PERMANENT MAKEUP TRAINING

EYELINER EYEBROWS FULL LIP COLOR

Makeup4Ever revised 3/2015
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Welcome to Makeup4Ever

What you are actually going to learn is a state of the art technique for applying Permanent Cosmetic Makeup and the corrective/camouflage applications of these procedures. The possibilities are exciting in this rapidly expanding field with endless opportunities for those desiring such.

The government in most states where tattooing is legal, basically consider permanent cosmetic makeup of form of tattooing, and leaves it alone. We believe as this field continues to expand various government agencies will insist on strict training requirements before allowing individuals to perform this procedure. Micro Dermagraphics school recommends regulation not only for the protection of those performing the procedure but those choosing to have the procedure done.

The technique you will learn, inserts pigment into the dermis leaving “shadows of color”. These shadows may enhance existing features such as eyeliner or give the appearance of able to electrolysis, but usually not as consistent.

If a potential patient feels there is risk involved, of being injured, or risk of a mistake, he/she may lose confidence in the procedure or the practitioner. We believe you are actually marketing confidence in yourself and your procedure.
The History of Tattooing

A tattoo is a marking made by inserting dark, indelible ink into the dermis layer of the skin to change the pigment for decorative or other reasons. Tattoos on humans are a type of decorative body modification, while tattoos on animals are most commonly used for identification or branding. The term "tattoo" or from Tahiti, "Tatau" is first referenced by Joseph Banks, the naturalist aboard Cook's ship the "Endeavour" in 1769 where he mentions it in his journal.

Tattoos have different meanings to different societies. Tattoos can be a mark of beauty, group identity, individuality, and can even be spiritual. Pictorial self-adornment has a long history. The earliest evidence of tattooing dates back to the Ice Age, or more than 8000 B.C. These early bodily adornments were probably used to imitate the color of animal, have some mystical or religious purpose, or possibly camouflage, through there is no clear evidence for these suppositions.

Modern tattooing is an extension of the primitive custom of painting the body. Examples of body paint include the red ochre found in prehistoric burial sites; blue wood, used by the ancient Britons; kohl, used in Asia to enhance the beauty of the eyes; henna used on the fingernails in the Middle East; and of course, the war paints of the American Indian tribes.

The giant cosmetic industry today might as well be considered a modification of primitive war paint customs. Early crude tattooing needles were made of bone, and bowls that held pigment (usually soot or coal) have been found in caves and rock strata in France, Portugal, Romania, and Scandinavia.

The oldest existing tattoos were found on a five thousand year old mummy who had been hunting when caught in a snowstorm. He was found next to his bow, arrows, bronze ax, and a flint for fire making. He had a tattoo of a cross on the inside of his left knee and six straight lines above his kidneys, indicating a troubled spot, maybe even a form of a healing power.
Egyptian Mummies, some as old as 4000 years, display tattoos on women but not men.

These tattoos were placed on dancing girls, concubines, and women singers, and usually depict the symbol of Bes, the goddess who protected these women. Libyans male mummies were tattooed with symbols of sun worship. They were found in the tomb of Sati I around 1300 BC. It has been well documented that the Incas, Mayas, and Aztecs were tattooing themselves long before the Christian Era. Daniels, Post, and Armelagos described mummified skin and published photographs of two tattooed hands, one from Ancon, Peru (900-1450 AD), and the other (date unknown) from elsewhere on the coast. They also reviewed the histology of mummy skin and could clearly identify black tattoo pigment, presumed to be carbon, melanin, and carotene.

There is no evidence of tattooing among Hebrews even before the Mosaic Law, which forbade the practice. There is a scarcity of tattoos on Jews, even nonreligious Jews, still today. From the ancient Middle East, the practice of tattooing spread to Southern Asia. By 2000 BC. It was practiced by the Shan’s, Burmese, Indians, and extended to the islands of the South Pacific. There is some controversy concerning the origin of tattooing in the South Pacific. One explanation is that tattooing came from China via Formosa, the Philippines, and the East Indies.

In China, there is evidence that tattooing was done as early as 1000 BC. The custom continued until the Chou Dynasty (300-100 BC). Tattooing was primarily practiced in the bar-variac tribes of the North usually only for branding criminals.

It has been well documented that the Incas, Mayas, and Aztecs were tattooing themselves long before the Christian Era. Daniels, Post, and Armelagos described mummified skin and published photographs of two tattooed hands, one from Ancon, Peru (900-1450 AD), and the other (date unknown) from elsewhere on the coast. They also reviewed the histology of mummy skin and
could clearly identify black tattoo pigment, presumed to be carbon, melanin, carotene, and acid muco polysaccharide.

The name 'Pict' used by these people actually is a Roman one meaning 'painted men' and referred to their practice of tattooing themselves with woad, a blue dye derived from a natural plant. They also colored their entire bodies blue with dye before battle, as they, like the Celts, often went into battle naked. And while we think of them as being 'blue Picts', the Romans also refer to them as being green."

Early Romans considered tattoos barbaric. Later, a few Romans had an interest in the art of tattooing, but only for a limited time. When Julius Caesar raided Britain in 55 and 54 BC, he found the Britons with animal tattoos. It is believed that the name 'Briton' is derived from the Breton word meaning 'painted with various colors'. Early Christians used small tattoos such as the sign of the cross, a lamb, a fish, or the letter 'X' or 'IN' to identify themselves, just as members of present-day Mexican-American gangs and clubs often sport the 'Pachuca Mark' between the thumb and index finger. The pigment is made from the soot of seal oil lamps, which is taken from the bottom of tea kettles or similar containers used to boil meat and other food over the open flame. The soot is mixed with urine, often that of an older woman, and is applied with steel needles.

Two methods of tattooing are practiced. One method is to draw a string of sinew or other thread through the eye of the needle. The thread is then soaked thoroughly in the liquid pigment and drawn through the skin as the needle is inserted and pushed just under the skin for a distance of about a thirty-second of an inch when the point is again pierced through the skin. A small piece is left without tattooing before the process is again repeated. The other method is to prick the skin with the needle which is dipped in the pigment each time.

Cabeza de Vaca, 1530, and Captain John Smith, 1593, recorded tattoos on natives in the Gulf of Mexico and in the
states of Virginia and Florida. Captain Cook wrote in his diary, called "First Voyage, 1796": "Both sexes paint their bodies, Tattow, as it is called in their language. This is done by inlaying the color black under the skins in such a manner a to be indelible."

The word 'tattoo' actually came into the English language because of Captain Cook. It is interesting that the only other Polynesian word that became current in languages other than those of the South Seas was "taboo", from the Tongan word "tabu", a word often used in connection with orders to ban tattooing. The word "tattoo" is a variation of "tattow", or "tatau", and "tattaw", all forms to "ta", the Polynesian word for striking or knocking. In the act of tattooing, Polynesians use a piece of wood to strike a piece of bone or shell with many points on it, carrying the pigment to be driven into the skin. Tattooing flourished in Japan in the 17th Century. It had been reinstated in the 13th Century, after having been abolished for 200 years. Its use was largely confined to branding criminals, a punishment that replaced former harsh sentences like the loss of a nose or an ear.

Modern tattooing can be dated to 1880, when Samuel O'Reilly designed the first electric tattoo machine in New York. It was later patented in Great Britain in 1891 by his cousin, Tom Reilly. Tattoo machines used today by tattoo artists are very similar to the original O'Reilly unit, with some ingenious modifications and artistic embellishments. Many of these modern tattoo machines may be seen in the Tattoo Art Museum in San Francisco or at the World of Tattoos exhibit in Honolulu.

From the standpoint of relatively modern medical applications, the use of tattooing can first be traced to Dr. Pauley who, in 1853, used a form of tattooing to treat 'congenital purple plaques' and other various lesions of the skin. In 1848, Cordier had used tattooing as a means of treatment for nevi. Schuh, in 1858, had the idea of first using skin tattooing in transplanted
tissue in the practice of cheiloplasty. Twenty-one years later, in 1879, Dr. Wicker began using India ink in tattooing corneas for the cosmetic improvement of unsightly glaucoma’s or corneal scars. In 1911, Kolle was the first to use tattooing of a reddish pigment to change the contours of scarred lips with the vermillion border. He also performed work in the area of scar revisions. In the late 1920s and mid '30s, Knapp, Duggan, and Nanavati began using various metals such as gold and platinum chloride to improve corneal scarring and give the illusion of a normal appearing iris.

In the 1940s, Morestin, Mauclaure, Duformentel, and Pascot are generally given credit as the first group of doctors to introduce the use of tattooing in general surgery. Also in the 1940s, due to the landmark work of Conway, Hance, Brown, Cannon and McDowell, tattooing was performed in permanent pigment injections in skin grafts and flaps, as was intradermal injection of tattooing for treatment of capillary hemangiomas. In the 1960s, Dr. Crowell Beard described in the literature the use of eyelash tattooing with a hypodermic needle and syringe using a brown pigment as an alternative to eyelash grafting.

Finally in 1984, Dr. Giora Angres published his now famous landmark article on the use of eyelash tattooing to create an eyeliner and/or eyelash enhancement effect for cosmetic purposes. Dr. Angres was the first medical doctor to develop his own machine and pigments for the purpose of this eyeliner surgery. Dr. Angres' contribution to cosmetic surgery has created an exciting atmosphere of investigative research into new uses of dermal pigmentation in facial plastic surgery. His creative work has stimulated a whole medical field of dermal pigmentation that otherwise would have remained forgotten with the works of Conway, Hance, and Beard.

It is important not to forget or diminish the role that tattoo artists played in the field of medical micro pigmentation surgery. Medical doctors would have progressed very little in the past
century with the help and clinical experience given them by these tattoo artists. Therefore, based on the work of all these individuals, we now have the "new field" of micro pigment Implantation.

There have been a select few artists that have been practicing cosmetic tattooing for the past few decades. Cosmetic tattooing however did not become popular nationally until the late 1980's. Nonetheless, many people have yet to even hear of its existence. What you are actually going to learn is a state of the art technique for applying Permanent Cosmetic Makeup and the corrective/camouflage applications of these procedures. The possibilities are exciting in this rapidly expanding field with endless opportunities for those desiring such.

The technique you will learn, inserts pigment into the dermis leaving "shadows of color". These shadows may enhance existing features such as eyeliner or give the appearance of hair to those with little or no brows.

This revolutionary new technique of micro pigment implantation uses only a tiny probe-inserting individual implants of pigment.

Today’s woman certainly considers the idea of permanent makeup very attractive.

Another fear that could inhibit the marketing of Permanent Cosmetic Makeup is that of pain. If the public sees this as some sort of tattooing, they associate it with pain. As you will learn, probe is inserted approximately one-half as deep as electrolysis with minimal sensation.

Although you will be taught pain preparation techniques for all procedures, the eyebrows, lip liner and camouflage usually can be done with little pain preparation, and minimal sensation felt by the patient. The eyeliner is only procedure where there can be, in some cases, a “pinching” sensation, comparable to electrolysis, but usually not as consistent.
History Examination

1. How far back does tattooing date?
   a. 1800’s
   b. 1700’s
   c. 800 B.C.
   d. 1900’s

2. What were some of the first items used to color the skin?
   a. soot and coal
   b. sand and ashes
   c. lead and rocks
   d. leaves and berries

3. What has been the Jewish belief in the use of tattooing?
   a. tattooing?
   some believe you cannot be buried with your family if you are tattooed.
   b. Same as other faiths
   c. no controversy

4. Who invented the first Electric Tattooing instrument?
   a. 1984 by Dr. Giora Angres
   b. 1911 by Kolle
   c. 1880 by Samuel O'Reilly
   d. 1940 by Conway, Hance, Brown, Cannon and McDowell

5. What year did tattooing become nationally aware?
   a. In the 1990’s
   b. In the 1980’s
   c. In the 1940’s
   d. In the 1850’s

6. Today’s woman certainly considers the idea of permanent makeup very attractive. But might be difficult to market with one fear.
   a. acceptance
   b. pain
   c. takes too long to perform

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Safety, Sanitation, Sterilization

Section 1: Hand Washing and Use of Gloves

Hand washing is the single most important procedure for preventing infections. Hand washing is defined as a vigorous, brief rubbing together of all surfaces of lathered hands, followed by rinsing under a stream of water. Although various products are available, hand washing can be classified simply whether plain soap or detergents, or antimicrobial-containing products are used. Hand washing with plain soaps or detergents (in bar, granule, leaflet, or liquid form) suspends microorganisms and allows them to be rinsed off; this process is often referred to as mechanical removal of microorganisms.

Because of the potential for the technician's hands to come in contact with the client's blood, a fresh pair of non-sterile disposable examination gloves should be worn by the technician during the treatment of each client to protect the client from potential exposure to microbial flora of the technician, including blood borne organisms should there be cuts, scrapes, or micro lesions on the technician’s hands.

Epidemiology

The microbial flora of the skin consists of resident and transient microorganisms; the resident microorganisms survive and multiply on the skin and can be repeatedly cultured. While the transient microbial flora represents recent contaminants from sources other than the person's normal flora and can survive only a limited period of time. Most resident microorganisms are found in superficial skin layers, but about 10% - 20% can inhabit deep epidermal layers.

Recent microorganisms in deep layers may not be removed by hand washing with plain soaps and detergents, but usually can be killed or inhibited by hand washing with products that contain antimicrobial ingredients. Most resident skin microorganisms are not harmful and are not usually implicated in
infections. Transient microorganisms often found on the hands can be pathogens and may cause infection. Hand washing with plain soaps and detergents is effective in removing many transient microbial floras.

**Control Measures**
Hand washing facilities with hot and cold running water should be located in each treatment room. Sinks with faucets that can be turned off by means other than hands, i.e., foot pedals, and sinks that minimize splash can help avoid immediate recontamination of washed hands.
Hand washing is indicated before and after treatment of each client. Hand washing is indicated before putting on gloves and immediately after gloves are removed.

The ideal duration of hand washing is not known. However, washing times of 15 seconds or less have been reported as effective in removing most transient contaminants from the skin. Therefore, for most activities, it is recommended that a vigorous, brief (at least 10 seconds) rubbing together of all surfaces of lathered hands, especially between fingers and fingernail areas, followed by rinsing under a stream of water. If hands are visibly soiled, more time may be required for hand washing.
Hands should be dried thoroughly with a disposable paper towel; faucets should be turned off with the paper towel. Cleaning of fingernails should take place when the hands are still moist, followed by the re-washing of hands.

The absolute indications for hand washing with plain soaps and detergents versus hand washing with antimicrobial-containing products are not known because of the lack of well controlled studies comparing infection rates when such products are used. For most routine activities, hand washing with plain soap appears to be sufficient since soap will allow most transient microorganisms to be washed off. Although an antimicrobial soap
can be used, it is not necessary. Plain soap would be sufficient
for use between clients.
When plain soap is selected for hand washing, the bar, liquid,
granule, or soap impregnated tissue form may be used. It is
preferable that bar soaps be placed on racks that allow water to
drain. Since liquid soap containers can be contaminated and
might serve as reservoirs for microorganisms, reusable liquid
containers need to be cleaned and refilled with fresh soap at
least once a month. Completely disposable containers obviate
the need to empty and clean dispensers, but may also be
expensive.
The Food and Drug Administration (FDA) categorizes hand
washing products according to their intended use. Information
about categorization of products can be obtained by writing the
Center for Drugs and Biologics, Division of OTC Drug Evaluation,
FDA, 5600 Fishers Lane, Rockville, MD 20857.

In addition to hand washing, non-sterile examination
gloves should be worn as an extra margin of safety. When gloves
are worn, hand washing is recommended because gloves may
become perforated during use and bacteria can multiply rapidly
on gloved hands. Tom or perforated gloves should be removed
immediately and hands washed after gloves are removed. As
with hand washing, the absolute indications for wearing gloves is
indicated when certain invasive procedures are performed or
when open wounds are touched. If a treatment session is
interrupted, a fresh disposable plastic over glove should be put
on over the gloved hand(s); or gloves should be removed and
discarded to handle the interruption. If gloves are removed,
hands should be washed and a fresh pair of gloves worn to
resume treatment. Washing gloves during the treatment of the
same client is not recommended.
Non-sterile gloves can be worn when hands are likely to be
contaminated with potentially infective material such as blood,
body fluids, or secretions containing Hepatitis B virus or other
pathogens. Non-sterile gloves are appropriate for makeup4ever
cosmetic procedures and are recommended when hands are likely to become contaminated with potentially infective materials such as blood, body fluids, or broken skin.

A fresh pair of non-sterile, disposable examination gloves should be worn at all times by the practitioner during the treatment of each client. Low-powdered gloves should be worn and or excess exterior powder should be rinsed from the gloves with tap water only (dry gently with paper towel) to prevent powder from contacting client's skin surface during the treatment. If a treatment session is interrupted, a fresh disposable plastic over glove should be put on over the gloved hand(s); or gloves should be removed and discarded to handle the interruption. If gloves are removed, hands should be washed and a fresh pair of gloves worn to resume treatment. Washing gloves during the treatment of the same client is not recommended. After a treatment procedure is completed, gloves should not be removed until the needle(s) and tube(s) are placed in a holding container of germicidal solution and all contaminated disposable items are discarded into containers lined with plastic bags. A fresh pair of gloves should be worn during the pre-cleaning, cleaning, rinsing, and drying of instruments prior to sterilization. Great care should be taken to avoid needle stick injuries. A practitioner should refrain from direct contact when the practitioner has exudative lesions or 'weeping' dermatitis until the condition is resolved.

Section I-A: NCTA Standards for Hand Washing and Use of Gloves

**II Hand washing**

1. A sink with hot and cold running water will be located in each treatment room.
2. Hands will be washed:
   a. Before and after treatment of each client.
b. Before putting on gloves and immediately after gloves are removed.

3. Hand washing products will include:
   1. Plain soaps, detergents, or antimicrobial-containing products.
      a. Bar soaps will be kept on a rack to allow water to drain.
      b. Liquid soap containers should be disposable;
      c. Reusable liquid soap containers should be cleaned and refilled with fresh soap at least once a month.

4. D. Hand washing techniques will include:
   5. Use of plain soap, detergent, or antimicrobial-containing products;
   6. A vigorous rubbing together of all surfaces of lathered hands, especially between the fingers and the fingernail area, for at least 10 seconds;
   7. A thorough rinsing under a stream of water; and
   8. Hands dried thoroughly with disposable paper towel, and then faucets turned off with the paper towel.

II Use of Gloves
9. A fresh pair of non-sterile disposable examination gloves will be worn during the treatment of each client.
10. Hands will be washed in accordance with the Hand washing Standards before putting on gloves and immediately after gloves are removed.
11. Low powdered gloves should be worn and/or excess powder should be rinsed from the gloves with tap water only (dry gently with disposable paper towel), to prevent powder from contacting client's skin surface during treatment.
12. D. When a treatment session is interrupted:
   1. A fresh disposable plastic over glove should be put on over the gloved hand(s); or
      a. A protective covering should be used over the gloved hand(s); or
      b. Gloves should be removed and discarded.
13. E. When gloves are remove during a treatment session, hands will be washed and a fresh pair of gloves used.
14. F. Torn or perforated gloves will be removed immediately and hands will be washed after gloves are removed.

Section 2: Cleaning and Sterilization of Instruments and Other Safety Precautions

Introduction
All procedures in the practice of makeup4ever Cosmetics result in breaking the blood barrier and should always be viewed as parenteral when developing strategies for client safety. Makeup4ever cosmetic procedures are invasive in that the needle(s) is (are) mechanically inserted into the dermis layer of the skin and come in contact with normally sterile tissue. Penetration of the skin results in contamination of needles, and the tube housing the needles, with blood, serum, and other material on the skin. The procedure of implanting pigment within the dermis layer is parenteral and results in blood contamination of instruments, pigments and pigment containers, and related surfaces. Critical care items are those that come in direct contact with the blood stream and other normally sterile areas of the body. Therefore, tubes and other contaminated objects must be thoroughly cleaned and then sterilized before re-use to reduce the transmission of infection and disease.

Control Measures
Cleaning is the physical removal of organic material or soil from objects, and is usually done by using water with or without
detergents. Generally, cleaning is designed to remove rather than kill microorganisms. Technology has provided cleaning products and devices that are especially for the cleaning of instruments used in makeup4ever cosmetics. The two recommended methods of sterilization or instruments/objects used in the practice of makeup4ever cosmetics are dry heat or moist heat (Steam under pressure). These methods are standardized and can be routinely monitored for effectiveness.

Liquid chemical germicides, i.e., Cidex, are not recommended as an applicable method for sterilization of instruments/objects, based on their toxicity level, instability, and impracticality. The endodontic dry heat sterilizer (glass bead sterilizer) is registered with the Food and Drug Administration (FDA) only for use in dental operatory to decontaminate endodontic instruments and has been categorized as a Class III devise, i.e., efficacy data must be submitted before marketing. The FDA Dental Device Classification Panel believed that the glass bead sterilizer presents "a potentially unreasonable risk of illness or injury to the patient because the device may fail to sterilize dental instruments adequately.

Depending on size, instruments may act as heat sinks to lower glass bead temperature significantly, and the bead containers are of insufficient size to accommodate the handles of tweezers and similar large items. However, the glass bead units may be effective in the makeup4ever cosmetic clinic to decontaminate needle(s) during treatment on the same client which have inadvertently touched a technician's non-sterile glove or other potentially contaminated surface.

After each treatment is completed, and before glove removal, contaminated needles and tubes should be placed in a holding container of germicidal solution. Thereafter, a fresh pair of gloves should be worn and needles and tubes mechanically pre-cleaned to remove organic matter (blood and tissue) and other residue, using a clean non-sterile cotton ball or swab
moistened with a solution of low-residue detergent and cool water, with care taken to ensure removal of any pigment inside tubes not visible to the eye, then placed in a holding container(s) filled with a low-residue detergent and cool water.

Instruments should be submerged in the soaking solution to keep any remaining organic matter from hardening while instruments accumulate during pre-cleaning for the next procedure. Instruments may be separated according to the compatibility of metals and/or needle size. Stainless steel or heat-tempered glass containers are appropriate for tubes and smaller stainless steel or heat-tempered glass containers for needles. Caution should be taken when handling needles to avoid needle stick injuries.

Further cleaning of accumulated instruments should be accomplished by using either a protein dissolving detergent-enzyme cleaner or ultrasonic cleaning unit. A protein dissolving detergent-enzyme cleaner prevents corrosion and removes blood, protein, and stain from makeup4ever cosmetic instruments. Ultrasonic cleaning units physically remove organic matter and other residue from instruments.

When using a protein dissolving detergent-enzyme cleaner, the holding container (here referred to as a container) should be held under cool running water to float off low residue detergent and water-soaking solution. After instruments are thoroughly rinsed, the container should be tilted to drain off water and a fresh solution of protein dissolving should be added to the container. Manufacturer's instructions for dilution and soaking time should be followed. Instruments should be held under warm running water to float off the cleaning solution. After instruments are thoroughly rinsed, the container should be tilted to drain off the water. An optional final rinse with distilled water may be used to remove hard water deposits from instruments. After final draining of water or distilled water, instruments are ready for the next procedure.
When using an ultrasonic cleaning unit, the holding container should be held under cool running water to float off low-residue detergent and water-soaking solution. After instruments are thoroughly rinsed, the container should be tilted to drain off water. Units should be used according to manufacturer's instructions, i.e., appropriate containers to hold instruments during cleaning to prevent contamination of well, type of detergent, fill-level of container and well cleaning time, etc. After cleaning has been accomplished, the container should be held under warm running water to float off the cleaning solution. After the instruments are thoroughly rinsed, the container should be tilted to drain off the water. An optional final rinse with distilled water may be used to remove hard water deposits from instruments. After final draining of water or distilled water, instruments are ready for the next procedure.

The container of cleaned instruments should be placed on a clean surface, which has been covered with a layer of plastic wrap and several layers of paper towels. Cleaned instruments should be transferred with gloved hands to the paper towels and dried with additional paper towels. Care should be taken to avoid needle stick injuries.

Ideally, needles should be packaged individually or in small multiples and tubes should be packaged individually, following manufacturer's instructions for packaging. Non-packaging of instruments is acceptable when instruments are handled using aseptic procedure. When instruments are not individually packaged, the following procedure should be used. For dry heat, the container used during the cleaning procedure should be cleaned and dried and instruments placed back into the container and placed into the sterilizer. When moist heat sterilization is used, the container used during the cleaning procedure should be cleaned, dried and sterilized and used to hold sterilized instruments.
All containers should have well-fitting lids which should be cleaned, dried and sterilized. Lids should be aseptically placed on containers before removing from the sterilizer. Aseptic procedures (those manipulations that prevent contamination of the instrument before it reaches the client) should be followed when entering the covered container to remove sterilized instruments. Lids should be lifted as little as possible and pick-up hemostat forceps/tweezers used to promptly remove the needles and tubes needed for each treatment. The pick-up should be kept in a dry holding container (cylinder type) which is wide enough to allow the pick-up to be placed in the container without the tips of the instrument touching the sides of the container. The holding container and the pick-up instrument should be cleaned and sterilized at least daily or whenever overtly contaminated.

Coordinate necessary sterilized instruments and supplies needed for each treatment in a manner whereby adherence to aseptic technique is maintained with minimal modes and sources of contamination, i.e., instruments are removed from the container and placed on a clean covered surface, using a sterile gauze sponge or an individually packaged 70% isopropyl alcohol swab under instruments.

Sterilizers should be registered with the FDA, and should be cleaned, used and maintained according to manufacturer's instructions. Dry heat ovens and moist heat (steam under pressure) autoclaves should have visible indicators, i.e., thermometers, timers. Do not overload the sterilizer, limit the size and density of each load so dry or most heat penetrates each item. Several runs may be necessary to process all items. Sterilized items should remain untouched until adequately cooled and dry.

The following time-temperature relationships are recommended, i.e., including but not limited to:

**Dry Heat** - 340 degrees Fahrenheit (170 degrees Celsius)  
- 1 hour 320 degrees Fahrenheit (160 degrees Celsius) - 2 hours
The above temperatures relate to the time of exposure after attainment of the specific temperature and do not include heat-up lag time.
The following time-temperature relationship is recommended or other time-temperature relationships recommended by manufacturer of instrument:

**Moist Heat** - (steam under pressure) - autoclave
15 minutes at 121 degrees Celsius (250 Fahrenheit); 15 psi (pounds per square inch)
The above exposure time relates only to the time the material is at temperature and does not include a penetration or heat-up lag time.

Chemical (i.e. color change) indicators should be used on each package/container to assure that each package/container has been processed through sterilization cycle. Biological monitoring is the only assurance that sterilization has been achieved.

Commercial preparations of spores (Bacillus stearothermophilus for steam under pressure sterilizers and Bacillus subtilis for dry heat sterilizers) should be used once a month according to the manufacturer's instructions to assure the sterilizer is functioning properly.

New instruments should be cleaned and sterilized before use. Pre-made needles and disposable tubes from a manufacturer should be sterilized before use. Sterilized items that become contaminated before use, i.e., dropping or touching a soiled surface, should be reprocessed before use. Unused instruments in containers that have been opened should be reprocessed after a twenty four (24) hour period. All containers holding contaminated needles and tubes and container lids should be cleaned and sterilized daily or whenever needed, i.e., if overtly contaminated.

It is not recommended practice to re-use needles. Contaminated needles should be cleaned and sterilized. Disposal of needles should be as follows: all needles, i.e., used or unused but damaged, should be placed in a sturdy puncture-resistant
container and the container securely sealed and disposed into the regular trash disposal, or in compliance with local laws.

Section 2-A: NCTA Standards for Cleaning & Sterilization of Instruments and Other Safety Precautions
Cleaning and Sterilizing of Instruments/Objects and Other Safety Precautions

A. Needles and tubes will be cleaned and then sterilized before use and between each client.
   1. Contaminated needles and tubes will be placed in a covered container of germicidal solution, i.e., Cidex, full strength or Formalin, 10% solution, until they can be cleaned and sterilized.
   2. Gloves will be worn during the mechanical pre-cleaning, cleaning, rinsing and drying of instruments and caution taken to avoid needle stick injury.
B. All containers holding contaminated needles and tubes and container lids will be cleaned and sterilized daily or whenever needed, i.e., if overtly contaminated.
C. Pre-made needles and disposable tubes from a manufacturer will be sterilized before use.
D. Unused instruments in trays or containers that have been opened will be reprocessed after a 24 hour period.
E. Pick-up hemostat/forceps/tweezers and holding cylinder will be cleaned and sterilized daily or whenever needed, i.e., if overtly contaminated.
F. Instruments contaminated before use, i.e., dropping or touching a soiled surface, will be reprocessed before use.
G. Needles and Tubes will be:
   1. Mechanically pre-cleaned using a clean cotton ball or swab moistened with a solution of low-residue detergent and cool water, with care taken to ensure removal of any pigment inside tube(s) not visible to the eye; and
2. Accumulated in a holding container by submersion in a solution of low-residue detergent and cool water; and
3. Thoroughly rinsed with warm water and drained; and
4. Cleaned by soaking in a protein dissolving detergent-enzyme cleaner used according to manufacturer's instructions; or
5. Cleaned in an ultrasonic cleaning unit used according to manufacturer's instructions; and
6. Rinsed and dried.

H. Needles will be packaged individually or in small multiples, and tubes will be packaged individually; or unpackaged and handled using aseptic procedures.
I. Aseptic procedures will be followed when handling sterilized instruments/objects.
J. Instruments/objects will be sterilized by the following methods:
   1. Dry heat.
      a. The following time-temperature relationships are recommended, i.e., including, but not limited to:
         (1) 340 degrees Fahrenheit (170 degrees Celsius) - 1 hour (2) 320 degrees Fahrenheit (160 degrees Celsius) - 2 hours
      b. The above temperatures relate to the time of exposure after attainment of the specific temperature and do not include a heat-up lag time; or
   2. Moist heat (steam under pressure) - autoclave.
      a. The following time-temperature relationship is recommended or other time-temperature relationships recommended by manufacturer of the instrument: 15 minutes at 121 degrees Celsius (250 degrees Fahrenheit);
      b. The above exposure time relates only to the time the material is at temperature and does not include a penetration or heat-up lag time.
K. Dry heat ovens and autoclaves (steam under pressure) will be registered with the Food and Drug Administration (FDA) and should be cleaned, used and maintained according to the manufacturer's instructions.

L. Sterilizers will have visible physical indicators, i.e., thermometers and timers.

M. Chemical (i.e., color change) indicators will be used on/in each package/container to assure that each package/container has been processed through the sterilization cycle.

N. Biological indicators will be used once a month according to manufacturer's instructions to assure the sterilizer is functioning properly.

O. Disposal of needles will be as follows:
   a. It is not recommended practice to re-use needles.
   b. Contaminated needles will be handled pursuant to subsections A, G and J of this Section.
   c. All needles, i.e., used or unused but damaged, will be placed in a sturdy, puncture-resistant container and the container securely sealed and disposed into the regular trash disposal, or in compliance with local laws.

Section 3: Environmental Control, Housekeeping

Introduction
A proper hygienic environment should be a goal of the Makeup4ever cosmetic technician and instructor. The procedure of implanting pigment with the dermis layer of skin is parenteral and results in blood contamination of pigments and pigment containers, and related surfaces. Critical care items are those that come in direct contact with the blood stream and other normally sterile areas of the body. Therefore, any pigments exposed to air, i.e., poured from covered holding container to disposable pigment container, regardless if unused in treatment, must be viewed as potentially contaminated and disposed of.
after each client to reduce the transmission of infection and disease. A variety of microorganisms are normal contaminants of environmental surfaces. Therefore, routine cleaning and removal of soil are recommended. Most microorganisms found on environmental surfaces are non-pathogens, but conscientious sanitation and disinfectant techniques control cross-infections.

Control Measures
The environment should be clean, well lighted, and provide good ventilation. A sink with hot and cold running water should be located in each treatment room. Toilet facilities should be available. Fresh disposable paper drapes or freshly laundered linens should be used on the treatment table/chair for each client. Paper drapes and linens should be stored in a closed cabinet. Disposable items should be discarded into a container lined with a plastic bag and removed daily. Soiled linens should be placed into a container lined with a plastic bag and removed weekly. Fresh pigment and disposable pigment containers should be used for each client. Used pigment containers and any pigment exposed to air should be discarded into a container lined with a plastic band and removed daily. New disposable pigment containers should be sanitized before use by submersion in 70% isopropyl alcohol for at least ten (10) minutes. The covered container used to hold the alcohol should be emptied at least weekly or whenever visibly contaminated, then cleaned, dried and refilled with fresh alcohol. Any disposable items, i.e., cotton balls, swabs, tissues, water cups, new or used that have come into contact with treatment table/chair or work area should be disposed of after each client. Said items should be discarded into a container lined with a
plastic bag and removed daily. Magnifier lamp/treatment lamp should be wiped with a detergent-germicide after each treatment. Hospital-grade disinfectant-detergents registered with the U.S. Environmental Protection Agency (EPA) should be used for environmental surface cleaning, but the actual physical removal of organisms by scrubbing is probably as important, if not more so, than an antimicrobial effect of the cleaning agent used. Product labels give the EPA registration number and should give adequate safety and precautionary information. Manufacturer's instructions on the use of the product should be followed. Information on specific manufacturer label claims and the classification of disinfectants can be obtained by writing the Disinfectant Branch, Registration Division, Office of Pesticides, EPA, 401 M Street SW, Washington, DC 20460. Disinfectant fogging is an unsatisfactory method of decontaminating air and surfaces, and is not recommended. Cleaning schedules and methods vary according to the type of surface to be cleaned and the amount and type of soil present. Counter tops should be of smooth, nonporous materials and cleaned daily, taking special care in the areas where the procedures of cleaning and sterilization of instruments/objects takes place. The exterior and interior where indicated, of containers/items kept on Counter tops should be maintained in a sanitary manner. Sinks and toilet facilities should be cleaned daily. Equipment surfaces, doorknobs, telephones, and treatment tables should be cleaned on a regular basis. Floors and/or carpets should be vacuumed and cleaned regularly. Walls and blinds/curtains should be cleaned when visibly soiled. Sterilizers should be cleaned according to manufacturer's instructions. Although blood spills on environmental surfaces would be rare, should they occur the following cleaning procedure should be used: gloves should be worn to clean up the spill and paper towels used to blot up the visible material?
Paper towels used to clean up the spill should be discarded into a plastic bag, securely fastened and disposed into the regular trash. The area should then be wiped down with paper towels and an EPA registered disinfectant-detergent or at 1: 100 dilutions of household bleach and water (1/4 cup bleach to 1 gallon water) and then wiped dry. Paper towels and gloves should then be discarded into a plastic bag, securely fastened and disposed into the regular trash. Hospital-grade disinfectant-detergents registered with the U.S. Environmental Protection Agency (EPA) should be used for environmental surface cleaning, but the actual physical removal of organisms by scrubbing is probably as important, if not more so, than an antimicrobial effect of the cleaning agent used. Product labels give the EPA registration number and should give adequate safety and precautionary information. Manufacturer's instructions on the use of the product should be followed. Information on specific manufacturer label claims and the classification of disinfectants can be obtained by writing the Disinfectant Branch, Registration Division, Office of Pesticides, EPA, 401 M Street SW, Washington, DC 20460. Disinfectant fogging is an unsatisfactory method of decontaminating air and surfaces, and is not recommended. Cleaning schedules and methods vary according to the type of surface to be cleaned and the amount and type of soil present. Counter tops should be of smooth, nonporous materials and cleaned daily, taking special care in the areas where the procedures of cleaning and sterilization of instruments/objects takes place. The exterior and interior where indicated, of containers/items kept on Counter tops should be maintained in a sanitary manner. Sinks and toilet facilities should be cleaned daily. Equipment surfaces, doorknobs, telephones, and treatment tables should be cleaned on a regular basis. Floors and/or carpets should be vacuumed and cleaned regularly. Walls and blinds/curtains should be cleaned when
visibly soiled. Sterilizers should be cleaned according to Manufacturer’s instructions. Although blood spills on environmental surfaces would be rare, should they occur the following cleaning procedure should be used: gloves should be worn to clean up the spill and paper towels used to blot up the visible material. Paper towels used to clean up the spill should be discarded into a plastic bag, securely fastened and disposed into the regular trash. The area should then be wiped down with paper towels and an EPA registered disinfectant-detergent or at 1: 100 dilutions of household bleach and water (1/4 cup bleach to 1 gallon water) and then wiped dry. Paper towels and gloves should then be discarded into a plastic bag, securely fastened and disposed into the regular trash.

**Section 3-A: NCTA Standards for Environmental Control and Housekeeping**

I. Environmental Control
   A. Offices and treatment rooms will be clean, well lit, and provide good ventilation.
   B. A sink with hot and cold running water will be located in each treatment room.
   C. Toilet facilities will be available.
   D. Fresh disposable paper drapes or freshly laundered linens will be used on the treatment table/chair for each client. Paper drapes and linens should be stored in a closed cabinet
   E. Soiled disposable items will be discarded into a container with a plastic bag and removed daily. Soiled linens will be discarded into a container with a plastic bag and removed weekly.
   F. Fresh pigment and disposable pigment containers will be used for each client. Used pigment containers and any pigment exposed to air will be discarded into a container lined with a plastic bag and removed daily.
G. New disposable pigment containers will be sanitized before use by submersion in 70% isopropyl alcohol for at least ten (10) minutes. The covered container used to hold the alcohol will be emptied at least weekly, or whenever visibly contaminated, then cleaned. Said items will be discarded into a container lined with a plastic bag and removed daily.

H. Any disposable items, i.e., cotton balls, swabs, tissues, water cups, new or used that have come into contact with the treatment table/chair or work area will be disposed of after each client. Said items will be discarded into a container lined with a plastic bag and removed daily.

I. Magnifier lamp/treatment lamp will be wiped with a detergent-germicide after each treatment.

II. Housekeeping
   a. Hospital-grade disinfectant-detergent registered with the Environmental Protection Agency (EPA) will be used for cleaning environmental surfaces.
   b. Blood spills on environmental surfaces will be cleaned according to the following procedure:
      1. Gloves will be worn;
      2. Paper towels are used to blot up the visible material;
      3. Paper towels are then discarded into a plastic bag, securely fastened and discarded into the regular trash;
      4. Area wiped down with paper towels and an EPA registered disinfectant detergent or a 1:100 dilution of household bleach and water (1/4 cup bleach to 1 gallon water);
      5. Area dried;
      6. Paper towels and gloves discarded into a plastic bag, securely fastened and discarded into the regular trash.
Section 4: Client Considerations

Introduction
A past and current health history should be maintained on each client. Since health history cannot reliably identify all clients infected with blood or body fluid pathogens, precautions should be consistently used for all clients. The skin surface is the most common site of many microorganisms. A thorough examination of skin surfaces is necessary prior to any treatment. Skin sites require pre- and post-treatment procedures.

Control Measures
A complete past and current health history should be obtained from the client on the initial visit. The practitioner should evaluate the history on a current basis prior to any treatment. An evaluation of the skin site and an examination for signs of infection or rashes should take place prior to any treatment. Treatment should be delayed if actual or potential signs or symptoms of infection are present. The practitioner should refer the client to an appropriate physician when evaluation of skin surfaces or history assessment indicates. Blood and body fluid precautions should be consistently used for all clients. Prior to treatment, the skin site should be cleaned of visible soil with soap and water or a germicidal skin preparation, and then wiped with an acceptable antiseptic product, i.e., 70% isopropyl alcohol, iodophor or other acceptable antiseptic product. An antiseptic is a substance that is used on or in living tissue to inhibit or destroy microorganisms. An antiseptic should be applied with a fresh non-sterile cotton ball. The area should be allowed to dry thoroughly before treatment. Prior to treatment, the skin site should be cleaned of visible soil with soap and water or a germicidal skin preparation, and then wiped with an acceptable antiseptic product, i.e., 70% isopropyl alcohol, iodophor or other acceptable antiseptic product. An
Antiseptic is a substance that is used on or in living tissue to inhibit or destroy microorganisms. An antiseptic should be applied with a fresh non-sterile cotton ball. The area should be allowed to dry thoroughly before treatment. After treatment, the skin site should be wiped with an acceptable antiseptic applied with a fresh non-sterile cotton ball. Alcohol and antiseptics containing large amounts of alcohol may cause burning and redness when used as a post-treatment antiseptic. Antiseptics such as hydrogen peroxide and iodophor may cause less irritation to treated skin sites. An application of ice contained in a fresh disposable bag, and healing cream/lotion/ointment may be applied to the treated skin site at the discretion of the practitioner. Creams/lotions/ointments should be stored in clean covered containers and used in an aseptic manner. Clients should be instructed on the appropriate post-treatment care to promote healing of the treated skin surface. The general health status of the client may be a predisposing factor in susceptibility to infection and normal healing.

Section 4-A: NCTA Standards for Client Considerations

I. Client Considerations
   1. Blood and body fluid precautions will be consistently used for all clients.
   2. A complete past and current health history will be obtained from each client prior to treatment. The health history will be updated and evaluated on a current basis.
   3. The skin site will be evaluated prior to any treatment.
   4. The client will be referred to an appropriate physician when evaluation of skin surfaces history assessment indicates.

II. Pre- and Post-Treatment of Skin Site
A. Before treatment, the skin site will be cleaned of visible soil using soap and water or a germicidal skin preparation, wiped with an acceptable antiseptic product, i.e., 70% isopropyl alcohol, iodophor, or other acceptable antiseptic product.

B. After treatment, the skin site will be wiped with an acceptable antiseptic product, i.e., hydrogen peroxide, iodophor, or other acceptable antiseptic product.

C. An application office in a fresh disposable plastic bag and/or healing cream/lotion/ointment may be applied to the skin site at the discretion of the practitioner. Creams/lotions/ointments will be kept in clean, covered containers and handled in an aseptic manner.

D. The client will be instructed on the appropriate post-treatment care to promote healing of the treated skin site.

**Glossary Definitions**

**Antiseptic** - a chemical agent that may kill or retard the growth of bacteria.

**Asepsis** - freedom from disease germs.

**Bactericide** - a chemical agent having the power to destroy bacteria (germs or microbes). **Chemical Agents:**

**Antiseptics** - a substance that may kill bacteria or retard their growth without killing them. As a general rule, antiseptics can be used with safety on the skin. [Several chemicals can be classified as both antiseptic and disinfectant. A strong solution may be used as a disinfectant and a weak solution as an antiseptic. Examples: formalin, alcohol.

**Disinfectants** - kills most bacteria and is used to sanitize implements. Requirements for a good disinfectant:

1. Convenience to prepare
2. Quick acting.
3. Practically odorless.
5. Economical.
6. Non-irritating to skin.

**Vapors** - (fumigants) in a cabinet sanitizer are used to keep sanitized implements sanitary.

**Disinfect** - to destroy bacteria on any object.

**Disinfectant** - a chemical agent having the power to destroy bacteria (germs or microbes).

**Fumigant** - vapor used to keep clean objects sanitary.

**Germicide** - a chemical agent having the power to destroy germs (bacteria or microbes).

**Parenteral** - introduced otherwise than by way of intestines.

**Physical Agents:**

**Moist Heat** - high water content, usually in the form of steam or conductive heat.

**Boiling Water** at 212 degrees Fahrenheit (100 degrees Celsius) for 20 minutes. This method is no longer used in beauty salons or makeup4ever cosmetic clinics.)

**Steaming** requires a steam pressure sterilizer. It is used in the medical field to kill bacteria and spores.

**Dry Heat** - (baking) is used in hospitals to sterilize sheets, towels, gauze, cotton and similar materials.

**Ultraviolet Rays** - in an electrical sanitizer are used to keep sanitized implements sanitary.

**Public sanitation** - the application of measures to promote health and to prevent the spread of infectious diseases. The importance of sanitation cannot be overemphasized. Makeup4ever cosmetics bring you in direct contact with the patron's skin, scalp, hair and nails. By using the best sanitary practices, you can insure the protection or your health and your client's health.

**Sanitize** - to render objects clean and sanitary.

**Sepsis** - poisoning due to pathogenic bacteria.

**Sterile** - free from all germs.
**Sterilization** - the process of making an object germ free by the destruction of all kinds of bacteria, whether beneficial or harmful. Sterilization and sanitation are of great importance to the makeup4ever cosmetic technician because they deal with methods used either to prevent the growth of germs or to destroy them entirely when possible, particularly those which are responsible for infections and communicable diseases.
Examination on Sterilization

1. When should you put on a pair of non-sterile disposable examination gloves?
   1. only when working on your client.
   2. only when cleaning up after working on your client.
   3. only after you have them on and the phone rings or you drop something.
   4. all of the above
2. Which one of these statements is true?
   1. Hand washing is the single most important procedure for preventing infections.
   2. Most resident skin microorganisms are not harmful and are not usually implicated in infections.
   3. Transient microorganisms often found on the hands can be pathogens.
   4. all of the above.
3. What does NCTA stand for.
   1. (a.) National College of Testing Association.
   2. (b.) Nonconventional transmissible agents.
   3. (c.) National Cable Television Association.
4. Which statement is not true?
   (a.) Sterilizers should be registered with the FDA, and should be cleaned, and maintained according to manufactures’ instruction.
   (b.) New instruments should be cleaned and sterilized before use.
   (c.) Used instruments can be reused.
   (d.) If you use an all-disposable system you do not need to sterilize.
5. Which statements are true?
   1. (a.) You can put used instruments directly Hospital-grade disinfectant-detergents.
   2. (b.) All blood containment articles are disposed of in a red bag labeled and sealed.
3. (c.) Disinfectants kill all bacteria and are used to sanitize instruments.

6. Requirements for a good Disinfectant
   (a.) Convenience to prepare according to manufacturer's instructions.
   (b.) Quick acting.
   (c.) Practically odorless.
   (d.) Non-corrosive
   (e.) Economical
   (f.) Non-irritating to the skin
   (g.) All of the above

7. Single-use, disposable gloves should be:
   a. washed before placing them in the trash
   b. Sanitized with alcohol prior to removal
   c. Disposed of if torn
   d. Applied while hands are still damp

8. Hand washing should be observed for at least __________
   a. 30 seconds
   b. 25 seconds
   c. 10 seconds
   d. 15 seconds

9. Latex gloves may be worn throughout the procedure except when:
   a. The client has an allergy to latex
   b. The technician must wear powder free gloves
   c. The technician has an allergy to latex
   d. A and C

10. OSHA requires employees to make the HBV vaccination series available to all employees at no cost within _____ days of employment.
   a. 30
   b. 60
   c. 10
   d. 20
11. Hand washing is the single most important procedure for preventing infections. There are two types of cleansers.
   a. Gas and liquid
   b. **Antimicrobial and soap**
   c. Dishwashing and laundry
   d. Lotion and powder
Anatomy and Physiology

Anatomy and Physiology are subjects of considerable importance in the practice of makeup4ever cosmetics. Knowledge of the structure and functions of the human body forms use scientific basis for the proper application of makeup4ever cosmetics. A basic understanding of these subjects will help to improve the professional skill of the technician.

Anatomy is the study of the organs and systems of the body, such as muscles, bones and arteries. The makeup4ever cosmetic technician is basically concerned with those parts such as the skin, eyes, mouth and face.

Histology, or microscopic anatomy, is the study of the minute structure of the various parts of the body. The technician is particularly concerned with the histology of the skin and the appendages of the skin (hair, nails, sweat and oil glands).

Physiology is study of the functions or activities performed by the various parts of the body. The Skeletal System

The skeletal system is the physical foundation of the body. It is composed of differently shaped bones united by movable and immovable joints.

Bone is the hardest structure of the body. It is composed of fibrous tissues bound together, consisting of About one-third animal matter and two-thirds mineral matter.

The scientific study of bones, their structure and function, is called osteology. Os is the technical term for bone and a word frequently used in crossword puzzles.

The following are the functions of bone:

1. To give shape and strength to the body.
2. To protect organs from injury.
3. To serve as attachments for muscles.
4. To act as levers for all bodily movements.
The **skull** is the skeleton of the head. It is an oval, bony case that shapes the head and protects the brain. The skull is divided into two parts: the cranium, consisting of eight (8) bones, and the skeleton of the face, consisting of fourteen (14) bones. The following bones are involved indirectly in connection with the scalp and facial manipulation.

**The Eight Bones of the Cranium**
1. **Occipital bone** forms the lower back part of the cranium.
2. Two **parietal bones** form the sides and top (crown) of the cranium.
3. **Frontal bone** forms the forehead.
4. Two **temporal bones** form the sides of the head in the ear region (below the parietal bones).
5. **Ethmoid bones** are light and spongy bones between the eye sockets and form part of the nasal cavities.
6. **Sphenoid bone** joins together all the bones of the cranium.

**The Fourteen Bones of the Face**
7. Two **nasal bones** form the bridge of the nose.
8. Two **lacrimal bones** are small fragile bones located at the front part of the inner wall of the eye sockets.
9. Two **zygomatic or malar bones** form the prominence of the cheeks.
10. Two **maxillae** are the upper jawbones, which join to form the whole upper jaw.
11. **Mandible** is the lower jawbone, and is the largest and strongest bone of the face. It forms the lower jaw.

**The Muscular System**

The **muscular system** covers shapes and supports the skeleton. Its function is to produce all movements of the body.
Myology is the study of the structure, functions, and diseases of the muscles. No outward sign of human life is more distinctive than that of muscular movement. The muscular system consists of over 500 muscles, large and small, comprising 40% - 50% of the weight of the human body. Muscles are contractile fibrous tissue on which various movements of the body depend for their variety and action. The muscular system relies upon the skeletal system and nervous system for its activities.

There are three (3) kinds of muscular tissues:

- **Striated** (striped) or voluntary, which are controlled by the will, such as those of the face, legs.
- **Non-striated** (smooth) or involuntary, which function without the action of the will, such as those of the stomach and intestines.
- **Cardiac** (heart muscle) which is the heart itself, and is not duplicated anywhere else in the body.

**Muscles of the Scalp**

**Epicranius or occipita-frontalis** is a broad muscle that covers the top of the skull. It consists of two parts: the **occipitalis**, or back part, and the **frontalis**, or the front part. A tendon, the aponeurosis, connects both. The frontalis raises the eyebrows, draws the scalp forward, and causes wrinkles across the forehead.

**Corrugator** muscle is beneath the frontalis and orbicularis oculi, and draws the eyebrow down and in. It produces vertical lines, and is the muscle used for frowning.

**Orbicularis oculi** completely surrounds the margin of the eye socket and closes the eye.

**Corrugator** muscle is beneath the frontalis and orbicularis oculi, and draws the eyebrow down and in. It produces vertical lines, and is the muscle used for frowning.
Muscles of the Nose
Procerus covers the bridge of the nose, depresses the eyebrow, and causes wrinkles across the bridge of the nose.
[The other nasal muscles are very small muscles around the nasal openings, which contract and expand the openings of the nostrils.]

Muscles of the Mouth
Quadratus labia superioris consists of three parts. It surrounds the upper part of the lip, raises and draws back the upper lip, and elevates the nostrils, as in expressing distaste.
Quadratus labia inferioris surrounds the lower part of the lip. It depressed the lower lip and draws it a little to one side, as in the expression of sarcasm.
Buccinator is the muscle between the upper and lower jaws. It compresses the cheeks and expels air between the lips, as in blowing.
Canius lides under the quadratus labia superioris. It raises the angle of the mouth, as in snarling. Mentalis is situated at the tip of the chin. It raises the lower lip, causing wrinkling of the chin, as in doubt or displeasure.
Orbicularis oris forms a flat band around the upper and lower lips. It compresses, contracts, puckers, and wrinkles the lips, as in kissing or whistling.
Risorius extends from the masseter muscle to the angle of the mouth. It draws the comers of the mouth out and back, as in grinning.
Zygomaticus extends from the zygomatic bone to the angle of the mouth. It elevates the lip, as in laughing.
Triangularis extends along the side of the chin. It draws down the comer of the mouth.

Muscles of Mastication
Masseter and temporalis are muscles that coordinate in opening and closing the mouth, and are referred to as the chewing muscles.

The Nervous System

Neurology is a branch of anatomy that deals with the nervous system and its disorders. The nervous system is one of the most important systems of the body. It controls and coordinates the functions of all the other systems and makes them work harmoniously and efficiently. Every square inch of the human body is supplied with fine fibers which we know as nerves. The principal parts that compose the nervous system are the brain and spinal cord and their nerves. Generally, the nervous system is composed of three main divisions:

1. The cerebro-spinal or central nervous system.
2. The peripheral nervous system.
3. The sympathetic or autonomic nervous system.

The cerebro-spinal nervous system consists of the brain and spinal cord. The following are its functions:

1. Controls consciousness and all mental activities.
2. Controls voluntary functions of the five senses: seeing, smelling, tasting, feeling and hearing.
3. Controls voluntary muscle actions, such as all body movements and facial expressions.

The peripheral nervous system is made up of the sensory and motor nerve fibers that extend from the brain and spinal cord and are distributed to all parts of the body. Its function is to carry messages to and from the central nervous system.

The sympathetic nervous system is related structurally to the cerebral-spinal (central) nervous system, but its functions are independent of the will. (The sympathetic nervous system is also referred to as the autonomic nervous system, meaning self-controlled.)
The sympathetic nervous system is very important in the operation of the internal body functions, such as breathing, circulation, digestion, and glandular activities. Its main purpose is to regulate these internal operations, keeping them in balance and working properly.

A neuron, or nerve cell, is the structural unit of the nervous system. It is composed of a cell body, and long and short fibers called cell processors.

Nerves of the Head, Face and Neck

The fifth cranial, trifacial or trigeminal nerve is the largest of the cranial nerves. It is the chief sensory nerve of the face, and the motor nerve of the muscles of mastication. It consists of three branches: ophthalmic, mandibular and maxillary. The following are the important branches of the fifth cranial nerve that are affected by massage:

1. **Supra-orbital** nerve affects the skin of the forehead, scalp, eyebrow, and upper eyelid.
2. **Supra-trochlear** nerve affects the skin between the eyes and upper side of the nose.
3. **Infra-trochlear** nerve affects the membrane and skin of the nose.
4. **Nasal** nerve affects the point and lower side of the nose.
5. **Zygomatic** nerve affects the skin of the temple, side of the forehead, and upper part of the cheek.
6. **Infra-orbital** nerve affects the skin of the lower eyelid, side of the nose, upper lip and mouth.
7. **Auriculo-temporal** nerve affects the external ear and skin above the temple, up to the skull.
8. **Mental** nerve affects the skin of the lower lip and chin.

The seventh (facial) cranial nerve is the chief motor nerve of the face. It emerges near the lower part of the ear; its divisions
and their branches supply and control all the muscles of facial expression, and extend to the muscles of the neck. Of all the branches of the facial nerve, the following are the most important:

9. Posterior auricular nerve affects the muscles behind the ear at the base of the skull.
10. Temporal nerve affects the muscles of the temple, side of forehead, eyebrow, eyelid, and upper part of the cheek.
11. Zygomatic nerve (upper and lower) affects the muscles of the upper part of the cheek.
12. Buccal nerve affects the muscles of the mouth.
13. Mandibular nerve affects the muscles of the chin and lower lip.
14. Cervical nerve (branch of the facial nerve) affects the side of the neck and the platysma muscle.

Eleventh (accessory) cranial nerve (spinal branch) affects the muscles of the neck and back.

Cervical nerves originate at the spinal cord, and their branches supply the muscles and scalp at the back of the head and neck as follows:

15. Greater occipital nerve, located in the back of the head, affects the scalp as far as the top of the head.
16. Smaller (lesser) occipital nerve, located at the base of the skull, affects the scalp and muscles of this region.
17. Greater auricular nerve, located at the side of the neck, affects the external ear and the area in front and back of the ear.
18. Cervical cutaneous or cutaneous coli nerve, located at the side of the neck, affects the front and side of the neck as far down as the breastbone.
The Circulatory System

The circulatory or vascular system is vitally related to the maintenance of good health. The vascular system controls the circulation of the blood through the body in a steady stream by means of the heart and the blood vessels (the arteries, veins and capillaries).

The vascular system is made up of two divisions:

1. The blood-vascular system, which comprises the heart and blood vessels (arteries, veins and capillaries) for the circulation of the blood.
2. The lymph-vascular or lymphatic system, consisting of lymph glands and vessels through which the lymph circulates.

These two systems are intimately linked with each other. Lymph is derived from the blood and is gradually shifted back into the bloodstream.

The heart is an efficient pump. It keeps the blood moving within the circulatory system.

The heart is a muscular, conical-shaped organ, about the size of a closed fist. It is located in the chest cavity, and is enclosed in a membrane, the pericardium. The vagus (tenth cranial nerve) and nerves from the sympathetic nervous system regulate the heartbeat. Generally, the heart beats about 72 to 80 times a minute.

The interior of the heart contains four chambers and four valves. The upper thin-walled chambers are the right atrium and left atrium. The lower thick-walled chambers are the right ventricle and left ventricle. Valves allow the blood to flow in only one direction. With each contraction and relaxation of the heart, the blood flows in, travels from the atria to the ventricles, and is then
driven out, to be distributed all over the body. Atrium is also called auricle.
The arteries, capillaries and veins are tube-like in construction. They transport blood to and from the heart and to various tissues of the body.

**Arteries** are thick-walled muscular and elastic tubes that carry pure blood from the heart to the capillaries.

**Capillaries** are minute, thin-walled blood vessels that connect the smaller arteries to the veins. Through their walls, the tissues receive nourishment and eliminate waste products.

Veins are thin-walled blood vessels that are less elastic than arteries. They contain cup-like valves to prevent back flow, and carry impure blood from the various capillaries back to the heart. Veins are located closer to the outer surface of the body than the arteries.

**Functions of the Blood**

The following are the primary functions of the blood:

1. To carry water, oxygen, food and secretions to all cells of the body.
2. To carry away carbon dioxide and waste products to be eliminated through the lungs, skin, kidneys, and large intestine.
3. To help to equalize the body temperature, thus protecting the body from extreme heat and cold.
4. To aid in protecting the body from harmful bacteria and infections, through the action of the white blood cells.
5. To clot the blood, thereby closing injured minute blood vessels and preventing the loss of blood.

**The Circulation of the Blood**

There are two systems that take care of this circulation:
Pulmonary circulation is the blood circulation that goes from the heart to the lungs to be purified, and then returns to the heart. General circulation is the blood circulation from the heart throughout the body and back again to the heart.

The Blood
Blood is the nutritive fluid circulating through the circulatory system. It is a sticky, salty fluid, with a normal temperature of 98.6 degrees Fahrenheit (37 degrees Celsius), and it makes up about one-twentieth of the weight of the body. From 8 to 10 pints of blood fill the blood vessels of an adult.

Color of blood. The blood itself is bright red in color in the arteries (except in the pulmonary artery) and dark red in the veins (except in the pulmonary vein). This change in color is due to the gain or loss of oxygen as the blood passes through the lungs.

Composition of blood. The blood is composed of one-third cells (red and white corpuscles and blood platelet) and two-thirds plasma. The function of red corpuscles (red blood cells) is to carry oxygen to the cells. White corpuscles (white blood cells), or leucocytes, perform the function of destroying disease-causing germs.

Blood platelets are much smaller than the red blood cells. They play an important part in the clotting of the blood over the wound.

Plasma is the fluid part of the blood in which the red and white blood cells and blood platelets flow. It is straw-like in color. About nine-tenths of the plasma is water, and it carries food and secretions to the cells, and carbon dioxide from the cells.

The Lymph-Vascular System
The lymph-vascular system, also called the lymphatic system, acts as an aid to the venous system, and consists of lymph spaces, lymph vessels, lymph glands and lacteals. Lymph is a colorless, watery fluid that circulates through the lymphatic system and is derived from the plasma of the blood, mainly by filtration.
The lymph acts as a middleman between the blood and the tissues. It carries nourishment from the blood to the cells, and removes waste materials from the cells.

Arteries of the Head, Face and Neck

The common carotid arteries are the main sources of blood supply to the head, face and neck. They are located on either side of the neck and divide into internal and external carotid arteries. The internal division of the common carotid artery supplies the brain, eye sockets, eyelids and forehead, while the external division supplies the superficial parts of the head, face and neck.

The external carotid artery subdivides into a number of branches which supply blood to various regions of the head, face and neck. Of particular interest to the makeup4ever cosmetic technician are the following arteries:

Facial artery (external maxillary) supplies the lower region of the face, mouth and nose. Some of its branches are:
- Sub mental artery - supplies the chin and lower lip
- Inferior labial artery - supplies the lower lip
- Angular artery - supplies the side of the nose
- Superior labial artery - supplies the upper lip, septum and wing of the nose.

Superficial temporal artery is a continuation of the external carotid artery, which supplies muscles, skin and scalp to the front, side and top of the head. Some of its important branches are:
- Frontal artery - supplies the forehead
- Parietal artery - supplies the crown and side of the head
- Transverse facial artery - supplies the masseter
- Middle temporal artery - supplies the temples
Anterior auricular artery - supplies the anterior part of the ear. The supra-orbital-artery, a branch of the internal carotid artery, supplies part of the head, the eye socket, eyelid and upper muscles of the eye. Infra-orbital artery, which originates from the internal maxillary artery - supplies the muscles of the eye. Occipital artery - supplies the back of the head, up to the crown. Posterior auricular artery - supplies the scalp, back and above the ear, and skin behind the ear. The blood returning to the heart from the head, face and neck flows on each side of the neck in two principal veins: the internal jugular and the external jugular. The most important veins of the face and neck are parallel to the arteries and take the same names as the arteries.

The Endocrine System

Glands are specialized organs that vary in size and function. The blood and nerves are intimately connected with the glands. The nervous system controls the functional activities of the glands. The glands have the ability to remove certain constituents from the blood and to convert them into new compounds. There are two main sets of glands: One group is called the duct glands, possessing canals that lead from the gland to a particular part of the body. Sweat and oil glands of the skin and intestinal glands belong to this group.

The Skin

It is very important for technician to have a thorough understanding of the skin to be successful in this industry. Adequate time must be devoted to learning the anatomy of the skin. New information is constantly being released about the effects of pigment implanted within the skin. It is important to keep up to date with this information.
The skin is the largest and one of the most important organs of the body. A **healthy skin** is slightly moist, soft and flexible, possesses a slightly acid reaction, and is free from any disease or disorder. Its **texture** (feel and appearance) ideally is smooth and fine grained. A **good complexion** is an indication of the fine texture and healthy color of the skin.

The skin varies in thickness, being thinnest on the eyelids and thickest on the palms and soles. Continued pressure over any part of the skin may cause it to thicken and develop into a callous. The skin of the scalp is constructed similarly to the skin elsewhere on the human body. However, the scalp has larger and deeper hair follicles to accommodate the longer hair of the head.

The skin contains two main divisions: the **epidermis** and the **dermis**.

1. The epidermis is the outermost layer of the skin. This layer is commonly called the **cuticle, or scarf skin**.
2. The **dermis** is the underlying, or inner layer, of the skin. It also is called the **derma, corium, cutis or true skin**.

The **epidermis** is the outer layer of skin that forms a protective covering of the body. It contains no blood vessels, but has many small nerve endings. The epidermis contains the following layers:

1. The **stratum corneum**, or horny layer, is the outer layer of the skin. Its scale-like cells are continually being shed and replaced by underlying cells coming to the surface. These cells contain **keratin**, a protein substance. The overlapping cells are covered by a thin layer of oil which helps make the stratum corneum almost waterproof.
2. The **stratum lucidum**, or clear layer, consists of small transparent cells through which light can be passed.
3. The **stratum granulosum**, or granular layer, consists of cells that look like distinct granules. These cells are almost dead and undergo a change into a horny substance.
4. The stratum germinativum, formerly known as the stratum mucosum and basal layer and Malpighian layer, is composed of several layers of differently shaped cells. The deepest layer is responsible for the growth of the epidermis. It also contains a dark skin pigment called melanin, which protects the sensitive cells below from the destructive effects of excessive ultra-violet rays of the sun or of a ultra-violet lamp.

The dermis is the true skin. It is a highly sensitive and vascular layer of connective tissue. Within its structure are found numerous blood vessels, lymph vessels, nerves, sweat glands, oil glands, hair follicles, arrector pili muscles and papillae. The dermis consists of two layers: the papillary, or superficial layer, and the reticular, or deeper layer.

1. The papillary layer lies directly beneath the epidermis. It contains small cone-shaped projections of elastic tissue that point upward into the epidermis. These projections are called papillae. Some of these papillae contain looped capillaries; others contain nerve fiber endings, called tactile corpuscles. This layer also contains some of the melanin skin pigment.

The reticular layer contains the following structures within its network:

1. Fat cells
2. Blood vessels
3. Lymph vessels
4. Oil glands
5. Sweat glands
6. Hair follicles
7. Arrector pili muscles

Subcutaneous tissue is a fatty layer found below the dermis. This tissue is also called adipose or subcutis tissue and varies in thickness according to the age, sex and general health of the individual. It gives smoothness and contour to the body, contains fats for use as energy, and also acts as a protective cushion for
the outer skin. A network of arteries and lymphatic’s maintains circulation.

How the Skin is Nourished

Blood and lymph supply nourishment to the skin. As they circulate through the skin, the blood and lymph contribute essential materials from growth, nourishment, and repair of the skin, hair and nails. In the subcutaneous tissue are found networks of arteries and lymphatic’s that send their smaller branches to hair papillae, hair follicles and skin glands. The capillaries are quite numerous in the skin.

Nerves of the Skin

The skin contains the surface endings of many nerve fibers. They are:

1. **Motor nerve fibers**, which are distributed to the arrector pili muscles attached to the hair follicles.
2. **Sensory nerve fibers**, which are distributed to the sweat and oil glands of the skin.

These nerves regulate the excretion of perspiration from the sweat glands and control the flow of sebum to the surface of the skin.

Sensory Nerves of the Skin

**Sense of Touch.** The papillary layer of the dermis provides the body with the sense of touch. Nerves supplying the skin register basic types of sensations, namely: touch, pain, cold, pressure or deep touch. Nerve endings are most abundant in the fingertips.
Complex sensations such as vibrations seem to depend on the sensitivity of a combination of these nerve endings. The pliability of the skin depends on the elasticity of the dermis. For example, healthy skin regains its former shape almost immediately after being expanded.

**Aging Skin.** The aging process of the skin is a subject of vital importance to everyone. Perhaps the most outstanding characteristic of the aged skin is the loss of elasticity.

**Skin Color**

The color of the skin, whether fair, medium or dark, depends in part on the blood supply to the skin, and primarily on the melanin, or coloring matter, which is deposited in the stratum germinativum and the papillary layers of the dermis. The pigment's color varies in different people. The distinctive color of the skin is a hereditary trait and varies among races and nationalities.

**The Glands of the Skin**

The skin contains two types of duct glands that extract materials from the blood to form new substances.

The **sudoriferous or sweat glands** excrete sweat. The **sebaceous or oil glands** secret sebum.

The sweat glands (tubular type) consist of a coiled base, or **fundus**, and a tube-like duct, which terminates at the skin surface to form the **sweat pore**. Practically all parts of the body are supplied with sweat glands, which are more numerous on the palms, soles, forehead, and in the armpits.

The sweat glands regulate body temperature and help to eliminate waste products from the body. Their activity is greatly increased by heat, exercise, emotions and certain drugs. The excretion of sweat is under the control of the nervous system. Normally, one to two pints of liquids containing salts are eliminated daily through the sweat pores in the skin.
The oil glands (saccular type) consist of little sacs whose ducts open into the hair follicles. They secrete sebum, which lubricates the skin and preserves the softness of the hair. With the exception of the palms and the soles, these glands are found in all parts of the body, particularly in the face.

Sebum is an oil substance produced by the oil glands. Ordinarily, it flows through the oil ducts leading to the mouths of the hair follicles. However, when the sebum becomes hardened and the duct becomes clogged, a blackhead is formed. Cleanliness is of prime importance in keeping the skin free of blemishes.

**Functions of the Skin**

The principal functions of the skin are protection, sensation, heat regulation, excretion, secretion and absorption.

1. **Protection.** The skin protects the body from injury and bacterial invasion. The outer most layer of the epidermis is covered with a thin layer of sebum, thus rendering it waterproof. It is resistant to wide variations in temperature, minor injuries, chemically active substances and many microbes.

2. **Sensation.** Through its sensory nerve endings, the skin responds to heat, cold, touch, pressure and pain. Extreme stimulation of sensory nerve endings produces pain. A minor burn is very painful, but a deep burn that destroys nerves may be painless. Sensory endings, responsive to touch and pressure, are situated near hair follicles.

3. **Heat Regulation.** The healthy body maintains a constant internal temperature of about 98.6 degrees Fahrenheit (37 degrees Celsius). As changes occur in the outside temperature, the blood and sweat glands of the skin make necessary adjustments in their functions. Heat regulation is a function of the skin, the organ that protects the body from the environment. The body is cooled by the evaporation of sweat.
4. Exertion. Perspiration from the sweat glands is excreted from the skin. Water lost by perspiration carries salt and other chemicals with it.

5. Secretion. Sebum is secreted by the sebaceous glands. Excessive flow of oil from the oil glands may produce seborrhea. Emotional stress may increase the flow of sebum.

6. Absorption. This function is limited, but it does occur. Female hormones, when and ingredient of a face cream, may enter the body through the skin and influence it to a minor degree. Fatty materials, such as lanolin cream, are absorbed largely through the hair follicles and sebaceous gland openings.

Disorders of the Skin

This information has been compiled to help the makeup4ever cosmetic technician become familiar with certain common skin disorders with which they may come into contact. Any client with a skin condition that the technician does not recognize to be a simple disorder should be referred to a physician. The most important thing to know is that a client who has an inflammatory skin disorder, which may or may not be infectious, should not be treated.

Definitions Pertaining to Skin Disorders

Listed below are a number of important terms with which the makeup4ever cosmetic technician should be familiar.

**Dermatology** - the study of the skin, its nature, structure, functions, diseases and treatment.

**Dermatologist** - A skin specialist

**Diagnosis** - the recognition of a disease by its symptoms.

**Etiology** - the study of the causes of disease.
Pathology - the study of disease.
Prognosis – the foretelling of the probable course of a disease.
Trichology - the study of hair and its diseases.

Lesions of the Skin

A lesion is a structural change in the tissues caused by injury or disease. There are three types:
1. Primary,
2. Secondary, and
3. Tertiary.

The makeup4ever cosmetic technician is concerned with primary and secondary lesions only.

Knowing the principal skin lesions helps the makeup4ever cosmetic technician to distinguish between conditions that may or may not be treated in the clinic setting.

A symptom is a sign of disease. They symptoms in diseases of the skin are divided into two groups:

1. **Subjective** refers to symptoms that can be felt, as itching, burning or pain.
2. **Objective** refers to symptoms that can be seen, as pimples, pustules or inflammation.

**Definitions Pertaining to Primary Lesions of the Skin**

**Bulla** - a blister containing a watery fluid, similar to a vesicle, but larger.

**Macula** - a small, discolored spot or patch on the surface of the skin, neither raised nor sunken, as freckles.

**Papule** - a small, elevated pimple in the skin, containing no fluid but which may develop pus.
**Pustule** - an elevation of the skin having an inflamed base, containing pus.

**Tubercle** - a solid lump larger than a papule. It projects above the surface or lies within or under the skin. It varies from the size of a pea to a hickory nut.

**Tumor** - an external swelling, varying in size, shape and color.

**Vesicle** - a blister with clear fluid in it. Vesicles lie within or just beneath the epidermis. [Example: Poison ivy produces small vesicles.]

**Whelp** - an itchy, swollen lesion that lasts only a few hours. [Example: hives, or the bite of an insect, such as a mosquito.]

**Crust** (scab) - an accumulation of serum and pus, mixed perhaps with epidermal material. [Example: the scab on a sore.]

**Excioriation** - a skin sore or abrasion produced by scratching or scraping. [Example: a raw surface due to the loss of the superficial skin after an injury.]

**Fissure** - a crack in the skin penetrating into the derma, as in the case of chapped hands or lips. **Scale** - an accumulation of epidermal flakes, dry or greasy. [Example: abnormal or excessive dandruff.]

**Scar** (cicatrix) - likely to form after the healing of an injury or skin condition that has penetrated the dermal layer.

**Stain** - an abnormal discoloration remaining after the disappearance of moles, freckles or liver spots, sometimes apparent after certain diseases.

**Ulcer** - an open lesion on the skin or mucous membrane of the body, accompanied by pus and loss of skin depth.

Before describing the disease of the skin so that they will be recognized by the makeup4ever cosmetic technician, it is well to understand what is meant by disease.
**Disease** - any departure from a normal state of health.

**Acute disease** - one manifested by symptoms of a more or less violent character and of short duration.

**Chronic disease** - one of long duration, usually mild, but recurring.

**Contagious disease** - one that is communicable by contact.

**Infectious disease** - one due to pathogenic germs taken into the body as a result of contact with a contaminated object or lesion.

**Skin disease** - any infection of the skin, which can be characterized by, and objective lesion (one that can be seen), which may consist of scales, pimples or pustules.

*Note: The terms "infectious disease," "communicable disease," and "contagious disease" are often used interchangeably.*

**Allergy** - sensitivity that certain persons develop to normally harmless substances. Skin allergies are quite common. Contact with certain types of cosmetics, medicines and tints, or eating certain foods, all may bring about an itching eruption, accompanied by redness, swelling, blisters, oozing and scaling.

**Congenital disease** - one that is present in the infant at birth.

**Epidemic** - the manifestation of a disease that attacks simultaneously a large number of persons living in a particular locality. Infantile paralysis, influenza, virus or smallpox is examples of epidemic-causing diseases.

**Inflammation** - a skin disorder characterized by redness, pain, swelling and heat. **Occupational disease** (such as dermatitis) - one that is due to certain kinds of employment and is caused by coming in contact with cosmetics, chemicals or tints.

**Seasonal disease** - one that is influenced by the weather, as prickly heat in the summer, and forms of eczema, which are more prevalent in cold weather.

**Parasitic disease** - one produced by disease-causing bacteria, such as staphylococcus and streptococcus, Puss-forming bacteria.
Systemic disease - due to under-or over-functioning of the internal glands. It may be caused by faulty diet.
Venereal disease - a contagious disease commonly acquired by contact with an infected person during sexual intercourse.

Disorders of the Sebaceous Glands
There are several common disorders of the sebaceous (oil) glands which the makeup4ever cosmetic technician should be able to identify and understand.
Comedones, or blackheads, are worm-like masses of hardened sebum, appearing most frequently on the face, forehead and nose.
Blackheads accompanied by pimples often occur in youths between the ages of 13 and 20. During the adolescent period, the activity of the sebaceous glands is stimulated, thereby contributing to the formation of blackheads and pimple
Milia or whiteheads, is a disorder of the sebaceous (oil) glands caused by the accumulation of sebaceous matter beneath the skin. This may occur on any part of the face, neck and, occasionally, on the chest and shoulders. Whiteheads are associated with fine-textured, dry types of skin.
Acne is a chronic inflammatory disorder of the sebaceous glands, occurring most frequently on the face, back and chest. The cause of acne is generally held to be microbic, but predisposing factors are adolescence and disturbance of the digestive tract. Acne, or common pimples, is also known as acne simplex or acne vulgaris
Acne appears in a variety of different types, ranging from the simple (non-contagious) pimple, to serious, deep-seated skin conditions. It is always advisable to have the condition examined and diagnosed by a physician before any service is given.
Seborrhea is a skin condition caused by an excessive secretion of the sebaceous glands. An oily or shiny condition of the nose,
forehead, or scalp indicates the presence of seborrhea. On the scalp, it is readily detected by the unusual amount of oil on the hair.

**Steatosis** is a condition of dry, scaly skin, characterized by absolute or partial deficiency of sebum, due to senile changes (old age) or some bodily disorders. In local conditions, it may be caused by alkalis, such as those found in soaps and washing powders.

**Rosacea**, formerly called acne rosacea, is a chronic inflammatory congestion of the cheeks and nose. It is characterized by redness, dilation of blood vessels, and the formulation of papules and pustules. It is usually caused by poor digestion and over-indulgence in alcoholic beverages. It may also be caused by over-exposure to extreme climate, faulty elimination, and hyperacidity. Eating and drinking hot, highly spiced, or highly seasoned foods or drink usually aggravates it.

**Steatoma, or sebaceous cyst**, is a subcutaneous tumor of the sebaceous gland. Its contents consist of sebum, and its size ranges from a pie to an orange, and usually occurs on the scalp, neck and back. A steatoma is sometimes called a **wen**.

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**Definitions Pertaining to Disorders of Sudoriferous Sweat Glands**

- **Bromidrosis of osmidrosis** - foul-smelling perspiration, usually noticeable in the armpits or on the feet.
- **Anidrosis** lack of perspiration - often a result of fever or certain skin diseases. It requires medical treatment.
- **Hyperidrosis or excessive perspiration** – caused by excessive heat or general body weakness. The most commonly affected parts are the armpits, joints and feet. Medical treatment is required.
- **Miliaria rubra (prickly heat)** - an acute, inflammatory disorder of sweat glands characterized by an eruption of small red vesicles, and accompanied by burning and itching of skin. It is caused by exposure to excessive heat.
**Dermatitis** - a term used to denote an inflammatory condition of the skin. The lesions come in various forms, such as vesicles or papules.

**Eczema** - an inflammation of the skin of acute or chronic nature, presenting many forms of dry or moist lesions. It is frequently accompanied by itching or by burning sensation. All cases of eczema should be referred to a physician for treatment. Its cause is unknown.

**Psoriasis** - a common, chronic inflammatory skin disease whose cause is unknown. It is usually found on the scalp, elbows, knees, chest and lower back, rarely on the face. The lesions are round, dry patches covered with coarse, silvery scales. If irritated, bleeding points occur. It is not contagious.

**Herpes simplex** - a virus infection of unknown origin, commonly called **fever blisters**. The eruption of a single, or group of vesicles on a red swollen base characterizes it. The blisters usually appear on the lips, nostrils, or other parts of the face, and rarely last more than a week. Indigestion may be one of the causes. It is contagious.

**Definitions Pertaining to Pigmentation of the Skin**

In abnormal conditions, **pigment** may come from inside or outside the body. Abnormal colors are seen in every skin disorder and in many systemic disorders, and are observed when certain drugs are being taken internally.

**Tan** - caused by excessive exposure to the sun or tanning booth ultraviolet lamps.

**Lentigines** - (singular, **lentigo**) or freckles - small yellow to brown colored spots or parts exposed to sunlight and air.

**Stains** - abnormal brown skin patches, having a circular and irregular shape. Their permanent color is due to the presence of blood pigment. They occur during aging, after certain diseases,
and after the disappearance of moles, freckles and liver spots. The cause of these stains is unknown.

**Chloasma** - characterized by increased deposits of pigment in the skin. It is found mainly on the forehead, nose and cheeks. Chloasma is also called **moth patches or liver spots.**

**Naevus** - commonly known as **birthmark.** It is a small or large malformation of the skin due to pigmentation or dilated capillaries.

**Leucoderma** - abnormal white patches in the skin, due to congenital defective pigmentation. It is classified as:

- **Vitiligo** an acquired condition of the leucoderma, affecting the skin or the hair. The only treatment is a matching cosmetic color, making it less conspicuous.
- **Albinism** congenital absence of melanin pigment in the body, including the skin, hair and eyes. The silky hair is white. The skin is pinkish white and will not tan.

Definitions Pertaining to Hypertrophies (New Growths)

**Keratoma or callous** - an acquired, superficial, round, thickened patch of epidermis, due to pressure friction on the hands and feet. If thickening grows inward, it is called a corn.

**Mole** - a small, brownish spot, or blemish on the skin. Moles are believed to be inherited. They range in color from pale tan to brown or bluish black. Some moles are small and flat, resembling freckles, while others are more deeply seated and darker in color. Large, dark hairs often occur in moles. Any change in a mole requires medical attention. **CAUTION:** Do not treat or remove hair from moles.

**Verruca** - technical term for **wart.** It is caused by a virus and is infectious. It can spread from one location to another, particularly along a scratch in the skin.

**Alopecia Areata** - a disorder causing baldness in spots. This condition may be treated under the direction of a physician. Alopecia refers to a condition of premature baldness or excessive hair loss. The chief causes of alopecia are poor circulation, lack of proper stimulation, improper nourishment,
certain infectious skin diseases, such as ringworm, or constitutional disorders. The treatment of alopecia is directed to stimulating the blood supply to the scalp and reviving the hair papillae involved in hair growth.

**HIV Infection and Aids**

There have been no reported cases of HIV infection caused as a direct result of tattooing. Nonetheless, it is important for you to know how to protect you and your client from the virus. Tattooing is an **invasive** (breaks through the body's normal barriers) procedure and the HIV virus can be passed on by infected blood and plasma. Every makeup4ever cosmetic technician should be careful to practice the safety precautions outlined elsewhere in this teaching manual. Even a minimal understanding of HIV and AIDS will make the importance of those procedures very clear.

The disease AIDS is caused by the human immuno-deficiency virus (HIV). The virus may live in the human body for years and can be spread to other people even before any symptoms appear. HIV makes the body unable to fight infections and other diseases. These diseases and infections can kill. The AIDS virus (HIV) is spreading. Today, about 1 to 1.5 million people in the United States are infected with HIV. Each of them can spread the virus to others. Most people get HIV by sharing needles or having unprotected sex with someone who already has the virus. The virus can attack anyone. It doesn't matter who you are or where you live. People can get HIV in the suburbs as well as in the inner cities. They can get the virus through sex and needle sharing at schools or college as well as on the street. So far there is no vaccine or cure for HIV infection or AIDS in sight. Experts believe that HIV, and AIDS, will be around for many years. But you can learn to protect yourself -- and those
you love -- from HIV. Education and safe behavior are our best defense against the spread of the virus.

FACT: A VIRUS CALLED HIV CAUSES AIDS
HIV stands for human immunodeficiency virus. This virus is passed by the semen, vaginal discharges or blood of HIV-infected people. Once it infects someone, HIV destroys the cells that defend the body. Without the cells that make up its immune system, the body cannot defend itself from illnesses. Disease and infections then move in without a fight. HIV also becomes a part of the body's cells. The virus can hide in these cells and act like a time bomb.

FACT: AIDS IS THE RESULT OF HIV INFECTION
It may take many years before AIDS develops. When people have AIDS, their bodies' immune system has been severely damaged by the AIDS virus (HIV). When that happens, they can get many different kinds of infections and cancers. It is these illnesses that kill.

FACT: WHEN SIGNS OF HIV APPEAR, THEY VARY FROM PERSON TO PERSON
some people get fevers or diarrhea. Most people get swollen glands that won't go away. Many lose weight for no apparent reason. The virus has harmed the body's immune system. Only a doctor and/or certain blood tests can tell if these signs are related to HIV.

FACT: PEOPLE INFECTED WITH HIV USUALLY LOOK AND FEEL HEALTH
The virus acts like a time bomb, quietly ticking away for years before showing any signs. People may not even know they are infected. Today about 1 to 1.5 million people in the United States have HIV. They can spread the virus to others.

FACT: MOST PEOPLE WITH HIVE OR AIDS GOT THE VIRUS BY HAVING SEX OR SHARING DRUG NEEDLES WITH SOMEONE WHO ALREADY HAD HIV
Anyone who has the virus can pass it on to others. Men with HIV can infect women as well as other men. Women can infect men

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as well as other women. Infected women can even infect their babies before and during birth, and rarely by breast-feeding. More than a third of babies born to infected mothers will have the virus and develop AIDS. The number of women and babies with HIV is growing.

FACT: THERE IS NO VACCINE FOR HIV OR A CURE FOR AIDS

Some medicines have prolonged the lives of people with AIDS. But no cure or vaccine is in sight.
Anatomy and Physiology Examination

1. On the surface of the skin, we can see:
   a. Veins and capillaries
   b. Arteries
   c. Nothing

2. The lymphatic system acts as a filtration aid for the:
   a. Muscular system
   b. Vascular system
   c. Nervous system
   d. Physiology of the bones

3. Pigment migration can occur in the:
   a. Lymph
   b. Plasma
   c. Brain
   d. Lymphatic system

4. The skin is nourished through:
   a. Vitamins and minerals
   b. Blood and lymph
   c. Good teeth

5. The main causes of pigment migration re:
   a. Medications, exfoliants, sun exposure
   b. Going too deep, macerating the skin, pigment with small particle size
   c. Using a large needle grouping, flat, or magnum
6. The blood travels through the circulatory system, which consists of two main divisions:
   a. The vascular and lymphatic system
   b. The arteries and veins
   c. The capillaries and the nerves

7. Blood travels in:
   a. Buckets
   b. Major intersections
   c. The heart, arteries, veins and capillaries

8. Capillaries are:
   a. Smaller than arteries or veins
   b. Thick elastic tubes that carry pure blood from the heart
   c. Thin walled blood vessels

9. The color of blood is blue red in the arteries and dark blue in the veins. What changes the color of blood is:
   a. Ancestry
   b. Oxygen
   c. A daily vitamin

10. Plasma is the fluid part of the blood in which the blood platelets flow and is:
    a. Not visible to the naked eye
    b. Only found in blood banks
    c. Straw like in color
Pigments and Color

Currently, there are numerous companies providing pigments for the purpose of cosmetic makeup. There are significant differences that exist in the chemical composition of these various pigments. There are also many different colors from which to choose.

Most pigment manufacturers will use some form of synthetic iron oxides for the purpose of Micro pigmentation. Synthetic iron oxides are made from iron sulfate and appear in basic earth tone colors.

To achieve colors that are brighter, manufacturers will add other synthetic extracts from vegetables, animals and minerals. Some of those minerals include the following:

- Black
- Blue
- Red
- Green
- Yellow
- White
- Carbon
- Cobaltous Aluminate
- Mercuric Sulfide (Cinnabar)
- Cadmium Selenite
- Alizarin
- Chromium Sesquioxide
- Chromium Oxide
- Cadmium Sulfide
- Titanium Oxide
- Zinc Oxide
- Barium Sulfate

Pigments recommended by makeup4Ever are:

- Insoluble
- non-irritating to tissues
- non-toxic

They are designed to eliminate most of the touch up applications required of pure synthetic iron oxides used by most companies who manufacture pigments for cosmetic tattooing.

Color Theory
To become successful in the art of makeup cosmetics, the technician must have a clear knowledge of the theory of color. It is essential that you understand colors and how they react when combined. Only with this knowledge and understanding can the technician make sound judgments concerning color selection.

**Primary Colors**
All colors originate from three basic colors called primary colors: Red, Yellow, and blue. These are called primary colors because every other color can be developed from them.

**Secondary Colors**
When equal proportions of any two (2) of the primary colors are mixed, they form a new color called a secondary color. Thus:

- **Tertiary Colors**
  - Red + Yellow = orange
  - Yellow + Blue = green
  - blue + red = violet

If equal proportions of any two color and its adjacent (on the color wheel) secondary color are mixed, they form yet a new color called a tertiary color, and six (6) new combinations, or color patterns, are formed:

- Yellow + green = yellow green
- blue + green = blue green
- blue + violet = blue violet
- red + violet = red violet
- red + orange = red orange
- yellow + orange = yellow orange
Thus, we can visualize that by continually intermixing these colors, an infinite number of colors and shades can be created. By thoroughly understanding the combinations of colors, primary colors, secondary colors, and tertiary colors, the makeup4ever cosmetic technician is in a position to correct color problems effectively and even to avoid them entirely.

**Black and Brown Colors**
If all three primary colors are mixed in equal amounts, they produce black. If all three primary colors are mixed in unequal
amounts, they create *browns*. The shade of brown created varies in accordance with the proportion of primary colors used. Thus, more red creates a brownish red: more blue, dark brown; and more yellow, a light brown.

**Depth of Color**
Up to this, we have been discussing the mixing of colors at full-strength. We must consider the reaction when primary colors are mixed with equal amounts of white. The result is a half-tine of the original color. If we then mix half-tones of two primary colors, we get a half tone of a secondary color. Continually intermixing these colors, an infinite numbers of times. Thus, a half tone of red mixed with a half tone of blue results in a half-tone (very light) violet. In this fashion, different color depths are created. Various mixtures and combinations create the very lightest shades created with almost limitless possibilities.

Depth of color indicates how dark or how light the color really is. The blacker used in the mixture, the darker the color. The more white used in the mixture, the lighter the color.

The foregoing are just a few thoughts on how the theory of color works. By applying the few basic theories developed and giving some thought to how colors react when mixed together, the makeup cosmetic technician can achieve greater color variety and assure better results.

**Eyebrow Colors**
YELLOW/WHITE to lighten add
Medium Brown to darken
Add PURPLE, DARK BLUE OR BLACK TAUPE
Mix YELLOW, RED AND WHITE with a small amount of BLACK OR BLUE Color Catalogue

**Lip Colors**
True RED straight mix with Blush or Brown
For a natural look.
For a darker RED, add Blue of Purple.
For SOFT RED (Pink), add a bit of White.
To WARM RED (Coral), add Yellow.

**Color Catalogue**

**Cheek Blush Colors**

Preferred Color
ROSE tones warmed with Yellow or cooled with Purple or Blue.
Use color extremely thin! 114 pigment to 3/4 liquid.  See Catalogue

Alternative Color
Browns and Violets in people of Color.

**Colors for Camouflage of Skin Imperfections**
Skin tones are made up from combinations of:
Browns Yellows Blues Pinks Purples Whites
Natural nipple colors are made up from combinations of:
Browns Reds Whites

**WARNING:** *Matching skin tones for camouflage procedures is difficult.*

Colors will change once the skin heals. It is important to test colors before doing the actual procedure!

What to Expect from Colors Before & After the Procedure Heals
BLUE heals darker in the skin. It is the densest or heaviest color in cosmetic tattooing. YELLOW heals much lighter in the skin, sometimes almost disappearing. It is the lightest color. WHITE has a tendency to optically "float" on the skin, giving the illusion of raised or scarred skin. This is because it is opaque or solid in nature where all other colors are transparent in nature.
BROWN will heal grey unless there is enough red and yellow in the mixture of pigment. REDS are much brighter when applied than they will be once the skin heals. A bright red will generally turn PINK. BLACK will heal slate -Blue-Black. Mixing a small amount of Brown will help eliminate the Blue cast.

**Note:** If you need to change or substantially lighten a color - add WHITE to the pigment to help block the offending color.
Pigments and Color Examination

1. The best pigments in the market to use are.
   a. Inert.
   b. insoluble and non-irritating to the tissues.
   c. soluble

2. It is essential that you understand colors and how they react when combined.
   a. true
   b. false

3. What are the Primary Colors?
   a. All colors can be made from any or all of these.
   b. The primary colors Red, Yellow, Blue, because every other color can be developed from them.
   c. Any color can be called a tertiary color.

4. The Color Wheel becomes a necessary tool to use in your practice because.
   a. It is impressive to your client
   b. When you understand how to use it will help in your ability to achieve the color you want.
   c. Nothing can help in achieving the color you want.
   d. You never need to test your colors.

5. Red and yellow creates orange, which is a _______________ color.
   a. Primary
   b. Secondary
   c. Tertiary
   d. Intermediate

6. Photo documentation is necessary and helpful:
   a. Prior to beginning a procedure
   b. After completion of the procedure
   c. To create a good portfolio
d. When the client has approved the design

e. All of the above

7. During the procedure, a lack of color deposit could indicate:
   a. Improper technique
   b. An ineffective anesthetic
   c. A hooked or burred needle
   d. All of the above

8. It is important to obtain the client’s consent prior to the procedure because:
   a. Treatment without consent is battery
   b. The client will be legally bound to pay for the procedure
   c. Your insurance policy may be void
   d. A and C

9. Pigment migration can occur in the:
   a. Lymph
   b. Plasma
   c. Brain
   d. Lymphatic system

10. The main causes of pigment migration are:
    a. Medications, exfoliants, sun exposure
    b. Going too deep, macerating the skin, pigment with small particle size
    c. Using a large needle grouping, a flat, or magnum

11. Capillaries are:
    a. Smaller than arteries or veins
    b. Thick elastic tubes that carry pure blood from the heart
    c. Thin walled blood vessels

**Video to watch**
List of Equipment Needed

2. Treatment table or retractable chair, such as a dental chair or a facial chair. Height adjustable chair for you to sit in, such as a steno chair.
3. Height adjustable chair for you to sit in, such as a steno chair.
4. Height adjustable overhead lamp.
5. Head or neck pillow for the patient.
6. Garbage can to dispose of contaminated swabs and tissues. The garbage can should be lined with a plastic liner.
7. Equipment table, preferably height adjustable. A stainless steel Mayo stand similar to what a dentist might use.
8. Lab coats or scrub suits, to wear when performing a procedure.
9. Client apron or gown to protect the client's clothing from pigment splattering during the procedure.
10. Hand-held mirror for the client to hold and look into. It is suggested that you also get a magnifying mirror patients that have difficulty seeing.
11. Ultrasonic cleaning unit or an autoclave (if not using the disposable system).
12. Eye Loupe to check needles.
13. Tweezers.
14. Pliers, Screw driver,
15. Cidex tray.
List of Supplies

1. Pigments.
2. Needles.
3. Tubes.
4. Disposable gloves.
5. Antibiotic Soap.
6. Skin Scribe
7. Vaseline or baby oil.
8. Antibiotic ointment, such as bacitracin or Neosporin.
10. Caps to contain pigment.
11. Cap holder
12. Cidex.
13. Ultrasonic cleaning solution.
14. Autoclave or Dry Heat tubing or pouches and indicator tape.
**Business Supplies**

2. Business cards.
4. Stationery.
5. Envelopes.
6. Portfolio.
7. Camera Digital or 35 mm with a micro lens for shooting close-up photographs.
10. "Consultation Record" forms.
11. "Personal Information" forms.
Machines

Holding Your Machine

Holding your machine correctly entails much more than getting a firm grip on it and implanting pigment.

Some basic things to remember when holding your machine include:

• Hold the machine as if you would a pen or pencil.
• You will eventually get used to the "heavy" feeling from the weight of the machine.
• After only a few procedures, it will feel quite natural.
• Rest your hand on your client's skin to stabilize the machine.
• Move the machine from your wrist, not your fingers. You may use your palm as a pivot.
• Hold your machine in an upright position when using a multiple needle.

Basic Machines

• Precision Pen
• Power Pen
• Sapphire Dynasty
• Platinum Machine
• Nouveau Contour

Various Needle Clusters and Uses
In cosmetic tattooing, the most frequently used needle clusters are:
SINGLE NEEDLE

THREE NEEDLES

FIVE NEEDLES

Five point shader eyeliner for men and women.

Three Needle: Eyeliner; working between the lashes; repair work, on lip liner; small beauty marks.

Five Needle: Round Wide eyeliner; average lip liner; filing small skin match areas; large beauty marks.

Seven Needle: Round; Heavy eyeliner; shadow; full lip; larger skin match areas.

In specialized areas of micro pigmentation, there are times when other types of needle clusters come into use. However, at this time, it is important to master the use of the needle clusters discussed here. Watch a video on three different machines to choose from Coil, Digital, Pen.
Machines and needles Examination

1. A manual pen, a rotary pen, and a coil machine are all:
   a. Tools used to tattoo on the skin
   b. Used in Micropigmentation
   c. Implantation techniques
   d. A and B

2. During the procedure, a lack of color deposit could indicate:
   a. Improper technique
   b. An ineffective anesthetic
   c. A hooked or burred needle
   d. All of the above

3. Types of needles used in Micropigmentation are:
   a. Liners, shaders, grouped and inline, flats and magnums
   b. Single and multiple grouped needles
   c. Tattoo needles

4. Three basic categories of scar tissue are:
   a. Asymptomatic, hypertrophic, keloid
   b. Thin, dense, raised
   c. Light, dark, vascular

5. An example of an antiseptic that can be safely used on the skin is:
   a. Distilled water
   b. Glycolic acid
   c. Hydrogen peroxide

6. Scar tissue is normally void of:
   a. Hair follicles, oil and sweat glands, most of the epidermal cells
   b. Merkel cells, Langerhan cells, melanocyte cells
c. Color
d. All of the above

7. The functions of the skin are:
   a. Protection, sensation, heat regulation, secretion, and absorption
   b. To keep us dry on the outside and wet on the inside
   c. To help us look good by letting us change color when we tan

8. An excessive or total loss of hair on the scalp, eyebrows and eyelashes is known as:
   a. Baldness
   b. Alopecia universalis
   c. Old age

9. A small elevation on the surface of the skin having an inflamed base containing pus is known as:
   a. Vector borne contact
   b. A pustule
   c. A vesicle

10. A lesion of the skin:
    a. Is common on older clients
    b. Cannot be recognized by the naked eye
    c. Is a structural change in the tissue caused by injury or disease

11. Edema in the skin’s connective tissue is commonly known as:
    a. Collagen
    b. Crusting
    c. Swelling

12. A port wine stain is a type of:
a. Pigment  
b. Hemangioma  
c. Color wash  

13. Malignant melanoma:  
a. Is cancer of the pigment cells of the skin  
b. Grows rapidly, has an irregular margin and tends to be large and thick, appears several shades of blue, red, and black  
c. Is both a and b  

14. Conjunctivitis is commonly known as:  
a. An allergic reaction, bacterial or viral infection of the mucous membrane lining the eye  
b. Pink eye  
c. Tissue death  

15. Often seen on the eyelids or temple, they appear as small white or yellowish growths and are caused by obstructed sweat ducts, they are:  
a. Milia  
b. Atopic dermatitis  
c. Freckles  

16. A non-contagious chronic inflammatory skin disease usually found on the scalp, elbows, knees, chest and lower back appearing as round, dry patches covered with coarse, silvery scales whose cause is unknown:  
a. Conjunctivitis  
b. Squamous cell carcinoma  
c. Psoriasis  

17. Herpes simplex virus I may pass from person to person by:  
a. Direct contact with infected skin or saliva  
b. Stress  
c. Exposure to chemical agents
18. Alopecia areata refers to a disorder causing:
   a. Localized hair loss
   b. Ringworm
   c. Increased blood supply

19. The herpes simplex virus can cause:
   a. Cold sores and fever blisters
   b. Increased circulation
   c. Infected carriers to sleep longer

20. In addition to causing infections around the mouth, herpes simplex virus can be transferred to:
   a. The scalp
   b. Eyes, fingers, the genital area and areas of the skin that are not intact
   c. Areas of skin that are exposed to the sun

21. Herpes simplex virus can be eliminated:
   a. By an antiviral medication
   b. False. It will remain dormant in the infected person’s body for the rest of their life
   c. By an antibiotic medication

22. Herpes simplex virus can be treated by using:
   a. Vaseline, Bacitracin or A&D ointment
   b. An antiviral medication like Zovirax Famvir
   c. An antibiotic medication like penicillin or tetracycline

23. A verruca, caused by a virus and is infectious, can be spread from one location to another or non-contact skin, is commonly known as:
   a. Mole
   b. A wart
   c. Vitiligo
24. A viral infection commonly called fever blisters, is contagious and appears as an eruption of sores on the lips is:
   a. Herpes simplex
   b. Shingles
   c. Chicken pox

25. The condition appears as brown spots or patches on both sides of the face especially the cheeks, upper lip, chin and nose. Commonly seen during pregnancy or hormonal changes:
   a. Lentigines
   b. Post inflammatory hyperpigmentation
   c. Melasma

26. If proper infection control guidelines are not followed, it is possible for the herpes simplex virus:
   a. To be transferred from lips to the eyes in Micropigmentation
   b. To grow plants in our work surface
   To create gremlins if dropped in water
Are you considering permanent makeup eyebrows? You are not the only one; countless of people who do not have big eyebrows will consider some type of permanent makeup to be used to help accentuate their eyebrows. Permanent makeup is also referred to as micro-pigment implantation or micro pigmentation. Using this process consists of tattooing some authentic makeup application onto some part of the skin to help accentuate any part of your body. Many women will find themselves using tattooing as a way to help accentuate their lips, eyebrows, eyes or disguise some big scars on their body. Chances are you may already be applying some sort of makeup to the following areas; the great news is when you decide to get some permanent makeup eyebrows you will not have to worry about applying your everyday makeup to that area anymore. Using this process to help enhance the eyebrows is very common. Many people who have extremely thin eyebrows or have lost them due to alopecia may have decided to use this method. It consists of tattooing the chosen eyebrow design onto the face using natural pigment. This process is preferred over using the typical makeup because it is known to last much longer
and you will not have to worry about applying makeup on a daily basis.  
Makeup4Ever recommends the Hairline Stroke Technique for application of permanent eyebrows.  
A single needle is preferred. The Hairline Stroke Technique does require some artistic ability to achieve symmetrical, natural appearance. It is recommended that you learn to apply eyebrows on those that still have some hair in their brow area until you become proficient.  
Eyebrows are the frame of the face, the visual outline of expression. The shape of the eyebrows can change one's entire expression. There are various shapes and sizes including thick, arched, or rounded. These shapes can change facial characteristics dramatically. It is important to learn how to apply these properly.  
In determining the correct shape, start by discussing options and listening to the client. A professional will study the client's facial structure and decide how to achieve the most attractive suitable eyebrow shape for each individual.  
Eyebrow color is another consideration. Brow color varies as much as natural hair. One rule to remember is it is easier to darken than to lighten the color.  
Needle Recommendation for Tattoo or Revolution Machines:  
#5 Needle in #5 Barrel  
Beginners: #3 Needles in #3 Barrel  
Needle Recommendation for Pen Machines: #3 Needle  
Communication. See Procedure Interview on page  
1. Client carefully reads and signs your Consent/Release Form.  
2. Clean procedure site with antimicrobial soap, such as Dial antibacterial, green soap, Betadine®, etc.  
3. Take "Before" photograph.  
4. She draws on her eyebrows with her eyebrow pencil.  
5. Set boundaries with 3 dots in 1 pore 1/4 inch apart along perimeter.
Fill-in Method Eyebrows
6. Fill in dotted perimeter using pointillism method.
7. Take "After" photograph.
8. Apply antibiotic ointment to site(s).

Hairline Stroke Method Eyebrows
10. Draw boundary strokes.
12. Take "After" photograph.
13. Apply antibiotic ointment to site(s).

Clean site with Vaseline, baby wipes, or green soap throughout the procedure.
It is recommended that you allow the client to pencil brows on as a guide for the permanent pigmentation. DO NOT TRY TO CONVINCE THE CLIENT TO SHAPE THEM TO YOUR PREFERENCE, EVEN IF YOU DO NOT AGREE WITH THE SHAPE THEY HAVE CHOSEN.
Most patients will prefer the Hairline Stroke Technique for the application of permanent eyebrows. However, there will be times when a client prefers the Filled-In Technique or the Dot Technique. If so, follow the instructions, changing only the technique.
Brows void of hair are the most difficult to create. Even the most artistic technician cannot duplicate hair with makeup4ever pigmentation. However, those without eyebrow hair are usually the most grateful for the permanent application.
The application of permanent eyebrow makeup can be the most involved of all the facial makeup procedures you will learn. The reason for this is simply that no two eyebrows are the same; whereas, an eye or lip liner basically is in a contained area following a general path, eyebrows have unique characteristics. In addition, your patient's taste in eyebrow makeup will vary from
person to person. Some like a thin, natural look; others like a thick, arched, strong appearance. Most patients will have different taste in eyebrows.

Another consideration is the color of the eyebrow. An eye liner is usually a very basic dark brown or black that builds slowly, to create a shadow. The eyebrow, however, can vary, incorporating all shades of natural human hair. Finally, and probably what the eyebrow most unique is the fact that you are imitating hair. When using micro pigment implantation to apply permanent cosmetic makeup, you truly can create the appearance of hair. When this procedure is complete, it can be difficult to detect where the natural hair ends and your work begins. Your highest priority when preparing to apply an eyebrow permanently is to adhere to this very important rule. That rule is, less and lighter is always better. Because of the great variance in eyebrow styles, even when you are working with a patient who indicates that she wants very full, bold lustrous eyebrows, you must still follow with an implant-by-implant procedure, never going to the extreme borders until the patient has a chance to observe your work.

It is not uncommon for a patient to actually see an eyebrow develop that she finds more attractive and desirable than one she originally -prototyped for you. With this step-by-step procedure she will have the option, all the way through, to stop and see where you are.

You will mix a color that is exactly the shade of her hair or pencil. It may even be darker. You will find that each individual implant of pigment adds greater density to the area, thus darkening the appearance of the treated area, just as with your own natural eyebrows. However, the area that is darkened does not possess darker hair than the lighter area, it merely has greater density of hair, creating a darker shadow on the skin and the appearance of darker hair.

You will begin the procedure with your, patient having applied the mirror effect to the opposite brow. Your first implant
will simply be to the most blatantly flawed areas, usually the center. Your eye, when comparing the treated brow to the mirrored brow, will always see the most blatant flaw that exists between the two. As you complete and fill the blatant flaws, other flaws begin to appear. Your eye will continue to look for perfection. As it does, it will find additional flaws each time you eliminate one.

You cannot help but see the flaw which prevents the treated brow from duplication the mirrored side. It is surprising to most that although you may only see one or two flaws to start, that as those flaws are completed, other flaws begin to appear. This is a natural process, and you will always see where you need color or shape to complete the duplication process. This should be done with one implant at a time. It will surprise you how much effect one tiny dot of pigment can have when filling a blank space. Once the eyebrow begins to look consistent in density and without flawed spaces, you will have reached the checkpoint phase of your treatment. During this phase you will have the patient use a hand held mirror and a toothpick as a pointer to indicate each area she feels needs more pigment to create or complete a shape. It is imperative that you literally advance one implant at a time during this checkpoint period, as your patient may not realize the effect each individual implant will have on the appearance of the eyebrow.

Remember, in electrolysis each hair that is removed can change the entire look of an eyebrow. This is the same thing in reverse. Although it may seem tedious and tiresome, this insures that you will always create an acceptable eyebrow for your patients. This procedure is always followed, regardless of the practitioner’s experience. It should also be noted that regardless of your patient’s enthusiasm to fill or build a given area, be it arch, the inside or the outside of the brow, you must still have that patient witness the growth of the area in shape, size and color after each implant once.
Remember, each time you touch your patient you will change the appearance of the eyebrow permanently. This method of using a checkpoint will not only insure against any error, but bring to your practice a sense of strength and security that you always keep control of the treatment, never letting it get out of hand. As others observe this approach method, it will give them confidence in you as a technician and alleviate their fears of a possible error. This is truly what you must seek, if you are to be successful!

EYEBROW HAIR

Building an eyebrow for a patient with little or no natural eyebrow hair can be very fulfilling. The first visit to saturate the patient will begin the density needed before concentrating on shape. She must arrive with her makeup on exactly as she wears them for they serve as the guide for the Derma-Technician. Using a hectograph pen (a sterile, surgical marker), a border is drawn around the makeup, leaving a perfect shape to follow. The cosmetic is removed with an antiseptic lotion and the procedure may begin. Proceed by implanting pigment inside of your hectograph pen border. Continue until completing a shadow resembling a brow. Once a complete shadow is implanted, you then can enhance the eyebrow with more implants on the next visit. You will then continue on the other eyebrow until both sides are complete. Remember, your patient still goes home with some very attractive eyebrows. They may not be exactly the color as she would like for a period of two weeks. This is a small price for her to pay to have permanent eyebrows where she had none. On returning for the focus visit your goal will be to establish more shape and adjust color by adding either lighter or darker pigment. This is considered more of a detail visit.
Chapter Outline BROW
1. "Mirror" opposite brow to desired effect.
2. Using "TAP" technique, fill treated brow to general shape and density of mirrored brow.

BROWS WITH LITTLE OR NO HAIR
1. Patient is to create a perfect border makeup on each brow bone (with hectograph pen).
2. Makeup inside removed, and using "TAP" technique, add dots to create appropriate shadow.
NOTE: It is imperative that all the above techniques are done in a manner that always allows for more work or darker color - rather than too much or too dark! Remember, always less and lighter!

Instructions for Eyebrow Procedure

1. Ask the patient to draw eyebrow on the brow area with an eyebrow pencil of her choice.

2. Mix pigment color and obtain your patient's approval.

3. Using a skin scribe, outline one eyebrow to designate the shape and placement of the pigmentation.

4. Using a Q-tip, wipe away pencil and rub with antiseptic.

5. Begin in the center of the eyebrow, implanting pigment in a "bowling pin" effect.

6. Fill in the area with micro implants of pigment.

7. After the eyebrow is complete, ask the patient to view the pigmented brow and perfect the shape to his or her instruction.
8. If needed, the patient will then adjust the penciled brow to match the pigmented brow.

9. Repeat Steps 3 through 7 to complete pigmentation of both brows.

10. Apply antibiotic or A and D ointment to pigmented area. 
Watch a video on Eyebrows Application Video number two
Eyebrows Examination

1. Other causes of discomfort during permanent cosmetics include:
   a. Stretching the skin
   b. Pressure on the eye
   c. Noise of machines
   d. Burning sensations
   e. All of the above

2. The immediate reaction of skin to a needle stick is called the wheal and flare reaction. This reaction includes:
   a. Swelling
   b. Redness
   c. Both of the above

3. Topical anesthetics are not as effective on the skin if the skin is swollen because fluid in the tissues prevents the absorption of topical anesthetics.
   a. True
   b. False

4. Sometimes a topical anesthetic causes:
   a. Itchy skin
   b. Temporary redness
   c. Puffiness of skin
   d. All of the above

5. When applying a topical anesthetic; it is important for the practitioner to be aware that the lips:
   a. May feel numb but have a lot of pain when you start to work.
   b. Resists pigmentation
   c. Have a low absorption capacity
d. Are impervious to topical absorption

6. Signs of local anesthetic toxicity are:
   a. Ringing in the ears
   b. Tongue feels swollen
   c. Seizures
   d. Cardiac arrest
   e. All of the above

7. The onset of a topical anesthetic is faster once the skin is opened
   a. True
   b. False

8. Other methods of pain control include:
   a. Soothing music
   b. Gentle technique
   c. Oral antihistamines (Benadryl)
   d. Pleasing personality of technician
   e. All of the above

9. Epinephrine is added to local anesthetics for broken skin to:
   a. Constrict blood vessels and control bleeding
   b. Control swelling
   c. Prolong the anesthetic effect
   d. All of the above

10. Pain control is vital for the successful practice of permanent cosmetics because
    a. People don’t like pain
    b. Technicians are under less stress
    c. Procedures are more successful
    d. Clients will tell their friends their pain was tolerable
    e. You’ll have a more successful practice
    f. All of the above
11. A well-anesthetized patient who is cooperative is less likely to have significant
   a. True
   b. False

12. When tattooing new eyebrows on a client
   a. The skin will become slightly irritated and inflame due to the presence of nickel in needles
   b. The skin will become irritated and inflamed if there is inadequate pigment flow
   c. The skin would become slightly irritated and inflamed due to the repeated punctures, deposited of foreign material, chemicals and exfoliation of the skin
   d. The skin would become slightly irritated and inflamed due to poor stretching

13. The reaction to pain by the body includes:
   a. Increased heart rate
   b. Increased blood pressure
   c. Delayed healing
   d. All of the above
The Eyeliner Procedure

The eyeliner applied in the method or an technique the desired natural look, men as well the pointillism three needle. shades of taupe will 'smudged appearance in the upper lids cannot be achieved due to the lack of subcutaneous tissue in that area. For a definite, bold line, use an outlining technique. Use only dark colors for upper lids.

Instructions for Eyeliner Procedure:

1. Communication. See Procedure Interview Guidelines on page

2. Client carefully reads and signs your Consent/Release Form.

3. Remove all eye makeup with Vaseline or eye make-up remover.

4. Take "Before" photograph.
5. Using a foam-tip applicator, apply a thick layer of anesthetic in the lashes and wait 12 minutes (may need re-application for sensitive clients). Remove with moist cotton balls.

6. Rinse eyes with saline solution and apply a Celluvisc drop (to draw anesthetic from around the eyes). Rinse thoroughly with Collyrium (to neutralize anesthetic side effects). Ask client to open her eyes when she has adjusted to the light. Verify that her vision is normal and her eyes are not stinging before beginning the procedure.

7. Reapply a Celluvisc drop to protect the eyes.

8. Begin dotting near inside corner of the lid. Using a foam-tip applicator, apply Duricaine as needed to control swelling and discomfort.

9. Complete lower lids first. Reapply anesthetic for 10 minutes to upper lids and repeat Steps 5 - 7 on upper lids.
10. Take "After" photograph.


**Apply drops of Celluvisc® throughout the procedure.**

Rinse eyes thoroughly with saline solution throughout the procedure. Rinse eyes thoroughly with Collyrium® eyewash if client complains of stinging.

It is recommended that you advise your client to have a friend drive them home. Very seldom will the client experience difficulty with vision. However, it is better to insure their safety when driving home from your clinic.

Physicians doing procedures may use Alcaine or Proparacaine drops to assist in eliminating discomfort of pigment that may seep into the eyes.
Topical anesthetics are recommended for anesthesia. Injections tend to cause swelling and will distort the area, making it difficult to insure proper placement of pigment.

DO NOT APPLY CLAMPS. It is not necessary and it will cause bruising.

It is very important to stretch the skin. Not properly stretching the skin will result in fading or loss of pigment. Complications that may arise as a result of permanent eyeliner application will be discussed later when we discuss post-procedure client concerns. Watch a video on eyeliner procedure
Eyeliner Examination

1. The reaction to pain by the body includes:
   a. Increased heart rate
   b. Increased blood pressure
   c. Delayed healing
   d. All of the above

2. The first topical anesthetic was:
   a. Novocaine
   b. Lidocaine
   c. Cocaine
   e. Marcaine

3. Allergic reactions to local anesthetics are:
   a. Extremely rare.
   b. Usually limited to a contact dermatitis
   c. Are confused with the normal actions of anesthetics to dilated blood vessels
   d. All of the above

4. The best questions to ask about allergies to local anesthetics is:
   a. Do you have problems at the dentist’s office?
   b. Do you have any family members who’ve died from anesthetics?
   c. Have you ever had an allergic reaction to local anesthetics?
   d. All of the above

5. The price of not providing good pain control for a client includes:
   a. Pigment can be misplaced during the procedure.
   b. Client will have excessive bleeding
   c. You will harm your practice
d. You will be under a lot of stress  
e. All of the above

6. The following facts are true about topical anesthetics used for eyeliner:  
   a. Alkaline topical anesthetics can cause chemical corneal burns  
   b. Emla (ph 9.12) has been reported to cause severe eye damage  
   c. Topical anesthetic eye drops cause increased permeability of the cornea  
   d. Topical anesthetics with a ph range of 7.5 are the safest for eyelids  
   e. All of the above

7. The ideal topical anesthetics to numb an eyelid before eyeliner is:  
   a. Close to the eye’s pH of 7.5  
   b. Does not melt or run into the eye  
   c. Works in 10-15 minutes without an occlusive dressing.  
   d. Lasts at least 20-30 minutes  
   e. All of the above

8. The problem with topical anesthetics of high concentration include:  
   a. They may be illegal in the united states  
   b. They require a doctor's prescription for each client  
   c. They may be too alkaline and cause corneal damage  
   d. They may be toxic to the eye if they get into the eye accidentally  
   e. All of the above

9. Topical anesthetics should not be added to your pigments because
a. They may cause tissue damage in high concentrations (4% lidocaine)
b. Pigments can change colors with a change in pH
c. The definition of tattooing is limited to placing color into the skin
d. It may be considered the practice of medicine
e. Your insurance won’t cover any complications
f. All of the above

10. Topical anesthetics are preferable to injections for permanent makeup because
   a. People are afraid of shots
   b. They are painless
   c. They don’t deposit fluid into the skin
   d. All of the above

11. Proper labeling of topical anesthetics includes:
   a. Indications
   b. Instructions for use
   c. Warnings
   d. Ingredients and concentrations of active anesthetics
   e. All of the above

12. The categories of local anesthetics include:
   a. Amide or ester type local anesthetics
   b. Benzocaine type local anesthetics
   c. Irreversible type local anesthetics
   d. None of the above

13. Toxicity from local anesthetics occur when:
   a. Too much local anesthetic enters the bloodstream.
   b. The rate of absorption exceeds the rate of metabolism
   c. Your client has liver disease
   d. All of the above.
Lip Liner/Full Lip Color Procedure

People who suffer from having very thin lips or do not have any coloring on their lips may also decide to get some type of permanent cosmetics as well. This process consists of choosing a colored pigment that will be used as a lip liner or can be help to bring out the border of the lips. When the process is done it will look as though you are wearing some natural shade of lip stick. The lip liner procedure is applied with the Outlining Technique, using five to fourteen needle round liner bars. It is important to advise the client of complications which may arise as a result of the Lip liner/full Lip color procedure.

Needle Recommendation for Tattoo or Revolution Machines: #3 Needle in #1 Barrel And: #5 Needle in #5 Barrel
Needle Recommendation for Pen Machines: #3 Needle (use pointillism)

1. Communication.

2. Client carefully reads and signs your Consent/Release Form.

3. Clean procedure site with antimicrobial soap, such as Dial antibacterial, green soap, Betadine, etc.

4. Take "Before" photograph.
5. **She** draws on **her** lip liner with **her** lip pencil before dental block or after Super Anesthetic application. Using a foam-tip applicator, apply a thick layer of anesthetic to the lips and wait 20 - 45 minutes (may need re-application for sensitive clients). Remove with moist cotton ball
6. Using a single or three needle, dot a boundary line on the outermost edge of your client's penciled line. **Stay within the line.**
8. Using a single needle, smooth out uneven areas.
9. Apply antibiotic ointment to site(s).
10. Take "After" photograph.

**For Full Lip Color (optional):**
Using a Five or Eight needle, fill in entire lip using vertical strokes (staying with the "grain" of the lips).
**Clean site with Vaseline or Baby soap throughout the procedure.**
Lip liner colors will fade at least 50%. Bright Red will heal a soft pink.

**WARNING:** Anesthetic injections from a physician or dentist may cause swelling, distortion of the area, and make it difficult to establish a true lip line. It is recommended that the client establish a lip line prior to injection.

All clients with a history of Herpes need to be on a antiviral medication
Full Lip and lipliner Examination

1. Anesthetic injections can legally be used by:
   a. Permanent makeup technicians
   b. Physician
   c. Aesthetician

2. Anesthetic is washed away by:
   a. The circulatory system
   b. The lymphatic system
   c. The skeletal system

3. Trauma to the skin of a dark skinned client can cause _________________.
   a. Melasma
   b. Hyperthyroidism
   c. Hyperpigmentation
   d. Hyperactivity

4. Because the FDA has not approved the use of FD&C colorants for Micropigmentation, the following is true:
   a. The use of anesthetics is considered off-label
   b. The use of pigments is considered illegal
   c. The use of pigments is considered permanent
   d. The use of pigments is considered off-label

5. Clients with Hispanic or South American Indian Ancestry have skin with:
   a. A lot of melanin
   b. A tendency to hyperpigmentation
c. May pull “blue” with their lip colors

d. All of the above

6. Lip are highly vascular and have a measure of ______________________ already present.
   a. Blue or Red (blood vessels)
   b. Gray (collagen)
   c. Brown (melanin) in some ethnic ancestry
   d. All of the above

7. What do you do when a client tells you during the consultation that he has had fever blisters in the past.
   a. Get a physician consult
   b. You tell them that they will need to take an antiviral before you will work on them.
   c. Wait in line for an appointment

8. If the needle depth is greater than the thickness of a dime, it is likely to deposit pigment into the:
   a. Reticular layer of the skin with an increased chance of hematomas
   b. Subcutaneous layer of the skin with an increased chance of hematomas
   c. Epidermal layer of the skin with an increased chance of hematomas
   d. Stratum corneum with an increased chance of hematomas

9. The color of human skin is determined by:
   a. Hormonal Influences
b. Density of melanocyte cells
c. Superficial blood vessels
d. All of the above

10. A potential client who behaves uncooperatively and has unreasonable expectations during the consultation:
   a. Is a pain in the neck and should be charged double
   b. Is considered high risk and traditional cosmetics should be recommended
   c. Should be asked to sign an additional consent stating that she will not sue in the future for any result she is unhappy with.

11. Both sides of the face are:
   a. Equal
   b. Unbalanced
   c. Hard to work on at once
Eye Shadow and Blush Procedures

Eye shadow and Blush should not be attempted until you feel confident with the other cosmetic procedures. This is an Advanced Procedure.
Several things to remember when doing eye shadow and blush include:

- Do not apply shadows above the eyelid toward the brow.
- Do not use flat shader bars for eye shadow. Use 5 to 14 round shader bars.
- Do not use one to five needle bars for blush. Use a flat shader bar or a fourteen needle round shader.
- Always thin pigments - 1 part pigment to 3 parts liquid.
- Do not use bright colors

**Complications** - Although complications following a procedure are rare, it is best to familiarize yourself with the following information:

**Infections** - Infections are usually a result of the client's failure to apply antibiotic ointment. Infections are very rare. Eye infections can occur as a result of eyeliner. If available, use antibiotic drops immediately following this procedure. If infection occurs, instruct your client to seek advice from a physician immediately.

**Allergies** - Allergies to pigment are extremely rare. However, they are very obvious. The pigmented area will appear very swollen. Allergies to antibiotic ointment are more common. If the client complains of redness and itching, it is probably an allergic reaction to the antibiotic ointment. Simply instruct the client to stop using the antibiotic ointment. Usually, the signs of allergic
reaction to antibiotic ointment do not occur until two to five days following the procedure, when the threat of infection has passed. A client can, however, go to a physician for steroid antibiotic ointment, which provides satisfactory antibacterial action with the additional benefit of anti-inflammatory steroid.

**Herpes** - (fever blisters/cold sores/mouth ulcers) - If the client has a past history of cold sores or fever blisters, he or she should ask their physician for a prescription for Zovirax at least one week prior to the procedure. If an outbreak occurs, the client should follow the pharmacist's instructions for applying this cream to the outbreak area. Another, less proven preventive is taking Lysine, an amino acid available over the counter. This can be taken beginning two weeks before the procedure. Suggested dosage is 2,000 milligrams. Lysine should be taken throughout the entire process until the lip liner procedure is completely healed. Another over the counter drug, which may aid in the prevention of outbreaks is Zilactin. This drug is available in drug stores.

**Corneal Abrasion** - A corneal abrasion can occur as a result of an eyeliner procedure. Corneal abrasions are rare and can be avoided by not allowing pigment to seep into the eye, and rinsing the eye properly. When a client complains of discomfort in the eye and cannot focus visually, the client probably has a corneal abrasion. Even though a corneal abrasion is an inconvenience to the client and can cause much apprehension, it is probably nothing to become too alarmed about. An ophthalmologist will instruct your client to keep patches on the eye until vision is restores too normal. The eyes heal very quickly.
Scar Revision

Skin Imperfection Camouflage (Scars, Vitiligo, Birthmarks, Etc.) Procedures for Camouflage of Skin Imperfections

We do not advise you to attempt procedures for camouflaging skin imperfections until you have completed numerous other cosmetic procedures. Application procedures for camouflage of skin imperfections are relatively difficult. Learning to match colors of skin tones, as well as learning how colors will eventually change once the procedure is healed, is achieved only through experience.

Camouflage of skin imperfections is a process and is recommended to be applied in several treatments, depending upon the procedure. It is also important to educate yourself in diseases and disorders of the skin.

The client should be informed that you cannot remove the imperfection. You can only improve its appearance. Texture problems associated with skin imperfections (e.g., keloid or burn scars) cannot be altered with makeup forever pigmentation. The color of the skin imperfection is the only thing you will alter.

There are medical procedures which may be more effective to achieve the desired results the client is seeking. It is helpful to work closely with a dermatologist who is familiar with you and your work. They can advise you and your clients as to treatments which will achieve optimal results.

Important things to remember when performing camouflage of skin imperfections:

- Never use a tube that has been used for eyeliner, eyebrow, or other procedure using dark colors. This is to insure that there are no dark pigments trapped in the tube. Even when sterilized and cleansed with an ultrasonic cleaner, color can cling to the sides of the tubes.
- Save the client’s color in a small plastic bottle. Date and label the bottle.
Keloid scars and other tough scars tissue
Skin which has undergone chemical peels, dermabrasion, or is thin as a result of burns, absorbs pigment more quickly. As a result, colors may heal brighter than on normal skin.
Each case of camouflage work will be treated differently. There are no set instructions to follow,
Do not camouflage scars that are less than one year old. Scars will change in color throughout the first year.
Complications Examination

1. Employer must maintain records on employees whose job duties may require contact with blood borne pathogens. These records are ________________
   a. Maintained privately by the employer
   b. Maintained as a matter of public record
   c. Maintained privately by OSHA

2. The hepatitis virus can:
   a. Be transmitted by indirect contact
   b. Arrack the liver
   c. Live on a hard surface for at least one week
   d. All of the above

3. Benign means:
   a. Palpable mass
   b. Abnormal growth –not cancer
   c. cancerous growth
   d. Spread of cancer through the lymph

4. Malignant means:
   a. A slow growing mole
   b. A fast growing wart
   c. Abnormal growth considered to be cancerous
   d. To remove growth considered to be cancerous

5. The term OSHA stands for:
   a. Occupational Safety and Health Alliance
   b. Occupational Safety and Health Administration
   c. Occupational Standards and Health Act
   d. Occupational Standards and Health Administration

6. Sharps container must:
a. Have a biohazard label, be composed entirely of molded plastic and mounted on the wall
b. Have a biohazard label, and be placed directly across the room from the technician
c. Have a biohazard label, puncture resistant and leak proof, and be red in color
d. Have a biohazard label, be red in color, and purchased only from reputable medical suppliers

7. OSHA requires employees to provide the following to micro pigmentationists:
   a. Class II Medical devices
   b. Training in use of Personal Protective Equipment
   c. Annual blood borne pathogens training, HBV vaccine series, Personal Protective Equipment
   d. Annual vaccines

8. Approximately 5.6 million workers in healthcare and other facilities are at risk of exposure to blood borne pathogens such as:
   a. Measles, mumps, chickenpox
   b. AIDS, HepB Virus HepC Virus
   d. Arthritis, blepharitis, eczema
   e. Tinnitus, viral warts, psoriasis

9. What to do if exposure to Hepatitis occurs:
   a. Wash exposed area with soap and water
   b. Flush any splashes to the nose, mouth or skin
   c. Irrigate the eyes with water or saline
   d. Report the exposure to your health care provider
   e. All of the above

10. Prevention of Hepatitis B in the workplace includes:
    a. Hepatitis B vaccine
    b. Follow all barrier precautions
c. Consider the risk if you are performing a procedure that may expose you to blood
d. All of the above

11. In the event of exposure to a contaminated needle:
   a. Request that the source be tested for infectious agents
   b. Encourage communication with a health care provider to obtain risk counseling and assessment
   c. Document the circumstances resulting in the potential exposure
d. All of the above

12. Personal Protective Equipment (PPE) is defined as:
   a. Specialized clothing or equipment worn for protective against infections materials
   b. Must be removed when leaving the area or if contaminated
   c. Includes gloves, eye shields, gowns, masks
d. All of the above

13. Disinfectants are regulated by:
   a. Environmental protection Agency
   b. Food and Drug Administration
   c. OSHA
d. All of the above

14. The Hepatitis B vaccine (HBV) series is administrated over a six-month period and consists of how many doses:
   a. Only one shot is needed
   b. Two shots
c. Three shots
d. Four shots

15. HIV can be transmitted by:
a. Non-sterile blood contaminated needles, which are infected with the aids virus
b. Direct contact through tear or saliva transmission
c. Airborne contact from an HIV infected person who coughs or sneezes
d. A and B

16. Which of the following can be found in human blood and cause disease in humans?
   a. Nonpathogenic bacteria or viruses
   b. Pathogenic microorganisms
   c. Leukocytes
   d. Hematomas
PRE-PROCEDURE PREPARATION

The Consultation

Most people interested in Permanent cosmetic Makeup will elect to visit your clinic for a consultation appointment before making a definite decision to commit to a procedure. The consultation appointment is imperative as it is your client's first impression of you and your environment.

The atmosphere of your office and procedure room must convey organization, sanitation, and professionalism. A disorganized, unprofessional and unsanitary environment will cost you many clients.

Upon arrival, you should include the client's name, address, telephone number, and medical history. Questions that are important to you are included in the sample custom form.

Information discussed during the consultation should be recorded either during the consultation or immediately following. The recorded information should include the procedure(s) in which the client has an interest, the fees discussed, and the specific concerns expressed by the client.

As a professional, it is crucial that you discuss all considerations and complications, which may arise as a result of the procedure(s). It cannot be stressed enough for you to educate and fully inform your client of any and all risks involved. Be considerate of the health and welfare of your client. Above all, be honest - even if it means losing a sale.

Presentation, Rebuttals and Closing

We must establish rapport with our potential client. They are confused; and little wonder with the half-truths and misconceptions about permanent cosmetic procedures; and anxious about making a decision they will have to live with the rest of their lives.

Therefore, you must discover the prospects knowledge and/or experience with permanent cosmetics; who and what will
influence their decision; and what benefits they hope to gain through having the procedures.
We must find out about third party influence. Are they for or against the procedures? We must attain the answer to their X-factor. What is the real reason they want the procedures. What is their emotional need and how do they think their life will change as a direct result of their procedures? We then need to find out what they do for recreation or their hobbies as a comparison of cost.
Our consultation questions are an example of how to expand and elaborate on these various issues. They allow you to gather the information you need to close the sale. Remember when looking for the true responses from your client you must use the, who, what, when, why, where, and how questions.
Examples of these are - do you know who has permanent makeup? What did your husband say when you told him you wanted to get permanent makeup? How long have you been thinking about permanent makeup? When did you want to have the procedures done? Why do you want the procedures? Where did you first learn about permanent makeup? How do you think it will make you feel? Here is the whole purpose of the interview process:

1. To get the clients doing 80% of the talking and the technician does 20% of the talking.
2. To help the technician understand the clients wants and needs.
To help the clients discover, verbalize, and clarify their own wants and needs.
3. To let the clients know with actions the technician isn't just trying to sell them anything, but also concerned about their well being.
4. Upon arrival, your client will complete the Medical History Profile that includes the client's name, address, telephone number, information to help you identify potential problems with
the procedures as well as information to overcome objections and close the sale.

We recommend the following information also be discussed during a consultation:

1. Micro pigmentation is a form of tattooing.
2. Touch-up procedures may be required.
3. Clients must wait 3-6 weeks before a touch-up procedure can be performed.
4. Thick eyeliner, full lip colors, and camouflage work may take more than one treatment. Application of makeup cosmetics can be painful.
5. Pigments can and will fade.
6. Pigments will heal a different color than what they appear when applied.
7. There may be immediate or delayed allergic reactions to pigments, especially red pigments.
8. Testing for allergic reactions to red pigment is recommended at least one week prior to the procedure. An allergy test does not guarantee a client will not have an allergic reaction to the pigment after the full procedure.
9. Infections can occur.
10. Allergic reactions to antibiotics and anesthetics can occur. There will be slight swelling and redness following the procedure. Clients receiving treatment for eyeliner should have someone drive them home. Clients receiving treatment for eyeliner may suffer a corneal abrasion. Clients receiving treatment for lip liner who have had previous problems with cold sores/fever blisters (i.e., herpes - a communicable virus) may have an outbreak following the procedure. Zovirax® is a prescription cream one can get from one's physician which has been shown to prevent or minimize such outbreaks.
Lip liner will appear "crusty" for one week following the procedure. Camouflage procedures are experimental in nature. Camouflage procedures will need to be tested for skin tone color matching. There are few effective methods for pigment removal. This information is not meant to frighten or alarm your client. However, it is imperative to let them know the risks involved. There have been very few reported cases of allergic reactions to pigment, as well as other complications listed. If you have an impressive portfolio and have permanent cosmetics yourself, most clients will follow through with the procedures. Furthermore, they will appreciate your honesty.

Procedures Interview Guidelines
Prior to the procedure, review the Medical History and chart information. You must establish if the client has developed any reservations about the procedure since the consultation. Do not assume they are still sold just because they showed up. In order to re-establish rapport, avoid complications, and select the most appropriate colors; you will need to get the answers to these questions:

Are you excited about getting your new makeup? (Be enthusiastic)

Are your friends and family excited about your new makeup?

How do you feel today?

Do you have someone to drive you home after the procedure if necessary?

Have you taken any aspirin within the past 3 days? Are you on any other medications?
Have you had any alcohol within the last 48 hours? Are you a smoker?

Tell me about your experience with topical anesthetics.

I see from your chart that you don't have any allergies. Is that correct?

Do you have any questions about the procedures before we get started?
How long have you been applying your makeup this way?

What kinds of colors do you wear?

Do you color your hair? How long have you had this color?

Do you wear your makeup differently in the evenings?

How much time do you spend in the sun?

Do you need to use the restroom before we start the procedure?

**Special Problems**

Too often, cosmetic technicians want to tattoo eyeliner on anyone who walks through their door, even the mailman, just to make the rent payment and get another photo for their procedure portfolio. But long-term success depends on knowing when *not* to do a procedure. This means turning down potential clients because permanent cosmetic makeup may not be appropriate for their situation.

**Potential Risks**

DIABETES - Diabetics have the tendency to both bleed and bruise easily, depending on the severity of their disease. The
healing process for diabetic clients can be lengthy. Interview the potential client at length. Ask them how they react to a surface wound (i.e. a cat scratch). Void brittle diabetics and those that are insulin-dependent.

PREGNANCY - those involved with pregnant women pay the most expensive insurance premiums and settlements in the medical community. This is a condition that only lasts nine months. Wait for the child to be born, and then do the procedure.

GLAUCOMA - Persons suffering from glaucoma may experience problems with eyeliner procedures because of the pressure in their eyes. Request a physician's approval.

PSORIASIS - Psoriasis patients suffer from excessively dry skin characterized by peeling and flaky skin. Peeling can make the skin of psoriasis victims extremely tender, making a procedure very difficult to complete. In addition, more bleeding may occur and the final procedure may slough off, requiring additional touch-up procedures.

HYPERPIGMENTATION - More common in black clients, hyperpigmentation is a result of a past injury to the skin, which has permanently blemished parts of the surface. Sufferers of hyperpigmentation will often experience further damage to the surface of their skin as a result of additional trauma to the skin inherent in cosmetic tattoo procedures.

SCARS - A scar is a result of past injury to the dermal layer of skin. Tattooing is applied to the upper dermal layer of the skin and therefore a tattoo is considered a scar of color. Scars vary in shape, size, texture and appearance. Camouflage procedures for the purpose of covering scars are considered experimental in nature. Always perform color testing on any scar before
attempting to camouflage the entire area. Allow test patches to heal for 3 weeks to one month.

KELOID SCARRING - Keloid scars look like thick ropes under the skin and may be extremely tender to the touch whereas other scars are usually flat on the surface of the skin and may feel numb.

QUESTIONABLE SKIN DISORDERS - Clients suffering from any type of visible skin allergy or infliction should be required to see a dermatologist before receiving any type of makeup4ever pigmentation. Request a physician’s written approval before performing a procedure.

ALLERGIES - Any client who suffers from allergies of any kind must receive a patch test. This test should be performed 3 weeks to one month prior to the procedure. Persons who experience allergic reactions from earring posts and must wear 14 karat gold posts may be allergic to nickel. Most tattoo needles are constructed from nickel alloy and may cause a great deal of swelling and irritation to these clients. Persons who are allergic to Novocain® or any type of Caine derivative may experience a reaction from topical ointments if they are applied. Latex gloves, powders used to lubricate many gloves, may cause other allergic reactions.

HERPES SIMPLEX - A viral infection commonly referred to as fever blisters, which erupt at the base of the lips. Persons who suffer from herpes simplex may receive both eyeliner and eyebrow procedures with little or no difficulty. However, any lip procedure will cause an outbreak unless the client takes a preventative medication such as Zovirax® (available by prescription only) prior to the procedure.
BIRTHMARKS - There are a wide range of birthmarks and many are risky for cosmetic tattooists. There are many preferable options for removal or camouflage of birthmarks. To avoid liability and, more importantly, to achieve the optimum result in birthmark removal, seek advice from a dermatologist specializing in cosmetic work.

EMOTIONALLY UNSTABLE CLIENTS - An integral part of the consultation is establishing the client's motives for getting the procedure and their emotional state. A client's unstable frame of mind could lead to problems far more complicated than any medical problem. When a client is unsure of a permanent procedure, do not do the procedure. They may discover that they've made a mistake, and pointing to it all will be your tattoo need.

These potentially dangerous clients come in all shapes and sizes and often give little clues to their uncertainty. If your client enters with a persuasive friend recommending your work, make sure that the client and not her friend is formulating a decision. If a client continually talks about how nervous they are, you may want to reschedule for a later date, maybe a year. One possibility, which usually works with the dubious potential client, is known as "The Trial Period". This is a two-week span, which the dubious client is instructed to diligently apply and never take off the permanent procedure. For instance, if Leery Louise has approached you for a set of red full lips and you sense her ambivalence, direct Louise to apply a long lasting lip color to her lips and wear it constantly throughout the day. You may want to have some long lasting lip color on hand for clients much like Leery Louise. Lip pencils, though drier in texture, often last up to twelve hours. Make sure your client applies it as often as possible, not allowing the color to fade. Have her look at her face first thing every morning. You, as the technician may want to call her and check on her progress.
"Hello Leery. How are you enjoying the feel of your semi-permanent lip color?"
"Do you like the color itself? Or do you think you may want to go darker or lighter?"
"Have you spoken with your friends or close relatives about the procedure? What do they think?"
You should be able to gain a perspective on Louise's feelings towards a permanent full lip line. Another helpful tactic for protecting yourself may be to have a more extensive Consent/Release form, which you save in the back of your file cabinet for people similar to Leery Louise.

**Testing for Allergic Reactions to Pigments**
Allergic reactions to pigment (especially red pigment) are very rare but they can be disfiguring. An allergy test performed one week prior to the procedure can identify those allergic to the pigment. However, there have been reported cases of delayed allergic reactions that have occurred years following the procedure. Allergy testing of pigment does not guarantee the client will not react at a later time.
To test for allergic reactions, simply implant a small amount of pigment in the area to be treated. Give the client the same instructions as you would if the client had received a routine procedure. Post-procedure instructions are discussed in a later chapter.
Allergic reactions to pigment are very evident and will usually occur within days following the treatment. The area will appear swollen and sore. Additional information on allergies is discussed in this manual.

**Procedure Room Preparation**
A list of equipment and supplies were discussed earlier in the manual. It is important for you to be organized before the client enters the room. Lack of organization or disorganization will increase the client's apprehension.
It is of the utmost importance that the room be sanitary. Methods of sanitation are discussed in Section 2 of this manual. Do not spray deodorizers or air fresheners. The smell of disinfectant reassures the client that you are sanitary.

**Consent and Release Form**

We recommend you have your clients sign a waiver of consent. A sample Consent and Release Form is found in this manual. A signed Consent and Release Form does not guarantee you will not be sued. It can be challenged in court of law. However, it does provide evidence you did prepare your client for the procedure that was performed. It also makes your client take the procedure more seriously.

**Personalize your form**

Since delicate skin or sensitive areas may swell slightly, or redden, it is advised not to make social plans for the same day. Lip liner may appear "crusty" for up to one week. Please wear your normal make-up to the procedure. If you are having lips or brows done, please bring your favorite pencils. If unwanted hair is normally removed in the area to be treated, i.e.; tweezing or waxing, the hair removal should be done at least 24 hours prior to your procedure. Electrolysis should not be done within five days of the procedure. Do not resume any method of hair removal for a week after the procedure.

If eyelashes or eyebrows are normally dyed, do not have that procedure done within 48 hours of this procedure. Wait one week after the eyebrow or eyeliner procedure before dying lashes or brows.

If you wear contact lenses and are having the eyeliner done, do not wear your lenses to your appointment and do not replace them until the day after the procedure.
If you are having the eyeliner procedure done, as a safety precaution, in case of watering or swelling, we recommend that you have someone available, or accompany you, who could drive you home if you so decide, or if it is necessary.

If you are having lip liner done and have had previous problems with cold sores, fever blisters, or mouth ulcers, the procedure is likely to re-activate the problem. Your makeup4ever Cosmetic Technician can make recommendations to help prevent or minimize the outbreak.

We recommend allergy testing of the red pigment (lip liner or skin tone pigments) one week before the planned procedure. Do not use aspirin or ibuprofen for 7 days prior to your procedure. We look forward to working with you. If you have any questions, please call or make notes so we can discuss them with you when you arrive for your appointment.

We look forward to working with you. If you have any questions, please call or make notes so we can discuss them with you when you arrive for your appointment.
Pre-Procedure Examination

1. Clients should be screened for medications and medical condition:
   a. If they have an adverse reaction during their healing period
   b. In order to qualify them as a candidate and minimize risk
   c. So we can make the procedure appear medical

2. We should ask our clients if anything has changed on their medical history:
   a. Once a year
   b. Every time we see them and update their medical form at least once a year
   c. Only if they look ill

3. Clients who have diabetes mellitus (sugar diabetes) and take insulin should:
   a. Eat before their procedure
   b. Have a doctor’s release
   c. Bring orange juice with them in case their blood sugar drops
   d. All of the above

4. Consultation before the procedure gives the technician an opportunity to:
   a. Evaluate the skin of the prospective client and ask relevant questions
   b. Appear friendly and try to win the client over
   c. Make a psychological evaluation of the clients mental state

5. A diabetic client may experience symptoms of hypoglycemia or low blood sugar, which may include:
a. Feeling shaky, dizzy irritable, lightheaded or a headache
   b. Blurred vision or slurred speech, tingling or numbness in the mouth or lips
   c. Both A and B

6. Possible causes of hypersensitivity on the day of your clients procedure could be:
   a. Too much coffee
   b. The client did not sleep well the night before
   c. Stress, anxiety, poor diet, lack of sleep, hormones and possible environmental factors such as weather or temperature changes

7. If a practitioner should notice an unrecognizable skin disorder on the client prior to procedure they should:
   a. Refer the client to a physician before working on them
   b. Ask the client to sign a statement that releases the practitioner from liability if there is an adverse reaction
   c. Tell the client it’s nothing to worry about

8. If your client discloses on her medical history that she is HIV positive you may:
   a. Decline the work because she has an infectious disease
   b. Ask for a physicians release for this invasive elective cosmetic procedure
   c. Refer her to another technician

9. Clients who have a condition called glaucoma should:
   a. Eat broccoli before they arrive at your office
   b. Be screened for latex allergies
   c. Provide a physicians release before you work on them
10. Permanent cosmetic procedures will fade over time due to these three main reasons:
   a. The natural aging process, HMO’s and malpractice insurance
   b. Sun exposure-natural and artificial, medications and medical conditions, exfoliation-chemical, mechanical, natural
   c. Flannel shirts, longer underwear and mittens

11. When performing a Micropigmentation procedure, clients may be predisposed to hypersensitivity during:
   a. A melancholy song on the radio
   b. A female client’s menstrual cycle
   c. The moment you quote the fee for your services

12. A client who will not allow you to take their photograph:
   a. Is probably on American Idol
   b. Is considered high risk and should not be worked on unless they consent to before and after photos each and every time you work on them
   c. Is definitely a celebrity and you should respect their privacy

13. Clients who are taking anticoagulant drugs such as high blood pressure medication or aspirin may possibly experience:
   a. Stomach upset and increased heart rate during the procedure
   b. Slight bruising, a slightly longer healing time with increased chance of color loss and the practitioner may notice additional bleeding during the procedure
   c. Excessive cold and need a warm covering

14. All clients who are allergic to latex gloves should have this alternative used when having a permanent cosmetic procedure performed:
a. Freshly washed and dried hands with no protective covering  
b. rubber gloves  
c. Nitrite or vinyl gloves

15. A client who is taking Accutane should wait:  
a. To make sure she will have no further trouble with acne  
b. Six months after finishing her prescription before having a permanent cosmetic procedure to prevent keloid scar formation  
c. until you are advertising a discount

16. A potential client must have a physicians release if they:  
a. Are heavy  
b. Are undergoing chemo therapy or radiation therapy  
c. Have unusual bone structure

17. A client on antibuse should not have any:  
a. Alcohol used on her skin during a Micropigmentation procedure  
b. Adverse reactions  
c. Any warm tones implanted or they will change to blue immediately
Consent Form for Tattoo and Permanent Cosmetics Procedures*

I, ________________________________, hereby request and consent to the application of permanent color and consent to have the following procedures performed by Karen Kotleba RN, ACLNC Cpma

Please circle any of the following that may pertain to you:
UPPER EYELID  LOWER EYELID  EYEBROWS  FULL LIP COLOR  LIP LINER  AREOLAS CAMOUFLAGE  STRETCH MARKS  SKIN NEEDLING

Other: _____________________________

I understand that the process used to apply color is not a one-step process and requires subsequent visits to achieve desired results. I further understand the fee includes my first visit. A touchup visit is at an additional fee of $100.00. Maintenance, color boosts touchups are scheduled as needed and may vary from six months to three years. Fees for maintenance visits and/or enhancements are $100.00 within the first year, $200 after second year, $300 after the third year and full price after four years per individual procedure.

I acknowledge that it is not reasonably possible to determine whether I might have an allergic reaction to any of the pigments, dyes, topical preparations, or process used in the procedure; and I agree to accept the risk that such a reaction is possible. I have informed the practitioner of any existing problems

I have been offered a patch test and declined.

I acknowledge that complications are always possible as a result of the Permanent Makeup procedure, particularly in the event that post-procedure instructions are not followed.

I acknowledge that the procedure will result in
a permanent change to my appearance and that no representations have been made to me as to the ability to later change or remove the results.

I understand that further laser treatments or other skin-altering procedures, such as plastic surgery, Permanent Makeup. I further understand that such changes are not the fault of the practitioner and/or any of the practitioner’s associates. I further understand that such changes in my appearance may not be correctable through further Permanent Makeup procedures.

I understand that time, pigment can (and will) fade and change color according to metabolism, skin type, medications, age, smoking, alcohol, sun exposure, Retin-A, and Glycolic acids.

I acknowledge that no guarantees have been made to me concerning the results of this procedure and that the professional recommendation is a NATURAL LOOK.

I understand the nature of the procedure and possible complications or adverse effects that may occur as a result of applied pigments. I fully understand this is a tattooing process; therefore it is not considered a science, but an art.

I have received and acknowledge pre- and post-procedures instructions, and agree to strictly adhere to such instructions.

I accept responsibility for determining the color, shape, and position of the pigments that will be applied. I understand the actual color of the pigment may be modified slightly due to the tone & color of my skin.

I understand that possible risks of this procedure include; infection, allergic reaction, fanning, scarring and spreading.

I understand that the taking of before and after photographs of procedures are required.

Client’s signature: __________________________ Date: __________

Practitioner’s Signature: __________________________ Date __________
Medical History Form*

Today's Date: ___ / ___ / ___
Name: __________________ Birth Date: ___/___/___
Home Address: ___________________________________
Home Phone: __________ Cell Phone: __________
Email address: __________________________ ___
Occupation: _____________ Employer: ___________
Referred by: _________________________________
Emergency Contact: (Name/phone) _______________

Are you now or have you been under the care of a physician within the last two years? ___________
If yes, please provide Physician's Name, address and phone number._____________________________
Name: _________________________________
Address: _________________________________

To avoid unforeseen complications, please answer the following questions:
Y N Have you consumed alcohol today?
Y N Are you over the age of 18? w
Legal guardian’s initials:____________

List all medications you are currently taking, including Retin A, Glycolic Acid and Acutane:
____________________________________

List any drug, makeup, skin or food allergies (i.e., soaps or cleansing creams):
____________________________________

Have you recently undergone a skin peel?
____________________________________

What products do you use for skin care?
____________________________________

o Abnormal Heart Condition
o Corneal Abrasions
o Cold Sores
- Eye Surgery or Injury
- Herpes Simplex
- Blephoplasty (eyelid surgery)
- Hemophilia
- Visual Disturbances
- High or Low Blood Pressure
- Cancer
- Prolonged Bleeding
- Tumors/Growths/Cysts
- Circulatory Problems
- Chemotherapy/Radiation
- Epilepsy
- Are you pregnant?
- Diabetes
- Hepatitis
- Fainting Spells/Dizziness
- Do you wear contact lenses?
- Cataracts
- Do you use tobacco products? 
- Glaucoma
- Dry Eye

Are you using any eye drops or other ocular medications?
__________________________________________

Have you ever experienced hyperpigmentation from an injury?
__________________________________________

Are you currently taking aspirin or ibuprofen? Where was your last eye exam? _____ / __ / __ Examining Physician:
__________________________________________

Signature: _____________________________ Date: __________
Post Procedure Instructions

FOR ALL PROCEDURES

(Eyebrows, Eyeliners, Lip Liner/Full Lips, Areola, and Camouflage) Immediately Following Cosmetic Tattoo Procedure: Apply ice to treated area for 10 - 30 minutes. Ice helps reduce swelling and aids in healing.

For 14 days following application of permanent cosmetics:
- Apply antibiotic ointment sparingly twice until the procedure area has healed. Using a clean cotton swab; do not use your fingertips.
- Do not rub or pick at the epithelial crust, allow it to flake off on its own. Absolutely no scrubbing, no cleansing creams or chemicals. Gently cleanse the makeup4ever cosmetic area with a mild antibacterial soap." You may rinse with water and lightly pat the area dry.
- Do not expose treated area to full pressure of the water in the shower.
- Do not soak treated area in bath, swimming pool or hot tub. Do not swim in fresh, salt or chlorinated pool water.
- Do not expose the treated area to the sun.
- Use a total sun block after the procedure area has healed to prevent future fading of pigment color.
- Do not use mascara or eyelash curlers for seven days after the procedure. When you resume use, purchase a new tube. The old tube may have bacteria in it.

Name __________________________ License Number __________________________ State _____ Date of Birth ______ Age_____
donor, do not donate for 1 year following your procedure. (American Red Cross guidelines)
Use sterile bandages and dressings when necessary. *Areola and camouflage procedures cannot be guaranteed. This is an experimental procedure.* Failure to follow post-treatment instructions may cause loss of pigment, discoloration or infection. Remember, colors appear brighter and more sharply defined immediately following the procedure. As the healing progresses, color will soften. A touch-up procedure may or may not be necessary. Final results cannot be determined until healing is complete. Touch-up procedures must be made between 30-60 days following the procedure. Additional fees will apply for touch-ups after 60 days following the procedure. If necessary, an appointment for a touch-up can be made.

**IF YOU HAVE ANY QUESTIONS CALL (your number)**

Enjoy your permanent cosmetics!

Signature: ________________________________
Enjoy your permanent cosmetics!

Company Info Sheet

<table>
<thead>
<tr>
<th>Date:</th>
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<tbody>
<tr>
<td>Name:</td>
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<tr>
<td>Address:</td>
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<tr>
<td>City: St: Zip code:</td>
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<tr>
<td>Home Phone: Work phone:</td>
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<tr>
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<td>Areas of Concern:</td>
</tr>
<tr>
<td>Pigments Used: Anesthetic Used:</td>
</tr>
<tr>
<td>Machine Used: Needles Used:</td>
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<tr>
<td>Procedure Started At: Procedure Completed At:</td>
</tr>
<tr>
<td>Touch-ups Done On:</td>
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</tbody>
</table>

Personalize Your Form
# Infection, Adverse Reaction, Allergic Reaction Incident Report

To be forwarded within 5 Days of Incident to You're State Department of Health

<table>
<thead>
<tr>
<th>Date Reported: Date of Procedure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Mailed to State Department of Health:</td>
</tr>
<tr>
<td>Client Name: Address:</td>
</tr>
<tr>
<td>City: State: Zip:</td>
</tr>
<tr>
<td>Work Phone: Home Phone:</td>
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<tr>
<td>Colors Used:</td>
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<tr>
<td>Description of Problem:</td>
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<th>Attending Physician:</th>
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<tr>
<td>Address:</td>
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<td>Phone Number:</td>
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## Procedure Preparation

Before beginning the procedure, it is important to communicate with your client information regarding the exact placement and color of pigments. You may suggest the client put on her make-up exactly the way she desires the permanent pigmentation to appear. Good communication with your client will prevent most problems.
If a client is hesitant about the procedure, do not go through with it! The client should be completely certain about what he or she wants before proceeding. It should be your client's decision as to placement of pigment. Do not allow your client to place the responsibility for the decision of colors and shapes on you. It is their face, their decision and it is permanent. *Do not make choices for your clients!* Do not alter the shape they like, even if you disagree with it.

**Preparing the Skin**

To prepare the skin, you will need to cleanse the area free of make-up and clean with antibacterial soap to remove any excess mascara or skin oils. For the eyeliner procedure, be careful not to get the antibacterial soap in your client's eyes. If you do, rinse the eyes thoroughly with saline solution or distilled water. Apply antibacterial soap with a Q-Tip. For sanitary reasons, dispose of the Q-Tip and any other cotton products after you use them.

**Pain Preparation**

Eyeliner and lip liners are painful procedures. Effective anesthesia is crucial for several reasons. The client is more comfortable, less apprehensive, and more cooperative. Perhaps more important, when a client is in pain, the area will tend to swell more. As a result, there will be significant loss of pigment. When the client is in pain, they tend to contract muscles and the technician will oftentimes implant pigment in the epidermal layer of skin, resulting in loss of pigment. As a makeup4ever cosmetic technician, there are a limited number of anesthetics available to you. It will benefit you to find a physician and dentist that will provide anesthetics for your clients. **DO NOT PLAY DOCTOR YOURSELF.** Simply request your
clients to obtain pain relievers from their physician. It will relieve you from significant liability and responsibility if they should have an adverse reaction to the anesthetic.

There are a few topical creams and gels that you may find to be of some help. Orajel, Ambesol, Anethecon, Hurricane Gel, and Americaine are a few names that may be familiar to you. Your local pharmacist is an excellent resource to help you find others. There are a few topical anesthetics that are much more effective. However, they require a physician's prescription. Your client may be able to obtain one of them from their family physician.

These anesthetics include:
- Lidocaine
- Xylocaine - Novocaine - Prilocaine - Alcaine
- Proparacaine

Physicians perform Micro pigmentation using local, regional or general anesthetics. Makeup4ever does not agree with these extreme measures of anesthesia. They are not necessary. Local injections cause a significant amount of swelling. This makes it difficult to determine exact placement of pigment. Furthermore, it can also cause migration of pigment due to the widening of the distance between the external skin and the deep skin structures.

The most effective topical anesthetic is the topical cream, EMLA. EMLA is a 2.5% Lidocaine and 2.5% Prilocaine. To date, this topical anesthetic is not available in the United States, nor is it FDA approved. EMLA is not to be applied near the eyes or in open wounds.

Many schools teaching Intradermal Cosmetics deny the level of pain associated with the various procedures a technician will perform. We recognize the pain recognized with the procedures and is researching more methods available to the technician which will be effective.
Techniques for Permanent Cosmetic Makeup

Dot Technique
The Dot Technique is applied in a dot-to-dot method similar to a sewing machine stitch pattern. Makeup4Ever recommends the Dot Technique for application of eyeliner when a "smudged" look is desired. The Dot Method also is used for scar camouflage in smaller areas.

Hairline Stroke Technique
The Hairline Stroke Technique involves strokes of intradermal pigmentation utilized to stimulate hair as in the eyebrows and to camouflage scars within the scalp. This technique is applied with a single needle.

Outlining Technique
The Outlining Technique is used for lip liners and for those wanting a definite lined eyelid. Outlining can be applied in short or long, even strokes.

Filled-in Technique
Full lip color, as well as camouflage of large areas, requires a Filled-In Technique. This is applied in a circular motion, known as "shading" in the tattoo industry. When filling-in large areas such as lips, a multiple needle is recommended.
**Post Procedure Guidelines**

There will be an epithelial crust that forms in the days following the procedure. It will be more noticeable in the eyebrow and lip liner procedures. This crust is dried pigment and plasma that forms externally. It is important that the client does not pick it. The crust will fall off naturally within a few days. Picking the crust will result in a loss of pigment.

Swelling is more noticeable in eyeliner procedures. Eyes will be slightly swollen until midday of the day following the procedure. Ice will reduce the swelling.

For the first few days following the procedure, the area will feel similar to that of sunburn. A topical ointment will soothe the area. Instruct your client to apply antibiotic ointment twice daily. For additional lubrication, use Vaseline.

**Post-Procedure Instructions**

Following the procedure, you will give your client the following instructions. You would be wise to have these instructions in a written handout, which the client may take with them.

- If swelling occurs, apply ice.
- Do not expose treated areas to the sun for five (5) days.
- Apply antibiotic (polysporin, Neosporin, bacitracin, etc.) twice daily for five days. –
- Do not expose treated area to the full pressure of water in the shower.
- Do not soak treated areas in a swimming pool with chlorine.
- Absolutely no scrubbing. Do not pick at the epithelial crust. Make-up may be applied over the area. Remove the make-up with Vaseline only.
- Absolutely no soaps, chemicals, or cleansing creams applied to the area for five days. Colors will appear brighter and more sharply defined.
immediately following the procedure. As the healing progresses, colors will soften.

- Failure to follow post-procedure instructions may cause loss of pigment, discoloration or infection.
Touch-up Application

Touch-up applications are provided for the purpose of perfecting procedures. If you are finding yourself doing multiple touch-ups on cosmetic procedures, you may need to analyze the reasons it. If you are experiencing a lack of pigment acceptance, review the following:

- Are you stretching the skin? You must insure the skin in the affected area receiving pigment implantation is stretched to its full elasticity. Lack of skin stretching will result in loss of pigment, pastel versions of color shades, or lack of pigment acceptance during the procedure.
- Are you penetrating the dermal layer of skin? Only when you reach the dermal layer of skin will the pigment stay. Do not be afraid to penetrate too deeply.
- Is your machine tuned properly? Review Chapter 5 of your manual.
- Are you allowing the machine time to implant proper amounts of pigment? Many beginning makeup4ever cosmetic technicians find themselves rushing the process. Allow the machine time to implant pigment. This does not mean to completely stop the movement of your machine altogether.
- Is your needle damaged? If you are finding as lack of pigment acceptance during the procedure, you should closely examine your needle. Sometimes there will be a hook or bend in the tip of the needle. You can check this with a magnifying glass or an eye loupe. Implanting with a bent or otherwise damaged needle results in skin damage or ripping, pigment not implanting properly, and excessive pain.
Frequently Asked Questions

Question: How often must I wait before I perform touch-up applications on a client? You must wait 4 weeks for people ages 18-60. Anyone over the age of 60 must wait 6 weeks.

Question: Is it true that lip color can completely disappear during the healing process?
Yes, lip color may fade or change during the healing process. You must wait a full four weeks to know the final result. The Enhanced Eyebrow colors appear orange in the beginning of the procedure. Will the color stay that way?
The Enhanced Eyebrow colors will appear orange in the beginning of the procedure. However, once the color is packed in with proper stretch, the color will heal beautifully.

How long should I wait to perform a procedure after surgery performed on that area?
After doctor's permission, you may perform the cosmetic procedure one year from the date of healed. Which means for example surgery was performed on 12/1/03 and she was finished healing on 12/12/03, you may do the procedure on 12/12/03.

Can the Glycolic Acid removal system be used near the eyes?
No, absolutely not.

How do I correct an immediate mistake?
Work over the mistake with a dry needle. If you are around the eyes, you may rinse with a little Collyrium. In any other area, you may use a small amount of glycolic. Do not overwork the area. The color may still appear but should scab off during the healing process.

How long must I leave the anesthetics on to achieve a maximum benefit?
Super Anesthetic should be applied twenty minutes prior to the procedure. Duricaine may be applied during the procedure. The first application with Duricaine should be left on for approximately...
Questions Pertaining to Allergic Reactions

What are the symptoms of an allergic reaction of pigment? Allergic reactions to pigment occur only in the pigmented area. Common symptoms are raised and flaking skin usually beginning at least three weeks after the procedure. Another symptom is granulomas. Granulomas are white hard bumps found on the skin.

How can technicians identify if a reaction is due to pigment or aftercare/anesthetics? Allergic reactions to pigment only occur in the pigmented area. Reactions to anesthetics or aftercare products will generally spread and occur immediately after the procedure.

If I patch test a client before a procedure, will it guarantee that they will never have an allergic reaction to the pigment? No. Patch test will show results of immediate reactions. However, sometime reactions may be delayed. For example, people can eat fish all of their life and one day they may have an allergic reaction. The body can eventually wear down and result in a reaction. However, reactions are rare. The FDA says about 1 in 200,000 tattoos will result in an allergic reaction.

Where should I patch test my client?
You may patch test in the hairline behind the ear. This hides the patch.
How long must I wait before doing a procedure after a patch test? One week for facial procedures and one month for camouflage procedures.

If my client is having a reaction to aftercare, what do I tell her and how long till she sees results?
The client should immediately stop the use of all products to the face. Cleanse the area with warm water. Do not scrub. Take a form of anti-allergy pill and wait 24 hours. If the symptoms have not disappeared advise her to seek the care of a professional.

What treatments are available for client's experiencing allergic reactions to pigment? Steroid creams and/or injections work in most cases. Especially in cases reported in the early state. In the most extreme cases laser removal is necessary.

You will need to complete your contact list. Your contact information will consist of local physicians, dentists, salons, and business in which will offer you return business. You will need to keep a separate log of all clients who have called for consultations or have had a procedure. Check on these clients often. Over the top customer service results in over the top sales.
MRI Concerns

Tattoos, Permanent Cosmetics, and Eye Makeup
Traditional (i.e., decorative) and cosmetic tattoo procedures have been performed for thousands of years. Cosmetic tattoos or “permanent cosmetics” are used to reshape, recolor, recreate, eye shadow, eyeliner, eyebrows, lips, beauty marks, and cheek blush. Additionally, permanent cosmetics are used aesthetically to enhance nipple-areola reconstruction procedures and for other applications. Unfortunately, there is much confusion regarding the overall safety aspects of permanent cosmetics. For example, based on a few reports of symptoms localized to the tattooed area during MR imaging, many radiologists have refused to perform examinations on individuals with permanent cosmetic particularly tattooed eyeliner. This undue concern for possible adverse events prevents patients with cosmetic tattoos access to an important diagnostic imaging technique. While it is well-known that permanent cosmetics and tattoos may cause artifacts and both cosmetic and decorative tattoos be associated with relatively minor, short-term cutaneous reactions, the frequency and severity of tissue reactions or other problems related to MR imaging and cosmetic tattoos is unknown. In 20 Tope and Shellock conducted a study to determine the frequency and severity of adverse events associated with MR imaging in a population of subjects with permanent cosmetics. A questionnaire was distributed to clients of cosmetic tattoo technicians. This survey asked study subjects for demographic data, information about their tattoos, and for their experiences during MR imaging procedures. Results from 1,032 surveys were tabulated. One hundred thirty-five (13.1%) study subjects underwent MR imaging after having permanent cosmetics applied. Only two individuals (1.5%) experienced problems associated with MR imaging. One subject reported a sensation of "slight tingling" and the other reported a "burning" sensation. Both incidents were transient and did not the MR procedures from being performed.
Based on these findings and additional information in peer-reviewed literature, it appears that MR imaging may be performed in patients with permanent cosmetics without serious soft tissue reactions or adverse events. Therefore, the presence of permanent cosmetics should not prevent a patient from undergoing MR imaging. Before undergoing MR procedure, the patient should be asked if he or she has ever had a permanent coloring tech (i.e., tattooing) applied to the body. This includes cosmetic applications such as eyeliner, lip-liner coloring, as well as decorative designs. This question is necessary because of the associated artifacts and, more importantly, because a small number of patients (fewer than 10 documented have experienced transient skin irritation, cutaneous swelling, or heating sensations at the site of permanent colorings in association with MR procedures (review of Medical Device Reports, 198 2011). Interestingly, decorative tattoos tend to cause worse problems (including first- and second degree burns) for patients undergoing MR imaging compared to those that have been reported for cosmetic tattoos. With regard to decorative tattoos, a letter to the editor described a second-degree burn that occurred on the skin of the deltoid from a decorative tattoo. The authors suggested that heating could have come either from oscillations of the gradients or, more likely from the RF-electrical currents".

However, the exact mechanism(s) responsible for complications or adverse in the various cases that have occurred related to decorative tattoos is unknown. Additionally, Kreidstein et al. reported that a patient experienced a sudden burning pain at the site of a decor tattoo while undergoing MR imaging of the lumbar spine using a 1.5-Tesla MR system. Swelling erythema was resolved within 12 hours, without evidence of permanent sequelae. The tattoo pig used in this case was ferromagnetic, which possibly explained the symptoms experienced by the patient. Surprisingly, in order to permit the MRI examination, an excision of the tattooed skin was performed. The authors of this report stated, "Theoretically, the application of a pressure
dressing tattoo may prevent any tissue distortion due to ferromagnetic pull". (However, this relatively benign procedure was not attempted for this patient.) The authors also indicated that, "In some cases, r of the tattoo may be the most practical means of allowing MRI". Kanal and Shellock (1998) common this report in a letter to the editor, suggesting that the response to this situation was "rather aggressive". Clearly the trauma, expense, and morbidity associated with excision of a tattoo far those that may be associated with ferromagnetic tattoo interactions. A firmly applied pressure may be used if there is concern related to "movement" of the ferromagnetic particles in the tattoo pigment. Additionally, direct application of a cold compress to the site of a tattoo would likely any heating sensation that may occur in association with MR imaging. **Artifacts.** Imaging artifact associated with permanent cosmetics and certain types of eye makeup have been reported. The artifacts are predominantly associated with the presence of pigments that use iron oxide or other of metal and occur in the immediate area of the applied pigment or material. As such, tattoo- and makeup-related MR imaging artifacts should not prevent a diagnostically adequate MR imaging procedure from being performed, especially in consideration that careful selection of imaging parameters may easily minimize artifacts related to metallic materials. The only possible exception this is if the anatomy of interest is in the exact same position of where the tattoo was applied using iron oxide-based pigment. For example, Weiss et al. reported that heavy metal particles used in pigment base of mascara and eyeliner tattoos, have a paramagnetic effect that causes alteration local magnetic field in adjacent tissues. Changes in the MR signal pattern may result in distortion globes. In some cases, the artifact and distortion may mimic actual ocular disease, such as a ciliary body melanoma or cyst.
GUIDELINES AND RECOMMENDATIONS

In consideration of the available literature and experience pertaining to MR procedures and patients with permanent cosmetics or tattoos, guidelines to manage these individuals include, the following:-

- The screening form used for patients should include a question to identify the presence of permanent cosmetics or decorative tattoos.
- Before undergoing an MR procedure, the patient should be asked if he or she had a per coloring technique (i.e., tattooing) applied to any part of the body. This includes cosmetic application such as eyeliner, lip-liner, lip coloring, as well as decorative designs.
- The patient should be informed about the risks associated with the site of the tattoo.
- The patient should be advised to immediately inform MRI technologist regarding any unusual sensation felt at the site of the tattoo in association with MR procedure.
- The patient should be closely monitored using visual and auditory means through the operation of the MR system to ensure safety.
- As a precautionary measure, a cold compress wet washcloth) may be applied to the tattoo site during the MR procedure. In addition to the above information and recommendations have been provided for patients by the United States Food and Administration, Center for Food Safety and Applied Nutrition, Office of Cosmetics and Colors Fa Sheet, as follows: "the risks of avoiding an MRI when your doctor has recommended one are likely much greater than the risks of complications from an interaction between the MRI and tattoo permanent makeup. Instead of avoiding an MRI, individuals who have tattoos or permanent make up should inform the radiologist or technician of this fact in order to take appropriate precautions, avoid complications, and assure the best results."
MRI Examination

1. MRI shows pictures of:
   a. Bones of the body
   b. Soft tissue and internal organs
   c. Teeth
   d. Skull

2. MRI results can be altered or effected by:
   a. The patient’s diet
   b. Previous exposure to sun
   c. Jewelry, keys, and zippers
   d. Cosmetics

3. MRI stands for:
   a. Magnetic rotary instrument
   b. Magnetic resonance imaging
   c. Modified revolution instrument
   d. Modified retro pulsed imaging

4. The definition of ethics is:
   a. A set of principles of right conduct
   b. A theory or system of moral values
   c. Conforming to accepted professional standards of conduct
   d. All of the above

5. The definition of slander is:
   a. Oral communication of false statements injurious to a person’s reputation
   b. A false and malicious statement or report about someone
   c. Both of the above
6. False advertising includes statements or pictures in your literature or phone book or advertisements, which lead the public to believe:
   a. Your techniques are pain free
   b. Your fresh work photos are what they can expect from a healed results
   c. Manufacturing propaganda is actually true when it involves product or pigments used in our industry
   d. Faces with traditionally applied makeup are actually cosmetic tattoo cases
   e. All of the above

7. The following acts are prohibited by the Academy members as unethical:
   a. Utilizing false pretense to obtain information from or about a competitor
   b. Using someone else’s business name because you think it is “cute” when they have used it first and the public is likely to be confused
   c. Making derogatory remarks or statements on the phone, in person or in writing about your competitor to potentially new clients
   d. All of the above

8. With regard to a claim to a trade name or trademark, the following is true:
   a. The date of first use is important
   b. The date of first interstate commerce is important
   c. Registering your name in your state does not necessarily protect you.
   d. All of the above