



Course Instructions

NOTE: The following page contains a preview of the final exam. The final exam is identical to the final exam that you will take online **after you purchase the course.**

After you purchase the course online, you will be taken to a receipt page online which will have a link to take the final exam. You will then click on this link to begin taking the exam. The link will also be emailed to you.

3 Easy Steps to Complete the Course:

- 1.) Read the Course Below**
- 2.) Purchase the Course Online & Take the Final Exam – see note above**
- 3.) Print Out Your Certificate**

North Carolina Manicurist 8 CE Hour Class Final Exam

CHEMICALS IN SALONS

- Under the Federal Food, Drug, and Cosmetic Act (FD&C Act), nail products are _____.**
 - cosmetics.
 - drugs.
 - cosmeceuticals.
 - monographs.
- Film-Formers _____.**
 - provide adhesion to the nail.
 - provide gel structure and give body and gloss to nail enamel.
 - help to minimize shrinkage of the polish as it dries.
 - act as carriers to solubilize the films and resin.
- _____ is a solvent used to dissolve polish or enamel.**
 - Petrolatum.
 - Sodium borate.
 - Acetone.
 - Cetyl alcohol.
- Nail products manufactured in the U.S. are not supposed to have:**
 - peroxide.
 - pigments.
 - resin.
 - free formaldehyde.
- As per OSHA, a hazardous chemical found in a nail salon product could be _____:**
 - calcium.
 - ibuprofen.
 - magnesium.
 - acetone.
- An OSHA tip to tell your doctor:**
 - if you have a hernia.
 - if you are pregnant or planning to become pregnant.
 - if you have fallen arches.
 - if anyone in your family has ever had diabetes.

NAIL SALON HAZARDS AND SAFETY

- Artificial fingernail products are made from many chemicals, but the main one in most of these products is:**
 - ethyl methacrylate (EMA).
 - propanol (PPL).
 - polyisocyanurate (PCA).
 - polyvinyl chloride (PVC).
- Considering the *Ingredients Table*, overexposure to butyl acetate may cause _____.**
 - digestion problems.
 - sleep deprivation.
 - uncontrollable muscle contractions.
 - irritation to eyes, skin, nose, mouth, and throat.

- Disinfect all nail care implements with an appropriate disinfectant after each:**
 - week.
 - shift.
 - day.
 - customer.

SANITATION AND INFECTION CONTROL

- Some ways infections are spread in a salon include but are not limited to the following: _____.**
 - clean hands and implements.
 - sanitary salon conditions.
 - open sores.
 - use of different implements on infected areas and non infected areas.
- If it can be reasonably expected that a worker could have hand contact with blood, OPIM, or contaminated surfaces or items, the employer must ensure that the worker wears: _____.**
 - gloves.
 - a mask.
 - foot protection.
 - eye protection.
- Licensees or students shall not use or possess in a cosmetic art school or shop any of the following: _____.**
 - Methyl Methacrylate Liquid Monomer, a.k.a. MMA.
 - razor-type callus shavers designed and intended to cut growths of skin including skin tags, corns, and calluses.
 - carbolic acid (phenol) over two percent strength
 - all of the above.

BUSINESS PRACTICES

- When you are an independent contractor:**
 - You cannot deduct business expenses.
 - You may deduct business expenses on Schedule C of your income tax return.
 - You will not have any business expenses.
 - You can deduct business expenses however you choose.
- Self-employed cosmetologists _____.**
 - may not work out of their own home..
 - may not own their own business.
 - may rent a work space in someone else's salon.
 - all of the above.
- If you rent a booth at a salon, you _____ claim the rent you pay each year for the booth.**
 - cannot.
 - can.
 - sometimes can.
 - none of the above.

North Carolina Manicurist 8 CE Hour Class

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Chemicals in Salons

Based on

US Food & Drug Administration's *Nail Care Products and Phthalates Health Hazard Manual for Cosmetologists, Hairdressers, Beauticians and Barbers*
by Nellie J. Brown, MS, of Cornell University

OSHA's *Nail Salon Workers Guide*

U.S. Food and Drug Administration Protecting and Promoting Your Health

Nail Care Products

It is important to use nail products safely, following labeled directions and paying attention to any warning statements. The following information answers common questions about some nail products and ingredients.

How Nail Products Are Regulated

Nail products for both home and salon use are regulated by the Food and Drug Administration. Under the Federal Food, Drug, and Cosmetic Act (FD&C Act), these products are cosmetics [FD&C Act, section 201(i)].

By law, nail products sold in the United States must be free of poisonous or deleterious (harmful) substances that might injure users when used as labeled or under the usual or customary conditions of use. Many nail products contain potentially harmful ingredients, but are allowed on the market because they are safe when used as directed. For example, some nail ingredients are harmful only when ingested, which is not their intended use.

The labels of all cosmetics, whether marketed to consumers or salons, must include a warning statement whenever necessary or appropriate to prevent a health hazard that may occur with use of the product (21 CFR 740.1). Cosmetics sold on a retail basis to consumers also must bear an ingredient declaration, with the names of the ingredients listed in descending order of predominance. The requirement for an ingredient declaration does not apply, for example, to products used at professional establishments or samples distributed free of charge. However, the requirement does apply if these products are also sold at retail, even if they are labeled "For professional use only."

Under the law, cosmetic products and ingredients, including nail products, are not subject to FDA premarket approval authority, with the exception of most color additives. However, FDA may pursue enforcement action against violative products, or against firms or individuals who violate the law.

While FDA regulates the nail products intended for use at home and in salons, the operation of nail salons and the licensing of their technicians are regulated by state and local authorities. Also, the Occupational Safety and Health Administration (OSHA) has addressed the safety of employees in nail salons.

Nail Product Ingredient Safety

Infections and allergic reactions can occur with some nail products. As mentioned previously, some ingredients in nail products may be harmful if ingested. Some can easily catch fire if exposed to the flame of the pilot light of a stove, a lit cigarette, or other heat source, such as the heating element of a curling iron. Nail products also can be dangerous if they get in the eyes. Consumers should read labels of nail products carefully and heed any warnings.

Acetonitrile in Artificial Nail Removers

Artificial nail removers consist primarily of acetonitrile. Child-resistant packaging is required for all household glue removers in liquid form containing more than 500 milligrams of acetonitrile in a single container [16 CFR 1700.14 (18)]. The Consumer Product Safety Commission (CPSC) enforces this requirement under authority of the Poison Prevention Packaging Act [15 U.S.C. 1471- 1476]. However, the fact that a product is in "child-resistant" packaging does not mean that a child could not open it.

Like any cosmetic product that may be hazardous if misused, it is important for these artificial nail removers to carry an appropriate warning on the label, along with directions for safe use.

Formaldehyde in Nail Hardeners

Formaldehyde is used in many different products, some of which are regulated as cosmetics. For example, formaldehyde is an important component of nail hardeners. Formaldehyde and formaldehyde-releasing ingredients are often used in other cosmetics as preservatives to protect against harmful bacteria, and formaldehyde also has been used in certain hair-smoothing or hair straightening products. Different forms of formaldehyde have different names, such as "formalin" and "methylene glycol."

The Cosmetic Ingredient Review (CIR) Expert Panel* concluded in December 2011 that formaldehyde and methylene glycol are safe for use in cosmetics when formulated to ensure use at the minimal effective concentration, but in no case should formalin concentration exceed 0.2% by weight. (This would be 0.074% by weight calculated as formaldehyde or 0.118% by weight calculated as methylene glycol.) CIR also found that formaldehyde and methylene glycol are safe under present practices of use and concentration in nail hardening products, where the concentration of formaldehyde is typically higher than the 0.2% level noted for cosmetics generally. "Present practices of use" include instructions to avoid skin contact. (However, CIR found that formaldehyde and methylene glycol are unsafe in the present practices of use and concentration in hair smoothing products.)

Nail hardeners that contain formaldehyde may cause an irritation or allergic reaction to those sensitized to this compound. There is also some evidence that certain individuals may become allergic to toluene sulfonamide-formaldehyde resin, a common ingredient in nail preparations. If you are allergic to formaldehyde, have previously experienced an allergic reaction to nail preparations, or for any other reason wish to avoid this ingredient, be sure to read the product ingredient statement on the label to determine whether formaldehyde or related ingredients, such as formalin and toluene sulfonamide-formaldehyde resin, are present.

Methacrylate Monomers in Artificial Nails ("Acrylics")

Artificial nails are composed primarily of acrylic polymers and are made by reacting together acrylic monomers, such as ethyl methacrylate monomer, with acrylic polymers, such as polymethylmethacrylate. When the reaction is completed, traces of the monomer are likely to remain in the polymer. For example, traces of methacrylate monomers remain after artificial nails are formed. The polymers themselves are typically quite safe, but traces of the reactive monomers could result in an adverse reaction, such as redness, swelling, and pain in the nail bed, among people who have become sensitive (allergic) to methacrylates.

Ethyl methacrylate monomer is commonly used today in acrylic nails, although methyl methacrylate monomer may still be found in some artificial nail products. In the early 1970s, FDA received a number of complaints of injury associated with the use of artificial nails containing methyl methacrylate monomer. Among these injuries were reports of fingernail damage and deformity, as well as contact dermatitis. Unlike methyl methacrylate monomer, ethyl methacrylate polymers were not associated with these injuries. Based on its investigations of the injuries and discussions

with medical experts in the field of dermatology, the agency chose to remove from the market products containing 100 percent methyl methacrylate monomer through court proceedings, which resulted in a preliminary injunction against one firm as well as several seizure actions and voluntary recalls. No regulation specifically prohibits the use of methyl methacrylate monomer in cosmetic products.

The CIR Expert Panel determined in 2002 that ethyl methacrylate is safe as used when application is accompanied by directions to avoid skin contact because of its sensitizing potential (that is, the possibility that a person might develop an allergy to this material).

Methacrylic Acid in Nail Primers

Despite the similar names, methacrylic acid is different from methacrylate monomers. It also is used differently and raises different safety concerns. Methacrylic acid (MAA) has been used in nail primers to help acrylic nails adhere to the nail surfaces. In response to cases of poisoning and injury, the CPSC issued a regulation [16 CFR 1700.14 (29)] requiring child-resistant packaging for household products containing MAA. A number of serious injuries have occurred to children who ingested such products or spilled them, receiving burns to their skin.

Nail primers that contain MAA are most commonly distributed through wholesale suppliers to nail salons and retail beauty supply stores, and they usually are labeled "For Professional Use Only." However, some of these retail stores sell to both professionals and consumers.

The CPSC regulation, established in accordance with the Poison Prevention Packaging Act, requires child-resistant packaging for liquid household products containing more than 5 percent MAA, weight to volume, in a single retail package. That means that it applies, for example, to a product containing more than 5 grams of MAA per 100 milliliters.

MAA products applied by means of absorbent material in a dispenser, such as a pen-like marker, are exempt from this requirement if there is no free liquid in the device and if, under any reasonably foreseeable conditions of use, the methacrylic acid will emerge only through the tip of the device. For more information regarding the child-resistant packaging requirements for MAA, contact the Office of Compliance, CPSC, at (301) 504-0608.

Phthalates

Phthalates are a group of chemicals used in a wide variety of products, from toys to carpeting and medical tubing. In nail polishes, they are used primarily at concentrations of less than 10% as plasticizers,

to reduce cracking by making them less brittle. Dibutylphthalate (DBP) has been used most commonly in nail polishes, but dimethylphthalate (DMP) and diethylphthalate (DEP) have been used occasionally. According to FDA's latest survey of cosmetics, conducted in 2010, however, DBP and DMP are now used rarely.

• **What are phthalates?**

Phthalates are a group of chemicals used in hundreds of products, such as toys, vinyl flooring and wall covering, detergents, lubricating oils, food packaging, pharmaceuticals, blood bags and tubing, and personal care products, such as nail polish, hair sprays, aftershave lotions, soaps, shampoos, perfumes and other fragrance preparations.

• **How phthalates have been used in cosmetics**

Historically, the primary phthalates used in cosmetic products have been dibutylphthalate (DBP), used as a plasticizer in products such as nail polishes (to reduce cracking by making them less brittle); dimethylphthalate (DMP), used in hair sprays (to help avoid stiffness by allowing them to form a flexible film on the hair); and diethylphthalate (DEP), used as a solvent and fixative in fragrances. According to FDA's latest survey of cosmetics, conducted in 2010, however, DBP and DMP are now used rarely. DEP is the only phthalate still commonly used in cosmetics.

• **Phthalates and human health**

It's not clear what effect, if any, phthalates have on human health. An expert panel convened from 1998 to 2000 by the National Toxicology Program (NTP), part of the National Institute for Environmental Safety and Health, concluded that reproductive risks from exposure to phthalates were minimal to negligible in most cases.

The Centers for Disease Control and Prevention (CDC) released a report on March 21, 2001, titled "National Report on Human Exposure to Environmental Chemicals." The report described a survey of a small segment of the U.S. population for environmental chemicals in urine. One group of chemicals surveyed was phthalates. However, the CDC survey was not intended to make an association between the presence of environmental chemicals in human urine and disease, but rather to learn more about the extent of human exposure to industrial chemicals.

In 2002, the Cosmetic Ingredient Review (CIR) Expert Panel reaffirmed its original conclusion (reached in 1985), finding that DBP, DMP, and DEP were safe as used in cosmetic products. (See "Annual Review of Cosmetic Ingredient Safety Assessments 2002/2003," International Journal of Toxicology

(Supplement 1), 1-102, 2005.) Looking at maximum known concentrations of these ingredients in cosmetics, the panel evaluated phthalate exposure and toxicity data, and conducted a safety assessment for dibutylphthalate in cosmetic products. The panel found that exposures to phthalates from cosmetics were low compared to levels that would cause adverse effects in animals. (The CIR is an industry-sponsored organization that reviews cosmetic ingredient safety and publishes its results in open, peer-reviewed literature. FDA participates in CIR on a non-voting basis and may or may not accept CIR findings.)

FDA reviewed the safety and toxicity data for phthalates, including the CDC data from 2001, as well as the CIR conclusions based on reviews in 1985 and 2002. While the CDC report noted elevated levels of phthalates excreted by women of child-bearing age, neither this report nor the other data reviewed by FDA established an association between the use of phthalates in cosmetic products and a health risk. Based on this information, FDA determined that there wasn't a sound, scientific basis to support taking regulatory action against cosmetics containing phthalates.

• **How FDA has followed up**

FDA continues to monitor levels of phthalates in cosmetic products. We have developed an analytical method for determining the levels of phthalates in cosmetic products and conducted surveys of products to determine these levels in cosmetics on the market.

FDA published this analytical method and results of our 2004 survey in the article, "Analysis of Consumer Care Products for Phthalate Esters," (J.C. Hubinger and D.C. Havery, Journal of Cosmetic Science, 2006, vol. 57, pp. 127-137. We conducted a second survey in 2006. Results were published in the article, "A Survey of Phthalate Esters in Consumer Cosmetic Products" (J.C. Hubinger, Journal of Cosmetic Science, 2010, vol. 61, no. 6, pp. 457-465). Results of a third survey, concluded in 2010, can be viewed in the table, Laboratory Survey of Cosmetics Products for Phthalate Esters (<http://www.fda.gov/Cosmetics/ProductsIngredients/Ingredients/ucm128250.htm#survey>). We learned from these surveys that use of phthalates in cosmetics decreased considerably from 2004 to 2010.

• **What we know about infant exposure to phthalates**

Infants, like all consumers, are exposed daily to phthalates from a number of sources, including air, drugs, food, plastics, water, and cosmetics.

The American Academy of Pediatrics has published an article stating that infants exposed to infant care products, specifically baby shampoos, baby lotions, and baby powder, showed increased levels

of phthalate metabolites in their urine (see “Baby Care Products: Possible Sources of Infant Phthalate Exposure” S. Sathyanarayana, Pediatrics, 2008, vol. 121, pp. 260-268).

Like the CDC report, this study did not establish an association between these findings and any health effects. In addition, levels of phthalates, if any, in the infant care products were not determined.

FDA included 24 children’s products intended for infants and children in the survey we completed in 2006, and nearly 50 products for infants and children in the survey we completed in 2010. What we learned was that the use of phthalates in cosmetics intended for people of all ages, including infants and children, has decreased considerably since our surveys began in 2004.

• [How to know if there are phthalates in the cosmetics you use](#)

Under the authority of the Fair Packaging and Labeling Act (FPLA), FDA requires an ingredient declaration on cosmetic products sold at the retail level to consumers. Consumers can tell whether some products contain phthalates by reading the ingredient declaration on the labels of such products.

However, the regulations do not require the listing of the individual fragrance ingredients; therefore, the consumer will not be able to determine from the ingredient declaration if phthalates are present in a fragrance. Also, because the FPLA does not apply to products used exclusively by professionals—for example, in salons—the requirement for an ingredient declaration does not apply to these products. Based on available safety information, DEP does not pose known risks for human health as it is currently used in cosmetics and fragrances. Consumers who nevertheless do not want to purchase cosmetics containing DEP may wish to choose products that do not include “Fragrance” in the ingredient listing.

• [FDA’s role](#)

Under the law, cosmetic products and ingredients, with the exception of color additives, are not subject to FDA approval before they go on the market. FDA can take action against unsafe cosmetics that are on the market, but only if we have dependable scientific evidence showing that a product or ingredient is unsafe for consumers under labeled or customary conditions of use.

At the present time, FDA does not have evidence that phthalates as used in cosmetics pose a safety risk. If we determine that a health hazard exists, we will advise the industry and the public, and will take action within the scope of our authority under the

Federal Food, Drug, and Cosmetic Act in protecting the health and welfare of consumers. <http://www.fda.gov/Cosmetics/ProductsIngredients/Ingredients/ucm128250.htm>

Toluene in Nail Polishes and Other Products

Toluene is used as a solvent in a variety of nail products, such as nail polish, nail hardeners, and polish removers. Toluene was reviewed by the CIR Expert Panel in 1987, when the Panel

determined that it was safe for cosmetic use in nail products when limited to concentrations no greater than 50 percent. The Panel re-evaluated the safety of toluene in 2005 and confirmed its original conclusion.

Reporting Adverse Nail Product Reactions

Consumers, nail technicians, and healthcare providers can report adverse reactions from nail products using the contact information at <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm241820.htm>

* The Cosmetic Ingredient Review (CIR) Expert Panel is an independent, industry-funded panel of medical and toxicology experts that meets quarterly to conduct safety assessments of cosmetic ingredients and publishes its findings in peer-review journals. FDA participates in the CIR in a non-voting capacity. FDA takes the results of CIR reviews into consideration when evaluating safety, but the results of FDA safety assessments may differ from those of CIR.

(<http://www.fda.gov/Cosmetics/ProductsIngredients/Products/ucm127068.htm> February 29, 2000; Updated December 13, 2006, March 9, 2010, December 6, 2012, and March 11, 2013)

EXCERPTS:

Health Hazard Manual for Cosmetologists, Hairdressers, Beauticians and Barbers

by Nellie J. Brown

We will now look at the principal occupational health hazards and exposures for nail technicians along with some of the related issues. We will look closely at the chemical composition of nail products to see what components appear to be particularly hazardous, how you are exposed to them, and what you can do to minimize exposure.

NAIL PRODUCTS

Nail Polish, Enamel, Basecoats and Hardeners

These nail products consist of film-formers, resin, plasticizers, solvents, colors, pigment dispersers and mixers. Undercoats, basecoats and topcoats differ from enamels mainly in their proportions of resins and nitrocellulose.

Film-Formers: Provide gel structure and give body and gloss to nail enamel.

Examples are:

nitrocellulose (cellulose nitrate);
ethyl cellulose.

Resins: Thermoplastic resins which provide adhesion to the nail, gloss and flexibility of the polish when dry.

Examples are:

toluene sulfonamide formaldehyde resin;
nylon resins (especially used in nail hardeners);
alkyl polyester resin (used in hypoallergenic products; tends to wear poorly since it chips and peels easily).

Plasticizers: Help to minimize shrinkage of the polish as it dries and contribute to the flexibility of the dry enamel.

These include:

dibutyl phthalate;
butyl acetate;
castor oil;
camphor.

Solvents: Act as carriers to solubilize the films and resin, then evaporate to leave the enamel behind.

Examples are:

ethyl acetate;
xylene;
toluene;
acetone;
ethanol;
methanol;
glycol ethers;
methyl ethyl ketone.

Colors: These may be fluorescent or nonfluorescent colors. Clear polishes contain small amounts of colors to give a faint tint.

Fluorescent colors:

eosin;
erythrosin;
fluorescein;
rhodamine B.

Nonfluorescent colors:

D&C Red No. 19;
D&C Red No. 31;
crystalline guanine (2-amino-6-hydroxypurine for

an iridescent, pearlized or frosted look);
bismuth oxychloride (frosted look);
mica coated with titanium dioxide (frosted look).

Pigment Dispersers: Prevent pigment settling by keeping it evenly dispersed in the product.

These include:

organically modified clay;
bentonites (bentonite clay treated with quaternary ammonium compounds);
dammar gum;
sandrac gum.

Mixers: Usually pellets of nickel or plastic which help to mix the polish when the bottle is shaken.

Cuticle Softener or Remover

Cuticle Softener: Used to soften or dissolve the keratin protein of the cuticle.

Such as:

potassium hydroxide;
sodium hydroxide.

Humectants: These keep the product or the skin from losing moisture and drying out, usually glycerin.

Fragrance: Usually an essential oil.

Nail Bleaches:

citric acid;
potassium binoxalate.

Nail Whites

Type: Cream

Color: titanium dioxide (white).

Vehicles: Provide the substance of the cream.

For example:

beeswax;
cetyl alcohol;
oxycholesterin;
petrolatum;
cocoa butter.

Preservatives: Prevent spoilage.

Such as:

tincture of benzoin;
sodium borate.

Type: Liquid

Color: titanium dioxide (white).

Vehicles: Provide the substance of the liquid or lotion.

For example:

glyceryl monostearate;
beeswax;
petrolatum.

Fragrance: almond oil.

Nail Polish Remover

Solvents: Used to dissolve polish or enamel.

acetone;
ethylacetate;
butyl acetate;
butyl stearate.

Emollient/Moisturizer: Used to moisturize the skin or combat the skin drying effects of the solvents.

lanolin;
cetyl alcohol;
castor oil;
olive oil;
spermaceti;
ethyl oleate.

Fragrance: An essential oil.

Artificial Nails

Stick-on type nails consist of a plastic tip and an adhesive to attach the artificial nail to the human nail. Sculptured artificial nails are made from synthetic monomers (“nail liquid”) and polymers (“nail powder”) which are mixed and molded onto the natural nail or an artificial nail extension. When the resin hardens (cures or polymerizes), it is filed into shape and then nail polish or enamel is applied.

Type: Liquid

methyl ethyl methacrylate;
butyl methacrylate;
isobutyl methacrylate;
ethylene glycol dimethacrylate;
trimethylolpropane trimethacrylate;
methacrylic acid;
tetrahydrofurfuryl methacrylate;
diethylene glycol dimethacrylate.

Type: Nail powder

Polymer Powder: polymethyl methacrylate

Initiator: Acts as a catalyst for the curing or polymerization chemical reaction.

benzoyl peroxide;
N, N-dimethyl-p-toluidine.

Adverse Health Effects Associated With Nail Products

When using nail products, the patron’s hand is one or two feet below the manicurist or nail sculptor’s breathing zone. As a result, both patron and manicurist are exposed to dusts and solvent vapors during the time it takes to do that particular service; but the professional has the repeated or prolonged exposure of doing many customers in a day.

The film-forming resin used in nail polishers or enamels, toluene sulfonamide formaldehyde resin, is a sensitizer when wet. Cosmetologists have experienced nail enamel dermatitis on the face and neck from contact with the wet enamel and then touching or scratching the neck or face. Adverse reactions have also occurred on the legs when nail polish was used to stop runs on stockings. However, as the enamel dries, it loses its sensitizing potential and becomes a weak allergen. These sensitization reactions appear to be the result of free formaldehyde, but in persons allergic to the resin there is often a cross-sensitization with formaldehyde and only rarely with sulphonamide.

Nail hardeners containing more than 5% free formaldehyde have been banned by the Food and Drug Administration. Nail products manufactured in the U.S. are not supposed to have free formaldehyde (a sensitizer); but foreign products may contain it and not all states bar foreign products. In the past, the formaldehyde in nail hardeners has been linked to nail loss, discoloration of the nail plate, inflammation of the nail, and even bleeding of the lips in nail biters. Newer nail hardeners containing toluene sulphonamide formaldehyde resin should not contain the free formaldehyde which cause these nail problems.

Persons sensitized to wet nail polish enamel have successfully used it by applying the polish carefully to the nail only, avoiding skin contact, allowing the nails to dry thoroughly (about 15 minutes) and checking for dryness with a cotton swab. When this procedure has been followed, dermatitis has not occurred.

Nail polish colors, especially the fluorescent colors (eosin, erythrosin, fluorescein and rhodamine B) are photosensitizers. Photosensitization involves the darkening of the skin after exposure to ultraviolet light (such as in sunlight or from tanning lamps) where the skin has absorbed or come into contact with these colors. Pigment dispersers, nonfluorescent colors and iridescent finishes rarely sensitize; but nonfluorescent colors have been known to stain the nail plate of the user.

The solvents in nail polish or remover are dehydrating and may cause irritant dermatitis from skin exposure, headaches, or nausea by inhalation. Inhalation of higher concentrations may cause central nervous system effects; chronic (long-term) exposure to toluene can cause liver

disease. However, animal experiments with exposure to butyl stearate suggest that it has a low toxicity.

The nickel in pellet mixers used to mix polish or hardeners is a potential sensitizer.

The sodium hydroxide and potassium hydroxide in cuticle removers are strong caustics; they can be skin irritants, cause skin burns, or be damaging to the eyes.

The nail powder used in sculptured nails contains methacrylates which are possible sensitizers, and can cause allergic contact dermatitis. Formerly these resins were methacrylates and polymethylmethacrylates but these were banned by the Food and Drug Administration in 1974 due to consumer complaints involving nail discoloration, irritation and loosening or detachment of the nail from the nailbed, or permanent nail loss. Sensitization to one of the methacrylates or from past use of one of the now-banned methacrylates may confer sensitization to others. For the nail sculptor, exposures can result from the methacrylate vapors and from the dust of the nail powder during mixing/preparation and during grinding to smooth and shape the nails. Dust on the arms, face or torso of nail sculptors has caused itching or rashes and should be minimized.

Animal studies to determine adverse effects such as embryonic-fetal toxicity and teratogenicity of methacrylates have shown that these reproductive effects do occur. However, these studies involved the injection of methacrylates into the animal body. It is unknown at present whether methacrylates pose any problem to nail sculptors who are chronically exposed to low levels of methacrylates by inhalation and skin absorption.

The adhesive used for stick-on nails may be a sensitizer for some individuals.

Protection and Prevention

Product Substitution:

- Instead of sculptured nails, use plastic tips or linen strips.
- Try a sculptured nail product containing a different methacrylate ingredient and see if this minimizes the health effects. There appears to be cross-sensitivity between ethyl methacrylate, methyl methacrylate and N-butyl methacrylate; a reaction to one would probably indicate avoiding both of the others.
- Substitute plastic pellet mixers for nickel ones in nail polish/enamels.
- Consider nail polish/enamel or remover having butyl stearate as the solvent.
- Avoid products containing formaldehyde.

Engineering Controls or Safe Work Practices:

- Avoid contact with the face and neck when handling wet nail polishers or enamels.
- Wash the hands and face during the day to remove the dust from sculptured nail products. Do not eat or smoke without removing the dust.
- When using cuticle removers, wash hands right away and do not rub eyes.
- Use good ventilation to minimize vapor or dust inhalation.
- Where vented manicure tables are used, replace the charcoal filters monthly to prevent their overloading with organic vapors.

Protective Equipment:

- Use a barrier cream to block the dust from sculptured nail ingredients.
- Where there is dust exposure to sculptured nail ingredients, wear long sleeves and high-necked clothing to cover the chest and neck as much as possible.

OSHA – A GUIDE FOR NAIL SALON WORKERS

With this guide, you will learn about possible hazards in nail salons and good work practices that should be used in nail salons to protect you from chemical hazards, muscle strains, and diseases. This booklet also explains your rights as a nail salon worker. For more information, see OSHA's *Health Hazards in Nail Salons* website at www.osha.gov.

Chemical Hazards

Products used in nail salons may have chemicals in them that can harm your health.

Chemicals can get into your body if you:

- Breathe in vapors, dusts, or mists from the products;
- Get the product on your skin or in your eyes; or
- Swallow the product if it gets on your uncovered food, drink, or cigarettes.

Chemicals affect different people in different ways. How a chemical affects you also depends on how much of it you are exposed to. You can get sick right away, or you can get sick over time. Exposures can “add up,” especially when many products are being used at the same time, when the products are used day after day, or when there is poor ventilation in the salon. If you use chemicals all day, every day, you are more likely to get sick than someone who uses the same chemicals

once in a while. Follow the steps in this guide to help protect your health.

Hazardous Chemicals Found in Nail Salon Products

Nail products, such as polishes, strengtheners, removers, and artificial nail liquids, can contain many chemicals. Some of these chemicals are more harmful than others. Over time with repeated use or exposure to high concentrations, these chemicals could damage your body or cause an allergic reaction. Every person is different and not everyone who breathes in these chemicals or gets them on their skin will experience these effects now or in the future.

Some potentially hazardous chemicals, the types of products they can be found in, and how they can affect your body include:

- **Acetone** (nail polish remover): headaches; dizziness; and irritated eyes, skin, and throat.
- **Acetonitrile** (fingernail glue remover): irritated nose and throat; breathing problems; nausea; vomiting; weakness; and exhaustion.
- **Butyl acetate** (nail polish, nail polish remover): headaches and irritated eyes, skin, nose, mouth, and throat.
- **Dibutyl phthalate** (DBP) (nail polish): nausea and irritated eyes, skin, nose, mouth, and throat. Long-term exposures to high concentrations may cause other serious effects.
- **Ethyl acetate** (nail polish, nail polish remover, fingernail glue): irritated eyes, stomach, skin, nose, mouth, and throat; high concentrations can cause fainting.
- **Ethyl methacrylate** (EMA) (artificial nail liquid): asthma; irritated eyes, skin, nose, and mouth; difficulty concentrating. Exposures while pregnant may affect your child.
- **Formaldehyde** (nail polish, nail hardener): difficulty breathing, including coughing, asthma-like attacks, and wheezing; allergic reactions; irritated eyes, skin, and throat. Formaldehyde can cause cancer.
- **Isopropyl acetate** (nail polish, nail polish remover): sleepiness, and irritated eyes, nose, and throat.
- **Methacrylic acid** (nail primer): skin burns and irritated eyes, skin, nose, mouth, and throat. At higher concentrations, this chemical can cause difficulty breathing.
- **Methyl methacrylate** (MMA) (artificial nail products, though banned for use in many states): asthma; irritated eyes, skin, nose, and mouth; difficulty concentrating; loss of smell.
- **Quaternary ammonium compounds** (disinfectants): irritated skin and nose and may cause asthma.

- **Toluene** (nail polish, fingernail glue): dry or cracked skin; headaches, dizziness, and numbness; irritated eyes, nose, throat, and lungs; damage to liver and kidneys; and harm to unborn children during pregnancy.

Tip: Make sure your doctor or healthcare provider knows what type of work you do and the chemicals you use. Tell them if you are pregnant or planning to become pregnant.

Report any health problems you think are from the products you use in the workplace to your employer and doctor. Employers must follow up on reports of health problems from workers.

Where to Get Information about the Chemicals Found in Nail Salon Products

You can get product information on packaging, or in printed materials delivered with the product such as its material safety data sheet.

Product Labels

At minimum, professional-use nail salon products containing hazardous chemicals must provide the following information:

- The name and address of the product manufacturer or distributor;
- Something that explains the type and use of the product, such as a name, description, or illustration;
- Facts about the product, such as directions for safe use if a product could be unsafe if used incorrectly; and
- All necessary warning and caution statements.

Material Safety Data Sheets (often called “MSDS”)

OSHA requires product manufacturers to provide salon owners with material safety data sheets (MSDS) for the products they buy that contain hazardous chemicals. (from OSHA's Hazard Communication standard, 29 CFR 1910.1200). Employers must make these MSDSs available to you. Your employer must also train you so that you understand the chemicals' potential hazards and how to use the products safely. In general, an MSDS must provide the following information:

- Hazardous ingredients in the product;
- How you can be exposed to the ingredients;
- Health and safety risks you face when using the product; and
- Steps for safely using and storing the product, including what to do in emergencies.

OSHA recently updated its rules about safety data sheet requirements. "Material Safety Data Sheets" will now be called "Safety Data Sheets" (SDS). SDSs will generally list the same information as MSDSs, but all information will now be presented in a common format across products. This can help you compare the differences in hazards between products.

Be aware that MSDSs may not contain all the information needed to help protect you. For example, the manufacturer may state that you should wear "impervious gloves," but not specify the type.

Steps You Can Take to Protect Your Health Choose Safer Products

- Whenever possible, use products with the least hazardous chemicals in them.
- 3-free: Some products now claim to be made without the "toxic trio" (toluene, formaldehyde, and dibutyl phthalate). These products are called "3-free" products. *(On April 10, 2012 the California Department of Toxic Substances (DTSC) announced its discovery of certain nail polish and nail care products that may endanger nail salon workers and the public despite being marketed as non-toxic. In May 2011, DTSC tested 25 nail products sold by California distributors. Of the 12 claiming to be "toxic-free," 10 contained toluene and four contained dibutyl phthalate (DBP). For more information, call (800) 728-6942 or visit www.dtsc.ca.gov)*
- Acid free: Some primers claim to be made without chemicals like methacrylic acid. These are labeled "acid free."
- Always read product labels and MSDSs and follow manufacturers' instructions when using all nail salon products, including those labeled as "free" of hazardous chemicals.

Ventilate the Room and Let in Fresh Air

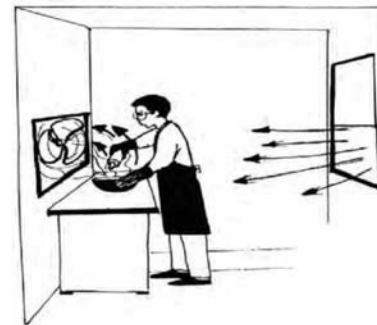
Ventilation is the best way to lower the level of chemicals in the salon. These steps can really help improve your health:

- Open doors and windows when possible to let in fresh air. If the salon has a ceiling vent, it should be turned on and working.
- Always keep the nail salon's exhaust system on.
- If your salon does not have an exhaust system, always keep the heating, ventilation, and air conditioning (HVAC) system on during work hours. The HVAC thermostat fan switch should always be in the "on" position (not "auto") so that it runs even when the heat or air conditioner is off. The salon owner should have a HVAC contractor clean the HVAC system and replace the filters at least once a year.



Bad Ventilation:
Outside air from the open window blows the chemicals into the worker's face before being vented from the salon.

Good Ventilation:
Outside air from the open window blows the chemicals away from the worker's face before being vented from the salon.



- Place fans near open doors or windows. Fans should pull air in one end of the salon and push it out of the other end:
- If the salon has ventilated tables:
 - Make sure they are turned on.
 - Change the charcoal filters at least once a month.
 - Clean out the catch basin at least once a week.
- If the salon has portable ventilation machines, use them in your work area to pull harmful vapors away from you and your clients.
 - *Without a ventilation system running, chemical levels during acrylic nail removal can reach very high levels (over 826 parts per million).*
 - *With a ventilation system running, chemical levels will be significantly lower (below 12.4 parts per million).*

Use Safe Work Practices to Avoid Regular and Accidental Exposures

- Store chemicals in small bottles with small openings and label them with the information from the manufacturer's label.
- Close bottles tightly when you are not using them so the product does not spill or get into the air.
- Use metal trashcans with tight, self-closing lids to keep the nail products soaked on cotton balls and other trash from evaporating and getting into the salon's air.
 - Put cotton balls and other soaked materials into the trashcans immediately.

- If you do not have metal trashcans with self-closing lids, put cotton balls and soaked materials in a sealed bag before putting them in the trashcan and keep the trash covered.
- Empty trashcans often and remove from the work area to the outside garbage at the end of each day.
- Use only the amount of product you need to perform services.
- When possible, do not keep extra products at a workstation.
- Follow instructions for safely disposing of used chemicals. DO NOT pour them down your sink or toilet, throw them on the ground or down outside drains, or pour them onto cotton balls.
 - Some chemicals must be disposed of in a specific way. For example, used liquid acetone must be saved in a fire department- approved metal container and disposed of as hazardous waste.
- Wash your hands before eating, drinking, putting on cosmetics, and smoking.
- When you have a break, go outside to get some fresh air. This will give you a chance to get away from chemicals in the salon's air.
- Keep food and drinks covered at all times, and do not store or eat food in work areas.

Keep Products Off of Skin and Out of Eyes

- Wear long-sleeved shirts to protect your arms and pants or skirts that are at least knee-length to protect your lap from acrylic nail and other dusts.
- Wash your hands before and after working on clients; before eating, drinking, putting on cosmetics or smoking; and after handling or transferring products.
- Wear goggles and the appropriate type of disposable gloves when handling and transferring products. For example, nitrile gloves (usually blue or purple) protect against many chemicals used in nail salon products, but latex or vinyl gloves are appropriate when handling
- Replace gloves immediately if there are cuts, tears, or holes in them.
- Cover and protect cuts or cracks in your skin. Damaged skin can increase chemical absorption and exposure.
- Do not continue to use a product if you see signs of skin irritation.
- If your hands are red and irritated, make sure your gloves are the right type for the product you are using.

Respiratory Protection

Using the ventilation methods described above, using products without harmful chemicals, and following good work practices all reduce the level of chemicals in a nail salon. If you work in a salon that follows these practices, you may not need respiratory protection.

Evaluating Possible Hazards

Employers need to determine if the levels of dust and/or chemical vapors in the salon pose a risk to workers and decide if respirators are required. Small employers can use available industrial hygiene services from OSHA's On-site Consultation Program. Other groups that can provide assistance include an employer's private insurance company or private industrial hygiene consulting firms. Because chemicals can cause effects even at low levels, you may decide that you want to wear a respirator to protect yourself while transferring chemicals or when buffing and filing nails.

Types of Respirators

Many nail salon workers wear paper or cloth medical masks. These are not the same as dust masks (filtering facepieces), and even when stuffed with tissues, they will not protect you from breathing in harmful gases, vapors, or dusts.

Here are some types of respirators that may be used in nail salons:

Filtering Facepiece Respirators (Dust Masks):

You should only use NIOSH-approved filtering facepiece respirators. "N95s" are one type. This type of respirator will:

- Help protect you from dust, viruses, and germs.

This type of respirator will not:

- Protect you from vapors or gases. Some N95s have filters that reduce chemical odors, but they may not protect you from harmful chemical exposure levels.

Filtering facepiece respirators are helpful when you are:

- Buffing or filing nails; or
- Using acrylic powders.

You don't need to wear the mask all the time, only when you are working on a client. When you put on this mask, make sure your hands are clean to avoid irritating your skin. If your employer allows you to wear this type of respirator voluntarily, then he/she must give you Appendix D of the OSHA Respiratory Protection Standard, which explains some important information about how to safely and effectively use your respirator.

Half-mask Respirators with Cartridges:

Half-mask respirators with chemical cartridges offer protection from breathing in chemical vapors. This

type of respirator will:

- Help protect you from breathing in chemical gases and vapors (such as formaldehyde).

Your employer may require you to wear this type of respirator when you:

- Transfer chemicals from larger bottles to smaller bottles; or
- Clean up large spills.

If you must use this type of respirator:

- Your employer is required to develop a respiratory protection program;
- You must be fitted and trained to wear a respirator properly;
- Your employer must evaluate the appropriate cartridge for the job task and provide it to you; and
- You must know how and when to change cartridges, and your employer must provide you with a cartridge change out schedule.

Preventing Aches and Pains

Nail salon workers can get aches and pains from leaning over a worktable for a long time; doing repetitive movements like filing and buffing nails; and resting hands, wrists, and forearms and/or elbows against hard surfaces or sharp edges of worktables. These are often called ergonomic or musculoskeletal hazards because they affect your muscles and bones. Ergonomics is the science of “fitting the task to the worker” so that you are more comfortable and efficient when doing your job. Good ergonomic practices will reduce stress to your body and help you avoid aches and pains.

Steps You Can Take to Reduce These Hazards

- Use an adjustable chair. Sit so that your feet are flat on the floor and your back is supported. Use a footrest if your feet do not touch the floor when sitting.
- Make sure there is enough space between the back of your knees and the front edge of your seat to improve blood flow to your legs.
- Adjust the lighting. Good lighting can help you see without having to bend over.
- Raise the client’s hand or foot. Use a cushion to raise the client’s hand or foot so you do not have to bend over as far.
- Use safety glasses with magnifying lenses. These glasses reduce the need for you to bend over to see the client’s hand or foot.
- Put a towel or foam pad on the table edge to soften it for hands, arms, wrists, and elbows.

- Put soft pads on tools to make handles larger and easier to hold.
- Take frequent breaks if possible; changing positions and doing a different task is also helpful.
- Pace your work. When you work too fast, your body can become tense, which could cause muscle pain.
- Do gentle stretching exercises in between sessions with clients. You may need to check with your doctor first!

Biological Hazards

Biological hazards include bacteria, fungi, and viruses. OSHA’s Bloodborne Pathogens standard, 29 CFR 1910.1030, requires your employer to evaluate whether you may come into contact with blood or other potentially infectious material. If this risk exists, then the employer must follow the requirements of the standard, including providing training, vaccination, and personal protective equipment.

You can be exposed to many infectious agents, such as hepatitis B, hepatitis C, and human immunodeficiency virus (HIV), if you come into contact with infected blood from a coworker or client. You can also be exposed to fungal infections of the nails and feet by touching a client’s infected skin or by using equipment that has not been cleaned.

Steps You Can Take to Prevent Exposure and Protect Your Health

- Avoid touching any blood or bodily fluids.
- Wear gloves, and avoid clients with cuts, open wounds/sores, blisters, or visibly infected skin on their hands, feet, or nails. Many agencies, such as the Boston Public Health Commission and the California Board of Barbering and Cosmetology, prohibit working on clients with these health issues.
- Throw away disposable gloves immediately after using them.
- Always wash your hands with soap and water before and after working with clients to avoid spreading germs.
- Bandage open cuts or broken skin to prevent contact with blood or other potentially infectious materials from a client or coworker.
- If an individual is bleeding, do not touch the blood. Ask the individual to use a cotton ball or tissue to stop the bleeding and to throw the used material directly into the trash once the bleeding has stopped.
- Consider getting immunized against hepatitis B. Your doctor can help you determine whether this is needed. Immunization practices can vary by state,

so be sure to follow your state's requirements. Your employer must offer you hepatitis B immunization without charge if you are likely to be exposed to blood or other infectious materials during your work.

- Clean and disinfect tools after each client according to the policies of your state's cosmetology board. Some common steps for cleaning and disinfecting tools are:
 - Always wear the right gloves for the product you are using while cleaning and handling disinfectants or tools soaked in disinfectant.
 - Wash tools with soap and water. Use a scrub if needed.
 - Soak tools in an EPA-registered disinfectant for 10–30 minutes, according to manufacturer directions. Follow the manufacturer's instructions when mixing the product ratios.
 - Rinse tools in clean water.
 - Dry tools with a clean cloth.
 - Store all disinfected tools in a clean, covered area. Only use ultraviolet (UV) sanitizing boxes to store clean and disinfected reusable metal tools. The UV boxes do not disinfect tools.
- Disinfect foot basins and spas after each client and at the end of the day. Follow your state cosmetology board's rules on how to clean and disinfect foot basins and spas.

Your Rights as a Worker

What is the difference between an Employee and an Independent Contractor for purposes of the Occupational Safety and Health Act?

- It doesn't matter how an individual is labeled by the salon owner. Instead, courts and agencies will look at a list of factors to determine whether you are an employee or an independent contractor.
- For example, if you: rent a station at a salon; purchase your own supplies and tools; have your own customers and set your own schedule and appointments; set your own rate and are paid by customers directly; and have your own business license, you may be more likely to be considered an independent contractor.
- However, if: the owner sets your work schedule; you are paid by the hour; the owner or receptionist makes the appointments for all the workers; you do not rent the space; the owner sets the rates paid by customers; and you use the owner's tools and equipment, you may be more likely to be considered an employee.

Why does it matter?

- Employers must provide protection against workplace hazards for their employees; independent contractors are responsible for their own occupational health and safety protection. Employees also have rights to a minimum wage, workers' compensation, and other benefits. Independent contractors do not.
- Just because a salon owner tells you that you are an independent contractor, it does not mean that you are one. Just because an owner gives you an IRS form 1099 instead of a W-2 does not mean that you are an independent contractor. Salons sometimes misclassify the employment status of their workers to bypass taking protective safety and health measures, and to also deny benefits. That is why it is important for you to know the difference between what constitutes an employee and an independent contractor. If you need help, you can contact OSHA at 1-800-321-OSHA (6742).

What are my rights as a worker?

You have the right to working conditions that do not put you at risk of serious harm. OSHA also provides you with the right to:

- Ask OSHA to inspect your workplace;
- Receive information and training about hazards, methods to prevent harm, and the OSHA standards that apply to your workplace. The training must be in a language you can understand;
- Get copies of test results done to find and measure hazards in your workplace;
- Review records of work-related injuries and illnesses;
- Get copies of your medical records;
- File a complaint asking OSHA to inspect your workplace if you believe there is a serious hazard or that your employer is not following the OSHA rules. When requested, OSHA will keep all identities confidential; and
- Use your rights under the law without retaliation or discrimination. Your employer cannot fire or punish you if you file a complaint.

For more information on workers' rights, employer responsibilities, and other OSHA services, visit OSHA's website at www.osha.gov/workers.html.

Contact OSHA

For questions or to get information or advice, report an emergency, fatality or catastrophe, order publications, file a complaint, or request OSHA's Free On-Site Consultation Program, contact your nearest office through OSHA's website at www.osha.gov or call 1-800-321-OSHA (6742); TTY 1-877-889-5627. We will keep your information confidential. We are here to help you.

Twenty-five states, Puerto Rico, and the Virgin Islands operate their own OSHA-approved safety and health program. For a list of all of the states and further information, please visit OSHA's State Occupational Safety and Health Plans page at www.osha.gov/dcsp/osp/index.

Nail Salon Hazards and Safety

Based on

NIOSH Hazard Controls HC 28:

Controlling Chemical Hazards during the Application of Artificial Fingernails

US EPA: *Protecting the Health of Nail Salon Workers*

Controlling Chemical Hazards During the Application of Artificial Fingernails

National Institute for Occupational Safety and Health Hazard Controls HC 28

Hazard

Artificial fingernail products are made from many chemicals, but the main one in most of these products is ethyl methacrylate (EMA). In 1974 the U.S. Food and Drug Administration outlawed a similar chemical, methyl methacrylate (MMA), used in fingernail products. MMA was proven harmful to nail technicians and customers. However, both MMA and EMA can cause contact dermatitis, asthma, and allergies in the eyes and nose—all problems that nail technicians know about. Both can make the eyes, nose, and other mucous membranes sting, become red, and swell. Customers are at risk, too. Because it is often difficult to tell which chemical in a nail salon is causing a sensitivity or allergy, it is best to control your exposure before you become sensitized.

Controls

In the nail salon, to get rid of EMA in the air you breathe, you should apply artificial fingernails at a ventilated work table. It is also helpful to keep all bottles of fingernail liquid tightly capped. Finally, you should look at your work habits to see if they can be improved.

References

This booklet was adapted from *Stay Healthy and Safe While Giving Manicures and Pedicures: A Guide for Nail Salon Workers*, which was developed by the Labor Occupational Health Program (LOHP), University of California, Berkeley and the California Healthy Nail Salon Collaborative, which was produced through the Susan Harwood Grant Program, under grant number SH20864SH0 from the Occupational Safety and Health Administration, U.S. Department of Labor.

Photos and video stills were provided by the Asian Law Caucus and Street Level Health Project, the Boston Public Health Commission, and the King County Local Hazardous Waste Management Program. Illustrations were provided by Mary Ann Zapalac.

VENTILATED TABLE

Researchers from the National Institute for Occupational Safety and Health (NIOSH) have found that a ventilation table protects the nail technician best against breathing EMA. The ventilated table is the most important engineering control for getting rid of EMA in the fingernail salon because the vented table places local exhaust ventilation close to the work area.

Place local exhaust ventilation as close to the EMA source as possible. Exhaust this air outdoors. Charcoal filters that allow the air to be used over again are not recommended because it is hard to know when the charcoal is full.

Build a ventilated table, or change a table you already own into a ventilated one (Figure 1). Ventilated table sizes will vary from nail salon to nail salon. Choose a wood for your ventilated table that will not soak up the chemicals. If the table acts like a sponge, it may actually expose you to the chemicals you want to avoid. A veneer-coated particle board works well for the table material.

Make a hole in the table top for an air in-take (called the downdraft face). This downdraft face should be placed on the technician's side of the table. Cover the hole with a screen-like cover (or perforated plate) to prevent things from falling in.

The client's side of the table should be a little higher than the technician's side. This will allow the client's hands to hang over the downdraft face and be as close as possible to the local exhaust ventilation (Figure 2).

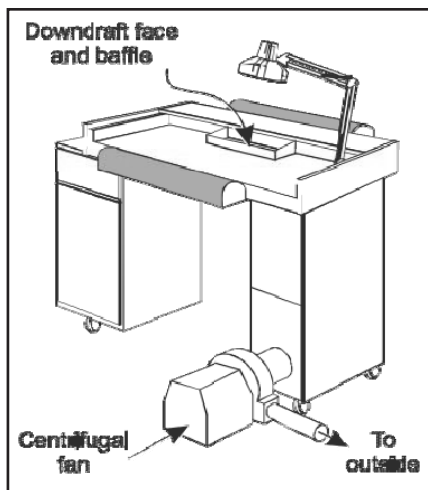


Figure 1

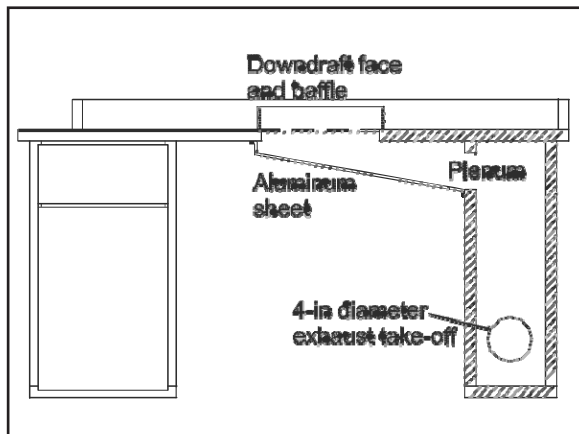


Figure 2

Make sure enough air blows through the table downdraft to get rid of the EMA. The amount of air exhausted depends on its speed as it moves through the downdraft face and on the size of the table opening. However, too much air rushing past the fingernails may cause the artificial nail product to crystallize.

An air speed of 620 feet per minute, directly above the 13- by 4-inch downdraft face works well. A 2½-inch baffle should surround the downdraft face to pull the moving air closer to the client's hands.

Different drying times are needed for different fingernail products and different application techniques. Although a stronger and larger airflow will collect more dust during filing and dry the color coat faster, a slower and lower airflow gives better results for the artificial fingernail product.

Choose an exhaust fan that can exhaust at least 250 cubic feet per minute of air and has ¼-inch static pressure. A 1/2 horse power centrifugal fan should work well. To prevent fan noise from getting in the way of talk or client comfort, you can do one of three things: (1) buy a quiet fan, (2) put a cover over a noisier fan, or (3) buy an outdoor fan to be placed on an outside wall. The fan should have control settings. Use either a multi-speed or high-volume exhaust fan with a damper. You can find a fan supplier by looking in a directory called "Thomas Register of American Manufacturers." Look under the headings of "fans" or "fans, centrifugal." Your public library should have this directory. The fan supplier may be able to install your fan, as well as supply the duct work and other needed materials.

Provide enough makeup air to replace the exhausted air. If the makeup air is too weak, there will be negative pressure areas and perhaps drafts. The air intake, which pulls outdoor air inside, should not be placed near the building exhaust. If the exhaust and intake vents are too close, dirty air will be pulled back into the room.

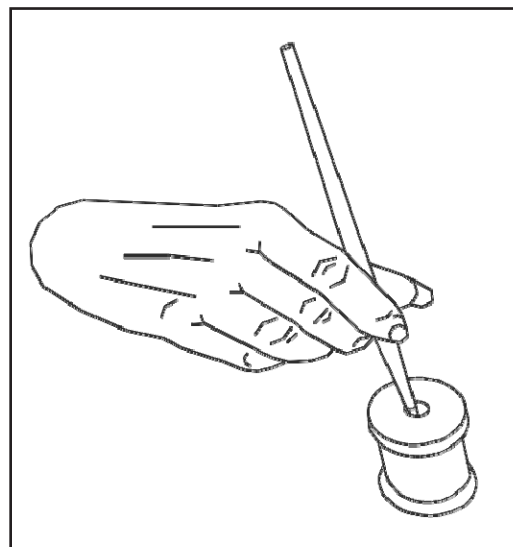


Figure 3

Comfort fans should not blow directly on the downdraft face because the strong air movement can interfere with the exhaust airflow.

KEEP DISPENSER BOTTLES CLOSED

Use dispenser bottles that have small openings, only large enough for an application brush to enter. The bottle stoppers should be pressure sensitive. A dispenser bottle with a pressure-sensitive stopper and small opening will result in less evaporation of the fingernail liquid and, thus, will cut down on possible exposures to methacrylates (Figure 3).

CHANGE YOUR WORK HABITS

Nail technicians can also lower their exposures to these airborne chemicals by changing some of their work habits:

1. EMA-soaked gauze pads should be placed in a sealed bag before being thrown in the trash can.

2. Trash can liners should be changed daily.
3. No more than the needed amount of fingernail liquid should be poured into the closed dispenser bottle.
4. Nail technicians should wear personal protective clothing and glasses. When technicians remove artificial nails, chips of acrylic often fly off, creating a need for eye protection. In addition to safety glasses, technicians also should wear long sleeves and gloves to protect their skin from acrylic dust.
5. Technicians should wash their hands, arms, and face with mild soap and water several times throughout the day to remove potentially irritating dust.
6. Eating and drinking should not be allowed where artificial fingernails are applied or in other working areas. Methacrylates in nail dust can be carried accidentally to the mouth or face on a cup or other

food item, and this contact may cause a skin rash. Also, many other chemicals are used in a salon that could cause health problems if swallowed.

7. Smoking should be banned for the entire salon because many of the chemicals in a beauty shop, including nail products, catch fire easily.

To obtain more free information about controlling this hazard or for information about other occupational safety and health issues:

call NIOSH* at 1-800-35-NIOSH (1-800-356-4674), or visit the NIOSH Homepage on the World Wide Web at <http://www.cdc.gov/niosh>

*NIOSH is the Federal agency responsible for conducting research and making recommendations for preventing work-related illnesses and injuries. All HAZARD CONTROLS are based on research studies that show how worker exposure to hazardous agents or activities can be significantly reduced.

Protecting the Health of Nail Salon Workers

United States Environmental Protection Agency, March 2007

INTRODUCTION

Approximately 155,000 people work in the United States as manicurists and pedicurists. These trained professionals provide nail treatments including filing, polishing, applying artificial nails, and giving manicures and pedicures. Products that nail salon workers use are critical to performing high-quality services, and indeed, without them, these services would not be possible. However, many of the products contain ingredients that should be used and handled properly to minimize potential for overexposure.

Professional nail care products are typically formulated to minimize exposure and the potential for adverse health effects. Also, nail salon products are typically used in small amounts, which can further lower the risk of overexposure. Yet, if proper care is not taken, overexposure may occur and could result in adverse health effects, such as skin irritation, allergic reaction, or serious eye injury. This guide recommends shop practices that nail salon workers and owners can use to minimize exposures and prevent overexposure.

In addition, this guide will help you understand how to use Material Safety Data Sheets (MSDSs).

These documents contain information for people working in many occupations including factory workers, shippers, warehouse employees, emergency responders, and doctors, as well as nail professionals who use these products to perform salon services. Not all of the information found on an MSDS is useful to nail professionals, but the information in the Appendix will help you better understand how to use these important documents properly and make your workplace safer.

The Appendix also contains information on ingredients in nail salon products and the potential health effects that could be associated with overexposure.

This guide was originally produced in response to requests from the Asian-American nail salon worker community in Houston, Texas, and the surrounding area. EPA's Region 6, located in Dallas, Texas, in collaboration with the EPA's Design for the Environment Program, in EPA's Washington, D.C. headquarters, partnered with nail salons to document and encourage best practices to protect nail salon workers, owners, and customers.

BEST SHOP PRACTICES

Developed in collaboration with pilot nail salons and other partners, the best practices recommended here are aimed at helping nail salon workers and shop owners improve working conditions and reduce or minimize product exposures. Since mandated state and local requirements may differ from these recommendations, always contact your local cosmetology board and/or your state health department for more information.

TO MINIMIZE INHALATION

- Install a local exhaust ventilation system near work tables. Since the general heating, ventilating, and air-conditioning systems (HVACs) slowly exchange the air inside the shop, a nail salon should use a system intended to effectively capture vapors and dust or expel them from the workplace, as well as a system that will exchange indoor air with fresh air from outside the building to maintain good air quality. Nail salons should have one or a combination of the following:
 - Work table with an exhaust vent embedded in it that is vented to the outdoors.
 - Ceiling or wall-mounted exhaust system with exhaust intake suspended above the work table.
- Use professional quality room air cleaning devices. Avoid using ozone generating air cleaning devices. Healthy people, as well as those with respiratory difficulty, can experience breathing problems when exposed to even relatively low levels of ozone.
- Always turn on the general ventilation system (HVAC) during work hours.
- Replace charcoal and dust filters regularly and according to the manufacturer's directions. If filters are not replaced, they will become ineffective.
- Keep the top of the ventilated table clear of obstructions, e.g., towels.
- Tightly close nail care product containers when not in use.
- Do not use excessive amounts of product when performing services.
- Keep products in properly labeled, smaller-sized containers at the work table.
- Do not use bulk containers when performing services. Instead, transfer products from large containers to smaller, properly labeled containers. Perform this task in a well-ventilated area, such as outside or near an open window or door. For additional protection, an organic vapor cartridge respirator may be worn during the transfer process, but it is usually unnecessary if ventilation is adequate.

- Place all waste in a metal trash can with a self-closing lid, and empty it often.
- Place all waste that has absorbed product, such as paper towels, gauze, cotton, or other absorbent material, in a sealed container (e.g., an empty plastic milk jug or resealable bag) before disposing of it in the trash.
- Change trash can liners at least once daily.
- Wear a dust mask if recommended in the Material Safety Data Sheet (MSDS) to prevent inhaling dust particles.

TO MINIMIZE SKIN EXPOSURE

- Wash hands before and after performing each service, before eating, and after handling products.
- Wear disposable nitrile gloves or the glove type recommended in the product MSDS when handling certain products.
- Replace gloves immediately if there are signs of cuts, tears, or holes.
- Choose appropriate clothing. Ensure that the clothing is not too loose in order to avoid accidental spills and that its coverage is adequate to help prevent skin overexposure to ingredients. For example, long-sleeved blouses or smocks protect arms; pants or skirts that are at least knee length when seated help protect the lap.
- Keep containers tightly closed when not in use to prevent accidental spills or leakage.
- Do not use excessive amounts of product when performing services.
- Keep products in small-sized containers at the work table to reduce the risk of spills and potential skin exposure.
- While transferring products to smaller containers, wear safety equipment, e.g., eye protection and/or gloves as recommended in the MSDS, and use a funnel or dropper to avoid spills.

TO PREVENT THE ACCIDENTAL SWALLOWING OF PRODUCTS

- Wash hands before eating and drinking.
- Do not eat or drink at the work table.
- Do not keep/store food and beverages around work area.
- Store nail care products in a separate area away from food and the eating area.
- Designate a dining area separate from storage and work areas.

TO ENSURE ADEQUATE SHOP CLEANLINESS

It is important to keep your shop clean. Bacteria, fungi, and viruses can be transferred between customers through dirty nail implements and other supplies and equipment, e.g., towels and pedicure tubs.

- Use a new towel for each customer.
- Wash your hands and your customer's hands and/or feet before each service.
- Perform services only on healthy nails and intact skin. Refuse service to clients that show any signs of infection, unhealthy appearing conditions, or broken/irritated skin.
- Clean any residue from all nail care implements after each use and before disinfection.
- Disinfect all nail care implements with an appropriate disinfectant after each customer.
- Follow your state cosmetology board's rules and instructions on proper cleaning and disinfection techniques. It is best to use an EPA-registered, hospital disinfectant labeled as viricidal, bacteriocidal, and fungicidal or a disinfectant as prescribed by your state cosmetology board. Follow usage instructions exactly. You may also choose to sterilize these disinfected items in an autoclave, if desired, or if required by your state's regulations.
- Do not put clients' feet into water that contains an EPA-registered disinfectant and avoid skin contact with the disinfectant.
- Use disposable implements on only one customer.
- If gloves are worn, replace them after each customer.
- Do not use razor-type shavers to remove calluses. These devices can cause injuries requiring medical attention. Licensing laws for nail salon workers and manicurists do not allow the use of cutting tools to remove living or callused skin.
- Using nail implements owned by customers is not recommended. Problems can arise because clients may not properly clean and disinfect the implements. All implements must be properly cleaned and disinfected by the salon worker before use on a client.

OTHER BEST SHOP PRACTICES

- Do not allow anyone to smoke in your shop, because products stored and used in nail salons may be extremely flammable.
- Provide training on hazard communication (OSHA 29 CFR 1910.1200) and the proper storage and handling of flammable liquids (OSHA 29 CFR 1910.106) to nail salon workers as required by OSHA.
- Read and understand the state cosmetology board's rules and regulations.

- Keep a copy of the most updated state cosmetology board's rules and regulations in the shop.
- Keep the latest version of the MSDS for each product containing potentially hazardous ingredient(s) stored and used in the salon.
- Keep all MSDSs in a binder, and store this binder in the same place you store your products.
- Read and understand the content of these MSDSs.
- Update all MSDS sheets at least once a year to keep them current.
- Label all containers so that nail salon workers can easily identify the contents.
- Dispose of liquid waste according to manufacturers' instructions on the product label or MSDS and in accordance with local regulations.

GLOVES

WHY SHOULD NAIL SALON WORKERS WEAR GLOVES?

- To prevent damage to workers' nails and skin.
- To prevent skin from absorbing potentially harmful ingredients which may cause skin allergies, irritation, or other related problems.

WHY DO SOLVENTS CAUSE MORE CONCERNS THAN OTHER NAIL SALON PRODUCTS?

- Skin can easily and quickly absorb certain solvents.
- Solvents may damage skin by removing natural oils from the skin (defatting), which can lead to skin dryness and/or irritation, making it easier for other ingredients to enter the body.

WHAT KIND OF GLOVES SHOULD NAIL SALON WORKERS WEAR?

- Nitrile gloves provide the best protection – latex and vinyl gloves are permeable to many nail product ingredients and should not be used.
- Always refer to the MSDS for recommendations on the kind of gloves to wear.

HOW DO NAIL SALON OWNERS AND WORKERS FIND MORE INFORMATION ABOUT THE TYPE OF GLOVES TO WEAR?

- Call the glove manufacturers and personal protective equipment distributors. Their phone numbers are listed in the phone book, on the box, and on glove

manufacturers' websites. These companies often offer technical advice and free samples.

- Ask your shop's nail care product distributor and personal protective equipment vendors.

SENSITIZATION

Sensitization or hypersensitivity reactions usually occur as a result of repeated or prolonged contact with a chemical substance that interacts with the body's immune system. In some cases, an individual may develop a reaction only after encountering a material repeatedly or after continuous prolonged contact. Red or itchy skin, water blisters, and areas that throb or feel warm are signs of possible sensitization of the skin.

EXAMPLE

- After wearing latex gloves daily for several weeks or months, a previously unaffected person may develop a persistent rash on their hands and wrists. This sensitization may be caused by one of several components of the gloves acting as an allergen (allergy-causing substance). If this occurs, gloves made from other materials, such as nitrile, may be used.

MASKS AND RESPIRATORS

WHY SHOULD NAIL SALON WORKERS WEAR DUST MASKS?

- To minimize breathing in dust particles.
- If you have asthma, allergies, or other breathing related conditions, and a nail service is expected to generate a lot of dust, it may be necessary to wear a dust mask to minimize breathing in particles.
- Dust masks are intended to prevent inhalation of dust; they will not protect against inhalation of vapors.

WHEN SHOULD NAIL SALON WORKERS WEAR DUST MASKS?

- When filing or shaping artificial nail enhancements.

WHAT KIND OF DUST MASKS SHOULD NAIL SALON WORKERS WEAR?

- Dust masks approved by the National Institute for Occupational Safety and Health (NIOSH), (e.g., N95 rated).
- Follow manufacturers' instructions when using these masks.

- Refer to the MSDS to determine if it is necessary to wear a dust mask and which type might be best.

TYPES OF MASKS NAIL SALON WORKERS CAN USE TO PROTECT THEMSELVES

- Dust masks will protect you from dusts and particulates.
- Surgical masks may help prevent the spread of germs but will not protect you from dusts or vapors.

WHY DON'T NAIL SALON WORKERS NORMALLY NEED TO WEAR RESPIRATORS WITH ORGANIC VAPOR CARTRIDGES?

- The most feasible way of protecting nail salon workers is to provide adequate ventilation in the salon. Providing adequate ventilation eliminates the need for respirator use.

WHAT REQUIREMENTS EXIST FOR USING A RESPIRATOR IN NECESSARY CIRCUMSTANCES?

Typically, an organic vapor respirator is not required. However, if a nail salon worker has a special need due to pre-existing health conditions, then the worker/shop owner should check the sources below to determine the proper type and proper fit guidelines, in accordance with the OSHA Respiratory Protection standard.

- OSHA has a Respiratory Protection standard that includes specific requirements such as training, fit testing, care and maintenance, and medical surveillance that shop owners and workers may need to follow when workers wear respirators.
- Contact OSHA at (202) 693-1888 or (800) 321-6742 for more information on the requirements that apply to your shop or for a copy of the Respiratory Protection standard (29 CFR 1910.134) and/or the Hazard Communication standard (29 CFR 1910.1200). To obtain an electronic copy, visit the OSHA website: www.osha.gov and enter the CFR number into the search function.

BEST SHOP PRACTICES CHECKLIST FOR OWNERS/MANAGERS

- Post "No Smoking," "No Eating," and "No Drinking" signs in the shop's work area.
- Post a sign near the shop's sink to remind workers to wash their hands before and after each customer, after handling chemicals, and before eating.
- Require all customers to wash their hands and fingernails thoroughly before receiving service.

- Perform services only on healthy nails and intact skin.
- Post step-by-step procedures near the shop's sink and in the shop's work area on how to clean and disinfect nail instruments and other equipment that comes in contact with clients' skin.
- Properly ventilate each work station. Preferably, install an effective exhaust system with individual exhaust vents for each work table. If possible, the exhaust should be vented outdoors in a manner that meets local building code requirements.
- Keep the general ventilation system (HVAC) on during work hours.
- Place a metal trash can with a self-closing lid at every work station.
- Label all product containers clearly and properly.
- Purchase appropriate masks and gloves recommended in the MSDS for your employees.
- Do not buy or use any nail product containing liquid methyl methacrylate (MMA) monomer.
- Designate a chemical storage area far away from the dining area and equipped with local exhaust ventilation.
- Provide an adequately ventilated dining area for nail salon workers, partitioned from the shop's work area.
- Designate a storage place for a binder of MSDSs for all nail salon products.
- Ask for the most up-to-date MSDS for each product at least once a year.
- Inform employees where MSDSs are kept.
- Provide training required for reading and understanding MSDSs.
- Provide worker training on hazard communication and proper storage and handling of flammable liquids as required by OSHA.
- Maintain the latest copy of the state cosmetology board's rules and regulations.

BEST SHOP PRACTICES CHECKLIST FOR WORKERS

- Keep the top of ventilated tables or other vents clear of any obstruction, e.g., towels.
- Keep nail product containers closed when not in use.
- Do not use excessive amounts of product when performing services.
- Keep nail products in smaller-sized, properly labeled containers at the work table.
- Keep a metal trash can near the worktable with a self-closing lid completely covered at all times.
- Place waste soaked with product in a sealed container before disposing of it in the trash container.
- Wear mask and gloves and protective eyewear, if recommended in the MSDS, when handling larger quantities of chemicals.
- Wash hands frequently: before and after working on customers; before eating and drinking; after handling products.
- If there are visible signs of sensitivity or allergic reaction to a product, discontinue use immediately.
- Do not eat, drink, or store food at the work table.
- Use a clean or disposable towel and a new pair of disposable gloves for each customer.
- Use disposable nail implements on only one customer.
- Clean and disinfect nail care implements properly after each use.
- Do not put disinfectants in the water when clients' feet are in the footspa. Avoid skin contact when using disinfectants.
- Do not use sharp instruments to shave calluses or remove living skin.
- Do not allow smoking in the shop.
- Read and understand the content of MSDSs for each product used.
- Know where to find MSDSs in the shop.
- Dispose of all waste properly.

APPENDIX

The following table describes potential health effects that may be associated with overexposure to some of the ingredients found in certain types of nail care products. For the purpose of this table, overexposure is defined as exposure exceeding safe limits established by the Occupational Safety and Health Administration (OSHA).

Quantities of these ingredients in nail care products are typically small, and with proper usage and application

techniques, exposure levels can be further minimized. Overexposure should not occur if proper steps are taken, as described in this guide. It is important to understand that nail care work can be performed safely if proper steps are taken to protect yourself.

The Appendix also contains a more detailed explanation of Material Safety Data Sheets (MSDSs) as well as a guide to interpret the information found on MSDSs.

POTENTIAL SYMPTOMS & HEALTH EFFECTS OF OVEREXPOSURE TO INGREDIENTS USED IN NAIL CARE PRODUCTS

INGREDIENT	USAGE	SYMPTOMS OF OVEREXPOSURE*
Acetone	Nail polish remover, fingernail glue remover ^A	Overexposure may cause headache, dizziness, irritation to skin, eyes, and throat, and central nervous system depression ¹
Benzoyl Peroxide	Powder additive for artificial nails ^{A,B,E}	Overexposure may cause irritation to eyes, skin, nose, mouth, throat, and lungs, and skin rash ²
Butyl acetate	Nail polish ^{A,D,F}	Overexposure may cause irritation to eyes, skin, nose, mouth, and throat, headache, drowsiness, skin rash, confusion and/or haziness ^{1,2}
Butyl methacrylate	Artificial nails ^A	Overexposure may cause irritation to eyes, skin, nose, mouth, and throat, shortness of breath, and skin rash ²
Camphor**	Nail polish ^D	Overexposure may cause irritation to eyes, skin, nose, mouth, and throat, nausea, vomiting, diarrhea, headache, dizziness, and in extreme cases of overexposure, uncontrollable muscle contractions ^{1,2}
Dibutyl phthalate**	Nail polish, nail hardener ^C	Overexposure may cause irritation to eyes, stomach, and upper respiratory system. Prolonged exposure to high concentrations may be hazardous to human reproduction and development ^{1,2,3}
Ethyl acetate	Nail polish ^{DE} , fingernail glue ^F	Overexposure may cause irritation to eyes, skin, nose, mouth, and throat, skin rash, confusion and/or haziness ^{1,2}
Ethyl cyanoacrylate	Fingernail glue ^{A,C,D,G}	Overexposure may cause irritation to eyes, mucous membranes, and skin, and skin sensitization ^{2,4}
Ethyl methacrylate	Artificial nails ^{A,E,F,G}	Overexposure may cause irritation to eyes, skin, and respiratory track, and skin sensitization ^{2,4}
Formalin**†	Nail hardener ^A	Overexposure may cause irritation to eyes, nose, skin, throat and respiratory system, and wheezing. Prolonged exposure may cause asthma-like respiratory problems. ⁵ Substance may be a carcinogen if inhaled in high concentrations or for long periods ^{1,2,^}
Hydroquinone**	Artificial nails ^A	Overexposure may cause irritation and inflammation to eyes, irritation to skin, skin rash, and in more serious cases of overexposure, colored urine, nausea, dizziness, rapid breathing, muscle contraction, and central nervous system excitement ^{1,2}
Isobutyl methacrylate	Artificial nails ^A	Overexposure may cause irritation to eyes, skin, nose, mouth, throat, and lungs ³

**POTENTIAL SYMPTOMS & HEALTH EFFECTS
OF OVEREXPOSURE TO INGREDIENTS USED IN NAIL CARE PRODUCTS (continued)**

INGREDIENT	USAGE	SYMPTOMS OF OVEREXPOSURE*
Methacrylic acid	Artificial nails ^{E,G}	Overexposure may cause irritation to eyes, skin, nose, mouth, and throat, burning of eyes and skin, shortness of breath, labored breathing, and cough ²
4-methoxyphenol**	Artificial nails ^A	Overexposure may cause irritation to eyes and skin, burning of eyes and skin, and central nervous system depression ^{1,2}
Methyl ethyl ketone	Nail polish ^{D,E} , nail polish remover ^C , artificial nail remover	Overexposure may cause irritation to eyes, skin, nose, mouth, and throat, cough, headache, dizziness, drowsiness, vomiting, and skin rash ^{1,2}
Methyl methacrylate (typically not used - illegal in many states.)	Artificial nails ^A	Overexposure may cause irritation to eyes, skin, nose, mouth, and throat, sore throat, cough, shortness of breath, and skin rash ^{1,2}
Poly (ethyl/methyl Methacrylate)	Powder for artificial nails ^{E,F,H}	Overexposure may cause irritation to the eyes, skin, and throat (by inhalation) ⁶
Titanium dioxide**	Nail polish, powder for artificial nails ^A	Overexposure may cause lung fibrosis and may be an occupational carcinogen ¹
Toluene	Nail polish ^A , fingernail glue	Overexposure may cause irritation to eyes and nose, weakness, exhaustion, confusion, inappropriate feelings of happiness, dizziness, headache, dilated pupils, runny eyes, anxiety, muscle fatigue, inability to sleep, feeling of numbness/tingling, skin rash, and in more serious cases of overexposure or intentional abuse, liver and kidney damage ^{1,2,‡}
Tosylamide Formaldehyde Resin (TFR Resin)	Nail hardener ^A , nail polish [†]	Overexposure may cause irritation to skin and skin rash ⁴

TABLE NOTES

FOOTNOTES

* Potential health effects depend on conditions of exposure, which may be minimized by working safely (e.g., ventilation and use of masks and gloves).

** Quantities in nail care products are small and application techniques are designed to minimize the potential for exposure.

† The term formalin describes aqueous solutions, particularly those containing 37 to 50 percent formaldehyde and 6 to 15 percent alcohol stabilizer.⁵

• ^ A study has shown that formaldehyde concentrations in nail salons were comparable to those found in office buildings and did not increase when nail products were in use and ventilation systems were operating properly.⁷

• ‡ A study has shown that toluene concentrations in nail salons were below the OSHA safe limit.⁷

TABLE NOTES *continued*

USAGE COLUMN REFERENCES AND NOTES

- A. OPI Products Inc. product MSDS or correspondence with Paul Bryson, O.P.I.
- B. Correspondence from General Dental Products
- C. Backscratchers product MSDS (available at: www.backscratchers.com)
- D. European Nail Factory product MSDS (available at: www.european-nailfactory.com)
- E. Kupa Incorporated product MSDS (contact: 800-994-5872)
- F. Nail Systems International product MSDS (available at: www.nsinails.co.uk/content/msds)
- G. Originails, E.O.H Industries, Inc. product MSDS (available at: www.originails.com/msds/index.htm)
- H. Star Nail International product MSDS (available at: www.starnail.com/msds.htm)
- I. Sally Hansen product MSDS (available at the National Institute of Health, Household Product Database: <http://hpd.nlm.nih.gov>)

SYMPTOMS OF OVEREXPOSURE COLUMN REFERENCES

1. National Institute for Occupational Safety and Health (NIOSH); Pocket Guide to Chemical Hazards; available at www.cdc.gov/niosh/npg/npg.html
2. National Institute for Occupational Safety and Health (NIOSH); International Chemical Safety Cards; available at www.cdc.gov/niosh/ipcs/nicstart.html
3. Hazardous Substance Data Bank; profiles available at <http://toxnet.nlm.nih.gov>
4. National Library of Medicine; Haz-Map: Occupational Exposure to Hazardous Agents; profiles available at <http://hazmap.nlm.nih.gov>
5. Occupational Safety and Health Administration (OSHA); Fact Sheet on Formaldehyde www.osha.gov/OshDoc/data_General_Facts/formaldehyde-factsheet.pdf ESSCHEM Inc, Linwood, PA. Material Safety Data Sheets
6. Industrial Hygiene Assessment of Toluene and Formaldehyde Concentrations in California Nail and Full Service Salons, Clayton Project, project no. 800-97276.00, Clayton Environmental Consultants, Santa Ana, CA, March 16, 1999.

FACTSHEET ON LIQUID METHYL METHACRYLATE (MMA) MONOMER

- Liquid MMA monomer was a commonly used ingredient in artificial nail products for many years.
- Liquid MMA monomer is a chemical substance that reacts and hardens when mixed with powdered acrylic.
- Liquid MMA monomer does not bond well to the natural nail without heavy filing with coarse abrasives, which may cause damage to the nail plate and bed.
- Liquid MMA monomer may cause overexposed people to develop an allergic reaction, usually after repeated exposure. Continued exposure often results in a worsening of symptoms for individuals that have developed sensitivities to products containing this monomer.
- Testing done on animals that had been exposed to high concentrations of liquid MMA monomer vapors suggests that excessive inhalation may cause damage to the respiratory system and to the liver.
- In the early 1970s, the Food and Drug Administration (FDA) received a number of personal injury complaints associated with the use of fingernail extenders containing liquid MMA monomer. After investigations and discussions with medical experts, the FDA concluded that liquid MMA monomer was a poisonous and harmful substance that should not be used in artificial fingernail products. Court rulings resulted in legal action against one firm, as well as several seizure actions and voluntary recalls to remove products containing liquid MMA monomer from the marketplace. More information is available at: <http://www.cfsan.fda.gov/~dms/cos-nail.html>
- Across the United States, at least 30 states have restricted or banned the use of liquid MMA monomer.
- Unlike liquid MMA monomer, powder MMA polymers are considered safer because they will not penetrate the skin and do not pose the same risks as liquid MMA.

MATERIAL SAFETY DATA SHEET (MSDS)

WHAT IS AN MSDS?

- An MSDS is an important document that explains the risks, precautions, and response actions related to exposure to a particular hazardous material used as an ingredient in a product. An MSDS also explains the appropriate and best course of action should accidental overexposure occur.

WHY IS IT IMPORTANT TO KEEP MSDSs IN YOUR SHOP?

- Federal law requires that MSDSs must be kept in a nail salon and be available to employees during working hours.
- Keep MSDSs in your shop to ensure that all employees:
 - Are aware of the dangers posed from potentially hazardous materials stored in the salon.
 - Know how to respond in an emergency or if overexposure occurs.
 - Know how to dispose of unused products properly.
 - Know what protective equipment (e.g., masks, gloves) should be worn when working with professional nail products.

WHAT SHOULD NAIL SALON WORKERS DO WITH AN MSDS?

- Review and understand the content of an MSDS.
- Know where they are kept in the salon.

WHAT SHOULD NAIL SALON OWNERS DO WITH AN MSDS?

- Ask for the most up-to-date version of the MSDS at least once each year to ensure or verify that you have the most recent version. If a product is delivered without an MSDS, ask the manufacturer to send you the MSDS before using the product in the workplace.
- Keep a binder that has an MSDS for all professional products stored and used in the salon.
- Inform employees where MSDSs are stored.
- Provide periodic training for reading and interpreting the MSDS.
- Read MSDSs to know what kind of protective equipment (e.g., masks, gloves, eye protection) should be purchased for employees.

HOW CAN YOU GET COPIES OF MSDSs FOR YOUR SHOP?

- Ask your nail products suppliers or distributors. By law, your distributors or suppliers must provide you with a copy of an MSDS for each product that contains a potentially hazardous ingredient.
- You may also request an MSDS from the product manufacturer by calling the phone number provided on the label of the product container or by submitting a request on the product manufacturer's website.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) CITATIONS FOR LISTING INGREDIENTS IN MSDS

1910.1200(g)(2): Each material safety data sheet shall be in English (although the employer may maintain copies in other languages as well), and shall contain at least the following information:

1910.1200(g)(2)(i)(C)(1): The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise 1% or greater of the composition, except that chemicals identified as carcinogens under paragraph (d) of this section shall be listed if the concentrations are 0.1% or greater; and,

1910.1200(g)(2)(i)(C)(2): The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise less than 1% (0.1% for carcinogens) of the mixture, if there is evidence that the ingredient(s) could be released from the mixture in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees.

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 9. U.S. Environmental Protection Agency and the Centers for Disease Control and Prevention, Preventing *Pedicure Foot Spa Infections*. <<http://www.epa.gov/pesticides/factsheets/pedicure.htm>>
 10. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Technology Transfer Network.. *Methyl Methacrylate*. January 2000. <<http://www.epa.gov/ttn/uatw/hlthef/methylme.html>>
 11. U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition, Office of Cosmetics and Colors. *Phthalates and Cosmetic Products*. <<http://www.cfsan.fda.gov/~dms/cos-phth.html>>

Sanitation and Infection Control

Based on OSHA and U.S. EPA Publications

What should infection control mean to you? In order to fully understand all that infection control encompasses you must first be aware of where it all begins. Keep in mind that it is the responsibility of all licensees and the North Carolina Board of Cosmetic Arts Examiners to ensure a safe and healthy salon environment for the public. This can be accomplished by understanding and putting to use the important infection control and safety information you will learn in this material.

Protecting Your Clients and Yourself

No matter what branch of cosmetology your license falls under: cosmetologist, nail technician, esthetician, natural hair stylist, or hair designer it is your responsibility as a licensee of the North Carolina Board of Cosmetic Arts Examiners to protect your client's health, as well as your own by performing services in a healthy and safe environment. This can be done by taking the proper steps to ensure that all implements, tools, and areas of the salon are properly cleaned and disinfected according to the Board's "Rules and Regulations." These regulations are your guideline for proper infection control. Infection control (decontamination) consists of three categories: 1) sanitation, 2) disinfection, and 3) sterilization. Each of these areas means something completely different when it comes to keeping a salon or spa environment healthy and safe. Therefore, it is vital to fully understand the differences between these three areas of infection control.

Some of you may be coming back to the industry after some time away. It is important to make sure that you are up to date on changes that may have taken

place, particularly when it comes to infection control. Gone are the days when the term sanitation could be used to cover the subject of infection control in salons. Infection control refers to the prevention of the transmission of infectious and communicable diseases. A communicable disease is one that can be passed from one person to another. It seems that everywhere you turn today there is talk about this very issue. The media has brought forth awareness that there can be dangers lurking in the salons the public trust to be safe. Methicillin Resistant Staphylococcus (MRSA), Hepatitis (HBV), HIV, Tuberculosis (TB), Fungus, and the common cold are among the list of infectious diseases that proper infection control procedures in a salon can help prevent.

Knowing the correct terminology and definitions of the words and items associated with infection control can be very helpful in keeping salons healthy and in return keeping the licensee and the public safe as well.

The term sanitation that most of us are familiar with is no longer a choice word to use when referring to the most effective way to keep a salon disease free. **Sanitation is simply cleaning;** it is the lowest level of infection control and is the removal of dirt and debris. Although sanitation methods clean and reduce microbes on the surface, germs are not killed.

Disinfection is the level of decontamination that should be used in a salon environment. Disinfection is the second level of infection control and destroys or kills some bacteria, fungi and viruses. It is important that all tools, implements, and areas of the salon be properly cleaned and disinfected.

Sterilization is the highest level of decontamination as it kills or destroys all microbes. Sterilization is only

required for tools or implements that puncture the skin. Therefore, this level of infection control usually does not apply to salons/spas.

There are **three types** of infectious microorganisms: 1) bacteria, 2) fungus, and 3) virus. All persons working in a salon/spa environment should have a basic understanding of what they do.

Bacteria (also known as germs) are one-celled microorganisms that contain both plant and animal characteristics. Bacteria are so small they are not visible to the naked eye. Bacteria can live and reproduce on their own and can be found in a variety of places that include but are not limited to:

- On skin
- In water
- Decayed Matter
- Body Secretions
- On clothing
- Under the free edge of nails

There are two primary types of bacteria - pathogenic and non pathogenic:

Nonpathogenic Bacteria are harmless, and do not cause disease.

Pathogenic Bacteria are harmful, and may cause disease or infection.

There are two stages in the life cycle of bacteria. The **active stage** is when bacteria grow and reproduce. Bacteria reproduce best in a warm, dark, moist, and dirty environment. If conditions are not favorable then it becomes difficult for bacteria to survive. The **inactive (spore-forming) stage** happens when conditions are not favorable for growth or reproduction. Certain bacteria can coat themselves with a waxy outer shell, this helps the bacteria withstand long periods of famine and unfavorable conditions. During this stage bacteria are not harmed by disinfectants.

Fungus (fungi) include mold, mildews, and yeast. A fungus can cause contagious diseases such as tinea capitis (ringworm) and nail fungus. Non contagious conditions such as dandruff and seborrheic dermatitis can also be caused by a fungus.

A **Virus** is a sub-microscopic particle that can only be seen under a powerful microscope. Viruses can cause a variety of health issues including the common cold, respiratory, gastrointestinal infections, measles, mumps, chicken pox, rabies, influenza, and HIV, which causes AIDS. A virus can only live by penetrating other cells and becoming part of them.

An **infection** can occur when pathogenic bacteria or viruses enter the body. A **contagious** infection is one that can be passed from person to person. The spread of infection in a salon/spa is why it is important

to practice personal hygiene and infection control procedures. Some ways infections are spread in a salon include but are not limited to the following:

- Open sores
- Unclean hands and implements
- Coughing or sneezing
- Common use of drinking cups and towels
- Use of same implements on infected areas and non infected areas
- Unsanitary salon conditions

Parasites are plant or animal organisms that live on or in another living organism. This is the only way they can survive.

Pediculosis Capitus (head lice) is a type of parasite. Lice are wingless insects that feed on human blood. These insects do not fly or jump; however, they can be passed from one person to another by direct contact, through sharing of brushes, combs, cloths, hats, etc.

Once a person is infected, the female insect lays approximately 3 to 6 eggs (more commonly known as nits) daily. These eggs then cement to the hair shaft about 1/4" away from the scalp. After the eggs are attached they begin to hatch in about 7-12 days and reach a mature status in roughly two days, once mature, they begin to lay their own eggs. Nits can stay alive for up to a month off of the head and adult lice can survive without a host for 24-48 hours. As you can see it does not take long to have an infestation problem.

Therefore, if a client comes into a salon with head lice there are important infection control procedures that need to be followed in order to prevent the spread of lice to other clients and employees. The steps to maintaining a healthy salon environment after the presence of lice are as follows:

- Discontinue service immediately.
- Immediately sweep hair from area
- Trash where contaminated hair and materials were discarded should be sealed and removed from the salon immediately.
- Contaminated area(s) including station, chair, shampoo bowl/area and reusable items should be immediately disinfected with an Environmental Protection Agency (EPA) registered disinfectant or bleach solution. Both of these solutions should remain on the area(s) for at least 10 minutes.
- Disinfect combs, brushes, shears, clippers and other implements used on the client with an EPA registered disinfectant.
- Towels, capes and any cloth items used should be laundered separately in hot water with a bleach

solution. Items should be dried in a hot dryer for at least 20 minutes.

- Chairs located in the reception area/lobby should be disinfected with an EPA registered disinfectant or bleach solution.
- If carpet is present in reception area it should be vacuumed.

Hand Washing

This is where infection control begins. By completing a task as simple as washing your hands before and after each client, you are helping to prevent the spread of germs.

The following guidelines should be followed for proper hand washing.

1. Dampen hands with warm water.
2. Apply antibacterial, liquid soap.
3. Spend 15-20 seconds working up a good lather. Be sure to wash spaces between fingers and finger nails.
4. Rinse with warm water.
5. Dry hands thoroughly; always use a single use paper towel or air blower.

Disinfectants

It is important to be aware of the guidelines to follow when selecting a proper disinfectant for a salon/spa. All chemical disinfectants should be Environmental Protection Agency (EPA) registered, and hospital effective. Hospital effective or broad spectrum disinfectant means a chemical that is efficient for bactericidal, fungicidal, pseudomonacidal, and virucidal purposes. This information can be located on all disinfectant product labels. Keep in mind this does not include household cleaners, disinfectants, etc. Any time you are mixing or using a chemical disinfectant it is important to follow the manufacturer's directions for mixing and safe use. Disinfectants are not designed to be used on the skin therefore, gloves should be worn.

Alcohol

There are some common misconceptions surrounding the use of alcohol as a disinfectant. Alcohol is a low-level disinfectant therefore; it should not be used to disinfectant implements, tools, stations, or salon areas. Alcohol can be used on the skin as a sanitizer. An alcohol based hand sanitizer should be kept available for use by licensee and public.

Bleach

Sodium Hypochlorite (Household Bleach) can be used as a disinfectant in salons. All bleach solutions must be mixed **daily** in a ten to one solution (nine parts

water and one part bleach). Bleach must be kept in a covered container and not exposed to sunlight. Vapors from bleach may react with other chemicals therefore, should be stored alone.

When using a chemical disinfectant you should always refer to the following guidelines:

1. Always mix disinfectants according to manufacturer's directions.
2. Mix all disinfectants daily or more often if solution becomes visibly contaminated (dirty). Once a chemical disinfectant is dirty it becomes ineffective and should be changed prior to use.
3. Leave surfaces (work areas, shampoos bowls, etc.) wet or completely immersed for a ten-minute contact time or longer if required by the manufacturer's instructions.
4. All implements/tools should be disinfected after each use. Example: combs, brushes, clippers, shears, etc.
5. Implements should first be cleaned of all visible dirt, debris, and bodily fluids by washing with warm, soapy/detergent water and then rinsed. Second, the implement should be completely immersed (enough liquid to completely cover all surfaces of the implement) in an Environmental Protection Agency (EPA) registered, hospital grade tuberculicidal, bactericidal, fungicidal, virucidal disinfectant. Allow implements to soak in disinfectant according to manufactures directions.
6. Remove implements from disinfectant with gloves or tongs. Rinse and dry completely.
7. Store implements in a closed, dry container or drawer

Caring for Porous Items

The most sanitary way to store porous (absorbent) items are to keep them in a closed, dry, dust-free container or drawer until ready for use. **Porous items can not be disinfected**; consequently, these types of items are considered to be single-use and should be used once and discarded unless the item can be laundered in a washing machine. For example, cloth towels, capes, smocks, robes, linens, and similar items should be laundered using detergent and chloride bleach. Examples of porous items include cloth towels, paper towels, cotton, orangewood sticks, cushion nail files, buffer blocks, etc.

Disposable/Single Use Items

It is important to understand the difference between items that can be disinfected and those that should be discarded after use.

Single-use items such as paper towels, tissues, cotton, and some files and buffers are considered porous therefore, cannot be disinfected.

Multi use implements can be cleaned, disinfected, and used on more than one person.

Storage/Handling of Chemicals – Material Safety Data Sheet (MSDS) are required for all potentially hazardous products that are used in salons. These sheets should be kept readily available in case of an emergency. The MSDS sheets provide information on hazardous ingredients, safe storage and handling, product usage as well as information on allergic reactions or injury. Refer to MSDS sheets for proper handling if a spill occurs and procedures for contact with eyes or skin. MSDS sheets should be obtained from the products' manufacturers.

Label all containers as to the contents and cover tightly. All containers should be stored in a cool, dry and well ventilated location. Always follow manufactures instructions as to specific guidelines.

Avoid inhaling or spilling any chemicals. When handling chemicals gloves and safety glasses should always be worn. It is important to wash hands and dispose of gloves after the handling of any chemical.

Safety Standards

In order to keep products such as creams, lotions, solutions, chemicals, etc. from becoming contaminated lids should be kept on at all times.

Product should be removed from containers with a disposable single-use applicator or nonabsorbent applicators that can be disinfected after each use. All single use items should be disposed of immediately. Fingers should never be used to remove product directly from a container.

Dispose of razor blades after individual use by placing in a puncture proof container.

All contaminated, single use items should be disposed of in a trash container immediately after use.

Items dropped on the floor should be picked up immediately. These items should be properly cared for by either discarding it as a single use item or disinfecting if reusable. Be sure to keep curling iron cords off the floor as they are a trip hazard. Sweep hair from floor immediately following any haircut service. If liquid is spilled on the floor be sure to clean up liquid and dry floor immediately.

To prevent damage to hair by an over heated curling iron always test temperature the of thermal curling iron(s) on end papers, paper towels or neck strips prior to use on hair to ensure correct temperature.

Disconnect or turn off all electrical appliances when not in use.

Use protective cream around hairline to protect skin from chemicals. Cream should be applied up to hairline but not in hair while covering the skin.

Wear protective goggles and gloves for application of primer and other nail products.

Do not use nail products that contain Methyl Methacrylate (MMA). MMA is an ingredient found in some artificial nail products. This ingredient has been banned by the Food and Drug Administration due to health issues. These issues include skin allergies, loss of nail plate, respiratory, liver and kidney problems, etc.

OSHA HEALTH HAZARDS IN NAIL SALONS

Biological Hazards

Biological hazards include bacteria, fungi, and viruses. Nail salon workers can be exposed to bloodborne pathogens, such as hepatitis B, hepatitis C, and human immunodeficiency virus (HIV), if they come into contact with infected blood from a co-worker or client. Workers can also be exposed to fungal infections of the nails and feet by touching infected client skin or by using equipment that has not been cleaned.

OSHA's Bloodborne Pathogens Standard, 29 CFR 1910.1030 (discussed later), covers exposures to blood and other potentially infectious materials in workplaces, including nail salons. Employers must evaluate whether an employee may contact with blood or other potentially infectious material. If the employer determines that this risk exists, then the employer must follow the requirements of the standard to protect the exposed employees, including providing training, vaccination, and personal protective equipment.

Steps to Prevent Exposure and Protect Worker Health

- Avoid all contact with blood or bodily fluids.
- Wear gloves, and avoid clients with cuts, open wounds/sores, blisters, or visibly infected skin on their hands, feet, or nails. As per North Carolina Administrative Code, 21 NCAC 14H .0401 (d) (4): A licensee or student shall not perform services on a client if the licensee has reason to believe the client has any of the following: (A) fungus, lice, or nits; (B) an inflamed, infected, broken, raised, or swollen skin or nail tissue in the area to be worked on; or (C) an open wound or sore in the area to be worked on.



- Throw away disposable gloves immediately after using them.
- Always wash hands with soap and water to avoid spreading germs. Wash hands before and after working with clients.
- Bandage open cuts or broken skin to prevent contact with blood or other potentially infectious materials from a client or coworker.
- If an individual is bleeding, do not touch the blood. Ask the individual to use a cotton ball or tissue to stop the bleeding and to throw the used material directly into the trash once the bleeding has stopped.
- Consider immunization against hepatitis B. Immunization practices can vary by state, so contact your local or state health department for information on current hepatitis B immunization policies in your area. Employers must offer employees hepatitis B immunization without charge if they are likely to be exposed to blood or other infectious materials during their work.
- Clean and disinfect tools after each client as per North Carolina Administrative Code, 21 NCAC 14H .0403. Some common steps for cleaning and disinfecting tools are:
 - Wear gloves when cleaning and handling disinfectants or tools soaked in disinfectant.
 - Wash tools with soap and water. Use a scrub if needed.
 - Soak tools in an EPA-registered disinfectant for 10-30 minutes, according to manufacturer directions. Be careful to follow the manufacturer's instructions when mixing the product ratios.
 - Rinse in clean water.
 - Dry with a clean cloth.
 - Store all disinfected tools in a clean, covered area. Only use ultraviolet (UV) sanitizing boxes to store clean and disinfected reusable metal tools. The UV boxes do not disinfect tools.
 - Disinfect foot basins and spas after each client and at the end of the day to prevent exposure to workers and other clients. Follow the U.S. EPA's *Recommended Cleaning and Disinfection Procedures for Foot Spa Basins in Salons*.



OSHA'S BLOODBORNE PATHOGENS STANDARD

Bloodborne pathogens are infectious microorganisms present in blood that 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), the virus that causes AIDS. Workers exposed to bloodborne pathogens are at risk for serious or life-threatening illnesses.

Protections Provided by OSHA's Bloodborne Pathogens Standard

All of the requirements of OSHA's Bloodborne Pathogens standard can be found in Title 29 of the Code of Federal Regulations at 29 CFR 1910.1030. The standard's requirements state what employers must do to protect workers who are occupationally exposed to blood or other potentially infectious materials (OPIM), as defined in the standard. That is, the standard protects workers who can reasonably be anticipated to come into contact with blood or OPIM as a result of doing their job duties.

In general, the standard requires employers to:

Establish an exposure control plan. This is a written plan to eliminate or minimize occupational exposures. The employer must prepare an exposure determination that contains a list of job classifications in which all workers have occupational exposure and a list of job classifications in which some workers have occupational exposure, along with a list of the tasks and procedures performed by those workers that result in their exposure.

Employers must update the plan annually to reflect changes in tasks, procedures, and positions that affect occupational exposure, and also technological changes that eliminate or reduce occupational exposure. In addition, employers must annually document in the plan that they have considered and begun using appropriate, commercially-available effective safer medical devices designed to eliminate or minimize occupational exposure. Employers must also document that they have solicited input from frontline workers in identifying, evaluating, and selecting effective engineering and work practice controls.

Implement the use of universal precautions (treating all human blood and OPIM as if known to be infectious for bloodborne pathogens).

Identify and use engineering controls. These are devices that isolate or remove the blood-borne pathogens hazard from the workplace. They include sharps disposal containers, self-sheathing needles, and safer medical devices, such as sharps with engineered sharps-injury protection and needleless systems.

Identify and ensure the use of work practice controls. These are practices that reduce the possibility of exposure by changing the way a task is performed, such as appropriate practices for handling and disposing of contaminated sharps, handling specimens, handling laundry, and cleaning contaminated surfaces and items.

Provide personal protective equipment (PPE), such as gloves, gowns, eye protection, and masks.

Employers must clean, repair, and replace this equipment as needed. Provision, maintenance, repair and replacement are at no cost to the worker.

Make available hepatitis B vaccinations to all workers with occupational exposure. This vaccination must be offered after the worker has received the required bloodborne pathogens training and within 10 days of initial assignment to a job with occupational exposure.

Make available post-exposure evaluation and follow-up to any occupationally exposed worker who experiences an exposure incident. An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIM. This evaluation and follow-up must be at no cost to the worker and includes documenting the route(s) of exposure and the circumstances under which the exposure incident occurred; identifying and testing the source individual for HBV and HIV infectivity, if the source individual consents or the law does not require consent; collecting and testing the exposed worker's blood, if the worker consents; offering post-exposure prophylaxis; offering counseling; and evaluating reported illnesses. The healthcare professional will provide a limited written opinion to the employer and all diagnoses must remain confidential.

Use labels and signs to communicate hazards. Warning labels must be affixed to containers of regulated waste; containers of contaminated reusable sharps; refrigerators and freezers containing blood or OPIM; other containers used to store, transport, or ship blood or OPIM; contaminated equipment that is being shipped or serviced; and bags or containers of contaminated laundry, except as provided in the standard. Facilities may use red bags or red containers instead of labels. In HIV and HBV research laboratories and production facilities, signs must be posted at all access doors when OPIM or infected animals are present in the work area or containment module.

Provide information and training to workers. Employers must ensure that their workers receive regular training that covers all elements of the standard including, but not limited to: information on bloodborne pathogens and diseases, methods used to control occupational exposure, hepatitis B vaccine, and medical evaluation and post-exposure follow-up procedures. Employers must offer this training on initial

assignment, at least annually thereafter, and when new or modified tasks or procedures affect a worker's occupational exposure. Also, HIV and HBV laboratory and production facility workers must receive specialized initial training, in addition to the training provided to all workers with occupational exposure. Workers must have the opportunity to ask the trainer questions. Also, training must be presented at an educational level and in a language that workers understand.

Maintain worker medical and training records.

The employer also must maintain a sharps injury log, unless it is exempt under Part 1904—Recording and Reporting Occupational Injuries and Illnesses, in Title 29 of the Code of Federal Regulations.

Additional Information

For more information, go to OSHA's Bloodborne Pathogens and Needlestick Prevention Safety and Health Topics web page at: <https://www.osha.gov/SLTC/bloodborne pathogens/index.html>.

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BLOODBORNE PATHOGEN EXPOSURE INCIDENTS

OSHA's Bloodborne Pathogens standard (29 CFR 1910.1030) requires employers to make immediate confidential medical evaluation and follow-up available for workers who have an exposure incident, such as a needlestick. An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials (OPIM), as defined in the standard that results from the performance of a worker's duties.

Reporting an Exposure Incident

Exposure incidents should be reported immediately to the employer since they can lead to infection with hepatitis B virus (HBV), hepatitis C virus (HCV), human immunodeficiency virus (HIV), or other bloodborne pathogens. When a worker reports an exposure incident right away, the report permits the employer to arrange for immediate medical evaluation of the worker. Early reporting is crucial for beginning immediate intervention to address possible infection of the worker and can also help the worker avoid spreading bloodborne infections to others. Furthermore, the employer is required to perform a timely evaluation of the circumstances surrounding the exposure incident to find ways of preventing such a situation from occurring again.

Reporting is also important because part of the follow-up includes identifying the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law, and determining the source's HBV and HIV infectivity status. If the status of the source individual is not already known, the employer is required to test the source's blood as soon as feasible, provided the source individual consents. If the individual does not consent, the employer must establish that legally required consent cannot be obtained. If state or local law allows testing without the source individual's consent, the employer must test the individual's blood, if it is available. The results of these tests must be made available to the exposed worker and the worker must be informed of the laws and regulations about disclosing the source's identity and infectious status.

Medical Evaluation and Follow-up

When a worker experiences an exposure incident, the employer must make immediate confidential medical evaluation and follow-up available to the worker. This evaluation and follow-up must be: made available at no cost to the worker and at a reasonable time and place; performed by or under the supervision of a licensed physician or other licensed healthcare professional; and provided according to the recommendations of the U.S. Public Health Service (USPHS) current at the time the procedures take place. In addition, laboratory tests must be conducted by an accredited laboratory and also must be at no cost to the worker. A worker who participates in post-exposure evaluation and follow-up may consent to have his or her blood drawn for determination of a baseline infection status, but has the option to withhold consent for HIV testing at that time. In this instance, the employer must ensure that the worker's blood sample is preserved for at least 90 days in case the worker changes his or her mind about HIV testing.

Post-exposure prophylaxis for HIV, HBV, and HCV, when medically indicated, must be offered to the exposed worker according to the current recommendations of the U.S. Public Health Service. The post-exposure follow-up must include counseling the worker about the possible implications of the exposure and his or her infection status, including the results and interpretation of all tests and how to protect personal contacts. The follow-up must also include evaluation of reported illnesses that may be related to the exposure.

Written Opinion

The employer must obtain and provide the worker with a copy of the evaluating healthcare professional's written opinion within 15 days of completion of the evaluation. According to OSHA's standard, the **written opinion** should only include: whether hepatitis B

vaccination was recommended for the exposed worker; whether or not the worker received the vaccination, and that the healthcare provider informed the worker of the results of the evaluation and any medical conditions resulting from exposure to blood or OPIM which require further evaluation or treatment. Any findings other than these are not to be included in the written report.

Additional Information

For more information, go to OSHA's Bloodborne Pathogens and Needlestick Prevention Safety and Health Topics web page at: <https://www.osha.gov/SLTC/bloodborne pathogens/index.html>.

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PERSONAL PROTECTIVE EQUIPMENT (PPE) REDUCES EXPOSURE TO BLOODBORNE PATHOGENS

OSHA's Bloodborne Pathogens standard (29 CFR 1910.1030) requires employers to protect workers who are occupationally exposed to blood and other potentially infectious materials (OPIM), as defined in the standard. That is, the standard protects workers who can reasonably be anticipated to come into contact with blood or OPIM as a result of doing their job duties.

One way the employer can protect workers against exposure to bloodborne pathogens, such as hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV), the virus that causes AIDS, is by providing and ensuring they use personal protective equipment, or PPE. Wearing appropriate PPE can significantly reduce risk, since it acts as a barrier against exposure. Employers are required to provide, clean, repair, and replace this equipment as needed, and at no cost to workers.

Selecting Personal Protective Equipment

Personal protective equipment may include gloves, gowns, laboratory coats, face shields or masks, eye protection, pocket masks, and other protective gear. The PPE selected must be appropriate for the task. This means the level and type of protection must fit the expected exposure. For example, gloves may be the only PPE needed for a laboratory technician who is drawing blood.

However, a pathologist conducting an autopsy would need much more protective clothing because of the

different types of exposure (e.g., splashes, sprays) and the increased amount of blood and OPIM that are encountered. PPE must be readily accessible to workers and available in appropriate sizes.

If it can be reasonably expected that a worker could have hand contact with blood, OPIM, or contaminated surfaces or items, the employer must ensure that the worker wears gloves. Single-use gloves cannot be washed or decontaminated for reuse. Utility gloves may be decontaminated if their ability to provide an effective barrier is not compromised. They should be replaced when they show signs of cracking, peeling, tearing, puncturing, or deteriorating. Non-latex gloves, glove liners, powderless gloves or similar alternatives must be provided if workers are allergic to the gloves normally provided.

Gloves are required for all phlebotomies outside of volunteer blood donation centers. If an employer in a volunteer blood donation center judges that routine gloving for all phlebotomies is not necessary, then the employer is required to periodically re-evaluate this policy; make gloves available for workers who want to use them; and cannot discourage their use. In addition, employers must ensure that workers in volunteer blood donation centers use gloves (1) when they have cuts, scratches or other breaks in their skin, (2) while they are in training, or (3) when the worker believes that hand contamination might occur.

When splashes, sprays, splatters, or droplets of blood or OPIM pose a hazard to the eyes, nose or mouth, then masks in conjunction with eye protection (such as goggles or glasses with solid side shields) or chin-length face shields must be worn. Protection against exposure to the body is provided by protective clothing, such as gowns, aprons, lab coats, and similar garments. Surgical caps or hoods, and shoe covers or boots are needed when gross contamination is expected, such as during orthopedic surgery or autopsies.

In HIV and HBV research laboratories and production facilities, laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing must be used in work areas and animal rooms.

Also, protective clothing must not be worn outside of the work area and must be decontaminated before being laundered.

Exception to Use of Personal Protective Equipment

A worker may choose, temporarily and briefly, **under rare and extraordinary circumstances**, to forego use of personal protective equipment. It must be the worker's professional judgment that using the personal protective equipment would prevent the delivery of health care or public safety services or would pose an increased hazard to the safety of the worker or coworker. When such a situation occurs, the

employer is required to investigate and document the circumstances to determine if there is a way to avoid it from happening again in the future. Employers and workers should be aware that this is not a blanket exemption to the requirement to use PPE. OSHA expects that this will be an extremely rare occurrence.

Decontaminating and Disposing of Personal Protective Equipment

Employers must ensure that workers remove personal protective equipment before leaving the work area. If a garment is penetrated by blood or OPIM, it must be removed immediately or as soon as feasible. Once PPE is removed, it must be placed in an appropriately designated area or container for storage, washing, decontamination, or disposal. In addition, employers must ensure that workers wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.

Additional Information

For more information, go to OSHA's Bloodborne Pathogens and Needlestick Prevention Safety and Health Topics web page at: <https://www.osha.gov/SLTC/bloodborne pathogens/index.html>.

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Recommended Cleaning and Disinfection Procedures for Foot Spa Basins in Salons

December 2006

Customer precautions - protecting the client

1. **Check the condition of the client's feet and legs:** If open sores or skin wounds are present (including insect bites, scratches, scabbed-over wounds, or any condition that weakens the skin barrier), explain to the client why they should not use the foot bath.
2. **Complete pedicure or wax after the foot bath soak:** Any procedure that risks damage to a client's skin should not be done before soaking feet in the foot spa basin.

Step by step instructions for disinfecting pedicure foot spa equipment

After Each Client: (this can take place any time after the client's feet are out of the footbath, while feet are massaged, toes are painted, or other opportunities)

1. **Drain** the water from the foot spa basin or bowl and remove any visible debris.
2. **Clean** the surfaces of the foot spa with soap or detergent, rinse with clean water, and drain.
3. **After cleaning, disinfect*** the surfaces with an EPA-registered hospital disinfectant according to the manufacturer's directions on the label. Surfaces must remain wet with the disinfectant for 10 minutes or the time stated on the label, which may be shorter.

* **For whirlpool foot spas, air-jet basins, "pipe-less" foot spas, and other circulating spas:** It is best to disinfect by filling the basin with clean water, adding the appropriate amount of liquid disinfectant, and turning the unit on to circulate the disinfectant for the entire contact time.

4. After disinfection, **drain and rinse** with clean water.

Nightly:

For whirlpool foot spas, air-jet basins, "pipe-less" foot spas, and other circulating spas:

1. **Remove** the filter screen, inlet jets, and all other removable parts from the basin and clean out any debris trapped behind or in them.
2. Using a brush, **scrub** these parts with soap or disinfectant (following cleaning directions).
3. **Rinse** the removed parts with clean water and place them back into the basin apparatus.
4. **Fill** the basin with clean water and add an **EPA-registered hospital disinfectant**, following label directions. Turn the unit on and **circulate** the system with the liquid for 10 minutes, or the label-indicated time if different. (The whirlpool mechanism of the tub must be operating for the entire disinfection period so the piping and internal components that contain hidden bacteria are disinfected.)
5. **After disinfection, drain, rinse,** and air dry.

For simple basins (no circulation):

1. **Drain** the basin and remove any visible debris.
2. **Scrub** the bowl with a clean brush and soap or disinfectant (following cleaning directions). **Rinse and drain.**
3. **Disinfect** basin surfaces with an **EPA-registered hospital disinfectant**, following manufacturer's instructions. Surfaces must remain wet with the disinfectant for 10 minutes or the contact time

stated on the label.

4. **Drain** the basin, **rinse** with clean water, and let air-dry.

Label information on disinfectant products

The label should clearly state that the product is a hospital or medical disinfectant. It may also list the following organisms: Staphylococcus aureus, Salmonella enterica (formerly S. choleraesuis), Pseudomonas aeruginosa.

The product label should clearly identify an EPA Registration Number.

The label will also specify use sites that are health care related.

Important additional measures

- **Follow your state guidelines and regulations:** Some states require a weekly flush of the whirlpool mechanism with bleach and that the bleach remain in contact for over eight hours. Salons should consult state cosmetology regulations to make sure they are in compliance.
- **Read all labels and instruction manuals:** Always follow label directions for disinfectant products, and consult operating manuals for foot spa basins. Care should be taken to use appropriate doses of products to prevent damage to foot spas.
- **Know the condition of your equipment:** If your whirlpool foot spa has not been regularly cleaned and disinfected, you may need to do more than just the maintenance steps listed above to remove bacterial buildup from the system. Consult the foot spa manufacturer for further information. A higher level EPA-registered disinfectant, such as those labeled "Tuberculocides," may be used initially. Once the system has been adequately disinfected, regular maintenance with cleaning and use of a hospital disinfectant, as described in this document, may be used.

North Carolina Administrative Code for Cosmetology: Title 21, Chapter 14, Subchapter H

SECTION .0100 - SANITATION

21 NCAC 14H .0101—COPY OF RULES TO COSMETOLOGY STUDENTS

Cosmetic art schools shall give a copy of the sanitation rules governing the practice of the cosmetic arts to each student for study.

History Note: Authority G.S. 88-23; 88-30; Eff. February 1, 1976; Amended Eff. April 1, 1991; January 1, 1989.

21 NCAC 14H .0102—COPY OF RULES TO BEAUTY ESTABLISHMENTS

The Board shall give copies of the rules of sanitation governing the practice of cosmetic art to all beauty establishments.

History Note: Authority G.S. 88-23; 88-30; Eff. February 1, 1976; Amended Eff. April 1, 1991; January 1, 1989.

21 NCAC 14H .0103—FAILURE TO ADHERE TO RULES

21 NCAC 14H .0104—BUILDING

History Note: Authority G.S. 88-23; Eff. February 1, 1976; Repealed Eff. January 1, 1989.

21 NCAC 14H .0105—SANITARY RATINGS AND POSTING OF RATINGS

History Note: Authority G.S. 88B-4; 88B-23; 88B-24; Eff. February 1, 1976; Amended Eff. January 1, 2011; June 1, 2009; June 1, 2007; August 1, 1998; June 1, 1994; April 1, 1991; January 1, 1989; Repealed Eff. September 1, 2012.

21 NCAC 14H .0106—RESIDENTIAL BEAUTY SHOPS

History Note: Authority G.S. 88-23; Eff. February 1, 1976; Repealed Eff. January 1, 1989.

21 NCAC 14H .0107—WATER SUPPLY

21 NCAC 14H .0108—FLOOR COVERINGS

21 NCAC 14H .0109—VENTILATION AND LIGHT

21 NCAC 14H .0110—BATHROOM FACILITIES

21 NCAC 14H .0111—CLEANLINESS OF OPERATORS

21 NCAC 14H .0112—CLEANLINESS OF CLINIC AREA

21 NCAC 14H .0113—CLEANLINESS OF SCISSORS: SHEARS: RAZORS AND OTHER EQUIPMENT

21 NCAC 14H .0114—CARE OF CREAMS: LOTIONS: AND COSMETICS

21 NCAC 14H .0115—FIRST AID

History Note: Authority G.S. 88B-4; 88B-4(a)(9); 88B-14; 88-23; Eff. February 1, 1976; Amended Eff. August 1, 1998; June 1, 1994; April 1, 1991; January 1, 1989; April 1, 1988; Temporary Amendment Eff. January 20, 1999; Amended Eff. April 1, 2011; January 1, 2011; July 1, 2010; December 1, 2008; January 1, 2008; October 1, 2006; February 1, 2006 November 1, 2005; December 1, 2004; September 1, 2004; February 1, 2004; August 1, 2000; Repealed Eff. September 1, 2012.

21 NCAC 14H .0116—HEALTH OF OPERATORS

History Note: Authority G.S. 88-23; 88-26(3); Eff. February 1, 1976; Amended Eff. January 1, 1989; Repealed Eff. December 1, 2008.

21 NCAC 14H .0117—ANIMALS

21 NCAC 14H .0118—SYSTEMS OF GRADING BEAUTY ESTABLISHMENTS

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-17; 88B-23; Eff. February 1, 1976; Amended Eff. August 1, 1998; June 1, 1994; April 1, 1991; January 1, 1989; Temporary Amendment Eff. January 20, 1999; Amended Eff. Amended Eff. July 1, 2010; December 1, 2008; August 1, 2000; Repealed Eff. September 1, 2012.

21 NCAC 14H .0119—NOTICE TO BOARD

History Note: Authority G.S. 88-23; 88-29; Eff. March 1, 1993; Amended Eff. March 1, 1994; Repealed Eff. August 1, 1998.

21 NCAC 14H .0120—WHIRLPOOL, FOOTSPA AND FACIAL STEAMER SANITATION

History Note: Authority G.S. 88B-4; 88B-14; Eff. February 1, 2004; Amended Eff. January 1, 2011; December 1, 2008; May 1, 2007; October 1, 2006; November 1, 2005; Repealed Eff. September 1, 2012.

21 NCAC 14H .0121—PROHIBITED PRACTICES

History Note: Authority G.S. 88B-2; 88B-4; Eff. April 1, 2004; Amended Eff. January 1, 2011; January 1, 2008; May 1, 2007; December 1, 2004; Repealed Eff. September 1, 2012.

SECTION .0200 - SHOP LICENSING AND PHYSICAL DIMENSIONS

21 NCAC 14H .0201—APPLICATION FOR SHOP LICENSE

- (a) Rules in this Subchapter apply to all cosmetic art shops making initial application to operate a cosmetic art shop after the effective date of these Rules.
- (b) Shops licensed prior to March 1, 2012 may choose to comply with Rules .0202, .0203(c), .0204 and .0301 of this Subchapter.
- (c) Shops licensed prior to March 1, 2012 must comply with Rules .0201, .0203(a)-(b), .0302-.0304 and Sections .0400 and .0500 of this Subchapter.
- (d) Shops licensed prior to March 1, 2012 that make any structural changes must come into compliance with all rules in this Subchapter.
- (e) Persons desiring to open a cosmetic art shop in the State of North Carolina shall make application to the North Carolina State Board of Cosmetic Art

SECTION .0300 - COSMETIC ART SHOP AND EQUIPMENT

Examiner on the Board's application form. Persons desiring to change ownership of a cosmetic art shop, relocate or reopen a shop which has been closed more than 90 days shall make application to the North Carolina State Board of Cosmetic Art Examiner on the Board's application form.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-22; Eff. April 1, 2012.

21 NCAC 14H .0202—RESERVED FOR FUTURE CODIFICATION

21 NCAC 14H .0203—NEWLY ESTABLISHED SHOPS

- (a) A cosmetic art shop shall be separate and apart from any building or room used for any other business or purpose, separated by a solid wall of at least seven feet in height and must have a separate outside entrance.
- (b) A newly established cosmetic art shop, shall be separate and apart from any building or room used for living, dining or sleeping and shall be separate and apart from any other room used for any other purpose by a solid wall of ceiling height, making separate and apart rooms used for a cosmetic art shop. All entrances to the cosmetic art shop shall be through solid, full length doors installed in solid walls of ceiling height.
- (c) A residential cosmetic art shop shall furnish bathroom facilities separate and apart from the residence.
- (d) An entrance to a cosmetic art shop from a passageway, walkway or mall area used only for access to the shop, or to the shop and other businesses, may be open.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.

21 NCAC 14H .0204—DIMENSIONS WITHIN COSMETIC ART SHOPS

Within the clinic area each shop shall maintain no less than the following working distances:

- (1) 48 inches of space from the center to the center of each styling chair, esthetics table or manicuring table;
- (2) 24 inches from the center of the chair forward;
- (3) 48 inches from the backrest behind the chair to any other styling chair, esthetics table or manicuring table; and
- (4) at least 30 inches of space from the back of each styling chair, esthetics table or manicuring table to the wall of the shop.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.

21 NCAC 14H .0301—WATER

- (a) Cosmetic art shops shall have a sink with hot and cold running water in the clinic area, separate from restrooms.
- (b) When a service is provided in a room closed off by a door, the sink required in this Rule must be within 20 feet of the door or 25 feet from the service table or chair. The restroom sink shall not be used to meet this requirement.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012; Amended Eff. June 1, 2013.

21 NCAC 14H .0302—VENTILATION AND LIGHT

- (a) Ventilation shall be provided at all times in the areas where patrons are serviced in all cosmetic art shops and there must be a continuous exchange of air.
- (b) All doors and windows, if open for ventilation, must be effectively screened.
- (c) Light shall be provided in the service area.
- (d) All cosmetic art shops must adhere to any federal, state and local government regulation or ordinance regarding fire safety codes, plumbing and electrical work.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.

21 NCAC 14H .0303—BATHROOM FACILITIES

- (a) Toilet and hand washing facilities consisting of at least one commode and one hand washing sink with hot and cold running water, liquid soap and individual clean towels or hand air dryer shall be provided.
- (b) Shops with an initial licensure date after March 1, 2012 must have toilet and hand washing facilities in the bathroom.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.

21 NCAC 14H .0304—EQUIPMENT

Cosmetic art shops shall maintain equipment and supplies to safely perform any cosmetic art service offered in the shop.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.

SECTION .0400 - SANITATION PROCEDURES AND PRACTICES

21 NCAC 14H .0401—LICENSEES AND STUDENTS

- (a) Notwithstanding Rule .0201 in this Subchapter, this Rule applies to licensees and students in practice in cosmetic art schools and shops. Each licensee and student shall wash his or her hands with soap and water or an equally effective cleansing agent immediately before and after serving each client.
- (b) Each licensee and student shall wear clean garments and shoes while serving patrons.
- (c) Licensees or students shall not use or possess in a cosmetic art school or shop any of the following:
 - (1) Methyl Methacrylate Liquid Monomer, a.k.a. MMA;
 - (2) razor-type callus shavers designed and intended to cut growths of skin including skin tags, corns, and calluses;
 - (3) FDA rated Class III devices;
 - (4) carbolic acid (phenol) over two percent strength;
 - (5) animals including insects, fish, amphibians, reptiles, birds, or non-human mammals to perform any service; or
 - (6) a variable speed electrical nail file on a natural nail unless it has been designed for use on a natural nail.
- (d) A licensee or student shall not:
 - (1) use any product, implement, or piece of equipment in any manner other than the product's, implement's, or equipment's intended use as described or detailed by the manufacturer;
 - (2) treat any medical condition unless referred by a physician;
 - (3) provide any service unless trained prior to performing the service;
 - (4) perform services on a client if the licensee has reason to believe the client has any of the following:
 - (A) fungus, lice, or nits;
 - (B) an inflamed, infected, broken, raised, or swollen skin or nail tissue in the area to be worked on; or
 - (C) an open wound or sore in the area to be worked on;
 - (5) alter or duplicate a license issued by the Board;

- (6) advertise or solicit clients in any form of communication in a manner that is false or misleading;
 - (7) use any FDA rated Class II device without the documented supervision of a licensed physician;
 - (8) use any product that will penetrate the dermis; or
 - (9) make any statement to a member of the public either verbally or in writing stating or implying action is required or forbidden by Board rules when such action is not required or forbidden by Board rules. A violation of this prohibition is considered practicing or attempting to practice by fraudulent misrepresentation.
- (e) In using a disinfectant, the user shall wear any personal protective equipment, such as gloves, recommended by the manufacturer in the Material Safety Data Sheet.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-24; Eff. April 1, 2012; Amended Eff. August 1, 2014; March 1, 2013.

21 NCAC 14H .0402—COSMETIC ART SHOPS AND SCHOOLS

- (a) Notwithstanding Rule .0201 in this Subchapter, this Rule applies to all cosmetic art schools and shops. A cosmetic art school or shop shall be kept clean.
- (b) Waste material shall be kept in receptacles with a disposable liner. The area surrounding the waste receptacles shall be maintained in a sanitary manner.
- (c) All doors and windows shall be kept clean.
- (d) Furniture, equipment, floors, walls, ceilings and fixtures must be clean and in good repair.
- (e) Animals or birds shall not be in a cosmetic art shop or school. Fish in an enclosure and animals trained for the purpose of accompanying disabled persons are exempt from the prohibition in this Paragraph.
- (f) Cosmetic art shops and schools shall designate the entrance by a sign or lettering.
- (g) The owner of a cosmetic art shop or school shall not post any sign that states or implies that some action is required or forbidden by Board rules when such action is not required or forbidden by Board rules. A violation of this prohibition is considered practicing or attempting to practice by fraudulent misrepresentation.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-24; Eff. April 1, 2012; Amended Eff. March 1, 2013.

21 NCAC 14H .0403—DISINFECTION PROCEDURES

- (a) Sanitation rules which apply to towels and cloths are as follows:
- (1) Clean protective capes, drapes, linens and towels shall be used for each patron;
 - (2) After a protective cape has been in contact with a patron's neck it shall be placed in a clean, closed container until laundered with soap and hot water and dried in a heated dryer. Capes that cannot be laundered and dried in a heater dryer may be disinfected with an EPA registered hospital grade disinfectant mixed and used in accordance with the manufacturer directions; and
 - (3) After a drape, linen or towel has been in contact with a patron's skin it shall be placed in a clean, covered container until laundered with soap and hot water and dried in a heated dryer. A covered container may have an opening so soiled items may be dropped into the container.
- (b) Any paper or nonwoven protective drape or covering shall be discarded after one use.
- (c) There shall be a supply of clean protective drapes, linens and towels at all times.
- (d) Clean drapes, capes, linens, towels and all other supplies shall be stored in a clean area.
- (e) Bathroom facilities must be kept cleaned.
- (f) All implements shall be cleaned and disinfected after each use in the following manner:
- (1) They shall be washed with warm water and a cleaning solution and scrubbed to remove debris and dried.
 - (2) They shall be disinfected in accordance with the following:
 - (A) EPA registered hospital/pseudomonacidal (bactericidal, virucidal, and fungicidal) or tuberculocidal that is mixed and used according to the manufacturer's directions. They shall be rinsed with hot tap water and dried with a clean towel before their next use. They shall be stored in a clean, closed cabinet or container until they are needed; or
 - (B) 1 and 1/3 cup of 5.25 percent household bleach to one gallon of water for 10 minutes. They shall be rinsed with hot tap water and dried with a clean towel before their next use. They shall be stored in a clean, closed cabinet or container until they are needed; or
 - (C) UV-C, ultraviolet germicidal irradiation used accordance with the manufacturer's directions.
- (3) If the implement is not immersible or is not disinfected by UV-C irradiation, it shall be cleaned by wiping it with a clean cloth moistened or sprayed with a disinfectant EPA registered, hospital/pseudomonacidal (bactericidal, virucidal, and fungicidal) or tuberculocidal, used in accordance with the manufacturer's directions.
- (4) Implements that come in contact with blood, shall be disinfected by:
- (A) disinfectant, used in accordance with the manufacturer's instructions, that states the solution will destroy HIV, TB or HBV viruses and approved by the Federal Environmental Protection Agency; or
 - (B) EPA registered hospital/pseudomonacidal (bactericidal, virucidal, and fungicidal) and tuberculocidal that is mixed and used according to the manufacturer's directions; or
 - (C) household bleach in a 10 percent solution (1 and 2/3 cup of bleach to 1 gallon of water) for 10 minutes.
- (g) All disinfected non-electrical implements shall be stored in a clean closed cabinet or clean closed container.
- (h) All disinfected electrical implements shall be stored in a clean area.
- (i) Disposable and porous implements and supplies must be discarded after use or upon completion of the service.
- (j) Product that comes into contact with the patron must be discarded upon completion of the service.
- (k) Clean, closable storage must be provided for all disinfected implements not in use. Containers with open faces may be covered/closed with plastic wrapping. Disinfected implements must be kept in a clean closed cabinet or clean closed container and must not be stored with any implement or item that has not been disinfected.
- (l) Lancets, disposable razors, and other sharp objects shall be disposed in puncture-resistant containers.
- (m) All creams, lotions, wax, cosmetics, and other products dispensed to come in contact with patron's skin must be kept in clean, closed containers, and must conform in all respects to the requirements of the Pure Food and Drug Law. Any product apportioned for use and removed from original containers must be distributed in a sanitary manner that prevents contamination of product or container. Any product dispensed in

portions into another container must be dispensed into a sanitized container and applied to patrons by means of a disinfected or disposable implement or other sanitized methods. Any product dispensed in portions not dispensed into another container must be used immediately and applied to patrons by means of a disinfected or disposable implement or other sanitized methods. No product dispensed in portions may be returned to the original container.

- (n) As used in this Rule whirlpool or footspa means any basin using circulating water.
- (o) After use by each patron each whirlpool or footspa must be cleaned and disinfected as follows:
 - (1) All water must be drained and all debris removed from the basin;
 - (2) The basin must be disinfected by filling the basin with water and circulating:
 - (A) Two tablespoons of automatic dishwashing powder and 1/4 cup of 5.25 percent household bleach to one gallon of water through the unit for 10 minutes; or
 - (B) Surfactant or enzymatic soap with an EPA registered disinfectant with bactericidal, tuberculocidal, fungicidal and virucidal activity used according to manufacturer's instructions through the unit for 10 minutes;
 - (3) The basin must be drained and rinsed with clean water; and
 - (4) The basin must be wiped dry with a clean towel.
- (p) At the end of the day each whirlpool or footspa must be cleaned and disinfected as follows:
 - (1) The screen must be removed and all debris trapped behind the screen removed;
 - (2) The screen and the inlet must be washed with surfactant or enzymatic soap or detergent and rinsed with clean water;
 - (3) Before replacing the screen one of the following procedures must be performed:
 - (A) The screen must be totally immersed in a household bleach solution of 1/4 cup of 5.25 percent household bleach to one gallon of water for 10 minutes; or
 - (B) The screen must be totally immersed in an EPA registered disinfectant with bactericidal tuberculocidal, fungicidal and virucidal activity in accordance to the manufacturer's instructions for 10 minutes;
 - (4) The inlet and area behind the screen must be cleaned with a brush and surfactant soap and

water to remove all visible debris and residue; and

- (5) The spa system must be flushed with low sudsing surfactant or enzymatic soap and warm water for at least 10 minutes and then rinsed and drained.
- (q) Every week after cleaning and disinfecting pursuant to Paragraphs (a) and (b) of this Rule each whirlpool and footspa must be cleaned and disinfected in the following manner:
 - (1) The whirlpool or footspa basin must be filled with water and 1/4 cup of 5.25 percent household bleach for each one gallon of water or EPA registered disinfectant with bactericidal, tuberculocidal, fungicidal and virucidal activity in accordance to the manufacturer's instructions; and
 - (2) The whirlpool or footspa system must be flushed with the bleach and water or EPA registered disinfectant solution for 10 minutes and allowed to sit for at least six hours; and
 - (3) The whirlpool or footspa system must be drained and flushed with water before use by a patron.
- (r) A record must be made of the date and time of each cleaning and disinfecting as required by this Rule including the date, time, reason and name of the staff member who performed the cleaning. This record must be made for each whirlpool or footspa and must be kept and made available for at least 90 days upon request by either a patron or inspector.
- (s) The water in a vaporizer machine must be emptied daily and the unit disinfected daily after emptying.
- (t) The area where services are performed that come in contact with the patron's skin including treatment chairs, treatment tables and beds shall be disinfected between patrons.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.

21 NCAC 14H .0404—FIRST AID

- (a) Each cosmetic art shop and school must have antiseptics, gloves or finger guards, sterile bandages and other necessary supplies available to provide first aid.
- (b) If the skin of the licensee or student is punctured, the licensee or student shall immediately do the following:
 - (1) Apply antiseptic and a sterilized bandage;
 - (2) Disinfect any implement exposed to blood before proceeding; and
 - (3) Put on disposable, protective gloves or a finger guard.

- (c) If the skin of the patron is punctured, the licensee or student shall immediately do the following:
 - (1) Make available to the patron antiseptic and a sterilized bandage;
 - (2) Disinfect any implement exposed to blood before proceeding; and
 - (3) Put on disposable, protective gloves or a finger guard.
- (2) all establishments receiving a rating of at least 80 percent, and less than 90 percent, shall be awarded grade B;
- (3) all establishments receiving a rating of at least 70 percent or more, and less than 80 percent shall be awarded grade C;
- (4) any cosmetic art shop or school with a sanitation grade of 70 percent or below shall be awarded a failed inspection notice.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.

SECTION .0500 - ENFORCEMENT, MAINTENANCE OF LICENSURE

21 NCAC 14H .0501—INSPECTION OF COSMETIC ART SHOPS

- (a) A newly established cosmetic art shop, a shop which has been closed for more than 90 days, or a shop which has changed ownership must file an application for licensure with the Board prior to opening. A newly established cosmetic art shop, a shop which has been closed for more than 90 days, a shop which has changed ownership or a shop which has been operating without a license shall be inspected before a license will be issued.
- (b) Each cosmetic art shop must pass inspection by an agent of the Board pursuant to this Subchapter. Inspections shall be conducted annually and may be conducted without notice.
- (b) Every beauty establishment shall be given a sanitary rating. A cosmetic art school shall be graded no less than three times a year, and a cosmetic art shop shall be graded once a year.
- (c) The sanitary rating or failed inspection notice given to a beauty establishment shall be posted in plain sight near the front entryway at all times.
- (d) All new establishments must receive a rating of at least 90 percent before a license will be issued.
- (e) The operation of a cosmetic art shop or school which fails to receive a sanitary rating of at least 70 percent (grade C) shall be sufficient cause for revoking or suspending the license.
- (f) A re-inspection for the purpose of raising the sanitary rating of a beauty establishment shall not be given within 30days of the last inspection unless the rating at the last inspection was less than 80 percent.
- (g) A whirlpool and footspa sanitation record must be kept on each whirlpool and footspa for inspection on a form provided by the Board.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-27; Eff. April 1, 2012.

21 NCAC 14H .0502—FAILURE TO PERMIT INSPECTION

If an inspector is twice unable to inspect a salon after making an appointment to inspect the salon the Board may initiate proceedings to revoke or suspend the salon license or may refuse to renew the shop license.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-27; Eff. April 1, 2012.

21 NCAC 14H .0503—SANITARY RATINGS AND POSTING OF RATINGS

- (a) The sanitary rating of a beauty establishment shall be based on a system of grading outlined in this Subchapter. Based on the grading, all establishments shall be rated in the following manner:
 - (1) all establishments receiving a rating of at least 90 percent or more shall be awarded a grade A;

- (h) All cosmetic art shops and schools with a failed inspection report shall be sufficient cause for the immediate suspension of licensure. All cosmetic art shops and schools with a failed inspection report must close until the sanitation conditions have improved to be awarded a passing grade.
- (i) Mobile cosmetic art shops and schools are prohibited.
- (j) A copy of the itemized and graded inspection report must be provided to the operator at the time of the inspection.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-26; 88B-27; Eff. April 1, 2012.

21 NCAC 14H .0504—SYSTEMS OF GRADING BEAUTY ESTABLISHMENTS

The system of grading the sanitary rating of cosmetic art schools and shops based on the rules set out in this subchapter shall be as follows, setting out areas to be inspected and considered, and the maximum points given for compliance:

Sanitation	Point Value
Each licensee and student shall wash his or her hands with soap and water or an equally effective cleansing agent immediately before and after serving each client.	2
Each licensee and student shall wear clean garments and shoes while serving patrons.	2
The cosmetic art facility shall be kept clean.	3
Waste material shall be kept in receptacles with a disposable liner. The area surrounding the waste receptacles shall be maintained in a sanitary manner.	4
All doors and windows shall be kept clean.	2
Furniture, equipment, floors, walls, ceilings and fixtures shall be clean and in good repair.	3
Clean protective capes, drapes, linens, and towels shall be used for each patron.	3
After a cape, drape, linen, or towel has been in contact with a patron's skin, it shall be placed in a clean, closed container until laundered with soap and hot water and dried in a heated dryer.	5
Any paper or nonwoven protective drape or covering shall be discarded after one use.	2
There shall be a supply of clean protective drapes, linens and towels at all times.	2
Clean drapes, capes, linens, and towels shall be stored in a clean area.	5
Bathroom facilities shall be kept cleaned.	3
All implements shall be washed with warm water and a cleaning solution and scrubbed to remove debris and dried.	2
All implements shall be disinfected.	10
All disinfected electrical implements shall be stored in a clean area.	2
Disposable and porous implements and supplies shall be discarded after use or upon completion of the service.	10
Any product that comes into contact with the patron shall be discarded upon completion of the service.	3
Disinfected implements shall be kept in a clean closed cabinet or clean closed container and shall not be stored with any implement or item that has not been disinfected.	10
Lancets, disposable razors, and other sharp objects shall be disposed in puncture-resistant containers.	1
The presence of animals or birds. Fish in an enclosure and animals trained for the purpose of accompanying disabled persons are exempt.	1
All creams, lotions, wax, cosmetics, and other products dispensed to come in contact with patron's skin shall be kept in clean, closed containers and dispensed in a sanitary manner. No product dispensed in portions shall be returned to the container.	10
After each patron's use each whirlpool or footspa shall be cleaned and disinfected.	10
The water in a vaporizer machine shall be emptied daily and the unit disinfected daily.	2
The area where services are performed that come in contact with the patron's skin including chairs, tables, and beds shall be disinfected between patrons.	3

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-23; 88B-26; Eff. April 1, 2012; Amended Eff. August 1, 2014.

21 NCAC 14H .0505—RULE COMPLIANCE AND ENFORCEMENT MEASURES

- (a) The use of or possession of the following products or equipment in a school or shop shall result in civil penalty in the amount of three hundred dollars (\$300.00) per container of product or piece of equipment:
 - (1) Methyl Methacrylate Liquid Monomer a.k.a. MMA; or
 - (2) razor-type callus shavers designed and intended to cut growths of skin including skin tags, corns, and calluses.
- (b) The use of or possession of the following in a school or shop shall result in civil penalty in the amount of one hundred dollars (\$100.00) per use or possession:
 - (1) animals including insects, fish, amphibians, reptiles, birds, or non-human mammals to perform any service; or
 - (2) variable speed electrical nail file on the natural nail unless it has been designed for use on the natural nail.
- (c) The action of any student or licensee to violate the Board rules in the following manner shall result in civil penalty in the amount of one hundred dollars (\$100.00) per instance of each action:
 - (1) use of any product, implement, or piece of equipment in any manner other than the product's, implement's, or equipment's intended use as described or detailed by the manufacturer;
 - (2) treatment of any medical condition unless referred by a physician;
 - (3) use of any product that will penetrate the dermis;
 - (4) provision of any service unless trained prior to performing the service;
 - (5) performance of services on a client if the licensee has reason to believe the client has any of the following:
 - (A) fungus, lice, or nits;
 - (B) inflamed infected, broken, raised, or swollen skin or nail tissue in the area to be worked on; or
 - (C) an open wound or sore in the area to be worked on; or
 - (6) alteration of or duplication of a license issued by the Board;
- (7) advertisement or solicitation of clients in any form of communication in a manner that is false or misleading; or
- (8) use of any FDA rated Class II device without the documented supervision of a licensed physician.
- (d) The failure to record the date and time of each cleaning and disinfecting of a footspa in a cosmetic art school or shop as required by this Subchapter including the date, time, reason, and name of the staff member who performed the cleaning or the failure to keep or make such record available for at least 90 days upon request by either a patron or inspector shall result in civil penalty in the amount of twenty-five dollars (\$25.00) per footspa.
- (e) The failure to clean and disinfect a footspa in a cosmetic art shop or school as required by this Subchapter shall result in civil penalty in the amount of one hundred dollars (\$100.00) per footspa.
- (f) The failure to maintain in a cosmetic art shop and school antiseptics, gloves or finger guards, and sterile bandages available to provide first aid shall result in civil penalty in the amount of twenty-five dollars (\$25.00) per item.
- (g) The failure to maintain a sink with hot and cold running water in the clinic area, separate from restrooms, shall result in civil penalty in the amount of one hundred dollars (\$100.00).
- (h) The failure to provide ventilation at all times in the areas where patrons are serviced in cosmetic art shops shall result in civil penalty in the amount of twenty-five dollars (\$25.00).
- (i) The failure to screen all doors and windows open for ventilation shall result in civil penalty in the amount of twenty-five dollars (\$25.00).
- (j) The failure to maintain equipment and supplies necessary to perform any cosmetic art service offered in the shop shall result in civil penalty in the amount of one hundred dollars (\$100.00).
- (k) The failure to maintain a sanitation grade of 80 percent or higher shall result in a civil penalty in the amount of two hundred dollars (\$200.00).
- (l) Repeated violations of the rules in this Subchapter exceeding three written notifications of any one rule documented to any one individual, shop, or school shall result in a mandatory disciplinary hearing in accordance with 21 NCAC 14C.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-23; 88B-24; 88B-26; 88B-27; 88B-29; Eff. April 1, 2012; Amended Eff. August 1, 2014.

Business Practices for Salon Owners and Employees

Based on:

IRS Publications 583, 1779, *Tax Tips for the Cosmetology and Barber Industry*



Tax Tips for the Cosmetology and Barber Industry

Whether a shop owner, an employee, or a booth renter (independent contractor), you need to know your federal tax responsibilities, including how to report your income and tips you receive from your customers.

The most common forms of business are the sole proprietorship, partnership, and corporation. Your form of business determines which income tax return form you have to file. Publication 583, *Starting a Business and Keeping Records*, available free from the IRS, can help you decide.

The purpose of this publication is to describe some of the Federal tax responsibilities that owners and workers must address each day.

Shop Owner

As a shop owner you can elect to structure your business in different forms. You can choose to operate your business as a sole proprietorship, partnership, or as a corporation. Your business may have employees who work for you or you may decide to operate without employees. Another common arrangement is renting space to another individual who operates an independent business. This is commonly referred to as a booth renter and will be discussed later in this publication.

It doesn't matter which business structure you choose; there are basic principles that do not change. Income received in the course of your business is taxable income and must be reported on the appropriate income tax return form.

If you operate your business without employees, where you are the only worker, then your federal tax responsibilities would be limited to reporting your income earned (including tip income) and expenses on the appropriate tax form. For example, a sole proprietorship would file Form 1040, using Schedule C to report business income and expenses and Schedule SE to report Self-Employment tax.

Once you decide to hire workers you must make a determination if they are your employees or if they will operate their own independent business (booth renters).

Who is an Employee?

Simply stated, an employee is an individual who works at the control and direction of another. It is important to remember that as the employer you do not have to control the worker all of the time, you simply have to have the right to control. The following questions are helpful in determining if someone is your employee or an independent contractor:

- As the owner, do you establish the hours the shop is open?
- Who makes the determination regarding who works specific shifts?
- Do the workers purchase their own supplies with their own money?
- Who determines the prices charged to customers?
- Do the workers each set their own appointments?
- Who is responsible for expenses, such as insurance, advertising, etc.?

These questions are not all inclusive, but they will provide insight as to whether you are their employer. If you give extensive instructions as to how, when, or where to do the work and where to purchase the supplies, then more than likely you are the employer and the worker is your employee. For additional information, see Publication 1779, *Independent Contractor or Employee*, included at the end of this chapter.

Shop Owner/Employer Tax Responsibilities

As an employer, federal law requires you to withhold taxes from your employees' paychecks. Depending on the wages, you must take out of your employees' paychecks certain amounts for federal income tax, social security tax, and Medicare tax. You must then pay any liability for the employer's share of social security and Medicare taxes. This portion, your share, is not withheld from employees. You may also be required to pay unemployment (FUTA) taxes on these wages. In addition to reporting all taxable income on the appropriate income tax form, you would also have the responsibility for issuing Form W-2, *Wage and Tax Statement*.

The wages paid, along with the taxes withheld, are reported on a quarterly basis by filing Form 941, *Employer's QUARTERLY Federal Tax Return*. You may also be required to file an annual form to pay Federal unemployment taxes. This is done by filing Form 940, *Employer's Annual Federal Unemployment (FUTA) Tax Return*. Form W-2 is furnished to employees after the close of the calendar year, but no later than January 31st.

For more information about payroll taxes, see Publication 15 (*Circular E*), *Employer's Tax Guide* that you can download at www.irs.gov/businesses and click on the Employment Taxes link.

Booth Renters

A booth renter is someone who leases space from an existing business and operates their own business as an independent contractor. As a booth renter, or independent contractor, you are responsible for your own record-keeping and timely filing of returns and payments of taxes related to your business.

Indications that you are an independent contractor include, but are not limited to:

- Having a key to the establishment
- Setting your own hours
- Purchasing your own products
- Having your own phone number and business name
- Determining the prices to be charged

If these factors are not present, then you are likely an employee of the business who is providing the space to you.

If the above factors are present, then as an independent contractor you would be responsible for your federal taxes. Your tax responsibilities would include:

- Reporting all income (including tips) on the appropriate income tax return form, such as Form 1040, using Schedule C or Schedule C-EZ. Social Security and Medicare Taxes are reported on Schedule SE.
- As a booth renter you must issue Form 1099-MISC for business rent paid of more than \$600 or more to non-corporate landlords each year.
- Issue Form 1099 MISC or W-2 to workers you hire or employ.

As a booth renter, or independent contractor, you may need to make estimated tax payments during the year to cover your tax liabilities. This is because as a booth renter (independent contractor), the business does not withhold taxes from your pay. Estimated tax is the method used to pay tax on income that is not subject to withholding, such as earnings from self-employment you receive as a booth renter.

Estimated tax payments are made each quarter using Form 1040-ES, *Estimated Tax for Individuals*. For

additional information regarding tax withholding and estimated tax, see Publication 505, *Tax Withholding and Estimated Tax*.

If you hire others to work for you it is possible that these workers would be your employees. As a booth renter you can hire others to work for you as your employees. If you have employees in your business, you would be required to deduct from their pay social security, Medicare and federal income taxes. This would require you to file quarterly Forms 941, as well as an annual Form 940. You would also be required to file Forms W-2 for each employee who worked for you during the calendar year.

Tip Income Responsibilities for the Employer or Booth Renter

Tips are considered taxable income and are subject to Federal income taxes. Tips that your employee receives from customers are generally subject to withholding. Your employees must report tips they receive to you by the 10th of the month after the month that the tips are received. The report should include tips that you paid over to the employee from customers that added the tip to their charged or debit card receipt and tips that the employee received directly from customers.

You must collect income tax, employee social security tax, and employee Medicare tax on the employee's tips. For more information on the taxation of tips, see Publication 15, *Circular E – Employer's Tax Guide*, available free from the IRS.

Employees are required by law to keep a daily record of all tips they receive. The IRS furnishes free, Publication 1244, *Employee's Daily Record of Tips and Report to Employer*, which employees can use to record their tips on a daily basis. Publication 1244 includes Form 4070, *Employee's Report of Tips to Employer* and Form 4070A, *Employee's Daily Record of Tips*.

If you operate your own business as a sole proprietor or booth renter, any tips received in the normal course of your business must be reported in gross receipts, and then reported on the appropriate income tax form.

See Publication 531, *Reporting Tip Income*, for more information regarding tip income reporting.

Employee Tip Reporting Responsibilities

All tips you receive are income and are subject to federal income tax. You must include in gross income all tips you receive directly from customers, charged tips paid to you by your employer, and your share of any tips you receive under a tip-splitting or tip-pooling arrangement.

You can use Form 4070A, *Employee's Daily Record of Tips* to record your tips, or any diary of your choosing. You can also keep copies of documents that show your tips, such as customer receipts and credit card slips. Publication 1244 includes Form 4070, *Employee's Report*

of *Tips to Employer* and Form 4070A, *Employee's Daily Record of Tips*, available free from the IRS. You can use an electronic system provided by your employer to record your daily tips. If you do, you must receive and keep a copy of this record.

Reporting Tips to Your Employer

Why report tips to your employer? You must report tips to your employer so that:

- Your employer can withhold federal income tax and social security, Medicare, Additional Medicare, or railroad retirement taxes,
- Your employer can report the correct amount of your earnings to the Social Security Administration or Railroad Retirement Board (which affects your benefits when you retire or if you become disabled, or your family's benefits if you die), and
- You can avoid the penalty for not reporting tips to your employer (explained later).

What tips to report. Report to your employer only cash, check, and debit and credit card tips you receive.

If your total tips for any 1 month from any one job are less than \$20, do not report the tips for that month to that employer.

If you participate in a tip-splitting or tip-pooling arrangement, report only the tips you receive and retain. Do not report to your employer any portion of the tips you receive that you pass on to other employees. However, you must report tips you receive from other employees.

Do not report the value of any noncash tips, such as tickets or passes, to your employer. You do not pay social security, Medicare, Additional Medicare, or railroad retirement taxes on these tips.

How to report. If your employer does not give you any other way to report your tips, you can use Form 4070, *Employee's Report of Tips to Employer*. Fill in the information asked for on the form, sign and date the form, and give it to your employer. To get a 1-year supply of the form, ask the IRS or your employer for Publication 1244.

If you do not use Form 4070, give your employer a statement with the following information.

- Your name, address, and social security number.
- Your employer's name, address, and business name (if it is different from your employer's name).
- The month (or the dates of any shorter period) in which you received tips.
- The total tips required to be reported for that period.

You must sign and date the statement. Be sure to keep a copy with your tax or other personal records.

Your employer may require you to report your tips more than once a month. However, the statement cannot cover a period of more than 1 calendar month.

Electronic tip statement. Your employer can have you furnish your tip statements electronically.

When to report. Give your report for each month to your employer by the 10th of the next month. If the 10th falls on a Saturday, Sunday, or legal holiday, give your employer the report by the next day that is not a Saturday, Sunday, or legal holiday.

Example. You must report your tips received in September 2014 by October 10, 2014.

Final report. If your employment ends during the month, you can report your tips when your employment ends.

Penalty for not reporting tips. If you do not report tips to your employer as required, you may be subject to a penalty equal to 50% of the social security, Medicare, Additional Medicare, or railroad retirement taxes you owe on the unreported tips. The penalty amount is in addition to the taxes you owe. You can avoid this penalty if you can show reasonable cause for not reporting the tips to your employer. To do so, attach a statement to your return explaining why you did not report them.

Giving your employer money for taxes. Your regular pay may not be enough for your employer to withhold all the taxes you owe on your regular pay plus your reported tips. If this happens, you can give your employer money until the close of the calendar year to pay the rest of the taxes.

If you do not give your employer enough money, your employer will apply your regular pay and any money you give to the taxes, in the following order.

1. All taxes on your regular pay.
2. Social security, Medicare, Additional Medicare, or railroad retirement taxes on your reported tips.
3. Federal, state, and local income taxes on your reported tips.

Any taxes that remain unpaid can be collected by your employer from your next paycheck. If withholding taxes remain uncollected at the end of the year, you may be subject to a penalty for underpayment of estimated taxes. See Publication 505, *Tax Withholding and Estimated Tax*, for more information.

Tip Rate Determination and Education Program (TRD/EP)

Employers may participate in the Tip Rate Determination and Education program. The program consists of various voluntary agreements designed for specific industries where tipping is customary. There is one designed specifically for this industry. TRAC, Tip Reporting Alternative Commitment, has characteristics unique to the Cosmetology and Barber industry.

The IRS developed this program to encourage voluntary compliance with tip income reporting through outreach and education and using enforcement actions as a last resort.

To learn more about the voluntary agreement program, access the irs.gov website at Market Segment Understandings (MSU).

You can get copies of the forms and publications referenced in this publication, at www.irs.gov.

What Can You Claim for Taxes as a Self-Employed Cosmetologist?

Self-employed cosmetologists may rent a work space in someone else's salon ("booth renter"), work out of their home or own their own business. In any of these cases, cosmetologists are entitled to deduct business expenses. To insure that you are able to calculate and claim all allowable deductions, keep records of all your income and expenses.

Advertising Expense

You probably need to advertise your business throughout the year. You can claim advertising expenses such as business cards, website setup and maintenance, printing and paper expense for fliers, phone book ad fees, radio ads fees and newspaper ad fees. You can even deduct the cost of an ad placed in a school yearbook or special event program.

Supplies and Equipment

The bulk of your expenses will be for hair supplies. Such supplies include scissors, clippers, combs, brushes, mirrors, hair products, hair dye, capes, hair dryers, curling irons and straightening irons. Also make sure to claim purchases such as hair washing bowls, hair washing sinks, swivel chairs, even brooms and dustpans. Also deductible are expenses for towel services, sharpening services and equipment repairs.

Professional Expenses

Cosmetologists can deduct professional expenses such as fees required to obtain cosmetologist licenses and business licenses. Also, you may deduct fees paid for tax preparation and premiums paid for professional liability insurance.

Rent or Mortgage

If you rent a booth at a salon, you can claim the rent you pay each year for the booth. If you work out of your home, you can claim a home office expense. If you own the salon real estate, you can deduct the costs of the mortgage and insurance, and deduct the gradual depreciation of the property.

Repairs & Maintenance

This category applies mainly to salon owners. You can

write off things such as fees paid to someone to clean your salon, floor maintenance (waxing & buffing) and any repairs that had to be made to your salon for upkeep.

Travel

You also may be able to deduct an amount for mileage. You can not typically deduct the cost of going from your home to your place of work, but you usually can deduct a mileage expense for obtaining beauty supplies and products and driving to beauty shows and continuing education classes. If you went away for a beauty trade show or conference, you may deduct the cost of getting to and from the event (plane or train tickets or mileage if you drove your own car) and the cost of food and lodging (hotel) while at the event.

Other Expenses

Other business expenses that you can claim include continuing-education classes, hair shows, hair magazine subscriptions, appointment books, pens and postage and envelopes for mailing business-related correspondence. You will be responsible for your own health and disability insurance, and can often deduct the premiums for these, or at least a certain percentage. If you employ other cosmetologists or helpers, you can deduct employee salaries and health insurance premiums you pay for them.

Claiming Deductions

You can claim business deductions against business income by filing a Schedule C, Profit or Loss from Business, along with your Form 1040. You cannot file Form 1040EZ for this purpose. Since you are self-employed, you must also file Schedule SE to file self-employment tax if your self-employment earnings exceed \$400 for the year.

Important IRS Forms and Publications

- Form 941: *Employer's QUARTERLY Federal Tax Return*
- Form 940: *Employer's Annual Federal Unemployment (FUTA) Tax Return*
- Form 1040-ES: *Estimated Tax for Individuals*
- Publication 15: *Circular E – Employer's Tax Guide*
- Publication 505: *Tax Withholding and Estimated Tax*
- Publication 531: *Reporting Tip Income*
- Publication 583: *Starting a Business and Keeping Records*
- Publication 1244: *Employee's Daily Record of Tips and Report to Employer*
- Publication 1779: *Independent Contractor or Employee*
- Publication 3144: *Tips on Tips for Employees*
- Publication 3148: *Tips on Tips for Employers*



Why Keep Records?

Everyone in business must keep records. Good records will help you do the following:

Monitor the progress of your business. You need good records to monitor the progress of your business. Records can show whether your business is improving, which items are selling, or what changes you need to make. Good records can increase the likelihood of business success.

Prepare your financial statements. You need good records to prepare accurate financial statements. These include income (profit and loss) statements and balance sheets. These statements can help you in dealing with your bank or creditors and help you manage your business. A balance sheet shows the assets, liabilities, and your equity in the business on a given date.

Identify source of receipts. You will receive money or property from many sources. Your records can identify the source of your receipts. You need this information to separate business from nonbusiness receipts and taxable from nontaxable income.

Keep track of deductible expenses. You may forget expenses when you prepare your tax return unless you record them when they occur.

Prepare your tax returns. You need good records to prepare your tax returns. These records must support the income, expenses, and credits you report. Generally, these are the same records you use to monitor your business and prepare your financial statements.

Support items reported on tax returns. You must keep your business records available at all times for inspection by the IRS. If the IRS examines any of your tax returns, you may be asked to explain the items reported. A complete set of records will speed up the examination.

Kinds of Records to Keep

Except in a few cases, the law does not require any specific kind of records. You can choose any recordkeeping system suited to your business that clearly shows your income and expenses.

The business you are in affects the type of records you need to keep for federal tax purposes. You should set up your recordkeeping system using an accounting method that clearly shows your income for your tax year (see IRS Publication 583 for more information). If you are in more than one business, you should keep a

complete and separate set of records for each business. A corporation should keep minutes of board of directors' meetings.

Your recordkeeping system should include a summary of your business transactions. This summary is ordinarily made in your books (for example, accounting journals and ledgers). Your books must show your gross income, as well as your deductions and credits. For most small businesses, the business checkbook (discussed later) is the main source for entries in the business books. In addition, you must keep supporting documents, explained later.

Electronic records. All requirements that apply to hard copy books and records also apply to electronic storage systems that maintain tax books and records. When you replace hard copy books and records, you must maintain the electronic storage systems for as long as they are material to the administration of tax law. An electronic storage system is any system for preparing or keeping your records either by electronic imaging or by transfer to an electronic storage media. The electronic storage system must index, store, preserve, retrieve and reproduce the electronically stored books and records in legible format. All electronic storage systems must provide a complete and accurate record of your data that is accessible to the IRS. Electronic storage systems are also subject to the same controls and retention guidelines as those imposed on your original hard copy books and records.

The original hard copy books and records may be destroyed provided that the electronic storage system has been tested to establish that the hard copy books and records are being reproduced in compliance with IRS requirements for an electronic storage system and procedures are established to ensure continued compliance with all applicable rules and regulations. You still have the responsibility of retaining any other books and records that are required to be retained.

The IRS may test your electronic storage system, including the equipment used, indexing methodology, software and retrieval capabilities. This test is not considered an examination and the results must be shared with you. If your electronic storage system meets the requirements mentioned earlier, you will be in compliance. If not, you may be subject to penalties for non-compliance, unless you continue to maintain your original hard copy books and records in a manner that allows you and the IRS to determine your correct tax. For details on electronic storage system requirements, see Revenue Procedure 97-22, available in Internal Revenue Bulletin 1997-13.

Supporting Documents

Purchases, sales, payroll, and other transactions you have in your business generate supporting documents. Supporting documents include sales slips, paid bills, invoices, receipts, deposit slips, and canceled checks. These documents contain information you need to record in your books.

It is important to keep these documents because they support the entries in your books and on your tax return. Keep them in an orderly fashion and in a safe place. For instance, organize them by year and type of income or expense.

Gross receipts. Gross receipts are the income you receive from your business. You should keep supporting documents that show the amounts and sources of your gross receipts. Documents that show gross receipts include the following:

- Cash register tapes.
- Bank deposit slips.
- Receipt books.
- Invoices.
- Credit card charge slips.
- Forms 1099-MISC.

Purchases. Purchases are the items you buy and resell to customers. If you are a manufacturer or producer, this includes the cost of all raw materials or parts purchased for manufacture into finished products. Your supporting documents should show the amount paid and that the amount was for purchases. Documents for purchases include the following.

- Canceled checks.
- Cash register tape receipts.
- Credit card sales slips.
- Invoices.

These records will help you determine the value of your inventory at the end of the year. See IRS Publication 538 for information on methods for valuing inventory.

Expenses. Expenses are the costs you incur (other than purchases) to carry on your business. Your supporting documents should show the amount paid and that the amount was for a business expense. Documents for expenses include the following.

- Canceled checks.
- Cash register tapes.
- Account statements.
- Credit card sales slips.
- Invoices.
- Petty cash slips for small cash payments.

A petty cash fund allows you to make small payments without having to write checks for small amounts. Each

time you make a payment from this fund, you should make out a petty cash slip and attach it to your receipt as proof of payment.

Travel, transportation, entertainment, and gift expenses. Specific recordkeeping rules apply to these expenses. For more information, see Publication 463.

Employment taxes. There are specific employment tax records you must keep. For a list, see Publication 15.

Assets. Assets are the property, such as machinery and furniture you own and use in your business. You must keep records to verify certain information about your business assets. You need records to figure the annual depreciation and the gain or loss when you sell the assets. Your records should show the following information:

- When and how you acquired the asset.
- Purchase price.
- Cost of any improvements.
- Section 179 deduction taken.
- Deductions taken for depreciation.
- Deductions taken for casualty losses, such as losses resulting from fires or storms.
- How you used the asset.
- When and how you disposed of the asset.
- Selling price.
- Expenses of sale.

The following documents may show this information.

- Purchase and sales invoices.
- Real estate closing statements.
- Canceled checks.

What if I don't have a canceled check? If you do not have a canceled check, you may be able to prove payment with certain financial account statements prepared by financial institutions. These include account statements prepared for the financial institution by a third party. These account statements must be highly legible. The following table lists acceptable account statements:

Proof of payment of an amount, by itself, does not establish you are entitled to a tax deduction. You should also keep other documents, such as credit card sales slips and invoices, to show that you also incurred the cost.

Recording Business Transactions

A good recordkeeping system includes a summary of your business transactions. (Your business transactions are shown on the supporting documents just discussed.) Business transactions are ordinarily summarized in books called journals and ledgers. You can buy them at your local stationery or office supply store.

IF payment is by...	THEN the statement must show the...
Check	Check number, amount, payee's name, date the check amount was posted to the account by the financial institution
Electronics funds transfer	Amount transferred, payee's name, date the transfer was posted to the account by the financial institution
Credit card	Amount charged, payee's name, transaction date

A journal is a book where you record each business transaction shown on your supporting documents. You may have to keep separate journals for transactions that occur frequently. A ledger is a book that contains the totals from all of your journals. It is organized into different accounts.

Whether you keep journals and ledgers and how you keep them depends on the type of business you are in. For example, a recordkeeping system for a small business might include the following items:

- Business checkbook.
- Daily summary of cash receipts.
- Monthly summary of cash receipts.
- Check disbursements journal.
- Depreciation worksheet.
- Employee compensation record.

The system you use to record business transactions will be more effective if you follow good recordkeeping practices. For example, record expenses when they occur, and identify the source of recorded receipts. Generally, it is best to record transactions on a daily basis.

Business checkbook. One of the first things you should do when you start a business is open a business checking account. You should keep your business account separate from your personal checking account.

The business checkbook is your basic source of information for recording your business expenses. You should deposit all daily receipts in your business checking account. You should check your account for errors by reconciling it.

Consider using a checkbook that allows enough space to identify the source of deposits as business income, personal funds, or loans. You should also note on the deposit slip the source of the deposit and keep copies of all slips.

You should make all payments by check to document business expenses. Write checks payable to yourself only when making withdrawals from your business for personal use. Avoid writing checks payable to cash. If you must write a check for cash to pay a business expense, include receipt for the cash payment in your records. If you cannot get a receipt for a cash payment, you should make an adequate explanation in your records at the time of payment.

Use the business account for business purposes only.

Indicate the source of deposits and the type of expense in the checkbook.

How Long to Keep Records

You must keep your records as long as they may be needed for the administration of any provision of the Internal Revenue Code. Generally, this means you must keep records that support an item of income or deduction on a return until the period of limitations for that return runs out. The period of limitations is the period of time in which you can amend your return to claim a credit or refund, or the IRS can assess additional tax. Table 3 contains the periods of limitations that apply to income tax returns. Unless otherwise stated, the years refer to the period after the return was filed. Returns filed before the due date are treated as filed on the due date.

Keep copies of your filed tax returns. They help in preparing future tax returns and making computations if you file an amended return.

Employment taxes. If you have employees, you must keep all employment tax records for at least 4 years after the date the tax becomes due or is paid, whichever is later. For more information about recordkeeping for employment taxes, see Publication 15.

Assets. Keep records relating to property until the period of limitations expires for the year in which you dispose of the property in a taxable disposition. You must keep these records to figure any depreciation, amortization, or depletion deduction, and to figure your basis for computing gain or loss when you sell or otherwise dispose of the property.

Generally, if you received property in a nontaxable exchange, your basis in that property is the same as the basis of the property you gave up, increased by any money you paid. You must keep the records on the old property, as well as on the new property, until the period of limitations expires for the year in which you dispose of the new property in a taxable disposition.

Records for nontax purposes. When your records are no longer needed for tax purposes, do not discard them until you check to see if you have to keep them longer for other purposes. For example, your insurance company or creditors may require you to keep them longer than the IRS does.

Table 3: Period of Limitations

IF you...	THEN the period is...
1. Owe additional tax and situations (2), (3), and (4), below, do not apply to you	3 years
2. Do not report income that you should report and it is more than 25% of the gross income shown on the return	6 years
3. File a fraudulent return	Not limited
4. Do not file a return	Not limited
5. File a claim for credit or refund after you filed your return	Later of: 3 years or 2 years after tax was paid
6. File a claim for a loss from worthless securities or a bad debt deduction	7 years



Independent Contractor or Employee

(from IRS Publication 1779)

Which are you?

For federal tax purposes, this is an important distinction. Worker classification affects how you pay your federal income tax, social security and Medicare taxes, and how you file your tax return. Classification affects your eligibility for social security and Medicare benefits, employer provided benefits and your tax responsibilities. If you aren't sure of your work status, you should find out now. This brochure can help you.

The courts have considered many facts in deciding whether a worker is an independent contractor or an employee. These relevant facts fall into three main categories: behavioral control; financial control; and relationship of the parties. In each case, it is very important to consider all the facts – no single fact provides the answer. Carefully review the following definitions.

Behavioral Control

These facts show whether there is a right to direct or control how the worker does the work. A worker is an employee when the business has the right to direct and control the worker. The business does not have to actually direct or control the way the work is done – as long as the employer has the right to direct and control the work. For example:

Instructions – if you receive extensive instructions on how work is to be done, this suggests that you are an employee. Instructions can cover a wide range of topics, for example:

- how, when, or where to do the work
- what tools or equipment to use
- what assistants to hire to help with the work
- where to purchase supplies and services

If you receive less extensive instructions about what should be done, but not how it should be done, you may be an independent contractor. For instance, instructions about time and place may be less important than directions on how the work is performed.

Training – if the business provides you with training about required procedures and methods, this indicates that the business wants the work done in a certain way, and this suggests that you may be an employee.

Financial Control

These facts show whether there is a right to direct or control the business part of the work. For example:

Significant Investment – if you have a significant investment in your work, you may be an independent contractor. While there is no precise dollar test, the investment must have substance. However, a significant investment is not necessary to be an independent contractor.

Expenses – if you are not reimbursed for some or all business expenses, then you may be an independent contractor, especially if your unreimbursed business expenses are high.

Opportunity for Profit or Loss – if you can realize a profit or incur a loss, this suggests that you are in business for yourself and that you may be an independent contractor.

Relationship of the Parties

These are facts that illustrate how the business and the worker perceive their relationship. For example:

Employee Benefits – if you receive benefits, such as insurance, pension, or paid leave, this is an indication that you may be an employee. If you do not receive benefits, however, you could be either an employee or an independent contractor.

Written Contracts – a written contract may show what both you and the business intend. This may be very significant if it is difficult, if not impossible, to determine status based on other facts.

When You Are an Employee...

- Your employer must withhold income tax and your portion of social security and Medicare taxes. Also, your employer is responsible for paying social

security, Medicare, and unemployment (FUTA) taxes on your wages. Your employer must give you a Form W-2, Wage and Tax Statement, showing the amount of taxes withheld from your pay.

- You may deduct unreimbursed employee business expenses on Schedule A of your income tax return, but only if you itemize deductions and they total more than two percent of your adjusted gross income.

When You Are an Independent Contractor...

- The business may be required to give you Form 1099-MISC, Miscellaneous Income, to report what it has paid to you.
- You are responsible for paying your own income tax and self-employment tax (Self-Employment Contributions Act – SECA). The business does not withhold taxes from your pay. You may need to make estimated tax payments during the year to cover your tax liabilities.
- You may deduct business expenses on Schedule C of your income tax return.

Beauty Academy

North Carolina Manicurist 8 CE Hour Class Evaluation

Name of Student/Date: _____ / _____

	<u>Low</u>				<u>High</u>	
Orientation was thorough and clear	1	2	3	4	5	
Organization of content	1	2	3	4	5	
Course objectives clearly stated	1	2	3	4	5	
Content was what I expected	1	2	3	4	5	
Satisfied with my learning experience	1	2	3	4	5	
Program met my needs	1	2	3	4	5	
Satisfied with customer service, if applicable	1	2	3	4	5	n/a

What suggestions do you have to improve this program, if any? _____

PULL OUT SECTION

SECTION .0400 - SANITATION PROCEDURES AND PRACTICES

21 NCAC 14H .0401—LICENSEES AND STUDENTS

- (a) Notwithstanding Rule .0201 in this Subchapter, this Rule applies to licensees and students in practice in cosmetic art schools and shops. Each licensee and student shall wash his or her hands with soap and water or an equally effective cleansing agent immediately before and after serving each client.
- (b) Each licensee and student shall wear clean garments and shoes while serving patrons.
- (c) Licensees or students shall not use or possess in a cosmetic art school or shop any of the following:
 - (1) Methyl Methacrylate Liquid Monomer, a.k.a. MMA;
 - (2) razor-type callus shavers designed and intended to cut growths of skin including skin tags, corns, and calluses;
 - (3) FDA rated Class III devices;
 - (4) carbolic acid (phenol) over two percent strength;
 - (5) animals including insects, fish, amphibians, reptiles, birds, or non-human mammals to perform any service; or
 - (6) a variable speed electrical nail file on a natural nail unless it has been designed for use on a natural nail.
- (d) A licensee or student shall not:
 - (1) use any product, implement, or piece of equipment in any manner other than the product's, implement's, or equipment's intended use as described or detailed by the manufacturer;
 - (2) treat any medical condition unless referred by a physician;
 - (3) provide any service unless trained prior to performing the service;
 - (4) perform services on a client if the licensee has reason to believe the client has any of the following:
 - (A) fungus, lice, or nits;
 - (B) an inflamed, infected, broken, raised, or swollen skin or nail tissue in the area to be worked on; or
 - (C) an open wound or sore in the area to be worked on;

- (5) alter or duplicate a license issued by the Board;
 - (6) advertise or solicit clients in any form of communication in a manner that is false or misleading;
 - (7) use any FDA rated Class II device without the documented supervision of a licensed physician;
 - (8) use any product that will penetrate the dermis; or
 - (9) make any statement to a member of the public either verbally or in writing stating or implying action is required or forbidden by Board rules when such action is not required or forbidden by Board rules. A violation of this prohibition is considered practicing or attempting to practice by fraudulent misrepresentation.
- (e) In using a disinfectant, the user shall wear any personal protective equipment, such as gloves, recommended by the manufacturer in the Material Safety Data Sheet.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-24; Eff. April 1, 2012; Amended Eff. August 1, 2014; March 1, 2013.

21 NCAC 14H .0402—COSMETIC ART SHOPS AND SCHOOLS

- (a) Notwithstanding Rule .0201 in this Subchapter, this Rule applies to all cosmetic art schools and shops. A cosmetic art school or shop shall be kept clean.
- (b) Waste material shall be kept in receptacles with a disposable liner. The area surrounding the waste receptacles shall be maintained in a sanitary manner.
- (c) All doors and windows shall be kept clean.
- (d) Furniture, equipment, floors, walls, ceilings and fixtures must be clean and in good repair.
- (e) Animals or birds shall not be in a cosmetic art shop or school. Fish in an enclosure and animals trained for the purpose of accompanying disabled persons are exempt from the prohibition in this Paragraph.
- (f) Cosmetic art shops and schools shall designate the entrance by a sign or lettering.
- (g) The owner of a cosmetic art shop or school shall not post any sign that states or implies that some action is required or forbidden by Board rules when such action is not required or forbidden by Board rules. A violation of this prohibition is considered practicing or attempting to practice by fraudulent misrepresentation.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; 88B-24; Eff. April 1, 2012; Amended Eff. March 1, 2013.

21 NCAC 14H .0403—DISINFECTION PROCEDURES

- (a) Sanitation rules which apply to towels and cloths are as follows:
- (1) Clean protective capes, drapes, linens and towels shall be used for each patron;
 - (2) After a protective cape has been in contact with a patron's neck it shall be placed in a clean, closed container until laundered with soap and hot water and dried in a heated dryer. Capes that cannot be laundered and dried in a heater dryer may be disinfected with an EPA registered hospital grade disinfectant mixed and used in accordance with the manufacturer directions; and
 - (3) After a drape, linen or towel has been in contact with a patron's skin it shall be placed in a clean, covered container until laundered with soap and hot water and dried in a heated dryer. A covered container may have an opening so soiled items may be dropped into the container.
- (b) Any paper or nonwoven protective drape or covering shall be discarded after one use.
- (c) There shall be a supply of clean protective drapes, linens and towels at all times.
- (d) Clean drapes, capes, linens, towels and all other supplies shall be stored in a clean area.
- (e) Bathroom facilities must be kept cleaned.
- (f) All implements shall be cleaned and disinfected after each use in the following manner:
- (1) They shall be washed with warm water and a cleaning solution and scrubbed to remove debris and dried.
 - (2) They shall be disinfected in accordance with the following:
 - (A) EPA registered hospital/pseudomonacidal (bactericidal, virucidal, and fungicidal) or tuberculocidal that is mixed and used according to the manufacturer's directions. They shall be rinsed with hot tap water and dried with a clean towel before their next use. They shall be stored in a clean, closed cabinet or container until they are needed; or
 - (B) 1 and 1/3 cup of 5.25 percent household bleach to one gallon of water for 10 minutes. They shall be rinsed with hot tap water and dried with a clean towel before their next use. They shall be stored in a clean, closed cabinet or container until they are needed; or
 - (C) UV-C, ultraviolet germicidal irradiation used accordance with the manufacturer's directions.
 - (3) If the implement is not immersible or is not disinfected by UV-C irradiation, it shall be cleaned by wiping it with a clean cloth moistened or sprayed with a disinfectant EPA registered, hospital/pseudomonacidal (bactericidal, virucidal, and fungicidal) or tuberculocidal, used in accordance with the manufacturer's directions.
- (4) Implements that come in contact with blood, shall be disinfected by:
- (A) disinfectant, used in accordance with the manufacturer's instructions, that states the solution will destroy HIV, TB or HBV viruses and approved by the Federal Environmental Protection Agency; or
 - (B) EPA registered hospital/pseudomonacidal (bactericidal, virucidal, and fungicidal) and tuberculocidal that is mixed and used according to the manufacturer's directions; or
 - (C) household bleach in a 10 percent solution (1 and 2/3 cup of bleach to 1 gallon of water) for 10 minutes.
- (g) All disinfected non-electrical implements shall be stored in a clean closed cabinet or clean closed container.
- (h) All disinfected electrical implements shall be stored in a clean area.
- (i) Disposable and porous implements and supplies must be discarded after use or upon completion of the service.
- (j) Product that comes into contact with the patron must be discarded upon completion of the service.
- (k) Clean, closable storage must be provided for all disinfected implements not in use. Containers with open faces may be covered/closed with plastic wrapping. Disinfected implements must be kept in a clean closed cabinet or clean closed container and must not be stored with any implement or item that has not been disinfected.
- (l) Lancets, disposable razors, and other sharp objects shall be disposed in puncture-resistant containers.
- (m) All creams, lotions, wax, cosmetics, and other products dispensed to come in contact with patron's skin must be kept in clean, closed containers, and must conform in all respects to the requirements of the Pure Food and Drug Law. Any product apportioned for use and removed from original containers must be distributed in a sanitary manner that prevents contamination of product or container. Any product dispensed in portions into another container must be dispensed into a sanitized container and applied to patrons by means of a disinfected or disposable implement or other sanitized methods. Any product dispensed in portions not dispensed into another container must be used immediately and applied to patrons by means of a disinfected or disposable implement or

other sanitized methods. No product dispensed in portions may be returned to the original container.

- (m) As used in this Rule whirlpool or footspa means any basin using circulating water.
- (o) After use by each patron each whirlpool or footspa must be cleaned and disinfected as follows:
 - (1) All water must be drained and all debris removed from the basin;
 - (2) The basin must be disinfected by filling the basin with water and circulating:
 - (A) Two tablespoons of automatic dishwashing powder and 1/4 cup of 5.25 percent household bleach to one gallon of water through the unit for 10 minutes; or
 - (B) Surfactant or enzymatic soap with an EPA registered disinfectant with bactericidal, tuberculocidal, fungicidal and virucidal activity used according to manufacturer's instructions through the unit for 10 minutes;
 - (3) The basin must be drained and rinsed with clean water; and
 - (4) The basin must be wiped dry with a clean towel.
- (p) At the end of the day each whirlpool or footspa must be cleaned and disinfected as follows:
 - (1) The screen must be removed and all debris trapped behind the screen removed;
 - (2) The screen and the inlet must be washed with surfactant or enzymatic soap or detergent and rinsed with clean water;
 - (3) Before replacing the screen one of the following procedures must be performed:
 - (A) The screen must be totally immersed in a household bleach solution of 1/4 cup of 5.25 percent household bleach to one gallon of water for 10 minutes; or
 - (B) The screen must be totally immersed in an EPA registered disinfectant with bactericidal tuberculocidal, fungicidal and virucidal activity in accordance to the manufacturer's instructions for 10 minutes;
 - (4) The inlet and area behind the screen must be cleaned with a brush and surfactant soap and water to remove all visible debris and residue; and
 - (5) The spa system must be flushed with low sudsing surfactant or enzymatic soap and warm water for at least 10 minutes and then rinsed and drained.
- (q) Every week after cleaning and disinfecting pursuant to Paragraphs (a) and (b) of this Rule each whirlpool and footspa must be cleaned and disinfected in the following manner:
 - (1) The whirlpool or footspa basin must be

filled with water and 1/4 cup of 5.25 percent household bleach for each one gallon of water or EPA registered disinfectant with bactericidal, tuberculocidal, fungicidal and virucidal activity in accordance to the manufacturer's instructions; and

- (2) The whirlpool or footspa system must be flushed with the bleach and water or EPA registered disinfectant solution for 10 minutes and allowed to sit for at least six hours; and
- (3) The whirlpool or footspa system must be drained and flushed with water before use by a patron.
- (r) A record must be made of the date and time of each cleaning and disinfecting as required by this Rule including the date, time, reason and name of the staff member who performed the cleaning. This record must be made for each whirlpool or footspa and must be kept and made available for at least 90 days upon request by either a patron or inspector.
- (s) The water in a vaporizer machine must be emptied daily and the unit disinfected daily after emptying.
- (t) The area where services are performed that come in contact with the patron's skin including treatment chairs, treatment tables and beds shall be disinfected between patrons.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.

21 NCAC 14H .0404—FIRST AID

- (a) Each cosmetic art shop and school must have antiseptics, gloves or finger guards, sterile bandages and other necessary supplies available to provide first aid.
- (b) If the skin of the licensee or student is punctured, the licensee or student shall immediately do the following:
 - (1) Apply antiseptic and a sterilized bandage;
 - (2) Disinfect any implement exposed to blood before proceeding; and
 - (3) Put on disposable, protective gloves or a finger guard.
- (c) If the skin of the patron is punctured, the licensee or student shall immediately do the following:
 - (1) Make available to the patron antiseptic and a sterilized bandage;
 - (2) Disinfect any implement exposed to blood before proceeding; and
 - (3) Put on disposable, protective gloves or a finger guard.

History Note: Authority G.S. 88B-2; 88B-4; 88B-14; Eff. April 1, 2012.