ❑ Red bags

- Liquid or semi-liquid blood or OPIM
- Items caked with dried blood or OPIM
- Items that could release blood or OPIM
- Pathological waste
- Microbiological waste















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# Laundry

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- ❑ Handle as little as possible
- ❑ Bag at the location where generated
- ❑ Prevent leakage
- ❑ Label or identify as requiring universal precautions





# V Vaccinations

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- ❑ Offer to all persons with reasonably anticipated exposure to blood or OPIM
- ❑ At no cost to the employee
- ❑ Performed by or under supervision of PLHCP (Physician or Other Licensed Health Care Professional)
  - Physician                      Physician's Assistant
  - Certified nurse practitioner
  - Clinical nurse specialist
  - Dentist



# HBV Vaccinations

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- ❑ Test for antibody to Hepatitis B surface antigen 1-2 months after completion of the three-dose vaccination series
- ❑ Non-responding employees must be re-vaccinated with a second three-dose series and retested
- ❑ Non-responders must be medically evaluated



# HBV Vaccinations

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- **Provided according to current U.S. Public Health Service recommendations**
  - **“Immunization of Health Care Workers: Recommendations of ACIP and HICPAC,” MMWR, Vol. 46, No. RR-18**
- **After the employee has received training and within 10 working days of assignment**
- **Declination statement--Appendix A**



# HBV Vaccinations

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- ❑ **Employer must have a Health Care Professional's Written Opinion for each person taking the vaccination**
  - Whether HBV vaccinations is indicated for the employee
  - If the employee received the vaccination



# Post-exposure Evaluation and Follow-up

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- ❑ **Performed by or under supervision of PLHCP**
  - **Physician**
  - **Physician's Assistant**
  - **Certified nurse practitioner**
  - **Clinical nurse specialist**
- ❑ **Provided according to current U.S. Public Health Service recommendations**



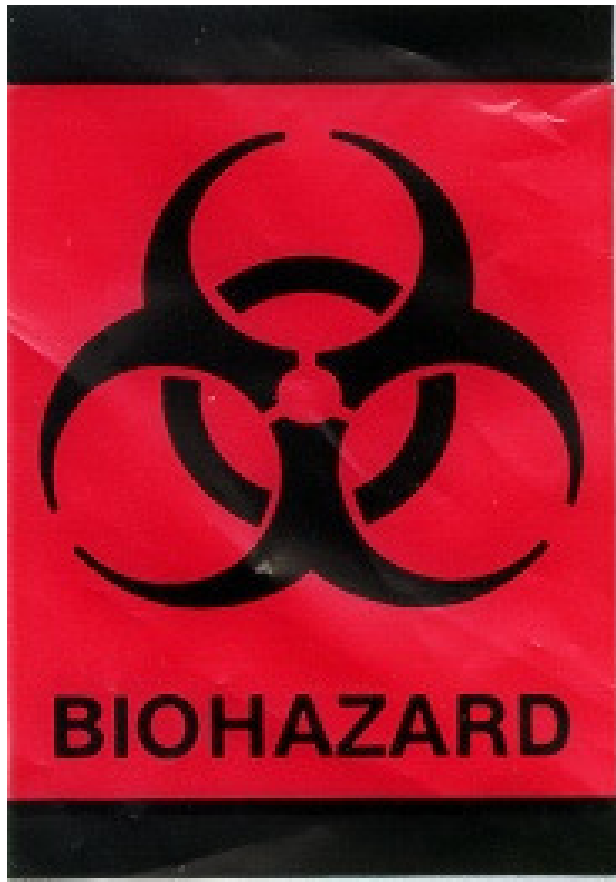
# Post-exposure Evaluation and Follow-up

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- **Employer must have, and provide to the employee, a Health Care Professional's Written Opinion for each exposure incident**
  - **Employee has been informed of results**
  - **Employee has been told about any medical conditions which require further evaluation**
  - **All other findings or diagnoses shall remain confidential**

# Labels

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- ☐ Fluorescent orange or orange-red background
- ☐ Letters in contrasting color
- ☐ Regulated waste
- ☐ Refrigerators/freezers
- ☐ Containers used to store, ship or transport







# Training

---

- ❑ Cover all 13 topics required by the law
- ❑ At no cost to employees
- ❑ During working hours
- ❑ At the time of initial assignment
- ❑ Annually--within 1 year of last training date
- ❑ Must be opportunity for interactive questions and answers
- ❑ Train employees on adopted safer needle devices before implementation



# Training

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- **Five Easy Questions**
  - **What is universal precautions?**
  - **What do you do when there is a blood spill?**
    - **Personal protection**
    - **Clean-up and disposal procedures**
    - **Disinfection (hazard communication applies)**
  - **What do you do with contaminated sharps and laundry?**
  - **Have you been offered the HBV vaccination free of charge?**
  - **Where is the Exposure Control Plan?**



# BBP Training Records

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- ❑ Date of training
- ❑ Summary of training
- ❑ Name and job title of trainee
- ❑ Name and qualifications of trainer
- ❑ Maintain records for three years



# Needlestick Injuries

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- ❑ 1,000,000 needlesticks per year
- ❑ 80% of exposure incidents are needlesticks
- ❑ 90% of occupationally acquired disease a result of needlesticks
- ❑ Risk: HBV - 30%, HCV - 10%, HIV - .3%
- ❑ hollow bore needles
- ❑ 56% of dental staff suffer at least 1 needle stick per year



# Needlestick Injuries - Cost

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- ❑ Direct costs - evaluation, counseling, prophylaxis
- ❑ Indirect costs - increased insurance costs, legal fees, human factor
- ❑ 1981 - \$28 per case; 2000 - \$3483 per case
- ❑ AHA estimates \$3000 per exposed worker
- ❑ HIV infected worker - \$1,000,000.



# Needlestick Injuries - prevention

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- ❑ Studies have shown that up to 83% of needlestick injuries can be prevented.
- ❑ How? Safer needle devices!
- ❑ Use reduces risk
- ❑ Widely available
- ❑ Are considered engineering controls
- ❑ Are required by LAW to be used



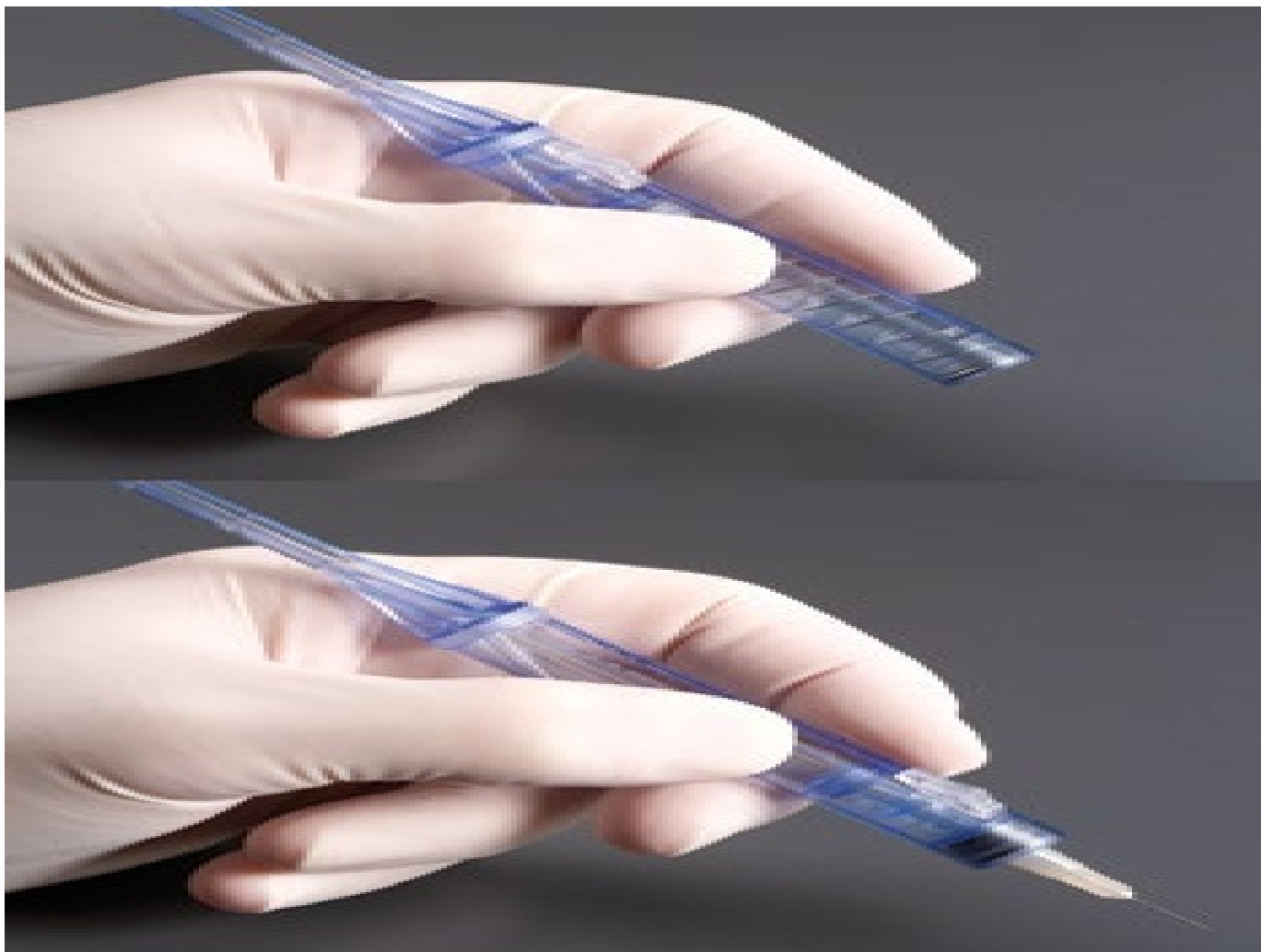
# Safety scalpels and Removal Devices





# Safety Wand

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## Ultra Safety Plus XL

<http://www.septodontusa.com/products/ultra-safety-plus-xl>

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<http://www.insafesyringe.com.au/>





# Sharps Injury Prevention Laws

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- ❑ Tennessee Sharps Injury Prevention Law
- ❑ CPL 2-2.69 (Federal)
- ❑ CPL 2-2.69 (Tennessee)
- ❑ Amendment to Bloodborne Pathogen Standard



# Tennessee's *New* Sharps Injury Prevention Law

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- ❑ Passed by Tennessee Legislature on March 17, 1999
- ❑ Senate bill 1023, House bill 634
- ❑ Signed by Governor Sundquist on March 19, 1999
- ❑ Passed with little fanfare
- ❑ List and information
- ❑ Tennessee Rules effective 04/25/01



# Tennessee's *New Sharps Injury Prevention Law* --Basic Tenants

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- The employer shall:
  - *Evaluate* safer medical devices that are appropriate
  - *Use* those that are more effective in preventing exposure incidents
  - *Document* when safer technology is not used because it is medically contraindicated or not more effective

# Tennessee's *New* Sharps Injury Prevention Law --Basic Tenants

---

- The employer shall *document* in the Written Exposure Control plan:
  - The results of the evaluation
  - Improvements adopted : list
  - The type and brand of device used when an **exposure incident** occurs
  - Front line employee selection input

# Sharps Injury Log / Sharps Injury Prevention

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- ❑ Confidential
- ❑ Type and brand of device involved in the incident
- ❑ Department or work area where the exposure incident occurred
- ❑ Explanation of how the incident occurred
- ❑ **Action resulted in investigation**

[http://www.tn.gov/labor-wfd/tosha\\_SampleSharpsLog.pdf](http://www.tn.gov/labor-wfd/tosha_SampleSharpsLog.pdf)

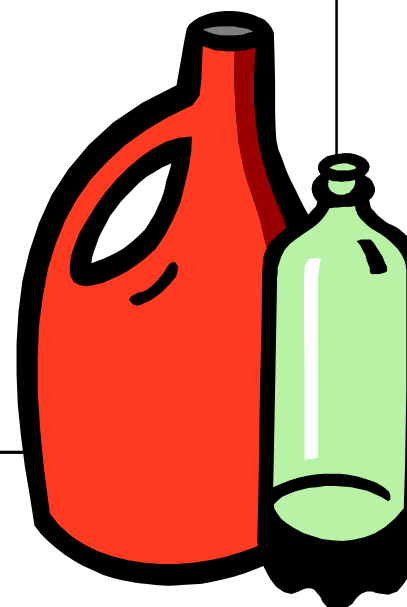




# Hazard Communication

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Control of Occupational Exposure to  
Hazardous Chemicals





# Common Dental Office Chemicals

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- ☐ Laundry chemicals
- ☐ Cleaning chemicals
- ☐ Compressed gases
- ☐ Medicines
- ☐ Disinfectants
- ☐ Anesthetic gases
- ☐ Mercury



6 9:38 AM





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# Hazard Communication

1910.1200

- ❑ Written Program –  
<http://www.state.tn.us/labor-wfd/Wtdbooklet.pdf>
- ❑ Material Safety Data Sheet for each product containing hazardous chemicals
- ❑ All chemical products must be labeled
- ❑ Training on specific chemicals used, hazards, first aid, and prevention





# Hazard Communication Written Program

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- ❑ Labeling policy
- ❑ Material Safety Data Sheet policy
- ❑ Training methods and procedures
- ❑ Hazardous chemical inventory list
- ❑ Non-routine tasks training methods
- ❑ Multi-employer activity





# Hazard Communication

## Labels

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- ❑ Each container of hazardous chemicals must be labeled with the:
  - Identity
  - Hazard warning
- ❑ Label must cross-reference with the MSDS and chemical inventory entry



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ORDER NO: 056472



# SANI-CLOTH® HB

## GERMICIDAL DISPOSABLE WIPE

ACTIVE INGREDIENTS	
QUATERNARY AMMONIUM CHLORIDE	0.01%
QUATERNARY AMMONIUM BROMIDE	0.01%
QUATERNARY AMMONIUM IODIDE	0.01%
QUATERNARY AMMONIUM SULFATE	0.01%
QUATERNARY AMMONIUM CHLORIDE	0.01%
QUATERNARY AMMONIUM BROMIDE	0.01%
QUATERNARY AMMONIUM IODIDE	0.01%
QUATERNARY AMMONIUM SULFATE	0.01%

### BACTERICIDAL, FUNGICIDAL, VIRUCIDAL

- Kills HBV (Hepatitis B Virus) in 10 minutes
- Effective against Staphylococcus aureus, Salmonella choleraesuis, Pseudomonas aeruginosa, Streptococcus salivarius and Escherichia coli (E coli)
- Kills HIV-1 (Aids Virus) in 30 seconds
- Kills Methicillin Resistant Staphylococcus aureus (MRSA)
- Effective against Vancomycin Resistant Enterococcus faecalis (VRE)
- Kills Pathogenic fungi (Athlete's Foot and Ringworm Fungi)
- Effective against Influenza A2 (Asian) & B (Asian) Viruses, Parv influenza Type 1 and Measles viruses
- Kills Herpes Simplex Type 1 & 2 viruses
- Effective in mold and mildew control
- Contact times are 10 minutes unless otherwise noted

**160** PREMOISTENED WIPES  
6 x 6.25 IN.  
(15.24 x 17.15 cm)  
NET CONTENTS 1 LB. 11.2 OZ. / 770 GRAMS

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PDI The Health Care Division of Wipac Inc.  
Greensburg, New York 12060-1276 U.S.A.  
12060198-9423

24 10:32 AM

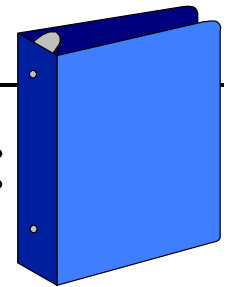
# Material Safety Data Sheets

- ❑ For each hazardous chemical
- ❑ no MSDS is required for:
  - Drugs in solid, final form for direct administration to patients (pills, tablets)
  - Consumer products where the employer can show:
    - ❑ It is used in the workplace for the purpose intended
    - ❑ Duration and frequency of use is not different from that of the consumer
- ❑ Must be available to employees while they are in their work areas



# Material Safety Data Sheets

- ❑ For each hazardous chemical
- ❑ Exemptions--no MSDS is required for:
  - Drugs in solid, final form for direct administration to patients (pills, tablets)
  - Consumer products where the employer can show:
    - ❑ It is used in the workplace for the purpose intended
    - ❑ Duration and frequency of use is not different from that of the consumer
- ❑ Must be available to employees while they are in their work areas





# Hazard Communication Training

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- ❑ Before employees are exposed
- ❑ Annually thereafter, per Tennessee Right to Know Law
- ❑ Training must be “effective,” i.e., employees must be able to recall basic information



# Hazard Communication

## 7 Basic Questions

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- ❑ What are the requirement of the hazard communication standard?
- ❑ What hazardous chemicals are you exposed to (or may be exposed to in an emergency)?
- ❑ Where are these chemicals present?
- ❑ What are the short and long term effects?
- ❑ How can you detect if you are overexposed?
- ❑ How can you protect yourself?
- ❑ Where are the MSDS and written program?





# Hazard Communication Recordkeeping

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- ❑ Maintain training records per Tennessee Right to Know Law for period of employment + 5 years
  - Identity of the employee trained
  - Date(s) of training
  - Brief description of the training
- ❑ Maintain MSDS for as long as the chemical is used or stored
- ❑ Maintain chemical list for 30 years

# Miscellaneous

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# *Specific Employer Requirements for PPE Programs*

## ☐ Hazard Assessment

### ☐ Written Certification of Assessment is Required

- ☐ Workplace evaluated
- ☐ Person doing the certification
- ☐ Date of the assessment
- ☐ Id of the document as a ppe certification

## ☐ Training

### ☐ Written Certification of Training

- ☐ Name of employee
- ☐ Dates of training
- ☐ Subject of certification



# Radiation



# Radiation

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# TN Non Smoker Protection Act

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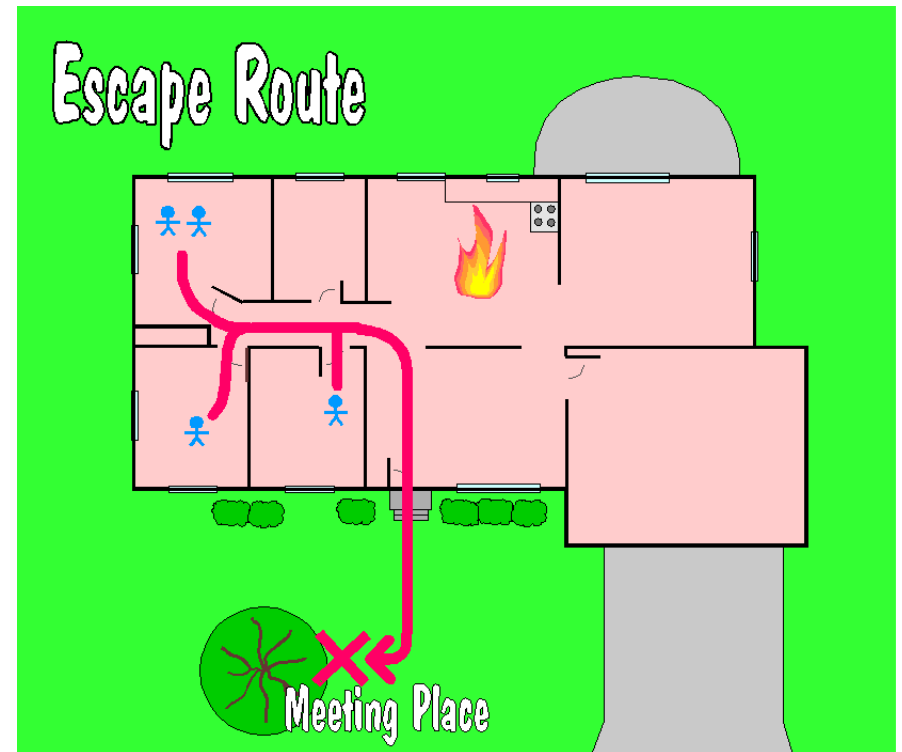
- ❑ No smoking in public buildings
- ❑ Must notify employees
- ❑ Must post signs at all entrances
- ❑ Fines for employer and smokers





# Emergency Action Plan

- ❑ Must be in writing\*
  - ❑ Minimal plan elements:
    - Emergency escape procedures
    - Procedures for critical plant operations
    - Accounting for all personnel
    - Rescue and medical duties
    - Means of reporting fires and other emergencies
    - Contacts for further information
    - Types of evacuations
- \*Employers with 10 or less employees may communicate the plan orally and need not maintain a written plan.





# Exits--Means of Egress

- ❑ Sufficient in number to allow all occupants to escape

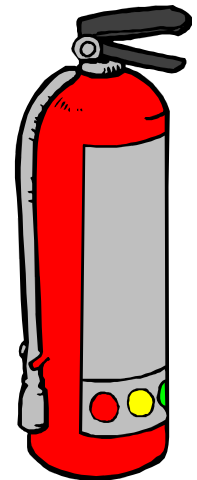
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- ❑ No locks or fastening devices to prevent free escape
- ❑ Maintained free of obstructions
- ❑ Discharge directly to street, yard, court or open space giving access to public way
- ❑ Marked by readily visible sign illuminated with at least 5 foot candles of light
- ❑ Mark door, etc. easily mistaken for an exit

# Fire Protection

## □ When fire extinguishers are provided :

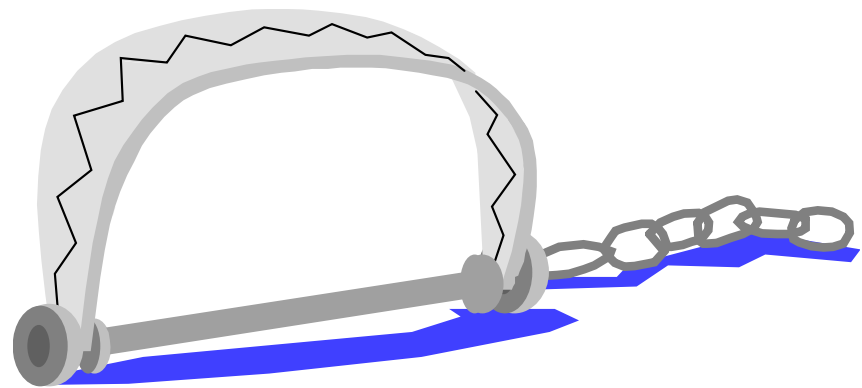
- Have a written emergency action plan (1910.38a) if evacuation of employees is part of your fire protection plan
- Perform a monthly visual check of extinguishers
- Have an annual maintenance check of extinguishers
- Make sure extinguishers are charged, fully operative and in their designated place
- Train employees to use the extinguishers

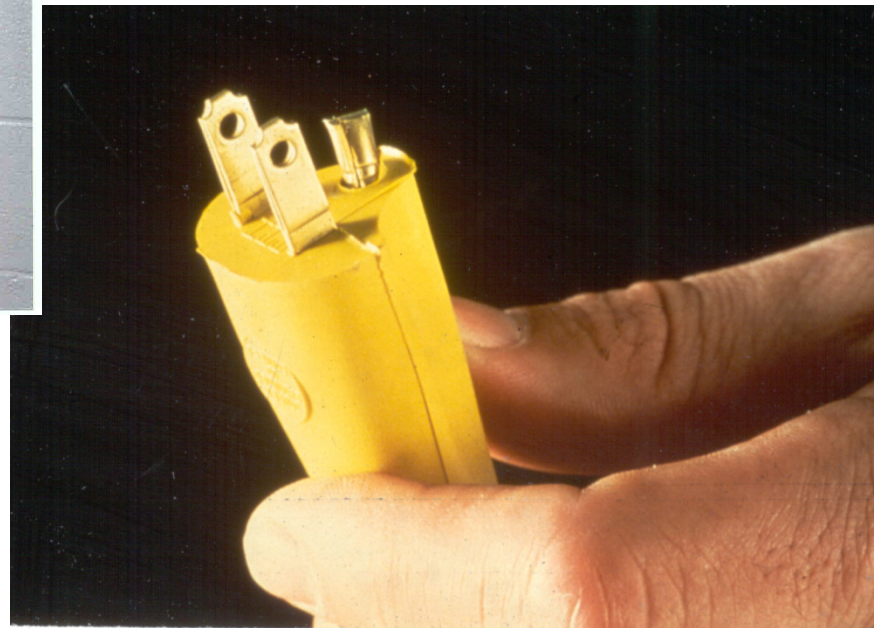
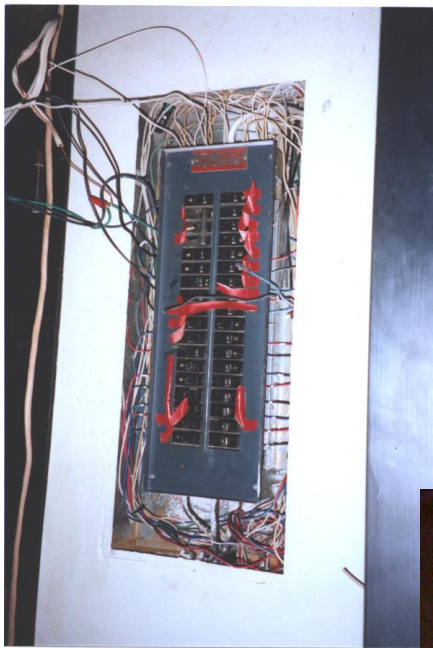
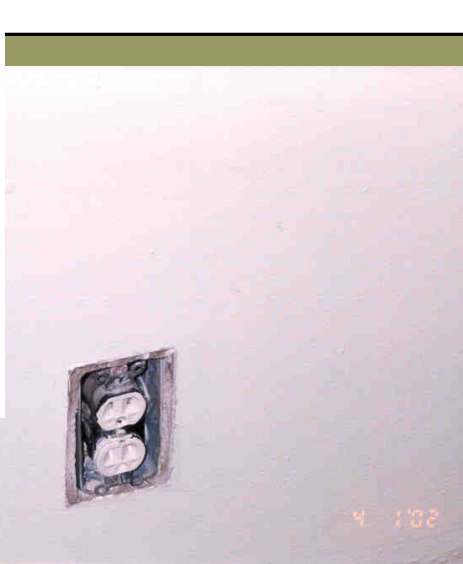
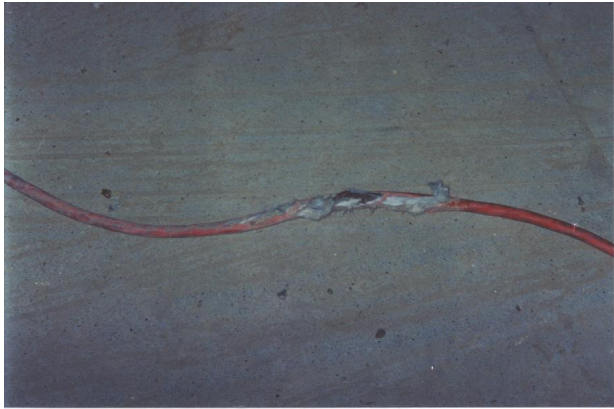


# Electrical Hazards

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- ❑ Grounding
- ❑ Ground Fault Circuit Interrupter
- ❑ Extension Cords
- ❑ Exposed Live Parts





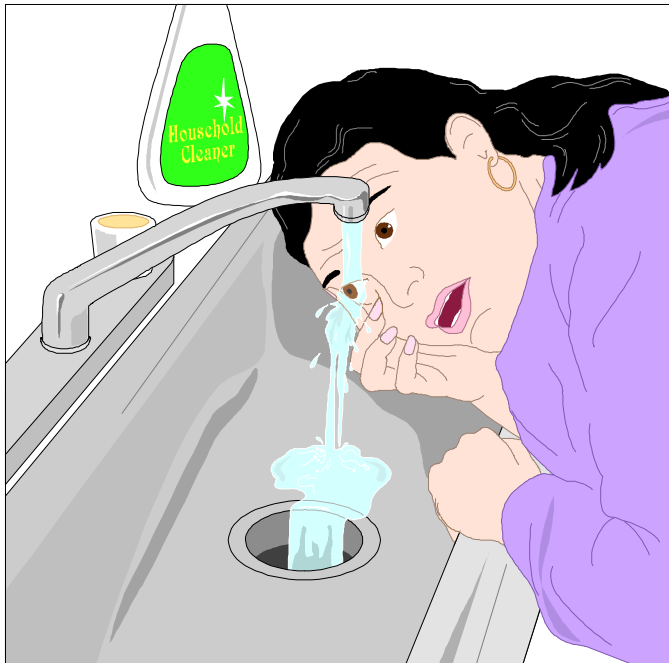




# Eye Washes

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- ❑ Plumbed eye washes are required when using chemicals with a pH of 0-2 or 12-14.











# Compressed Gases

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- ❑ LP gas storage cylinders - must be protected from damage by vehicular traffic
- ❑ Medical gas cylinders - O<sub>2</sub>, Helium, Nitrous Oxide
- ❑ Must be secured to prevent being knocked over
- ❑ Must be stored with valve protection cap in place and hand tight.





# Postings

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- New Poster--"It's the Law" Replaces
  - "Safety and Health Protection on the Job" Poster
  - "Hazardous Chemical-Right to Know" Poster
  
- Citations



# TSHA Area Offices

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- ❑ Memphis Office 901-543-7721
- ❑ Jackson Office 731-423-5641
- ❑ Nashville Office 615-741-279  
1-800-249-8510
- ❑ Knoxville Office 865-594-6180
- ❑ Kingsport Office 423-224-2042
- ❑ Chattanooga 423-634-6424
- ❑ Consultative Services 1-800-325-9901



# Resources

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- ❑ [www.osha.gov](http://www.osha.gov)
- ❑ [www.cdc.gov](http://www.cdc.gov)
- ❑ [www.cdc.gov/niosh](http://www.cdc.gov/niosh)
- ❑ [www.state.tn.us/labor-wfd](http://www.state.tn.us/labor-wfd)
- ❑ <http://www.med.virginia.edu/medcntr/centers/epinet/products.html>