# **1.2 Environmental Health** and Safety

# I. Purpose and Scope

This detention standard protects detainees, staff, volunteers and contractors from injury and illness by maintaining high facility standards of cleanliness and sanitation, safe work practices and control of hazardous substances and equipment.

This detention standard applies to the following types of facilities housing ERO detainees:

- Service Processing Centers (SPCs);
- Contract Detention Facilities (CDFs);
   and
- State or local government facilities used by ERO through Intergovernmental Service Agreements (IGSAs) to hold detainees for more than 72 hours.

Procedures in italics are specifically required for SPCs, CDFs, and Dedicated IGSA facilities. Non-dedicated IGSA facilities must conform to these procedures or adopt, adapt or establish alternatives, provided they meet or exceed the intent represented by these procedures.

Various terms used in this standard may be defined in standard "7.5 Definitions."

# **II. Expected Outcomes**

The expected outcomes of this detention standard are as follows (specific requirements are defined in "V. Expected Practices").

- 1. Facility cleanliness and sanitation shall be maintained at the highest level.
- 2. Compliance with all applicable federal, state and local safety and sanitation laws shall be ensured by documented internal and external inspections, and by corrective action when indicated.
- 3. Compliance with all applicable fire safety codes and fire safety performance requirements for facility furnishings shall be ensured.
- 4. Flammable, poisonous, toxic and caustic materials shall be controlled and used in a safe manner.
- 5. Compliance with fire prevention regulations, inspection requirements and other practices, including periodic fire drills, shall ensure the safety of detainees, staff and visitors.
- 6. Staff shall be knowledgeable about procedures an.3
- 7. d responsibilities during emergency situations, including those that require evacuation, in accordance with a written plan and with training at least annually.
- 8. The facility shall have a written plan for immediate release of detainees from locked areas, and provisions for a back-up system.
- 9. A sufficient number of properly positioned emergency exits, clear from obstruction, shall be distinctly and permanently marked.
- 10. Preventive maintenance and regular inspections shall

- be performed to ensure timely emergency repairs or replacement and to prevent dangerous and life-threatening situations.
- 11. Potential disease transfer shall be minimized through proper sanitization of barbering equipment and supplies.
- 12. Pests and vermin shall be controlled and eliminated.
- 13. Safe, potable water shall be available throughout the facility.
- 14. Emergency lighting and life-sustaining equipment shall be maintained and periodically tested.
- 15. Disposal of garbage and hazardous waste shall be in compliance with applicable government regulations.
- 16. The applicable content and procedures in this standard shall be communicated to the detainee in a language or manner the detainee can understand.

All written materials provided to detainees shall generally be translated into Spanish. Where practicable, provisions for written translation shall be made for other significant segments of the population with limited English proficiency.

Oral interpretation or assistance shall be provided to any detainee who speaks another language in which written material has not been translated or who is illiterate.

# **III. Standards Affected**

This detention standard replaces "Environmental Health and Safety" dated 12/2/2008.

## IV. References

American Correctional Association, Performance-based Standards for Adult Local Detention Facilities, 4th Edition: 4-ALDF-1A-01, 1A-02, 1A-03, 1A-07, 1A-14, 1A-15, 1A-16, 1A-17, 1A-18, 1A-19, 1A-20,1C-01, 1C-02, 1C-03, 1C-04, 1C-05, IC-07, 1C-08, 1C-09, 1C-10, 1C-11, 1C-12, 1C-13, 1C-14, 1C-15, 4B-07, 4C-18.

Occupational Safety and Health Administration (OSHA) Regulations.

NFPA Standards.

U.S. Public Health Service Report on Carcinogens.

# **V. Expected Practices**

### A. Environmental Health and Safety

#### 1. General Environmental Health

Environmental health conditions shall be maintained at a level that meets recognized standards of hygiene, including those from the:

- a. American Correctional Association;
- b. Occupational Safety and Health Administration;
- c. Environmental Protection Agency;
- d. Food and Drug Administration;
- e. National Fire Protection Association's Life Safety Code; and
- f. National Center for Disease Control and Prevention.

The health services department or equivalent shall assist in the identification

and correction of conditions that could adversely impact the health of detainees, employees and visitors. The facility administrator designee for environmental health is responsible for developing and implementing policies, procedures and guidelines for the environmental health program that are intended to identify and eliminate or control as necessary, sources of injuries and modes of transmission of agents or vectors of communicable diseases.

The facility administrator designee shall:

- a. conduct special safety investigations and comprehensive surveys of environmental health conditions; and
- b. provide advisory, consultative, inspection and training services regarding environmental health conditions.

The health services administrator or equivalent is responsible for:

- a. implementing a program that assists in maintaining a high level of environmental sanitation; and
- b. providing recommendations to the facility administrator concerning environmental health conditions, in consultation with the environmental health designee.

#### 2. Staff and Detainee Safety

The facility administrator shall ensure that adequate provisions are made for staff and detainee safety, in accordance with these detention standards and applicable law. Standard "7.3 Staff Training" further addresses employee training-related issues. Standard "5.8 Voluntary Work Program" addresses detainee training issues for

workers. Detainees shall receive safety instruction as necessary for living arearelated assignments, such as working with cleaning products to clean general use areas.

Detainee living area safety shall be emphasized to staff and detainees to include providing, as noted in the standards, a housekeeping plan. For example, when there are safety concerns with a detainee sleeping in a top bunk that is not along a wall and that has no bed rail, accommodations shall be made to ensure safety. (Because of the potential safety risk they pose, bed rails are not common in detention settings except for medical housing units.) In locations where ladders are unavailable, alternate accommodations, such as the use of bottom bunks or the addition of a ladder or step, shall be made for detainees on a case-by-case basis. Detainees who have medical or physical problems that may be aggravated by sleeping on a top bunk shall be referred to the medical unit for consideration of a lower bunk permit.

#### 3. General Housekeeping

The facility administrator shall ensure that staff and detainees maintain a high standard of facility sanitation and general cleanliness. When possible, the use of non-toxic cleaning supplies is recommended.

- a. All horizontal surfaces shall be dampdusted daily with an approved germicidal solution used according to the manufacturer's directions.
- b. Windows, window frames and windowsills shall be cleaned on a weekly schedule.
- c. Furniture and fixtures shall be cleaned daily.

- d. Floors shall be mopped daily and when soiled, using the double-bucket mopping technique and with a hospital disinfectant-detergent solution mixed according to the manufacturer's directions.
- e. A clean mop head shall be used each time the floors are mopped.
- f. Waste containers shall weigh less than 50 lbs., be non-porous and lined with plastic bags; the liner shall be changed daily.
- g. Waste containers shall be washed weekly at a minimum, or as needed when they become soiled.
- h. Cubicle curtains shall be laundered monthly or during terminal cleaning following treatment of an infectious patient.

#### 4. Pests and Vermin

The facility administrator shall contract with licensed pest-control professionals to perform monthly inspections to identify and eradicate rodents, insects and other vermin. The contract shall include a preventive spraying program for indigenous insects and a provision for callback services as necessary. Doors to the outside should be tight fitting and door sweeps should be installed to prevent the entry of vermin from outside.

#### 5. Certification of Facility Water Supply

At least annually, a state laboratory shall test samples of drinking and wastewater to ensure compliance with applicable standards. A copy of the testing and safety certification shall be maintained on site.

#### 6. Emergency Electrical Power Generator

#### 1.2 | Environmental Health and Safety

At least every two weeks, emergency power generators shall be tested for one hour, and the oil, water, hoses and belts of these generators shall be inspected for mechanical readiness to perform in an emergency situation.

Power generators are to be inspected weekly and load-tested quarterly at a minimum, or in accordance with manufacturer's recommendations and instruction manual. Technicians shall check starting battery voltage, generator voltage and amperage output at a minimum, and shall perform all other necessary checks as well.

Other emergency equipment and systems shall be tested quarterly, and all necessary follow-up repairs or replacement shall be performed as soon as feasible.

#### 7. Garbage and Refuse

- a. Garbage and refuse includes all trash, rubbish and other putrescible and non-putrescible solid waste, except the solid and liquid waste discharged into the sanitary sewer system of the facility.
- b. Garbage and refuse shall be collected and removed from common areas at least daily to maintain sanitary conditions and to avoid creating health hazards.
- c. Facilities shall comply with all federal, state and local environmental regulations and requirements governing methods for handling and disposing of refuse.

#### **B.** Hazardous Materials

Every facility shall establish a system for storing, issuing, using and maintaining inventories of and accountability for hazardous materials. The facility program shall be supervised by an individual trained in accordance with OSHA standards. The effectiveness of any such system depends not only on written policies, procedures and precautions, but also on adequate supervision and responsible behavior of staff and detainees, including following instructions precisely, taking prescribed precautions and using safety equipment properly.

A list of common flammable, toxic and caustic substances is included at the end of this detention standard as "Appendix 1.2.A: Common Flammable, Toxic and Caustic Substances."

#### 1. Personal Responsibility

Every individual who uses a hazardous substance must:

- a. be trained in accordance with OSHA standards;
- b. be knowledgeable about and follow all prescribed precautions;
- c. wear personal protective equipment when indicated; and
- d. promptly report hazards or spills to the designated authority.

#### 2. Protective Equipment

a. Protective eye, face, and other appropriate equipment (such as footwear, gloves, gowns, and/or aprons) is required where there is a reasonable probability of injury preventable by such equipment. Areas of the facility where such injuries can occur shall be conspicuously marked with eyehazard warning signs.

b. Eyewash stations that meet OSHA standards shall be installed in designated areas throughout the facility, and all employees and detainees in those areas shall be instructed in their use.

#### 3. Inventories

Every area shall maintain a current inventory of the hazardous substances (e.g., flammable, toxic or caustic) used and stored there. Inventory records shall be maintained separately for each substance. Entries for each shall be logged on a separate card (or equivalent), and filed alphabetically by substance. The entries shall contain relevant data, including purchase dates and quantities, use dates and quantities and quantities on hand.

#### 4. Material Safety Data Sheet Files

- a. Every department or other area of the facility using hazardous substances shall maintain a file of Material Safety Data Sheets (MSDS) that includes a list of the locations where hazardous substances are stored, along with a diagram and legend of these locations. Designated staff from each department or area shall provide a copy of each file to the maintenance supervisor.
- b. MSDS are produced by manufacturers and provide vital information on individual hazardous substances, including instructions on safe handling, storage and disposal; prohibited interactions; etc.
- c. Staff and detainees shall have ready and continuous access to the MSDS for the substances with which they are working. Staff and detainees who do not read English shall not be authorized to work

with these materials.

- d. Because changes in MSDS occur often and without notice, staff must:
  - review the latest issuance from the manufacturers of the relevant substances;
  - 2) update the MSDS files as necessary; and
  - 3) forward any changes to the maintenance supervisor, so that the copy is kept current.

#### 5. Master Index

The maintenance supervisor or facility administrator designee shall compile:

- a. a master index of all hazardous substances in the facility and their locations;
- b. a master file of MSDS; and
- c. a comprehensive, up-to-date list of emergency phone numbers (e.g., fire department, poison control center, etc.).

The maintenance supervisor shall maintain this information in the safety office (or equivalent) and ensure that a copy is sent to the local fire department.

# 6. General Guidelines Regarding Hazardous Substances

a. Issuance

Flammable, caustic and toxic substances (hazardous substances) shall be issued (i.e., drawn from supply points to canisters or dispensed) only under the supervision of the designated officer.

b. Amounts

Hazardous substances shall be issued in single-day increments (the amount needed for one day's work.)

c. Supervision
 Qualified staff shall closely monitor detainees working with hazardous substances.

d. Accountability
 Inventory records for a hazardous
 substance must be kept current before,
 during and after each use.

#### 7. Flammable and Combustible Liquids

- a. As required by the Federal Hazardous Substances Labeling Act, any liquid or aerosol labeled "flammable" or "combustible" must be stored and used as prescribed on the label.
- b. Lighting fixtures and electrical equipment installed in flammable liquid storage rooms must meet National Electrical Code requirements in hazardous locations.
- c. Every hazardous material storage room shall:
  - 1) be of fire-resistant construction and properly secured;
  - have self-closing fire doors at each opening;
  - 3) be constructed with either a four-inch sill or a four-inch depressed floor; and
  - 4) have a ventilation system (mechanical or gravity flow), which provides at least six air changes per hour, within 12 inches of the floor.
- d. Every storage cabinet shall:

- be constructed according to the applicable code and securely locked at all times;
- 2) be clear of open passageways, stairways and other emergency exit areas;
- 3) be conspicuously labeled: "Flammable— Keep Fire Away"; and
- 4) contain not more than 60 gallons of Class I or Class II liquids, or more than 120 gallons of Class III liquids.
- e. Storage rooms and cabinets may be entered only under secure conditions and under the supervision of authorized staff.
- f. Any portable container that is not the original shipping container must be designated as an approved safety canister, and must be listed or labeled by a nationally recognized testing laboratory. Each container shall bear a legible label that identifies its contents.
- g. Excess liquids shall remain in original containers, tightly closed, in the storage room or cabinet.
- h. The MSDS shall govern use of particular flammable or combustible liquids.
- Only authorized staff may dispense flammable and combustible liquids, using acceptable methods for drawing from or transferring these liquids.
- j. Drawing from or transferring any of these liquids into containers indoors is prohibited except:
  - 1) through a closed piping system;
  - 2) from a safety can;

- 3) by a device drawing through the top; or
- 4) by gravity, through an approved selfclosing system.

An approved grounding and bonding system must be used when liquids are dispensed from drums.

- k. Without exception, cleaning liquids must have a flash point at or above 100° F (e.g., Stoddard solvents, kerosene). Cleaning operations must be in an approved partscleaner or dip tank, fitted with a fusible link lid with a 160 degree F meltingtemperature link.
- 1. Staff shall follow MSDS directions:
  - 1) when disposing of excess flammable or combustible liquids; or
  - 2) after a chemical spill.
- 8. Toxic and Caustic Substances
- a. All toxic and caustic materials must be stored in secure areas, in their original containers, with the manufacturer's label intact on each container.
- b. Only authorized staff shall draw/dispense these substances, in accordance with the applicable MSDS.
- c. Staff shall either return unused amounts to the original container(s) or, under certain circumstances, to another suitable, clearly labeled container within the storage area.
- d. MSDS directions shall determine the disposal and spill procedures for toxic and caustic materials used in the facility.
- 9. Poisonous Substances

Poisonous substances or chemicals (e.g., methyl alcohol, sulfuric acid, muriatic acid, caustic soda or tannic acid, etc.) pose a very high (Class I) caustic hazard due to their toxicity.

Methyl alcohol, variously referred to as wood alcohol and methanol, is commonly found in industrial applications (e.g., shellac thinner, paint solvent, duplicating fluid, solvents for leather cements and dyes, flushing fluid for hydraulic brake systems).

- a. If ingested, methyl alcohol can cause permanent blindness or death.
- b. Staff must directly supervise the use of any product containing methyl alcohol. Products that contain methyl alcohol in highly diluted amounts (e.g., shoe dye) may be issued to detainees, but only in the smallest workable quantities.
- c. Immediate medical attention is vital any time methyl alcohol poisoning is suspected.

#### 10. Other Toxic Substances

- a. Permanent antifreeze containing ethylene glycol shall be stored in a locked area and dispensed only by authorized staff.
- b. Typewriter cleaner containing carbon tetrachloride or trichlorochane shall be dispensed in small quantities and used under direct staff supervision.
- c. Cleaning fluids containing carbon tetrachloride or tetrachloride or trichlorochane shall be strictly controlled.
- d. Glues of every type may contain hazardous chemicals. Toxic glues must be stored in a locked location, for use only by

- authorized staff. When use of a nontoxic product is not possible, staff must closely supervise all stages of handling.
- e. The use of dyes and cements for leather requires close supervision. Nonflammable types shall be used whenever possible.
- f. Ethyl alcohol, isopropyl alcohol and other antiseptic products shall be stored and used only in the medical department and only under close supervision. To the extent practical, such chemicals shall be diluted and issued in small quantities to prevent any injuries or lethal accumulation.
- g. Pesticides not currently approved by the Environmental Protection Agency, such as DDT and 1080 (sodium fluoroacetate) are prohibited. The maintenance supervisor is responsible for purchasing, storing (in a locked area) and dispensing all pesticides used in the facility.
- h. The maintenance supervisor or other staff members responsible for herbicides must hold a current state license as a certified private applicator. Persons applying herbicides must wear proper clothing and protective gear.
- Lyes may be used only in dye solutions and only under the direct supervision of staff.

# **11**. Labeling of Chemicals, Solvents and Other Hazardous Materials

The facility administrator shall individually assign the following responsibilities associated with the labeling procedure:

a. identifying the nature of potentially hazardous materials adopted for use;

- b. overseeing use of properly labeled containers for hazardous materials, including any and all miscellaneous containers into which employees might transfer materials;
- c. instructing staff in the meaning of the classification code and the MSDS, including the safe handling procedures for each material;
- d. working with staff ensure that containers are properly labeled; and
- e. correctly labeling all smaller containers to correspond to the manufacturer-affixed labels on larger shipping containers.

#### 12. Controlled Hazardous Materials

Certain substances require special treatment and careful planning and precautions before use. These controlled materials are classified according to the type of hazard and the nature of the restrictions imposed for their safe use, as specified in OSHA regulations.

- a. Class I: Industrial Solvents
  Industrial solvents and chemicals used as paint thinners, degreasers and cleaning agents may have toxic properties and low flash points, making them dangerous fire hazards.
- b. Class II: Restricted Materials
  Beryllium and its alloys and compounds,
  and silver solder containing cadmium,
  pose a danger to workers, for whom
  special precautions must be taken.
- c. Class III: Recognized Carcinogens OSHA-listed carcinogens are governed by the OSHA regulations provided in 29 CFR 1910.1000.

- Although asbestos appears on the OSHA list, it is exempt from the regulation when:
- 1) no asbestos fibers shall be released into the air during handling and use; and
- 2) the asbestos consists of firmly bound fibers contained in a product such as a transit pipe, wallboard, or tile (except when being sawed or otherwise handled in a way that releases fibers into the air).
- d. Class IV: Suspected Carcinogenic,
  Teratogenic and Mutagenic Materials
  Chemical agents, substances, mixtures
  and exposures are listed in the biennial
  Report on Carcinogens issued by the
  U.S. Public Health Service, in accordance
  with the Public Health Service Act. The
  maintenance supervisor shall ensure that
  the facility has copies of the report and
  that there is compliance with the
  provisions of the latest edition.

#### C. Fire Prevention and Control

#### 1. Fire Safety Codes

Every facility shall comply with standards and regulations issued by:

#### a. OSHA:

b. the American Correctional Association
"mandatory" Expected Practices
[Mandatory ACA Expected Practice 4ALDF-1C-07 requires that the facility
conform to applicable federal, state and/or
local fire safety codes, and that of the
authority having jurisdiction document
compliance. A fire alarm and automatic
detection system are required (or else
there must be a plan for addressing these

or other deficiencies within a reasonable time period), as approved by the authority having jurisdiction. If the authority approves any variance, exceptions or equivalencies, they must not constitute a serious life-safety threat to the occupants of the facility.];

- c. local and national fire safety codes; and
- d. applicable standards of the American Society for Testing and Materials, American National Standards Institute and Underwriters' Laboratories or Factory Mutual Engineering Corporation.

New construction, alterations and renovations, shall comply with:

- a. the latest revision or update of the International Council Codes;
- b. the Uniform Building Code; or
- c. the Standard Building Code, in accordance with 40 U.S.C § 619 and local law.

If the local government does not mandate adherence to a particular code, construction must conform to the International Council Codes.

In addition, construction shall comply with the latest edition of the National Fire Protection Association (NFPA)'s 101, Life Safety Code and National Fire Codes (NFCs). If the fire protection and life safety requirements of a local building code differ from NFPA 101 or the NFCs, the requirements of NFPA 101 and the NFCs shall take precedence and be recognized as equivalent to those of the local building code.

#### 2. Inspections

- a. A qualified departmental staff member shall conduct weekly fire and safety inspections.
- b. Facility maintenance (safety) staff shall conduct monthly inspections.
- c. Written reports of the inspections shall be forwarded to the facility administrator for review and, if necessary, corrective action determinations. The maintenance supervisor shall maintain inspection reports and records of corrective action in the safety office. Fire safety deficiencies shall be promptly addressed.

#### 3. Fire Prevention, Control and Evacuation Plan

Every facility shall develop a written fire prevention, control and evacuation plan that includes the following:

- a. control of ignition sources;
- b. control of combustible and flammable fuel load sources;
- c. provisions for occupant protection from fire and smoke;
- d. inspection, testing and maintenance of fire protection equipment, in accordance with NFPA codes, etc.;
- e. monthly fire inspections;
- f. installation of fire protection equipment throughout the facility, in accordance with NFPA codes;
- g. accessible, current floor plans (including all buildings and rooms); prominently posted evacuation maps/plans; and exit signs and directional arrows for traffic flow, with a copy of each revision filed with the local fire department; and

h. exit diagrams that shall be conspicuously posted throughout the facility.

#### 4. Fire Drills

Fire drills shall be conducted and documented at least quarterly in all facility locations including administrative areas.

- a. Fire drills in housing units, medical clinics and other areas occupied or staffed during non-working hours shall be timed so that employees on each shift participate in an annual drill.
- b. Detainees shall be evacuated during fire drills, except:
  - in areas where security would be jeopardized;
  - 2) in medical areas where patient health could be jeopardized; or
  - 3) in individual cases when evacuation of patients or detainees is logistically not feasible.
    - Staff shall simulate drills in areas where detainees are not evacuated.
- c. Emergency-key drills shall be included in each fire drill, and timed. Emergency keys shall be drawn and used by the appropriate staff to unlock one set of emergency exit doors not in daily use.

  NFPA recommends a limit of four and one-half minutes for drawing keys and unlocking emergency doors. However, when conducting fire drills, emphasis shall be placed on safe and orderly evacuation rather than speed.

#### 5. Exit Diagram

In addition to a general area diagram, the

following information must be provided on signs:

- a. instructions in English, Spanish and the next most prevalent language at the facility;
- b. "You are here" markers on exit maps; and
- c. emergency equipment locations.

"Areas of Safe Refuge" shall be identified and explained on diagrams. Diagram posting shall be in accordance with applicable fire safety regulations of the jurisdiction.

### **D. Medical Operation**

#### 1. Needles and Other Sharp Objects

A mandatory, uniform procedure shall be established for the safe handling and disposal of used needles and other potentially sharp objects (sharps) to prevent both mechanical injury and the percutaneous transmission of infectious disease organisms, such as the hepatitis B virus (HBV) and human immunodeficiency virus (HIV). Sharps are defined as all disposable or discarded items derived from detainee care that could potentially transmit disease via direct subdermal inoculation. Items included are: hypodermic needles and syringes, scalpel blades, glass vials or ampules containing materials deemed to be infectious, burrs, glass cartridges and lancets.

Accidental injuries from sharp objects are common in health care programs; most are from needle sticks caused by staff attempting to recap hypodermic needles. A uniform procedure for used needles and other disposable sharps is necessary to reduce the number of such injuries by preventing the

secondary handling of needles and other dangerous sharp objects used in the delivery of medical care.

# 2. Standard Precautions (includes "Universal Precautions")

Staff shall frequently wash their hands and take additional routine precautions to prevent contact with blood or other body fluids.

- a. Gloves shall be worn: prior to touching blood and body fluids, mucous membranes, or non intact skin of all patients; prior to handling items or surfaces soiled with blood or body fluids; and prior to performing venipuncture and other vascular access procedures.
- b. Gloves shall be changed after contact with each detainee.
- c. Masks and protective eyewear or face shields shall be worn during procedures that are likely to generate droplets of blood or other body fluids.
- d. Gowns and/or aprons shall be worn during procedures that are likely to generate splashes of blood or other body fluids.
- e. Hands and other skin surfaces shall be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands shall be washed immediately after gloves are removed.
- f. All health-care workers shall take precautions to prevent injuries caused by needles, scalpels and other sharp instruments or devices during procedures, especially at the following times: when cleaning used instruments, during

- disposal of used needles and when handling sharp instruments after procedures. Instruments and drugs shall be maintained in a secure and sanitary condition.
- g. To prevent needle-stick injuries, needles shall not be recapped, purposely bent or broken, removed from disposable syringes, or otherwise manipulated by hand. After use, disposable syringes and needles, scalpel blades and other sharp items shall be placed in puncture-resistant containers for disposal.
- h. Large-bore reusable needles shall be placed in a puncture-resistant container for transport to the reprocessing area.
- To minimize the need for emergency mouth-to-mouth resuscitation, mouthpieces, resuscitation bags or other ventilation devices shall be available for use in areas in which the need for resuscitation is foreseeable.
- j. Health-care workers who have exudative lesions or weeping dermatitis shall refrain from all direct patient care and from handling patient care equipment until the condition resolves.
- k. Pregnant health-care workers shall strictly adhere to precautions to minimize the risk to the fetus of perinatal transmission of HIV.
- Isolation precautions shall be used as necessary if associated conditions, such as infectious diarrhea or tuberculosis, are diagnosed or suspected. Implementation of standard blood and body fluid precautions for all detainees eliminates the need for

the use of isolation category of "blood and body fluid precautions" previously recommended by the Centers for Disease Control for individuals known or suspected to be infected with blood-borne pathogens.

Staff shall encourage detainees to wash their hands frequently and to take additional routine precautions to prevent contact with blood or other body fluids.

#### 3. Accidental Needle Sticks

Any employee or detainee who receives a needle stick or who is cut while handling potentially contaminated sharps shall be counseled regarding baseline testing for HBV and HIV, and referred to his/her usual source of health care. If the injury also involves a person who is a known source of possible infection, that person shall also be tested for HBV and HIV. The incident shall be reported as an occupational injury and documented in accordance with applicable regulations for commissioned officers and civil service employees, respectively.

The leading health service provider's exposure-control plan shall be followed in the event of a needle stick.

#### 4. Inventory

Items that pose a security risk, such as sharp instruments, syringes, needles and scissors, shall be inventoried and checked weekly by an individual designated by the medical facility's Health Service Administrator (HSA) or equivalent.

#### 5. Handling

Without removing the needles or replacing

the needle covers, staff shall place used (disposable) syringes in a plastic disposal box or container.

#### a. Disposal Containers

- Use only commercially available, biohazardous-waste sharps containers approved by the National Institute of Safety and Health (e.g., a "Winfield Sharps Container").
- 2) Do not use milk cartons or plastic milk jugs or other plastic containers of similar thickness.
- 3) Use containers with a two-gallon capacity (approximate).
- 4) Under no circumstances shall an item be removed from the Winfield Sharps Container (Sharps Container).

#### b. Location

Sharps Containers shall be located on top of counters or, if on the wall, at least five feet above ground. Sharps Containers shall never sit on the floor.

#### c. Disposal

When the disposal box is one-half to twothirds full, the lid shall be closed and locked, and tape shall be placed over the top of the lid to indicate that it is ready for disposal. The Sharps Container shall be labeled with the words "infectious waste" or with the universal biohazard symbol, and placed in the proper area for removal and disposal.

Sharps are considered infectious waste, and final disposal of the Sharps Container and contents shall be through a commercial contractor that handles disposal of infectious waste in accordance with all local and federal regulations.

The HSA shall make arrangements for disposal with an approved contractor and is responsible for validating that the contractor's disposal methods are in accordance with all infectious and hazardous waste disposal laws and regulations. Arrangements shall be made with local hospitals, when possible, for disposal with the hospitals' own infectious waste.

#### 6. Environmental Health in Medical Operations

While many of the following considerations, precautions and specific procedures apply to situations that typically arise in medical operations, in many cases they have general application to all facility operations.

a. General Housekeeping
Environmental cleanliness shall reduce,
control and prevent nosocomial infections
due to contaminated environmental
surfaces. The HSA or designee is
responsible for ensuring the cleanliness of
the medical facility.

Using an acceptable health agency standard as a model, the HSA shall establish:

- 1) the cleaning equipment, cleansers, disinfectants and detergents to be used;
- 2) the methods of cleaning; and
- 3) the frequency of cleaning and inspections.

The HSA or designee shall make a daily visual inspection of the medical facility, noting the condition of floors, walls, windows, horizontal surfaces and

equipment.

All surfaces touched by detainees or staff shall be cleaned using fresh solutions of appropriate disinfectant products, applied with clean cloths, mops or wipes. Cleaned surfaces need not be monitored microbiologically since the results of such tests have been shown not to correlate with infection risk. Floors, walls, beds, tables and other surfaces that usually come in contact with intact skin require low-level disinfection

Horizontal surfaces in detainee care areas are cleaned on a regular basis, when soiling or spills occur. Additionally, short-stay units are cleaned when a detainee is discharged. Cleaning of walls, blinds or curtains is required only when visibly soiled.

The Chief Nurse (or equivalent) is responsible for training all staff and detainees in using proper housekeeping procedures and proper handling of hazardous materials and chemicals.

#### 1) General Cleaning

- a) All horizontal surfaces shall be damp dusted daily with an approved germicidal solution.
- b) Windows, window frames and windowsills shall be cleaned on a regular schedule, but do not require daily cleaning.
- c) Furniture and fixtures shall be cleaned daily.
- d) Floors shall be mopped daily and when soiled using the double bucket

- mopping technique. The cleaning solution shall be a hospital disinfectant-detergent solution mixed according to the manufacturer's directions. A clean mop head shall be used each time the floors are mopped.
- e) Waste containers shall be lined with plastic bags and the liner shall be changed daily. The container itself shall be washed at least weekly, or as needed when it becomes soiled.
- f) Cubicle curtains shall be laundered monthly or during terminal cleaning following treatment of an infectious patient.

#### 2) Isolation Cleaning

- a) An approved germicidal detergent solution shall be freshly prepared in accordance with the manufacturer's specifications for each cleaning.
- b) After cleaning the isolation room, mops and cleaning cloths shall be laundered before being reused.
- c) Dirty water and used disinfecting solutions shall be discarded and the buckets and basins disinfected before being refilled. Items used in cleaning a contaminated isolation room shall never be taken into another area.
- d) Linens shall be carefully removed from the bed and double-bagged for transport.
- e) All waste materials shall be doublebagged and disposed of as contaminated waste.

#### 3) Terminal Cleaning

- a) Every item in the room must be cleaned with an approved hospital germicidal solution.
- b) When applicable, linen shall be stripped from the bed, with care taken not to shake the linen. Linen shall be folded away from the person and folded inward into a bundle, then removed with minimal agitation.
- c) When applicable, all reusable receptacles (e.g., drainage bottles, urinals, bedpans, water pitchers) shall be emptied and rinsed with germicidal solutions.
- d) All equipment that is not to be discarded (e.g., IV poles, respirators, suction machines) shall be washed with an approved germicidal solution following manufacturer's guidelines for cleaning the specific piece of equipment.
- e) When applicable, mattresses and pillows covered with durable plastic covers shall be washed thoroughly with the approved germicidal solution.
- f) When applicable, beds shall be washed thoroughly, using a small brush soaked in germicidal solution to gain access to small holes and crevices, to areas between the springs and to the casters.
- g) All furniture shall be washed with a germicidal detergent solution. Use a small brush if necessary. Outside

- and underside as well as legs and casters must also be washed.
- h) Wastebaskets shall be thoroughly washed with a germicidal solution after trash and liner have been removed.
- i) Telephones shall be thoroughly cleaned with a clean cloth soaked in the germicidal solution. The earpiece and mouthpiece shall be unscrewed, scrubbed, dried and replaced.
- j) Walls and ceilings need not be washed entirely, but areas that are soiled shall be washed with germicidal solution.
- 4) Choice of Disinfecting Materials
  Hospital-grade disinfectant detergent
  formulations registered by the
  Environmental Protection Agency
  (EPA) may be used for environmental
  surface cleaning, but the physical
  removal of microorganisms by
  scrubbing is as imperative as any
  antimicrobial effect of the cleaning
  agent used.
  - Cost, safety and acceptance by staff shall be the criteria for selecting any such registered agent. The manufacturer's instructions for use shall be followed exactly.
- b. Blood and Body Fluid Clean-up
  Spills of blood and body fluids shall be
  cleaned up and the surface
  decontaminated in such a manner as to
  minimize the possibility of workers
  becoming exposed to infectious organisms,
  including HIV and HBV. A suitable

cleanup kit shall be maintained for use in cases of spills of blood and body fluids. Cleanup kits may be obtained from commercial sources, or may be compiled by Health Services Department (HSD) staff or the designated health care provider.

## 1) Compiling a Cleanup Kit

To prepare a cleanup kit for blood and body fluid spills, package the following materials in a 12" x 15" clear zip-lock bag:

- a) gloves, rubber or vinyl, householdtype (2 pair);
- b) clean absorbent rags (4);
- c) absorbent paper towels (15);
- d) disposable bag marked "contaminated" size 23"x10"x39", minimum thickness 1.5 mils.;
- e) Clear plastic bag 13"x10"x39", minimum thickness 1.5 mils.; and
- f) Bottle of "hospital disinfectant" (containing quaternary ammonium chlorides in at least 0.8% dilution), or a bottle of household bleach such as "Clorox" or "Purex" (5.25% sodium hypochlorite).
- 2) Selection of Disinfectants
  Dilute solutions of sodium hypochlorite
  are reported extremely effective against
  both HIV and the Hepatitis B virus and
  therefore have been recommended for
  use in environmental decontamination
  procedures. Quaternary ammonium
  compounds are less effective against

Hepatitis B. Chlorine in solution inactivates viruses quickly and efficiently, but must reach the virus particles to do so.

Proteinaceous materials may interfere with the ability of the appropriate disinfectant solution to reach the virus particles. Since quaternary disinfecting compounds may act as a detergent as well as a disinfectant, these compounds may be used for cleaning and removal of proteinaceous materials from surfaces. However, when using such a compound to clean a surface, it shall be necessary to follow with the use of chlorine solution for final disinfection.

Most blood or fluids shall be removed from the surface during routine medical cleaning procedures before application of the disinfectant; in such cases, use of sodium hypochlorite solution shall be sufficient.

- 3) Selection of Gloves
  Household or industrial rubber gloves
  are recommended for use rather than
  surgical rubber gloves, as surgical
  gloves are somewhat porous and are
  less resistant to mechanical damage
  and punctures during clean-up
  procedures.
- 4) Assignment of Cleaning Duties to Detainees in Medical Facilities Detainee workers may be assigned duties cleaning the medical facility. Detainees are permitted to clean floors and walls and to remove trash, but are not permitted to clean medical

- equipment.
- 5) Instructions for Use of Clean-Up Kit
  - a) Open the bag and remove the supplies.
  - b) Put on one pair of gloves.
  - c) Depending on the type of disinfectant in the kit, take out bottle of "hospital disinfectant," or prepare a dilute solution of sodium hypochlorite. To prepare a 1:10 dilution of 5.25% sodium hypochlorite, mix 1 part of 5.25% sodium hypochlorite (common household bleach) with 10 parts water.
  - d) Open the large clear plastic bag and the large bag marked "contaminated." Place them next to each other.
  - e) Use paper towels to absorb as much of the spilled fluid as possible; then place soiled paper towels in the large clear plastic bag.
  - f) Pour the solution carefully onto the spill area. Dispose of the empty bottle in the large, clear plastic bag. Leave disinfectant in place for 15 minutes.
  - g) Use the rags to clean the area, and place rags in the large clear plastic bag.
  - h) Tie off the clear plastic bag and place it inside the large plastic bag marked "Contaminated."
  - i) Remove gloves carefully and place them in the plastic bag marked

"Contaminated."

- j) Put on the second pair of gloves and tie the "Contaminated" trash bag closed.
- k) Properly dispose of the "Contaminated" trash bag in a contaminated-waste receptacle.
- Properly dispose of the second pair of gloves in the contaminated-waste receptacle.
- m) Wash your hands.
- n) Prepare a new clean-up kit.

NOTE: Do not place linen or nondisposable articles in the "Contaminated" trash bag.

c. Hazardous and Infectious Waste Disposal Infectious and hazardous waste generated at a medical facility shall be stored and disposed of safely and in accordance with all applicable federal and state regulations.

For identified wastes that represent sufficient risk of causing infection or injury during handling and disposal, the following precautions shall be applied.

#### 1) Definitions

Hazardous or infectious waste is defined as: microbiology laboratory waste; human blood and blood products; sharps (as defined in "Section VIII," "A" above); laboratory and other chemicals; or certain drugs such as antineoplastic.

Miscellaneous biomedical waste is defined as waste materials that are not specifically defined as infectious waste. Such waste includes bandages, dressings, casts, catheters and disposable pads.

Waste from detainees in isolation is not considered to be infectious waste unless it falls within the specific definition of infectious waste as stated above.

- 2) Collection and Storage Infectious waste must be separated from the general waste stream and clearly labeled as infectious, adhering to the following practices:
  - a) Infectious waste shall be doublebagged and tied and labeled "Infectious Waste."
  - b) The bags used must be impermeable, commercially supplied red bags intended specifically for biohazardous waste storage.
  - c) Miscellaneous biomedical waste shall be double-bagged and tied but need not be labeled as infectious.
- 3) Treatment and Disposal
  Blood products and designated body
  fluids shall be poured slowly and
  carefully down a toilet to prevent
  splash. Compacting of untreated
  infectious waste is prohibited. The
  waste disposal contractor must meet all
  state and local requirements for
  transportation and disposal.

## E. Barber Operations

Sanitation in barber operations is imperative because of the possible transfer of diseases through direct contact or by towels, combs and clippers. Towels shall not be reused by other detainees until sanitized. Instruments such as combs and clippers shall not be used successively on detainees without proper cleaning and disinfecting.

- 1. For sanitation reasons, it is preferable that barbering operations be located in a room that is not used for any other purpose. The room must have sufficient light, and be supplied with hot and cold running water. The floors, walls and ceilings shall be smooth, nonabsorbent and easily cleaned.
- 2. Each barbershop shall have all equipment and facilities necessary for maintaining sanitary procedures for hair care, including covered metal containers for waste, disinfectants, dispensable headrest covers, laundered towels and haircloths.
- 3. After each detainee visit, all hair care tools that came in contact with the detainee shall be cleaned and effectively disinfected. Ultraviolet lights are not appropriate for sterilization but may be

- used for maintaining tools that have already been properly sterilized.
- 4. Detailed hair care sanitation regulations shall be conspicuously posted in each barbershop for the use of all hair care personnel and detainees. Cotton pads, absorbent cotton and other single or dispensable toilet articles may not be reused, and shall be placed in a proper waste receptacle immediately after use. The common use of brushes, neck dusters, shaving mugs and shaving brushes is prohibited.
- 5. Barbers or beauticians shall not provide service to any detainee when the skin of the detainee's face, neck or scalp is inflamed, or when there is scaling, pus or other skin eruptions, unless service of such detainee is performed in accordance with the specific authorization of the chief medical officer. No person who is infested with head lice shall be served.

# Appendix 1.2.A: Common Flammable, Toxic and Caustic Substances

**Class I Liquids** 

Gasoline

Benzene (Petroleum ether)

Acetine

Hexane

Lacquer

Lacquer thinner

Denatured alcohol

Ethyl alcohol

Xylene (Xylol)

Contact cement (flammable)

Toudi (Toluene)

Methyl ethyl ether

Methyl ethyl ketone

Naphtha Y, M and P

**Class II Liquids** 

Diesel fuel

Motor fuel

Kerosene

Cleaning solvents

Mineral spirits

Agitene

**Class III Liquids** 

Paint (oil base)

Linseed oil

Mineral oil

Neat's-foot oil

Sunray conditioner

Guardian fluid

**Toxic Substances** 

Ammonia

Chlorine

Antifreeze

Duplicating fluid

Methyl alcohol

Defoliants

Herbicides

Pesticides

**Caustic Substances** 

Lve

Muriatic acid

Caustic soda

Sulfuric acid

Tannic acid