Occupational Hazards in Home Health Care



# Laundry Hazards

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This tool is used to help develop a comprehensive health and safety program. Within this tool are links that will lead to resources which will require internet connectivity for you to view them. The Care West Team has captured key elements in which we believe are pertinent to developing a successful health and safety program.

# Contaminated Laundry

Contaminated Laundry as outlined in the Bloodborne Pathogen Standard definitions <u>Section (b)</u> as: laundry which has been soiled with blood or other potentially infectious material or may contain sharps.

## **Potential Hazard**

Exposure to blood or other potentially infectious materials through contaminated laundry that was improperly labeled, or handled.

## **Possible Solutions**

Follow the procedures outlined in the Bloodborne Pathogens Standard, 1910.1030(d)(4)(iv) handling contaminated laundry such as:

- Handle contaminated laundry as little as possible with minimal agitation.
- Bag contaminated laundry at the location of use. Do not sort or rinse laundry at the location where it was used.
- Place wet contaminated laundry in leak-proof, and color-coded or labeled containers, at the location where it was used.
- Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through
  of or leakage from the bag or container, the laundry shall be placed and transported in bags or
  containers which prevent soak-through and/or leakage of fluids to the exterior.
  - Contaminated laundry must be placed and transported in bags or containers labeled with the biohazard symbol or put in red bags in accordance with 1910.1030(g)(1)(i).
    - In a facility that utilizes universal precautions in the handling of all soiled laundryalternative labeling or color-coding is sufficient if it permits all employees to recognize the containers as requiring compliance with universal precautions.
    - Use red bags or bags marked with the biohazard symbol, if the facility where items are laundered does not use universal precautions for all laundry.
  - For more information on labeling requirements see:
    - Labeling Requirements Table. (Taken from Bloodborne Pathogens and Longterm Care Workers OSHA document 3131).
- Contaminated laundry bags should not be held close to the body or squeezed when transporting to avoid punctures from improperly discarded syringes.
- Normal laundry cycles should be used according to the washer and detergent manufacturer's recommendations.
  - o <u>Guidelines for Laundry in Health Care Facilities.</u> CDC/OhASIS (1997).

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# Personal Protective Equipment (PPE)

Exposure to bloodborne pathogens through contact with contaminated laundry by not wearing appropriate PPE.

**Possible Solutions** 

- Employers must ensure that employees who have contact with contaminated laundry wear appropriate PPE as discussed in the Bloodborne Pathogens Standard 1910.1030(d)(4)(iv)(B) when handling and/or sorting contaminated laundry.
- Employers must ensure employees wear appropriate PPE such as gloves, gowns, face shields, masks, when sorting contaminated laundry.
- The use of thick utility gloves when sorting contaminated laundry may provide workers with additional protection.
  - Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised.
  - However, they must be discarded if they are cracked, peeling, torn, punctured, exhibit other signs of deterioration, or when their ability to function as a barrier is compromised.
- Disposable (single use gloves shall not be washed or decontaminated for re-use.

For additional information, see - PPE.

# **Sharps Handling**

Exposure to bloodborne pathogens from contaminated laundry that contains sharps.

# **Possible Solutions**

A safety and health program that includes procedures for appropriate disposal and handling of sharps and follows required practices outlined in the Bloodborne Pathogens Standard.

- Contaminated needles and sharps shall not be bent, recapped or removed. No shearing or breaking permitted.
- Sharps Containerization:
  - Immediately or as soon as feasible, contaminated sharps need to be discarded in appropriate containers.
  - Needle containers need to be available, and in close proximity to areas where needles may be found, including laundries.

## Hazardous Chemicals

#### **Potential Hazard**

Employee exposure to hazardous cleaning chemicals found and used in the laundry or housekeeping process.

- Unlabeled chemicals.
- Splattering when pouring from larger container to smaller container.
- o Soaps and detergents may cause allergic reactions and dermatitis.
- Broken skin from soap or detergent irritation may provide an avenue for infection or injury if exposed to chemical or biological hazards.
- Never mix together cleaning solutions that contain ammonia and chlorine. When mixed together these chemicals form a deadly gas.

#### **Possible Solutions**

Implement a written program which meets the requirements of the Hazard Communication Standard (HCS) to provide for worker training, warning labels, and access to Material Safety Data Sheets (MSDS).

Medical Services and First Aid: Where the eyes or body of any person may be exposed to injurious corrosive materials, provide suitable facilities for quick drenching or flushing the eyes and body within the work area for immediate emergency use.

For additional information, see - Hazardous Chemicals.

# Latex Allergy

**Potential Hazard** 

Exposure of worker to latex allergy from wearing latex gloves, while handling or sorting contaminated laundry.

**Possible Solutions** 

Use appropriate gloves for latex-sensitive employees:

- Employers must provide appropriate gloves when exposure to blood or other potentially infectious materials (OPIM) exists [1910.1030 Bloodborne Pathogens Standard].
- Alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

#### **Noise Exposure**

**Potential Hazard** 

Occupational exposure to high noise levels from loud machinery in the laundry area can lead to occupationally induced hearing loss, hearing impairment, hypertension, elevated blood pressure levels and other health hazards.

**Possible Solutions** 

A safety and health program that recognizes and addresses the hazards created by noise exposure.

#### **Heat Stress**

Exposure to excessive heat can result in heat exhaustion and heat stroke. At high temperatures, the body circulates great amounts of blood to the skin in an effort to eliminate heat through perspiration. As a result, less blood is circulated to the body's vital organs including the brain. Heat exhaustion can lead to dizziness, blurred vision, nausea, and eventual collapse. If not treated promptly, by lowering the person's body temperature, a person suffering from heat exhaustion could suffer brain damage. Even more serious than heat exhaustion is heat stroke. During heat stroke the body stops sweating, making it impossible to dissipate heat. The body temperature may rise to a dangerously high level in a short time and cause death.

## **Potential Hazard**

Workers may be exposed to excessive heat from working in laundry areas. Exposure to excessive heat may lead to heat exhaustion, heat stroke, and possible death.

#### **Possible Solutions**

Good work practice includes educating and training employees and supervisors to detect early signs of heat-related illness and have available first aid workers to recognize and treat these illnesses.

- Recognize the first signs of heat exhaustion, (e.g., dizziness, lightheadedness, weakness, blurred vision, nausea) and take immediate action to lower the employee's body temperature to prevent the progression of symptoms. Workers suffering from heat exhaustion should be removed from the hot environment and immediately given cool water to drink. Lay them on their back and raise their legs. If they are sick to their stomach lay them on their side. If the person does not feel better in a few minutes call for emergency help.
- Recognize the signs of heat stroke (which can be fatal). The symptoms are severe headache, mental confusion, loss of consciousness, flushed face, and hot, dry skin, with no sweating. If someone has stopped sweating, seek medical attention immediately. If a worker shows signs of possible heat stroke, professional medical treatment should be obtained immediately.
- The worker should be placed in a cooler, well ventilated area and the outer clothing should be removed. The worker's skin should be wet and air movement around the worker should be increased to improve evaporative cooling until professional methods of cooling are initiated and the seriousness of the condition can be assessed. Fluids should be replaced as soon as possible. The medical outcome of an episode of heat stroke depends on the victim's physical fitness and the timing and effectiveness of first aid and medical treatment.

Good work practice encourages employers to assess worksites for potential hot work environments and identify and address ways to decrease heat hazards in these areas.

# Employers should be aware of engineering and work practice controls such as:

- o General ventilation and local exhaust ventilation at points of high heat production.
- Spot cooling fans.
- Shielding from radiant heat.
- Evaporative cooling and air conditioning.
- Protective clothing and equipment.
- Provide plenty of drinking water.
- Acclimatize, or gradually introduce employees to the hot environment, because the body gradually builds up a tolerance to high temperatures. This process usually takes up to 2 weeks.
- o Encourage employees to perform the heaviest work in the coolest part of the day.
- o Encourage employees to wear light, loose-fitting, breathable (like cotton) clothing.
- Consider the employee's physical condition and recognize that older or obese workers and personnel on some types of medication are at greater risk.
- Understand the danger of using drugs, including therapeutic ones, and alcohol in hot work environments.
- Encourage employees to avoid using caffeine and alcoholic beverages while working in hot environments. These beverages make the body lose water and increase the risk for heat illnesses.
- Alternate work and rest periods. Encourage frequent short breaks in cool areas to allow your body to cool down.
- o Monitor temperatures, humidity and workers' responses to heat at least hourly.
- Supervisors should be able to detect early signs of heat-related illness and permit workers to interrupt their work if they are extremely uncomfortable.
- Educate employees to recognize the need to replace fluids and salt lost through perspiration.

Additional Information:

- <u>Heat Stress</u>, Safety and Health Topics Page.
- OSHA Technical Chapter: <u>Section III: Heat Stress.</u>
  - <u>Appendix III: 4-2</u>. Heat Stress Related Illness or Accident Follow-up. Lists factors to be evaluated when reviewing a heat stress situation.
  - <u>Appendix III: 4-1</u>. Heat Stress General Workplace Review.
- Protecting Workers in Hot Environments. OSHA Fact Sheet 95-16 (1995, January 1).
- The Heat Equation. OSHA Office of Occupational Health Nursing, <u>3154</u> (English) <u>3155</u> (Spanish), 1998, PDF.

# Lifting/Pushing Hazards

## **Potential Hazard**

Excessive reaching/pushing and/or lifting wet heavy laundry can cause work related musculoskeletal disorders such as strains and sprains to the back or shoulder area.

## **Possible Solutions**

Assess the laundry area for ergonomic stressors and identify and address ways to decrease stressors such as:

- Use proper lifting techniques:
  - o Avoid lifting bulky or awkwardly weighted objects.
  - Avoid lifting/reaching or working above shoulder height.
  - o Avoid awkward postures, such as twisting while lifting.
  - Lift items close to the body.
  - Limit the weight of the item to be lifted.

## **Fire Hazards**

#### **Potential Hazard**

Increased fire hazard because of lint build-up on ceilings and other surfaces such as heat producing equipment. Lint build-up in lint traps can also be a hazard.

#### **Possible Solutions**

Routine cleaning surfaces of lint, and emptying of lint traps.

- "Housekeeping." The employer shall control accumulations of flammable and combustible waste materials and residues so that they do not contribute to a fire emergency. The housekeeping procedures shall be included in the written fire prevention plan.
- The employer shall apprise employees of the fire hazards of the materials and processes to which they are exposed.
- The employer shall review with each employee upon initial assignment those parts of the fire prevention plan which the employee must know to protect the employee in the event of an emergency.
- "Maintenance." The employer shall regularly and properly maintain, according to established procedures, equipment and systems installed on heat producing equipment to prevent accidental ignition of combustible materials. The maintenance procedures shall be included in the written fire prevention plan.

# Slips / Trips / Falls

Potential Hazard

Employee exposure to slips/trips/falls from the wet floors found in the laundry area.

**Possible Solutions** 

A safety and health program that recognizes and addresses slip/trips/falls hazards.

For additional information, see - Slips/Trips/Falls.



#### Noise

Occupational exposure to high noise levels can be found in different areas of the hospital (e.g., laundry, engineering, and heliport). Employee exposure to noisy machinery, or equipment, may induce hearing loss, hearing impairment, hypertension, elevated blood pressure levels and/or other health hazards.

#### Possible Solutions

A safety and health program that recognizes and addresses the hazards created by noise exposure.

- Some examples of engineering and work practice controls to help decrease occupational noise exposure levels include:
  - Reduce the amount of sound energy released by the noise source.
  - Divert the flow of sound energy away from the worker.
  - Protect the receiver from the sound energy reaching him/her.
  - o Proper maintenance of equipment, equipment replacements.
  - Revised operating procedures, equipment redesign, enclosures.
  - Acoustical shields and barriers.
  - o Personal protective equipment.
    - Use hearing protection (e.g., ear plugs, ear phones) to eliminate or decrease noise exposure.
  - The Occupational Noise Exposure Standard [<u>1910.95</u>], where applicable requires an effective hearing conservation program, which includes specific requirements for:
    - Monitoring noise exposure,
    - Audiometric testing,
    - <u>Audiogram evaluation</u>,
    - <u>Hearing protection</u>,
    - <u>Recordkeeping</u> and training.
- Noise Exposure Computation App A, Noise dose is computed by using Table G-16a.

# **Needlesticks: Handling Needles/Sharps**

Handling Needles/Sharps:

- Do not bend, recap, or remove contaminated needles and other sharps unless such an act is required by a specific procedure or has no feasible alternative.
  - Do not shear or break contaminated sharps. (OSHA defines contaminated as the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface).
- o Containerization:
  - Have needle containers available near areas where needles may be found.
  - Discard contaminated sharps immediately or as soon as feasible into appropriate containers.
- Appropriate containers must be:
  - Closable, puncture-resistant, and leak-proof on sides and bottom.
  - Accessible, maintained upright, and not allowed to overfill.
  - Labeled or color coded according to 1910.1030(g)(1)(i)
  - Colored red or labeled with the biohazard symbol.
  - Labeled in fluorescent orange or orange-red, with lettering and symbols in a contrasting color. Red bags or containers may be substituted for labels.



## **Fire Hazards**

## **Potential Hazards**

The potential for fire can occur from many different sources such as: heat-producing equipment, storage of flammable chemicals, and faulty electrical wiring.

**Possible Solutions** 

OSHA Fire Safety requirements include:

- A safe means of egress from fire and like emergencies [1910.36(a)].
  - Employers must comply with OSHA Standards on Means of Egress <u>1910 [Subpart E]</u>, including:
    - A minimum of 2 exits or means of egress are required [1910.36(b)(8)].
    - Exits must be clearly marked [1910.36(b)(5)].



- Access to exits must remain clear of obstructions at all times [(b)(4)].
- o Construction or Maintenance Operation Areas:
  - Any area under construction or under maintenance must:
    - Continuously maintain existing exits and any existing fire protection, or other measures which provide equivalent safety [1910.36(c)(2)].
    - Not be occupied in whole or in part until all exits required for that part are completed and ready for use [1910.36(c)(1)].
    - Have travel from exits to outside continuously free and clear of obstruction [1910.36(d)(1)].

Wiring methods, components, and equipment for general use [1910.305].

- "Housekeeping." The employer shall control accumulations of flammable and combustible waste materials and residues so that they do not contribute to a fire emergency. The housekeeping procedures shall be included in the written fire prevention plan [1910.38(b)(3)].
  - The employer shall apprise employees of the fire hazards of the materials and processes to which they are exposed [1910.38 (b)(4)(i)].
  - The employer shall review with each employee upon initial assignment those parts of the fire prevention plan which the employee must know to protect the employee in the event of an emergency [1910.38(b)(4)(ii)].
  - "Maintenance." The employer shall regularly and properly maintain, according to established procedures, equipment and systems installed on heat producing equipment to prevent accidental ignition of combustible materials. The maintenance procedures shall be included in the written fire prevention plan [1910.38(b)(5)].
- If employees are to fight fires, the employer must decide if all employees or just designated employees will fight fires, or if a fire brigade will be trained and equipped. Fire Brigades [1910.156]. Portable Fire Extinguishers [1910.157].
- If employees are not to fight fires, (i.e., employer relies on safe evacuation of all employees and outside services, e.g., local fire stations to fight fires). Employers must provide an Emergency Action Plan, 1910.38(a) and a Fire Prevention Plan, 1910.38(b) following the requirements of <u>1910.38</u>.

Additional Information:

- o <u>Fire Protection</u>, Safety and Health Topics Page, provides complete requirements.
- o <u>1910 Subpart L</u> OSHA Fire Protection Standard.
- Workplace Fire Safety OSHA Fact Sheet.