MAKE-UP APPLICATION & TCSG HEALTH AND SAFETY

COURSE OUTLINE:

SECTION 1:

- INTRODUCTION
- COSMETIC USE FOR FACIAL MAKEUP
- FOUNDATION CHEMISTRY
- STARTING WITH A CLEAN FACE
- FACE MASKS
- USING FOUNDATION
- USING CONCEALER

SECTION 2:

- FACE POWDERS
  - FACE POWDER CHEMISTRY
  - USING FACE POWDER
- CHEEK COLOR

(Complete the Reading Material first then click on the Take Test Now Button to start the test. Test is at the bottom of this page)
• LIP COLOR
  o LIP COLOR CHEMISTRY
  o USING LIP COLOR
• LIP LINER

SECTION 3:
• EYE SHADOW
• EYE LINERS
• EYEBROW COLOR
• MASCARA
• EYE MAKEUP REMOVERS
• MAKEUP TIPS
• TIPS FOR KEEPING GREAT SKIN
• ANTI-AGING RULES

SECTION 4:
• GREASE PAINT
• MAKEUP BRUSHES AND OTHER TOOLS
• DISPOSABLE IMPLEMENTS
• CLIENT RECOMMENDATIONS

SECTION 5:
• MAKEUP COLOR THEORY
  o PRIMARY COLORS
  o SECONDARY COLORS
  o TERTIARY COLORS
• COLOR THEORY
  o WARM COLORS
  o COOL COLORS
• SELECTING MAKEUP COLORS
- DETERMINING SKIN COLOR
- COMPLEMENTARY COLOR FOR THE EYES
- ADDING CHEEK AND LIP COLOR
- HAIR COLOR AND EYE COLOR
- REVIEWING COLOR SELECTION STEPS
- MINERAL COSMETICS
- SUMMARY OF MAKEUP TOOLS

SECTION 6:

- CLIENT CONSULTATION
- LIGHTING
- MAKEUP CONSULTATION
- BEAUTY RISKING CHOICES

TEST: TRUE/FALSE QUESTIONNAIRE

LESSON OBJECTIVES:

Upon completion of this class the student will be able to:

1. Categorize the cosmetic use for facial makeup.
2. Summarize the chemistry of foundations.
3. Demonstrate the use of face masks, foundations, and concealers.
4. Understand the chemistry of face powders, cheek color, and lip color.
5. Diagram the use of lip liner.
6. Determine the appropriate eye shadow, eye liner, eyebrow color, and mascara to use on a client.
7. Identify eye makeup removers.
8. Apply basic makeup tips, and tips for keeping great skin.
9. Outline the tools and implements used in the makeup procedure.
10. Distinguish between reusable and disposable implements.
11. Construct client recommendations for the makeup procedure.
12. Discuss primary, secondary, and tertiary colors in relations to the makeup color theory.
13. Demonstrate the use of warm and cool colors.
14. Select makeup colors to compliment a client’s prominent features.
15. Determine a client's skin color for a more appealing makeup procedure.
16. Review the color selection steps.
17. Summarize the categories of makeup tools.
18. Implement an effective client makeup consultation.
19. Identify the risks in makeup choices when performing a service.

SECTION 1

MAKE-UP APPLICATION

Makeup has a great quality that whispers to the cosmetologist, estheticians and the client. It makes you think of weddings, proms and big glamorous events and is often the secret to making the Hollywood stars look good. Each year this art and science increase in the sophistication of makeup. In the 21st century, the magic of makeup is more powerful than ever. Thanks to technological advances and intensive training the industry is experiencing greater potential in terms of growth and opportunity.

For most clients, makeup application should be modest. The main goal that you are trying to achieve is to accentuate the client's most attractive facial features while minimizing those features that are less attractive. There is no fixed pattern for applying facial makeup. Makeup application may vary from one client to the next. Facial structure, eyes, hair color and skin tone must be taken into consideration before applying facial makeup.
Cosmetologists should consider a complete understanding of facial makeup for the following reasons:

- Clients will rely on you to advise them on tips and techniques that will help them look their best.
- You will want to use basic makeup techniques to enhance the hair and chemical services you provide for clients, offering them a total look that is harmonious and balanced.
- You will need to understand the various categories of facial makeup products available so that you know when and on whom they should be used.

**COSMETIC USE FOR FACIAL MAKEUP**

The cosmetic industry has created a wide range of products designed to enhance the skin’s appearance as well as its condition. Cosmetics on the market today meet the needs of every skin type.

**Foundation** is a cosmetic usually tinted, that is used as a base or as a protective film applied before makeup and/or powder. Foundation evens the skin tone, hides color and minor imperfections of the skin and protects the skin from dirt, debris and the sun.
Liquid foundation and cream foundation are the most widely used types and give a natural coverage with a slight sheen. They contain essential or mineral oil and are referred to as oil-based. These products are a good choice for normal to dry skin. Oil free products are referred to as water-based, water being the main ingredient. Water-based liquid foundation, cream foundation or powder foundation generally give a more matte dull non shiny finish and help conceal minor blemishes and discolorations. These foundations are particularly effective for oily skin as they will not add more oil to the skin.

FOUNDATION CHEMISTRY

Cream foundations are predominantly water, mineral oil, stearic acid, cetyl propylene glycol, alcohol, triethanolamine, lanolin derivatives, borax and insoluble pigments. Foundation may also contain surfactants emulsifiers, humectants (promotes the retention of water), perfume and preservatives such as paraben. The formulation of these products is generally suited for dry to normal skin and gives medium to full coverage.

Liquid foundations are suspensions of organic and inorganic pigments in alcohol and water-based solutions. Most liquid foundations must be shaken before used, but bentonite is added to help keep the products blended. The formulation of this
product is generally suited for clients with oily to normal skin conditions who desire sheer to medium coverage.

Powder foundations consist of a powder base mixed with a coloring agent and perfume and are especially effective for oily skin. Cream foundations are moist on application but dry to a powdery finish.

Many foundations contain barrier agents, such as sunscreen and silicone, to protect the complexion from environmental damage.

**Using Foundation**

A successful makeup application is dependent upon selecting the correct color and using an effective method of application. With the correct color, and application method, foundation creates a smooth even canvas for the rest of the makeup application.

When selecting the foundation color, consider your client’s skin tone. Warm tones are often defined as yellow, orange, or red-orange. Cool tones are referred to as blue, blue-green (olive), or blue-red (pink). Neutral skin has equal amounts of warm and cool tones.

Matching the foundation as closely as possible to your client’s actual skin tone will determine the success of your service. If the foundation color is too light, it will appear chalky or gray and will sit on top of the skin, emphasizing imperfections. If the color is too dark, it will look dirty or muddy on the skin. Apply a stripe of color to clean skin on your client’s jawline to determine the correct foundation color. Blend slightly, and then repeat this process with two or three colors. The color that fades or disappears on the skin is the correct tone. Creating a contrast between the color of the face and the color of the neck should be avoided. Makeup should be matched in color and blended smoothly with no visible line of demarcation.

**STARTING WITH A CLEAN FACE**

For the best results, always start with a fresh face. Think of the face as a blank canvas, being the artist of this canvas, you must start with a clean slate. Makeup will go on more smoothly, more evenly, and last much longer.
The first rule is to stop over cleansing the skin. Unless you work all night or became all sweaty, your morning routine should be nothing more than reactivating last night’s moisturizer with a splash of warm water.

Once you have cleansed the skin, toning is your next step and a very important one. The purpose of the toner is to remove residue soap, moisturizer, and oil. Lemons are a very effective toner, which is more refreshing than store bought toners. There is no need to rinse this or any toner off.

The final step is moisturizing. You want to make sure you are using a moisturizer that has sunscreen in it. Much of the evidence of aging such as rough skin, wrinkles, age spots, etc., is really the result of too much sun. So protect your clients face with the right moisturizer, and you are now ready to start the makeup application.

Here are a few homemade recipes to pass on to clients:

FACE MASKS

1. **Mayonnaise**: Apply whole egg mayonnaise on your face for about 20 minutes. Rinse off with cool water.

2. **Peach and Brandy**: Mash up a peach (ripe, canned, or frozen) and mix in a tablespoon of brandy. Leave it on for 20 minutes and rinse off.

3. **Tomato Mask**: For oily skin, mash up a ripe tomato and leave it on for 15 to 20 minutes. Rinse with warm (not hot) water.

4. **Banana Mash**: Mash up a very ripe banana, add just enough honey to make a soft pulp. Apply over face; this is a very firming mask. Leave it on for 20 minutes and then rinse with warm water.

5. **Pepto Bismol**: This is a face mask particularly suited for those with sensitive skin. Apply it straight from the bottle with a cotton swab. Allow it to dry and rinse with cool water.

CONCEALERS
Concealers are used to cover blemishes and discolorations of the skin and may be applied before and after foundation. They are available in pots, pencils, wands and tubes or sticks in a range of colors to coordinate with or match natural skin tones. Any form of concealer may contain moisture or control oil, depending on the brand. Some specifically treat acne and oiliness, while others provide anti-aging ingredients and moisturizing benefits.

Generally, pot concealer is the heaviest and provides the most coverage. Pencil concealer gives sheer to medium coverage and may contain some moisture. Wand concealer is usually sponge or brush tipped and in fluid consistency. Tube or stick concealer is usually medium to sheer and may double as a foundation. The chemical composition of concealers is similar to that of cream foundations.

**USING CONCEALER**

Concealer is removed from the container with a spatula and may be applied with a concealer brush or sponge. Place it sparingly over blemish or areas of discoloration and blend it into the surrounding skin with a facial sponge. It is important to match concealer color to skin as closely as possible. Concealer that is noticeably lighter than skin can appear to draw attention to a problem area such as dark circles under the eyes. If covering blemishes, match the skin very closely so that you do not highlight the blemish. The principles that apply to choosing foundation colors also apply to concealer colors.

**APPLICATION TIMES**

No matter where your client is going, the usual routine should take no longer than 15 minutes. When applying the foundation use a sponge and start under the client’s eye area. This is where coverage is needed the most. Blend all over the face including the lips. Sweep more heavily over flaws, go lightly over your clients "good" areas to even out the color. Fill in any areas that need it with the concealer. The concealer can be used before or after foundation to even out the skin tone.

**SECTION 2**

**FACE POWDERS**
Face powder is fine as baby powder but it is cosmetic powder, sometimes tinted and scented, it is used to add a matte or dull finish to the face. It improves the overall attractiveness of the skin by enhancing the skin's natural color. It also helps to conceal minor blemishes and discolorations, toning down excessive color and shine. Face powder is also used to set the foundation.

FACE POWDER CHEMISTRY

Two forms of face powder are widely used in the salon, loose powder and pressed powder. These types have the same basic composition; pressed powders are simply compressed and held together with binders so they will not crumble. Face powder consists of a powder base mixed with a coloring agent and perfume. Ingredients in most powders include talc, zinc oxide, titanium dioxide, kaolin, chalk, zinc stearate and magnesium stearate. Bactericides are also added to inhibit the growth of bacteria and preserve the product.

USING FACE POWDER

Face powder is available in a variety of tints and shades and in different weights. Light and medium weights are effective on skin that is normal to oily. Face powder should match the natural skin tone and work well with the foundation. It should never appear caked, spotted, or streaked on the face. Translucent powder blends with all foundations and will not change color when applied.

Apply face powder after foundation using a fresh cotton puff. Press the powder over the face in the desired areas, and then use a powder brush or another puff to remove the excess. When suggesting products to a client, recommend both loose...
and pressed powders. Press powders are compact and easy to carry for quick touch-ups during the day. Loose powder is best used at home.

Bronzing powder, is the most versatile cosmetic your client will ever own. Bronzing is the way to finish your face. The misuse of blush is at the heart of many beauty blunders! If you use blush improperly you can end up looking like a clown in the circus. So a suggestion, use more bronzing powder to add color to your face. It’s the perfect tool for nonprofessionals to use in order to contour the face. You can use this type of powder on the cheeks, down the side of the nose, under the jaw line and to add color to the face. You’ll find bronzng powder readily available at drugstores, cosmetic counter, wherever your budgets take you.

**CHEEK COLOR**

Cheek color is a cream liquid dry or loose powder cosmetic used to color the cheeks and the skin beneath the cheekbones. It gives a natural-looking glow to the face and also helps to create more attractive facial contours.

**CHEEK COLOR CHEMISTRY**

Powder cheek color is simply pressed or loose powder with coloring added. Cream and liquid cheek colors fall into two categories; oil-base and emulsions. The oil based formulations are combinations of pigments in an oil or fat base. Blends of
waxes and oily liquids create a water-resistant product. In addition, cream cheek colors contain water; thickeners and a variety of surfactants or detergents that enable particles to penetrate their follicles and cracks in the skin.

**USING CHEEK COLOR**

Cheek colors are applied over foundation.

- Cream or gel cheek colors resemble cream foundation and are generally preferred for dry and normal skin. These colors are applied with a facial sponge.
- Liquid cheek color blends well and is suitable for all skin types. It is applied with a facial sponge.
- Dry cheek color imparts a matte finish and is the most widely used. It is applied with a brush or cotton puff.
- Loose powder cheek color comes in a variety of shades. It is applied with a brush or cotton puff.

Cheek color accents the part of the face where it is applied. Peach or brown tones are most flattering to dark skin. You’ll find that pink shades have too much of a blue undertone. Use a large soft brush to spread the color and for evening glamour, use a brown shade of tones darker than your natural skin color.

The following are general rules for applications:

1. Apply cheek color where natural color would normally appear in the cheeks. Do not apply the color in toward the nose beyond the center of the eye.

2. Do not extend color above the outer corner of the eye.

3. Do not apply color in a bright, round circle. Blend the color so that it fades softly into the foundation.

**LIP COLOR**

Lip color is a cosmetic in paste form, usually in a metal or plastic tube, manufactured in a variety of colors. It is used to color the lips and to enhance or correct the shape of the lips. Some lip colors contain sunscreen to protect the lips.
from the harmful effects of the sun. Others contain moisturizers to keep lips from becoming dry or chapped.

**LIP COLOR CHEMISTRY**

Lip color is available in a variety of forms, creams, glosses, pencils, gels and sticks. All are formulas of oils, waxes and dyes. Castor oil is the primary ingredient in lipsticks: other oils used are olive, mineral, sesame, cocoa butter, petroleum, and lecithin and hydrogenated vegetable oils. Waxes commonly included in the ingredients are paraffin, beeswax carnauba and candelilla wax.

**USING LIP COLOR**

Artistry has a keen sense of fashion and that fashion is essential when it comes to selecting the appropriate lip color shade or tint. The current fashions trend might call for a certain look, such as lighter or darker colors or a certain style of application, for example, heavily lined, glossy, lightly stained or matte. Consider the client's preferences, eye color, skin tone and lip shape before selecting and applying lip color. Lip color must not be applied directly from the container unless it belongs to the client.

Use a spatula to remove the lip color from the container, and then take it from the spatula with a disposable lip brush. Use the tip of the brush to line the lips, beginning at the outer corner of the upper lip and working toward the middle.
Repeat on the opposite side. Connect the center peaks using rounds strokes, following the natural lip line. Repeat on the bottom lip, working from the outer corners in and connecting in the middle. Aim for symmetry and balance.

**LIP LINER**

Lip liner is a colored pencil used to outline the lips. It also helps to keep lip color from feathering. It is often used when doing corrective makeup. Lip liner comes in thin or thick pencil form and is available in a variety of finishes. Some lip liners double as lipstick for ease of application.

Lip liner is usually applied before lip color to ensure proper shape and definition of the lips. Choose a lip liner that coordinates with the chosen lip color. The liner should not be dramatically darker or brighter than the lip shade. If a darker liner is desired, fill in most of the lip with the liner and blend the lip color and liner to avoid harsh lines. Sharpen the lip liner pencil and wipe with a clean tissue before each use. Also, remember to sanitize the sharpener before every use.

Line the lips, beginning at the outer corner of the upper lip and working toward the middle. Repeat on the opposite side. Connect the center peaks with rounded strokes, following the natural line of the lip. Outline the lower lip from the outer corners in, and then apply liner on the lips, staying within the outline. The same rule of "the darker the skin, the darker the color" applies to the lips. Red lips are perfect for evening. You can choose reds with warm, brown tones, rather than blue undertones, which tend to be too cold. Women with darker tones usually have darker pigmentation outlining their lips, so they have their own natural lip line. If you do find that you require a lip liner, stay in the brown tones.

1. Lip liner adds depth, definition; prevent lip color from bleeding.

2. Lipstick Matte gives intense shine free long wearing color.

3. Satin gives a moist finish color intensive.

4. Sheer gives translucent color and delicate shine.
5. Lip Gloss gives intense shine see-through or opaque color depending on the formula.

The secret to keeping a good face starts with these three care basics: cleanse, moisturize and protect. For makeup to look flawless and wear well, you need to know your client skin type, understand the skin behavior and treat it with the proper skin care products. Start your prep with a suitable cleanser and follow with a moisturizer. Make sure it contains sunscreen to protect your skin. This helps to avoid incidental exposure and also maintains an even tone. Be sure to apply moisturizer immediately after you cleanse and wait a few minutes before you begin to apply makeup.

Selecting the proper textures and shades can range from a look that says nude and lovely to one that’s styled and communicates a glam slam. Perfecting this artistic craft calls for selecting the right texture and shades. No matter what, you always want to select a shade that enhances one's natural beauty.

Begin by choosing the proper concealer, as we all have a little something to hide, select the proper foundation for your client skin matching both the client skin tone and undertone. To find the correct shade, select those shades closest to the complexion and apply them along the jaw line, then allow a minute for them to dry.

Powders should also fall into the scheme of things, natural and flawless. Be sure to choose the right shade, one that is not ashy or too red. More often then not, you'll find that a yellow-based powder will fit the bill.

When it comes to blush, continue the harmony of naked skin like finishes by selecting shades and textures that impart a warm glow. With experience you'll eventually find compatible bronzing creams and powders.

So let's say good-bye to those ashy or densely pigmented shadows of yesteryear, and open the door to new colors that will enhance your inner and outer beauty!

SECTION 3

EYE SHADOW
Eye shadows are cosmetics applied on the eyelids to accentuate or contour them. They are available in almost every color of the rainbow, from warm to cool, neutral to bright, and light to dark. Some powder eye shadows are designed to be used wet or dry. They also come in a variety of finishes, including metallic, matte, frost, shimmer, or dewy.

Eye shadow is available in stick, cream, pressed, and dry powder form, and usually come with an applicator. Stick and cream shadows are water-based with oil, petrolatum, thickener, wax, perfume, preservatives, and color added. Water-resistant shadows have a solvent base, such as mineral spirits. Pressed and dry powder shadows are composed much the same as pressed face powder and powdered cheek color.

When applied to the lids, eye color or shadow makes the eyes appear brighter and more expressive. Matching eye shadow to eye color creates a flat field of color and should generally be avoided. Using color other than the actual eye color (that is, a contrasting or complementary color) can enhance the eyes. Using light and dark can also bring attention to the eyes.

Generally, a darker shade of eye color or shadow makes the natural color of the iris appear lighter, while a lighter shade makes the iris appear deeper. However, the only set of rules for selection of eye makeup colors is that they should enhance the client's eyes. Color choices should be more subtle for daytime. If desired, eye
makeup color may match or coordinate with the client's clothing color. Eye shadow colors are generally referred to as highlight, base, and contour colors.

1. Highlight color is lighter than the client's skin tone and may have any finish. Popular choices include matte or iridescent (shiny). As the name suggests, these colors highlight a specific area, such as the brow bone. Remember that a lighter color will make an area appear larger.

2. Base color is generally a medium tone that is close to the client's skin tone. It is available in a variety of finishes. This color is generally used to even skin tone to the eye. It is often applied all over the lid and brow bone, from lash to brow, before other colors are applied, thus providing a smooth surface for the blending of other colors. If used this way, a matte finish is generally preferred.

3. Contour color is a color, in any finish, that is deeper and darker than the client's skin tone. It is applied to minimize a specific area, to create contour in a crease, or to define the eyelash line.

To apply eye shadow, remove the product from its container with a spatula, then use a fresh applicator or clean brush. Unless you are doing corrective makeup, apply the eye color close to the lashes on the upper eyelid, sweeping the color slightly upward and outward. Blend to achieve the desired effect. More than one color may be used if a particular effect is desired.

The general rule is that the darker the skin, the deeper the eye color. This is because darker skin tends to absorb color. Use rich eye colors like gold, deep gray, purples, russet, copper and brown. Pale pink and beige are enhancing highlighters. If your eyebrows are a little sparse, use dark brown or black pencil to fill them in. Use a Kohl pencil to rim the eyes and some coats of mascara.

**EYELINERS**
Eyeliners are a cosmetic used to outline and emphasize the eyes. It is available in a variety of colors, in pencil, liquid, pressed (cake), or felt tip pen form. With eyeliner you can create a line on the eyelid close to the lashes to make the eyes appear larger and the lashes fuller.

Eyeliner pencils consist of a wax (paraffin) or hardened oil base (petrolatum) with a variety of additives to create color. They are available in both soft and hard form for use on the eyebrow as well as the upper and lower eyelid.

Liquid and cake eyeliners contain alkanolamine (a fatty alcohol), cellulose, ether, polyvinylpyrrolidone, methylparaben, antioxidants, perfumes, and titanium dioxide.

Most clients prefer eyeliner that is the same color as the lashes or mascara for a more natural look. More dramatic colors may be chosen depending on seasonal color trends.

Be extremely cautious when applying eyeliner. You must have a steady hand, be sure that your client remains still. Sharpen the eyeliner pencil and wipe with a clean tissue before each use. Also, remember to sanitize the sharpener before each use. Apply the desired area with short strokes and gentle pressure; the most common placement is close to the lash line. For powder shadow liner application, scrape a small amount onto a tissue and apply to the eyes with a disposable applicator or clean brush. If desired, wet the brush before the application for a more dramatic look.
EYEBROW COLOR

Eyebrow pencils or shadows are used to add color and shape to the eyebrows, usually after tweezing or waxing. They can be used to darken the eyebrows, correct their shape, or fill in sparse areas.

The chemistry of eyebrow pencils is similar to that of eyeliner pencil. The chemical ingredients in eyebrow shadows are also similar to those on the eye shadows.

Sharpen the eyebrow pencil and wipe clean tissue before each use. Sanitize the sharpener before each use. For powder shadow application, scrape small amount onto a tissue and use a disposable applicator or a clean brush to apply shadow to brows. Avoid harsh contrasts between hair and eyebrow color, such as pale blonde or sliver hair with black eyebrows.

MASCARA

Mascara is a cosmetic preparation used to darken, define, and thicken the eyelashes. It is available in liquid, cake, and cream form and in a variety of shades and tints. Mascara brushes can be straight or curved, with fine or thick bristles. The most popular mascara colors are shades of brown and black, which enhance the
natural lashes, making them appear thicker and longer. Mascara and eyebrow pencils should be generally coordinate so there is no harsh contrast.

Mascara is available in tube and wand applicators. Both are polymer products that include water, wax, thickeners, film-formers, and preservatives in their formulation. The pigments in mascara must be inert (unable to combine with other elements) and usually are carbon black, carmine, ultramarine, chromium oxide, and iron oxides. Some wand mascaras contain rayon or nylon fibers to lengthen and thicken the hair fibers.

Mascara may be used on all the lashes, from the inner to outer corners. Using a disposable wand, dip it into a clean tube of mascara and apply it close to the base of the lashes out towards the tips, making sure the client is comfortable throughout the process. Dispose of the wand. Never double-dip.

**EYE MAKEUP REMOVERS**

Eye makeup removers do just that; remove eye makeup. Most eye makeup products are water-resistant, so plain soap and water is less effective for removal. Eye makeup removers are either oil-based or water-based. Oil-based removers are generally mineral oil with a small amount of fragrance added. Water-based removers are a water solution to which acetone; boric acid, oils, lanolin or lanolin derivatives and other solvents have been added.

**GREASEPAINT**

Greasepaint is a heavy makeup used for theatrical purposes. Cake (pancake) makeup is a shaped, solid mass applied to the face with a moistened cosmetic sponge. It gives good coverage and generally used to cover scars and pigmentation defects.

**MAKEUP TIPS**

1. Lipstick makes a great cream blush. You’ll find it’s a perfect way to color coordinate your face.

2. A nude pencil is just right to outline lips, cover blemishes and line brows.
3. Eye shadow doubles as lip powder.

4. Mascara can create an emergency beauty mark.

5. Dark brown eye liner can be used as a lip pencil.

6. Dry blush can be used to seal lips or to change lip color.

7. Translucent powder can be used to lighten brows and to seal lipstick.

8. Concealer hides redness and thins a too prominent nose.

9. Powder puffs sprayed with hair spray help powder to stay put.

10. When retouching makeup in the middle of the day, go lightly. keeping in mind that Oil from the skin will absorb the make-ups color and intensify it, making it look artificial.

11. Pressed powder has finer texture than loose powder and looks less “floury”.

12. Brush powder only on the center of the face. The sides of the face are always drier and don’t require it.

**OTHER TIPS**

1. Baby wipes are hygienic use them once and throw them away. Baby wipes are very gentle to the face. You’ll find that most versions contain lanolin which is a skin softener. This is a great tool for both cleansing the face and removing makeup This is also useful for taking off a stain or deodorant mark.

2. Hemorrhoid cream can be used for puffy eyes and along the jaw line for puffy cheeks. It is an instant face lift.

3. White eyeliner is essential to create a wide-eyed look. Use it along the lash line and softly smudge it with a sponge applicator.

4. White eye shadow is used to create a shimmering face base by mixing it with foundation. Stroke just under the brow, lifts the eye.
5. Vaseline, you can create your own tinted gloss and save lots of money by simply mixing any of your favorite lipsticks with a dab of Vaseline.

6. Instead of expensive toners, use lemon juice to remove residue and refresh your face. Make sure that you purchase juice with real lemons.

7. Teething rings are also placed on the eyes to reduce any puffiness and provide a well rested, wide-awake appearance. Another way to wake up those eyes is to hold a spoon over the eye for about thirty seconds. The coolness of the metal wakes up the eyes.

8. Here is another trick take a tooth brush and brush your lips, not only does it take away any chapping, it plumps up the lips temporarily for that sought after pouty look.

TIPS FOR KEEPING GREAT SKIN

1. Drink lots of spring water, don’t smoke, and avoid fatty foods and chocolate. Boil some whole milk let it cool down lift off the film that form on the surface and apply it to the skin, after it dries, scrub it off and exfoliate the skin.

2. Don't use moisturizer under your foundation. It can look extremely greasy. Line lips and then dip a Q-tip in powder and run along the line. This will create a mouth that pops out.

3. A simple way to resist aging is sun protection. This is the number one reason why our skin ages. Wear sunscreen at all times and don't forget that the skin needs to be protected from the sun.

4. Smoking causes early wrinkling and this occurs due to the reduced levels of the oxygen needed to keep skin healthy. Smoking is the prime source of oxygen deprivation. If you are in the process of quitting make sure you drink lots of water.

5. Alcohol in excess dehydrates the body and robs it of vitamins that keep the skin both healthy and glowing. Never have an alcoholic drink without a chaser of ice water.
6. Improper Nutrition: the modern day use of convenience foods encourages the formation of free radicals. These foods are high in process fats and oils. Protection of the skin is possible by eating foods rich in vitamins A, C and E. Fresh fruits and vegetables are particularly good for keeping the skin youthful. Supplementation may be necessary if you're not getting these nutrients in your food.

ANTI-AGING RULES

Anti-Aging Rule 1: Update your makeup the way you update your wardrobe.

Anti-Aging Rule 2: Age gracefully and you’ll always remain youthful.

SECTION 4

MAKEUP BRUSHES AND OTHER TOOLS

Makeup brushes come in a variety of shapes and sizes. They may be made of synthetic or animal hair with wooden or metal handles. Commonly used makeup brushes and implements include the following items:
POWDER BRUSH: Large soft brush used to apply powder or blush and for blending edges of color.

BLUSH BRUSH: Smaller, more tapered version of the powder brush, excellent for applying powder cheek color.

1. CONCEALER BRUSH: Usually narrow and firm with a flat edge, used to apply concealer around the eyes or over blemishes.

2. LIP BRUSH: Similar to the concealer brushes, with a more tapered edge; may be used to apply concealer or lip color.

3. EYE SHADOW BRUSHES: Available in a variety of sizes, from small to large, and diffused based on the blend of the shadow. A firm brush is better for depositing dense color than for blending it.

4. EYELINER BRUSH: Fine, tapered, firm bristles; used to apply liquid liner or shadow to the eyes.

5. ANGLE BRUSH: Firm, thin bristles; angled for ease of application of shadow the eyebrows or shadow liner to the eyes.

6. LASH AND BROW BRUSH: Comb-like brush used to remove excess mascara on lashes or to comb brows into place.

7. TWEEZERS: Available in metal or plastic; used to remove excess facial hair.

8. EYELASH CURLER: Metal or plastic device used to give lift and upward curl to the upper lashes.

If you invest in high-quality make-up brushes, you will have them for years. Take good care of your brushes by cleaning them gently.

A commercial sanitizer can be used for quick cleaning, although spray-on instant sanitizers contain a high level of alcohol and will dry brushes over time. A gentle shampoo or brush solvent should be used to truly clean the brushes. These products will not hurt brushes and may actually help them last longer.
One caution: the brush should always be put into running or still water with the ferrule (the metal ring that keeps bristles and handle together) pointing downwards. If the brush is pointed up, the water may remove the glue that keeps the bristles in place. Rinse brushes thoroughly after cleansing, they will dry in the shape they are left in. Reshape the wet bristles and lay the brushes flat to dry.

**DISPOSABLE IMPLEMENTS**

1. **Sponges**: Come in a variety of sizes and shapes, including wedges and circles, and work well to apply and blend foundation, cream or powder blush, powder, or concealer.

2. **Powder or Cotton puffs**: May be made of velour or cotton and are used to apply and blend powder, powder foundation, or powder blush.

3. **Mascara wands**: Usually plastic; used to apply mascara on a client; generally disposable, so as to ensure proper hygiene.

4. **Spatulas**: Wooden or plastic, with a wide, flat base; used to remove makeup such as lip stick, foundation, concealer, powder, blush, and shadow from their containers.

5. **Disposable lip brushes**: May be plastic or another synthetic; used to hygienically apply lip color to a client.

6. **Sponge**: Tipped shadow applicators: Used to apply shadow and lip color or to blend eyeliner; may be used to remove unwanted makeup from eyes or lips.

7. **Cotton swabs**: May be used to apply shadow, blend eyeliner, or remove unwanted makeup from eyes and lips.

8. **Cotton pads or puffs**: May be used with astringents or makeup removers; also used to apply powder products.

9. **Pencil sharpener**: Use before each application of eye or lip liner pencil to ensure hygienic application.

**OPTIONS THAT YOU CAN RECOMMEND TO YOUR CLIENT**
Temporary fillers, the great advantage to temporary fillers over permanent fillers is that if anything goes wrong or your client simply don’t like the result, she is not stuck with the changes she made. The down side to the option is that she will need to pay for treatments several times a year to keep her desired look.

Collagen treatments are a protein naturally found in the skin. Think of it as scaffolding that provides your skin with its firm, smooth, resilient texture. As we age and are exposed to the sun the collagen frameworks break down and with repeated muscles movements overlying these areas, wrinkles begin to appear. Collagen replacement therapy restores the natural collagen support layer to your skin. Facial lines are smoothed and wrinkles are diminished. Collagen may also be used to plump up lips that have become thinner.

Chemical peels are becoming increasingly popular and the variety of ingredients used for this purpose is increasing daily. The goal of a peel is to leave the skin smoother, more even in texture and tone and less wrinkled. The newer combinations of peels adds antioxidants and humectants that make them stronger yet better tolerated. Newer techniques also allow for peels of different strengths to be used at one time to permit a deeper peel at another more delicate site. Chemical peels speed up the natural exfoliating process in which outer layer of your skin cells are sloughed off. Various types of acids are used to help break the chemical bonds between skin cells. In this way, the peels also accelerate the production of new cells as the skin heals are stimulated to renew themselves.

Glycolic Acid Peel fall into the family of alpha hydroxy acids, some of which are derived from fruits, which is why they are sometimes called fruit acids The AHAs include: Glycolic acid from sugarcane, Lactic acid from sour milk, Citric acid from citrus fruit, Malic acid from apples and Tartaric acid from grapes.
They are commonly used in concentrations of 8 to 5 percent in over the counter products. However, they are also commonly used by dermatologist in higher concentrations, up to 70 percent as peeling agents. This procedure may cause minimal irritation or redness lasting a few hours to a few days after the procedure, especially with the higher concentration acids. However, the skin will feel firmer and more hydrated. Fine lines, skin discoloration and age spots will appear diminished.

*Lactic Acid Peel* is another type of hydroxy acid that is more and more commonly being used for peels. It is also applied as a series, alone or in combination with other peels and procedures.

*Salicylic Acid Peel* is available in the over the counter formulations in maximal concentrations of 2 percent. In some doctors offices, concentrations of 5 to 30 percent can be used with the purpose of penetrating the epidermis (upper layer of the skin) to exfoliate the surface layer of dead skin cells and cleanse away acne-forming bacteria. Remaining surface impurities can then be removed during acne surgery. This is a process whereby blackheads are manually extracted, using a special instrument designed for this purpose.

*Micro dermabrasion* is a treatment in which fine crystals made of aluminum oxide or salt crystals are applied with barring degrees of pressure to your skin to loosen the outer layer of dead cells. The cells are then vacuumed up, using a suction device.

The treatments listed above are great tools to use when trying to create a smooth skin texture.

**SECTION 5**

**MAKEUP COLOR THEORY**

A strong understanding of how color works is vital for effective makeup application. Everyone sees color a little differently, and it may take a while to learn to see color naturally and easily.
Let us review how to identify primary, secondary, and tertiary colors, as well as warm, cool, and complementary colors. Once you understand these basics of the color theory, you can use your creative instincts to invent any color palette you desire.

**PRIMARY COLORS:**

Primary colors are fundamental colors that cannot be obtained from a mixture. The primary colors are yellow, red, and blue.

![Primary Colors Diagram]

**SECONDARY COLORS:**

Secondary colors are obtained by mixing equal parts of two primary colors. Yellow mixed with red makes orange. Red mixed with blue makes violet. Yellow mixed with blue makes green.
**TERTIARY COLORS:**

Tertiary colors are formed by mixing equal amounts of a secondary color and its neighboring primary color on the color wheel. These colors are named by primary color first and secondary color second. For example, when we mix blue (a primary color) with an equal amount of violet (a neighboring secondary color), we call the resulting color blue-violet.
Primary and secondary color directly opposite each other on the color wheel are called *complementary colors*. When mixed, these colors cancel each other out to create a neutral brown or gray color. When complementary colors are placed next to each other, each color makes the other look brighter, resulting in greater contrast. For example, if you place blue next to orange, the blue seems bluer, the orange brighter. Try this with magic markers or colored paper to compare. The concept of complementary colors is useful when determining color choice. For example, the use of complementary colors will emphasize eye color, making the eyes appear brighter.
WARM AND COOL COLORS

Learning the difference between warm and cool colors is essential to your success as a makeup artist. This is the basis of all color selection, and understanding the difference will enable you to properly enhance your client's coloring.

WARM COLORS

Warm colors are the range of colors from yellow and gold through the oranges, red-oranges, most reds, and even some yellow-greens.

COOL COLORS

Cool colors suggest coolness and are dominated by blues, greens, violets, and blue-reds. You will notice that reds can be both warm and cool. If the red is orange-based, it is warm. If it is blue-based, it is cool. Green is similar: if a green contains more gold, it is warm; if it contains more blue, it is cool.

You may hear people refer to a color as having a lot of blue in it. For example: "This lipstick has a blue base" or "That blush is very blue." This does not mean that the color is truly blue. Rather, it means that when the pigments were mixed to create that cosmetic, more blue color was added. What you are seeing might look primarily violet or magenta.
SELECTING MAKEUP COLORS

Now that we have determined warms and cools, it is time to learn a system that will help you feel more comfortable when choosing colors for your clients. Keep in mind this is simply one way of choosing colors. The art of makeup application allows for more than one way to achieve the result you are looking for. However, once you learn the rules of a basic color selection system, you can then go on to break them if you so desire.

As you look to the color wheel, think of it as a tool in determining color choice. There are three main factors to consider when choosing colors for a client: skin color, eye color, and hair color.

DETERMINING SKIN COLOR

When determining skin color, you must first decide if the skin is light, medium, or dark level. Then determine whether the tone of the skin is warm or cool. You may not see skin colors truly in the beginning. Give yourself time and practice to develop your eye.

A neutral skin tone contains equal elements of warm and cools, no matter how light or dark the skin is. Remember to always match your foundation color to the color of the skin, or use the corrective techniques discussed later in this section. Once you have determined if the skin is light, medium, or dark, you may choose eye, cheek, and lip colors to match the skin color level, or try contrast for more impact. Most skin tones and levels can wear a surprisingly wide range of eye, cheek, and lip colors.

1. If the skin color is light, you may use light colors for a soft, natural look. Medium to dark colors will create a more dramatic look.
2. If the skin color is medium, medium tones will create an understated look. Light or dark tones will provide more contrast and will appear bolder.

3. If the skin color is dark, dark tones will be most subtle. Medium to medium light or bright tones will be striking and vivid.

4. Be cautious when choosing tones lighter than the skin. If the color is too light, it will turn gray or chalky on the skin. Look for translucent, shimmery colors if you are choosing these tones.

**COMPLEMENTARY COLOR FOR EYES**

As you begin recommending eye, cheek, and lip colors, neutrals will always be your safest choice. They contain elements of warm and cool and work well on any skin tone, eye color, or hair color. They come in variations of brown or gray. For instance, they may have a warm cool base with brown tones. Or you might choose a plum-brown, which would be considered a cool neutral. An orange-brown would be considered a warm neutral. Charcoal gray is a cool neutral, as is blue-gray.

Contrary to popular belief, matching eye color with shadow color is not the best way to enhance it; it only creates a flat region of color. By contrasting eye color with complementary colors, you emphasize the color most effectively.

The following is a guideline for eye color selection. You may refer back to the color wheel for additional help in determining complementary colors.

1. **COMPLEMENTARY COLORS FOR BLUE EYES**: Orange is the complementary color to blue. Because orange contains yellow and red, shadows with any of these colors in them will make your eyes look bluer. Common choices include gold, warm orange-browns, like peach and copper, red-browns like mauves and plum, and neutrals like taupe or camel.

2. **COMPLEMENTARY COLORS FOR GREEN EYES**: Red is the complementary color to green. Because red shadows tend to make the eyes look tired or bloodshot, pure red tones are not recommended. Instead, use brown-based reds or other color options next to red on the color wheel. These include red-orange, red-violet, and violet. Popular choices are coppers, rusts, pinks, plums, mauves and purples.
3. **COMPLEMENTARY COLORS FOR BROWN EYES**: Brown eyes are neutral and can wear any color. Recommended choices include such contrasting colors as greens, blues, grays, and slivers.

**ADDING CHEEK AND LIP COLOR**

After you have chosen eye makeup, use the color wheel to determine whether your choices are warm or cool and then coordinate cheek and lip makeup on the same color family as the eye makeup. For example, if your client has green eyes, you should recommended plums for her, which is cool. Now you should stay with cool colors for the cheeks and lips in order to coordinate with the eye makeup. You may also choose neutrals, as these contain both warm and cool elements and coordinate with any makeup colors.

**HAIR COLOR AND EYE COLOR**

Hair color needs to be taken into account when determining eye makeup color. For example, if a woman has blue eyes, your instinct might be to select orange-based
eye makeup as the complementary choice. If she has cool blue-black hair, the orange will not be flattering. In this case, you would choose cool colors to coordinate with the hair color. Red-violets (plums) would be a more flattering choice. Look at orange on the color wheel: it is warm. Go around the wheel while still remaining cool. Red-violets are the closest to orange on the color wheel while remaining cool. As stated earlier, there is a range of colors to choose from for any client.

**REVIEWING COLOR SELECTION STEPS**

1. Determine skin level: light, medium, or dark.
2. Determine skin undertone: warm, cool, or neutral.
3. Determine eye color: blue, green, brown and so forth.
4. Determine complementary colors.
5. Determine hair color: warm or cool.
6. Choose eye makeup colors based on complementary or contrasting colors.
7. Coordinate cheek and lip colors within the same color family: warm, cool and neutral.
8. Apply makeup.

The best thing about choosing colors is the unlimited number of choices you have. Try one or all methods of choosing color. You may choose colors based only on skin tone, or you might find that working with complementary colors makes you feel more comfortable. Bring out hair color by matching or contrasting with it, or by blending all three areas as discussed here.

**Mineral Cosmetic**

Mineral cosmetic can calm irritated and post treatment skin for those with allergy-prone, laser-treated or otherwise challenged skin or those who simply want to minimize the possible sensitizing factors and inherent toxic risks of conventional color cosmetics. Micronized mineral cosmetics are the best answer, Powdered mineral foundations, blushes and eye shadows, which are colored primarily by iron oxides, actually calm irritation due to their titanium dioxide and zinc oxides, which are anti-inflammatory.
Because they don’t contain synthetic dyes, even the lip pencils and blushes can be used in the eye area. Mineral makeup is recommended by dermatologist and plastic surgeons for use after a peel and as the first makeup usable after laser treatment. They provide a broad spectrum of UVA and UVB sun protection which can reduce added burden to sensitive facial skin. This can be avoided by applying common sunscreen products. They are also water resistant but not pore-clogging. The microscopic crystals overlap, allowing the skin to breath, but they don’t crease or accentuate wrinkles as talc-based powders do. As a result of the level of coverage, the loose and pressed formulas stand in for liquid foundation and powder without the buildup or cakiness of cream-to-powder foundation.

Makeup should match your natural look. It should be a proper foundation that's an exact match to your skin tone, with matching powder. When applying makeup makes sure you put emphasis on the client best features.

When your clients are applying makeup at home make sure that you educate them on using the right tools. A small collection of good quality, natural hair brushes that wash well, retain their shape and won’t shed or scratch your skin are essential to the process. Dome-shaped sponges for applying foundation for blending and clean-ups. By all means, toss those compact brushes and tiny spongy applicators that come with your makeup. These basic tools will not only aid you tremendously in getting the look you desire, but allow you to apply your makeup quickly and easily with the most natural results.

Makeup Application Tools

**Flat shadow brush**: Just the tool for precise application of color to the lids.

**Fluffy medium shadow brush**: Great for applying shadow in the crease and unbeatable for applying a sheer wash of color on the lids.

**Small angle brush**: Great for lining eyes or filling in brows.

**Powder brush**: Perfect for face powder or bronzer.
Brow brush/ lash comb: Excellent for brushing brows into shape and combing and separating lashes.

Lip brush: For a precise application of color and coverage.

Blush brush: Perfectly contoured for applying blush accurately. The functional items listed below will also aid you in giving a great face.

Dual-size pencil sharpener used for upkeep of small and large pencils.

Tweezers: For cleaning up brows, removing occasional facial hair.

Eyelash curler: Giving eyelashes a lift upward, thereby making them appear longer.

Retractable powder brush: Great portable option for on the go touch up.

Blotting papers: To reduce oil and unwanted shine without adding color.

Velour powder puff: To apply powder and set foundation in place.

Tissue: For blotting lips, cleaning up spills.

Cotton swab: Perfect for blending and cleaning up makeup missteps.

Liquid Foundation gives shear to medium coverage oil-free formulas are great for oil and combination skin types; water based formulas are best for normal to dry skin; both give a slightly dewy finish.

Cream foundation gives a medium to maximum coverage this products is available in oil-free and moisturizing formulas; imparts a flawless, moist finish.

Cream to Powder formulation gives moderate coverage as a foundation, dries to a matte powder finish: for all skin types.

Sticks offer medium to maximum coverage; available in oil-free and water-based formulas; gives a semi-matte finish can also be used as a concealer.

Concealer solid cream provides maximum coverage; great for minimizing under eye circles and dark spots.
**Section 6**

**Client Consultation**

The first step in the makeup process, as with all other services that take place in the salon, is the client consultation. This is where you ask the client the questions that will bring out her wishes and concerns. Listen closely and try not to impose your own opinions too much. Your role is to hear your client's wishes and concerns and to make recommendations based on your knowledge. If she chooses not to act on your recommendations; do not take it personally. In time, perhaps she will.

**Consultation Area**

The area that you use for consultations must be clean and tidy. No one wants to see a messy makeup unit or dirty brushes lying about. Clean your brushes after each use and tidy your makeup area daily. Also, keep a portfolio in the consultation area that includes photographs of your own work or pictures from magazines. The client can go through your portfolio to find styles and colors that appeal to her.

**Lighting**

Adequate and flattering lighting is essential for both the consultation and application parts of the makeup process. Be sure your client's face evenly lit and without dark shadows. Natural light is the best choice, but if it is necessary to use artificial light, it should be combination of incandescent light (warm bulb light) and fluorescent light (cool industrial tube light). If you must choose between the two, incandescent light will be more flattering.

**Tube lightweight cream**: gives medium coverage: camouflages minor imperfections, uneven tone.

**Sticks** give a somewhat sheer coverage, conceals minor imperfections: sticks can be applied directly onto small areas.

**Wand** gives semi sheer coverage best for small areas is applied on the skin with convenient sponge tip applicator.
Make sure that the light always shines directly and evenly on the face. And remember, good lighting makes a client look good, and clients look good are more likely to purchase the products you recommend. When this happens, everyone comes out a winner.

**MAKEUP CONSULTATION**

A makeup service should always begin with a warm introduction to your client. Visually assess her to understand her personal style. This will give you cues as you continue your consultation.

Engaging the client in conversation will help you determine her needs. Gather whatever information you can on her skin condition, how much or how little makeup she wears, daily versus special occasion makeup, the amount of time she spends applying makeup, colors she likes or dislikes, and any makeup areas she is having trouble with.
Record this information on a client consultation card. Also, write down your recommendations so that you may refer back to them at the end of the makeup application. Reviewing and restarting your written advice with the client at the end of the service will also help you sell the retail products you hope she will purchase. Escort your client to the reception area where you can assist her in gathering the products that you have recommended. Ask her if she has any other questions and, if so, give clear answers. If possible, set up a time for her next appointment. Then give her a business card with your name on it and shake her hand as you turn her over to the receptionist who will check her out.

**BEAUTY RISKING CHOICE**

Benzoyl peroxide: Drying and peeling regimens like benzoyl and vitamin A derivatives can destroy the beauty of the skin and compromise its protective and antiaging matrix. Tetracycline prescribe for moderate acne, this drug can cause photosensitivity chronic yeast overgrowth and digestive problems. Accutane, another drug of choice for treating severe acne, can cause dryness of the skin, nose, mouth and lips. It can also result in itching and peeling of the palms and soles along with high cholesterol. Some of the less common side effects include thinning hair, body aches and liver damage.

Beauty supporting choice for acne is Phospholipids. It helps restore the acid balance that fights bacteria in the skin. Azelaic acid is a natural compound sometime prescribe as azelex instead of topical antibiotics. It has been shown to have effects comparable to topical benzoyl peroxide gel and 5% tretinoin cream. Tea tree oil has an effect similar to benzoyl peroxide 5% without making the skin flaky. Tea tree oil and salicylic acid are a good option for mild acne. Essential oils can purify and normalize skin oil. Neem oil is antimicrobial and antifungal and Neroli oil is purifying and normalizes oil production.

*Considerations*: Excess oil, skin cell buildup, bacteria and inflammation are the issues. Excess oil production is often hormonal or stress induced. Others factors contributing to acne may include the skin's reaction to hair products, phones, fabrics and prescription drugs such as steroid inhalers. Food allergies Iodine-containing food and poor digestion or imbalance of intestinal flora can contribute to acne. Keep in mind our modern lifestyle poses a challenge to the good bacteria (probiotics) that dwells in our bodies.
From the drugs we take to the water we drink and shower in, our precious bugs are fighting for survival and when they start to lose, more virulent bad bugs, like Candida Albicans strain, can rule over our gut and other parts of our bodies. This can contribute to a stubborn imbalance of good and bad bacteria and yeast in the gut and even on the skin, which can set the stage for autoimmune syndromes and skin disorders. Hydration is a basic defense against acne so drink plenty of pure water. Sometimes it is good to use detox measures such as green juices chlorella, milk thistle, turmeric, green tea red clover and plant sterolins help the liver and reduce the detox burden on the skin. Zinc gluconate supplements work comparably to the antibiotic minocycline hydrochloride against inflamed acne. MSM available in topical products or supplements is the better utilized form of sulfur that inhibits bacteria and promotes healing. Alpha acid topicals can help normalize oil production and shrink pore size.

**Dark Spots or Patches**: skin lighteners containing hydroquinone can cause skin discoloration and allergic reaction. Hydroquinone is made from crystalline phenol a suspected carcinogen. Lasers do not perform well on melasma discoloration. Azelaic acid is an effective and safer bleaching agent. Some data suggest that topical azelaic acid, used twice daily with a broad spectrum sunscreen, works as well as hydorquinone 4% creams. Kojic Acid inhibits melanin. Vitamin C, Licorice and bioflavonoids can lighten the skin some what. Laser and micordermabrasion for brown spots that go with sun damage is recommended especially for melasma.

**Consideration for Dark spots or patches**: Keep in mind that hormonal changes, those associated with pregnancy or use of birth control pills, often contribute to dark spots and patches or melasma. This can only be avoided by vigilantly protecting your skin from sun exposure. Use mineral based sunscreens for maximum and safe protection. Another protection is mineral makeup, its benefits are anti-inflammatory and it gives coverage without irritation. Don’t forget about antioxidants taken internally and applied to the skin can offer added protection from the sun.

**Beauty risking choices for Dry lips**: Phenol-containing mineral oil or petrolatum based lip balms cause skin irritation, dryness and lip balm addiction.
Beauty supporting choice: Skin compatible oil and lip balm containing ingredients like shea butter, cocoa butter, coconut oil, bees wax, calendula, aloe allantoin (comfrey root) and vitamins C and E all truly hydrate heal and protect the lips.

Consideration: Avoid contact with water in the colder months. If your lips are chapped try applying lip balm before brushing. Avoid irritating and drying products such as alcohol-containing mouth washes and toothpaste with SLS.

Beauty risking choice: Dry skin, foaming and detergent cleanser, soaps and bubble baths make dry skin worst. Mineral oil and petrolatum based body moisturizers, body oil, baby oil and lip balms can actually leave the skin and lips dryer.

Beauty supporting choice: Cleansing milks and non-stripping cleanser free of irritants like propylene glycol and detergents help your skin recover its own protection. Phospholipids and GLA containing moisturizers and supplements can rebuild the lipid barrier that prevents dry rough skin. Skin compatible oils such as jojoba, sweet almond oil, apricot kernel oil, primrose oil, avocado, azulene, squlane, emu oil, nee, olive oil contain fatty acids that work in concert with sebum rather than against it. Injuv is a new supplement that may increase the level of hyaluronic acid in the body. Hyaluronic acid acts as a sponge, holding moisture within the skin.

Consideration: A humidifier and increased water intake will help alleviate dryness. Decreased caffeine and alcohol intake can also help. Chlorinated water can contribute to dry skin. Installing a shower filter can make an unbelievable difference.

Beauty risking choices for Wrinkles: Long term use or abuse of Alpha-hydroxy acids can leave the skin irritated, dry, tight, thin, raw and dull. It also causes makeup to look blotchy.

Synthetic vitamin A derivatives, such as Retin-A or Renova prescribed for wrinkles and acne, can be extremely irritating and leave the skin red and flaky. They also leave the skin intensely vulnerable to the sun, water loss and offending substances that are more likely to be absorbed by the skin after treatment.

Beauty supporting choice Phospholipids can rebuild the hydro lipid barrier and prevent premature aging of the skin. Studies have proven that high potency
topically applied vitamin C serums can rebuild collagen. Marine Lipids and extracts Papaya enzymes and licorice-containing moisturizers soften and stimulate skin renewal without irritation.

*Consideration:* Smoking, too much sun, and sugar compromised skin barrier due to harsh products fat or vitamin deficiency in the diet all contribute to wrinkles.

*Wrinkle alert:* If you smoke, you are two to three times more likely to have moderate to severe wrinkles at age forty or older than a nonsmoker. GLA supplements help rebuild the skin’s barrier form moisture evaporation and help prevent premature skin aging due to water loss. Eating sugar and high glycemic foods induces glycation as well as collagen cross-linking that cause wrinkles. Alphalipoic acid inhibits the glycation process. Wrinkle fighting antioxidant that inhibit skin damage and aging are known as Vitamins C, E and A.

**Bibliography References:**

“Skin Care: How to Save Your Skin”, By Mark Lees, Joel Gerson, Thomson Learning

“The Skin Type Solution” by Dr. Leslie Baumann March 2010 (McGraw-Hill 2010)


Milady Standard Makeup by Michelle D Allaird, (2012)
GEORGIA TCSG HEALTH AND SAFETY—3 HRS.

COURSE TABLE OF CONTENTS

SECTION 1: SKIN, DISEASES, DISORDERS

- Anatomy and Histology of the Skin
  - Nerves of the Skin
  - Glands of the Skin
  - Nourishment of the Skin
  - Functions of the Skin
  - Terminology
- Diseases and Disorders
  - Skin Conditions/Descriptions
  - Nail Diseases/Disorders
  - Hair Disease/Disorders
  - Skin Conditions/Descriptions

SECTION 2: BLOODBORNE PATHOGENS

- What are Bloodborne Pathogens?
- Hepatitis B Virus (HBV)
- Human Immunodeficiency Virus (HIV)
• Signs and Symptoms
• Transmission
• Transmission Routes
• Risk Factors and Behaviors
• Personal Protective Equipment

SECTION 3: DECONTAMINATION & STERILIZATION

• Common Questions
• HIV
• Precautions

SECTION 4: DECONTAMINATION AND INFECTION CONTROL

• Professional Salon Environment
• Safety Precautions
• Material Safety Data Sheet (M.S.D.S.)
• Organizing an M.S.D.S. Notebook

SECTION 5: GEORGIA STATE BOARD OF COSMETOLOGY SANITARY REGULATIONS FOR SALONS AND SCHOOLS

SECTION 6: APPENDIX A GEORGIA STATE BOARD OF COSMETOLOGY GLOSSARY OF LEGAL DEFINITIONS
Georgia Department of Technical and Adult Education
Skin, Diseases, Disorders
Skin, Diseases,
# Table of Contents

**Skin, Diseases, Disorders** ................................................................. 1  

Introduction .......................................................................................... 1  

Objectives ............................................................................................ 2  

**Anatomy and Histology of the Skin** ............................................... 3  

Nerves of the Skin .................................................................................. 5  

Glands of the Skin ................................................................................ 5  

Nourishment of the Skin ....................................................................... 6  

Functions of the Skin ............................................................................ 6
Terminology ......................................................................................................................... 7

Diseases and Disorders ........................................................................................................... 11

Skin Conditions /Descriptions ................................................................................................. 12
Skin, Diseases, Disorders

Introduction

The flexible, waterproof, tough protective covering known as the skin is the largest organ in the body both by weight and surface area. Skin accounts for approximately 16% of the body’s weight.

Healthy skin has a fine texture that is slightly moist, soft, and flexible. Varying in thickness, the skin is thinnest on the eyelids and thickest on the palms and soles. A callous can be caused by continuous friction on any part of the skin.

The skin has appendages that include the hair, sweat and oil glands, and the nails. Composed of the substance known as keratin, this protein gives the skin its protective ability. The skin is slightly acidic in pH, which enables good immunity responses to intruding organisms. Normally the skin separates the internal environment from the external. However skin diseases and
infections can invade that barrier. For this reason, a thorough understanding of the histology of the skin and its diseases and disorders is needed for a better position to give clients professional advice.
Objectives

Upon completion of this course, trainees will be able to:

• Explain the structure and the composition of the skin.

• Identify the functions of the skin.

• Describe terms relating to skin disorders.

• Recognize which skin diseases/disorders may be dealt with in the salon and which should be referred to a physician.

• Identify online dermatology resources.
Anatomy and Histology of the Skin

The two major divisions of the skin are the dermis and the epidermis.

The outermost layer of the skin is the epidermis that is composed of sheets of dead cells that serve as the major waterproof barrier to the environment. The epidermis is the visible layer of skin. This layer contains numerous nerve endings, but no blood vessels. The human epidermis is renewed every 15-30 days.
The epidermis consists of many layers. The stratum corneum is the outer layer that is often called the horny layer. Cells are continually being shed and replaced. This layer of skin for the most part is dead – it is composed of cells that are almost pure protein.

The stratum lucidum consists of translucent cells through which light can penetrate.

The stratum granulosum, known as the granular layer, consists of cells that resemble granules. These cells are transforming into a harder form of protein.
The stratum mucosum is also known as the basal cell layer. Basal cells are continuously being reproduced. It is the deepest layer of the epidermis. This layer also contains melanocytes that produce the coloring matter known as melanin and determines skin color. Melanocytes also react to ultraviolet rays to darken the skin for added protection.

The middle layer, the dermis, provides a tough, flexible foundation for the epidermis. In the dermis, body temperature is regulated by sweat glands and blood vessels. It also contains arrector pili muscles, papillae, and hair follicles. Nerve endings send sensations of pain, itching, touch, and temperature to the brain. The skin is moisturized by oil glands that produce sebum.

The dermis consists of two layers. The papillary layer connects the dermis to the epidermis. Tactile corpuscles are nerve fiber endings that contain looped capillaries. Tactile corpuscles are responsible for the sense of touch. The papillary layer also contains some of the melanin.

The reticular layer is the deepest layer of the dermis. It contains fat cells, blood vessels, lymph vessels, oil glands, sweat glands, hair follicles, and arrector pili muscles. The reticular layer supplies the skin with oxygen and nutrients.

Subcutaneous tissue is the fatty layer found below the dermis. It is also called the adipose or the subcutis tissue. It varies in thickness according to age, sex, and general health of the individual. The subcutaneous tissue contains fats.
for energy, gives smoothness and contour to the body, and acts as a protective cushion for the outer skin. Arteries and lymphatics maintain circulation to the body.
Anatomy and Histology of the Skin

Nerves of the Skin

Sensory nerves are receptors and send messages to the brain causing reactions to heat, cold, touch, pressure, and pain.

Motor nerve fibers, attached to the hair follicles, are distributed to the arrector pili muscles which may cause goose flesh when you are frightened or cold.

The secretory nerve fibers regulate the excretion of perspiration from the sweat glands and regulate the flow of sebum to the surface of the skin.

Glands of the Skin

There are two types of duct glands contained in the skin that pull out minerals from the blood to create new substances. The suderiferous glands are the sweat glands and the sebaceous glands are the oil glands.
Sweat glands secrete perspiration. This secretion is odorless when excreted, but in a short period of time produces an offensive odor due to the bacteria on the skin’s surface feeding on the fats of its secretion. Perspiration is controlled by the nervous system. About 1-2 pints of liquid containing salts are excreted daily through the sweat pores in the skin. The sweat glands consist of a coiled base or fundus and a tube-like duct that ends at the skin surface forming the pores. Sweat glands are more numerous on the palms, soles, forehead, and armpits. Body temperature is regulated by the sweat glands that also aid in the elimination of waste.

Oil glands secrete sebum through little sacs whose ducts open into the hair follicles. These glands are found in all parts of the body with the exception of the palms and soles. The oily substance produced by the oil glands is called sebum. Sebum lubricates the skin and preserves the pliability of the hair. When the duct becomes clogged with hardened sebum, a blackhead is formed.
**Nourishment of the Skin**

Blood and lymph circulate through the skin providing nourishment essential for growth and repair of the skin, hair, and nails.

**Functions of the Skin**

The major functions of the skin are sensation, heat regulation, absorption, protection, excretion, and secretion. The functions of the skin can easily be remembered using the acronym: SHAPES

- **S** – sensation – response to heat, cold, pressure, and pain
- **H** – heat regulation – maintains body temperature of 98.6
- **A** – absorption – substances can enter the body through the skin and affect it to a minor degree
- **P** – protection – from bacterial invasion
- **E** – excretion – sweat glands excrete perspiration
S – ecretion - sebum is secreted by the sebaceous glands
Anatomy and Histology of the Skin

Terminology

Dermatology
study of the skin, its nature, functions, and treatment

Dermatologist
a medical skin specialist

Disease
a pathological condition of the body, organ, or mind making it incapable of carrying on normal functions

Disorder
abnormal condition usually not contagious

Immunity
freedom from or resistance to disease

Integumentary system
one of the 10 systems of the body; pertains to the skin, its appendages and functions

Pathology
study of disease
Etiology study of the causes of diseases

Trichology study of hair

Diagnosis recognition of a disease by its symptoms

Prognosis foretelling of the probable course of a disease

Objective symptom visible symptom

Subjective symptom symptom that can be felt by client, but not by observation

Acute rapid onset with severe symptoms of short duration
Chronic

long duration, usually mild, but often recurring

Infectious

invasion of body tissue by bacteria that cause disease

Contagious

communicable; by contact

Occupational

due to certain kinds of employment

Seasonal

influenced by weather

Parasitic

caused by vegetable or animal parasites

Pathogenic

produced by disease causing bacteria

Systemic

due to over or under functioning of the internal glands

Venereal disease

acquired by sexual contact

Epidemic

emergence of a disease that affects a large number of people simultaneously
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergy</td>
<td>reaction due to extreme sensitivity to normally harmless substances</td>
</tr>
<tr>
<td>Inflammation</td>
<td>skin disorder characterized by redness, pain, edema, and heat</td>
</tr>
<tr>
<td>Rhytidectomy</td>
<td>face lift</td>
</tr>
<tr>
<td>Blepharoplasty</td>
<td>eyelid surgery</td>
</tr>
<tr>
<td>Chemical peel</td>
<td>chemical solution applied to skin areas causing a mild, controlled burn of the skin</td>
</tr>
</tbody>
</table>
Anatomy and Histology of the Skin

Rhinoplasty  plastic surgery of the nose

Mentoplasty  chin surgery

Dermabrasion  sandblasting irregularities of the skin

Injectable fillers  tiny injections of collagen to soften wrinkles

Retin-A  prescription cream used in the treatment of acne

Skin, Diseases,
Notes:
Diseases and Disorders

In a salon, you will come in contact with diseases and disorders of the skin and its appendages: the hair and nails. Your license requires you to be responsible for the recognition of potentially infections diseases. Some disorders can be treated in cooperation with and under the supervision of a physician.
**Skin Conditions /Descriptions**

**WARNING:** NEVER TRY TO DIAGNOSE A DISEASE; ALWAYS REFER TO A PHYSICIAN.

**NOTE:** COLOR CHANGES, A CRACK ON THE SKIN, A TYPE OF THICKENING, OR ANY DISCOLORATION, RANGING FROM SHADES OF RED TO BROWN AND PURPLE TO ALMOST BLACK, MAY BE SIGNS OF DANGER AND SHOULD BE EXAMINED BY A DERMATOLOGIST.

**CAUTION:** DO NOT TREAT OR REMOVE HAIR FROM MOLES.

<table>
<thead>
<tr>
<th>Condition/Disease/Disorder</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigmented Lesions</td>
<td></td>
</tr>
<tr>
<td>Lentigo</td>
<td>small, yellow to brown spots</td>
</tr>
<tr>
<td>Condition</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Chloasma</td>
<td>moth patches, liver spots = increased deposits of pigment</td>
</tr>
<tr>
<td>Naevus</td>
<td>birthmark (portwine or strawberry) small-large malformation of skin due to</td>
</tr>
<tr>
<td></td>
<td>pigmentation or dilated capillaries</td>
</tr>
<tr>
<td>Leucoderma</td>
<td>abnormal light patches due to congenital defective pigmentations</td>
</tr>
<tr>
<td>Vitiligo</td>
<td>acquired condition of leucoderma-may affect skin or hair</td>
</tr>
</tbody>
</table>
Diseases and Disorders

Albinism  
congenital absence of melanin pigment

Stain  
abnormal, brown, skin patches having a circular
& irregular shape

Disorders of the Sebaceous Glands

Comedones  
blackheads, a worm-like mass of keratinized cells
& hardened sebum

Milia  
whiteheads, an accumulation of dead, keratinized cells and sebaceous matter trapped beneath
the skin
Acne Simplex  chronic inflammatory disorder usually related to
hormonal changes & overactive sebaceous glands

Acne Vulgaris  acne-pimples

Acne Rosacea  chronic inflammatory congestion of the cheeks & nose

Seborrhea/Seborrhea  overactive sebaceous glands-often the basis of acne

Oleosa = Oily Dandruff

Steatoma  wen or sebaceous cyst (subcutaneous tumor)
ranges in size from a pea to an orange

Asteatosis  dry, scaly skin characterized by absolute or partial
deficiency of sebum

Furuncle  boil-a subcutaneous abscess that fills with pus
Cysts

sac-like, elevated (usually round) area, contains liquid or semi-liquid substance when a follicle ruptures deep within the dermis & irritating oil & dead cells seep into the surrounding tissues- often cause acne pits

Pimples

follicle filled with oil, dead cells, & bacteria- inflammation causes white blood cells to rush to fight bacteria creating a pus

Disorders of the Sudoriferous Glands

Bromidrosis
osmidrosis=foul-smelling perspiration

Anhidrosis
lack of perspiration

Hyperhidrosis
excessive perspiration

Miliaria Rubra
prickly heat-eruptions of small red vesicles accompanied by burning & itching-caused by excessive heat
Hypertrophies

Keratoma      callus-superficial, round, thickening of the epidermis caused by friction (inward growth is called a corn)

Mole          a small, brown spot-believed to be inherited-may be flat or deeply seated-pale tan-brown or bluish black

Verruca       wart, a viral infection of the epidermis-benign
Diseases and Disorders

Skin Tag
bead-like fibrous tissue that stands away from the flat surface—often a dark color

Polyp
growth that extends from the surface or may also grow with the body

Inflammations

Eczema
dry or moist lesions accompanied by itching, burning, & various other unpleasant sensations—usually red-blistered, & oozing

Psoriasis
rarely on the face, lesions are round, dry patches covered with coarse, silvery scales—if irritated, bleeding points occur—may be spread to larger area—not contagious

Herpes Simplex/
fever blisters/cold sores—single group of vesicles

Herpes Zoster = Shingles on a red swollen base
Allergy Related Dermatitis

Dermatitis  allergy to ingredients in cosmetics, etc.
Venenata  protection is the prevention-gloves, etc.

Dermatitis  dermatitis that occurs after an injection of a substance
Medicamentosa

Urticaria  hives-inflammation caused by an allergy to specific drugs/foods
## Primary Skin Lesions

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macule</td>
<td>Small, discolored spot or patch on the skin's surface, neither raised nor sunken-ex: freckles</td>
</tr>
<tr>
<td>Papule</td>
<td>Small elevated pimple containing no fluid, but may have pus note: yellow or white fatty papules around the eyes indicate an elevated cholesterol level-refer to a physician (xanthelasma).</td>
</tr>
<tr>
<td>Wheal</td>
<td>Itchy, swollen lesion that lasts only a few hours-ex: mosquito bite</td>
</tr>
<tr>
<td>Tubercle</td>
<td>Solid lump larger than a papule-projects above the skin or lies with-sized from pea to hickory nut</td>
</tr>
<tr>
<td>Tumor</td>
<td>External swelling-varies in size, shape &amp; color</td>
</tr>
<tr>
<td>Vesicle</td>
<td>Blister with clear fluid-lie within or just beneath the epidermis-ex: poison ivy</td>
</tr>
</tbody>
</table>
Bulla  
blister containniig a watery fluid-larger than a vesicle

Pustule  
elevation with inflamed base, containing pus

Secondary Skin Lesions

Scale  
accumulation of epidermal flakes, dry or greasy-
ex: abnormal dandruff

Crust  
accumulation of serum & pus-mixed with
epidermal material-ex: scab
### Diseases and Disorders

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excoriation</strong></td>
<td>Abrasion produced by scratching or scraping - e.g. raw surface after injury</td>
</tr>
<tr>
<td><strong>Fissure</strong></td>
<td>Crack in the skin penetrating into the dermis</td>
</tr>
<tr>
<td><strong>Ulcer</strong></td>
<td>Open lesion on skin or mucous membrane, accompanied by pus &amp; loss of skin depth</td>
</tr>
</tbody>
</table>

#### Acne Scars

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice Pick Scar</td>
<td>Large, visible, open pores that look as if the skin has been jabbed with an ice pick-follicle always looks open - caused by deep pimple or cyst</td>
</tr>
<tr>
<td>Acne Pit Scar</td>
<td>Slightly sunken or depressed appearance - caused by pimples/systs that have destroyed the skin &amp; formed scar tissue</td>
</tr>
</tbody>
</table>
Acne Raised Scar
lumpy mass of raised tissue on the surface of the
skin-caused where cysts have clumped together

Contagious Disorders

Tinea
ringworm, due to fungi

Tinea Capitis - Ringworm of Scalp
(plant or vegetable parasites)

Tinea Sycosis - Barber's Itch
parasites)-small reddened

Tinea Favosa - Honeycomb Ringworm
patch of little blisters that

Tinea Unguium - Ringworm of Nails
spread outward and heal in

Athlete's Foot - Ringworm of Feet
the middle with scaling
CAUTION! NEVER ATTEMPT TO DIAGNOSE BUMPS, LESIONS, ULCERATIONS, OR DISCOLORATIONS AS SKIN CANCER, BUT YOU SHOULD BE ABLE TO RECOGNIZE THE CHARACTERISTICS OF SERIOUS SKIN DISORDERS AND SUGGEST THAT THE CLIENT SEE A PHYSICIAN OR DERMATOLOGIST.

Extremely Serious Disorders-Skin Cancers

Basal Cell Carcinoma least malignant-most common skin cancer-characterized by light or pearly nodules & visible blood vessels

Squamous Cell Carcinoma scaly, red papules-blood vessels are not visible-more serious than basal cell

Malignant Melanoma most serious-characterized by dark brown, black, or discolored patches on the skin

Tumor abnormal growth of swollen tissue

Nail Diseases/Disorders
Onychophagy       nail biting

Onychogryposis  overcurvature of the nail-clawlike

Pterygium        sticky overgrowth of the cuticle

Eggshell Nail    extremely thin nail

Leuconychia      white spots under the nail plate
Diseases and Disorders

Paronychia  
bacterial inflammation of tissue (perionychium)  
around the nail

Tinea Corporis  
ringworm of the hand

Tinea Pedia  
ringworm of the foot

Agnail  
hangnail

Onychia  
an inflammation somewhere in the nail

Onychocyanosis  
blue nail (usually caused by poor circulation)

Hematoma Nail  
bruised nail (usually caused by a hammer or slammed door)

Tinea Unguium  
onychomycosis-ringworm of the nail

Onychorrhexis  
split or brittle nails with a series of lengthwise ridges

Beau's Lines  
ridges/corrugations/furrows
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onychatrophia</td>
<td>atrophy or wasting away of the nail</td>
</tr>
<tr>
<td>Onychocryptosis</td>
<td>ingrown nail</td>
</tr>
<tr>
<td>Onychauxis</td>
<td>overgrowth of the nail plate</td>
</tr>
<tr>
<td>Onychosis</td>
<td>any nail disease</td>
</tr>
<tr>
<td>Onychophosis</td>
<td>accumulation of horny layers of epidermis under the nail</td>
</tr>
</tbody>
</table>
Hair Disease/Disorders

Pityriasis Capitis  dry dandruff
Simplex

Pityriasis Capitis  greasy dandruff
Steatoids  Seborrhea
Oleosa
= Oily Dandruff

Trichoptilosis  split hair ends

Trichorrehexis Nodosa  knotted

Tinea Favosa  honeycomb ringworm

Tinea Capitis  ringworm of the scalp

Tinea Sycosis  barber's itch
<table>
<thead>
<tr>
<th>Alopecia Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Androgenetic Alopecia</td>
<td>common hereditary hair loss</td>
</tr>
<tr>
<td>Alopecia Adnata</td>
<td>loss of hair shortly after birth</td>
</tr>
<tr>
<td>Alopecia Areata</td>
<td>hair loss in patches</td>
</tr>
<tr>
<td>Alopecia Follicularis</td>
<td>hair loss caused by inflammation of hair follicles</td>
</tr>
<tr>
<td>Alopecia Prematura</td>
<td>hair loss early in life</td>
</tr>
<tr>
<td>Alopecia Senilis</td>
<td>hair loss from old age</td>
</tr>
<tr>
<td>Alopecia Totalis</td>
<td>hair loss from entire scalp</td>
</tr>
<tr>
<td>Alopecia Universalis</td>
<td>hair loss from entire body</td>
</tr>
</tbody>
</table>
## Diseases and Disorders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traction/Traumatic Alopecia</td>
<td>patchy hair loss sometimes due to repetitive traction on the hair by pulling or twisting</td>
</tr>
<tr>
<td>Postpartum Alopecia</td>
<td>temporary hair loss at the conclusion of pregnancy</td>
</tr>
<tr>
<td>Telogen Effluven</td>
<td>hair loss during the telogen phase of the hair growth cycle</td>
</tr>
<tr>
<td>Canities</td>
<td>gray hair</td>
</tr>
<tr>
<td>Pediculosis Capitis</td>
<td>headlice</td>
</tr>
<tr>
<td>Monilithrix</td>
<td>beaded hair</td>
</tr>
<tr>
<td>Fragilitis Crinium</td>
<td>brittle hair</td>
</tr>
<tr>
<td>Hirsuites/Hypertrichosis</td>
<td>superfluous hair, excessive</td>
</tr>
</tbody>
</table>
Scabies  contagious disease caused by the itch mite

Impetigo/Infantigo  highly contagious bacterial infection, usually staphylococcal

Discoid Lupus  chronic autoimmune disorder, causes red

Erythematous (DLE)  often scarring plaques, hair loss, & internal effects

Keloids  forms when excess collagen forms at the site of a healing scar-overhealing

Asteatosis  excessive dry skin
Websites: Online Dermatology Resources

http://tray.dermatology.uiowa.edu/DermImag.htm

http://www.medic.mie-u.ac.jp/derma/world/worldd1.html

http://www.skin-information.com/

http://www.skin-disease.com/

http://www.skin-cancers.net/

http://www.age-spot.com/

http://www.i-wrinkle.com/

http://www.i-wrinkle.com/
http://www.asds-net.org  American Society of Dermatologic Surgery

http://www.aad.org  American Academy of Dermatology
Skin Conditions / Descriptions

WARNING: NEVER TRY TO DIAGNOSE A DISEASE; ALWAYS REFER TO A PHYSICIAN.

NOTE: COLOR CHANGES, A CRACK ON THE SKIN, A TYPE OF THICKENING, OR ANY DISCOLORATION, RANGING FROM SHADES OF RED TO BROWN AND PURPLE TO ALMOST BLACK, MAY BE SIGNS OF DANGER AND SHOULD BE EXAMINED BY A DERMATOLOGIST.

CAUTION: DO NOT TREAT OR REMOVE HAIR FROM MOLES.

<table>
<thead>
<tr>
<th>Condition/ Disease/Disorder</th>
<th>Description</th>
</tr>
</thead>
</table>

Pigmented Lesions

Lentigo

small, yellow to brown spots
Chloasma  
moth patches, liver spots = increased deposits of pigment

Naevus  
birthmark (portwine or strawberry) small-large 
malformation of skin due to pigmentation or 
dilated capillaries

Leucoderma  
abnormal light patches due to congenital 
defective pigmentation

Vitiligo  
acquired condition of leucoderma—may affect skin or hair
Albinism                 congenital absence of melanin pigment
Stain abnormal, brown, skin patches having a circular & irregular shape

Disorders of the Sebaceous Glands

Comedones blackheads, a worm-like mass of keratinized cells & hardened sebum

Milia whiteheads, an accumulation of dead, keratinized cells and sebaceous matter trapped beneath the skin
Acne Simplex  chronic inflammatory disorder usually related to hormonal changes & overactive sebaceous glands
Acne Vulgaris  acne-pimples

Acne Rosacea  chronic inflammatory congestion of the cheeks & nose

Seborrhea/Seborrhea  overactive sebaceous glands-often the basis of acne

Oleosa = Oily Dandruff

Steatoma  wen or sebaceous cyst (subcutaneous tumor)

ranges in size from a pea to an orange
Asteatosis  dry, scaly skin characterized by absolute or partial deficiency of sebum
Furuncle

boil-a subcutaneous abscess that fills with pus

Cysts

sac-like, elevated (usually round) area, contains liquid or semi-liquid substance-when a follicle ruptures deep within the dermis & irritating oil & dead cells seep into the surrounding tissues often cause acne pits

Pimples

follicle filled with oil, dead cells, & bacteria inflammation causes white blood cells to rush to fight bacteria creating a pus
## Disorders of the Sudoriferous Glands

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bromidrosis</td>
<td>osmidrosis=foul-smelling perspiration</td>
</tr>
<tr>
<td>Anhidrosis</td>
<td>lack of perspiration</td>
</tr>
<tr>
<td>Hyperhidrosis</td>
<td>excessive perspiration</td>
</tr>
<tr>
<td>Miliaria Rubra</td>
<td>prickly heat-eruptions of small red vesicles accompanied by burning &amp; itching-caused by excessive heat</td>
</tr>
</tbody>
</table>

## Hypertrophiess

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keratoma</td>
<td>callus-superficial, round, thickening of the epidermis caused by friction (inward growth is called a corn)</td>
</tr>
<tr>
<td>Mole</td>
<td>a small, brown spot-believed to be inherited may be flat or deeply seated-pale tan-brown or bluish black</td>
</tr>
<tr>
<td>Verruca</td>
<td>wart, a viral infection of the epidermis-benign</td>
</tr>
</tbody>
</table>
All Rights Reserved. Materials may not be copied, edited, reproduced, distributed, imitated in any way without written permission from C.O. E. Continuing Education. The course provided was prepared by C.O. E. Continuing Education Curriculum Coordinator. It is not meant to provide medical, legal or professional services advice. If necessary, it is recommended that you consult a medical, legal or professional services expert licensed in your state.

Page 103 of 206
Skin Tag  
bead-like fibrous tissue that stands away from the flat surface-often a dark color

Polyp  
growth that extends from the surface or may also grow with the body

Inflammations

Eczema  
dry or moist lesions accompanied by itching, burning, & various other unpleasant sensationsusually red-blistered, & oozing

Psoriasis  
rarely on the face, lesions are round, dry patches covered with coarse, silvery scales-if irritated, bleeding points occur-may be spread to larger area-not contagious
All Rights Reserved. Materials may not be copied, edited, reproduced, distributed, imitated in any way without written permission from C.O.E. Continuing Education. The course provided was prepared by C.O.E. Continuing Education Curriculum Coordinator. It is not meant to provide medical, legal or professional services advice. If necessary, it is recommended that you consult a medical, legal or professional services expert licensed in your state.

Page 105 of 206
Herpes Simplex/ fever blisters/cold sores-single group of vesicles
Herpes Zoster = Shingles on a red swollen base

Allergy Related Dermatitis

Dermatitis allergy to ingredients in cosmetics, etc.-
Venenata protection is the prevention-gloves, etc.

Dermatitis dermatitis that occurs after an injection of a substance
Medicamentosa
Urticaria  
hives-inflammation caused by an allergy to 
specific drugs/foods
Primary Skin Lesions

Macule  small, discolored spot or patch on the skin's surface, neither raised nor sunken-ex:
freckles

Papule  small elevated pimple containing no fluid, but may have pus note: yellow or white fatty papules around the eyes indicate an elevated cholesterol level-refer to a physician (xanthelasma).

Wheal  itchy, swollen lesion that lasts only a few hours:
mosquito bite
Tubercle  solid lump larger than a papule—projects above the skin or lies with-sized from pea to hickory nut

Tumor  external swelling—varies in size, shape & color

Vesicle  blister with clear fluid—lie within or just beneath the epidermis—ex: poison ivy

Bulla  blister containing a watery fluid—larger than a vesicle

Pustule  elevation with inflamed base, containing pus
Secondary Skin Lesions

Scale  accumulation of epidermal flakes, dry or greasy:
       abnormal dandruff

Crust  accumulation of serum & pus-mixed with
       epidermal material-ex: scab

Excoriation  abrasion produced by scratching or scraping-ex:
             raw surface after injury

Fissure  crack in the skin penetrating into the dermis

Ulcer  open lesion on skin or mucous membrane,
       accompanied by pus & loss of skin depth

Acne Scars
Ice Pick Scar  

large, visible, open pores that look as if the skin has been jabbed with an ice pick-follicle always looks open-caused by deep pimple or cyst
Acne Pit Scar  slightly sunken or depressed appearance-caused by pimples/systs that have destroyed the skin & formed scar tissue

Acne Raised Scar  lumpy mass of raised tissue on the surface of the skin-caused where cysts have clumped together
Contagious Disorders

Tinea
Tinea Capitis - Ringworm of Scalp
Tinea Sycosis - Barber's Itch
Tinea Favosa - Honeycomb Ringworm
Tinea Unguium - Ringworm of Nails
Athlete's Foot - Ringworm of Feet

ringworm, due to fungi
(plant or vegetable parasites) - small reddened patch of little blisters that spread outward and heal in the middle with scaling
CAUTION! NEVER ATTEMPT TO DIAGNOSE BUMPS, LESIONS, ULCERATIONS, OR DISCOLORATIONS AS SKIN CANCER, BUT YOU SHOULD BE ABLE TO RECOGNIZE THE CHARACTERISTICS OF SERIOUS SKIN DISORDERS AND SUGGEST THAT THE CLIENT SEE A PHYSICIAN OR DERMATOLOGIST.

Extremely Serious Disorders-Skin Cancers

Basal Cell Carcinoma  least malignant-most common skin cancer characterized by light or pearly nodules & visible blood vessels

Squamous Cell Carcinoma  scaly, red papules-blood vessels are not visible more serious than basal cell
Continuing Education. The course provided was prepared by C.O.E. Continuing Education Curriculum Coordinator. It is not meant to provide medical, legal or professional services advice. If necessary, it is recommended that you consult a medical, legal or professional services expert licensed in your state.
Malignant Melanoma  
most serious-characterized by dark brown, black, or discolored patches on the skin

Tumor  
abnormal growth of swollen tissue

Nail Diseases/Disorders

Onychophagy  
nail biting

Onychogryposis  
overcurvature of the nail-clawlike
Pterygium  sticky overgrowth of the cuticle

Eggshell Nail  extremely thin nail
Leuconychia  white spots under the nail plate

Paronychia  bacterial inflammation of tissue (perionychium)
            around the nail

Tinea Corporis  ringworm of the hand

Tinea Pedia  ringworm of the foot
Agnail (hangnail)

Onychia (an inflammation somewhere in the nail)

Onychocyanosis (blue nail, usually caused by poor circulation)

Hematoma Nail (bruised nail, usually caused by a hammer or slammed door)
Tinea Unguium

onychomycosis-ringworm of the nail
Onychorrhexis  split or brittle nails with a series of lengthwise ridges

Beau's Lines  ridges/corrugations/furrows

Onychatrophia  atrophy or wasting away of the nail

Onychocryptosis  ingrown nail
The course provided was prepared by C.O.E. Continuing Education Curriculum Coordinator. It is not meant to provide medical, legal or professional services advice. If necessary, it is recommended that you consult a medical, legal or professional services expert licensed in your state.
### Hair Disease/Disorders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onychauxis</td>
<td>overgrowth of the nail plate</td>
</tr>
<tr>
<td>Onychosis</td>
<td>any nail disease</td>
</tr>
<tr>
<td>Onychophosis</td>
<td>accumulation of horny layers of epidermis under the nail</td>
</tr>
</tbody>
</table>

#### Pityriasis Capitis

- **Simplex**
- Greasy dandruff
- Steatoids Seborrhea Oleosa
  - Oily Dandruff

- **Pityriasis Capitis**
  - dry dandruff

- **Trichoptilosis**
  - split hair ends

- **Trichorrehexis Nodosa**
  - knotted
<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinea Favosa</td>
<td>honeycomb ringworm</td>
</tr>
<tr>
<td>Tinea Capitis</td>
<td>ringworm of the scalp</td>
</tr>
</tbody>
</table>
Tinea Sycosis  barber's itch

Androgenetic Alopecia  common hereditary hair loss
Alopecia Adnata  loss of hair shortly after birth
Alopecia Areata  hair loss in patches

Alopecia Follicularis  hair loss caused by inflammation of hair follicles

Alopecia Prematura  hair loss early in life
Alopecia Senilis  hair loss from old age
Alopecia Totalis  hair loss from entire scalp
Alopecia Universalis  hair loss from entire body
<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traction/Traumatic</td>
<td>patchy hair loss sometimes due to repetitive</td>
</tr>
<tr>
<td>Alopecia</td>
<td>traction on the hair by pulling or twisting</td>
</tr>
<tr>
<td>Postpartum</td>
<td>temporary hair loss at the conclusion</td>
</tr>
<tr>
<td>Alopecia</td>
<td>of pregnancy</td>
</tr>
</tbody>
</table>
Telogen Effluvium: hair loss during the telogen phase of the hair growth cycle.

Canities: gray hair

Pediculosis Capitis: headlice

Monilithrix: beaded hair

Fragilitis Crinum: brittle hair

Hirsuites/Hypertrichosis: superfluous hair, excessive

Scabies: contagious disease caused by the itch mite

Impetigo/Infantigo: highly contagious bacterial infection, usually staphylococcal
Discoid Lupus  chronic autoimmune disorder, causes red
Erythematous (DLE)  often scarring plaques, hair loss, &
internal effects

Keloids  forms when excess collagen forms at the site of a
healing scar-overhealing

Asteatosis  excessive dry skin
Georgia Department of Technical and Adult Education

Bloodborne Pathogens
be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from Georgia Department of Technical and Adult Education.

Published December 2002
(C121002)
# Table of Contents

**Introduction** ................................................................. 1

Objectives .................................................................................. 1

**What Are Bloodborne Pathogens?** ................................... 3

Hepatitis B Virus (HBV) ............................................................... 4

Human Immunodeficiency Virus (HIV) .................................... 4

**Signs and Symptoms** .......................................................... 5

Signs and Symptoms of (HVB) ................................................ 5

Signs and Symptoms of (HIV) ................................................ 5

**Transmission** ....................................................................... 7

Transmission Mediums .............................................................. 7

Transmission Routes ................................................................. 8

**Risk Factors and Behaviors** ................................................ 9

**Personal Protective Equipment** ........................................... 11
Decontamination & Sterilization ........................................ 15

Common Questions ..............................................................

17

Discuss with the class: .......................................................... 17

HBV .................................................................................. 17

HIV .................................................................................. 18

Precautions ........................................................................

19

Summary ...........................................................................

23
Introduction

A bloodborne pathogen is a specific cause of disease, such as a virus or bacteria. “Bloodborne” means carried by or in blood and certain other body fluids. AIDS, hepatitis B and C, malaria, and syphilis are examples of diseases that are caused by bloodborne pathogens.

Objectives

Upon completion of this course, you will be able to:

- Discuss bloodborne pathogens,

- Identify two bloodborne pathogens of concern in the workplace,

- Explain how bloodborne pathogens are transmitted,

- List four high risk factors, and

- Discuss the precautions to be used in the workplace.
Notes:
What Are Bloodborne Pathogens?

Two types of pathogens of concern in the workplace are:

1. Hepatitis B Virus (HBV)
2. Human Immunodeficiency Virus (HIV)

Hepatitis B is much more contagious than HIV.
Hepatitis B Virus (HBV)

The HB Virus infects the liver: it's more common than HIV and is a greater risk on the job. Many HBV infected people have no problems or symptoms. Some, however, do develop serious or fatal problems such as cirrhosis, liver cancer, or chronic liver disease. There is a vaccine for HBV which is dispensed in three doses. Any employee at risk should take the vaccine.

Human Immunodeficiency Virus (HIV)

HIV causes AIDS, it attacks the body's immune system, reducing its ability to fight disease.
To protect yourself against HIV and HBV, avoid direct exposure to infectious blood or body fluids - the prime transmitters of HBV and HIV.
Signs and Symptoms

Signs and Symptoms of (HVB)

Discuss and list different signs and symptoms of HVB.
Signs and Symptoms of (HIV)

Discuss and list different signs and symptoms of HIV.

- 
- 
- 
- 
- 
- 
- 
- 
-
Transmission

Transmission Mediums

Body Fluids that can transmit infection are:

- Blood
- Semen
- Vaginal secretions
- Cerebrospinal fluid (brain and spinal fluid)
- Synovial fluid (lubricating fluid of joints and tendons)
- Pleural fluid (fluid around the lungs)
- Pericardial fluid (fluid around the heart)
- Peritoneal fluid (fluid in the abdomen)
- Amniotic fluid (fluid that surrounds an embryo)

- Saliva (in dental procedures)
Transmission Routes

HIV and hepatitis are transmitted only in the following ways:

1.

2.

3.

You can’t catch HIV through casual contact, such as touching, hugging, being coughed on or sneezed on or working around someone who has AIDS. Family members and health care workers who are constantly around patients with AIDS do not catch AIDS when they use proper precautions.
Risk Factors and Behaviors

In light of what we know about the way the HBV and HIV virus are transmitted, risk of exposure to either virus is increased for people who:

- Have unprotected sex or multiple partners.
- Have unprotected sex with an IV drug user.
- Have shared needles while using drugs.
- Have occupational exposure to the blood or body fluids of others.
- Between 1978 and the spring of 1985, received blood or blood products in transfusion.
- Between 1978 and the spring of 1985, received an organ transplant.
- Received artificial insemination from an untested donor.
- Between 1978 and the spring of 1985, received treatment for a clotting disorder.

- Have been exposed to blood or body fluids of a person known to have AIDS or be HIV-positive.

- Are immigrants from high risk areas (southeast Asia, Africa, Southern and Central Europe):
  - Have tattoos.
  - Are family of infected persons.
Personal Protective Equipment

"Universal Precautions" is the name used to describe a prevention strategy in which all blood and potentially infectious materials are treated as if they are, in fact, infectious, regardless of the perceived status of the source individual. In other words, whether or not you think the blood/body fluid is infected with bloodborne pathogens, you treat it as if it is. This approach is used in all situations where exposure to blood or potentially infectious materials is possible. This also means that certain engineering and work practice controls shall always be utilized in situations where exposure may occur.

Probably the first thing to do in any situation where you may be exposed to bloodborne pathogens is to ensure you are wearing the appropriate personal protective equipment (PPE). For example, you may have noticed that emergency medical personnel, doctors, nurses, dentists, dental assistants, and other health care professionals always wear latex or protective gloves. This is a simple precaution they take in order to prevent blood or potentially infectious body fluids from coming in contact with their skin. To protect yourself, it is essential to have a barrier between you and the potentially infectious material.

Discuss and List 4 Rules to Follow with PPE:

1. 
2.

3.

4.

If you work in an area with routine exposure to blood or potentially infectious materials, the necessary PPE should be readily accessible. Contaminated gloves, clothing, PPE, or other materials should be placed in appropriately labeled bags or containers until it is disposed of, decontaminated, or laundered. It is important to find out where these bags or containers are located in your area before beginning work.
This approach is used in all situations where exposure to blood or potentially infectious materials is possible. This also means that certain engineering and work practice controls shall always be utilized in situations where exposure may occur.

**Gloves**

Gloves should be made of latex, nitril, rubber, or other water impervious materials. If glove material is thin or flimsy, double gloving can provide an additional layer of protection. Also, if you know you have cuts or sores on your hands, you should cover these with a bandage or similar protection as an additional precaution before donning your gloves. You should always inspect your gloves for tears or punctures before putting them on. If a glove is damaged, don’t use it! When taking contaminated gloves off, do so
carefully. Make sure you don't touch the outside of the gloves with any bare skin, and

be sure to dispose of them in a proper container so that no one else will come contact with them either.
Always Check your gloves for damage before using them!!

Goggles

Anytime there is a risk of splashing or vaporization of contaminated fluids, goggles and/or other eye protection should be used to protect your eyes. Again, bloodborne pathogens can be transmitted through the thin membranes of the eyes so it is important to protect them. Splashing could occur while cleaning up a spill, during laboratory procedures, or while providing first aid or medical assistance.
**Face Shields**

Face shields may be worn in addition to goggles to provide additional face protection. A face shield will protect against splashes to the nose and mouth.

**Aprons**

Aprons may be worn to protect your clothing and to keep blood or other contaminated fluids from soaking through to your skin. Normal clothing that becomes contaminated with blood should be removed as soon as possible because fluids can seep through the cloth to come into contact with skin. Contaminated laundry should be handled as little as possible, and it should be placed in an appropriately labeled bag or container until it is decontaminated, disposed of, or laundered.
Decontamination & Sterilization

All surfaces, tools, equipment and other objects that come in contact with blood or potentially infectious materials must be decontaminated and sterilized as soon as possible. **Equipment and tools must be cleaned and decontaminated before servicing or being put back into use.**

Decontamination should be accomplished by using:

- A solution of 5.25% sodium hypochlorite (household bleach/Clorox) diluted between 1:10 and 1:100 with water. The standard recommendation is to use at least a quarter cup of bleach per one gallon of water.

- Lysol or some other EPA-registered tuberculocidal disinfectant.

Check the label of all disinfectants to make sure they meet this requirement.

If you are cleaning up a spill of blood, you can carefully cover the spill with paper towels or rags, and leave it for at least 10 minutes. This will help ensure that any bloodborne pathogens are killed before you actually begin cleaning or wiping the material up. By covering the spill with paper towels or rags, you decrease the chances of causing a splash when you pour the bleach on it.
If you are decontaminating equipment or other objects, you should leave the disinfectant in place for at least 10 minutes before continuing the cleaning process.

Of course, any materials you use to clean up a spill of blood or potentially infectious materials must be decontaminated immediately, as well. This would include mops, sponges, reusable gloves, buckets, pails, etc.
Common Questions

Discuss with the class:

HBV

What symptoms do I have if I am suffering from hepatitis B infection?

Many people with HBV do not have any symptoms and feel perfectly well. Occasionally, the hepatitis B infection may become active and make the patient feel ill with nausea, have a loss of appetite, and become jaundiced.

What kind of outlook can I expect if I have a hepatitis B infection?

Many patients with the hepatitis B infection can expect to lead a full and normal life. It is most important to regard yourself as a normal individual who happens to be infected with hepatitis B. However, it is important to take precautions not to spread the disease and to get medical checkups regularly.

Can I get hepatitis from the vaccine?
No. The hepatitis vaccine is a safe and highly purified vaccine. It does not contain any blood products or living or dead viruses.

What should be done if the second or third vaccine dose is delayed?

If the doses are delayed for less than one year, the remaining doses can be resumed to complete the vaccination without the need to restart the vaccination series. If the lapsed doses are more than one year apart, extra doses or restarting of the series may be required for high risk individuals.
HIV

What will the AIDS test tell me?

A positive result indicates the presence of antibodies to HIV, which has been found in people with AIDS.

Does a negative test mean that I am not infected?

Unfortunately, no. Although the test is reliable, there is a “window”-some say it’s six to twelve weeks, some say longer-when you could be developing the antibody, but the test will still be negative. That’s why you need to be retested at six to twelve weeks and again in 6 months.

If you test negative, but still carry HIV, it is still possible to transmit the virus.

Counseling will be provided when you receive your test results whether they are negative or positive.

What happens if I test HIV positive?

Currently, there is no known therapy to reverse antibody status. If an employee tests HIV positive, we recommend ongoing medical monitoring and possible anti-retroviral (contains RNA for protein productions) drugs.

What is the prognosis?
Research indicates that HIV - positive individuals will eventually develop AIDS. Currently, there is no treatment for AIDS and it is generally believed to be eventually fatal. As discussed previously, there is a vaccine for hepatitis B which is available to all employees at risk.

What HIV symptoms should I watch for?

Almost half of the people who contract HIV experience a flu-like illness six to twelve weeks after exposure. Employees who experience an exposure incident should report any illness that feels like the flu or mononucleosis, especially if it is accompanied by fever, rash, or swollen glands.

Will my employer know the results of my test?

No. The health care professional will give the results of your tests to you only. All records, including test results, relating to an exposure incident are Strictly Confidential.
Precautions

The following precautions should be taken by anyone who has had an exposure incident so that others are not exposed.

- Inform sexual or needle-sharing partners so they can be tested for the virus.

- Inform physicians and other health care givers so they can protect themselves.

- Don’t give any blood, tissue, organs, or semen.

- Remove the organ donor designation from your driver’s license.

- Hold off on getting pregnant until your health care provider says it is okay.

- If you are pregnant, get counseling.

- Don’t breast-feed.

- Be careful not to expose others to your blood or bodily fluids.
- Don’t share personal items such as toothbrushes, razors, etc.

- Use a bleach solution of 1:10, 70% isopropyl alcohol or other EPA-approved germicide to clean up any spills of blood.

- Refrain from sexual activity, or at least take the following precautions:

  - Limit the number of partners

  - Use latex condoms from start to finish, even if your partner is HIV-positive.
Job situations which may result in exposure include:

- Job duties that bring you into contact with needles or other sharp objects such as glass that might be contaminated with infected blood.

- Providing emergency first-aid assistance to co-workers.

Discuss with the class other circumstances in which exposure is possible:

It is important that you use universal precautions to prevent becoming infected by contaminated blood. Universal precautions means that all blood and body fluids are considered a potentially infectious.
When first aid measures are needed, make sure that you adhere to the following:

1. **Mouth-to-Mouth Breathing** – The safest course of action is to use a breathing mask whenever you are called on to give mouth-to-mouth resuscitation.

2. **Controlling Bleeding** – To help the victim without infecting yourself (or the victim), wear rubber gloves.

While chance of infection on the job are small, why take unnecessary risks with your life? Following the necessary safety precautions is the best way to minimize risks.
Summary

Bloodborne pathogens are a very real risk in the workplace. However, protective measures are in place for employees at risk. To avoid infection of bloodborne pathogens, it is very important to follow all precautions.

Knowing how infection occurs is the first step in preventing the spread of disease. Certain factors and behaviors put employees at risk. Avoid these behaviors as much as you can.

Education combined with practicing safe behaviors can save your life.
Decontamination and Infection Control
be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from Georgia Department of Technical and Adult Education.

Published December 2002
(C121002)
# Table of Contents

**Decontamination and Infection Control** ........................................... 1

- Introduction ........................................................................................................ 1
- Objectives ............................................................................................................. 2
- Professional Salon Environment ........................................................................ 3
- Safety Precautions ............................................................................................. 6

**Material Safety Data Sheet (M.S.D.S.)** .................................................. 7

- Organizing an M.S.D.S. Notebook ..................................................................... 10
Decontamination and Infection Control

Introduction

Infection and disease control is one of the most important aspects of being a professional salon operator or owner. Federal and state laws govern what must be done by operators and owners to ensure the safety of the public and that no germs are allowed to spread uncontrolled.

This unit provides you with the necessary elements to help control dangerous disease-causing germs. By following some very important basic procedures and by providing a clean salon it will be easy to provide your clients with the very best professional care without the fear of your clients becoming infected by a disease agent. It is important to understand that the removal of all disease-causing germs in a salon will be almost impossible, but the control of dangerous levels is the key to providing a safe salon.

Objectives
Upon completion of this course, you will be able to discuss the importance of:

- Decontamination
- Sanitation, disinfecting, and sterilization
- Use of disinfectant products
- Using disinfectants in the salon
- Salon professionalism.
Decontamination and Infection Control

Professional Salon Environment

Let’s take a close look and see what can be done to identify and control the professional salon environment. Things like tables, chairs, walls, and floors are very likely contaminated with a number of germs that may be very serious disease-causing germs. There may be millions of germs present that do not affect humans when contact is made. However, one case of an infected client can send your career and the reputation of your salon downward. By understanding contamination and knowing the proper techniques of decontamination, shop operators and owners can avoid ugly lawsuits and having the business they worked hard to build destroyed.

It is important to understand the more people that enter the salon environment, the greater the chance that new germs will be introduced and reintroduced as a result of the human contact factor. Control over where and what people do before they get to the salon is impossible to monitor, so contamination concerns must be continuous and ongoing.

Your responsibility as a professional to eliminate and control contamination is vital.

**Decontamination** of surfaces and tools used in the salon will allow for a safe and professional experience for the client. Contamination can occur in many...
forms and on the surface of equipment, implements, and furnishings may not show signs of contamination. Soiled towels, combs, brushes, and even clippers can and more than likely are sources for contamination if not disinfected or sterilized properly.

Sanitation and disinfection are required in the salon to provide a safe environment for clients, co-workers, employees and oneself. Sanitation is the removal of large amounts of living organisms from a surface. By sanitizing tools and other items used in the salon, bacteria and germs are eliminated or lowered to safer levels. Popular forms of sanitation are described below.
• The Heat steam of an autoclave has been used for many years and has proven to be one of the most dependable forms of sanitizing.

• Hospital-grade disinfectants are used to sanitize surfaces and tools as well.

• Quaternary Ammonium Compounds (quats) are available in liquid or tablet form. Implements should be immersed for 20 minutes or longer to ensure elimination of germs and bacteria.

• Glutaraldehyde is a germicidal used to disinfect and sterilize implements that cannot be heat sterilized.

• Ethyl Alcohol is used as a disinfectant. In order to remain effective, the strength of ethyl alcohol should be no less than 70%.

• Bleach (sodium hypochlorite), commonly known as household bleach, has for many years been utilized as a disinfectant at killing germs. As a result of more advanced techniques now being used, bleach is not the preferred method for decontamination. It is, however, very effective on floors, sinks, and general cleaning around the salon.

• Ultrasonic Cleaners are used in some salons but must be used with a disinfectant. The advantage of this device is that it may
reach tiny crevices that may otherwise be omitted in the cleaning and sanitizing process.

- Disinfection is also a part of operating a safe salon.

Disinfection is used when objects can be damaged due to exposure to extreme heat. Disinfection kills microorganisms with the exception of spores. It is important to understand that disinfectants should never be used on clients.
Decontamination and Infection Control

Note: It is important that directions are followed when using disinfectants. When directions are not followed money can be wasted. Furthermore, by not following directions properly, the product that is to be disinfected may not be if a solution is too weak. It is also important to understand that the disinfectant solution always remain at an effective level. In saying this, always remember to wash all products to be disinfected with soap and water. If you attempt to disinfect soiled implements, the solution may become too weak to do an effective job.

Notes:
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
Decontamination and Infection Control

5


**Safety Precautions**

Remember that disinfectants are industrial strength cleaners that are powerful and can be harmful if used improperly. Never use a disinfectant to clean your hands. This is an unsafe practice and can cause skin disease. You should wear protective equipment such as gloves and safety goggles while mixing chemicals for disinfection control. Use soaking baskets and tongs to insert and remove equipment in disinfectant solutions. Always remember to clearly mark containers that are used for storing disinfectants.

Look at the following definition.

**Sanitation** is the process of reducing the levels of pathogens found on a surface. While the surface may be clean, there are still many microorganisms residing on the surface.
Material Safety Data Sheet (M.S.D.S.)

Every chemical used in the United States must have an M.S.D.S. report developed by the manufacturer that developed the chemical. The purpose of the M.S.D.S. is to report the product name, active ingredients, directions for use, and safety instructions in case of accidents involving the chemical. The following is a break down of the sections on an M.S.D.S. report.

Product information of the chemical is listed at the very start of the report. The Manufacturer’s/Distributor emergency contact number(s) along with product identity, product code number, product use, and hazard classification.

Section 1 is a listing of the hazardous ingredients found in the product along with specific ingredient codes.

Section 2 is the characteristics both physical and chemical of the product in general. These characteristics include but are not limited to physical state (liquid or solid), odor appearances like smell and color of product.
Section 3 is fire and explosion hazard information on the product. Usually the fire/flame point will be listed and the level of danger to which this product will burn. Also, the extinguishing procedures are listed here in case there is a need to control a chemical fire as a result of this product.

Section 4 is the reactivity data section. This section lists chemical(s), which this product must not come in contact with to ensure the product remains stable.

Section 5 lists the health hazards and if special precautions need to be followed. This section discusses or lists exposure concerns and first aid procedures to follow in case of an accident.

Section 6 lists control and protective measures that will need to be followed to ensure safe use of the product or chemical.
**Section 7** are control measures and precautions on the product. Safe handling is necessary to ensure that accidents are minimized. Waste disposal is also listed in this area.

**Section 8** is the regulatory information for the product. A listing of active ingredients that must be reported and a record maintained on file (M.S.D.S).
Below is an example of an M.S.D.S.

The Clorox Company
7200 Johnson Drive
Pleasanton, California 94588
Tel. (510) 847-8100

Material Safety Data Sheet

Material Safety Data Sheet (M.S.D.S.)

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Other Designations</th>
<th>Manufacturer</th>
<th>Emergency Telephone No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOROX GERMICIDAL BLEACH</td>
<td>CLEAR, LIGHT YELLOW LIQUID WITH CHLORINE ODOR</td>
<td>Sodium hypochlorite solution</td>
<td>The Clorox Company</td>
<td>Rocky Mountain Poison Center</td>
</tr>
</tbody>
</table>

II Health Hazard Data

Causes substantial but temporary eye injury: May Irritate skin. May cause nausea and vomiting if ingested. Exposure to vapor or mist may irritate nose, throat and lungs. The following medical conditions may be aggravated by exposure to high concentrations of vapor or mist; heart conditions or chronic respiratory problems such as asthma, chronic bronchitis or, obstructive lung disease. Under normal consumer use conditions the likelihood of any adverse health effects are low.

FIRST AID:
EYE CONTACT: Immediately flush eyes with plenty of water. If irritation persists, see a doctor.
SKIN CONTACT: Remove contaminated clothing. Wash area with water.
INGESTION: Drink a glassful of water and call a physician.
INHALATION: If irritation.

III Hazardous Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Concentration</th>
<th>Worker Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>5.25%</td>
<td>not established</td>
</tr>
</tbody>
</table>

CAS # 7881-52-9

None of the ingredients in this product are on the IARC, NTP or OSHA carcinogen list. Occasional clinical reports suggest a low potential for sensitization upon exaggerated exposure to sodium hypochlorite if skin damage (e.g. irritation) occurs during exposure. Routine clinical tests conducted on intact skin with Clorox Liquid Bleach found no sensitization in the test subjects.

IV Special Protection and Precautions

Hygienic Practices: Wear safety glasses. With repeated or prolonged use wear gloves.

Engineering Controls: Use general ventilation to minimize exposure to vapor or mist.

V Transportation and Regulatory Data

U.S. DOT Hazard Class: Not restricted

U.S. DOT Proper Shipping Name: Hypochlorite solution with not more than 7% available chlorine. Not Restricted per 49CFR172.101(c)(12)(iv)

Section 313 (Title III Superfund Amendment and Reauthorization Act):

VI Spill or Leak Procedures

VIII Reactivity Data
### VIII Fire and Explosion Data

- Not flammable or explosive. In a fire, cool containers to prevent rupture and release of sodium chlorate.

### IX Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point</td>
<td>212 F, 100 C</td>
</tr>
<tr>
<td>Specific Gravity (H₂O)</td>
<td>1.085</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>complete</td>
</tr>
</tbody>
</table>
Organizing an M.S.D.S. Notebook

Suggestions for setting up an M.S.D.S. notebook include:

- Using a three-ring binder that pages can easily be placed in or removed from.

- Highlighting specific areas to identify key aspects of the M.S.D.S. report within the notebook. (see example)

- Alphabetizing the M.S.D.S. reports so that locating the sheets will be fast.

- Clearly mark the notebook on all sides to indicate it as the M.S.D.S. notebook.

- Use a white or bright colored notebook so it can be easily identified as the M.S.D.S. Notebook.

- When ordering products for the first time, request the company send you a product sheet (M.S.D.S.) page to add to your notebook.

- Remove any M.S.D.S. reports when the product is no longer used in the salon.
- Establish an emergency contact sheet that will be the very first page in your M.S.D.S. notebook. List the local emergency numbers for your salon area.

- Add the Centers for Disease Control and the National Poison Control Center to the emergency contact page.

- Have a sheet that states your salon operators have read and understand the concept of the M.S.D.S. notebook and have them sign a form stating the information has been read. Keep a copy of this form in their employment file.

- Make sure the M.S.D.S. Notebook is located in a place where all employees have access to it and they are aware of its location.
Georgia State Board of Cosmetology Sanitary Regulations for Salons and Schools

130-4-.01 Facilities.

(1) All facilities (salons/shops or schools) wherein cosmetology services are practiced or taught within the State of Georgia must provide suitable quarters equipped to give adequate services, subject to inspection by representatives of the Georgia State Board of Cosmetology.

(2) A beauty facility shall have a permanent and definite location in which the cosmetology professions of master cosmetologist, hair designer, nail technician, and/or esthetician, are practiced in accordance with the laws and rules of the Georgia State Board of Cosmetology. All mobile units, including kiosks, carts, mobile homes, trailers, and motor homes, shall not be licensed as salons/shops unless they meet all requirements of the Board and are permanently anchored on the ground with wheels detached.

130-4-.02 Use of Facility for Home Salon/Shop.

Space used for a cosmetology facility must be separated by tight, ceiling high partitions from residence rooms and must have separate restrooms. The cosmetology facility shall have a separate outside entrance. Separate space must be provided for a cosmetology facility. The use of any such space for sleeping, dining or any other domestic purpose is prohibited.

130-4-.03 Facilities (salon/shop/school).

Space used for a cosmetology facility must be separated by tight, ceiling high partitions from other commercial facilities.

130-4-.04 Cleanliness.

Walls, ceiling, floors, furniture and equipment must be kept free from excessive dust, dirt and debris. All equipment must be kept in good and safe working condition.

Revised November 2008
130-4-.05 Plumbing, Hot and Cold Water.

Each facility must have proper toilet and plumbing facilities and an adequate supply of hot and cold running water in accordance with recognized health standards.

130-4-.08 Posting of Licenses, Rules, Reports and Inspection Reports.

(1) Each salon/shop shall post in an open area the current salon/shop license issued to them by the Georgia State Board of Cosmetology, or a current copy of the online verification of licensure.

(2) Each person employed in the salon/shop shall post, in an open area, the current license/permit issued to them by the Georgia State Board of Cosmetology or the Georgia State Board of Barbers, or a current copy of the online verification of licensure.

(3) Salons/Shops shall have posted in an open area at all times a copy of the most recent inspection report.

(4) Salons/Shops shall comply with rules for sanitation, health and disinfectants in Chapter 130-5 of the Rules of Georgia State Board of Cosmetology.

(5) Sanitary rules and regulations governing salons or shops in the State of Georgia shall be posted in an open area in the salon/shop so as to be easily read by customers.

130-5-.01 Shampoo Equipment.

Shampoo bowls must be thoroughly cleansed and sanitized.
130-5-.02 Linens.

Towels/linens, after being used once, must be placed in a closed container until properly laundered. Clean towels must be kept in a closed cabinet, container, or closet except linens which are designated for use on current patrons.

130-5-.03 Sterilization.

The use of any article that is not properly cleansed and disinfected on any patron is prohibited. Hands must be properly cleansed and sanitized prior to servicing each client.

130-5-.04 Waste and Garbage.

All waste material must be removed daily. Garbage shall be stored in a covered, washable container and shall not be left in the establishment overnight. Each facility must be free from stale food and soiled dishes.

130-5-.05 Cleaning and Recommended Disinfection of Implements.

(1) All multi-use tools, implements, and equipment used for cosmetology services that come in contact with a client must be cleaned of all visible debris after each use and disinfected after each use by complete saturation or immersion for at least 10 minutes in an EPA-registered, hospital-grade disinfectant according to the manufacturer’s directions. Autoclave is an acceptable method of sterilization. Each salon or shop shall provide correct wet disinfection and dry storage standards at all times.

(a) Multi-use items constructed of nonporous materials such as metal, glass, or plastic for use on more than one client include, but are not limited to the following items: nail clippers, cuticle nippers, cuticle pushers, scissors, shears, reusable nail forms, manicure and pedicure bowls, foot files, glass, metal and fiberglass files, metal drill bits, tweezers, comedone extractors, brushes, combs, clips, reusable pencil sharpeners, reusable gloves, and any other metal tools/non-porous implements not listed above.

(b) Single use items shall be discarded after being used one time. These items include: buffers, emery boards, nail files, sleeves and sanders for electric files, orangewood/birchwood sticks, wooden applicator sticks or spatulas, porous foot files, pedicure slippers and toe separators, disposable gloves, paraffin liners, cotton balls, cotton strips or swabs, neck strips and muslin strips or any items that cannot be disinfected.

Revised November 2008
(2) Wet disinfection standards for tools, implements, or equipment:

(a) After cleaning, all tools, implements and equipment must be disinfected by complete saturation or immersion (enough solution to cover all surfaces of the item) for 10 minutes in an EPA-registered, hospital-grade disinfectant that is bactericidal, virucidal, fungicidal, and pseudomonacidal. The disinfecting solution must be changed daily and/or prepared according to manufacturer’s directions.

(b) All tools, implements, or equipment that come in contact with blood or body fluids must be disinfected by complete immersion for a minimum of 10 minutes in an EPA registered disinfectant that is effective against HIV-1 and Human Hepatitis B Virus, or tuberculocidal that is prepared and used according to the manufacturer’s directions. Autoclave is an acceptable method of sterilization.

(3) Dry storage standards for tools, implements, or equipment:

(a) All disinfected tools and implements shall be stored in a sanitary manner in a covered container. The container must be labeled to show that it contains disinfected tools and implements.

(b) Soiled and dirty tools and implements must be stored in a separate and properly labeled covered container. Soiled and dirty tools and implements shall not be used again until properly cleaned and disinfected according to the procedures stated in this rule.

(4) Hand washing is required before and between providing services to each client. An anti-bacterial soap is recommended to sanitize the hands and the exposed portions of arms before providing services and after smoking, drinking, eating, and using restrooms.

(5) Pedicure equipment cleaning and disinfection procedures to be used for all pedicure equipment that holds water including sinks, bowls, basins, pipe-less, and whirlpool spas are as follows:
(a) After each client, all pedicure units must be cleaned with a chelating soap or detergent with water to remove all visible debris, then disinfected with an EPA registered hospital-grade bactericidal, fungicidal, virucidal, and pseudomonacidal disinfectant used according to manufacturer’s instructions for at least ten (10) minutes. If the pedicure unit has a foot plate, it should be removed and the area beneath it cleaned, rinsed, and wiped dry. (b) At the end of each day of use, the following procedures shall be used:

1. All filter screens in whirlpool pedicure spas or basins for all types of foot spas must be sanitized. All visible debris in the screen and the inlet must be removed and cleaned with a chelating soap or detergent and water. For all pedicure units, the jet components and/or foot plate must be removed and any debris removed and cleaned. The screen, jet, and/or foot plate must be completely immersed in an EPA-registered, hospital-grade bactericidal, fungicidal, virucidal, and pseudomonacidal disinfectant that is used according to manufacturer’s instructions. The screen, jet, and/or foot plate should be replaced after disinfection is completed and the system flushed with warm water and low sudsing soap for 5 minutes, rinsed, and drained.

2. After the above procedures are completed, the basin should be filled with clean water and the correct amount of EPA-registered disinfectant. The solution must be circulated through foot spa system for 10 minutes and the unit then turned off. The solution should remain in the basin for at least 6 to 10 hours. Before using the equipment again, the basin system must be drained and flushed with clean water.

(c) Once each week, additional procedures should be performed. After completing the required cleaning procedures for the end of the day, the basin should be filled with water that contains one teaspoon of 5.25% bleach for each gallon of water.

The solution should be circulated through the spa system for 5 to 10 minutes and then the solution should sit overnight in the basin, or for at least 6 to 10 hours. Before being used again, the system should be drained and flushed.

(d) A record or log book containing the dates and times of all pedicure equipment cleaning and disinfection procedures must be documented and kept in the pedicure area by the salon or shop and made available for review upon request by a consumer and/or an inspector from the Board.

(6) Signs shall be posted in clear view in the reception area of the salon/shop as follows: (a) Cosmetology laws, rules, and regulations are available upon request.

(b) All cosmetology services shall only be performed on intact, healthy scalp, skin, and nails.

(c) Customers should not shave their legs the same day as receiving pedicure services to reduce the risk of infection.

(7) Signs shall be posted in clear view in the pedicure services area of the salon/shop as follows: (a) All cosmetology services shall only be performed on intact, healthy scalp, skin, and nails.
(b) Customers should not shave their legs the same day as receiving pedicure services to reduce the risk of infection.

(c) Any razor-like implement, such as a credo blade, shall not be used to reduce the chance of injury or infection.

(d) Pumice stones shall not be reused from one customer to another to prevent the spread of bacteria.

130-5-.06 Storage of Preparations.

Creams, lotions and other cosmetics for use on patrons must be kept in sanitary, closed containers.

130-5-.07 Pets.

Pets shall not be allowed in cosmetology facilities, with the exception of animals for handicapped patrons.

130-5-.08 Protective Clothing and Footwear for Patrons.

Patrons in all Georgia Schools/salons/shops shall wear appropriate clothing and footwear to prevent exposure to potential infectious materials.
130-5:09 Protective Clothing.

Cosmetologists, hair designers, nail technicians, and estheticians in Georgia are required to abide by all state laws for cosmetology, hair design, nail care, and esthetics. The professions of cosmetology, hair design, nail technology and esthetics are subject to the guidelines and rules promulgated by Georgia State Board of Cosmetology. Cosmetologists, hair designers, nail technicians, estheticians are also subject to the provisions of O.C.G.A. §43-1-19. Practitioners of the cosmetology profession in Georgia shall wear appropriate protective clothing for clinical services to prevent occupational exposure to potential infectious materials. Appropriate clothing and footwear may include, but not be limited to, clinical jackets, gloves and/or similar outer garments for the protection from infectious or harmful materials.
Appendix A

Georgia State Board of Cosmetology

Glossary of Legal Definitions

Master Cosmetologist

Any person who performs any one or more of the following services for compensation:

- Cuts or dresses the hair
- Gives facial or scalp massage or facial and scalp treatment with oils or creams and other preparations made for this purpose, either by hand or mechanical appliance
- Sings and shampoos the hair, dies the hair, or does permanent waving of the hair
- Braids the hair by hair weaving, interlocking, twisting, plaiting, wrapping by hand, chemical or mechanical devices, or using any natural or synthetic fiber for extensions to the hair
- Performs nail care, pedicure, or manicuring services as defined in Nail Technician
- Performs the services of an esthetician as defined in Esthetician or Esthetics Operator

Such person shall be considered as practicing the occupation of a cosmetologist within the meaning of this Code section; provided, however, that such term shall not mean a person who only braids the hair by hairweaving; interlocking; twisting; plaiting; wrapping by hand, chemical, or mechanical devices; or using any natural or synthetic fiber for extensions to the hair, and no such person shall be subject to the provisions of this chapter. Such term shall not apply to a person whose activities are limited to the application of cosmetics which are marketed to individuals and are readily commercially available to consumers.
Hair Designer

Any person who performs any one or more of the following services for compensation:

- Cuts or dresses the hair
- Singes and shampoos the hair or dyes the hair.

Esthetician

A person who, for compensation, engages in any one or a combination of the following practices, esthetics, or cosmetic skin care:

- Massaging the face or neck of a person
- Trimming eyebrows
- Dyeing eyelashes or eyebrows
- Waxing, stimulating, cleansing, or beautifying the face, neck, arms, or legs of a person by any method with the aid of the hands or any mechanical or electrical apparatus or by the use of a cosmetic preparation.

Such practices of esthetics shall not include the diagnosis, treatment, or therapy of any dermatological condition. Such term shall not apply to a person whose activities are limited to the application of cosmetics which are marketed to individuals and are readily commercially available to consumers.

Nail Technician

A person who, for compensation, trims, files, shapes, decorates, applies sculptured or otherwise artificial nails, or in any way cares for the nails of the hands and feet of another person.
EVALUATION / TEST QUESTIONS

1. WERE YOU GIVEN ENOUGH TIME TO COMPLETE THIS CLASS?
2. DID THIS CLASS PROVIDE YOU WITH GREAT INFORMATION?
3. CAN THIS CLASS ASSIST YOU IN YOUR TEACHING METHODS?
4. WILL YOU RECOMMEND THIS CLASS TO A CO-WORKER?