



Bloodborne Pathogens and HazCom Regulations

Karen Gregory, RN



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- Karen Gregory is an employee of Total Medical Compliance, a Hu-Friedy Key Opinion Leader and on the OSAP Board of Directors.
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Objectives

1. The major sections of the Bloodborne Pathogens Standard.
2. List three types of engineering and/or work practice controls.
3. Describe two updates to the Hazard Communication Standard as a result of alignment with the Globally Harmonized System of Classification and Labeling (GHS).
4. Identify the meaning of pictograms which will be included in the updated labeling system.
5. Recall sections in Safety Data Sheets (SDS) which provide information on the type of hazard associated with the chemical, first aid measures, appropriate PPE, and spill clean-up.
6. List the elements of an effective Hazard Communication Program.
7. Identify measures for safe handling of hazardous chemicals.

OSAP Occupational Exposure Risks



Infectious hazards

Physical Hazards


Chemical Hazards

OSAP Infectious Hazards


- Hep B, C, HIV
 - HIV - More than 1 million people are living with HIV.
 - Hepatitis B - Over 1 million people living with chronic HBV infection.
 - Hepatitis C - Over 3 million people living with chronic HCV infection.
- Herpes
- Staph, MRSA
- Chicken pox, measles, mumps
- Influenza, "colds", enterovirus D-68
- TB

OSAP Chemical Hazards


- Disinfectants
 - Surface
 - High-level
- Sterilants
- Dental procedure materials
 - Bleach
 - Chloform
 - Amalgam

 **Physical Hazards**

- Electrical
- Fire
- Cuts
- Falls
- Burns
- Flying objects
- Exposure to ionizing radiation
 - Processing and exposure to saliva

 **Bloodborne Pathogen Standard**

- Federal law enacted in 1991 to protect employees from serious illness or death as a result of exposure to infectious material in the blood, especially HIV, hepatitis B, and hepatitis C
- There are 22 states or territories with approved OSHA plans with requirements as stringent
- Each practice must have written plan in place to outline safeguards against exposure to blood and body fluids.
 - A copy of both the Bloodborne Pathogen Rule must be available during training
 - If asked you must provide a written copy of the Exposure Control Plan to employees

 **Fast Facts**

HIV

- May have flu-like symptoms or none at all
- People with HIV infection are often affected by viral hepatitis
- Risk of infection if exposed by needlestick is .3%

Hepatitis B

- May have fever, joint pain, nausea, vomiting, weakness
- 50 - 100 times more infectious than HIV
- Estimated that 40,000 become infected annually in the US
- Best protection is vaccination

Hepatitis C


- May have fever, joint pain, nausea, vomiting, weakness
- Over 3 million people living with chronic HCV infection
- Testing recommended for individuals born between 1945 – 1965
- With needlestick/sharps exposure the risk of HCV infection is approximately 1.8%

OSAP Requirements of the Standard

- Written Exposure Control Plan
- Hep B vaccination at no cost to the employee
- Labels and signs to communicate hazards
- PPE
- Enforcement of work practice controls
- Use of engineering controls
- Post exposure follow-up
- Record keeping
 - Employee training
 - Employee medical records
 - OSHA 300 and OSHA300A


OSAP Exposure Determination

- List of job classifications in which all or some employees have occupational exposure.
- List of all tasks and/or procedures in which occupational exposure occur.
- Exposure determination made without regard to the use of PPE.






OSAP Hepatitis B Vaccination

- Employer must make Hepatitis B vaccination available to employees who are occupationally exposed:
 - Free of charge at a reasonable time and place
 - After training and within 10 working days of initial assignment
- Anti-HBs testing should be performed 1–2 months last dose of the vaccine series.
- Proof of series or declination on file.
- **Exception:**
 - Employee has been vaccinated
 - Antibody testing reveals immunity



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Think Safety

-  Handwashing
-  Personal Protective Equipment
-  Work Practice Controls
-  Engineering Controls

7/24/2016

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Foundation of Protection




Standard

- ☒ All blood and body fluids, secretions, and excretions, *except sweat and tears*, regardless of whether or not they contain visible blood
- ☒ Contact with non-intact skin and mucous membranes
- ☒ Established standard of care to reduce disease transmission
- ☒ Handwashing, use of PPE and barriers.

7/24/2016

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Foundation of Protection



All contact with patients, and/or their blood or body fluids provides the potential for exposure to infection.


☒ Contact with non-intact skin and mucous membranes.

- ☒ Established standard of care to reduce disease transmission.
- ☒ Handwashing, use of PPE and barriers.

7/24/2016

OSAP To Wash or Not to Wash?


- When hands are visibly dirty, contaminated, or soiled, wash with non-antimicrobial or antimicrobial soap and water.
- If hands are not visibly soiled, use an alcohol-based handrub (60% - 95%) for routinely decontaminating hands.



OSAP Work Practice Controls

- Safe work practices alter the way a task is performed
- Based on employee behavior instead of equipment
 - One handed recapping of needles
 - Only pass needles which are recapped
 - Placing contaminated sharps immediately or as soon as possible in a sharps container
 - Do not reach by hand into container where contaminated sharps are stored
 - No eating, drinking, applying lipstick or contact lenses in areas where there is likelihood of exposure to blood or body fluids
 - Food/drink must not be store with biohazard items

OSAP Work Practices Controls



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Engineering Controls Safety Devices

- Devices or equipment controls that eliminate, isolate or remove the bloodborne pathogens hazard from the workplace.
- Comprehensive program of devices to reduce the likelihood of a sharps exposure.
- Safety devices are required by the Needlestick Safety and Prevention Act.



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Needlestick Safety & Prevention Act

- Effective in 2001, REQUIRED - annual evaluation of safer sharps devices and work practice controls
- Input from non-managerial employees
- Should ensure safety devices have been evaluated
- Document evaluation process with employee input
- If using safety devices always activate the device
- Use other engineering controls for additional protection against sharps exposure

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Evaluation of Devices

- OSHA requires employer to consider procedures and technology that reduce the risk of needlesticks
- Must document consideration and use of appropriate, and effective safer devices
 - Description of devices identified as candidates
 - Method(s) used to evaluate those devices
 - Justification for the eventual selection (or rejection)
 - Cannot use cost as a justification for non-selection of a safer device
- Non-managerial employee input must be documented but can be informal in nature

OSAP Engineering Controls

Blade Remover

Cassettes

Recapping Device

Safety Aspirating Syringe

Safety Scalpel

Sharps Container

OSAP Personal Protective Equipment

- Use based on task being performed.
- Utilized to reduce exposure to the worker.
- Must be accessible, properly cleaned, laundered, repaired, and disposed of at no cost to employees.
- Should be removed when leaving area or upon contamination.

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OSAP Environmental Infection Control

- Employers must maintain a clean and sanitary workplace
- Written cleaning schedule
- Clinical Contact Surfaces
 - High potential for direct contamination from spray or spatter or by touch
- Housekeeping surfaces
 - Limited risk of disease transmission
 - Clean on a routine basis

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Written Cleaning Schedule

- Cleaning and decontamination.
- Location within the facility.
- Type of surface to be cleaned.
- Type of soil present.
- Tasks or procedures being performed.
- May use barriers.
- Surfaces must be appropriately disinfected after completion of procedures with splash or splatter blood or OPIM.




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Clean or Use Barriers

- Risk of transmitting infections greater than for housekeeping surfaces
- Surface barriers can be used and changed between patients

OR

- Clean then disinfect using an EPA-registered low- (HIV/ HBV claim) to intermediate-level (tuberculocidal claim) hospital disinfectant




CDC

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Tips on Barrier Use

- Clean surfaces
 - Beginning of day
 - End of day
 - Barrier compromised
- Fluid proof
- If using plastic wrap must meet FDA weight for food wrap
- Best to utilize commercial barriers



Consider:

- Saliva ejector holder
- Light switches
- Light handles
- Air-water syringe handle

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Surface Disinfection - Review


Follow manufacturer's instructions for use

Use PPE - Gloves and possibly face protection

Utilize Two Step Method EPA registered Hospital Disinfectant

Don't forget handpiece cradles, light switches, door handles

Surface disinfectant contact time?




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An Exposure Has Occurred

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How Do Exposures Occur?

- Stick with contaminated needle
- Cuts from sharp objects that are contaminated with an infected patient's blood
- Splash to mucous membranes of the eyes, nose, mouth or to non-intact skin



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Items to Consider

- Who will manage the post exposure process?
 - Employee Health
 - Occupational Medicine
 - Emergency Departments
 - Urgent Care
- Difficulty in locating a care partner?
 - Contact local dental society
 - Worker's Compensation provider
- Establish the relationship in advance.
 - Payment of services
 - Availability of post exposure medication
 - Wait times to be evaluated
 - Current with most recent guidance on bloodborne exposures

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Provide the Following:

- Copy of the Bloodborne Pathogen Standard.
- Description of the exposed worker's duties as they relate to the exposure.
- Documentation of the route(s) of exposure and circumstances under which exposure occurred.
- Results of the source individual's blood testing if available.
- All medical records relevant to the appropriate treatment of the worker, including vaccination status.

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Waste Definitions

General Non hazardous, non-regulated. Example: waste from break room.

▶

Medical Waste generated in the diagnosis or treatment of patients

▶

Regulated Carries a substantial risk of causing infection during handling and disposal

OSAP OSHA - Regulated Waste

- Placed in an appropriately labeled container: red bag or container with biohazard label.
 - Pathological and microbiological wastes containing blood or OPIM.
 - Liquid or semi-liquid blood or other potentially infectious materials.
 - Contaminated items that would release blood or OPIM in a liquid or semi-liquid state if compressed.
 - Items that are caked with blood or OPIM and are capable of releasing these materials during handling.
 - Contaminated sharps.

OSAP Biohazard Warning Labels

- Waste receptacles
 - Red bags or containers may be substituted for labels.
 - Ensure acceptable with State and local ordinances.
- If container labeled all contents are considered biohazardous.
- Lid must be closable.
- Other items which must be labeled:
 - Containers used to store, transport, or ship blood or other potentially infectious materials.
 - Outside of specimen containers.



OSAP Employee Training – BBP

- At no cost to the employee and during work hours.
- At the time of initial assignment to tasks where exposure may occur and annually thereafter.
- Annual training for all employees must be provided within one year of their previous training.
- Within 90 days after the effective date of any change in a standard.
- An opportunity for interactive questions and answers with the person conducting the training.

OSAP Employee Training Records

- Dates of training sessions.
- Contents or a summary of the sessions.
- Names and job titles of attendees.
- Names and qualifications of person(s) conducting the training.
- Retained for three years.


OSAP Medical Record

- Required for all employees at risk of exposure to BBP.
- Employee name and social security number.
- Copy of HBV vaccination status.
- Copy of results of examinations, medical testing, follow-up procedures.
- Employer's copy of healthcare professional's written opinion which is provided in an exposure incident.
- Copy of information provided to healthcare provider.
- All incident reports.
- Retained for duration of employment plus 30 years.
- If records requested provide a copy:
 - To the employee or anyone with the employee's written consent
 - Director of NIOSH or HHS and/or Assistant Secretary of Labor


OSAP Hazard Communication and GHS




This is the Year for GHS

 **Effective Haz Com Program**

- ☒ Hazard Communication Plan
- ☒ Employees Right to Know and Right to Understand
- ☒ Employee training
- ☒ Maintain an inventory of hazardous elements, chemical compounds or mixture of elements/compounds
 - ☒ Must review at least annually
- ☒ Material Safety Data Sheets or Safety Data Sheets (MSDS/SDS)
 - ☒ Where are they located?
- ☒ Secondary container labels
 - ☒ Name of chemical and hazards
- ☒ Appropriate PPE based on chemical in use

 **Hazard Communication and GHS**

- Globally Harmonized System of Classification and Labeling (GHS) is a collection of best practices by the United Nations
- Process of communicating severity of hazards of chemicals consistently worldwide
 - Classification – Type of risk associated with use/exposure
 - Labeling – Include pictograms, signal words, hazard statement
 - Safety Data Sheets – Specified 16 section format
- After 4 (four) years, final compliance date June 1, 2016

 **Labels are Created**

- **Symbols - Pictograms:** Convey health and physical hazard information,
- **Signal Words:** "Danger" or "Warning" are used to emphasize hazards. Only one signal word will be utilized on a label.
- **Hazard Statements:** Standard phrases that describe the nature of the hazard.
- **Precautionary Statements:** Measures to be taken to minimize or prevent adverse effects from exposure, improper handling or storage. First aid measures.

ToxiFlam (Contains: XYZ)

Danger! **Toxic If Swallowed, Flammable Liquid and Vapor**

do not drink or use tobacco when using this product. Wash hands thoroughly after handling. Keep container tightly closed. Away from heat/sparks/open flame. – No smoking. Wear protective gloves and eye/face protection. Ground container and receiving equipment. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Store in cool/well-ventilated place.


IF SWALLOWED: Immediately call a POISON CONTROL CENTER. Rinse mouth.

In case of fire, use water fog, dry chemical, CO₂, or "alcohol" foam. See Material Safety Data Sheet for further details regarding safe use of this product.


MyCompany, MyStreet, MyTown NJ 00000, Tel: 444 999 9999

OSAP **Understanding Pictograms**

- Symbol and other elements such as border, background or pattern, or color used to relate specific chemical hazard information.
- Eight (8) pictograms have been included in the updated standard.




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Skull and Crossbones


Chloroform



Health Hazard


Formaldehyde

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Exclamation Mark


Isopropyl Alcohol
Acetic Acid



Flame


Ethyl Alcohol
Ammonia

OSAP



Corrosion


Sodium hypochlorite
"Bleach"



Explosion
Bomb


TNT

OSAP



Gas
Cylinder


Compressed Air
Nitrogen



Flame over
Circle

Oxygen
Hydrogen Peroxide

OSAP Nitrous Tank Explosion



The photograph shows the aftermath of an explosion at an industrial facility. A large, multi-story building has been severely damaged, with its structural steel framework exposed and significant portions of the exterior walls missing. Debris is scattered across the ground in front of the structure. Yellow caution tape is strung across the area, and a red fire hydrant is visible in the background. The scene is overcast.

OSAP Safety Data Sheets

- SDSs must be in a uniform format
 - 16 sections
 - Provide specific direction/information
- Sections of interest
 - **Section 2 - Hazard(s) identification** – may see pictogram
 - **Section 4 - First-aid measures**
 - **Section 6 - Accidental release measures** – spill clean-up
 - **Section 8 - Exposure controls/personal protection**

OSAP Employee Training

- GHS updates
- Safety related to the specific chemicals used in the work environment
 - Location of Plan and SDS/MSDS
 - Train on chemicals specific to employee work processes
 - SDS and chemical label
 - Risk associated with use, appropriate PPE, spill clean up measures, first aid

OSAP Compliance Date – June 1, 2016


- Review the current status of MSDS and SDS sheets
 - Reach out to vendors/manufacturers to obtain SDS, but not required
- Review the current inventory, consider elimination of any products no longer used
- Educate supply personnel to retain any SDS received
 - Manufacturers are only required to provide the SDS with the first shipment or first shipment if changes to the document
- Review new SDS for any change in hazards associated with the use and educate staff

OSAP OSHA Inspection – Are You Prepared?




OSAP OSHA Inspection Triggers

- Imminent danger – Condition that can be expected to cause death or serious physical harm.
- Catastrophes and fatal accidents – death of an employee or 3 or more employees hospitalized.
- Complaints and Referrals - Either an employee or from another agency.
- Programmed inspections – Target high-hazard industries.
- Follow-up inspections – Corrected the problem? Failure to abate could impose additional penalties.




OSHA Fines - August 1, 2016

Type of Violation	Current Maximum Penalty	New Maximum Penalty
Serious Other-Than-Serious Posting Requirements	\$7,000 per violation	\$12,471 per violation
Failure to Abate	\$7,000 per day beyond the abatement date	\$12,471 per day beyond the abatement date
Willful or Repeated	\$70,000 per violation	\$124,709 per violation



The Process....

- Inspector arrives, usually without notice.
 - Inspector should provide credentials.
 - Great the inspector and begin the process ASAP.
- Opening Conference – Purpose for the visit explained and what to expect.
- Walk-through - Facility walk-through to inspect for safety/health hazards.
- Closing Conference – Discussion of findings.



Citation Examples

Citation 01 Item 001


- The Exposure Control Plan was *not reviewed and updated* at least annually:

Citation 01 Item 002

- The employer, who is required to establish an Exposure Control Plan, *did not solicit input from non-managerial employees responsible* for direct patient care in the identification, evaluation and selection of effective engineering and work practice controls.

Citation 01 Item 003

- Engineering and work practice controls were not used to eliminate or minimize employees exposure:
- (a) Utilized B-D 27 gauge 1 1/4 in. *needles which were not equipped with a safety device.*


 Citation Examples

Citation 01 Item 004


- Immediately or as soon as possible after use, contaminated reusable sharps were not placed in appropriate containers until properly reprocessed:
- (a) Reusable contaminated surgical tools were *placed on trays or carried by hand from the surgical room to the lab* where they were placed into the sink to be washed prior to sterilization.

Citation 01 Item 005

- The employer *did not ensure that each employee with occupational exposure participated in the training program at the time of initial assignment or annually.*

 Citation Examples

- **Citation 01 Item 006a**
- *Protective equipment*, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, *was not provided*, used and maintained in a sanitary and reliable condition.
- **Citation 01 Item 006b**
- *The employer did not assess the workplace to determine if hazards were present, or were likely to be present, which necessitated the use of personal protective equipment (PPE):*

 Summary/Takeaways

- Written plan for both BBP and Haz Com
- Accountable individual in the practice/facility
- Employee training
 - BBP – annually
 - HazCom - GHS
- Safety rounds
- Catch workers doing things right and reward them



Thanks ya'll!

Karen Gregory, RN
Director of Compliance and Education
Total Medical Compliance
Karen@totalmedicalcompliance.com