New York City Department of Health and Mental Hygiene

Health Standards and Recommendations for Tattooing

March 2016

PREFACE TO THE HANDOUT

This informational handout can be used by applicants for a tattoo license in preparing to take the required examination for such license as established by the "Tattoo Regulation Act" of the New York City Administrative Code. The handout outlines health and safety procedures for tattoo artists so that they can safely provide tattoo services to the general public.

Health Standards and Recommendations for Tattooing

Acknowledgments

This handout was originally based upon the Health Guidelines for Personal Care and Body Art Industries prepared by the Department of Human Services, Communicable Disease Control Section of the State Government of Victoria, Australia, first issued in 1990 and subsequent revision of 2004. Additional references utilized for this revision of this handout are listed on the related section.

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Overview of Regulations and Requirements for Tattooing in New York City

Since mid-1997 the practice of tattooing has been legalized in New York City with the introduction of Subchapter 7, entitled "Tattoo Regulation Act "to Chapter 23 of Title 17 of the City's Administrative Code. The Act set forth requirements for obtaining tattoo license and regulates tattoo artists to ensure that they are practicing basic health and safety procedures.

Any person eighteen years of age or older intending to engage in the practice of tattooing shall apply to the commissioner for a tattoo license. Each applicant for tattoo license shall take an examination administered by the department in accordance with rules promulgated by the commissioner regarding health issues relating to tattooing.

The Department of Health and Mental Hygiene (DOHMH) licenses tattoo artists –no tattoo parlors. Tattoo license applications are available at the department of Consumer Affairs Citywide License center, 42 Broadway, 5th floor, New York, NY 10004. Tattoo licenses are valid for two years.

No tattoo may be applied to a person younger than 18 years. Evidence of the age of prospective clients must be examined.

DOHMH inspect tattoo parlors on a complaint basis. Non-adherence to the provisions of the "*Tattoo Regulation Act*" can result in violations and penalties as established in the Act.

The New York City Department of Health and Mental Hygiene (DOHMH) requires that the following basic principles be observed by people operating in establishments that provide tattooing services or working independently:

- The work area must be kept clean and hygienic
- Needles and other objects for penetrating the skin must be sterile
- Tattooists and their clothing must be clean. No cuts, infections, dermatitis or wounds on the skin can be kept exposed
- Needles and other objects, which have touched blood or body fluids, must be disposed of appropriately.

The purpose of this booklet is to describe the infection prevention and control practices for practitioners who perform tattooing. The guidelines are based on an assessment of potential or documented evidence of infection risk posed by skin piercing procedures and the principles of infection control to manage the risk.

The information in this booklet represents the standards of practice recommended for tattoo artists to protect their customers, themselves and the community

I. INTRODUCTION

Tattooing and body piercing have become is increasingly popular among Americans and body art is found in people of all ages, occupations, and social classes.

Tattooing is an invasive procedure that has the potential of resulting in serious skin and blood infections. Skin protects us from many infections. Tattooing involves piercing the skin with a needle or other sharp instrument and unless the needles are new, sterilized for each treatment and properly handled by the practitioner they can be contaminated with the infected blood and bodily fluids of another person. The bacteria or viruses that may also be present on the skin of the person receiving the tattoo can penetrate his/her body when the skin is pierced. Practitioners who do the tattooing are also at risk of becoming infected through accidental cuts and punctures.

It is possible to transmit viral infections such as hepatitis B, hepatitis C, Human Immunodeficiency Virus (HIV)/ Acquired Immunodeficiency Syndrome (AIDS) and herpes through tattooing, as well as bacterial skin infections such as streptococcus and Staphylococcus.

It is essential for tattoo artists to be fully aware of the potential dangers of their procedures and to understand the precautions that need to be taken to minimize the likelihood of infection.

II. DEFINITIONS

Acquired immune deficiency syndrome (AIDS) -The last stage of infection caused by the human immunodeficiency virus (HIV), which most often results in severe damage to the body's immune system.

Applicator - A term referring to either single-use and reusable spatula or similar devices.

Antiseptic - A chemical agent that destroys or inhibits microorganisms on skin or tissue and has an effect of limiting or optimally preventing infection.

A**utoclave -** Equipment used for the sterilization of heat resistant instruments *(see sterilization).*

Bacteria - Microscopic organisms that are too small to be visible to the naked eye. Bacteria are capable of causing infection when a person is exposed to them under certain circumstances, such as through abraded skin (e.g. staphylococci, streptococci).

Bacterial Spores -Some bacteria are able to survive in very harsh conditions by enveloping themselves with a thick wall called bacterial spore. Spores make bacteria highly resistant to killing. If spores are introduced into the body where conditions become more favorable —when there's more water or more food available—the bacteria "come to life" again, transforming from a spore back to a vegetative cell that can cause serious infection. Spores can be destroyed by sterilization only.

Bloodborne infections – Infections caused by viruses found in the blood such as hepatitis B virus (HBV), hepatitis C virus (HCV) or human immunodeficiency virus (HIV).

Body Fluids -Fluids normally present in the body such as blood, mucous, sweat, oil, saliva, urine, ooze from a festering sore, or tears. They may contain infectious microorganisms.

Cleaning – Refers to the process of removing blood, other body fluids, organic material, tissue and dirt from the surface of an object by scrubbing with a brush, detergent and water. Cleaning greatly reduces the number of microorganisms (including bacterial endospores) on items and is a crucial step in processing. If items have not first been cleaned, further processing might not be effective.

Contamination – A disinfected or sterile item or surface that becomes soiled with microorganisms.

Cross-contamination -The transfer of microorganisms from one surface to another or from something contaminated to something clean or sterile.

Detergent - A substance that enhances the cleansing action of water (preferably warm/hot) or another liquid.

Disinfectant - A chemical agent that destroys microorganisms, but does not necessarily kill all microbial forms on inanimate objects.

Disinfection- A process that destroys or kills some, but not all, disease-producing microorganism on an object or surface. Disinfection does not kill spores.

Gloves - Protective equipment that must be worn to protect against exposure to blood and other potentially infectious materials. D*isposable gloves are* single-use gloves that are disposed of after each use. Most popular disposable gloves are made of latex, but hypoallergenic gloves, glove liners, powderless gloves or other alternatives are available for persons who are allergic to it.

Hepatitis B virus (HBV) – The virus that causes hepatitis B disease, which is a serious infection of the liver. The hepatitis B virus (HBV) can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death. It takes from six weeks to six months to produce infection after the virus enters the body.

Hepatitis C virus (HCV) - The virus that causes hepatitis C disease, which is an infection of liver cells. It takes from six weeks to six months to produce infection after the virus enters the body. The hepatitis C virus (HCV), which is found in the blood of persons who have this disease. HCV is spread by contact with the blood of an infected person

Human Immunodeficiency Virus (HIV) – The virus that causes HIV infection and AIDS. It may take from one to six months for the blood to test positive for antibodies to the HIV after the virus enters the body.

Immunization - A method to produce immunity (protection from infection) using vaccines, e.g. *three injections of hepatitis B vaccine over six month will confer immunity in most vaccinated people.*

Infection – Condition resulting form the presence and multiplication of microorganisms in the body. Not all infections result in apparent signs and symptoms of illness, yet the infected person is capable of transmitting the microorganism to others.

Infection control – Refers to practices and strategies that aim to minimize the risk of spreading infections from infected to non infected persons. In a tattoo parlor, transmission needs to be prevented from client to client, from client to tattooist, and from tattooist to client.

Infectious waste- Infectious wastes (also called biomedical waste) include human waste, animal waste and objects and materials contaminated with blood and body fluids containing disease-causing microorganisms or viruses. Items saturated with blood, used needles syringes and other sharps must be handled with special precaution since they may be contaminated with germs which can make you ill. Major concerns are the spread of hepatitis B, C and HIV.

Instrument - A tool that is used to perform a specific function, e.g. needle. Instruments are usually made of stainless steel and can withstand heat during sterilization.

Latex – Latex is natural rubber that is made from the sap of the Brazilian rubber tree. Hundreds of products may contain latex: medical devices (gloves, blood pressure cuffs, IV tubes and catheters); dental items (dams and orthodontic rubber bands); clothing (the elastic waistbands in pants and underwear); children's items (bottle nipples, pacifiers, teething toys and toys); household items (rugs, bathmats and rubber gloves); personal care items (diaphragms and condoms);

Latex Allergy - A reaction to a protein in the sap of the rubber tree. A person who is sensitive to the protein can develop an allergic reaction when touches a latex-made item or breathes close to it.

Microorganism – Also called a germ, e.g. bacteria, virus, or fungus.

Mucous membrane -The sheets of tissue that line various openings of the body such as the mouth, nose, eyes or genitals.

Pathogen - A microorganism that can cause disease in humans.

Regulated infectious waste- Includes all waste, which is visibly dripping with blood and could potentially be contaminated with disease-causing microorganisms, and which presents a recognized infectious hazard to waste disposal workers and to the environment if appropriate precautions are not used.

Reusable – An instrument designated by the manufacturer as suitable for reprocessing and reuse. Opposite to a device that the manufacturer designates or intends for single –use only.

Sharps - An**y** article that can pierce the skin and cause punctures or cuts. In the tattoo facility sharps refer to needles and disposable razors used.

Single-use – An instrument or glove designated and labeled for one use only. It must be immediately discarded after use.

Stencil - Stencil means single-use paper stencil in this booklet unless otherwise stated.

Sterile gloves - Single-use gloves that are sterile at the time of use. They must come from a package that labels the gloves as being sterile.

Sterilization - A process that destroys all forms of microbial life including the most resistant forms, e.g., bacterial spores by heat, chemicals, or gases.

Standard precautions - Work practices that require everyone to assume that all blood and body fluids are potential source of infection, independent of perceived risk. Such precautions involve the use of protective barriers and safe workplace practices and the safe disposal of body substances and soiled material.

Tattoo - Any mark on the body of a person made with indelible ink or pigments injected beneath the outer layer of the skin, or to make such a mark.

Tattooist - Any person who applies a tattoo to the body of another person.

Virus - Microorganism that is smaller than bacteria And reproduces inside human cells and may cause infection (e.g. hepatitis B, hepatitis C and HIV) Viruses can survive for some time (hours or days) on inanimate surfaces and be transferred into the body through, for example, contamination of abraded skin.

III. EVALUATING THE INFECTION RISK FOR TATTOING

An assessment of infection risk include: the potential risk of spreading infection by skin piercing procedures, the documented infection risk in the literature, the frequency of skin piercing procedures in the population and the proportion of clients who are infected prior to the skin piercing.

A. What is the Potential Infection Risk from Tattooing Procedures?

1. Source of Pathogens Causing Infections

To understand why it is important to follow these guidelines to prevent infection during skin tattooing procedures, it is necessary to understand potential sources of infection and where these pathogens live.

Humans are protected from many infections by the skin or mucous membranes. When the skin or mucous membrane is pierced, pathogens have a chance to enter the body. This may result in infection. The pathogens that enter the client's body may come from another person via contaminated objects or from the client's own skin or mucous membrane. Most people have microorganisms on their own skin or mucous membranes that do not cause a problem unless the skin or membrane is pierced or broken.

i. Transfer of Pathogens from Another Person

If the skin piercing object is contaminated, pathogens have a way to enter the body. The skin piercing object becomes contaminated by the methods that follow:

- The skin piercing object is contaminated by the infected blood/body fluids from the client or the practitioner. Pathogens that could be introduced are HBV, HCV, or HIV.

- The skin piercing object is contaminated by pathogens from an unclean work surface in the environment. Invisible pathogens could be contained in very small amounts of blood/body fluids.

- The skin piercing object is touched by the contaminated pathogens on the worker's hands, allowing pathogens to enter the client's body, for example, via the needle.

ii. Transfer of Pathogens from the Clients Themselves

Often, pathogens that are present on the client's skin are harmless until the skin is pierced and they have a way to enter the body. Pathogens on the skin enter the body when the skin is pierced with needles, e.g. a wart virus (papilloma virus) on the skin spreads warts on the upper lip.

iii. Injury From a Contaminated Needle or Object

A client or practitioner can incur in accidental needle stick injuries during the procedure or because of inappropriate disposal. Similarly, it is possible that blood from an infected client that has contaminated a tattoo machine, exposes other clients to a risk of infection.

Blood does not have to be visible on an instrument or a needle to transmit infection, so all reusable skin penetration instruments must be appropriately cleaned and sterilized before use on another client.

Contamination- the spread of microorganisms from an item to another, can occur when:

- strict operator hygiene is not observed
- operators share the same equipment or materials
- used and clean instruments come into contact with one another
- clean instruments are placed on unclean surfaces
- sterile instruments are placed on un-sterile surfaces or come into contact with un-sterile instruments
- contaminated dressings, spatulas and single-use gloves are not disposed of immediately and appropriately after use

B. What is the Documented Risk of Infection Following Tattooing?

According to the CDC, any percutaneous exposure has the potential for transferring infectious blood and potentially transmitting bloodborne pathogens.

Tattooing has been reported as the source of infection for several documented single case reports or outbreaks of disease. Hepatitis B was the most common infection acquired as a result of tattooing; two hepatitis C case reports also implicated tattooing as the source

Warts (verruca, verruca plana and verruca vulgaris) have also reportedly been spread by tattooing. Cases of toxic shock syndrome, cutaneous tuberculosis, inoculation leprosy and *Molluscum contagiosum* are other diseases for which tattooing has been implicated as the source.

C. Non-Infectious Risk

Skin disorders. The body may form bumps called granulomas around tattoo particles, especially if the tattoo includes red ink. Tattooing can also cause areas of raised excessive scarring (keloids), if one is prone to them.

Scarring. Unwanted scar tissues may form when getting or removing a tattoo.

Allergic reactions. Tattoo dyes, particularly red dye, can cause allergic reactions, resulting in an itchy rash at the tattoo site. This may occur even years after getting the tattoo.

MRI complications. Rarely, tattoos or permanent make up may cause swelling or burning in the affected areas during magnetic resonance imaging (MRI). In some cases - such as when a person with permanent eyeliner has and MRI of the eye - tattoo may interfere with the quality of the image.

IV. INFECTION CONTROL FOR A SAFE BUSINESS

A. The Shop

The design of the physical space for skin piercing procedures should be simple, organized, and clean. Equipment, furniture, floors and walls should be purpose built or purchased specifically for the task to be performed. They should be durable, safe and suitable for cleaning and maintenance, and constructed of sealed, nonporous material. There should be adequate lighting and ventilation throughout the premises. Particular attention should be paid to those areas that are frequently damp, such as above, behind and under wash basins.

1. Premises

i. Shop zones

Shop should be organized to provide separate function-specific client and cleaning/sterilizing areas to prevent cross contamination of clean, disinfected or sterile equipment with dirty equipment.

Two separate areas are best:

- Function-specific client zone where clients are accommodated and tattooing procedures are performed. All sterilized packages, disinfected and clean equipment should be stored in this area.

- Cleaning/sterilizing area with a washing sink and holding basins that should be available for used items that need to be cleaned and disinfected or sterilized at the end of the day. The cleaning area should be designed to ensure movement of instruments/equipment in a one-way direction from dirty to clean to sterile areas

ii. Recommended General Requirements

- Hot and cold running water. Two sinks are recommended: a hand washing basin in the clean zone and a utility sink in the dirty zone. If only one sink is available, care should be taken to avoid contamination of the faucet or equipment that has been cleaned;

- Cabinets and storage space (preferably enclosed) are protected from dust and moisture;

- Sufficient bench space for good working practices;

- Public washroom access.

2. Choice and Use of Instruments and Equipment

i. Instruments

Re-usable instruments should be smooth, non-corrosive, and constructed of materials that are able to with stand heat during sterilization, e.g. surgical stainless steel.

ii. Machines

- Controls for machines should preferably be foot operated;
- An ultrasonic cleaning device, with a lid, may be used to clean instruments; ***it does not sterilize or disinfect*** but provides excellent cleaning and may prevent injuries to the workers;
- Steam (preferably) or dry heat sterilizer, with operator's manual, should be used for sterilization. Dry heat sterilization may be damaging to some products, e.g. the solder used for attaching needles to the needle bar in tattooing may melt in the dry heat oven. The method chosen will depend on the item to be sterilized;
- It is preferable not to touch office equipment, e.g. the telephone, treatment table, or magnifying glass arm, during treatment procedures. If they are used during the procedure, they should be covered with a plastic sheath or cleaned after each client service. Gloves should be changed if the office equipment is used by the practitioner

iii. Necessary Equipment

- Packages of sterile instruments and sterile needles;
- Metal tray for holding sterile sets of instruments or clean equipment prior to the skin piercing service;
- Storage containers, with lids, to store clean items such as cot ton balls or small sterile packages, e.g. forceps;
- Single-use plastic sheaths or bags to cover items that can not be easily cleaned, e.g. the tattoo machine, the cord, the plastic spray bottle used to clean and disinfect the skin during tattooing;
- Metal basin or other suit able container for dirty equipment.

iv. Necessary Supplies

- Medical gloves, e.g. latex, nitrile, neoprene, or vinyl;

- Single-use wooden tongue depressors or cotton-wrapped sticks for removing creams, gels, or ointments from a bulk container into smaller, single-use packages;

- Clean linen or disposable towels for patient protection or cover for a working surface;

- Wrapping materials or suitable containers to contain instruments for sterilization;

- Chemical time/temperature and/or humidity sensitive tape, strips or pellets for monitoring each sterilization cycle;

- Spore strips or vials for testing the sterilization process monthly;

- Liquid handwashing soap contained in a pump style container or cartridge for a wall mounted unit;

- Detergent for cleaning;

- Commercial sharps containers (puncture-resistant) for sharp waste;

- Hospital grade disinfectant(s).

B. Cleaning, Disinfection and Sterilization

1. Cleaning the Environment

It is important to keep the shop clean, as this reduces the chance of cross-contamination during skin piercing procedures. Pay special attention to work surfaces that may become contaminated by used instruments or equipment, or surfaces touched by the practitioner's unclean hands. The following categories of cleaning are advised:

i. Routine Cleaning

Use a solution of detergent and water to clean dust and soil from all surfaces in the shop. Equipment or surfaces that have been touched and are potentially contaminated during procedures require special care.

ii. Special Cleaning of Contaminated Surfaces

After each client, use gloved hands to clean and disinfect equipment or surfaces that may have become contaminated. A low level disinfectant (see Table 1), mixed according to manufacturers' directions and the specified con tact time,

should be used to disinfect contaminated surfaces. Alternatively, an intermediate level disinfectant, e.g. a solution of household bleach, 1 part bleach and 9 parts water mixed fresh daily (1:10), may be used.

iii. Blood Spills

When a blood spill occurs, the practitioner should wear gloves and blot up the blood with disposable towels before applying a disinfectant to the surface area. The towels should be discarded into a plastic-lined waste receptacle. After the spill area has been cleaned, an intermediate level hospital grade disinfectant should be applied to the area for the length of time recommended by the manufacturer. As an alternative, a solution of household bleach and water (as described above) should be left on the surface for 10 minutes.

2. Cleaning Instruments and Equipment

Contaminated instruments should be cleaned in the dirty zone, preferably in a utility sink. Cleaning removes soil and body materials, e.g. blood, from instruments, equipment, and environmental surfaces. Cleaning **must** occur as a first step before the disinfection or sterilization process, or the disinfection or sterilization will be ineffective. A step-by-step cleaning guide follows **(Table 1)**

Table 1. Steps to Clean Instruments

	Cleaning Process	Comments
1	Soak items that cannot be immediately cleaned in basin of cool water with or without detergent.	Used instruments should be soaked to prevent blood and other organic matter from drying on the item. **Do not** soak dirty items in hot water or a disinfectant before cleaning, because it causes the soil and matter to stick to the surface of the object.
2	Put on utility gloves (non-medical gloves).	Utility gloves are suitable for cleaning and have a wider bib at the wrist to help prevent water from entering the inside of the glove. They are also reusable and therefore economical. Some items may require a more delicate glove.
3	Take instruments apart and rinse in lukewarm running water.	Hot water makes body proteins stick to objects
4	Prepare cleaning sink by adding warm water and detergent	Ensure that objects are visible by using a low sudsing detergent
5	Clean instrument surfaces by using friction (washing and scrubbing motions). Use a small brush to clean any crevices or seams on the instruments, e.g. hinges.	Scrub below the water surface to prevent splashing into the eyes or on the clothing. An **ultrasonic cleaning device,** with a lid, may be used for cleaning
6	Drain dirty water. Rinse cleaned	Rinsing removes residual detergent and soil that may

	Cleaning Process	Comments
	instruments in clean, warm water.	impair the function of the instrument or interfere with the action of disinfectants
7	Either air dry or dry with a lint free towel.	If wet items are not dried a film may be left on the surface (biofilm), which contains microorganisms
8	Store cleaned instruments in a covered container until disinfected or sterilized, if required.	Uncovered, clean instruments may become contaminated by dust or moisture
9	Remove utility gloves; wash, rinse and hang to dry.	Cleaned utility gloves may be used again as long as the rubber is not torn or punctured
10	Wash hands	Hands should be washed after glove removal to avoid contamination

i. Ultrasonic cleaner method

Ultrasonic cleaners work by producing high-frequency, high-energy sound waves that cause organic material to dislodge and drop to the bottom of the tank. Use only a manufacturer-recommended detergent because others may limit the effectiveness of the ultrasonic cleaner. Cannulated items may require additional manual cleaning, because these items are not always successfully cleaned in an ultrasonic cleaner. Cannulated items should be brushed thoroughly and rinsed before being carefully placed into the ultrasonic tank, to ensure air is not trapped within the lumen. They should be brushed again on removal (using a clean brush) to remove loosened debris.

Ultrasonic cleaners do not sterilize or disinfect instruments, but they provide a safe and effective means of cleaning most reusable instruments before sterilization

Manufacturer's recommendation must be followed for ensuring correct and safe operation of the ultrasonic cleaner.

ii. Categories of instruments

Instruments and equipment, together with their cleaning, disinfection and sterilization requirements, can be classified into categories based on their intended use. **Table 2** provides examples of the instrument types, procedures and cleaning processes required.

Table 2. Examples of level of risk associated with a particular procedure/site for personal care and body art industries

Risk	Procedure	Cleaning/Disinfection/ Sterilization
High risk	Penetration of sterile or mucosal with a sharp instrument All body piercing and tattooing procedures Accidental breaks of intact skin, such as shaving or occupational exposure	Clean, sterilize Clean, sterilize Clean, sterilize
Intermediate risk	Manicure/pedicure	Clean, dry, disinfect (as necessary), rinse off disinfectant with distilled water, dry (Alcohol evaporates, so does not require rinsing.)
Low risk	Hairdressing (for example, combs)	Clean, dry

3. Disinfection

Instruments used on intact skin may be washed and stored in a dry place, but instruments that penetrate the skin must undergo cleaning and sterilization. The use of disinfectants do not replace the need for good cleaning practices, and all items/ equipment/surfaces must be thoroughly cleaned before disinfection.

Disinfectants should be used only when equipment or the environment is contaminated with blood or other body substances however, items that can be, must be sterilized after cleaning. Detergent solution is sufficient for cleaning off perspiration, for example. Disinfectants can become easily contaminated and are a potential source of infection. Solutions should be labeled appropriately (with the name, date and dilution strength). Do **not mix** detergent or disinfectant solutions because they may react with each other and, in doing so, reduce their effectiveness or cause harm. Some disinfectants, such as those producing chlorine, must be freshly prepared.

Only disinfectants registered with the Environmental Protection Agency (EPA) should be used for disinfection. The disinfectant should only be used for the approved purpose. When buying a disinfectant, ask the manufacturer to give you a material safety data sheet (MSDS), which gives information about use of the product and worker safety.

i. <u>Classification of Items for Disinfection</u>

How the item is used determines the classification. Equipment and instruments are classified as non-critical, semi-critical, or critical. While Table 2 provides a guide for when a disinfection process can be used based on the associated risk of transmitting an infection, **Table 3** describes the classification of items, the type of

disinfectant for each category and the method of disinfection to help you decide the best method. **Items must be cleaned before they can be disinfected**.

Table 3 - Classification of Items for Disinfection ***(****General recommendation applicable to the personal services business of Tattooing, Ear/Body Piercing and Electrolysis)*

Classification	Disinfection	Method
NON-CRITICAL items that may come into con tact with intact skin and /or are used for routine house keeping	Low level disinfectants are good for non critical items.	
Items that are rarely contaminated with blood/body fluid, e.g. client chair and table, sponge holder, electrolysis machine arm holding the electrolysis magnifying glass	Detergent is adequate.	Clean to remove dust or soil from items/equipment and surfaces with a solution of detergent and warm water.
Items that are often contaminated with blood/body fluid, e.g. lamp handles, clip cord, dirty instrument tray, tattoo motor frame, tattoo chuck or clamp, pump packs, spray bottle, electrolysis magnifying glass	Low level disinfectants, e.g. quaternary ammonium compounds or "Quats", or a combination of a low level disinfectant-detergent; 3% hydrogen peroxide compounds	Clean and follow with low level disinfection for reusable items and environmental surfaces that may be contaminated. Wet or spray a paper towel to wipe the clean item/ surface with the disinfectant prepared and used according to the manufacturer's directions, i.e. allow sufficient surface contact time with the disinfectant.
SEMI-CRITICAL items come into con tact with mucous membrane or non-intact skin, or they hold a sterile item	Intermediate and high level disinfectants are good for items that come into contact with mucous membranes or non-intact skin, or that hold a sterile item	
Items that cannot be soaked and hold a sterile item that may have been splattered with blood/ body fluids, e. g. pin device that holds electrolysis needle.	Intermediate level disinfectants, e.g. 70% isopropyl alcohol or 1 part 5.25% house hold bleach and 9 parts water. Bleach may be corrosive to metals.	Clean item is wet wiped with an intermediate level disinfectant and air dried after each client.
Items capable of being soaked and hold a sterile item that may have been splattered with blood/ body fluids, e.g. plastic needle pusher.	High level disinfectants, e.g. 2% gluteraldehyde or 6% hydrogen peroxide.	Clean item is soaked for a number of minutes, as specified by the manufacturer, to achieve a high level of disinfection.
CRITICAL items enter the skin, e.g. tattoo or ear/body piercing needles, hypodermic needle used during electrolysis, Jewelry	Sterile items must be used to enter the skin	
	Metal items to pierce the skin should be purchased sterile or packaged and sterilized by a steam or dry heat method.	Pre-sterilized, single use, packaged needles or earring studs should be used. Items that are not pre-packaged as sterile must be sterilized. Sterile electrolysis needles should never be saved and reused on the same client.
		Chemicals that sterilize are not recommended for critical items as it is difficult to monitor and confirm that sterilization has been achieved and the packaging of items to maintain sterility is not possible.

ii. Disinfectant Types

Disinfectants are grouped into three broad categories (low, intermediate, high) depending on their action, i.e. the ability to kill certain organisms (**Table 4**).

Table 4 –Disinfectant Type and Action

Disinfectant	Action	Comment
LOW LEVEL The most common are quaternary ammonium compounds or "Quats". Some phenols and 3% hydrogen peroxide are included in this group.	Effective for non-critical items. Kills some bacteria and viruses e.g. staphylococcus, herpes, HBV, HCV, and HIV. Does not kill *Mycobacterium tuberculosis*, fungi, or spores.	DO NOT use to disinfect instruments. Always add to water according to the manufacturer's directions. Generally, not irritating to the practitioner.
INTERMEDIATE LEVEL 70% isopropyl alcohol, 5.25% household bleach, and iodophors, e.g. iodine solutions are included in this group.	Effective for some semi-critical items. Kills the microorganisms for low level disinfectants plus fungi but does not kill *Mycobacterium tuberculosis*, or spores.	Mostly non-toxic, but some iodophors and bleach burn skin and stain fabrics. Bleach mixture: 1 part bleach and 9 parts water should be prepared every 24 hours. Prepare bleach solution as required, or prepare daily (label bottle) as its effectiveness deteriorates rapidly. Household bleach is not a good choice for disinfection of metal instruments or equipment as corrosion is a problem.
HIGH LEVEL Common examples are 2% gluteraldehyde and 6% hydrogen peroxide (stronger than the 3% hydrogen peroxide found in the drug store).	Used for semi-critical items and for critical items that can not with stand heat sterilization. Kills all viruses, bacteria (including *Mycobacterium tuberculosis*) but does not kill spores. These products are able to sterilize objects with longer soaks according to times suggested by the manufacturer.	Gluteraldehyde is non-corrosive but is irritating to the skin, and vapors are toxic. NEVER use gluteraldehyde as a spray. Good ventilation is required when using this product. 6% hydrogen peroxide can be corrosive to some metals, e.g. aluminum.

Items of equipment should be immersed in a chemical disinfectant solution only for the time specified by the manufacturer. They should be removed and rinsed with distilled water before being dried and stored. Chemical disinfectant solutions should be discarded immediately after use. The container should have a close-fitting lid. Spray bottles are not a suitable method of disinfecting equipment because the aerosols produced do not come into contact with all parts of the equipment.

Proprietors/operators who choose to use chemical disinfectants as part of their practices should consider each chemical and its use carefully, and follow the manufacturer's instructions.

iii. Use and Storage of Chemicals

Many chemical products used in personal care and body art procedures have the potential to harm the health of the operator and client if they are not labeled, handled and stored with care. To protect the operator and the client, consider the following practices:

- Ensure premises are well ventilated.
- Only use drop-on or brush-on products.
- Try to avoid aerosol products.
- Wear gloves when decanting or mixing products such as chemicals (including ready-made inks and powdered pigments) because they should not come into contact with the skin of the client or operator.
- Label all solutions decanted from bulk containers, and date them with the day of decanting and a use-by date if applicable.
- Do not eat, drink or smoke in areas where chemicals are stored or used, because food and drink may absorb emitted vapors that can be flammable. (Ideally a specific staff room should be set aside for breaks and the consumption of food).
- After handling chemicals, wash hands before consuming food or drink, because chemical residues on the hands will contaminate food and will be ingested.
- Label all chemical containers, secure their lids and store them in a cool area away from gas appliances.
- Secure chemicals to prevent unauthorized access.
- Remember that cotton wool and similar articles soaked with chemicals will be present in waste, so fumes will be dispersed into the room if not adequately contained. Remove waste regularly from the immediate client area to a larger, covered bin.

Proprietors and operators should request (from manufacturers/suppliers of chemicals) material safety data sheets relating to the safe handling, storage and first aid requirements for chemical products. All personal care and body art

proprietors/operators should refer to these sheets for advice and keep copies on the premises at the point of use.

4. Sterilization

All items that pierce the skin **must** be sterile. Single-use needles purchased as sterile must be used before the expiration date and should not be re used or re-sterilized. Skin piercing objects, jewelry, and direct instrument attachments, e.g. needle bar for tattooing, must be sterilized by the practitioner.

Any sterile instrument that is accidentally touched or is contaminated in any other way, either be fore or during treatment, should be re placed by another sterile instrument or needle.

All items for sterilization must be **pre-cleaned** and appropriately packaged prior to sterilization. Wiping instruments with disinfectants does not sterilize them. Successful steam/heat sterilization depends on time, temperature, pressure (in the autoclave), and full contact with the item to be sterilized.

i. Packaging and Loading of Instruments

- Instruments are packaged in self-sealing autoclave bag systems (paper, plastic, or paper/plastic peel-down pouches/bags) to protect the instrument when it is sterile and permit removal with out it be coming contaminated.
- Paper/plastic peel-down pack ages offer good visibility but have limited strength.

- Plastic/paper packaging must not be reused.

- Instruments for one client may be grouped into one bag or in sets on a tray or metal container. It is recommended that needles and needle tubes are autoclaved in separate bags. Date of sterilization should be written on the bag.

- Packaged items are loaded into the sterilizer to allow all items to be in contact with steam.

The purpose of placing cleaned instruments into bags for autoclaving is to protect the contents from becoming contaminated after sterilization and to enable instruments to be more easily stored in a sterile condition.

Some autoclaves do not have a drying cycle and the door must be left slightly open, at the end of the sterilization cycle, to allow the packages to dry. If the packages are removed when wet, contamination may occur. Only a small number of well-spaced (to allow adequate air circulation), sealed packets of instruments are to be placed in autoclaves which do not have a drying cycle.

A chemical color indicator which changes color to indicate that instruments have been sterilized, should be included on the autoclave bag. Instructions for using indicators should be carefully followed, as indicators may vary.

ii. Sterilization by Steam Autoclave

The steam autoclave method is the recommended method of sterilization for skin piercing items. It may also be used to sterilize liquids. The common steam sterilizer temperature is 121° C (250° F) with pressures that are preset by the manufacturer. The length of time required for sterilization depends on whether the instrument is packaged or not. Packaged items at a temperature of 121° C normally require a sterilization time of 30 minutes or a temperature of 133° C for 15 minutes, although unpackaged items may require less time.

Always follow autoclave operator manual instructions for sterilization.

Table 5 -Steps for Sterilization

Steps	**Comments**
Clean instruments as per Table 1: Steps to Clean Instruments.	Instruments that are not clean cannot be effectively sterilized.
Wash hands.	Unclean hands will put debris on clean objects, and sterilization may not be accomplished.
Package cleaned instrument.	Paper/plastic peel-down pouches or sets on trays or in metal containers should be used.
Place chemically treated tape or thermal indicator on bags that change color.	Heat indicator tape or bags should be used on each load to monitor exposure to steam or heat.
Load the sterilizer evenly and do not overload the chamber. Packs should rest on edge in loose contact with each other. Packs should not be oversized.	Overloading will prevent the sterilizer from doing the job. Tight packing of instruments and trays should be avoided.
Set appropriate dials to start the sterilization process.	Monitor the sterilizer to verify it is achieving sterilization by including the spore test at least once per month. Place the spore test in the autoclave as per manufacturer's instructions.
Remove items when dry.	Leave the autoclave door ajar to permit drying of packages.
Store sterilized items in a clean, dry, place that is protected from dust, dirt, moisture and vermin.	Handling increases the chance of punctures of sterilized bags. DO NOT use damaged packages

iii. Monitoring of the Sterilization Process

There is clearly no point in using an autoclave if it does not sterile properly. Using instruments that are not sterile places clients at a considerable risk of infection. Therefore, it is very important to monitor the sterilization process on a regular basis to ensure that the autoclave is working correctly.

Autoclaves must be fitted with gauges to measure time, temperature and pressure. During each use, these gauges must be viewed to ensure that the readings are correct and these readings should also be recorded.

Heat Sensitive Chemical indicator strips - (such as those on autoclave bags) change color with heat and are available to use in autoclaves to test for procedural errors and equipment malfunction. These strips, however, only test physical characteristics of the autoclave such as temperature and pressure. They must be used on the outside wrapping and the inside of each part placed in the autoclave.

Biological indicators – the only sure method to show that sterilization has been achieved. Biological indicators must be used during instrument sterilization, as well as during testing and after repairs, and must be used according to the manufacturer's instructions. To monitor steam sterilization, the spore strips or vials should be placed into the center of the load during a regular cycle in the sterilizer. It is important to follow manufacturer's instructions for use of all indicators, as indicators may vary.

Regular maintenance of the sterilizer should be scheduled as per the manufacturers' instructions or more frequently if necessary. Service records should be logged and kept for information. All staff involved in the sterilization of instruments/ equipment should be trained to operate the sterilizer.

iv. Storage of Sterilized Instruments

- sterilized items must be kept sealed in the original pack age/set until just before use;
- sterilized items must be stored in a clean, protected, dry area where dust, moisture, and vermin cannot disturb the equipment;
- single instruments from a pack age of multiple sterile instruments must be removed with forceps (which have been sterilized and pack aged as a single item). The package must be sterilized again;
- packages that are torn, punctured or wet should not be used as sterile;
- frequent handling of sterile packages should be avoided.

V. INFECTION PREVENTION FOR THE PRACTITIONER

Once items are cleaned, disinfected and sterilized, the practitioner should keep equipment and instruments free of contamination. Clean and aseptic procedures are dependent on the practices of the practitioners. The next section describes how to keep items clean and/or sterile.

A. Asepsis

The tattooing instruments must be sterile at the outset of the procedure and should not become contaminated with another client's blood or the blood of the practitioner during the procedure. The tattooing instruments object should be protected from contamination by the following practices:

- Wash hands be fore and after wearing gloves.
- Keep items used during a procedure within easy reach to avoid accidental contamination. The equipment used during the procedure should be positioned above waist level and clearly visible to the practitioner.
- Do not touch contaminated areas with a sterile object.
- Keep environmental objects clean, e.g. cord that you touch during the procedure.
- Concentrate on the activity, and change the skin piercing object if it becomes contaminated.

B. Handwashing

Hand washing is the first step in any infection control program. A separate handwashing sink equipped with liquid soap, hot and cold running water, and paper towels must be available in the work area. The surface of forearms, hands and nails must be clean before customer contact. Abrasions, cuts or lesions should be covered by a waterproof dressing.

A. <u>When to Wash Hands</u>

- Before and after contact with each customer.
- Whenever work is interrupted.
- After contact with any blood or other body fluid.
- Immediately prior to wearing new disposable, single-use surgical gloves and attending a customer.
- Immediately after removing disposable, single-use surgical gloves for any reason.
- After completing a tattoo on a customer.
- After touching mouth or nose.
- After smoking.
- After going to the toilet.

- Before and after applying cosmetics.

B. How to Wash Hands

- Remove all jewelry from hands and wrists, and roll sleeves up.
- Use soap or detergent with warm running water.
- Rub hands vigorously during washing (for a minimum of 30 seconds). Consider using hand/nail brush.
- Wash the entire surface of the hands, including:
  - backs of hands,
  - wrists,
  - between fingers,
- under fingernails (recommend using a nail brush), and
- forearms up to the elbows.
- Rinse your hands well.
- Thoroughly dry hands with a new, single-use, disposable paper towel or dry them thoroughly under an air drier. Turn off faucet knobs by using a paper towel. Do not touch the faucet knobs with your clean hands.

C. Smoking

The tattoo artist should not smoke when carrying out procedures on a customer. Smoking will allow transferring bacteria from your mouth onto your fingers and then to your customer.

D. Protective Equipment and Clothing for Staff

1. Gloves

Tattooists should always wear **disposable, single-use** sterile medical exam gloves while carrying out tattoo procedures and their hands should always be thoroughly washed immediately prior to wearing such gloves and immediately after removing them. During the tattooing process, the tattooist must avoid touching his/her eyes, nose, mouth, or any other part of the body with gloved hands.

It is important that disposable, single-use sterile medical exam gloves are:

- Removed and disposed of before leaving a customer for any reason and don a new pair of disposable gloves when returning to the customer.

- Disposed of the gloves if they become torn, contaminated with blood or are removed for any reason. Be aware that ointments may erode gloves. Check gloves frequently to make sure they are intact.

- Changed between attending customers.

- Never wash or reuse them.

- Disposed of used gloves in an infectious waste bin.

Latex allergies are a growing concern to both clients and practitioners. Common symptoms include skin rash, runny nose and/or eyes, asthma and, less commonly, more severe breathing problems. Individuals with latex allergies should be referred to a dermatologist or allergist for advice. Non-powdered, low-protein latex gloves may solve the problem or, in some cases, latex may have to be avoided completely

2. Utility Gloves

Wear heavy-duty utility gloves while cleaning instruments prior to sterilization. These gloves may be reused but they should be replaced if torn, cracked, peeling or showing signs of deterioration. Check surfaces of the utility gloves before putting them on.

3. Clothing

Smocks, aprons, uniforms, lap pads and other outwear may be used to protect clothing. If worn, these items should be laundered regularly and when soiled.

4. Masks

Tattooists might elect to wear a mask when there is a possibility of splashing or splattering of blood or other body substances. The type of mask best suited to a particular situation depends on the nature of the activity. Masks should be worm following the manufacturer instructions.

5. Eye protection

Eyes should be protected from splashing created during cleaning procedures, although the practices used by the operator should ensure these events are kept to a minimum. Various types of eye protection are available, including goggles, face masks, visors and full-face shields, which have either reusable or single-use guards.

VI. TATTOOING

A. Information to Client, Consent and Records

It is important that the customer **be informed** of any possible risk associated with tattooing.

It is advisable that pregnant women and persons with possible allergies to ink or dyes consult with their physician prior to getting a tattoo. Customers should also be asked whether or not they are allergic to latex, so that the tattoo artist can use disposable gloves

In New York State, it is against the law to tattoo any person **under the age of 18 years**. Parental consent for tattooing persons under the age of 18 is not allowable.

Each customer must sign a **consent** form prior to receiving the tattoo. The consent form must include the name, address and age of the customer and the date the tattoo was performed. These forms must be available for inspection by the New York City department of Health.

A record of each skin piercing procedure should be kept, including the client's name, date of birth, address, phone number, date of procedure, practitioner's name and site of procedure. Records should be kept in accordance with local requirements and, if not stated, for a minimum period of one year. Records should be available for inspection by the New York City Department of Health and Mental Hygiene. These records could be valuable if there is any question of an infectious problem occurring because of the tattoo procedure and may help to protect you.

B. Preparation of Client Procedure Area

To provide a safe working environment the operator should completely prepare the work area so as to avoid having to leave the customer in the middle of a tattooing procedure to get something that may be needed. Interrupting your procedure increases the risk of cross-contaminating surfaces. The following best practices are recommended:

- Ensure that the tattoo procedure area is clean and tidy
- Ensure all required items are within reach, and remove items not required from the immediate area.
- Place leak- and puncture-proof washable containers (only used for these purposes) with a firm-fitting lid labeled 'dirty instruments for cleaning and sterilization' in the work area for the collection of used instruments.
- Cover surfaces that may need to be touched (for example, spray and ink bottles) with single-use plastic bags so only the nozzles are exposed. Cover light fittings and power pack controls with cling film.

- Dispense the required pigment, lubricating jelly, antiseptic cream and any other lotion (including solutions used to clean the skin during the tattooing process) into single-use containers using single-use spatulas. Alternatively, dispense inks onto a single us, disposable tray. Any leftover ink must be discarded with the ink cups or disposable tray, after each customer.

- Place water to be used for rinsing between colors into single-use cups.

- Place sufficient single-use wipes or tissues for one client in the area. Wipes must be stored where they cannot become contaminated.

- Cover spray-bottles and ink bottles with sterile plastic wrap, so that only the nozzles are exposed.

- Open all sterile items (including tubes and needles attached to needle bars) in the presence of the client to show sterile instruments are being used. Check the chemical indicators for color change and, if satisfactory, then assemble the hand piece

- Solder sterile needles onto the sterile needle bars using a lead free solder and then clean them to remove any flux residue. After soldering they must then be sterilized in the autoclave according to Section 2.D, prior to being used on a customer.

- Replace any sterile instruments accidentally touched by you or contaminated in any other way, either before or during a treatment, with another sterile instrument or needle.

- Take care when inspecting needles for defects such as damaged or blunt points.

- Needles must never be tested for sharpness on the tattooist's skin.

C. Skin Preparation

- Ensure the client's skin is clean and free from infection (no rashes, pus, swelling or redness), sores, wounds or rashes on or around the tattoo site. Do not perform tattooing on skin showing any of the above signs.

- If the area to be tattooed needs to be shaved, then use a new single-use safety razor for each client and immediately discarded it into a sharps container.

- Prior to tattooing, disinfect the site where the procedure will be carried out.

- Use an antiseptic to clean and disinfect the skin prior to tattooing. The following can be used:
  - 70 % isopropyl alcohol.
  - Alcoholic (isopropyl and ethyl) formulations of 0.5%t to 4% chlorhexidine.

- Aqueous or alcoholic povidone-iodine (1 percent available iodine).

- Antiseptic can be applied to the skin using a spray-bottle or pump pack and wiping with a clean disposable cloth. Alternatively, skin disinfectants may be poured from their original container into a single-use container, without contaminating the bulk supply. At the end of tattooing each customer, any remaining fluid along with the single-use container and disposable towels must be discarded. Alcohol in the form of sterile disposable swabs may also be used to disinfect the skin. Expiration dates on disinfectants must be observed.
- The time between skin disinfection and skin penetration should be at least two minutes.

- Use an antimicrobial lotion or plain soap on the skin before placement of a single-use stencil. Multi-use deodorants should never be used.

- Apply lubricating jelly to the tattoo site using a single-use spatula such as a tongue depressor for each client. The jelly should be placed in a single-use container that is discarded after use on a customer. If extra jelly is required, then use a new spatula; discard the spatula after each application. Never use gloves or bare fingers. Self-dispensing pumps for lubricating jelly should be used only to dispense onto a clean single-use applicator due to the high risk of cross-contamination.

- Any leftover jelly **must not** be returned to the original container and **must not** be used on another customer. Containers used to hold jelly used for a client must be discarded after tattooing each client. Immediately discard any leftover detergent or lubricating jelly.

D. Procedure

Pigments (Dyes)

a. Fresh pigments (dyes) in individual containers must be provided for use on each client. They shall be stored and handled in a manner that prevents contamination. Commercially manufactured dyes must be used and all dry powder pigments should be prepared as per the manufacturer's specifications and in a hygienic manner.

b. Excessive dye shall be removed from the skin with clean, single use, disposable absorbent material

Each tattooist must have a fully equipped and separate workstation. Equipment must not be shared. The floors, walls and doors should be made of a sealed nonporous material. The use of sterile single-use gloves must be worn with each skin penetration procedure.
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- Wash hands using antimicrobial or plain liquid soap and thoroughly pat dry before putting on single-use gloves.

- Always wear single-use gloves on both hands for each client and wear throughout the tattooing procedure.

- Change the needle assembly or hand-piece after each client use.

- Where possible, avoid contaminating the work area with the client's blood.

- Avoid cross-contamination between surfaces.

- When tattooing, do not eat, drink or smoke. If there is a need to leave during the procedure (for example, to answer the phone or for a toilet break), then remove and dispose of gloves and wash and thoroughly pat dry hands. Before resuming tattooing, wash hands, thoroughly pat dry and put on new single-use gloves.

- If the client takes a break during the tattooing process, then cover the skin being tattooed with a dry clean dressing.

- Use pre-dispensed cleaning solution and single-use wipes to remove excess pigment and blood from the tattoo site. Dispose of wipes into the clinical and related waste container.

- When the tattoo is completed, clean the area, then remove gloves and wash and dry hands, then re-glove (using single-use gloves).

- Remove antiseptic cream from a single-use container and apply to the treated area by means of a single- use spatula. Cover site with a sterile dressing.

- Remove gloves, and wash and dry hands.

- Take time to demonstrate to the client how to care for the tattoo to prevent infection, and provide the client with the same information in writing. Ensure the client has fully understood these instructions.

E. Post Tattoo Skin Care

- A suitable anti-bacterial skin cleanser such as those listed in Section VI.B may be used on the area of the skin where the tattoo has been applied. This can also be used on the tattoo during the tattooing procedure.

Apply anti-bacterial lotions or creams to the tattooed area of the skin, if necessary. A single use spatula shall be used to apply anti-bacterial lotions or creams to the tattoo area of the skin, if necessary

- A clean sterile dressing should be carefully applied over the completed tattoo to avoid touching the sterile surface. The dressing should remain over the tattooed area for 3-5 hours. Sterile dressings should be individually wrapped by the manufacturer to ensure sterility until dressing is applied to the customer's skin. Plastic coverings that do not allow for proper air circulation to the tattooed area should not be used.

- Written instructions shall be provided to each customer on how to care for his/her tattoo and how to prevent infection from occurring (for example, keeping the tattooed area clean and dry, notifying their physician if they notice signs of possible infection such as redness, pus, or swelling). (See Appendix C.)

Personal Service Worker - Health and Safety

a. The tattooist shall wash his/her hands thoroughly with soap and water before and after tattooing.

b. Any tattooist with open lesions or weeping dermatitis such as eczema on the hands or other areas that are not adequately covered should refrain from direct contact with clients until the condition clears.

c. It is recommended that all tattooists be immunized against Hepatitis B.

d. The tattooist should avoid handling the needles as much as possible to reduce accidental needlestick injuries.

e. The tattooist should use a lap pad to protect clothing during the procedure

VII. WASTE DISPOSAL

A. Disposal of Sharps, Infectious Waste and Non-Infectious Waste

All waste, infectious or not, must be kept in an area separate from areas where clean materials are stored, cleaning or sterilization occurs, or tattooing occurs.

It is essential that regulated infectious wastes are properly segregated, packaged, labeled, handled and transported to minimize the risk of needle stick injuries and the transmission of infectious diseases to waste handlers and the community.

The disposal of infectious and hazardous waste is regulated by City, State, and Federal laws, and must be adhered to. Improper disposal is dangerous to the health of you, your co-workers and customers, and the general public. Infectious waste includes (a) items saturated with human blood, even if the blood is dried and (b) discarded sharps (such as needles), whether used or unused. Check with your licensed infectious waste carter for regulations on packaging wastes and sharps for disposal.

All waste should be segregated into sharps, infectious waste and non-infectious waste.

1. Sharps

To prevent accidents involving potential transmission of blood borne diseases such as HIV, hepatitis B and hepatitis C, sharps, such as needles, must be handled with care during procedures that involve their use.

Discarded sharps, whether used or unused, must be disposed of in a commercially available, leak-proof, puncture-resistant disposable sharps container immediately after use. The person who uses the disposable sharp instrument must be the person who places it into the sharp container. Do not forcefully insert items into the container or you may injure your hand. Do not ever reach out inside the container with bare hands to retrieve an item.

Place sharps containers in all areas where sharps are used. Take care where you place these containers so that children and clients cannot reach them under any circumstances. Sharp containers should be locked at all times.

Once the container becomes three-fourth full, seal it, replace it and dispose of it in accordance with state and local laws.

2. Disposal of Infectious Waste

Regulated infectious wastes such as gloves or towels saturated with blood must be disposed of in a leak proof container marked "infectious waste." Disposal of infectious waste, with the exception of discarded sharps, must be in red, plastic biohazard bags.

Regulated infectious waste (including sharps) must be discarded in accordance with applicable laws, rules and regulations governing the disposal of infectious waste. Infectious waste and sharps removal must be done by a licensed carter.

- Keep regulated infectious waste (including sharps) away from non-infectious waste.

- Store infectious waste in a storage area reserved for contaminated materials to be discarded until time of disposal.

- All infectious waste must be removed by a licensed infectious waste carter and disposed of according to Federal, State, and City regulations.

3. Non-Infectious Waste (items to be discarded which are not visibly contaminated with blood or body fluids).

All non-infectious wastes, (e.g., cotton balls, used gloves, paper towels), should be placed into a suitable trash receptacle as soon as possible after treating each customer unless saturated or dripping with blood, in which case they should be placed in the infectious waste bin. Non-infectious waste should be removed from inside the premises at least daily.

4. Transport of Infectious Waste

Regulated infectious waste must be transported by a licensed infectious waste carter. All red bags and sharps containers awaiting pick-up shall be stored in the cartons provided by the transporter. All laws and rules governing infectious waste must be adhered to by the licensee and the carter. Such cartons must be leak-proof, have tight fitting covers and be kept clean and in good repair.

The storage area for the cartons should be accessible only to authorized employees and should be maintained in such a manner that it does not provide a breeding place or a food source for insects and rodents.

VIII. OCCUPATIONAL HEALTH AND SAFETY

A. Health and Safety in the Workplace

Tattoo parlor operators are responsible for providing a safe work environment to minimize risks to the health of employees, clients and other persons entering the premises. In the tattoo industry, safety involves the provision of:

- adequate staff training, including training in hygiene and infection control;

- properly maintained facilities and equipment, including personal protective equipment;

- a suitably designed and clean workplace to minimize potential hazards, such as the safe storage of equipment and chemicals, sharps and other clinical and related waste.

B. Bloodborne Pathogen Precautions

In 1987, "the Center for Disease Control and Prevention" (CDC) released Guidelines for "Prevention of Transmission of Human Immunodeficiency Virus, Hepatitis B Virus, and Other Bloodborne Pathogens in Health-Care Settings." In the guidelines, "Universal precautions" as defined by the CDC are a set of precautions designed to prevent transmission of human immunodeficiency virus (HIV), hepatitis B virus (HBV), and other bloodborne pathogens when providing first aid or health care. Under Universal Precautions, blood and certain body fluids of all patients are considered potentially infectious for HIV, HBV and other bloodborne pathogens. Any effective approach to the prevention of the transmission of BBPs is based on the assumption that all blood and certain body fluids are potentially infectious.

Universal precautions stem from the rationale that since it is impossible to tell if someone has a bloodborne infection, all blood and body fluids should be treated as if they are infectious at all times. The basic components of BBP precautions include immunization, handwashing, protective barriers (gloves, goggles, and clothing), prevention of needle-stick injuries, and cleaning of blood spills.

Because of the risk of infection transmitted by exposure to infected blood, tattoo artists and customers should avoid contact with each other's blood and body fluids. Practice universal precautions with all customers.

1. <u>Occupational Exposure to Blood and / or Body Fluids/ Substances</u>

If a needle-stick or contact between skin, mucous membranes or a wound and blood or body fluids occurs, take the following steps:

- Wash **intact skin** that has come into contact with blood or body fluids thoroughly with soap and water, and then pat dry.

- If contact is with **non-intact skin** e.g., skin that is chapped, cut or abraded or dermatitis or if accidental penetration (for example sharp injury) occurs, then you should:

    - Flush with warm water, running water, then wash with liquid soap and warm water;
    - Thoroughly pat dry;
    - Cover with a waterproof dressing;

- Apply firm pressure to control the bleeding if necessary;
- Notify your physician for evaluation of the exposure. You should receive a medical evaluation as soon as possible, ideally within two hours. You may require emergency prophylaxis to prevent hepatitis B and HIV.

- If blood and/or body fluids/substances come in contact with **mucous membranes** (eye, nose, mouth), then you should:

  - for eyes - rinse gently with eyes open, using copious amounts of warm tap water or saline;
  - for the mouth - spit out the blood or body fluid, then rinse the mouth thoroughly and repeatedly with warm water;
  - Notify your physician for evaluation of the exposure. You should receive a medical evaluation as soon as possible ideally within two hours. You may require emergency prophylaxis to prevent hepatitis B and HIV;
  - Report all types of contact with blood or body fluids to your doctor and the employer.

C. Immunization

No vaccine is available for the prevention of hepatitis C and HIV/AIDS. There is, however, a safe and effective vaccine for the prevention of hepatitis B. Immunization for hepatitis B is not mandatory, but is strongly recommended for all operators involved in skin penetration procedures and for staff involved in cleaning instruments/equipment.

1. Hepatitis B Vaccination (*See Fact Sheet on Hepatitis B in Appendix A*)

A safe and effective vaccine for the prevention of hepatitis B is available. Vaccination is advised for all tattooists involved in skin penetration procedures, and for staff who may be involved in cleaning skin tattooing instruments and equipment.

A primary vaccination series usually consists of three injections (shots) over six months. At the end of this time, a blood test should be done to verify the immunization status to hepatitis B. If not effective, the person should speak with his/her doctor regarding the need for additional vaccine. There is no risk of acquiring any disease from this vaccine.

Vaccination and blood tests should be arranged through your own doctor. Alternatively, vaccination for hepatitis B be can be obtained, free of charge, at one of the Immunization walk-in clinic of the New York City Department of Health and Mental Hygiene (http://www.nyc.gov/html/doh/html/imm/immclin.shtml)

D. Emergency situations

It is essential for premises to have contact numbers for local and emergency services at hand.

1. First aid

It is a good practice for tattoo parlor operators to conduct a risk assessment to determine likely workplace hazards and develop a first aid kit accordingly. The contents of the kit will depend on factors such as the number of employees, the nature of any hazards and the location of the workplace. At minimum a basic first aid kit should be available at each premise.

It is strongly recommended that proprietors/operators of tattoo parlors complete a first aid course. The course should cover basic first aid, including cardiopulmonary resuscitation (CPR) and the management of burns and eye injuries/hazards such as splashes.

Infection control/prevention and sterilization training is also strongly recommended as a way of reinforcing the principles and practices in these guidelines. Consult manufacturers for further information.

E. Bleeding

Should bleeding occur at any time in the course of a tattooing procedure or accidentally, the tattooist should:

- Put on single-use gloves if he/she is not already wearing them.
- Prevent the bleeding by applying direct pressure to the wound with a dry sterile disposable dressing until it stops.
- Apply an additional dressing or bandage very firmly if bleeding continues, and call for medical assistance as needed.
- Handle disposable dressings and contaminated instruments carefully to avoid coming in contact with blood or body fluids from the customer or the instrument.
- Dispose of contaminated disposable instruments (e.g., needles) into a sharps container.
- Place contaminated reusable instruments in the appropriately marked container and clean and sterilize them according to the procedures outlined in Section 2.
- Thoroughly wash hands with soap and hot water after treating wounds or handling contaminated dressings, and then pat dry.

- Dispose of all cloths used for wiping up blood spills by placing them in a bin marked "infectious waste" for disposal in accordance with Federal, State and City guidelines.

- In the event of a spill of blood or body fluids on a surface, wash the surface with diluted bleach (1:10 – 1 part bleach to 9 parts cold water) and leave for a minimum of fifteen minutes before wiping dry (see Section 2.a ii).

IX. REFERENCES:

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3. *H*ealth Standards and Guidelines for tattooing- Alberta Health and Wellness, June 2002. Accessed electronically via Internet at: *http://www.health.alberta.ca/about/health_legislation.html*

4. *"Health and Safety of Tattoo Artists, Body Piercing, and Their Clients"*- Center For Disease Control And Prevention. Accessed electronically via Internet at: http://www.cdc.gov/features/bodyart/

Appendix A - Fact Sheet. New York City Department of Health Patient Fact Sheets.

(1) AIDS Patient Fact Sheet
(2) Hepatitis B Patient Fact Sheet.
(3) Hepatitis C Patient Fact Sheet.

1. AIDS Patient Fact Sheet

What is AIDS

AIDS (acquired immuno-deficiency syndrome) is a serious illness. The virus that causes AIDS attacks the immune system, the body's natural defense against the disease. Damage to the immune system leaves the body vulnerable to secondary infections that can be fatal. There is still no known cure for AIDS, but research continues in the hope of developing more effective treatments and a vaccine.

What causes AIDS?

AIDS is caused by a virus called HIV (human immunodeficiency virus). A healthy immune system includes special kinds of white bloods cells called B cells and T cells, and depends on a balance of certain kinds of T cells. "Helper" T cells assist B cells in fighting disease. "Suppressor" T cells call off the attack when the invading disease has been stopped. HIV apparently destroys the helper cells without affecting suppressor cells proportionately. When suppressor cells outnumber helper cells; the immune system does not work.

What are the effects of HIV on the body?

HIV may be in the body for many years before there are any signs of illness. As HIV weakens the immune system, symptoms may appear. People may have:

- swollen lymph glands in the neck, underarm, and groin area
- recurrent fever, including "night sweats"
- rapid weight loss for no apparent reason
- constant fatigue
- diarrhea and decreased appetite
- white spots or unusual blemishes in the mouth
- other illnesses may occur

People infected with HIV who go on to develop AIDS can't fight off a number of serious illnesses. One common illness of this type is *Pneumocystis carinii* pneumonia, a rare lung infection. Symptoms include fever, cough, and shortness of breath.

Scientific research also shows that HIV can damage the brain and spinal cord. Signs of damage may include memory loss, indifference, inability to make decisions, partial paralysis, loss of coordination and other problems in controlling the body.

How is HIV transmitted?

HIV is mainly spread:

- through sexual intercourse with an HIV -infected person.

- by sharing a needle to inject drugs or other substances with an HIV -infected person.
- from HIV-infected mothers to their infants before, during, and after birth (breast feeding).

HIV may also be spread through blood products. This is very unlikely now because:

- all donors are carefully screened.
- all donors' blood and blood products are tested before being used.
-

Current research shows that HIV is NOT spread by casual contact. For example, it's not spread by nonsexual, everyday contact, such as:

- touching, hugging, and shaking hands
- breathing and coughing
- using toilets, telephones, drinking fountains, etc.

Who can get infected with HIV?

Anyone can get HIV, but those at increased risk include:

- homosexual and bisexual men who contracted the HIV through sexual activity with an infected person
- heterosexuals who contracted HIV from sexual activity with an infected person
- intravenous drug users who contracted HIV by sharing infected needles and drug "works" to inject drugs.
- hemophiliacs who apparently contracted HIV through the use of donated blood and blood products
- Children who contracted HIV from an infected mother

Remember, anyone can look healthy and still be infected.

If you think you've been exposed to HIV, follow proper reporting procedures and arrange to have blood tests and counseling (both are confidential). Don't donate blood in order to be tested.

Precautions for Tattooists.

Follow required procedures for your job to protect yourself, your customers, and others from any risks. In general, you should follow "universal precautions".

- Don't make assumptions about who is infected. Take appropriate precautions with ALL customers
- Wear gloves anytime you come in contact with blood, potentially infectious body fluids (any body fluid containing visible blood), and items and surfaces that may be contaminated. Change gloves after contact with each customer
- Wear eye protection and aprons if there's a chance of blood or body fluids splashing.
- Prevent injuries from sharp instruments and needles. To avoid needle puncture injuries, never recap, bend, or break needles after use. Place used needles and other sharps in puncture-resistant containers
- Use disposable equipment whenever possible. To reduce the risk of spreading HIV and other diseases, use needles and other equipment designed to be discarded after one use.
- Protect open wounds from contact with potentially infectious materials. Properly cover any broken skin surfaces
- Wash your hands and other skin surfaces immediately after direct contact with blood or

other body-fluids (without gloves, mask, etc.), removing gloves and other protective gear, and handling potentially contaminated items
- Take care of contaminated articles and infectious waste, according to the recommendations in this booklet
- Clean up all blood spills promptly using an approved disinfectant. Also clean your work surface anytime it's contaminated by potentially infectious materials and after you've completed your work

Where can I get more information?
Ask your supervisor, local or state health department (in New York City, call 1-800-TALK-HIV), or local AIDS organizations. You can also call:
- US Public Health Service Hotline 1-800-CDC-INFO
- National AIDS Information Clearinghouse 1-800-458-5231

Progress against AIDS is being made!
It's up to you to:
- understand what is known about AIDS
- take all necessary precautions for your job
- be alert to new developments in AIDS research.

It makes sense to be informed about AIDS.

2. Hepatitis B Patient Fact Sheet

What is hepatitis B?
Hepatitis B (formerly known as serum hepatitis) is an infection of the liver caused by a bloodborne virus. The disease is fairly common. In 1995, there were 523 acute cases reported among New York City residents (rate of 7.4 cases per 100,000 persons).

Who gets hepatitis B?
Anyone can get hepatitis B, but those at increased risk include:
- injecting drug users who share needles;
- health care workers who have contact with infected blood;
- persons having sexual contact (vaginal, oral, or anal) with a person who is infected;
- homosexual or bisexual males, particularly those with multiple partners;
- people with multiple sexual partners;
- travelers to area of the world where hepatitis B is endemic if they are staying for more than 6 months;
- people in custodial care (in settings such as developmental centers) or staff of these facilities;
- hemodialysis patients;
- household contacts of infected persons (especially if they share personal items, such as razors or toothbrushes); and
- infants born to mothers who are hepatitis B carriers.

How is hepatitis B virus spread?

Hepatitis B virus can be found in the blood and, to a lesser extent, saliva, semen and vaginal fluids of an infected person. It is spread by direct contact with infected body fluids; usually by needle stick injury or sexual contact. Hepatitis B virus is not spread by casual contact.

What are the symptoms of hepatitis B?
The symptoms of hepatitis B include fatigue, poor appetite, fever, nausea, vomiting, diarrhea, joint pain, hives or rash. Urine may become darker in color, and then jaundice (a yellowing of the skin and whites of the eyes) may appear. Some people experience few or no symptoms.

How soon after infection do symptoms appear?
The symptoms appear two to six months after exposure, but usually within three months.

For how long is a person able to spread the hepatitis B virus?
A person is able to spread the disease as long as the virus can be found in the blood and other body fluids. The virus can be found in blood and other body fluids several weeks before symptoms appear and generally persists for several months afterward. Approximately 10 percent of infected people may become long-term carriers of the virus. Carriers may remain infectious for hepatitis B for years.
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How is hepatitis B diagnosed?
Hepatitis B is diagnosed by a positive blood test for hepatitis B viral antigen or antibody.

What is the treatment for hepatitis B?
There are no special medicines or antibiotics that can be used to treat a person once the acute symptoms appear. Generally, bed rest is all that is needed. Chronic carriers of hepatitis B should seek consultation from a physician for medical follow-up.

What precautions should hepatitis B carrier take?
Susceptible household members, particularly sexual partners, should be immunized with hepatitis B vaccine. Hepatitis B carriers should follow standard hygienic practices to ensure that any unvaccinated contacts are not directly contaminated by his/her blood or other body fluids. Carriers must not share razors, toothbrushes, or any other object that could potentially become contaminated with blood. It is important for carriers to inform their dentist and health care providers.

How can hepatitis B be prevented?
A safe and effective vaccine to prevent Hepatitis B has been available for several years. It is recommended that hepatitis B vaccine be routinely administered to all infants beginning at birth or two months of age. The vaccine is given in 3 separate shots (you must have all 3 to be protected). The vaccine is also recommended for people in high-risk settings, such as:

- injecting drug users who share needles;
- tattooist or health care workers who have contact with infected blood;
- persons having sexual contact (vaginal, oral, or anal) with a person who is infected;
- homosexual or bisexual males, particularly those with multiple partners;
- people with multiple sexual partners;
- travelers to area of the world where hepatitis B is endemic if they are staying for more

than 6 months;

- people in custodial care (in settings such as developmental centers) or staff of these facilities;
- hemodialysis patients;
- household contacts of infected persons (especially if they share personal items, such as razors or toothbrushes); and
- infants born to mothers who are hepatitisB carriers.

It is also recommended that hepatitis B vaccine be universally administered to all children, along with their routine childhood immunizations beginning at birth or two months of age. A special hepatitis B immune globulin is also available for people who are exposed to the virus. In the event of exposure to hepatitis B, consult a doctor or the health department.

For more information on hepatitis B, call the 311.

3. Hepatitis C Patient Fact Sheet

What is hepatitis C?
Hepatitis C (formerly called non-A, non-B hepatitis) is a liver disease caused by a recently identified blood-borne virus.

Who gets hepatitis C?
Hepatitis C occurs most often in people who have received a blood transfusion or who have shared needles.

How is hepatitis C virus spread?
Like hepatitis B, hepatitis C is spread by exposure to blood from an infected person, such as through a blood transfusion or sharing needles. The risk of sexual transmission has not been thoroughly studied but it appears to be small. There is no evidence that the hepatitis C virus can be transmitted by casual contact, through foods or by coughing or sneezing. Transmission from mother to child appears to be uncommon.

What are the symptoms of hepatitis C?
Some people experience appetite loss, fatigue, nausea and vomiting, vague stomach pain, and jaundice (a yellowing of the skin and whites of the eyes).

How soon after infection do symptoms occur?
Symptoms may occur from two weeks to six months after exposure but usually within two months.

When and for how long is a person able to spread hepatitis C?
Some people carry the virus in their bloodstream and may remain contagious for years. The disease may be followed by complete recovery or it may become chronic and cause symptoms for years.

How is hepatitis C diagnosed?

Hepatitis C is diagnosed by a positive blood test for hepatitis C antibody.

What is the treatment for hepatitis C?
There are no special medicines or antibiotics that can be used to treat people with the acute form of hepatitis C. However, the FDA has approved a drug called recombinant alpha-interferon for treating people with chronic hepatitis C.

Is donated blood tested for the virus?
Since May 1990, blood donation centers throughout the United States have routinely used a blood donor screening test for hepatitis C. Widespread use of this test has significantly reduced the number of post-transfusion hepatitis C cases.

What are the possible consequences of hepatitis C?
Approximately 25 percent of people infected with hepatitis C virus will become sick with jaundice or other symptoms of hepatitis. Fifty percent of these individuals may go on to develop chronic liver disease.

How can hepatitis C be prevented?
People who have had hepatitis C should be aware that their blood and possibly other body fluids are potentially infectious. Therefore, infected persons should avoid sharing toothbrushes, razors, needles, etc. In addition, infected people must not donate blood and should inform their dental or medical care providers so that proper precautions can be followed. The risk of sexual transmission of hepatitis C virus has not been thoroughly investigated but appears to be minimal. Several studies suggest that spread seldom occurs from people with chronic hepatitis C disease to their steady sexual partners. Therefore, limitations on sexual activity with steady partners may not be needed. However, people with acute illness and multiple sexual partners may be at greater risk and should use condoms to reduce the risk of acquiring or transmitting the hepatitis C virus, as well as other sexually transmitted infections.

Is there a vaccine for hepatitis C?
At the present time, a hepatitis C vaccine is not available.
For more information on hepatitis C, call 311.

Appendix B - Management of Sharp Injury and Exposure to Blood or Body Fluids

If you or a client or other staff member is injured by a needle or other sharp instrument that is possibly contaminated with blood or body fluids, or if there is contact between blood or body fluids and eyes, nose or mouth or non-intact skin (i.e., chapped, or abraded skin or skin with rash):

- Immediately wash exposed area of skin or puncture wound with soap and water.

- In the case of exposure of eyes or mucous membranes, rinse thoroughly with tap water.

This type of injury poses a risk for infection with microorganisms present in blood or body fluids, including those that can cause AIDS, hepatitis B or hepatitis C. The person who was exposed must receive immediate medical evaluation: evaluation should occur as soon as possible, but definitely within two hours of the injury. If a physician decides that therapy to prevent infection with some blood borne pathogens is indicated, preventive therapy must be started as soon as possible after the injury in order to be maximally effective.

Appendix C - Care of Tattoos

You are required to give the customer written instructions on how to care for their tattoo. The following is a sample of the items that should be included:

Remove your sterile bandage in 3-5 hours and wash the area with cool, soapy water.

Gently pat the area dry with a clean towel.

Do not rub the skin.

Apply a very thin layer of "bacitracin" or other antibacterial cream/lotion as often as needed to keep the tattoo moist at all times. Do this for the first four days. After four days, switch to unscented skin cream or lotion. NEVER use "petroleum jelly".

Do not cover with a bandage. Your tattoo needs to breathe.

Showers are fine…but not baths. No pools … no jacuzzis … no ocean bathing for two weeks.

Your tattoo may peel for a while. This is just the old skin and some bits of excess ink. It is normal. Your tattoo will be fine once healed.

Protect your tattoo from direct sunlight and it will be bright and fresh for many years. Use a sun block with a rating of "40" or stronger.

Do not drink alcohol for twenty-four hours following the tattoo.

If you notice signs of infection (pus, redness, and swelling) or increased bleeding at the site of the tattoo, you should contact your doctor immediately.