ANNEX
to the
BODY ART MODEL CODE

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Foreword

Annex to the 2019 Body Art Model Code, 2nd Edition

This Annex is provided as a supplement to the Body Art Model Code (the Code). The information contained in this Annex provides justification, rationale, and best practices to support the requirements in the Code, but is not intended to be interpreted or enforced as additional Code requirements. The Annex is provided to assist users in understanding the content and intent of the Code and applying the Code effectively.

The information in this Annex is intended to assist health departments, body art regulators, body artists, and other stakeholders in ensuring the health and safety of body art establishments and procedures. This Annex is not intended to provide any medical advice or diagnoses. Additionally, body artists are not medical professionals, unless they have become certified medical professionals outside of their body art work. Body artists are not to give or be construed as giving medical advice or diagnoses.

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1. DEFINITIONS

The terms used in these regulations are defined as follows:

ADULT means an individual who is 18 years or older.

AFTERCARE means recommended instructions specific to the body art procedure(s) rendered, given to the client about caring for the body art and surrounding area. These instructions will include information about when to seek medical treatment, if necessary.

ANTISEPTIC means a product that is labeled as useful in preventing diseases caused by microorganisms present on the skin and/or on mucosal surfaces of humans. This includes products meant to kill germs and/or labeled as "antiseptic," "antimicrobial," "antibacterial," "microbicide," or "germicide," or other similar terms. These products should be in compliance with section 201(g)(1)(B) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(g)(1)(B)).

ASEPTIC TECHNIQUE means a set of specific practices and procedures performed under controlled conditions with the goal of minimizing contamination by pathogens.

AUTHORIZED AGENT means an employee of the designated health department/district appointed by the Director of Health to enforce provisions of these regulations.

AUTOCLAVE means a device that is intended for use by a user to sterilize products by means of pressurized steam. This device must comply with one of three types of steam programs defined as B, N, and S by standard EN13060, ISO 17665.

AUTOMATED INSTRUMENT WASHER means a mechanical washer designed specifically for the decontamination of instruments prior to sterilization. These devices must comply with ISO 15883-1/2.

BIOCOMPATIBLE means the ability of an object to be inserted into a person without eliciting any undesirable local or systemic effects in that person.

BIOMEDICAL WASTE means any solid or liquid waste that can present a threat of infection to humans, including nonliquid tissue, body parts, blood, blood products, and body fluids from humans; wastes that contain human disease-causing agents; and discarded sharps. The following are also included:

1. Used, absorbent materials saturated with blood, blood products, body fluids, or excretions/secretions contaminated with visible blood. Also includes absorbent materials saturated with blood or blood products that have dried.
2. Nonabsorbent, disposable devices that have been contaminated with blood, body fluids or, secretions/excretions visibly contaminated with blood, but the devices have not been treated by an approved method.

BLOODBORNE PATHOGEN means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV) [Occupational Safety and Health Administration [OSHA] definition 29cfr 1910.1030(b)].

BODY ART means body piercing, tattooing, branding, scarification, or permanent cosmetics.

BODY ART ESTABLISHMENT means any place or premise, whether licensed or not, public or private, temporary or permanent, in nature or inside, for profit or not, where the practices of body art are performed.

BODY ARTIST means any person performing body art services, whether licensed or not.

BODY PIERCING means any method of piercing the skin or mucosa to place jewelry through the skin or mucosa.

BRANDING means the process in which a mark or marks are burned into human skin tissue with the intention of leaving a permanent mark.

CAS REGISTRY NUMBER also referred to as **CASRN** or **CAS Number**, means a unique numerical identifier assigned by the Chemical Abstracts Service (CAS) to every chemical substance described in the open scientific literature.

CHRONIC/REPEAT VIOLATIONS means a violation that has occurred three times within five inspections.

CLIENT means an individual upon whom a body artist performs a body art procedure.

COMPLAINT OF INJURY FORM means a document used to file with the Department a notice of injury as a result of a body art procedure.

CONTAMINATED means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

COSMETIC TATTOOING see **PERMANENT COSMETICS**

CRITICAL VIOLATIONS means those items that are likely to cause an imminent health danger to the public and/or body artist.

CYCLE NUMBER means a unique number that corresponds to each individual autoclave cycle. This number is used as an identifier. It might or might not include the date as part of the number.

DECONTAMINATION means the use of physical and/or chemical means to remove, inactivate, or destroy pathogens on a surface. A surface/item is decontaminated when there are no infectious particles, and then the surface/item is rendered safe for handling, use, or disposal (OSHA).

DEPARTMENT means the agency (whether local, state, or federal) or its authorized representatives who have jurisdiction to promulgate, monitor, administer, and enforce regulations.

DILUENT means a substance used to dilute something.

DISINFECTANT means a product that is tuberculocidal and registered by the U.S. Environmental Protection Agency, as indicated on the label for use in disinfection.

DISINFECT means to destroy pathogenic and other kinds of microorganisms by physical and/or chemical means. Disinfection is less lethal than sterilization because it destroys most recognized pathogenic microorganisms; it does not, however, necessarily destroy all microbial forms, such as bacterial spores. Disinfection does not ensure the margin of safety associated with sterilization processes (Centers for Disease Control and Prevention's [CDC] Division of Oral Health).

EAR PIERCING see **BODY PIERCING**

EAR PIERCING GUN means a stud-and-clasp ear-piercing system. Ear-piercing guns must adhere to these regulations and meet the requirements of a body art practitioner.

ENFORCEMENT OFFICER means all jurisdictional health officers, directors of environmental health, and duly authorized registered environmental health specialists and their agents having regulatory jurisdiction as applied to body art establishments and operations.

EQUIPMENT means all machinery, containers, vessels, tools, devices, implements, storage areas, and sinks that are used in conjunction with the storage or application of body art by a body artist, or used within the sterilization/decontamination and disinfection processes.

FACILITY see **BODY ART ESTABLISHMENT**

FURNISHINGS means all fixtures, furniture, and other objects within a body art establishment that are not integral to the structure of the physical establishment (e.g., walls, windows, doors) and are not used in the storage of body art equipment, application of body art, or its sterilization/decontamination and disinfection processes.

GLOVES means medical grade or exam grade, sterile or nonsterile, disposable, single-use, full-hand coverings worn for protection against disease transmission.

GUARDIAN means a person lawfully invested with the power and charged with the obligation of taking care of managing the property and rights of a person who, because of age, understanding, or self-control, is considered incapable of administering his or her own affairs.

HAND WASHING means the act of cleaning one's hands for the purpose of removing dirt, soil, or microorganisms through the use of soap, warm water, and friction.

HAND WASHING SINK means a sink equipped to provide water at a temperature of at least 38 oC (100 oF) through a mixing valve or combination faucet, used solely for washing hands, arms, or prosthetics.

HAZARDOUS WASTE means all substances that exposure to results or can result in adverse effects on human health and safety under 29 CFR 1910.120 OSHA.

IDENTIFICATION means government-issued ID card with name, photo, and birthdate.

IMMINENT HEALTH HAZARD means a significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that requires immediate correction.

INFORMED CONSENT AND RELEASE FORM means a form signed by a client prior to a body art procedure to confirm that he or she agrees to the procedure and is aware of any risks that might be involved.

INSPECTION means a careful examination, exploration, or evaluation of the body art establishment and the body artist by the Department in compliance with this document.

INSTRUMENTS/TOOLS/DEVICES/IMPLEMENTS USED FOR BODY ART means handpieces, needles, needle bars, forceps, and other tools that could come in contact with a client's body or could be exposed to bodily fluids during body art procedures.

JEWELRY means any biocompatible object that is worn through a body piercing.

LICENSE means written approval by the Department to operate a body art establishment or to perform body art. Approval is given in accordance with this Code and in addition to any other local, state, or federal requirements.

LICENSEE means an individual or entity granted the license under state and local ordinance.

MAINTENANCE means repairs and upkeep to equipment as recommended by the manufacturer.

MATERIAL CERTIFICATE means all documents intended to state the specifics of a material used for body jewelry. Names for these documents include but are not limited to Mill Certificates, Material Certificates, Metal Composition Sheets, MSD, and Material Certification Sheets.

MINOR means an individual who is under the legal age of consent.

MOBILE BODY ART ESTABLISHMENT/UNIT means a licensed mobile establishment or unit that is self-propelled or otherwise movable from place to place and operated by a licensed body artist who performs body art procedures.

MUCOSAL SURFACE means the moisture-secreting membrane lining of all body cavities or passages that communicates with the exterior, including but not limited to the nose, mouth, vulva, and urethra.

MUNICIPAL SOLID WASTE means common trash or garbage that does not meet the definition of hazardous or biomedical waste.

NONCRITICAL VIOLATIONS means those items are not likely to cause an imminent health danger to the public and/or the practitioner.

OPERATING PLAN means a document detailing policies and procedures regarding the containment, labeling, storage, and transport of biomedical waste, in addition to detailed training for personnel of the body art establishment.

OPERATOR means any person, whether permitted or not, who controls any interest in, operates, or manages a body art establishment and who is responsible for compliance with these regulations, whether or not actually performing body art activities.

PERMANENT COSMETICS means a tattoo, whether permanent, semipermanent, or temporary, by someone other than a licensed physician, which includes but is not limited to eyebrows, eyelids, lips, and other parts of the body for beauty marks, hair imitation, lash enhancement, or areola repigmentation. This term includes any procedures whether referred to as, but not limited to, "permanent makeup," "microdermapigmentation," "micropigment implantation," "microblading," "micro-needling with the use of pigment," "dermagraphics," "cosmetic tattooing," or any other similar procedures and for the purpose of this Code has the same meaning as "tattoo."

PERMIT see **LICENSE**

PERSON means an individual, any form of business or social organization, or any other nongovernmental legal entity, including but not limited to corporations, partnerships, limited-liability companies, associations, trusts, or unincorporated organizations.

PERSONNEL means employees, body artists, contracted body artists, and agents of the body art facility, whether or not actually performing body art activities.

PHYSICIAN means a person licensed by the state to practice medicine in all its branches and may include other areas such as dentistry, osteopathy, or acupuncture, depending on the rules and regulations particular to that state.

OTHER POTENTIALLY INFECTIOUS MATERIAL (OPIM) means

1. The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
2. Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
3. HIV-containing cell or tissue cultures, organ cultures, HIV- or HBV-containing culture medium or other solutions, blood, organs, or other tissues from experimental animals infected with HIV, HVC, or HBV (OSHA - 29 CFR 1910.1030).

PROCEDURE means the act of performing body art.

PROCEDURE AREA means a room, or portion of a room, or any surface of an inanimate object that is designated to be used only to perform body art.

PROCEDURE SITE means the area or location on the client's body selected for the placement of body art.

PROPYLENE GAS means any gas that is labeled with a CAS Registry Number of 115-07-1 (this includes but is not limited to MAPP gas and methyl ethylene gas).

REGULATED WASTE means liquid or semiliquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semiliquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials [OSHA definition 29cfr 1910.1030(b)].

SAFETY DATA SHEET (SDS) means a document for any potentially harmful chemical that includes information such as the properties of each chemical; the physical hazards, health hazards, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical [as per The Hazard Communication Standard (29 CFR 1910.1200(g))].

SCARIFICATION means the process in which a mark or marks are cut into human skin tissue with the intention of leaving a permanent mark.

SHARPS means any objects that can purposely or accidentally cut or penetrate the skin or mucosa, including but not limited to presterilized, single-use needles; scalpel blades; and razor blades.

SHARPS CONTAINER means a closable, puncture-resistant, leakproof (on sides and bottom) container made specifically to be a sharps container that meets NIOSH standards and can be closed for handling, storage, transportation, and disposal. A sharps container must be labeled with the international biohazard symbol.

SHARPS DISPOSAL means used sharps containers are stored and disposed of by medical waste collection or disposal services that are authorized to handle such waste.

SINGLE USE means products or items that are intended for one-time, one-person use and are disposed of after use on each client, including but not limited to cotton swabs or cotton balls, tissues or paper products, paper or plastic cups, gauze and sanitary coverings, razors, needles, scalpel blades, stencils, ink cups, and protective gloves.

STANDARD PRECAUTIONS/UNIVERSAL PRECAUTIONS means a set of infection control practices used to prevent transmission of diseases that can be acquired by contact with blood, body fluids, nonintact skin (including rashes), and mucous membranes.

STERILIZATION means a validated process used to render a product free from viable microorganisms International Organization for Standardization 11139].

STERILIZATION AREA or **STERILIZATION ROOM** means a room or enclosed area, set apart and used only to clean, decontaminate, and sterilize instruments. This room must be enclosed, not open to the public, and used only for cleaning, sterilization, and related tasks.

STRIKE BRANDING means the process by which a mark is burned with heated metal into the tissue of a person.

SURFACE ANCHOR or **SINGLE-POINT PIERCINGS** or **DERMAL ANCHORS** or **MICRODERMAL** means a piercing that is installed by piercing into the skin at the desired location and the base of the jewelry is inserted via this same hole, which it also exits from.

STERILE GLOVES means a medical-grade or exam-grade disposable, single-use covering for the hands worn for protection against disease transmission. Sterile gloves have been sterilized by the manufacturer or by following the sterilization protocol set forth by the glove manufacturer.

STERILE WATER means water that is purchased from the manufacturer sterile, in a single-use container.

STERILITY means a state of being free from viable microorganisms [ISO 11139].

TATTOO means the mark resulting from the act of tattooing.

TATTOOING means any act of placing ink or other pigment into or under the skin or mucosa by the use of needles or any other method used to puncture the skin, resulting in permanent or temporary colorization of the skin or mucosa. This includes all forms of permanent cosmetics.

TEMPORARY BODY ART ESTABLISHMENT means any place or premise operating at a fixed location where a body artist performs body art procedures but does not have a permanent body art facility license (i.e., educational, trade show, convention, public or private events, performance, product demonstration, or aesthetic shows).

TEMPORARY BODY ARTIST LICENSE see **LICENSE**

THERMAL CAUTERY UNIT (TCU) means an electrical device that provides direct or alternating current that is passed through a resistant metal wire electrode, generating heat used for branding.

ULTRASONIC CLEANER or **ULTRASONIC** means a device that removes debris by a process called cavitation, in which waves of acoustic energy are propagated in aqueous solutions to disrupt the bonds that hold particulate matter to surfaces [Guidelines for Disinfection and Sterilization in Healthcare Facilities, 2008, Section 445].

ULTRAVIOLET AIR PURIFIER means a machine designed to use ultraviolet germicidal irradiation (UVGI) as a means of purifying air.

ULTRAVIOLET GERMICIDAL IRRADIATION (UVGI) means a disinfection method that uses short-wavelength ultraviolet (UV-C) light to kill or inactivate microorganisms by destroying nucleic acids and disrupting their DNA, leaving them unable to perform vital cellular functions.

VIOLATION means the act of violating or going against any section or subsection of this document.

WORKSTATION means the area within a procedure area where a body artist performs body art. The workstation includes but is not limited to the client chair or table, counter, mayo stand, instrument tray, storage drawer, and practitioner's chair.

2. BODY ART OPERATOR REQUIREMENTS AND PROFESSIONAL STANDARDS

2.1 The Centers for Disease Control and Prevention (CDC) determined that the use of ASEPTIC TECHNIQUE is a fundamental standard of care to prevent infection in healthcare settings. This standard is "not expected to change based on emerging evidence or to be regularly altered by changes in technology or practices" (Healthcare Infection Control Practices Advisory Committee, 2017). The Body Art Model Code (BAMC) Committee recognizes that not all policies and procedures required for a healthcare setting or laboratory are applicable to a BODY ART ESTABLISHMENT but believes that due to the nature of the work and the severe risk for transmission of harmful pathogens via body fluids, ASEPTIC TECHNIQUE is an important standard for BODY ART ESTABLISHMENTS.

2.2 The U.S. Department of Labor (U.S. DOL, n.d.) classifies MINORS as individuals under the age of 18. The Fair Labor Standards Act (FLSA) sets standards and requirements for MINORS working in jobs covered by the statute and dictates permitted occupations for MINORS, abiding by the guiding principle that the working conditions do not interfere with their schooling or health and well-being. As applicable to BODY ART, 29 C.F.R. 570.34(b) permits 14- and 15-year-olds to be employed to perform work of an artistically creative nature (U.S. DOL, 2016). U.S. DOL does not, however, consider TATTOOING or BODY PIERCING to be artistically creative endeavors under the provisions of either 29 C.F.R. 570.34(b) or 29 C.F.R. 541.302(b) due to the potential for exposure to BLOODBORNE PATHOGENS (Child Labor Regulations, 2010). Where state employment law and the FLSA overlap, whichever law is more protective of the MINOR shall be applied (U.S. DOL, n.d.).

2.3 BODY ARTISTS and ESTABLISHMENTS must be licensed per Section 14 of this Code to ensure the BODY ART ESTABLISHMENTS are properly inspected and regulated in the interest of PERSONNEL and CLIENT safety.

2.4 BODY ARTISTS must maintain a certain level of personal hygiene to avoid contaminating their WORKSTATION and INSTRUMENTS. Relative to other parts of the hand, the area underneath the fingernails harbors the most microorganisms and is the most difficult area to clean (Lin et al., 2003). Artificial, or acrylic, nails harbor more bacteria than natural nails and as such, this Code prohibits BODY ARTISTS from wearing them. According to the Association of perioperative Registered Nurses (2021), "Artificial nails have been associated with hand contamination and epidemiologically implicated in outbreaks caused by gram-negative bacteria and yeasts." Fingernail length is another essential element in hand hygiene, as studies have consistently found that microbial cell numbers are positively correlated with fingernail length (Lin et al., 2003; Wu & Lipner, 2020). As of publication, no studies have shown that nails with intact polish harbor more microbes than unpolished nails. Studies have found, however, that nails with chipped polish might serve as reservoirs for microbes (Ward, 2007).

2.5 Open, uncovered wounds are entry points for pathogens (Mckenzie, 2018). The BODY ARTIST must treat and cover any wounds to prevent infection and the spread of disease.

2.6 Performing BODY ART PROCEDURES on infected or damaged skin can lead to the spread of disease and can be harmful to public health. Those with conditions that affect the skin have a higher risk of experiencing adverse reactions to BODY ART (Nall, 2019). Best practices in the case of visible or suspected rash or infection include the BODY ARTIST conducting

consultations to observe the skin; considering a different location for the BODY ART; and the CLIENTS consulting PHYSICIANS, other experts, and relevant organizations. As discussed in the foreword of this Code, BODY ARTISTS are not medical professionals and are not licensed to provide medical diagnoses unless they have achieved medical credentials outside of their BODY ART work.

2.7 Proper HANDWASHING can stop the spread of communicable diseases. Where this Section refers to Section 12.10, it is intended to refer to Section 2.11, which provides a HANDWASHING procedure.

CDC guidelines for HANDWASHING recommend HANDWASHING prior to a BODY ART PROCEDURE, after any interruption during a PROCEDURE, prior to putting on GLOVES, and upon completing a PROCEDURE.

Ensuring active participation of PERSONNEL in proper hand hygiene practices depends upon facilitators at various levels (CDC, 2002). The Occupational Safety and Health Administration (OSHA) requires that employers provide handwashing facilities that are readily accessible to employees (Bloodborne Pathogens, 2012). Beyond providing the physical resources to maintain proper hand hygiene, the BAMC Committee encourages stakeholders to foster a culture of hand hygiene adherence and promotion.

2.8 To reduce the potential spread of infection, BODY ARTISTS shall wear GLOVES when touching the CLIENT in preparing for, performing, and cleaning up from the BODY ART PROCEDURE (Siegel et al., 2019). GLOVES are not needed for casual contact with the CLIENT. OSHA regulations on GLOVE usage with occupational exposure to blood are as follows:

> 1910.1030(d)(3)(ix) Gloves shall be worn when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and nonintact skin; when performing vascular access procedures except as specified in paragraph (d)(3)(ix)(D); and when handling or touching contaminated items or surfaces.
>
> 1910.1030(d)(3)(ix)(A) Disposable (single-use) gloves such as surgical or examination gloves, shall be replaced as soon as practical when contaminated or as soon as feasibly if they are torn, punctured, or when their ability to function as a barrier is compromised.
>
> 1910.1030(d)(3)(ix)(B) Disposable (single-use) gloves shall not be washed or decontaminated for re-use. (Bloodborne Pathogens, 2012)

GLOVES must be donned properly to avoid cross-contamination and maintain STERILITY. Proper technique for donning GLOVES as dictated by the World Health Organization (WHO, 2009) is as follows:

1. Take out a glove from its original box.
2. Touch only a restricted surface of the glove corresponding to the wrist (at the top edge of the cuff).
3. Don the first glove.
4. Take the second glove with the bare hand and touch only a restricted surface of glove corresponding to the wrist.
5. To avoid touching the skin of the forearm with the gloved hand, turn the

external surface of the glove to be donned on the folded fingers of the gloved hand, thus permitting to glove the second hand.
6. Once gloved, hands should not touch anything else that is not defined by indications and conditions for glove use.

To reduce cross-contamination, GLOVES must be removed and thrown away whenever a BODY ARTIST leaves their WORKSTATION (National Institute for Occupational Safety and Health [NIOSH], 2013). Proper technique for GLOVE removal as dictated by WHO (2009)is as follows:

1. Pinch one glove at the wrist level to remove it, without touching the skin of the forearm, and peel away from the hand, thus allowing the glove to turn inside out.
2. Hold the removed glove in the gloved hand and slide the fingers of the ungloved hand inside between the glove and the wrist. Remove the second glove by rolling it down the hand and fold into the first glove.
3. Discard the removed gloves.
4. Then, perform hand hygiene by rubbing with an alcohol-based handrub or by washing with soap and water.

Several clinical studies have confirmed the efficacy of GLOVES in reducing the transmission of pathogens. GLOVES do not, however, provide complete protection against hand CONTAMINATION and should not be used as a substitute for proper hand hygiene (WHO, 2009). BODY ARTISTS must wash their hands before putting on GLOVES. Moisture inside GLOVES creates conditions in which bacteria can reproduce (NIOSH, 2013). Thus, it is essential that BODY ARTISTS completely dry their hands prior to putting on GLOVES (Bloodborne Pathogens, 2012). BODY ARTISTS must wash their hands immediately after removal of GLOVES, as pathogens can gain access to the BODY ARTIST'S hands via defects in GLOVES or by CONTAMINATION of the hands during GLOVE removal.

2.9 PERSONNEL must make best efforts to prevent CONTAMINATION of EQUIPMENT. As stated in Section 2.1 of this Code, BODY ARTISTS must use ASEPTIC TECHNIQUE. To prevent CONTAMINATION of EQUIPMENT surfaces that are difficult to clean, barriers such as clip cord covers and machine covers can be used (CDC, 2019a).

EQUIPMENT that can inadvertently become CONTAMINATED, despite best efforts, must be inspected and removed or DECONTAMINATED to reduce the potential for infection. OSHA regulations regarding CONTAMINATION of EQUIPMENT state that any "equipment which may become contaminated with blood or other potentially infectious materials" shall be examined and DECONTAMINATED as necessary (Bloodborne Pathogens, 2012).

2.10 OSHA regulations regarding eating or drinking in BODY ART PROCEDURE AREAS are as follows:

> 1910.1030(d)(2)(ix) Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.
>
> 1910.1030(d)(2)(x) Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets, or on countertops or benchtops where blood or other potentially infectious materials are present. (Bloodborne Pathogens, 2012)

Exceptions can be made when it is necessary to render first aid, such as when a CLIENT is feeling faint. In such instances, BODY ARTISTS must make their best effort to avoid cross-contamination by following basic protocol such as properly removing GLOVES and washing their hands prior to providing the CLIENT with water. Additionally, the BODY ART ESTABLISHMENT should make available closed water bottles kept outside of PROCEDURE AREAS.

2.11 Hands of BODY ART PERSONNEL can transmit pathogens if proper hand hygiene is not performed. This Code requires PERSONNEL to follow a 7-step HANDWASHING procedure to reduce the potential for infection (CDC, 2020). Several studies have found that skin underneath jewelry harbors more bacteria than comparable areas of skin without jewelry (CDC, 2002). This Code requires PERSONNEL to remove all rings, watches, and bracelets on and surrounding their hands when preparing for and during a PROCEDURE. This Code requires PERSONNEL to wash hands with clean, running water, as hands can become recontaminated if placed in a basin of water that has been CONTAMINATED through previous use (Palit et al., 2012). Hands must be lathered to create friction, which helps lift debris and microbes from the skin. The entire hand must be scrubbed, as microbes are present on all surfaces of the hand and are highly concentrated under the nails (Lin et al., 2003). PERSONNEL should point their fingers toward the faucet when rinsing their hands to avoid recontaminating their hands with anything unsterile on their upper arms.

Hand drying is an essential part of hand hygiene, as bacteria are more likely to be transmitted from wet skin than from dry skin (Huang et al., 2012). A systematic literature review of twelve studies on hand drying effectiveness found that SINGLE-USE paper towels efficiently dry hands, effectively remove bacteria, and cause less CONTAMINATION of the surrounding washroom environment than electric air dryers. The review concluded that SINGLE-USE paper towels should be used “in locations where hygiene is paramount” (Huang et al., 2012).

3. SPECIFIC CONSIDERATIONS FOR PIERCING

3.1 EAR PIERCING GUNS; presterilized SINGLE-USE, stud-and-clasp ear-piercing systems; and similar devices are to be held to the same standards as all other BODY PIERCING techniques, as they still pierce the skin or mucosa and thus present pathogen exposure and infection risks. As stated by the Association of Professional Piercers (APP, n.d.a), “the health and safety issues concerning body piercing apply equally to the ear and to all parts of the body.” This Code requires the use of ASEPTIC TECHNIQUE across all piercing methods and PROCEDURE SITES.

EAR PIERCING GUNS use blunt force to drive JEWELRY through the skin. The effect of this blunt force trauma is more similar to a crush injury than a piercing and because of the damage this can cause to surrounding cartilage, use of EAR-PIERCING GUNS is limited to the earlobe. Complications that can occur when EAR PIERCING GUNS are used on structural tissues include but are not limited to shattered cartilage, excessive scarring, and auricular chondritis. Infections in cartilage take longer to heal than infections in lobe tissue, as the area has less blood flow, and for this reason can be much more severe, in some cases requiring antibiotic therapy and reconstructive surgery (APP, n.d.a).

Potential damage from EAR PIERCING GUNS is not limited to cartilage. Lobe tissue can also become damaged and infected from ear piercing guns and associated processes. For example, EAR PIERCING GUNS can malfunction and the force of their spring-loaded mechanism might be insufficient to force the blunt JEWELRY through the skin. In such instances, the JEWELRY must be manually removed or forced through the flesh. Both options present the risk of injury and infection, especially in workplaces that do not meet the regulations for BODY ART ESTABLISHMENTS. Thus, it is required that any establishment that uses an EAR PIERCING GUN meet the hygiene standards and regulations set forth in this Code to reduce the risk of infection, complications, and disease transmission. The use of STERILE GLOVES during the PROCEDURE helps maintain ASEPTIC TECHNIQUE.

The EAR PIERCING GUNS itself present a high risk for BLOODBORNE PATHOGEN exposure. Most EAR PIERCING GUNS are made partially of plastic and cannot be STERILIZED to the same extent as other piercing INSTRUMENTS. In LICENSED BODY ART ESTABLISHMENTS, reusable INSTRUMENTS are AUTOCLAVED. This process uses heat, steam, and pressure to STERILIZE INSTRUMENTS between use, killing most pathogens (National Environmental Health Association, 2018). Since plastic INSTRUMENTS cannot be AUTOCLAVED, the BODY ARTIST must conduct procedures to ensure the EAR PIERCING GUN is as clean and STERILE as possible. DISINFECTION and STERILIZATION procedures can be found in Section 9 of this Code.

The policy statement from NEHA (2018) on EAR PIERCING GUNS recommends that state, local, tribal, and territorial government agencies classify the use of EAR PIERCING GUNS as a piercing PROCEDURE and enforce BODY ART regulations on these ESTABLISHMENTS as governed by state and local health jurisdictions. The statement also encourages agencies to educate lawmakers and regulators on the public health risk associated with performing piercings with devices that cannot be fully STERILIZED. The full statement discusses this risk as well as the science and justification behind these recommendations and can be found in *Appendix A: National Environmental Health Association Policy Statement on Ear Piercing Guns*.

In the pending update of this Code, the Specific Considerations for Piercing section will be relocated to be alongside the sections Specific Considerations for Tattooing, Specific Considerations for Cosmetic Tattooing, Specific Considerations for Branding, and Specific Considerations for Scarification. These sections are currently located after Section 4 in this Code and discussion of these sections is also located after Section 4 in this Annex.

4. JEWELRY STANDARDS

4.1 The first piece of JEWELRY that a BODY ARTIST inserts into a piercing, referred to as initial JEWELRY, is worn inside an open wound. As it is in contact with a CLIENT'S internal tissues, this initial JEWELRY must be BIOCOMPATIBLE to avoid adverse reactions such as contact dermatitis, scar tissue, infection, and other issues that might arise with the use of substandard JEWELRY.

To ensure JEWELRY is BIOCOMPATIBLE, this Code requires the JEWELRY to meet standards based on those set by the International Organization for Standardization (ISO), ASTM

International (formerly known as the American Society for Testing and Materials), and APP. ISO establishes expert reviewed and approved international standards across industries to "ensure quality and safety in both products and services" (Approachable Certification, 2016). ASTM International (2021), one of the largest voluntary standards developing organizations in the world, develops standards for materials, products, systems, and services. Materials listed in Section 4 of this Code with ASTM International or ISO standards are BIOMEDICAL materials proven safe for human implant standards. Materials listed without ASTM International or ISO standards are chosen based on the research and expertise of APP and other industry experts.

4.2 Records, whether in print or electronic, shall be retained in accordance with the DEPARTMENT or at minimum following the 3-year requirement of this Code. OPERATORS should collect and store receipts to certify they have an adequate amount of JEWELRY for initial piercings as referenced in Section 4.1. Maintaining sufficient inventory of BIOCOMPATIBLE JEWELRY ensures BODY ARTISTS never have to compromise quality and risk infection or other adverse reactions. Inspectors are encouraged to exercise due diligence by auditing the documentation to ensure that MATERIAL CERTIFICATES, receipts, inventory, packaging, etc., are consistent and meet BIOCOMPATIBILTY standards.

4.3 Piercers must certify with their manufacturers that the JEWELRY they are using meets the standards for BIOCOMPATIBILTY in Section 4.1 of this Code. Records of this certification, also called MATERIAL CERTIFICATES or mill certificates, are documents provided to JEWELRY makers by the manufacturers of the raw materials. MATERIAL CERTIFICATES provide "evidence of a specific grade of metal with an ASTM or ISO code designation" (APP, n.d.b). MATERIAL CERTIFICATES must be retained for a minimum of 3 years and produced for INSPECTION, or upon request, to ensure compliance with BIOCOMPATIBILITY standards.

SPECIFIC CONSIDERATIONS FOR TATTOOING

TATTOO inks, dyes, and pigments can be CONTAMINATED with microorganisms that can cause infection and other serious complications. Inks, dyes, and pigments must be purchased from trusted manufacturers that can verify the STERILITY of the product.

The Food and Drug Administration (FDA) investigates and takes appropriate action when it identifies a safety problem associated with TATTOO ink. FDA (2015), however, has traditionally not exercised regulatory authority for color additives on the pigments used in tattoo inks. Color additives are subject to premarket approval under the Federal Food, Drug, and Cosmetic Act, though even with this approval process in place, inks can still be CONTAMINATED. For example, in May 2019, FDA issued a safety advisory regarding six TATTOO inks that were found to be CONTAMINATED with microorganisms and had been voluntarily recalled (FDA, 2019).

This Code requires BODY ARTISTS to use distilled or STERILE WATER for the mixing of inks, dyes, or pigments. Dilution with nonsterile water has been linked to multiple waterborne skin infections caused by *Legionella*, *Pseudomonas*, and *Mycobacteria* (County of San Diego Department of Environmental Health, n.d.). Infections from these bacteria can result in scarring, damage to the TATTOO, severe illness, and, when left untreated, can result in fatality. It is essential that BODY ARTISTS use only STERILE WATER to ensure CLIENT safety and prevent damaging the BODY

ART. In the case of an outbreak or complaint, water should be tested to determine if it is a source of CONTAMINATION.

BODY ARTISTS must also ensure that any prediluted ink is manufactured using STERILE processes and materials. In 2012, FDA reported an outbreak of nontuberculous mycobacterial (NTM) skin infections associated with the use of prediluted gray ink. NTM contamination of inks can occur during the manufacturing process as a result of using contaminated ingredients or poor manufacturing practices, or when inks are diluted with nonsterile water (CDC, 2012).

Inks must be placed into SINGLE-USE cups or caps immediately before a TATTOO is applied to minimize potential CONTAMINATION opportunities. All cups and caps must be properly disposed of after the BODY ART PROCEDURE. Ink cups or caps and leftover ink, which has direct blood contact, must be disposed of safely in accordance with Section 12 of this Code.

SPECIFIC CONSIDERATIONS FOR COSMETIC TATTOOING

COSMETIC TATTOOING, also referred to as permanent makeup or PERMANENT COSMETICS, is a specialized TATTOO technique that deposits colored pigment into the upper reticular layer of the dermis (Society of Permanent Cosmetic Professionals, 2021). Popular COSMETIC TATTOOING PROCEDURES include lipliner, eyeliner, and eyebrows. Eyebrow COSMETIC TATTOOING is often done using a technique called microblading, which utilizes a small disposable blade that is configured of multiple small needles and attached to a handle.

The disposal of manual devices for COSMETIC TATTOOING, including microblading, must comply with OSHA's Bloodborne Pathogens Standard (2012) section 1910.1030(d)(2)(vii)(A) that states, "Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed unless the employer can demonstrate that no alternative is feasible or that such action is required by a specific medical or dental procedure." An OSHA interpretation letter explaining this requirement clarifies that the exception for handling of a CONTAMINATED SHARP does not apply to microblades. The interpretation letter from OSHA (2017) states:

> As you explained in your letter, there are commercially available, single-use, disposable microblade tools that reduce the handling of a contaminated microblade. Therefore, this exception does not apply. It should be noted, however, that the single-use tools you discussed in your letter are not without potential sharps hazards. Users must be trained to use them properly and to immediately dispose of used microblades in sharps containers that meet the requirements of paragraphs 29 C.F.R. 1910.1030(d)(4)(iii) and 29 C.F.R. 1910.1030(g)(2).

In accordance with this interpretation and safety protocols based on scientific evidence, this Code requires that once a needle grouping is affixed to a handle, the needle grouping cannot be removed before disposal in an approved SHARPS CONTAINER.

In addition to following proper SHARPS DISPOSAL procedures, COSMETIC TATTOOING must comply with all other standards set forth in this Code, as it is a form of TATTOOING as defined in this Code. More information on the risks of microblading and the scientific justification behind the recommendation that microblading be classified and regulated as TATTOOING can be found in *Appendix B: National Environmental Health Policy Statement on Microblading*.

SPECIFIC CONSIDERATIONS FOR BRANDING

During the BRANDING PROCEDURE, the BODY ARTIST and CLIENT must wear protective face masks rated as N95 or higher, as the fumes produced when flesh burns can be toxic and spread disease and infection. NIOSH-approved particulate filtering facepiece respirators include N95, Surgical N95, N99, N100, R95, P95, P99, and P100 (NIOSH, 2020).

Researchers have identified over 600 organic compounds in the smoke generated by burned or vaporized tissue. Many of the identified compounds have documented harmful health effects including irritation to the eyes, nose, and throat; liver and kidney damage; carcinogenic cell changes,; headaches; and dizziness and drowsiness, to name a few (Ubelacker, 2009). Additionally, studies have found human papillomavirus, HIV, infectious polio virus, and hepatitis B in smoke plumes resulting from laser vaporization, cautery surgery, or similar procedures (Lui et al., 2019). To protect against the harmful smoke generated during a BRANDING PROCEDURE, the PROCEDURE AREA must be completely enclosed and have an appropriately powerful ULTRAVIOLET AIR PURIFIER for the size of the room per the manufacturer's recommendations. Studies have shown that C-wavelength ultraviolet (UV-C) disinfection is highly effective at inactivating pathogens (Vatansever et al., 2013). According to FDA (2021a), UV-C radiation has been used effectively for decades to reduce the spread of bacteria, including tuberculosis.

Though there are other types of BRANDING, STRIKE BRANDING and BRANDING using a THERMAL CAUTERY UNIT (TCU) are the only two that can be safely conducted and regulated in a BODY ART ESTABLISHMENT. STRIKE BRANDING is a process by which a BODY ARTIST heats metal and applies it to the CLIENT'S skin. Electrocautery is a process by which a BODY ARTIST uses a TCU, which generates heat via direct or alternating current passing through a resistant metal wire electrode.

For STRIKE BRANDING, only nongalvanized metal should be used. Galvanization is the process of applying a zinc coating to metal. Materials containing coated or plated metals can chip or wear off and imbed into the skin, causing metal poisoning and other adverse effects that can require extensive treatment or surgery to remedy (Skin Artists, n.d.). Galvanized metal can produce toxic fumes, the overexposure to which can cause metal fume fever, which is also referred to as zinc chills, zinc shakes, or galvanize poisoning (Langill, 1996). Additionally, galvanized metal does not heat evenly and might only produce second-degree burns, whereas third-degree burns are necessary for safe and effective BRANDING.

PROPYLENE GAS must be used for BRANDING PROCEDURES, as it is nontoxic and has superior combustion performance compared to propane gas (Linde, 2021).

SPECIFIC CONSIDERATIONS FOR SCARIFICATION

SCARIFICATION processes involve cutting into the skin and mucus membranes, which increases the risk of exposure to and infection with BLOODBORNE PATHOGENS, such as hepatitis B, hepatitis C, and HIV. Proper personal protective equipment must be worn to reduce CONTAMINATION risk. BODY ARTISTS must wear disposable sleeves with elastic bands on each end to keep the sleeve in place and to keep out contaminants.

Depending on the method used, SCARIFICATION can create unhealthy airborne toxins. To protect against any harmful airborne byproducts and reduce the spread of airborne pathogens, the SCARIFICATION PROCEDURE AREA must be completely enclosed and have an appropriately powerful ULTRAVIOLET AIR PURIFIER for the size of the room per the manufacturer's instructions. Studies have shown UV-C disinfection is highly effective at inactivating pathogens (Vatansever et al., 2013). According to FDA (2021), UV-C radiation has been used effectively for decades to reduce the spread of bacteria, including tuberculosis.

The age limit for SCARIFICATION is based on a standard established within the SCARIFICATION community.

5. PUBLIC NOTIFICATION REQUIREMENTS

5.1 BODY ART ESTABLISHMENT LICENSES shall be posted in a highly visible location that all CLIENTS have access to, such as the front desk reception/lobby area.

5.2 Individual BODY ARTIST LICENSES shall be posted in a highly visible location in each BODY ARTIST station for individual CLIENTS to view.

5.3 AFTERCARE instructions should be provided to the CLIENT verbally as well as in writing, in a manner that does not CONTAMINATE the PROCEDURE AREA. Written AFTERCARE instructions can be hard copies and/or digital copies.

5.4 The BODY ART ESTABLISHMENT shall post the full contact information of the DEPARTMENT and the procedure for filing a complaint in a highly visible location so that any PERSON who wishes to ask questions or file a complaint has a clear method by which to do so.

5.5 Providing BODY ART requirements of the DEPARTMENT upon request ensures transparent communication with the public and promotes public health and safety.

6. FACILITY RECORDKEEPING REQUIREMENTS

6.1 Recordkeeping is an essential practice that allows OPERATORS and officials to act swiftly in the name of public health. It is essential that OPERATORS are aware of and following their jurisdiction's documentation and recordkeeping requirements.

6.1.1 OSHA's Bloodborne Pathogens Standard (2012) states that each employer that has employees with occupational exposure "shall establish a written Exposure Control Plan designed to eliminate or minimize employee exposure." The standard dictates what elements the Exposure Control Plan must contain. Additionally, it states that a copy of the Exposure Control Plan must be accessible to employees; the Exposure Control Plan must be reviewed and updated "annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure;"

the PERSON establishing the Exposure Control Plan must solicit input from nonmanagerial employees who face potential exposure; and the Exposure Control Plan must be made available to the DEPARTMENT upon request. An emergency plan should be incorporated into a written Exposure Control Plan so PERSONNEL know the appropriate actions to take and PERSON to contact in response to emergencies, CONTAMINATION, and infection.

6.1.2 OPERATORS must retain certain records for each nonexempt worker pursuant to OSHA's Records to Be Kept by Employers (1991). Payroll records containing the employee information stated in this Code must be kept on the premises or in a central records office for 3 years (U.S. DOL, 2008).

6.1.2.10.1 OSHA's Bloodborne Pathogens Standard (2012) states in section 1910.1030(g)(2)(i) that the "employer shall train each employee with occupational exposure in accordance with the requirements of this section. Such training must be provided at no cost to the employee and during working hours." Training must be provided at the time of initial assignment to tasks where occupational exposure to blood or OTHER POTENTIALLY INFECTIOUS MATERIALS (OPIM) might exist and at least annually thereafter. Section (g)(2)(vii) lists the elements that must be covered in such training.

Additional training must be provided when any changes, such as modification of procedures or tasks or the institution of new procedures or tasks, affect the employee's exposure. A letter of interpretation states that "in this case, the additional training may be limited to addressing the newest information or change in procedure or policy and does not have to cover all the topics included in the initial training" (OSHA, 1997).

In the case of contract employees, the personnel provider and the ESTABLISHMENT OPERATOR have a shared responsibility for assuring that employees are protected from workplace hazards (OSHA, 2011). OSHA standard interpretations (2011) state that the ESTABLISHMENT OPERATOR is responsible for "providing site-specific training and personal protective equipment, and would have the primary responsibility regarding the control of potential exposure conditions" and the personnel provider is required to "provide the general training outlined in the [Bloodborne Pathogens] standard, ensure that employees are provided with the required vaccinations, and provide the proper follow-up evaluations following an exposure incident."

6.1.3

6.1.3.6 BIOMEDICAL WASTE is regulated on a state and local level. OPERATORS must determine what their local regulations are and what records they must keep. Recordkeeping is essential for the disposal of BIOMEDICAL WASTE to ensure traceability in the event of an incident or exposure to blood or OPIM.

6.1.5 Information on OSHA Exposure Control Plan requirements can be found in

Section 6.1.1 of this Annex.

6.1.6 SAFETY DATA SHEETS (SDSs) communicate the hazards of chemical products and can be obtained from the manufacturer, distributor, or importer. OSHA's Hazard Communication Standard (2013) requires that SDSs are "readily accessible during each work shift to employees when they are in their work area(s)." SDSs can be kept and provided as electronic copies as opposed to paper copies if presenting them in such a way does not create any barriers to immediate employee access.

6.1.7 MATERIAL CERTIFICATES, as discussed in Section 4 of this Code, can be obtained from JEWELRY and/or raw material manufacturers. As with SDSs, MATERIAL CERTIFICATES can be kept as electronic or paper copies so long as they are readily accessible to employees.

6.1.8 Spore tests, or biological indicators, are the most accepted means of monitoring sterilization (CDC, 2018a). Spore test results might look different depending on the third party used to conduct the tests and can be kept as either as electronic or paper copies.

6.1.11 The BODY ARTIST should report all adverse events relating to or suspected of being related to materials used during a BODY ART PROCEDURE to the DEPARTMENT and MedWatch, FDA's medical product safety reporting program. MedWatch receives reports from the public and publishes safety alerts for FDA-regulated products when appropriate (FDA, 2021b). The utilization of this system streamlines reporting practices and allows adverse reactions to be tracked and potential common causes of such reactions to be found and dealt with appropriately.

6.1.12 OPERATORS can obtain documentation of STERILITY tests from the INSTRUMENT manufacturer.

7. INFORMED CONSENT AND RELEASE FORM

7.1 All CLIENTS must complete and sign a release form prior to any PROCEDURE to indicate informed consent. PERSONNEL must offer a copy of the completed and signed release form to the CLIENT. In accordance with Section 8 of this Code, a copy of this form must be retained for a minimum of 3 years and must be available to the DEPARTMENT upon request.

7.2 BODY ARTISTS must record all BODY ART PROCEDURES administered, as well as all materials and STERILIZED INSTRUMENTS used during the PROCEDURE to account for the adherence to STERILIZATION requirements.

7.3 BODY ARTISTS must ensure they are complying with the regulations of their DEPARTMENT regarding what must be included on an informed consent statement.

7.4 BODY ARTISTS can obtain a COMPLAINT OF INJURY FORM from their DEPARTMENT. Should their DEPARTMENT not have a COMPLAINT OF INJURY FORM, the BODY ART ESTABLISHMENT will need to create one.

As stated in this Code, one of the circumstances that requires BODY ARTISTS to submit a COMPLAINT OF INJURY FORM is any notifiable disease resulting from the BODY ART PROCEDURE. Diseases that are considered notifiable vary by state and PERSONNEL should remain aware of their jurisdiction's regulations and notifiable disease list or reach out to their DEPARTMENT for further guidance. On a national level, notifiable diseases are determined by CDC. CDC, in collaboration with the Council of State and Territorial Epidemiologists, operates the National Notifiable Diseases Surveillance System. Through this system, CDC collects and compiles reports and statistics to develop a Nationally Notifiable Disease List that provides comprehensive reporting of diseases that occur in the U.S. (CDC, 2019b). The Nationally Notifiable Disease List can be found in Appendix C.

7.5 The BODY ARTIST shall report all adverse events relating to or suspected of being related to materials used during a BODY ART PROCEDURE to the DEPARTMENT and MedWatch, FDA's medical product safety reporting program. MedWatch receives reports from the public and publishes safety alerts for FDA-regulated products when appropriate (FDA, 2021b). The utilization of this system streamlines reporting practices and allows adverse reactions to be tracked and potential common causes of such reactions to be found and dealt with appropriately.

7.6 All BODY ARTISTS have the right to decline services to a CLIENT in the interest of the CLIENT'S health and well-being. BODY ARTISTS can use their discretion to determine whether they are comfortable and capable of performing a BODY ART PROCEDURE while protecting their personal health and safety as well as their CLIENT'S. Depending on local regulations, any refusal of service might need to be recorded on the consent form.

7.7 The CLIENT is entitled to a copy of the completed release form. Providing CLIENTS with the form contributes to transparency and helps protect the CLIENT, BODY ARTISTS, and BODY ART ESTABLISHMENT should there be an adverse reaction or event with the potential of investigation or litigation.

8. RECORDS RETENTION

8.1–8.2 Recordkeeping is an essential practice that allows OPERATORS and officials to act swiftly in the name of public health. Records must be made available to the DEPARTMENT upon request, and the DEPARTMENT and BODY ART ESTABLISHMENT must keep records confidential. Only AUTHORIZED AGENTS and PERSONNEL trained in handling confidential records should be granted access. After the minimum time for record retention has passed, all records should be destroyed in a manner that protects the confidentiality of all CLIENT tand/or PERSONNEL-related documents.

8.3 Records of presterilized INSTRUMENTS are necessary to protect public health and ensure traceability and compliance in the event of an outbreak. Records of presterilized items must include the manufacturer's indication of STERILIZATION.

9. DISINFECTION AND STERILIZATION PROCEDURES

9.1 Microbiologically contaminated surfaces can serve as reservoirs of potential pathogens that can spread via hand contact with the CONTAMINATED surface (CDC, 2019a). Nonporous surfaces in good repair can be easily cleaned and thus contribute to a reduction in pathogen spread. Surfaces must be cleaned prior to DISINFECTING. Cleaning is done by scrubbing with detergents and surfactants and then rinsing with water to remove organic matter, salts, and visible soils, which interfere with microbial inactivation (CDC, 2019a). If cleaning is not conducted prior to STERILIZATION or DISINFECTION, the success of these processes is compromised.

OSHA's Bloodborne Pathogens Standard (2012) states in section 1910.1030(d)(4)(ii) that "all equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials." OSHA requires the use of U.S. Environmental Protection Agency (U.S.EPA)-registered tuberculocidal DISINFECTANTS or hypochlorite solution (diluted 1:10 or 1:100 with water) when BLOODBORNE PATHOGENS other than hepatitis B or HIV are of concern (CDC, 2019a). The U.S. EPA's 2020 list of registered tuberculocidal DISINFECTANTS can be found in *Appendix D: U.S. Environmental Protection Agency Registered Tuberculocide Products Effective Against Mycobacterium tuberculosis*.

9.2 SINGLE-USE barrier protective coverings, such as clip cord covers and machine covers, should be used on surfaces that might be touched frequently with gloved hands or that might become CONTAMINATED with blood or OPIM. Barrier protective coverings are especially useful on surfaces and INSTRUMENTS that are difficult to clean. These coverings must be changed routinely between CLIENTS and when visibly soiled or damaged (Rutala et al., 2019). Section 1910.1030(d)(4)(ii)(B) of OSHA's Bloodborne Pathogens Standard (2012) states that protective coverings used to "cover equipment and environmental surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated."

9.3 EQUIPMENT must be inspected for breaks in integrity that can impair cleaning, DISINFECTION, and/or STERILIZATION. Damaged EQUIPMENT or EQUIPMENT not used for its intended purpose might introduce contaminants to the PROCEDURE AREA. EQUIPMENT that no longer functions as intended or cannot be properly cleaned, DISINFECTED, and/or STERILIZED must be discarded or repaired (CDC, 2019a).

9.4 To control quality, STERILIZATION of reusable INSTRUMENTS must be performed in a central room or area devoted to the task. The STERILIZATION ROOM or AREA must be set apart from PROCEDURE AREAS to prevent CONTAMINATION during the STERILIZATION process. Cleaning INSTRUMENTS as soon as possible after use ensures soiled materials do not become dried onto the INSTRUMENTS. Dried materials on the INSTRUMENT can make the removal process more difficult, potentially causing damage to the INSTRUMENT or ineffective STERILIZATION, and thus increased risk of pathogen transmission (CDC, 2019a).

CDC guidelines state that cleaning (i.e., the removal of foreign material from objects) must be conducted prior to DISINFECTION or STERILIZATION, as remaining inorganic and organic materials on INSTRUMENT surfaces interfere with the effectiveness of DISINFECTION and STERILIZATION. Cleaning is accomplished using water with detergents or enzymatic products (CDC, 2019a). BODY ARTISTS must ensure that the detergents or enzymatic products they are using are compatible with the metals and other materials in the INSTRUMENTS. Enzymatic products, or enzymatic detergents, are cleaning products that use enzymes to break down soils

at a neutral pH (Steris Healthcare, 2018). Enzymatic detergents are not DISINFECTANTS but are instead used during the cleaning cycle to lift soils from INSTRUMENTS. BODY ARTISTS must use enzymatic detergents in accordance with the manufacturer's instructions, including proper dilution of the detergent and contact with equipment for the amount of time specified on the label (CDC, 2019a).

Chemical indicators are control tools used to test and monitor the STERILIZATION capabilities of AUTOCLAVES and steam sterilizers (Dubrey, 2020). ISO standards define six classes of chemical indicators: Class 1: Process Indicators; Class 2: Indicators for Use in Specific Tests; Class 3: Single Variable Indicators; Class 4: Multivariable Indicators; Class 5: Integrating Indicators; and Class 6: Emulating Indicators. ISO 11140-1:2014 contains specific STERILIZATION manufacturing and application standards to which each class of chemical indicators must adhere. This standard defines Class 5 chemical indicators as Integrating Indicators (Integrators) (ISO, 2014).

This Code requires that STERILIZATION loads include a Class 5 chemical indicator, which is also referred to as an integrating indicator, a chemical integrator, or an integrator. Class 5 integrators are designed to react to the three critical variables of sterilization: time, temperature, and steam (Govoni, 2013). Integrators respond to all critical variables and are the most accurate of the internal chemical indicators (3M Medical, n.d.). The use of chemical integrators is not a substitute for biological monitoring or spore testing. According to CDC (2018a), no matter the class or type, chemical indicators do not verify STERILITY and do not replace the need for weekly spore testing. Spore tests, however, are done only weekly and results are typically not obtained immediately, necessitating the use of chemical monitoring via integrators as well.

9.5 Steps 1 through 6 of Section 9.4 of this Code may be completed using an AUTOMATED INSTRUMENT WASHER in accordance with the manufacturer's instructions. Studies have found that automated methods for cleaning reusable devices used for minimally invasive surgical procedures are more efficient than manual methods (Alfa et al., 2006).

9.6 Reusable INSTRUMENTS that have been cleaned must then be STERILIZED using an AUTOCLAVE.

1. The first method of STERILIZATION discussed in this Code can be referred to as sealed package STERILIZATION. This method of STERILIZATION is to be used when the INSTRUMENTS will be stored prior to use.

STERILIZATION packaging used in sealed package STERILIZATION must have a color-changing chemical indicator. Chemical monitoring helps detect equipment malfunction and procedural errors in STERILIZATION, such as incorrect packaging or overloaded sterilizers. According to CDC (2018a), chemical monitoring uses sensitive chemicals that change color when exposure to high temperatures or combinations of time and temperature. A chemical indicator must be used with every package to ensure the STERILIZING agent has successfully penetrated the package and its contents. An external indicator should also be used if the internal chemical indicator is not visible from the outside of the package (CDC, 2018a). If the chemical indicator suggests inadequate processing, the INSTRUMENT cannot be used. For each STERILIZATION cycle, the results of the chemical monitoring must be noted on the packaging or indicator strips with the date and CYCLE NUMBER. This information must match what is recorded in the sterilization log.

Chemical indicator information should be documented on the CLIENT'S INFORMED CONSENT AND RELEASE FORM.

2. The second method of STERILIZATION discussed in this Code can be referred to as cassette-style STERILIZATION. This method of STERILIZATION is to be used when

the INSTRUMENTS will be used immediately after STERILIZATION. As stated in Section 9.4, STERILIZATION loads must contain a Class 5 chemical integrator.

INSTRUMENTS that have been STERILIZED must be immediately used or stored in a cabinet, drawer, or tightly covered container that prevents exposure to dust, moisture, and any other source of CONTAMINATION and is dedicated to storing INSTRUMENTS that have been STERILIZED only. CDC recommends that sterile instruments and supplies should be stored in covered or closed cabinets away from anything that might cause them to become wet (Rutala et al., 2019).

9.7 If the BODY ART ESTABLISHMENT is using only SINGLE-USE, disposable INSTRUMENTS that are not to be reprocessed, an AUTOCLAVE, ULTRASONIC, and STERILIZATION ROOM or STERILIZATION AREA are not required.

If a BODY ART ESTABLISHMENT, however, is sterilizing clean, unused INSTRUMENTS and/or JEWELRY, the ESTABLISHMENT shall have an AUTOCLAVE, but a separate STERILIZATION ROOM might not be necessary.

9.8

a) STERILIZED INSTRUMENTS must be stored in a cabinet, drawer, or tightly covered container that prevents exposure to dust, moisture, and any other source of CONTAMINATION and is dedicated to storing STERILIZED INSTRUMENTS only. The CYCLE NUMBER must be recorded on the packaging or indicator/integrator strip and correspond to the sterilization log.

b) Clean INSTRUMENTS to be STERILIZED immediately prior to a PROCEDURE must be stored in an area where they can remain clean (i.e., in a manner that prevents exposure to dust, moisture, and any other source of CONTAMINATION).

Following the STERILIZATION process, INSTRUMENTS must be handled using ASEPTIC TECHNIQUE to prevent CONTAMINATION (Rutala et al., 2019).

9.9 STERILE EQUIPMENT and INSTRUMENT packaging should be inspected prior to use. If packaging is compromised (e.g., wet, torn, punctured) or the expiration date has passed, the INSTRUMENTS are no longer considered STERILE and must go through the cleaning and STERILIZATION processes discussed in Sections 9.4–9.6 or be disposed of in the appropriate waste receptacle.

9.10 In addition to chemical monitoring, biological monitoring must be done to verify STERILITY. According to CDC (2018a), biological indicators, or spore tests, are the most accepted means of monitoring sterilization because they assess the sterilization process directly by killing known highly resistant microorganisms (e.g., *Geobacillus* or *Bacillus* species)." Spore tests must be done at least weekly. Spore test records must be retained for 3 years in compliance with Section 8 of this Code. In its STERILIZATION guidelines, CDC provides a standard minimum retention time for STERILIZATION records of 3 years, which is the time frame requested by the Joint Commission for the Accreditation of Healthcare Facilities (Rutala et al., 2019).

9.11 This procedure for responding to a positive spore test is compatible with that developed by CDC and the Association of periOperative Registered Nurses. A BODY ART ESTABLISHMENT'S procedure for responding to a positive spore test should be included in its Exposure Control Plan.

A single positive spore test does not necessarily indicate that the STERILIZATION procedure or sterilizer is defective. Single positive spore tests can occur sporadically due to slight variation in the resistance of the spores, improper use of the sterilizer, and laboratory contamination during culture (Rutala et al., 2019). Regardless of a potential false-positive, the procedures outlined in this Code must be followed in the case of a single positive spore test to ensure STERILITY of INSTRUMENTS.

An AUTOCLAVE repair service typically provides a loaner device during the repair period. Records for this loaned AUTOCLAVE must be maintained according to Section 8 of this Code. If a spore test is positive and there is no backup AUTOCLAVE, loaner AUTOCLAVE, or STERILIZED equipment from a negative spore test cycle, the BODY ART ESTABLISHMENT must exclusively utilize disposable INSTRUMENTS if operations continue while the AUTOCLAVE is out of service.

STERILIZATION records must be maintained for a minimum of 3 years in accordance with Section 8 of this Code.

10. PREPARATION AND CARE OF THE PROCEDURE SITE

10.1 To reduce the potential spread of pathogens, BODY ARTISTS shall wear GLOVES when touching the CLIENT in preparing for, performing, and cleaning up from the BODY ART PROCEDURE (Siegel et al., 2019). GLOVES are not needed for casual contact with the CLIENT.

BODY ARTISTS shall utilize ASEPTIC TECHNIQUE by wearing GLOVES when preparing for and conducting a PROCEDURE and when tearing down and DISINFECTING a PROCEDURE AREA. If GLOVES become CONTAMINATED in the process of preparing for, conducting, or tearing down after a PROCEDURE, GLOVES must be replaced. OSHA's Bloodborne Pathogens Standard (2012) states:

> 1910.1030(d)(3)(ix) Gloves shall be worn when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures except as specified in paragraph (d)(3)(ix)(D); and when handling or touching contaminated items or surfaces.
>
> 1910.1030(d)(3)(ix)(A) Disposable (single use) gloves such as surgical or examination gloves, shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

Proper technique for donning and doffing GLOVES as dictated by WHO can be found in Section 2.8 of this Annex.

10.2 The BODY ARTIST must cleanse the PROCEDURE SITE with ANTISEPTIC to reduce the microorganisms present on the skin and thus reduce the risk of infection. ANTISEPTICS are considered antimicrobial drugs used on living tissue and as such are regulated by FDA under the Food, Drug, and Cosmetic Act (Rutala et al., 2019). Though they both kill microorganisms, skin ANTISEPTICS are not suitable for use as environmental surface DISINFECTANTS and vice versa. Bednarek et al. (2021) published a list of ANTISEPTICS that should be used for most, if not all, procedures that enter the dermis of the skin or deeper, along with the methods of administration, adverse effects, and more information on each of the ANTISEPTICS. The list of commonly used ANTISEPTICS includes chlorhexidine, povidone-iodine, chloroxylenol, isopropyl alcohol, hexachlorophene, benzalkonium chloride, and hydrogen peroxide.

10.3 If shaving results in razor burn, cuts, or irritation of the skin, the BODY ARTIST should follow the protocol discussed in Section 2.6 of this Annex.

Razors are considered SHARPS and must be disposed of into a SHARPS CONTAINER immediately after use. Razors cannot be broken or recapped before being disposed of into a SHARPS CONTAINER. OSHA's Bloodborne Pathogens Standard (2012) section 1910.1030(d)(2)(vii)(A) states, "Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed unless the employer can demonstrate that no alternative is feasible or that such action is required by a specific medical or dental procedure."

10.4 Any SINGLE-USE item used to stop the flow of or absorb blood must be disposed of immediately and in accordance with Section 12 of this Code.

OSHA's Bloodborne Pathogens Standard (2012) defines regulated waste, or BIOMEDICAL WASTE, as "contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed" and "items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling." The determination of BIOMEDICAL WASTE according to OSHA standards is based on the potential to release blood. OSHA (2005) states that "bandages which are not saturated to the point of releasing blood or OPIM if compressed would not be considered as regulated waste" but must be disposed of into waste containers that are "lined in such a way as to protect employees from physical contact with the contents." (OSHA, 2005).

10.4 BODY ARTISTS must use ASEPTIC TECHNIQUE when handling any SINGLE-USE items that contact the CLIENT during the PROCEDURE to reduce the risk of cross-contamination. SINGLE-USE items cannot be reprocessed.

Duplicate Sections 10.4 will be addressed in the pending update of this Code.

10.5 SINGLE-USE items, whether used or unused, that were portioned out for the PROCEDURE and/or were present in the WORKSTATION were exposed to the risk of CONTAMINATION and must be discarded upon completion of the PROCEDURE to prevent pathogen transmission.

11. REQUIREMENTS FOR SINGLE-USE ITEMS

11.1 SINGLE-USE items, which can also be referred to as disposable items, are intended to be used on only one CLIENT during a single PROCEDURE. They are not intended to be reprocessed through cleaning, DISINFECTION, and/or STERILIZATION, and subsequently reused, either on another CLIENT or in another PROCEDURE. SINGLE-USE items are designed to be used only once and might not have the durability or integrity to be safely reused. Reprocessing of SINGLE-USE items can lead to fatigue-induced failure and fracturing that can put the CLIENT at increased risk of infection or other complications (Medicines & Healthcare products Regulatory Agency, 2021). SINGLE-USE items might not be designed to be cleaned and DISINFECTED according to the standards required by this Code. For example, SINGLE-USE items can be made with materials that are not able to withstand required chemical cleaning agents or have features/parts that are not accessible for cleaning.

Using SINGLE-USE items over items that are reprocessed improves CLIENT safety by eliminating cross-contamination risk (CDC, 2018b). Not reusing SINGLE-USE items serves to protect BODY ARTISTS and PERSONNEL, as the possibility of being exposed to blood and OPIM while cleaning the items is avoided (NIOSH, 2013). A BODY ART ESTABLISHMENT'S Exposure Control Plan will contain descriptions of which INSTRUMENTS and items are SINGLE-USE and which are intended to be reprocessed through cleaning, DISINFECTION, and/or STERILIZATION, and subsequently reused.

Per OSHA's Bloodborne Pathogens Standard (2012), "contaminated sharps shall be discarded immediately or as soon as feasible" in approved SHARPS CONTAINERS that are closable, leakproof, puncture resistance, and labeled or color-coded according to 1910.1030 section (g)(1)(i). Further information on SHARPS CONTAINERS can be found in Section 12.2.4 of this Code and Annex.

12. BIOMEDICAL WASTE

12.1–12.3 According to U.S. EPA (2021a), medical waste is primarily regulated by state environmental and health departments. BODY ART FACILITIES must follow jurisdictional regulations regarding BIOMEDICAL WASTE. Depending on the jurisdiction, BIOMEDICAL WASTE might also be referred to by terms such as regulated waste, medical waste, and regulated medical waste, among others.

Separating and identifying waste is essential to minimization and effective management of BIOMEDICAL WASTE. Proper handling, treatment, and disposal of BIOMEDICAL WASTE by type reduces costs and protects public health (Bartone et al., 1999).

The BODY ART ESTABLISHMENT'S procedures for managing, storing, and removing BIOMEDICAL WASTE should be documented in the Exposure Control Plan.

BODY ART ESTABLISHMENTS must utilize BIOMEDICAL WASTE transporters or mail-back services that comply with jurisdictional regulations as well as U.S. Department of Transportation (U.S. DOT) and U.S. Postal Service (USPS) regulations. Infectious substances are regulated as hazardous materials under U.S. DOT Hazardous Materials Regulations, 49

C.F.R. Parts 171-180. An infectious substance must conform to all applicable hazardous materials regulations when transported or offered for transportation by air, highway, rail, or water (U.S. DOT, 2020). BIOMEDICAL WASTE mail-back services are permitted under this Code. The DEPARTMENT might have a list of approved companies that provide mail-back services for BIOMEDICAL WASTE. These companies must comply with USPS regulations set forth in the Domestic Mail Manual 601.10.17.5 (Mailability: Hazardous Materials: Sharps and Other Mailable Regulated Medical Waste), which imposes standards for the transportation of medical waste through the mail and approves medical waste mail-back systems (Medical Waste Management Act, 2017).

12.1 BIOMEDICAL WASTE mixed with and/or disposed of as general waste can spread pathogens and injure PERSONNEL and the public. Similarly, any general waste that is put into a BIOMEDICAL WASTE container cannot be subsequently removed and must be disposed of with the BIOMEDICAL WASTE. To protect public health, waste must be properly separated and handled. OPERATORS should check with local jurisdictional regulations to determine waste categories, proper management of each category, and protocol in the case of mixed waste.

Training of PERSONNEL in operating plans to manage BIOMEDICAL WASTE must adhere to OSHA's Bloodborne Pathogens Standard (2012).

BIOMEDICAL WASTE records shall be kept in accordance with Section 8 of this Code. Recordkeeping is essential for the disposal of BIOMEDICAL WASTE to ensure traceability in the event of an incident or exposure to blood or OPIM.

12.2 Though BIOMEDICAL WASTE regulations can vary by jurisdiction, OSHA regulates the management of SHARPS, requirements for containers that hold BIOMEDICAL WASTE, labeling of BIOMEDICAL WASTE containers, and employee BIOMEDICAL WASTE training.

OSHA's Bloodborne Pathogens Standard (2012) addresses labeling of BIOMEDICAL WASTE by stating the following:

> 1910.1030(g)(1)(i)(A) Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material; and other containers used to store, transport or ship blood or other potentially infectious materials, except as provided in paragraph (g)(1)(i)(E), (F) and (G).
>
> 1910.1030(g)(1)(i)(B) Labels required by this section shall include the following legend:

BIOHAZARD

1910.1030(g)(1)(i)(C) These labels shall be fluorescent orange or orange-red or predominantly so, with lettering and symbols in a contrasting color.

1910.1030(g)(1)(i)(D) Labels shall be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.

1910.1030(g)(1)(i)(E) Red bags or red containers may be substituted for labels.

12.2.1 The BAMC Committee recognizes the storage time requirements for BIOMEDICAL WASTE vary by jurisdiction but recommends the ESTABLISHMENT develop and follow protocol that protect the health of their PERSONNEL, CLIENTS, and the public.

WHO recommendations for storage facilities for BIOMEDICAL WASTE state that the storage area should be lockable to prevent access by unauthorized persons; be inaccessible to animals, insects, and birds; be cleaned regularly; have impermeable floors that are easy to clean and DISINFECT; be the appropriate size for the volume of waste generated in the FACILITY; and be labeled in accordance with the hazard level of the stored waste (Chartier et al., 2014).

12.2.3 A plastic bag authorized for BIOMEDICAL WASTE must be certified by its manufacturer as being compliant with ASTM D-1922, Standard Test Method for Propagation Tear Resistance of Plastic Film and Thin Sheeting by Pendulum Method, and ASTM D-1709, Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method.

12.2.4 SHARPS CONTAINERS are regulated by FDA. FDA does not necessarily enforce OSHA regulations but evaluates whether a sharps container has features that are consistent with current good infection control practices as expressed in the OSHA Bloodborne Pathogen regulations related to engineering and work practice controls (FDA, 1993). FDA-approved SHARPS CONTAINERS are made of rigid plastic and are marked with a line that indicates when the container is considered full and must be discarded. FDA-approved SHARPS CONTAINERS come in a variety of sizes and the selection of an appropriately-sized SHARPS CONTAINERS should be based on a site-specific hazard analysis.

OSHA's Bloodborne Pathogens Standard (2012) establishes minimum design performance elements for SHARPS CONTAINERS, stated as follows:

> 1910.1030(d)(4)(iii)(A)(1) Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:
>
> > 1910.1030(d)(4)(iii)(A)(1)(i) Closable;
> >
> > 1910.1030(d)(4)(iii)(A)(1)(ii) Puncture resistant;
> >
> > 1910.1030(d)(4)(iii)(A)(1)(iii) Leakproof on sides and bottom; and

1910.1030(d)(4)(iii)(A)(1)(iv) Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.

The standard further states that during use, SHARPS CONTAINERS must be:

1910.1030(d)(4)(iii)(A)(2)(i) Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);

1910.1030(d)(4)(iii)(A)(2)(ii) Maintained upright throughout use; and

1910.1030(d)(4)(iii)(A)(2)(iii) Replaced routinely and not be allowed to overfill.

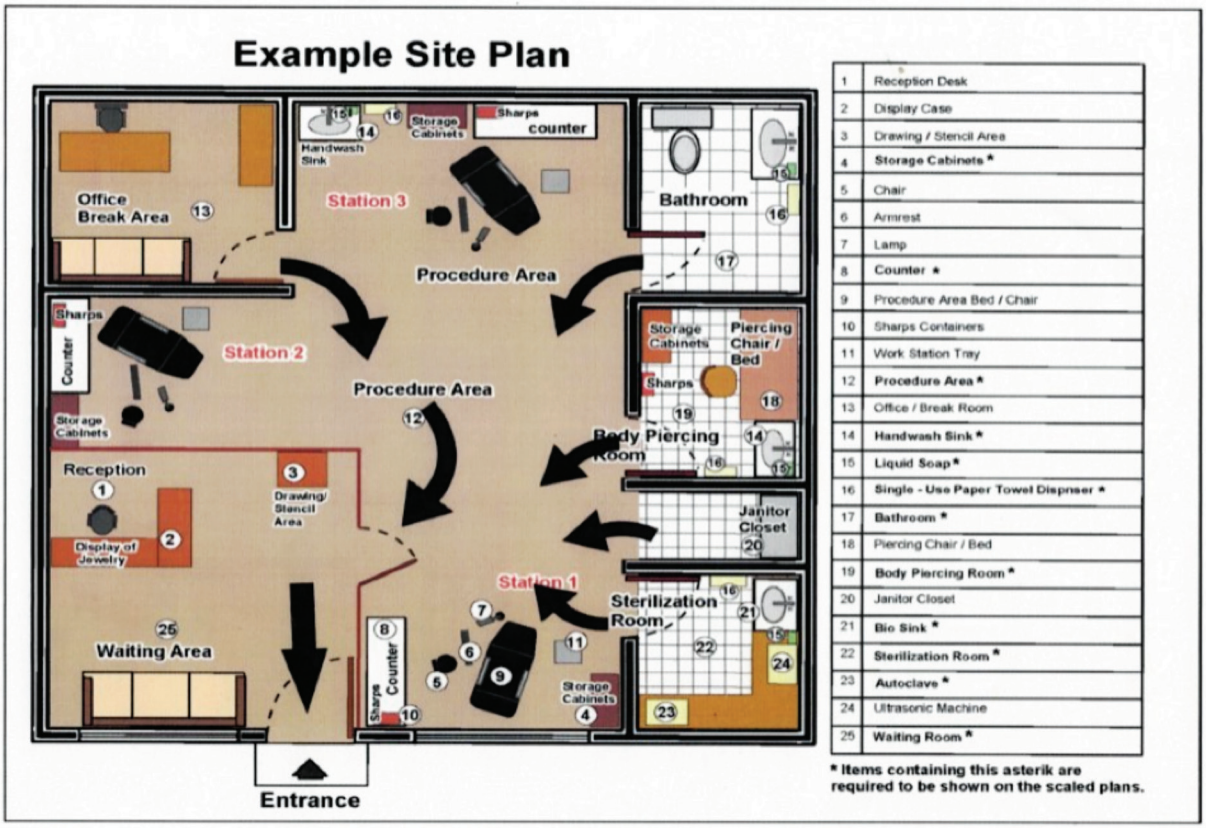
WHO states that waste bags and sharps containers should be filled to no more than three quarters full (Chartier et al., 2014). After each use, reusable outer containers must be cleaned and DECONTAMINATED per the following section in OSHA's Bloodborne Pathogens Standard (2012)

1910.1030(d)(4)(ii)(C) All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

12.3 WHO recommends that BIOMEDICAL WASTE bags be labelled with the date, type of waste, and point of generation to allow them to be tracked through to disposal (Chartier et al., 2014). Labelling and recordkeeping are essential for verifying waste pickup and tracking any public health incident.

13. REQUIREMENTS FOR PREMISES

13.1 BODY ART ESTABLISHMENT applications shall require a plan review by the DEPARTMENT to ensure compliance with code in the interest of protecting public health. Floor plans should be drawn to scale and denote square footage, HAND SINKS, PROCEDURE AREA, nonprocedure area/waiting area, mop/utility sink, INSTRUMENT storage, restroom(s), exit(s), office, sterilizer, and STERILIZATION ROOM. An example of a BODY ART ESTABLISHMENT floor plan is included below.



(Source: Cathy Montie Body Art Training Company, 2020.)

13.2 Environmental surfaces, such as walls, floors, and sinks, must be smooth, durable, in good repair, and nonporous to allow for easy cleaning to reduce microorganisms and prevent pathogen transmission. Using nonporous materials is an environmental control that reduces the risk of pathogen exposure and spread, as there is no way to completely DISINFECT absorbent materials.

BODY ARTISTS and OPERATORS must determine the schedules and methods necessary to clean and DISINFECT surfaces depending on the area (e.g., PROCEDURE AREA, nonprocedure area, restroom, office), type of surface, and the level of CONTAMINATION. PROCEDURE AREAS must be cleaned and DISINFECTED after each CLIENT. Most environmental surfaces need to be cleaned with only a detergent and water or a U.S. EPA-registered hospital disinfectant/detergent, depending on the nature of the surface and the type and degree of contamination (Kohn et al., 2003).

OSHA's Bloodborne Pathogens Standard (2012) states:

> 1910.1030(d)(4)(ii) All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.
>
> 1910.1030(d)(4)(ii)(A) Contaminated work surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

13.3 To prevent cross-contamination, BODY ART PROCEDURES and related activities must be conducted in enclosed spaces, completely separate from any personal services unrelated to BODY ART PROCEDURES and INSTRUMENT processing.

OSHA's Bloodborne Pathogens Standard (2012) regarding eating or drinking in BODY ART PROCEDURE AREAS are as follows:

> 1910.1030(d)(2)(ix) Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.
>
> 1910.1030(d)(2)(x) Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

As stated in Section 2.10 of this Annex, exceptions can be made when it is necessary to render first aid, such as when a CLIENT is feeling faint. In such instances, BODY ARTISTS must make their best effort to avoid cross-contamination by following basic protocol such as utilizing closed water bottles stored outside of the PROCEDURE AREA and properly removing GLOVES and washing their hands prior to providing the CLIENT with water.

13.4 BODY ART ESTABLISHMENTS must meet high levels of sanitation, as BODY ART PROCEDURES pierce the skin or mucosa and the risk of pathogen transmission must be contained. Pests can spread disease and must be kept out of BODY ART ESTABLISHMENTS to reduce the risk of cross-contamination within the FACILITY (U.S. EPA, 2020). U.S. EPA (2017) recommends preventing pests from entering an ESTABLISHMENT by using integrated pest management (IPM), a strategy that focuses on pest prevention and uses pesticides only as needed. The OPERATOR should obtain the services of a licensed commercial pest control company to aid in IPM and/or if IPM solutions fail.

13.5 Smoking and vaping, as discussed in this Code, include the use of both nicotine and non-nicotine products.

NIOSH (2015) recommends that employers establish and maintain smoke-free workplaces that prevent those in workplaces from involuntary, secondhand exposures to tobacco smoke and airborne emissions from e-cigarettes and other electronic nicotine delivery systems. As of December 31, 2020, 34 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, the Marshall Islands, the Northern Mariana Islands, Palau, and American Samoa have 100% smoke-free indoor air laws in private worksites (CDC, 2021a). As of December 31, 2020, 15 states, the District of Columbia, and Puerto Rico include e-cigarettes in their smoke-free indoor air laws (CDC, 2021b).

13.6 The BAMC Committee established a standard of 80 ft2 minimum per PROCEDURE AREA to ensure the PROCEDURE AREA has space for all items required by this Code, such as a HANDWASHING SINK, a waste receptacle, and a SHARPS CONTAINER, as well as space for the BODY ARTIST to safely perform BODY ART PROCEDURES.

13.7 Privacy screens or walls must be smooth, durable, in good repair, nonporous, and easily cleanable to prevent pathogen transmission. Per OSHA standard 1910.1030(d)(4)(ii), "All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or OPIM" (Bloodborne Pathogens, 2012). Most environmental

surfaces need to be cleaned with only a detergent and water or a U.S. EPA-registered hospital disinfectant/detergent, depending on the nature of the surface and the type and degree of contamination (Kohn et al., 2003).

13.8 Adequate ventilation and lighting are essential to a healthy working environment. Ventilation is an engineering control that supplies fresh air to an enclosed space to replace the existing air and remove contaminants. Ventilation is a critical concern with BODY ART, as the associated activities use processes and chemicals that generate fumes. Ventilation capacity should be reviewed during the plan review. OPERATORS should follow the manufacturer's guidelines for ventilation products to ensure the product is appropriately sized to the room based on the square footage.

Proper lighting is essential for a healthy work environment and keeps PERSONNEL and CLIENTS in a BODY ART ESTABLISHMENT safe from accidents. Artificial lighting is defined by the U.S. General Services Administration (2010) as a "combination of direct and indirect sources provided by ambient and task lighting fixtures and should complement, not duplicate, natural lighting." Lighting is typically measured in foot-candles. One foot-candle is equivalent to one lumen per square foot. The BODY ART ESTABLISHMENT must have an artificial light source equivalent to at least 20 lumens per square foot, or 20 foot-candles, to ensure PERSONNEL can see where there could be CONTAMINATION in the PROCEDURE AREA and ESTABLISHMENT at large.

13.9 The Americans with Disabilities Act (ADA) defines a service animal as a "dog that has been individually trained to do work or perform tasks for an individual with a disability" (U.S. Department of Justice, 2020). ADA Title II states that "consistent with CDC guidance, it is generally appropriate to exclude a service animal from limited-access areas that employ general infection-control measures" (U.S. Department of Justice, 2010).

The *Guidelines for Environmental Infection Control in Health-Care Facilities* (CDC, 2019a) does not prohibit fish tanks/aquariums in waiting areas but does recommend that they are kept out of patient-care areas and STERILE and clean supply storage areas to control the spread of waterborne microorganisms. Based on these guidelines, this Code states that fish aquariums are allowed in waiting rooms and nonprocedural areas, but that they are prohibited from PROCEDURE AREAS and STERILIZATION AREAS/ROOMS. CDC guidelines also recommend establishing a FACILITY policy for regular cleaning of fish tanks (CDC, 2019a). Supplying fish tanks/aquariums with aquatic species that can survive underwater for a minimum of 48 hours, maintaining a regular cleaning schedule for fish tanks/aquariums, and ensuring the tank/aquarium is the appropriate size for the number of fish housed in it will help reduce the risk of CONTAMINATION in the BODY ART ESTABLISHMENT.

13.10 Healthcare specialists generally cite HANDWASHING as the single most important factor in stopping the spread of germs and reducing the risk of infection (CDC, 2000; International Association of Healthcare Central Service Material Management, 2016). Each BODY ART PROCEDURE AREA must be equipped with a sink dedicated exclusively to HANDWASHING. To prevent cross-contamination, HANDWASHING SINKS should not be used for purposes other than HANDWASHING.

OSHA's Bloodborne Pathogens Standard (2012) defines HANDWASHING facilities as facilities "providing an adequate supply of running potable water, soap, and single-use towels or air-drying machines". This Code requires paper towels be used for hand drying, as SINGLE-USE paper towels efficiently dry hands, effectively remove bacteria, and cause less

CONTAMINATION of the surrounding washroom environment compared to electric air dryers (Huang et al., 2012).

OSHA's Bloodborne Pathogens Standard (2012) states:

> 1910.1030(d)(2)(iii) Employers shall provide handwashing facilities which are readily accessible to employees.
>
> 1910.1030(d)(2)(vi) Employers shall ensure that employees wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials. (OSHS, 2012)

Convenient accessibility of a HANDWASHING SINK encourages timely HANDWASHING and promotes a culture of hand hygiene, which reduces the risk of CONTAMINATION and spread of infection.

13.11 The BODY ARTIST must be able to access HANDWASHING facilities without causing environmental surface CONTAMINATION. OSHA states that it is a violation of the Bloodborne Pathogens Standard if an employee must leave the work area and thread their way through doorways and/or stairs to wash their hands (OSHA, 2001).

13.12 To reduce the risk of pathogen transmission, restroom/lavatory sinks cannot be used to clean BODY ART INSTRUMENTS or perform tasks associated with BODY ART PROCEDURES.

13.13 A dedicated STERILIZATION AREA or STERILIZATION ROOM is required to decrease the risk of cross-contamination. CDC infection control guidelines state that PERSONNEL should process all instruments in a designated central processing area to more easily control quality and ensure safety (Kohn et al., 2003). The guidelines state that the section where cleaning and DECONTAMINATION activities occur should be separated from the section where STERILIZATION activities occur by physical barriers (CDC, 2019a; Kohn et al., 2003). Physical barriers to separate STERILIZATION activities are engineering controls that isolate CONTAMINATION hazards.

13.14 The water supply should be from a municipal water supply system. If the ESTABLISHMENT is using water supplied from private wells, the water must be tested regularly. The DEPARTMENT should have a list of licensed laboratories in the jurisdiction that test water for a variety of substances and contaminants. Wastewater should be collected and disposed of into a sanitary sewer or an onsite wastewater treatment system approved by the public health agency having jurisdiction. Developing contingency plans for emergency response to water supply or wastewater disposal disruptions can help prevent an interruption in operation and/or a public health hazard.

13.15 Waste from a BODY ART ESTABLISHMENT is classified as either nonregulated waste or REGULATED WASTE. OSHA's Bloodborne Pathogens Standard (2012) defines REGULATED WASTE as follows:

> Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of

releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

REGULATED WASTE must be disposed of in accordance with Section 12 of this Code. Nonregulated waste can be discarded as general waste. General waste receptacles must be lined, covered, hands free, and easily cleanable to maintain FACILITY hygiene and prevent pathogen transmission.

13.16 Uncontaminated supplies and INSTRUMENTS should be stored in closed or covered cabinets or containers. Uncontaminated supplies should not be stored under sinks or in other locations where they might become wet (Kohn et al., 2003). Clean or STERILE INSTRUMENTS cannot be stored in an area where CONTAMINATED INSTRUMENTS are held or cleaned (i.e., uncontaminated INSTRUMENTS must be stored in an area where they can remain uncontaminated). STERILE items should be wrapped or placed in containers designed to maintain sterility during storage (Kohn et al., 2003).

13.17 Reusing cloths and textiles in a BODY ART FACILITY poses an increased risk for cross-contamination. According to CDC (2019a), contaminated textiles and fabrics often contain a high number of microorganisms from bodily substances. There are various disposable options for textiles that can be used in a BODY ART ESTABLISHMENT, such as disposable chair or table covers, disposable facemasks, and disposable pillowcases to cover vinyl pillows and wedges.

14. LICENSE REQUIREMENTS

14.1-14.5 In the interest of public health, both the BODY ART ESTABLISHMENT, whether fixed, mobile, or temporary, and the BODY ARTISTS must be licensed with the DEPARTMENT. The licensing procedure can differ between departments and/or licensing agencies. Licensing procedures shall be conducted in accordance with the jurisdiction's administrative procedure act, which establishes procedures for agencies to carry out their functions of rulemaking, adjudication, and licensing (Justia, 2018).

ESTABLISHMENTS and BODY ARTISTS that operate outside of what their LICENSE permits are subject to revocation and/or legal remedial actions and sanctions depending on the jurisdiction.

14.1 Upon enactment of this Code, ESTABLISHMENTS and BODY ARTISTS will have 6 months to achieve compliance with this Code to ensure public health is protected without putting an undue burden on any ESTABLISHMENT or BODY ARTIST.

14.1 To protect public health and PERSONNEL safety, BODY ART ESTABLISHMENTS must go through the licensing process annually with their DEPARTMENT. LICENSES are nontransferrable and any change in OPERATORS or FACILITY location will require a new application.

Any establishments using EAR PIERCING GUNS or similar devices must comply with this Code and be licensed by the DEPARTMENT. Further justification on this recommendation

can be found in Section 3 of this Annex and in Appendix A: National Environmental Health Association Policy Statement on Ear Piercing Guns.

BODY ART ESTABLISHMENT LICENSES should be posted in a highly visible location that all CLIENTS have access to, such as the front desk reception/lobby area.
Duplicate Sections 14.1 will be addressed in the pending update of this Code.

14.2 To obtain a LICENSE, BODY ARTISTS must have proof of attendance at an OSHA bloodborne pathogen training program or equivalent industry-specific training program approved by the DEPARTMENT. OSHA's Bloodborne Pathogens Standard (2012) states:

> 1910.1030(g)(2)(i) The employer shall train each employee with occupational exposure in accordance with the requirements of this section. Such training must be provided at no cost to the employee and during working hours. The employer shall institute a training program and ensure employee participation in the program.

The standard includes specific training requirements in paragraph 1910.1030(g)(2)(vii) and 1910.1030(g)(2)(viii) (Bloodborne Pathogens, 2012). To aid in implementation of OSHA's policies and procedures, OSHA maintains a publicly accessible training and reference materials library developed by the OSHA Directorate of Training and Education (OSHA, n.d.).

An individual who practices BODY ART must obtain a BODY ARTIST LICENSE and practice within a licensed FACILITY. BODY ARTISTS must be able to demonstrate FACILITY safety and sanitation knowledge to properly handle any hazardous materials, reduce the transmission of pathogens, maintain their own and CLIENT safety, and properly respond in the event of an accident or exposure incident.

In the case of contract employees, the PERSONNEL provider and the ESTABLISHMENT OPERATOR have a shared responsibility for assuring that employees are protected from workplace hazards (OSHA, 2011). OSHA standard interpretations state that the ESTABLISHMENT OPERATOR is responsible for providing site-specific training and personal protective equipment and have the primary responsibility regarding the control of potential exposure conditions (OSHA, 2011). The PERSONNEL provider is required to provide the general training outlined in the Bloodborne Pathogens Standard, ensure that employees are provided with the required vaccinations, and provide the proper follow-up evaluations following an exposure incident (OSHA, 2011).

Individuals using EAR PIERCING GUNS or similar devices must comply with this Code and be licensed by the DEPARTMENT. Further justification on this recommendation can be found in Section 3 of this Annex and in Appendix A: National Environmental Health Association Policy Statement on Ear Piercing Guns.

Individual BODY ARTIST LICENSES should be posted in a highly visible location in each BODY ARTIST station for individual CLIENTS to view.

14.3 Applicants for TEMPORARY BODY ART ESTABLISHMENT LICENSES must comply with the requirements of a fixed BODY ART ESTABLISHMENT. TEMPORARY BODY ART ESTABLISHMENT LICENSES are nontransferrable. The BODY ARTIST and ESTABLISHMENT LICENSES must be posted in highly visible locations in accordance with Section 5 of this Code.

For sections 14.3.3–14.3.5, the following list provides references to the area in this Code and Annex where further information on each requirement can be found, where applicable:

14.3.3.1: Reference Section 9
14.3.3.2: Reference Section 13.2
14.3.3.3: Reference Section 14.4
14.3.3.5: Reference Section 13.2
14.3.3.6: Reference Section 13.7
14.3.3.7: Reference Sections 13.10–13.11
14.3.3.8: Reference Section 12
14.3.3.11: Reference Section 13.9
14.3.4: Reference Section 17
14.3.5: Reference Section 18

14.4 To protect public health and safety, all BODY ARTISTS performing BODY ART PROCEDURES outside of a fixed BODY ART ESTABLISHMENT and/or for educational, trade show, convention, event, performance, or product demonstration purposes must be LICENSED by the DEPARTMENT to ensure compliance with this Code and all jurisdictional regulations. Requirements and application timelines for temporary BODY ART LICENSES will vary by jurisdiction.

14.4.2.2.1 This Section should state that the applicant must provide proof of compliance with Section 14.2.3–14.2.7 above. This change will be made in the pending update of this Code.

14.5

14.5.1 Depending on the jurisdiction, MOBILE BODY ART ESTABLISHMENTS might not be restricted to use only at special events and will be able to obtain LICENSES lasting longer than 14 days.

To prevent cross-contamination, BODY ART PROCEDURES and related activities must be conducted in enclosed spaces separate from any activities unrelated to BODY ART PROCEDURES. The MOBILE BODY ART ESTABLISHMENT must be maintained in a clean and sanitary condition to reduce the risk of pathogen transmission.

For sections 14.5.2–14.5.7, the following list provides references to the area in this Code and Annex where further information on each requirement can be found, where applicable:

14.5.2: Reference Sections 14.2–14.3
14.5.3: Reference Section 13.9
14.5.4: Reference Section 17
14.5.5–14.5.7: Reference Section 5

15. PROHIBITIONS

15.1 The BODY ART ESTABLISHMENT PERSONNEL and the DEPARTMENT should consult local and state laws to verify the age of majority in their jurisdiction and the age at which various BODY ART PROCEDURES can be performed, as the age might vary with PROCEDURE (Washington University in St. Louis, 2012).

The prohibition on performing BODY ART on MINORS is based partially on established legal principles that MINORS cannot enter into a legal contract or render informed consent for a medical procedure. Beyond legal justification, scientific studies show that adolescents, those 12–18 years of age, are statistically less aware of the health risks associated with BODY ART than young adults, those 18–25 years of age (Gallè et al., 2011). Lack of knowledge or awareness of risks can lead to MINORS not taking the proper precautions to protect their health and safety.

15.2 As discussed in Section 7 of this Code, for the BODY ARTIST to perform BODY ART on a CLIENT, the CLIENT must complete an INFORMED CONSENT AND RELEASE FORM. On this form, the CLIENT must confirm that they are not under the influence of drugs or alcohol. Various studies have shown that drugs and alcohol are associated with cognitive changes, including the loss of inhibition, confused or abnormal thinking, and poor decision-making (Goudriaan et al., 2007; MacDonald et al., 1995; Mosel, 2021; Steele & Josephs, 1990; Verdejo-García et al., 2006). Additionally, drugs and alcohol might put the CLIENT at greater risk for complications during and after the procedure. According to Mukamal (2006), alcohol consumption, in moderation and at excessive levels, tends to inhibit the activity of platelets, the blood cells that form clots, and to reduce levels of fibrinogen, a blood protein involved in clotting. This blood thinning effect can increase the risk of excessive bleeding and certain bleeding complications, putting both the CLIENT and the BODY ARTIST at risk.

Due to the nature of BODY ART and the associated potential health risks, this Code prohibits BODY ART to be performed on CLIENTS who are under the influence of drugs or alcohol, as they can experience impaired decision-making. The BODY ARTIST must use their best judgment to determine if the CLIENT is not under the influence of drugs or alcohol and is able to make an informed decision. The BODY ARTIST reserves the right to decline services to a CLIENT per Section 7.6 of this Code.

15.3 Information on LICENSE requirements can be found in Section 14 of this Code. LICENSES must be posted according to Section 5 of this Code.

15.4 It is prohibited to submit to the DEPARTMENT any falsified information including but not limited to training certificates, identification documents, BIOMEDICAL WASTE operating plans, exposure control plans, spore test results, permits, or any other documents required by this Code and the jurisdiction.

16. ENFORCEMENT

16.1 The DEPARTMENT shall refer to their jurisdiction's administrative procedure act. The Administrative Procedure Act (APA) is a federal law that establishes uniform procedures for federal agencies to carry out their functions of rulemaking, adjudication, and licensing. All U.S. states have adopted a body of statutes similar to the federal APA (Justia, 2021).

17. INSPECTION

17.1–17.6 INSPECTIONS must be performed in compliance with the applicable administrative procedure act. All U.S. state legislatures have passed administrative procedure acts that govern the way in which agencies operate, propose and issue regulations, and conduct administrative hearings and appeals (Yackee, 2019).

17.1 The inspector has the right to access a FACILITY when the FACILITY is occupied. Routine and nonroutine INSPECTIONS are conducted to protect public health as well as the health of the FACILITY OPERATOR and PERSONNEL.

17.2 As dictated by this Code, BODY ART ESTABLISHMENT LICENSES are issued annually by the DEPARTMENT. As such, INSPECTIONS must be conducted at least annually and as often as necessary to protect public health. Authorized agents of the DEPARTMENT must present identification to conduct an INSPECTION so OPERATORS can ensure they are not violating confidentiality or privacy and are showing documents, such as INFORMED CONSENT AND RELEASE FORMS and employee files, to authorized viewers.

17.3 OPERATORS who submit false documents to the DEPARTMENT can be prosecuted to the fullest extent of their jurisdiction's law.

17.4 Providing a copy of the INSPECTION report to the LICENSE holder or OPERATOR of the BODY ART ESTABLISHMENT is necessary to protect public health and safety. The LICENSE holder or OPERATOR will be able to reference the report at will, enabling them to better respond to any concerns, if necessary. Maintaining complete and accessible records between the LICENSE holder or OPERATOR and the DEPARTMENT contributes to strong communication channels between the parties.

17.5 All violations must be corrected within the time frame specified by the DEPARTMENT. In the case of an IMMINENT HEALTH HAZARD, the violations must be corrected prior to operations resuming. What qualifies as an IMMINENT HEALTH HAZARD will vary by jurisdiction. Though IMMINENT HEALTH HAZARDS will vary by jurisdiction, some examples can include but are not limited to suspected disease transmission by an employee of a BODY ART ESTABLISHMENT, extended interruption of electrical service at the ESTABLISHMENT, or a sewage backup in the FACILITY.

17.6 The DEPARTMENT might receive reports of or observe violations that require them to act to protect public health.

18. SUSPENSION

18.1-18.3 Suspension procedures must be performed in compliance with the jurisdiction's administrative procedure act. All U.S. state legislatures have passed administrative procedure acts that govern the way in which agencies operate, propose and issue regulations, and conduct administrative hearings and appeals (Yackee, 2019).

18.3 Following notification that the conditions causing the suspension have been corrected, the DEPARTMENT shall inspect the ESTABLISHMENT within a period of time specified by law or defined by the DEPARTMENT.

19. REVOCATION

19.1 Following initial notice and subsequent hearing, the DEPARTMENT has the authority to recommend permanent revocation of a LICENSE. The DEPARTMENT must deliver a written notice stating the reasons for the permanent revocation and inform the OPERATOR of the process for filing a request for a hearing in front of a board of appeals.

19.2–19.3 Depending on the jurisdiction, the hearing must be conducted within a specified time frame after the request for a hearing is filed. A jurisdiction's administrative procedure act will govern how an agency must conduct administrative hearings and appeals.

19.4 Operating a BODY ART FACILITY or performing BODY ART PROCEDURES without a LICENSE is a direct violation of this Code per Section 14.1. ESTABLISHMENTS and BODY ARTISTS that operate without proper LICENSES can be subject to legal remedial actions and sanctions as provided by the jurisdiction's law.

20. CITATIONS

20.1 The U.S. has 51 state health departments, including the District of Columbia's, and about 3,000 local health agencies. Public health governance structures vary by state. All states exercise a formal legislative grant of authority to conduct public health activities and depending on a state's structure, local health agency authority can flow through the state or exist as an independent grant of authority (Association of State and Territorial Health Officials, 2007). Depending on the jurisdiction, the DEPARTMENT has the authority to set and enforce standards to protect public health. In accordance with local grants of authority, the DEPARTMENT can propose penalties on BODY ART ESTABLISHMENTS, BODY ARTISTS, and OPERATORS in accordance with an assessment of the violation's risk exposure.

20.2 After the suspension or revocation period has ended and/or required corrective actions have been taken, the LICENSEE must pay all fines and reinstatement fees for the LICENSE suspension or revocation to be lifted.

20.3 The 12-month period refers to the LICENSE period for BODY ARTIST LICENSES and fixed BODY ART ESTABLISHMENT LICENSES, both of which are issued and expire annually.

This fee structure was developed from industry standards to help the DEPARTMENT protect public health without placing an undue burden on any parties involved. An escalating structure for repeat violations provides the DEPARTMENT the ability to ensure public health and safety hazards are addressed. In cases where violations are not addressed and LICENSES are suspended per Section 20.3.4 of this Code, the LICENSE holder can apply for reinstatement, and protocol dictated by the jurisdiction's administrative procedure act must be followed.

20.4 An established limit on the length of time that a citation can go unaddressed allows the DEPARTMENT to protect public health by limiting the time a potential public health hazard can remain unrectified.

20.5 This fee structure was developed from industry standards to help the DEPARTMENT protect public health without placing an undue burden on any parties involved. When a BODY ARTIST LICENSE is placed on revoked status, the individual is considered to be operating without a LICENSE, per Section 19.4 of this Code. Additionally, if a BODY ARTIST operates in an ESTABLISHMENT that has a suspended LICENSE, the DEPARTMENT can issue citations.

21. DEPARTMENT PERSONNEL COMPETENCY REQUIREMENTS

21.1 DEPARTMENT personnel performing environmental health/sanitary evaluations or complaint investigations of BODY ART ESTABLISHMENTS play a vital role in identifying and controlling environmental hazards and toxic exposures that might affect individual or population health (Public Health Degrees, 2021). According to the U.S. Bureau of Labor Statistics (2021), for most entry-level jobs, "environmental scientists and specialists must have a bachelor's degree in environmental science or a science-related field, such as biology, chemistry, physics, geosciences, or engineering." Depending on the jurisdiction, DEPARTMENT personnel might be required to pass a civil service exam and hold an environmental health specialist license or credential. These DEPARTMENT personnel requirements serve to provide regulators with the industry-specific knowledge and skills necessary to protect public health.

DEPARTMENT personnel performing evaluations, investigations, or INSPECTIONS of BODY ART ESTABLISHMENTS must have proof of completion of an OSHA Bloodborne Pathogens Standard training program (or equivalent) given or approved by the DEPARTMENT, proof of completion of an OSHA first aid training program (or equivalent) given or approved by the DEPARTMENT, and proof of completion of an in-person CPR training program (or equivalent) given or approved by the DEPARTMENT. The importance of safety and regulations surrounding BLOODBORNE PATHOGENS requires that regulators complete OSHA Bloodborne Pathogens Standard training to be able to protect themselves from blood and OPIM during INSPECTIONS, to be prepared in the event of an unanticipated incident occurring during INSPECTIONS, and to be able to ensure BODY ART PERSONNEL compliance in the interest of public health and safety. Completing first aid and CPR trainings enables the regulator to have a full understanding of what is expected of BODY ART PERSONNEL and to ensure compliance in the interest of public health and safety.

22. INTERPRETATION AND SEVERABILITY

22.1 Words used in this Code and Annex, regardless of the number, gender, or tense specifically used, shall be construed to include any other number, gender, or tense, as the context requires. Terms used in capitalized form in this Annex have the meanings specified in Section 1. Words and phrases not specifically defined in Section 1 of this Code and Annex shall be construed according to context.

22.2 If any one or more clause, section, provision, or application of this Code shall for any person or circumstance be declared by a jurisdiction's court as unenforceable, void, or illegal, it shall not affect 1) the enforceability or validity of remainder of the clauses, sections, provisions, and applications; or 2) the enforceability or validity in other jurisdictions of that or any other clause, section, provision, or application of this Code.

APPENDIX A: National Environmental Health Association Policy Statement on Ear Piercing Guns

Policy Statement on Ear Piercing Guns

In the U.S., approximately 83% of the population has their earlobes pierced and 14% has a piercing outside the earlobe (The Academy of Responsible Tattooing, 2018). Commonly regulated separate from other piercing techniques, ear piercing guns are frequently used to pierce the ear lobe, outer ear, and other areas of the body despite their inability to meet the same sterilization requirements as other piercing methods. This inability increases health risks such as infection, disease transmission, and tissue damage, including cartilage shattering (Centers for Disease Control and Prevention [CDC], 2008, 2018; Keene et al., 2004), as well as potential hospitalization in severe cases (Cicchetti et al., 2002; Margulis et al., 2003). Environmental health professionals regulate piercing procedures to protect public health. Not all states, however, classify the use of ear piercing guns as a piercing procedure and it can be exempt from these regulations. This situation creates an environment that allows for insufficient hygiene standards that have been shown to produce greater rates of infection, complications, and disease transmission. These discrepancies highlight the need to update requirements for ear piercing guns and limit their use to the ear lobe to protect public health and safety.

The National Environmental Health Association (NEHA) advocates for national, state, and local policies, regulations, research, and resources that will enhance the ability of environmental health professionals to ensure the practice of safe body art procedures to better protect public health.

NEHA recommends the following for state, local, tribal, and territorial government agencies:

- Classify establishments that use ear piercing guns in the same category as body piercing facilities and enforce body piercing and biomedical waste regulations on these establishments as governed by state and local health jurisdictions.

- Ensure that sterilization procedures can be monitored, sanitary practices can be established, and regulations will allow for uniform inspections and improve consumer health.

- Hold the use of ear piercing guns to the same standards as other piercing techniques. As stated in the NEHA Body Art Model Code, “individuals who perform piercings with a presterilized, single-use, stud-and-clasp ear piercing system must adhere to [general body art] regulations and meet the requirements of a body art practitioner.”

- Limit the use of ear piercing guns to the ear lobe.

- Educate lawmakers and health agencies on the dangers of unregulated facilities and untrained personnel using ear piercing guns on the public. Piercings performed with ear piercing guns that cannot be fully sterilized might result in serious infection, tissue damage, and disease transmission. These issues can be exacerbated with untrained staff in unregulated facilities.

- Ensure that regulatory agencies have the resources, training, and jurisdiction to conduct inspections of all piercing facilities, including those that use ear piercing guns.

- Hold establishments using ear piercing guns to the standards outlined in the NEHA Body Art Model Code.

Background

The perception of body piercing has changed from extreme to generally accepted. While exact numbers are hard to come by, some studies have stated that 83% of the U.S. population has their ears pierced, and only 10–20% of women do not (The Academy of Responsible Tattooing, 2018; Hallman, 2005). As piercings are becoming more common, further studies and experiences have shed more light on the most common methods used. Ear piercing guns are frequently used to pierce the ear lobe, high ear, and occasionally other areas of the face and body. The instruments are designed to pierce the skin by driving a starter earring through the desired area. The most common type of ear piercing gun is spring loaded and when the trigger is released, the earring is driven through the skin and into the provided earring back. Some models of ear piercing guns use disposable cartridges (the stud-and-clasp holder is entirely disposable), while more traditional ear piercing guns require manual loading of the earring and back into the device for each procedure. In either case, most ear piercing guns are made at least partially of plastic and cannot be sterilized to the same extent as other piercing equipment, leading to a greater risk of infection. Ear piercing guns are typically used in mall kiosks or cosmetic shops and are rarely found in tattoo and piercing studios (More et al., 1999).

Regulation of ear piercing guns varies across the country. The Food and Drug Administration (FDA) maintains the position that ear piercing devices should be restricted to prescription dispensing, which means they cannot be used by people without medical training. Furthermore, FDA has attempted to regulate such devices on an ad hoc basis. Due to the lack of uniformity in state regulations, however, FDA is unable to enforce this position. In fact, many states do not require prescription dispensing as FDA suggests. A recent opinion from the California attorney general stated that because "ear piercing does not constitute the practice of medicine, it follows that . . . there are no circumstances that would prohibit a nurse or any other licensed or unlicensed person from performing earlobe piercing" (Food and Drug Administration, 2015). Indiana and Tennessee piercing regulations exclude ear piercing guns from piercing instrument definitions, thereby eliminating most sterilization requirements (Indiana State Department of Health, 2017; Tennessee Department of Health, 2002). In contrast, several state regulations limit the use of ear piercing guns to the ear lobe or the lobe and the outer ear due to the increased potential for tissue damage. Ear piercing guns use blunt force to pierce the skin and can damage the surrounding cartilage and lead to serious infection. Ohio, Oklahoma, and Massachusetts limit the use of the ear piercing gun to the lobe alone, while Mississippi and Texas allow the device to be used on the entire ear but nowhere else on the body (Ohio Administrative Code, 2014; Oklahoma State Department of Health, 2017; Mississippi State Department of Health, 2012; Ridley, 2001; Texas Department of State Health Services, 2005).

Some ear piercing gun operators have reported that the guns malfunction at times, requiring removal of the jewelry with pliers that are later used on other clients, creating a pathway for disease transmission. Occasionally the force of the gun is insufficient to force the earring stud through the client's ear, leading to contamination from the employee attempting to remove the earring or excessive trauma if the earring is forced through the lobe. Ear piercing guns are also misused despite manufacturer instructions. Piercings have been documented on ear lobes, upper ear cartilage, nostrils, navels, eyebrows, tongues, and other areas of the body although many manufacturers label ear piercing guns for use on ear lobes only (Association of Professional Piercers [APP], 2018). Infections from ear piercing gun procedures on the tongue or navel often result in serious complications.

Due to widely varying regulations and underreporting, well documented data on ear piercing gun procedure complications are lacking. Nonetheless, infection and injury have been documented. When used on the high ear, piercing guns drive the blunt end of the earring through the cartilage,

using sheer force to complete the piercing. Rather than creating a clean cut, the cartilage can be fractured around the piercing, which can lead to infection and a difficult, lengthy healing process (Lyons et al., 2012). In rare cases, infection from this type of injury can lead to choroiditis and the collapse of the upper ear, resulting in a difficult reconstruction process with varying success (Cicchetti et al., 2002; Margulis et al., 2003). Keloid formation, or excessive scarring, has also been documented after high ear piercing infections using an ear piercing gun (Bashir et al., 2011).

In any piercing area, the posts of the jewelry used in ear piercing guns are often too short to accommodate the swelling that occurs after the procedure, pushing the stud up against the back of the ear. This occurrence can lead to cases of embedded earrings, increased pain, and infection. Jewelry that fits too closely to the skin prevents normal discharge from piercing sites to escape, creating a fluid barrier that traps bacteria against the skin (APP, 2018). Furthermore, the jewelry used in ear piercing guns is typically not high quality, implant-grade metal suitable for body piercing and could contain common allergens like nickel. In one study, more than 26 cases of embedded earrings were identified after using a spring-loaded ear piercing gun (Cohen et al., 1994). This issue is particularly worrisome for young children who often have their ear lobes pierced with ear piercing guns, since they might not be able to communicate that the earring has become embedded and parents might assume the jewelry is missing (Tiong et al., 2008).

Justification

The percentage of the U.S. population with piercings has grown steadily in recent decades, prompting a rapid expansion in piercing methods and locations (APP, 2018). The ear piercing gun is popular because it is easy to use. Its inherent design and the lack of training for employees, however, demands more regulation. While some states have begun to limit the locations on the body where ear piercing guns can be used, few states have standards that consider the increased likelihood of contamination from improper sterilization, procedures, or training. Ear piercing guns should be held to the same standards as all other piercing techniques and should be limited to use on the ear lobe. Streamlining sterilization regulations will allow for uniform inspections and improve consumer health.

Ear piercing guns have been shown to cause more damage than the techniques typically used in professional piercing studios. Cases of shattered cartilage and keloid formation have been reported when ear piercing guns are used on the upper ear. Many mall kiosks or cosmetic stores are entirely prepared to use the ear piercing gun on any part of the ear, creating a greater risk for these types of injuries. Employees have also not hesitated to use the gun for cartilage piercings on children under 16 years old (Jervis et al., 2001). In contrast, the technique used by most professional piercers involves piercing the ear with a sterile, disposable, hollow needle that cleanly breaks the skin and removes unwanted tissue. This method decreases the likelihood of injury and infection as sterilization procedures are more in-depth and there is not a high risk of blunt force trauma (APP, 2018). Ear piercing gun use should be limited to the ear lobe, where tissue damage is less likely to occur.

In professional piercing studios, any nondisposable equipment is autoclaved, a process that uses heat, steam, and pressure to sterilize all nondisposable piercing tools between each use, killing most pathogens. In contrast, ear piercing guns cannot be autoclaved as they are usually made from plastic. Instead, piercing guns are simply wiped down with disinfectant between each use. Wiping down the external surfaces rarely eliminates all the bacteria outside the gun and cannot kill pathogens within the working parts of the gun. Blood from one client could easily contaminate another, leading to potential infection and transmission of diseases such as hepatitis or methicillin-resistant Staphylococcus aureus, which can live for extended periods of time on inanimate surfaces (CDC, 2008, 2018). Pathogens and disease can also be spread from

client to technician, and from technician to client. Infection or injury are also likely to lengthen the healing time for piercings, which can already take months to completely heal. While ear lobe piercings typically heal in 6–8 weeks, cartilage and navel piercings can take anywhere between 6 months to a full year if no complications occur. Ear piercing guns need to be regulated with the same sterilization standards as all other piercing establishments to alleviate these issues.

Risk of infection is magnified by unsanitary workspaces that do not meet regulations or recommendations for general piercing studios. For any type of piercing, all surfaces should be nonporous and easily cleanable. These surfaces include floors, counters, chairs, and walls. Many ear piercing guns are used in unregulated procedures in mall stores or kiosks, which can emphasize comfort and appearance over cleanliness. In addition to limited separation from other areas of the store, ear piercing gun procedure areas might have pillows, sheets, or rugs. These surfaces are absorbent and could contain blood particles from multiple clients. A tuberculocidal disinfectant should also be used to regularly clean all surfaces. Lighting and washing is also important for hygienic workspaces. Body piercing and sterilization areas should all be adequately lit and contain hand sinks to facilitate proper handwashing practices.

While ear piercing guns might seem easier to use, that does not make them less harmful. Training procedures at establishments using ear piercing guns should match their equivalents at professional piercing studios. Videos, demonstrations, and direct supervision are sometimes used to train employees to use ear piercing guns, although there is no specified training period (More et al., 1999). Employees at establishments that use ear piercing guns commonly do not have bloodborne pathogen training or do not follow appropriate aseptic techniques. Employees have also shown a lack of knowledge concerning potential complications from piercing procedures (Jervis et al., 2001). For example, employees at a mall kiosk in Oregon neglected to wash the bottle used to spray disinfectant onto earring studs, leading to an outbreak of Pseudomonas aeruginosa infections and several cases of auricular chrondritis. Four of the cases had to be hospitalized and undergo drainage surgeries (Keene et al., 2004). In contrast, most professional piercing studios require apprenticeships, typically lasting at least one year, before an employee can perform procedures individually (Grant, 2002; More et al., 1999). Increased regulation of ear piercing guns requiring standard sterilization, training, and workplace practices would alleviate injury and infection.

Many state regulations exclude ear piercing guns from disinfection and sterilization requirements, which causes a public health concern. Indiana requires that any “equipment that penetrates the skin (i.e., needles) or comes into direct contact with an instrument that penetrates the skin, except a piercing gun, requires sterilization.” Similarly, Tennessee regulation defines body piercing as “the piercing of any part of the body for compensation by someone . . . who utilizes a needle or other instrument for the purpose of inserting an object into the body for nonmedical purposes; body piercing includes ear piercing, except when the ear piercing procedure is performed with an ear piercing gun” (Tennessee Department of Health, 2002). If exceptions continue to be given to ear piercing guns in state regulations, manufacturers and users will have no incentive to alter disinfection practices, innovate or use newer methods, or improve training practices.

Regulation of ear piercing guns in the U.S. lags behind policies in other countries. In 2013, Mexico became the first country to ban ear piercing gun use entirely (Zapata, 2013). At the federal level in Canada, disposable cartridge ear piercing guns are recommended for use on the ear lobe only and legally regulated as such in several territories. Additionally, sterilizers used with ear piercing guns must be tested for effectiveness monthly in Alberta (Rideout, 2010). The Australia Government Department of Health (2011) requires that ear piercing guns are used only on the

ear lobe and specifies disinfection and storage requirements. U.S. regulation at the state level is sporadic and sometimes grants exceptions to ear piercing guns. Streamlining regulations for ear piercing guns and other piercing techniques, in addition to limiting use to the ear lobe, will elevate policy and prevent infection.

Increased regulation for ear piercing guns has received support from the professional piercing community, elected officials, and public health organizations. The Association of Professional Piercers (2018) states that because ear piercing guns cannot be fully sterilized, traditional piercing techniques from reputable organizations should always be used. Additionally, some states have already begun to limit the use of ear piercing guns to certain areas of the body.

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APPENDIX B: National Environmental Health Association Policy Statement on Microblading

Policy Statement on Microblading

Over the past 50 years, tattooing has evolved from a stereotyped subculture to commonplace. In the U.S., 21% of adults have a tattoo, which has increased from 16% in 2003 (Braverman, 2012). The use of permanent cosmetics, and more specifically microblading, has also risen in popularity during this time. Microblading is a relatively new type of permanent cosmetic procedure that falls under the definition of tattooing. Microblading is performed with a configuration of needles attached to a handle, often described as a blend between a scalpel and a fine-tooth comb, to manually create small cuts that resemble eyebrow hairs that are then filled in with ink to achieve the appearance of fuller brows (Darby & Darby, 2016a; Food and Drug Administration [FDA], 2017). Environmental health professionals regulate tattoo procedures to protect public health. Not all states, however, classify microblading as a tattoo procedure and it can be exempt from these regulations. This situation creates an environment that allows for insufficient hygiene standards that have been shown to produce greater rates of infection, complications, and disease transmission. Tattoos administered in unhygienic conditions can lead to a host of bloodborne pathogens such as hepatitis C and HIV, in addition to other common infections (Smith, 2003). These instances highlight the need to update requirements for microblading to protect public health and safety.

The National Environmental Health Association (NEHA) advocates for national, state, and local policies, regulations, research, and resources that will enhance the abilities of environmental health professionals to ensure safe body art practices and protect public health.

NEHA recommends the following for state, local, tribal, and territorial governmental agencies:

- Classify microblading as tattooing as listed in the NEHA Body Art Model Code to increase regulation of the permanent cosmetic industry to improve public health and safety.

- Adopt the NEHA Body Art Model Code into state and local laws.

- Reclassify establishments that perform microblading tattoo procedures and permanent cosmetic procedures in the same category as other tattoo establishments so they fall under the jurisdiction of state and local health agencies.

- Ensure that sterilization procedures can be monitored, sanitary practices can be established, and regulations will allow for uniform inspections to increase epidemiological surveillance to provide public health and safety.

- Assure that regulatory agencies have the resources, training, and jurisdiction to conduct inspections of all microblading, permanent cosmetic, and other facilities that perform tattooing.

- Hold microblading and permanent cosmetic procedures to the same sterilization, hygienic, training, and aftercare standards as other tattooing techniques.

- Educate lawmakers and health agencies on the dangers of unregulated facilities and untrained or unlicensed personnel performing microblading and permanent cosmetic procedures on the public.

Background

Regulation of microblading varies widely across the country. While the Food and Drug Administration (FDA) can investigate and act to prevent consumer injury after a public health issue is identified, there is no federal oversight for cosmetic or traditional tattooing. Instead, states and other local jurisdictions are largely responsible for regulating tattooing and permanent makeup industries (FDA, 2017). Health regulators in various states have taken dissimilar views on microblading with some considering severe restrictions to the practice and others believing microblading should be exempt from existing tattoo regulations. Lawmakers in Missouri, with support of permanent makeup technicians, recently put forth a bill that would redefine tattooing in the state to include microblading and other types of permanent makeup procedures ("Lack of Regulations," 2017). Additionally, the Georgia Department of Public Health recently issued a press release stating that under Georgia law, microblading is considered tattooing and can only be performed in a licensed tattoo studio (Hokanson, 2017). Similarly, the Oklahoma State Department of Health specifies that any procedure that affects more than the dead layer of skin cannot be performed by a cosmetology licensed individual (Oklahoma Secretary of State, 2017). Many other states including Idaho, Maryland, and Wyoming, however, do not reference microblading in their regulations (Mercer, 2017). Microblading is often referred to as semipermanent, a term that has created confusion and has cast doubt on whether the practice should be regulated more like traditional tattoos. The shifting use of technologies has also made it difficult for regulators to keep up with the specifics of the practice (Darby & Darby, 2016b).

Due to widely varying regulations and underreporting, well documented data on microblading procedure complications are lacking. Nonetheless, adverse reactions that vary from mild to severe have been documented after undergoing microblading procedures. In 2003 and 2004, FDA reported more than 150 adverse reactions from certain permanent makeup ink pigment. Additionally, FDA received numerous reports in 2012 of contaminated inks resulting in widespread infection, leading FDA to issue a warning for cosmetic tattooing nationwide (FDA, 2017). Powdered inks sometimes used in microblading can be mixed with contaminated water or alcohol solutions. Some inks, often advertised as organic or natural, are known to turn from black to blue or green. The spreading out of pigment has also been reported in select cases of eyebrow and cosmetic tattooing, causing unsatisfactory and often permanent physical scarring (Lee et al., 2001).

Other complications that can occur from eyebrow tattooing include reactions resulting in noninfectious or infectious granulomas (raised and reddened tissue) that can spread beyond the tattooed area (Greywal & Cohen, 2016; Ro & Lee, 1991). Granuloma reactions can occur regularly and without warning. Previous skin tattoos in other areas have not been shown to predict or influence the likelihood of a reaction following cosmetic eyebrow tattoos (Cunningham & Feighery, 2015).

Additionally, a previous history of drug allergies or medication offers no insight into whether granulomas will develop. Granuloma reactions can take months to resolve and often require extensive treatment with steroids or varying antibiotics (Martín et al., 2007; Sim et al., 2010). Cases can also take months or even years to present themselves, and can appear after repeat procedures (Guerra et al., 2016).

Furthermore, eyebrow tattooing has resulted in multiple cases of sarcoidosis, a granulomatous disease that can involve multiple organs including the lungs, eyes, nerves, and skin (Mirzaei et al., 2017; Naeini et al., 2017). One study revealed a woman suffering from chronic coughing for nearly eight months because of nodules that had formed in her lungs following an eyebrow tattooing procedure (Landers et al., 2005). Common at the sites of scars, trauma, and foreign

body deposition, sarcoidosis can take more than six months to resolve and often results in permanent physical scarring (Ringger & Sluzevich, 2012). Microblading patients might be at an increased risk for these types of injuries and infections since they will likely receive the procedure several times, multiplying opportunities for exposure (Harsányi et al., 2015). These issues highlight the need for best practices concerning sterilization and hygiene requirements.

Justification

While microblading has been heralded by some as an emerging beauty trend or referred to as semipermanent, it is another form of permanent tattooing and should be regulated as such. Streamlining requirements for tattooing and microblading within state and local health jurisdictions will create a uniform regulatory process and improve public health.

The term semipermanent, however, is misleading in several ways. No form of tattooing, including microblading, can guarantee that the pigment will fade away completely in a given time frame. Less ink is used in the microblading procedure, which can indicate a faster rate of fading and a need for more touch up procedures. Additionally, some technicians have claimed that pigment is only implanted into the surface epidermis layer, not the dermis, during microblading procedures, differentiating the process from tattooing. If this were true, ink would fade within a matter of weeks or months, not years (Society of Permanent Cosmetic Professionals, 2018). Finally, the NEHA Body Art Model Code defines
tattooing as "any method of placing ink or other pigment into or under the skin or mucosa by the use of needles or any other instruments used to puncture the skin, resulting in permanent or temporary
colorization of the skin or mucosa. This includes all forms of permanent cosmetics." Microblading clearly falls under this definition, as it inserts ink under the skin using needles, results in permanent colorization, and falls under the category of permanent cosmetics.

Similar infections can arise in both tattooing and microblading, yet tattooing is more strictly regulated (Khunger et al., 2015). Many states have tattoo regulations, but microblading is not always defined as a tattoo procedure. Rates of infection have dropped dramatically since the implementation of public health mandates related to tattooing in the mid to late 20th century that require the use of disposable needles and proper sterilization techniques (Islam et al., 2016). In comparison to tattooing, similar reactions have been documented after microblading procedures, yet the quality of sterilization differs dramatically. Inappropriate hygiene measures in tattooing and ineffective aftercare are major risk factors for tattoo related infections (Dieckmann et al., 2016).

Infection rates from unlicensed body art practitioners using nonsterile equipment or ineffective sterilization methods multiply these risks (Centers for Disease Control and Prevention [CDC], 2006). Standard aftercare instructions should be supplied to clients, but untrained microblading technicians can fail to distribute instructions or supply incomplete information. Unlicensed tattooists using nonsterile equipment in unregulated facilities or settings might offer lower rates, driving up demand for their services while heightening the potential for disease transmission (Coulson, 2012).

Standards of training for microblading technicians might be lower than the core competencies required for body art practitioners and other cosmetic tattooists. States and localities have different licensing requirements and microblading is not always included. Sterilization is particularly important in microblading due to the direct connection between the handle and the needle. A lack of training might lead to a greater risk for contamination due to practices such as the reuse of hand tools and contact between the hand and needles (Darby & Darby, 2016b).

Some microblading demonstration classes recommend merely wiping down the microblading handle and needle for reuse on the next client. In contrast, all needles in tattoo studios are sterilized and single use. Reusable or nondisposable devices are autoclaved to effectively sterilize the instruments (Darby & Darby, 2016b). Instruments that cannot be autoclaved must be disinfected by a tuberculocidal disinfectant prior to reuse. Even in comparison to other cosmetic tattoo devices, many microblading handles lack an impermeable hygiene membrane between the hand piece and actual needle. Also, the inks used in cosmetic tattooing and microblading might not be manufactured or regulated in the same way as ink used in tattoo studios, which could increase the risk of infection (Wenzel et al., 2010). Another issue with the lack of training in microblading is uneven tattooing. While tattoo studios often require apprenticeships detailing needle depth, new microblading professionals might have no experience, resulting in uneven scarring and ink distribution. These problems illustrate the need for better training practices and increased licensing standards to protect public health.

Risk of infection is magnified by unsanitary workspaces that do not meet regulations or recommendations for general tattoo studios. For any type of tattooing, all surfaces should be nonporous and easily cleanable, including floors, counters, chairs, and walls. Many microblading procedures are done in salons where comfort over cleanliness might be emphasized. In addition to taking place next to waxing, hair cutting, and nail procedures, microblading chairs can have pillows, sheets, or rugs. These surfaces are absorbent and could contain blood particles from multiple clients. A tuberculocidal disinfectant should be used to regularly clean all surfaces. Lighting and washing is also important for hygienic workspaces. Procedure and sterilization areas should be adequately lit and contain hand sinks to facilitate proper handwashing practices.

Streamlining regulations for microblading and tattooing will help eliminate public health issues and encourage technicians to seek out certified educational opportunities. Education for other types of cosmetic tattooists is typically provided by technicians with years of experience and formal qualifications. Training organizations can also prepare courses to fit specific health regulations to avoid complications during and after the procedure. The sudden popularity of microblading has left new technicians without sufficient pathways to education and has led to a rise in courses and procedures being offered by people without sufficient training. Consequently, microblading technicians might only receive one to two days of demonstrations and start offering their own services a few weeks later. As a result, important hygiene factors are often ignored, increasing the risk of infection and injury. Trained body art practitioners should be certified through their state or by a reputable not-for-profit representative trade organization if no state or local regulations exist (Darby & Darby, 2016b).

Increased regulation of tattooing has been shown to decrease incidents of infection and injury. Prison populations and other groups participating in unregulated tattooing procedures are more likely to contract serious infections and transmit diseases like HIV and hepatitis C than the general population (CDC, 2006). Additional tattoos, when applied with the proper hygienic guidelines, have not been shown to increase the risk for hepatitis B and C infections. Despite the apparent risks, state and local legislations can lag behind safety regulations (Armstrong, 2005). Microblading is no exception, and several entities have begun to push for more stringent regulations. Support from public institutions and professional permanent makeup organizations cement the need to uniformly adopt microblading into state and local tattooing regulations. This policy change will streamline the regulating process, thereby improving training and sterilization standards, and advance public health outcomes.

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APPENDIX C: Centers for Disease Control and Prevention 2020 National Notifiable Conditions

Anthrax
Arboviral diseases, neuroinvasive and non-neuroinvasive
- California serogroup virus diseases
- Chikungunya virus disease
- Eastern equine encephalitis virus disease
- Powassan virus disease
- St. Louis encephalitis virus disease
- West Nile virus disease
- Western equine encephalitis virus disease

Babesiosis
Botulism
- Botulism, foodborne
- Botulism, infant
- Botulism, wound
- Botulism, other

Brucellosis
Campylobacteriosis
Cancer
Candida auris, clinical
Carbapenemase Producing Carbapenem-Resistant Enterobacteriaceae (CP-CRE)
- CP-CRE, Enterobacter spp.
- CP-CRE, Escherichia coli (E. coli)
- CP-CRE, Klebsiella spp.

Carbon monoxide poisoning
Chancroid
Chlamydia trachomatis infection
Cholera
Coccidioidomycosis
Congenital syphilis
- Syphilitic stillbirth

Coronavirus Disease 2019 (COVID-19)
Cryptosporidiosis
Cyclosporiasis
Dengue virus infections
- Dengue
- Dengue-like illness
- Severe dengue

Diphtheria
Ehrlichiosis and anaplasmosis
- *Anaplasma phagocytophilum* infection
- *Ehrlichia chaffeensis* infection
- *Ehrlichia ewingii* infection
- Undetermined human ehrlichiosis/anaplasmosis

Foodborne Disease Outbreak
Giardiasis
Gonorrhea
Haemophilus influenzae, invasive disease

Hansen's disease
Hantavirus infection, non-Hantavirus pulmonary syndrome
Hantavirus pulmonary syndrome
Hemolytic uremic syndrome, post-diarrheal
Hepatitis A, acute
Hepatitis B, acute
Hepatitis B, chronic
Hepatitis B, perinatal virus infection
Hepatitis C, acute
Hepatitis C, chronic
Hepatitis C, perinatal infection
HIV infection (AIDS has been reclassified as HIV Stage III)
Influenza-associated pediatric mortality
Invasive pneumococcal disease
Lead, elevated blood levels
    Lead, elevated blood levels, children (<16 Years)
    Lead, elevated blood levels, adult (≥16 Years)
Legionellosis
Leptospirosis
Listeriosis
Lyme disease
Malaria
Measles
Meningococcal disease
Mumps
Novel influenza A virus infections
Pertussis
Pesticide-related illness and injury, acute
Plague
Poliomyelitis, paralytic
Poliovirus infection, nonparalytic
Psittacosis
Q fever
    Q fever, acute
    Q fever, chronic
Rabies, animal
Rabies, human
Rubella
Rubella, congenital syndrome
Salmonella Paratyphi infection (Salmonella enterica serotypes Paratyphi A, B [tartrate negative], and C [S. Paratyphi])
Salmonella Typhi infection (Salmonella enterica serotype Typhi)
Salmonellosis
Severe acute respiratory syndrome-associated coronavirus disease
Shiga toxin-producing *Escherichia coli*
Shigellosis
Silicosis
Smallpox
Spotted fever rickettsiosis
Streptococcal toxic shock syndrome

Syphilis
    Syphilis, primary
    Syphilis, secondary
    Syphilis, early non-primary non-secondary
    Syphilis, unknown duration or late
Tetanus
Toxic shock syndrome (other than streptococcal)
Trichinellosis
Tuberculosis
Tularemia
Vancomycin-intermediate *Staphylococcus aureus* and Vancomycin-resistant *Staphylococcus aureus*
Varicella
Varicella deaths
Vibriosis
Viral hemorrhagic fever
    Crimean-Congo hemorrhagic fever virus
    Ebola virus
    Lassa virus
    Lujo virus
    Marburg virus
    New World arenavirus – Guanarito virus
    New World arenavirus – Junin virus
    New World arenavirus – Machupo virus
    New World arenavirus – Sabia virus
Waterborne Disease Outbreak
Yellow Fever
    Zika virus disease and Zika virus infection
    Zika virus disease, congenital
    Zika virus disease, non-congenital
    Zika virus infection, congenital
    Zika virus infection, non-congenital
(CDC, 2020b)

APPENDIX D: U.S. Environmental Protection Agency Registered Tuberculocide Products Effective Against Mycobacterium tuberculosis, September 2020

List B: U.S. Environmental Protection Agency Registered Tuberculocide Products Effective Against Mycobacterium tuberculosis		
Registration Number	Product Brand Name	Company
1043-119	SPOR-KLENZ READY TO USE	STERIS CORPORATION
1043-120	SPOR-KLENZ CONCENTRATE	STERIS CORPORATION
1043-124	HASTE-SSD- COMPONENT B	STERIS CORPORATION
1043-125	HASTE -SSD - COMPONENT A	STERIS CORPORATION
1043-92	LPH SE	STERIS CORPORATION
10492-4	DISCIDE ULTRA DISINFECTING TOWELETTES	PALMERO HEALTH CARE
10492-5	DISCIDE ULTRA DISINFECTING SPRAY	PALMERO HEALTH CARE
10807-177	MISTY II DISINFECTANT & DEODORANT	AMREP, INC
1130-15	WEIMAN GERMICIDAL SOLUTION	WEIMAN PRODUCTS, LLC.
11525-30	DISINFECTANT SPRAY “G”	KIK CUSTOM PRODUCTS, INC.
1672-65	AUSTIN A-1 ULTRA DISINFECTING BLEACH	JAMES AUSTIN COMPANY
1677-129	OXONIA ACTIVE	ECOLAB INC.
1677-226	VIRASEPT	ECOLAB INC.
1677-237	FF-ATH	ECOLAB INC.
1839-174	STEPAN TOWELETTE	STEPAN COMPANY
1839-223	SCTB WIPE	STEPAN COMPANY
1839-225	SC-RTU-TB	STEPAN COMPANY
1839-83	DETERGENT DISINFECTANT PUMP SPRAY	STEPAN COMPANY
33176-5	AIRYSOL BRAND SURFACE DISINFECTANT	AMREP, INC.
33176-6	AIRYSOL BRAND MULTI- PURPOSE DISINFECTANT CLEANER	AMREP, INC.
34810-21	READY TO USE WEXCIDE	WEXFORD LABS, INC.
34810-25	READY TO USE THYMO CIDE	WEXFORD LABS, INC.
34810-31	WEX-CIDE-128	WEXFORD LABS, INC.
34810-36	CLEAN-CIDE WIPES	WEXFORD LABS, INC.
3862-104	HOSPITAL SURFACE DISINFECTANT AND DEODORIZER	ABC COMPOUNDING CO, INC
3862-177	TEK-TROL DISINFECTANT CLEANER CONCENTRATE	ABC COMPOUNDING CO, INC
3862-179	OPTI-PHENE CLEANER DISINFECTANT DEODORANT	ABC COMPOUNDING CO, INC
3862-181	FOAMING DISINFECTANT CLEANER	ABC COMPOUNDING CO, INC
44446-67	CONCEPT HOSPITAL DISINFECTANT DEODORANT	QUESTVAPCO CORPORATION
46781-12	CAVICIDE 1	METREX RESEARCH
46781-13	CAVIWIPES 1	METREX RESEARCH
46781-14	CAVIWIPES BLEACH	METREX RESEARCH

46781-15	CAVICIDE BLEACH	METREX RESEARCH
46781-6	CAVICIDE	METREX RESEARCH
46781-8	CAVIWIPES	METREX RESEARCH
46851-1	OMNI II	CERTOL INTERNATIONAL, LLC
46851-5	OMC II SPRAY	CERTOL INTERNATIONAL, LLC
498-134	SRAYPAK SPRAY CLEANSE	CHASE PRODUCTS CO
498-194	SPRAYPAK SPRAY DISINFECTANT/LUBRICANT	CHASE PRODUCTS CO
52252-11	REVOX PA STERILANT	MINNTECH CORP
52252-4	MINNCARE COLD STERILANT	MINNTECH CORP
52252-7	ACTRIL COLD STERILANT	MINNTECH CORP
54289-4	PERACLEAN 15% (PEROXYACETIC ACID SOLUTION)	EVONIK CORPORATION
56392-8	DISPATCH HOSPITAL CLEANER DISINFECTANT TOWELS WITH BLEACH	CLOROX PROFESSIONAL PRODUCTS COMPANY
5741-22	STERIPHENE II BRAND DISINFECTANT DEODORANT	SPARTAN CHEMICAL COMPANY, INC.
5813-1	CLOROX BLEACH	CLOROX CO.
5813-20	FRESH SCENT CLOROX	CLOROX CO.
5813-50	ULTRA CLOROX BRAND REGULAR BLEACH	CLOROX CO.
59894-10	KWIKKILL DISINFECTANT DEODORIZING CLEANING WIPES	M & S RESEARCH, INC.
62296-1	LET'S TOUCH	RBR PRODUCTIONS, INC.
65787-1	AMUCHINA	ALCAVIS HDC, LLC
675-1	VANI-SOL BOWL CLEANSE	RECKITT BENCKISER LLC
67603-4	SPRAY DISINFECTANT	SHERWIN- WILLIAMS DIVERSIFIED BRANDS
67619-1	CPPC BLEACH	CLOROX PROFESSIONAL PRODUCTS CO
67619-20	REX	CLOROX PROFESSIONAL PRODUCTS CO
67619-21	CARB	CLOROX PROFESSIONAL PRODUCTS CO
67619-24	BLONDIE	CLOROX PROFESSIONAL PRODUCTS CO
67619-25	DAGWOOD	CLOROX PROFESSIONAL PRODUCTS CO
67619-8	CPPC ULTRA BLEACH 2	CLOROX PROFESSIONAL PRODUCTS CO
69151-1	PAROX HOSPITAL DISINFECTANT	STERITECH, INC
70060-19	ASEPTROL S10-TAB	BASF CORPORATION
70144-1	OPTI-CIDE 3	MICRO-SCIENTIFIC LLC.
70144-2	OPTI-CIDE 3 WIPES	MICRO-SCIENTIFIC LLC
70144-4	OPTI-CIDE MAX WIPES	MICRO-SCIENTIFIC LLC.
70144-5	OPTI-CIDE MAZ	MICRO-SCIENTIFIC LLC.
70590-1	HYPE-WIPE	CURRENT TECHNOLOGIES INC

70590-2	BLEACH-RITE DISINFECTING SPRAY WITH BLEACH	CURRENT TECHNOLOGIES INC
70627-2	DISINFECTANT D.C. 100	DIVERSEY, INC.
70627-56	OXIVIR TB	DIVERSEY, INC.
70627-6	PHENOLIC DISINFECTANT HG	DIVERSEY, INC.
70627-60	OXIVIR WIPES	DIVERSEY, INC.
70627-74	OXIVIR 1	DIVERSEY, INC.
70627-77	OXIVIR 1 WIPES	DIVERSEY, INC.
72083-2	HALOSOURCE BLEACH	HALOSOURCE, INC.
73232-1	ALPET D2	BEST SANITIZERS, INC.
74559-1	ACCEL TB	VIROX TECHNOLOGIES INC.
74559-10	OXY-1 WIPES	VIROX TECHNOLOGIES INC.
74559-3	ACCEL TB WIPES	VIROX TECHNOLOGIES INC.
74559-9	OXY-1 RTU	VIROX TECHNOLOGIES INC.
74986-5	SELECTROCIDE 5G	SELECTIVE MICRO TECHNOLOGIES, LLC
777-71	LYSOL BRAND FOAMING DISINFECTANT BASIN TUB & TILE CLEANER II	RECKITT BENCKISER LLC.
777-81	LYSOL BRAND DISINFECTANT TOILET BOWL CLEANER	RECKITT BENCKISER LLC.
777-99	BRACE	RECKITT BENCKISER LLC.
8383-12	PERIDOX	CONTEC, INC
8383-13	PERIDOX RTU (TM)	CONTEC, INC
8383-7	SPORICIDIN BRAND DISINFECTANT TOWELETTES	CONTEC, INC.
84545-4	PERADOX HC SOLUTION PART A	SBIOMED, LLC
84545-5	PERADOX HC ACTIVATOR SOLUTION PART B	SBIOMED, LLC
84683-1	BENEFECT BROAD SPECTRUM DISINFECTANT	OHSO CLEAN, INC.
84683-4	BENEFECT BOTANICAL DAILY CLEANER DISINFECTANT TOWELETTE	OHSO CLEAN, INC.
84683-5	CLEAN WELL BROAD SPECTRUM DISINFECTANT	OHSO CLEAN, INC.
8714-8	CLIDOX-S BASE	PHARMACAL RESEARCH LABORATORIES, INC.
87508-3	PERFORMACIDE	ODORSTAR, LLC
87742-1	THYMOX DISINFECTANT SPRAY	LABORATORIE M2
88494-1	WEDGE DISINFECTANT	NORTH AMERICAN INFECTION CONTROL, LTD.
9150-11	CRYOCIDE 20	INTERNATIONAL DIOXCIDE INC.
9150-2	ANTHIUM DIOXCIDE	INTERNATIONAL DIOXCIDE INC.
9150-3	CARNEBON 200 2% AQUEOUS STABILIZED CHLORINE DIOXIDE	INTERNATIONAL DIOXCIDE INC.
92108-1	EXCELYTE VET	PARADIGM CONVERGENCY TECHOLOGIES CORP

9480-10	WONDER WOMAN FORMULA B	PROFESSIONAL DISPOSABLES INTERNATIONAL, INC.
9480-12	WONDER WOMAN FORMULA B GERMICIDAL WIPES	PROFESSIONAL DISPOSABLES INTERNATIONAL, INC.
9480-14	PROJECT FLASH SPRAY	PROFESSIONAL DISPOSABLES INTERNATIONAL, INC.
9480-4	SANI-CLOTH GERMICIDAL WIPES	PROFESSIONAL DISPOSABLES INTERNATIONAL, INC.
9480-8	PDI SANI-CLOTH BLEACH WIPES	PROFESSIONAL DISPOSAB LES INTERNATIONAL, INC.
9480-9	FREESTAR	PROFESSIONAL DISPOSABLES INTERNATIONAL, INC.
954-10	CLIPPERCIDE SPRAY	KING RESEARCH, INC.
9616-13	VERTEX GERMICIDAL ULTRA BLEACH	VERTEX CHEMICAL CORP
9804-1	OXINE	BIO-CIDE INTERNATIONAL INC

(U.S. EPA, 2021b)

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ANNEX
to the
BODY ART MODEL CODE

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