Objectives:
The students will be provided with a basic overview of the hazards of working in the cosmetology industry. In particular, training will focus on chemical safety, infection control, respiratory protection, and ergonomics.

Enduring Understanding(s):
1. The student will be able to identify potential occupational hazards associated with the cosmetology industry.
2. The student will be able to discuss possible solutions to control job hazards found in the cosmetology industry.
3. The student will be able to demonstrate competency with proper protective glove use.

Essential Question(s):
- What are the main health and safety hazards associated with working in the cosmetology industry?
- What are the potential solutions to control job hazards in the cosmetology industry?
- What are the various types of personal protective equipment that would protect employees from job hazards that cannot be controlled with engineering or other formal controls?

Total Duration: 1 hour

Materials and Equipment:
-Dry erase board or flip chart and markers. (Alternatively, a chalkboard and chalk may be used.)
-Use PowerPoint slides with a laptop and LCD projector. (Alternatively, PowerPoint slides may be printed onto Overhead transparencies and used with an overhead projector)
-Where possible, provide a computer with Internet access
-Fake contamination material (example: GloGer™ powder or liquid, chocolate or strawberry syrup)
-Disposable gloves (nitrile, vinyl, or latex gloves)
-Examples of surgical masks and N-95 respirators
-Box of No. 2 pencils (enough for half the class)

Notes for instructor:
This lesson is meant to educate students, teachers, employers, and parents about the importance of young worker safety and training. This lesson is meant to last approximately one hour depending on the level of interaction and discussion with class participants. Before teaching this lesson:

1. Determine the technology capabilities at the location of training. Where possible, use a laptop, LCD projector, and screen.
2. Review the “Glossary of Terms” in preparation for this lesson.
3. Obtain markers and either a flipchart, cling sheets, or a dry erase board to be used for activities.
4. Obtain disposable gloves (nitrile, vinyl, or latex), fake contamination material, No. 2 pencils, and respiratory protection.
5. Make handout packet for the Breaking News- Case Study Example.
6. Determine Internet access capabilities for the training location.
7. Define the audience: employers, educators, young workers, parents to emphasize each group’s focus to reduce young worker injuries and illnesses during the training.
## Lesson Plan

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
<th>Materials</th>
<th>Description</th>
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<tbody>
<tr>
<td>A. Introduction to Cosmetology Industry Hazards</td>
<td>5 minutes</td>
<td>Slides 1-6</td>
<td>Begin by introducing the course and the learning objectives. Explain that this is an awareness level training. Ask students if they can brainstorm some of the occupational hazards of the cosmetology industry. Explain the differences in laws and regulations for protection of the public and those performing the work.</td>
</tr>
</tbody>
</table>
| B. Chemical Safety and Personal Protective Equipment in the Cosmetology Industry | 20 minutes (with optional 1 hour breakout activity) | Slides 7-18, Internet access Respiratory Protection/ Dust Masks | 1. Working with chemicals (slide 8): Begin the discussion by talking about various products used in the cosmetology industry and ask the students if they are aware of their chemical properties or what hazardous chemicals are contained with the different products. Explain that the human body has three main protective barriers against exposure to hazards. These include:  
   - The skin, which protects the body from contaminants outside the body;  
   - The gastrointestinal (GI) tract, which protects the inner body from contaminants that have been ingested,  
   - The membranes within the lungs and respiratory tract, which protect the inner body from contaminants that have been inhaled.  
   Explain to the class that these exposures may occur through inhalation, absorption, and ingestion. Injection directly into the bloodstream may also occur when working with sharp objects. Discuss with the class the potential routes of exposure in the cosmetology industry when handling and working with products. Have the class discuss the differences between the different fields, including working with nails, hair, makeup and other areas of esthetics.  
   2. Discuss with the students basic tips for cosmetology students and employees working with the chemicals (slide 9):  
      - Always read the MSDS sheets for the chemicals and products used  
      - Choose protective gloves that are appropriate for the chemical exposures  
      - Wash hands with soap and water after removing gloves or handling products  
      - Wear eye protection when mixing chemicals  
      - Do NOT mix chemicals or products unless manufacturer directions specify  
      - Always keep containers closed when not in use  
   Ask the students what other tips they have learned for working with chemicals.  
   3. Slides 10-12 discuss the requirements of OSHA’s Hazard Communication Standard. The Hazard Communication Standard... |
(HCS) is based on a simple concept--that employees have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working. Discuss with the students who is technically covered by the standard. Include a discussion on the letter of interpretation that is meant to clarify OSHA’s Hazard Communication Standard (HCS), 29 CFR 1910.1200, as it applies to independent contractors operating in beauty salons. This letter can be found online at: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=19939

*Copies of all recommended materials are also included in Appendix B of this lesson plan.

- Include an overview of the items that must be covered in the Hazard Communication Standard (slide 10). These include: Site Specific Written Program, Chemical Inventory, MSDSs, Labeling, Non-routine Tasks, Contractors, and Training. One important area to focus on in the hazard communication standard is labeling (slide 11). Seek feedback from the class regarding labeling in salons and if products and secondary containers are labeled in accordance with the hazard communication standard. Reasons why labels may not be found on containers include: labels fall off, no one may be accountable for labeling, and individuals may not be sure if a label is needed. It is important that if a salon or cosmetology school does not already have a system in place to ensure that containers have legible labels that a labeling system be developed.

- Discuss Material Safety Data Sheets (MSDS) with the class (slide 12. An MSDS should be available for all hazardous chemicals in the workplace. The manufacturer or supplier/distributor should provide companies with an MSDS for their chemicals. MSDS should be available at all times to all employees. MSDSs should include the most current information (i.e., exposure limits should be current).

4. Breaking News- Case Study Exercise (Slide 13): This exercise is designed to integrate the concepts discussed during the entire Chemical Hazards portion of the lecture. This exercise may take up to an hour to conduct. Items needed for this exercise include:

- The OSHA News Release from 12/08/2011: US Department of Labor continues to cite beauty salons and manufacturers for formaldehyde exposure from hair smoothing products, which can be found at: http://www.dol.gov/opa/media/press/OSHA/OSHA20111735.htm

- The OSHA Hazard Alert: Hair Smoothing Products That Could Release Formaldehyde, which can be found at: http://www.osha.gov/SLTC/formaldehyde/hazard_alert.html

(These two items have been included in Appendix B of this lesson plan.)
- A Material Safety Data Sheet for a hair straightening product used either in class or at the salon, an example includes the Brazilian Blowout MSDS. (This is an excellent exercise to do as an assignment or breakout exercise.)

This exercise can be conducted in one of three different ways:

1. This exercise can be conducted as a group discussion lead by the instructor.

2. This exercise can be conducted as a take home assignment or individually conducted breakout exercise.

3. The exercise can be conducted as a small group discussion session.

Focus the discussion on the following questions:

- What have OSHA’s investigations found?
- What is formaldehyde and how can it affect my health?
- What other names are used for formaldehyde?
- How would I know if the product I’m using could expose me to formaldehyde?
- What should salons do to protect their workers?

Answers to these questions can be found in the Hazard Alert and News Release. Discuss with the class the risks associated with exposure to hazardous chemicals and have the students weigh the costs and the benefits.

5. Review with the class that there are often several ways to control a hazard, but that some methods are better than others. Go over with the class the three main control methods: remove the hazards, improve work policies and procedures, and use protective clothing and equipment. Either use the examples provided (slide 14), or ask the class to provide suggestions for controlling a specific cosmetology-industry hazard related to infection control, and either write them on the white board/flip chart, or use sticky notes.

6. Discuss with the class various methods used in the cosmetology industry to protect employees from inhalation hazards (using slides 15-18). Begin the discussion by holding up various types of approved respiratory protection devices (such as NIOSH-approved N95 filtering facepieces (aka. “dust masks”) and surgical masks. Explain to the class the formal definition of a respirator and point out which types of masks are considered respirators (use the Glossary as needed). Focus the discussion on the hazard of dust exposure when working with and shaping acrylic nails. Have the class weigh the costs and benefits from using National Institute of Occupational Safety and Health (NIOSH) approved respirators versus the typical surgical masks commonly used in the nail salon industry. Remind the students that N-95 respirators and surgical
1. Discuss with the class the definition of a pathogen. Review how in the cosmetology industry, employees may be exposed to common viruses and bacteria due to the close proximity required for client service. Discuss the state and federal regulations for operating a cosmetology business in a way that safeguards the health of the public (clientele), and explain that the rules are in place to protect the employees as well.

2. Review the most common ways an employee might have an exposure to a biological pathogen. Ask the class what “sharp objects” might be used in cosmetology procedures. Review the terms “body fluids” and “mucous membranes” in the context of cosmetology procedures. (Use the Glossary if needed).

3. Ask the class to list common cosmetic procedures or activities that could create a potential exposure to a biological pathogen.

4. Review with the class that there are often several ways to control a hazard, but that some methods are better than others. Go over with the class the three main control methods: remove the hazards, improve work policies and procedures, and use protective clothing and equipment. Either use the examples provided (slide 23), or ask the class to provide suggestions for controlling a specific cosmetology-industry hazard related to infection control, and either write them on the white board/flip chart, or use sticky notes.

5. Discuss with the class the requirement to adequately clean cosmetic tools and work surfaces to remove potential biological pathogens. Review the differences between decontamination, disinfection, and sterilization. Review the typical procedures (devices and chemical compounds) used in the industry to achieve the required level of decontamination (use the Glossary if needed).

6. Discuss how for certain cosmetic procedures, disposable gloves may be used to protect an employee from chemicals (e.g. hair dyes, bleaches, permanent solution, chemical peels, disinfectants or cleaning solutions) or contact with client body fluids. Remind students that removing gloves properly once they are contaminated is important and sometimes difficult. Hand out a pair of disposable gloves to all students, and ask them to put them on. Apply a quarter size amount of chocolate or strawberry syrup to the palm of one glove, and ask the student to rub their hands together to distribute the syrup. (Alternatively, apply Glo-Germ™ powder or liquid in the same manner). Review the proper glove removal procedure (slide 25) with students, and then ask students to remove the gloves without contaminating their hands, wrists, or fingers with the syrup (or Glo-Germ™ product).

7. Remind students that hand washing (with soap and water) is the most appropriate method to decontaminate their hands following a cosmetic procedure. Using an anti-bacterial, alcohol-based hand sanitizer does NOT remove chemicals from the hands, nor does hand sanitizer kill all harmful bacteria or viruses. Discuss with students the importance of taking the time to wash their hands for 20 seconds with water and soap at the end of any cosmetic procedure that might expose their skin to chemicals or bloodborne pathogens.
<table>
<thead>
<tr>
<th>Section</th>
<th>Duration</th>
<th>Slides/Tools</th>
<th>Activity/Notes</th>
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</table>
| D. Ergonomic Hazards in the Cosmetology Industry | 10 minutes | Slide 27-32 Flipchart Markers No. 2 Pencils | 1. Review with students the common postures and body positions that cosmetologists use for certain tasks, and how these positions are unnatural for how the body would “like” to be. Discuss how doing these tasks with these movements over and over again can cause injury to the body. Discuss how using the proper body postures and muscles can actually prevent injury.  

2. Have the students divide into pairs, and hand out one pencil to each student pair (slide 29). Have Student A hold the pencil using the grip shown in Figure 1. Have Student B try to pull the pencil out of Student A’s hand. Have Student B return the pencil to Student A. Have Student A hold the pencil using the grip shown in Figure 2. Have Student B try to pull the pencil out of Student A’s hand again. Note the difference in results. Have Student B hold the pencil using the grip in Figure 2. Have Student A try to pull the pencil out of Student B’s hand. Return the pencil to Student B instruct Student B to hold it using the grip shown in Figure 3. Have Student A try to pull the pencil out of Student B’s hand again. Discuss the results as a group. Explain the differences between the grip strengths and the number of muscles engaged.  
(Source: OSHA’s 11: An OSHA 10-hour curriculum for Young Workers developed by the University of Washington Environmental and Occupational Health Sciences.)  

3. Review the definition of “ergonomics” and then review the list of questions on Slide 31. Discuss as a group, and then review the prevention strategies pyramid. Either use the examples provided (slide 32), or ask the class to provide suggestions for controlling a specific cosmetology-industry hazard related to ergonomic or repetitive motion injuries and either write them on the white board/flip chart, or use sticky notes. |
| F. Other Safety and Health Concerns | 5 minutes | Slides 33-35 Flip chart/Wipe erase board | 1. Engage the students in a discussion on what their other concerns, related to safety and health, are in the cosmetology industry that were not yet covered in the lecture.  

2. Review the other safety concerns, as outlined in slide 34. Using a flip chart or wipe erase board, keep a running list of any other hazards identified by students in the class.  

3. Conclude the lecture by engaging the students in a discussion focusing on their rights as an employee. Section 5(a)(1) of the OSH Act states: “Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.” Discuss what it means to have a workplace that is safe and healthful. |
| G. Conclusions and Summary | 5 minutes | Slides 36-39 Internet Access | - Share various resources outlined on slides 36-39.  
- Share contact information for Youth Center on slide 39.  
- Go over the objectives of this lecture, as outlined in the beginning of this lesson plan.  
- Answer student questions. |
References

- [http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1006&amp;context=manuals](http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1006&amp;context=manuals)
- [http://www.ilo.org/safework_bookshelf/english?content&amp;nd=857171213](http://www.ilo.org/safework_bookshelf/english?content&amp;nd=857171213)
- [http://unionsafe.labor.net.au/hazards/106014706721942.html](http://unionsafe.labor.net.au/hazards/106014706721942.html)


OSHA. (2010), *Introduction to OSHA Presentation*. United States Department of Labor, Occupational Safety and Health Administration.

Hecker, S. et al. (Downloaded 2011), *OSHA’s 11: An OSHA 10-hour curriculum for Young Workers*. University of Washington Environmental and Occupational Health Sciences.

* This material was produced under grant number #SH-20848SHO from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.
Appendix A: Glossary
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Bloodborne Pathogen</td>
<td>Means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).</td>
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<tr>
<td>Body Fluid</td>
<td>Fluids originating from inside the body, such as blood or saliva.</td>
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<tr>
<td>Decontamination</td>
<td>A process to eliminate contamination; but doesn’t necessarily kill a biological pathogen. May include cleaning, disinfection or sterilization.</td>
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<tr>
<td>Disinfection</td>
<td>A process (either chemical or physical) that destroys pathogens. The correct disinfectant must be chosen depending on the type of pathogens present.</td>
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<tr>
<td>Ergonomics</td>
<td>Is the science of fitting the workplace conditions and job demands to the capabilities of the working population.</td>
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<tr>
<td>Ethyl Alcohol</td>
<td>Common alcohol used for disinfection of surfaces or objects.</td>
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<tr>
<td>Formaldehyde</td>
<td>A colorless, strong-smelling gas often found in aqueous (waterbased) solutions. Commonly used as a preservative in medical laboratories and mortuaries, formaldehyde is also found in many products such as chemicals, particle board, household products, glues, permanent press fabrics, paper product coatings, fiberboard, and plywood. It is also widely used as an industrial fungicide, germicide and disinfectant.</td>
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<tr>
<td>Glutaraldehyde</td>
<td>A liquid disinfectant used for sterilization of objects or surfaces that cannot be treated with heat.</td>
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<tr>
<td>Hazard Communication Standard</td>
<td>This standard is based on a simple concept—that employees have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working. They also need to know what protective measures are available to prevent adverse effects from occurring.</td>
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<tr>
<td>Hepatitis B</td>
<td>Infectious disease affecting the liver. Spread through blood and contact with bodily fluids from someone infected with the hepatitis b virus. A vaccination is available.</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>Infectious disease affecting the liver. Spread through blood contact with someone infected with the hepatitis c virus. There is no vaccine available.</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus, the virus that causes AIDS.</td>
</tr>
<tr>
<td>Hospital Grade Disinfectant</td>
<td>The Environmental Protection Agency (EPA) regulates and registers disinfectants that have been tested against 3 pathogens (Staphylococcus aureus, Salmonella cholera, and Psuedomonas aeruginosa). A hospital grade disinfectant must prove that it can kill at least these 3 organisms.</td>
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<tr>
<td>Impetigo</td>
<td>Highly contagious bacterial skin infection. Creates red, oozing sores. Most common in children.</td>
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<tr>
<td>Material Safety Data Sheet (MSDS)</td>
<td>Means written or printed material (form) concerning the hazards associated with a particular chemical.</td>
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<tr>
<td>Mucous Membrane</td>
<td>Body tissue the lines the body cavities that have contact with the air. Examples: eye, inside skin of nose, inside of mouth, inside of lungs</td>
</tr>
<tr>
<td>Other Potentially Infectious Materials (OPIM)</td>
<td>(1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is</td>
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visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

<table>
<thead>
<tr>
<th>Pathogen</th>
<th>A biological agent/organism that can cause illness.</th>
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<tr>
<td>“Quats”</td>
<td>Quaternary ammonium compounds. Typically listed as an ingredient on the chemical label as some form of “alkyl dimethyl ammonium chloride.” Can be used for cleaning and sanitizing, but needs longer contact time with contaminated surface.</td>
</tr>
<tr>
<td>Respiratory Protection</td>
<td>A respirator is a personal protective device that is worn on the face, covers at least the nose and mouth, and is used to reduce the wearer’s risk of inhaling hazardous airborne particles (including dust particles and infectious agents), gases or vapors. Respirators should only be used as a &quot;last line of defense&quot; in the Hierarchy of Controls when engineering and administrative controls are not feasible or are in the process of being put in place.</td>
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Respirators protect the user in two basic ways. The first type of respirator removes contaminants from the air, and are called air-purifying respirators (APR). APRs include particulate respirators, which filter out airborne particles, and “gas masks,” which filter out chemicals and gasses. Other respirators protect by supplying clean respirable air from another source. Air-supplying Respirators (ASR) comprise this category of respirators. They include airline respirators, which use compressed air from a remote source; and self-contained breathing apparatus (SCBA), which include their own air supply.

| Sanitization                  | Destruction or removal of pathogens               |
| “Staph” Infections           | Refers to a type of infection caused by the *Staphylococcus* bacteria. *Staphylococcus* bacteria are often commonly found on skin (and do not cause infection or problems). However, it can cause serious illness if it moves deeper into the body. The most dangerous “Staph” infections are those caused by bacteria that are resistant to antibiotics. |
| Sterilization                | A process that removes or destroys ALL forms of microbial life (including spores) |
| “Universal Precautions”      | Treating all human blood and bodily fluids as if they contained infectious materials (viruses or bacteria). |
Appendix B: Additional Resources
March 13, 1990

The Honorable Alan Wheat
United States House of Representatives
811 Grand Avenue, #935
Kansas City, Missouri 64106-1997

Dear Congressman Wheat:

Thank you for your letter of January 9, to Ms. Ruth Knight, Director of Intra-Governmental Affairs for the Occupational Safety and Health Administration (OSHA). Your letter transmitted correspondence from your constituent, Ms. Paula J. Sego, who requested a clarification of OSHA's Hazard Communication Standard (HCS), 29 CFR 1910.1200, as it applies to independent contractors operating in beauty salons.

OSHA's Hazard Communication Standard (HCS), 29 CFR 1910.1200, sets forth the requirements for communicating the hazards of chemicals used, handled, or produced in the workplace. The applicability of the HCS (and indeed of all OSHA standards promulgated under the Occupational Safety and Health Act of 1970 (“the Act”)) depends on whether any of the individuals in the workplace are employees or employers as defined under the Act and under the HCS. An examination of the actual economic relationship that exists between the individuals in a workplace is necessary to determine if an employee/employer relationship exists and, therefore, if the provisions of the Act and the HCS apply. Operators or other workers simply calling themselves “independent contractors” or using contractual agreements does not automatically transform these individuals into “independent contractors” nor relieve the salon operator from responsibility as an employer.

Determination by OSHA regarding the applicability of the Act and the HCS in uncommon employment situations such as the one described in your constituent's letter is always made on a case-by-case basis. First, a determination of whether any of the entities engaged in the salon's business are functioning as employers or employees under the OSH Act must be made. No single criterion exists that, in and of itself, determines if an employer/employee relationship exists and, therefore, if the provisions of the Act and the HCS apply. Operators or other workers simply calling themselves "independent contractors" or using contractual agreements does not automatically transform these individuals into "independent contractors" nor relieve the salon operator from responsibility as an employer.

OSHA compliance officers would utilize these criteria, developed by the Occupational Safety and Health Review Commission and the Courts under the OSH Act, on a case-by-case basis, to determine if a salon owner, operator or other entity is in fact an employer of some or all of the workers in the salon. Under various work situations, the salon operator could in fact be the employer of all the salon workers including beauty operators, shampooists, receptionists, janitors, etc. Alternatively, the salon owner could be the employer of only the operators and maintain an independent contractor relationship with other workers. It is also possible that the beauty operators could be working as independent contractors for the salon owner and, at the same time, the operators could be the employers of other workers like shampooists or receptionists.

If, utilizing the above criteria, OSHA determines that an employee/employer relationship exists, as set forth under the Act, then a determination on the applicability of the Hazard Communication Standard is performed. The HCS applies if an employer is engaged in a business where chemicals are either used, distributed or produced and if an employee may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies.

In some situations, a beauty salon might qualify as a multi-employer workplace under the HCS. For example, each operator could act as an
employer and hire an employee to shampoo and perform other work. OSHA's compliance officer would have to determine whether each operator and shampooist had an employee/employer relationship under the OSH Act criteria listed earlier. Then it would be necessary to determine if the HCS applied (Does the operator use, distribute or produce chemicals in the business and may the shampooist be exposed to hazardous chemicals?). If more than one operator is an employer under the HCS, then the multi-employer worksite provision applies, and information regarding the hazardous chemicals, including MSDS, labels and appropriate precautionary measures must be included in each employer's hazard communication program.

OSHA realizes that the applicability of the provisions of the HCS is sometimes a difficult issue in the type of workplace situations described by Ms. Sego. Hopefully, however, the information in this letter will be beneficial to your constituent and help clarify the concerns she raised. Please feel free to contact us again if we can be of further assistance.

Sincerely,

Gerard F. Scannell
Assistant Secretary

cc: Washington D.C. Office

[Corrected 4/20/2005]

January 9, 1990

Ms. Ruth Knight
Director of Intergovernmental Affairs
Occupational Safety and Health Administration
U.S. Department of Labor
200 Constitution Ave., N.W. Room N364I
Washington, D.C. 20510

Dear Ms. Knight:

Enclosed please find correspondence received from Ms. Paula J. Sego, who is one of my constituents. Ms. Sego would appreciate a clarification of OSHA Hazard Communication Standard, 29 CFR 1910.1200. Ms. Sego does not understand why independent contractors who operate out of the same salon are not subjected to the same standards as a salon owner with employees. She believes in both cases there is the same risk of chemical source illness and injury.

I would appreciate your review of this matter and any information you can provide which will help me respond to Ms. Sego. Please respond to my Kansas City office, and thank you for your assistance.

Sincerely,

Alan Wheat
Member of Congress

December 27, 1989

Representative Alan Wheat
811 Grand Room 935
Kansas City, MO 64106

Dear Representative Wheat:

I am writing to you for assistance in clarifying the attached interpretation letter. My company, Chemical Communication Inc., gets business owners into compliance with the OSHA Hazard Communication Standard (HCS).

One of my clients is a salon owner with 24 independent contractors. My concern is the definition of an "independent contractor" in relation to the HCS, 29 CFR 1910.1200. From my interpretation an independent contractor who rents space in a workplace is not required to provide the salon owner copies of the material safety data sheets (MSDS) of the chemicals they use in performing their work.

If the salon owner has an employee, it is his responsibility to maintain the MSDS's of the chemicals used in the workplace. If the salon owner had no employees, no MSDS's would be obtained for the entire chemical inventory in the workplace. I understand that when a person who works for themselves, by themselves, (beauty salons operated in the home) they would not be covered by the HCS, because no employee/employer relationship exists. That situation is comprehensible. The only person they are affecting by over-exposure to the chemicals is themselves.

The consumer/customer is not, as yet, provided the MSDS for the chemicals they are exposed to because the exposure is on a consumer level. But when you have 24 independent contractors, over-exposing not only themselves but the other independent contractors, would these people (independent contractors), who are not considered employees be immune from the chemical source illnesses and injuries that can occur. That is the intent of the HCS, to reduce chemical source illnesses and injuries.

Independent contractors, and the legality, is a controversial issue in the cosmetology profession. Many salon owners with employees have been informed by independent contractors that they are exempt from complying to the HCS. Salon owners are confused as to why if they are exposed to the same chemicals as the independent contractor, do they have to obtain information on the chemicals.

The term "independent contractor" needs a clear definition applicable to the HCS. Feel free to call me for further information.
I would like to speak to you personally with regard to standardizing the non-mandatory OSHA Form 174 for the material safety data sheets. Your assistance is appreciated.

Paula J. Sego

Attachment

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration
911 Walnut Street, Room 406
Kansas City, Missouri 64106

November 27, 1989

Ms. Paula J. Sego
Chemical Communication, Inc.
P.O. Box 16701
Kansas City, Missouri 64133

Dear Ms. Sego:

This is in response to your letter of November 6, 1989, requesting a clarification of how the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) applies to independent contractors working in a beauty salon.

With regard to your first statement that a salon owner "has twenty-six independent contractors who work in his salon ...". If these "independent contractors are in fact persons who are not controlled by the salon owner in terms of, for example, the manner in which they perform their work, and instead are merely "renting" the spaces that they occupy to execute their professional duties, these persons would not be covered by the rule. However, if any of these "independent contractors employ an assistant or assistants for various duties, these assistants would be entitled to training regarding the safe use of chemicals. Additionally, if the salon owner or the "independent contractors" individually or collectively employ any other worker, such as but not limited to receptionists or maintenance personnel as part of the normal operation of the salon, these employees by virtue of their actual or potential exposure to hazardous chemicals, would also be entitled to training regarding the safe use of chemicals.

With regard to two of the three questions you raise concerning the imposition of fines on the salon owner for violations of the HC rule, before any decision is reached by OSHA as to who may receive a citation and what penalty may be imposed, an effort is made to determine the controlling employer as well as responsibility for workplace safety and health on a case-by-case basis.

With regard to the second question you raise of "Should the salon owner receive copies of MSDSs from his independent contractors?", this will, for a large part, be dependent on the owner's employments' of other persons at the salon. However, where MSDSs are required to be maintained, it would probably be most efficient for the salon owner to coordinate this function. Regardless of who does the coordinating, it is the responsibility of each employer to provide other employer(s) MSDSs if the other employer(s) will have employees exposed or potentially exposed to hazardous substances.

Sincerely,

Janice P. Barrier
Assistant Regional Administrator for Technical Support
OSHA News Release: US Department of Labor continues to cite beauty salons and manufacturers for formaldehyde exposure from hair smoothing products

OSHA News Release: [12/08/2011]
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US Department of Labor continues to cite beauty salons and manufacturers for formaldehyde exposure from hair smoothing products

OSHA urges salon owners to implement protective measures

WASHINGTON — The U.S. Department of Labor's Occupational Safety and Health Administration is continuing its efforts to protect workers from the dangers of formaldehyde exposure.

In November, OSHA issued citations and fines to two salons for failing to implement precautions to protect workers from exposure to formaldehyde when using certain hair-smoothing products. Formaldehyde can irritate the eyes and nose; can cause allergic reactions of the skin, eyes and lungs; and is a cancer hazard. Salon owners who decide to use products that may contain or release formaldehyde must follow the requirements of OSHA's formaldehyde and hazard communication standards to keep workers safe.

"We want to make sure that salon owners are aware that if they use these products, they have to implement protective measures such as air monitoring and training," said Assistant Secretary of Labor for OSHA Dr. David Michaels. "What is very troubling to the agency is that some of these products clearly expose workers to formaldehyde even when the label states they are 'formaldehyde free.'"

OSHA continues to respond to complaints and referrals of formaldehyde exposure in salons, beauty schools and manufacturing facilities. To date in calendar year 2011, federal OSHA has issued citations to 23 salon owners and beauty schools in Connecticut, Massachusetts, Pennsylvania, Florida, Illinois, New York, New Jersey and Ohio, with fines ranging up to $17,500 for failing to protect workers from overexposure and potential exposure to formaldehyde.

Some of these violations include failing to communicate the hazards of exposure to formaldehyde, provide needed protective equipment and test air levels. The requirements of OSHA's formaldehyde standard can be viewed at http://www.dol.gov/KW. In three separate salons, OSHA's tests showed that workers were exposed to formaldehyde levels above the agency's 15-minute short-term exposure limit, which is 2.0 parts of formaldehyde per million parts of air. In one case, OSHA determined that a hair stylist was exposed to more than five times the allowable amount with an actual exposure reading of 10.12 ppm. In another instance, the exposure reading was 4.73 ppm.

OSHA also has issued citations to two Florida manufacturers and two Florida-based distributors of hair products containing formaldehyde for failing to protect their own workers from possible formaldehyde exposure as well as to communicate the hazards of formaldehyde exposure to salons, stylists and consumers. The violations of OSHA's formaldehyde and hazard communication standards include failing to list formaldehyde as a hazardous ingredient on the material safety data sheet, the hazard warning sheet provided to users such as salon owners and stylists; include proper hazard warnings on product labels; and list the health effects of formaldehyde exposure on the MSDS. Labels must include ingredient and health hazard warning information, and the MSDS must provide users with information on the chemicals in a product, the hazards to workers and how to use the product safely.

"The best way to control exposure to formaldehyde is to use products that do not contain formaldehyde. Salons should check the label or product information to make sure it does not list formaldehyde, formalin, methylene glycol or any of the other names for formaldehyde," said Michaels. "If salon owners decide to use products that contain or release formaldehyde, then they must follow a number of protective practices — including air monitoring, worker training and, if levels are over OSHA limits, good ventilation or respirators."

OSHA has conducted significant outreach to salons, beauty schools and manufacturers to alert them about the hazards of hair smoothing products and the requirements of OSHA's standards. In late September, OSHA issued a second hazard alert to hair salon owners and workers about potential formaldehyde exposure from working with certain hair smoothing and straightening products, which can be viewed at http://www.osha.gov/SLTC/formaldehyde/hazard_alert.html. This alert, which revised the initial alert issued last spring, was prompted by the results of additional agency inspections, a warning letter issued by the U.S. Food and Drug Administration, and factually incorrect information recently sent to salons by Brazilian Blowout, a company that manufactures hair products.

In response to the Aug. 24 letter sent by Brazilian Blowout to salon owners claiming that all OSHA air tests performed on the company's Brazilian Blowout Professional Acai Smoothing Solution yielded results below OSHA's standard for exposure, the agency sent a letter to the company refuting that assertion. OSHA's letter can be viewed at http://www.osha.gov/SLTC/formaldehyde/brazilian_blowout_letter.pdf.

For more information on formaldehyde exposure in salons, visit http://www.osha.gov/SLTC/hairsalons/index.html.

For small businesses in all states across the country, OSHA's On-site Consultation Program offers free and confidential advice for employers seeking help to identify and prevent job hazards or improve their safety and health management systems. In fiscal year 2010, the program provided free assistance to more than 30,000 small businesses covering more than 1.5 million workers across the nation. For more information, visit http://www.osha.gov/dtcp/smallbusiness/consult.html.

"These consultation services are separate from enforcement and do not result in penalties or citations," said Michaels. "Consultants from state agencies or universities work with employers to identify workplace hazards, provide advice on compliance with OSHA standards, and assist in establishing safety and health management systems."

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA's role is to ensure these conditions for America's working men and women by setting and enforcing standards, and providing training, education and assistance. For more information, visit http://www.osha.gov.
During Federal OSHA investigations, air tests showed formaldehyde at levels above OSHA’s limits in salons using Brazilian Blowout Acai Professional Smoothing Solution, labeled “formaldehyde free,” and Brasil Cacau Cadiveu, resulting in violations and citations.

The Occupational Safety and Health Administration (OSHA) and several State OSHA programs are investigating questions and complaints from hair salon owners and workers about possible formaldehyde exposure from hair smoothing products. Some of these products have been labeled as “formaldehyde-free.” Oregon’s Occupational Safety and Health Administration [36 KB PDF, 2 pages], California’s Occupational Safety and Health Administration [34 KB PDF, 2 pages], the Connecticut Department of Public Health, and several other state agencies have already issued warnings about these products to salon owners, stylists, other salon workers, and clients. The National Institute for Occupational Safety and Health (NIOSH) has also completed a Health Hazard Evaluation [150 KB PDF, 11 pages] for salon workers that assessed risks posed from using a specific hair smoothing product in a single salon. In addition, the Food and Drug Administration (FDA) has issued a warning letter to the importer and distributor of Brazilian Blowout Acai Professional Smoothing Solution (GIB LLC dba Brazilian Blowout) identifying this product as adulterated and misbranded because it contains methylene glycol, which can release formaldehyde during the normal conditions of use, and because the label makes misleading statements (“Formaldehyde Free or “No Formaldehyde”). This Hazard Alert provides updated information about OSHA’s investigations, the health hazards of formaldehyde, and how to protect workers using hair smoothing products that contain or release formaldehyde.

What have OSHA’s investigations found?

Federal OSHA and State OSHA programs continue to investigate complaints from stylists and hair salon owners about exposure to formaldehyde while using hair smoothing products such as: Brazilian Blowout (Acai Professional Smoothing Solution, Professional Brazilian Blowout Solution), Brasil Cacau Cadiveu, Keratin Complex Smoothing Therapy (Natural Keratin Smoothing Treatment, Express Blow Out, Natural Keratin Smoothing Treatment Blonde), and Marcia Teixeira (Advanced Brazilian Keratin Treatment, Extreme De-Frizzing Treatment). OSHA has conducted air sampling at multiple salons and found formaldehyde in the air when stylists were using hair smoothing products. Some of these products were labeled “formaldehyde free” or did not list formaldehyde on the product label or in the Material Safety Data Sheet (MSDS). In most cases, where the label did not state that the product had formaldehyde in it, OSHA found that hair salon owners using those products did not know that hair smoothing products contain or could expose workers to formaldehyde because manufacturers, importers, and distributors did not include the correct hazard warnings on the product’s label or MSDS.
Recent reports from Federal OSHA, Oregon OSHA, and California OSHA should alert salon owners and stylists to look closely at the hair smoothing products they are using to see if they contain methylene glycol, formalin, methylene oxide, paraform, formaldehyde, methanal, oxomethane, oxymethylene, or CAS Number 50-00-0. All of these are names for or treated as formaldehyde under OSHA’s Formaldehyde standard. There are also chemicals, such as timonacic acid (also called thiazolidinedicarboxylic acid), that can release formaldehyde under certain conditions, such as those present during the hair smoothing treatment process. Products that contain these chemicals can expose workers to formaldehyde. Employers who use, manufacture, import or distribute, the products must follow OSHA’s formaldehyde standard.

What is formaldehyde and how can it affect my health?

Formaldehyde is a colorless, strong-smelling gas that presents a health hazard if workers are exposed. You can be exposed to formaldehyde if you breathe it into your lungs, if it gets into your eyes, or if it is contained in a product that gets onto your skin. You can also be exposed accidentally if you touch your face, eat food, or drink after using a product containing formaldehyde without first washing your hands. It can irritate the eyes and nose, and cause coughing and wheezing. Formaldehyde is a “sensitizer,” which means that it can cause allergic reactions of the skin, eyes, and lungs such as asthma-like breathing problems and skin rashes and itching. When formaldehyde is in a product that gets sprayed into the eyes, it can damage the eyes and cause blindness. It is also a cancer hazard. Formaldehyde is a health hazard, whether in a product or in the air. OSHA’s Formaldehyde standard 29 CFR 1910.1048 covers employers who use formaldehyde, and products that contain or release formaldehyde. (OSHA has also published a Formaldehyde Fact Sheet [43 KB PDF*, 2 pages].) For more information about formaldehyde, click here.
Why do some hair smoothing products expose me to formaldehyde?

Many keratin-based hair smoothing products contain formaldehyde dissolved (and chemically reacted) in water and other ingredients in the product. Because of the way the formaldehyde reacts in these products, some manufacturers, importers, or distributors might list other names for formaldehyde on product information or might claim that the product is “formaldehyde-free.” Formaldehyde might be listed as methylene glycol, formalin, methylene oxide, paraform, formic aldehyde, methanal, oxomethane, oxymethylene, or CAS Number 50-00-0. All of these are names for formaldehyde under OSHA’s Formaldehyde standard. There are also chemicals, such as timonacic acid (also called thiazolidinecarboxylic acid) that can release formaldehyde under certain conditions, such as those present during the hair smoothing treatment process. The bottom line is that formaldehyde can be released from hair smoothing products that list any of these names on the label and workers can breathe it in or absorb it through their skin. Workers can be exposed to formaldehyde during the entire hair straightening process, especially when heat is applied (e.g. blow-drying, flat ironing).

How would I know if the product I’m using could expose me to formaldehyde?

Read the product label and MSDS to determine if they list methylene glycol or any of the other names for formaldehyde listed above. If they do, the product can expose you to formaldehyde. Under OSHA’s Hazard Communication standard, salon owners and other employers must have an MSDS for each product used in the salon that contains a hazardous chemical. Employers need to review the MSDSs they receive and make sure they understand the hazards of the products they use in their salon(s). They must also make the MSDSs available to their workers (e.g., stylists) and train all workers using the product about the hazards and how to use it safely. If employers do not receive an MSDS automatically, they should request one. If the MSDS does not look complete (e.g., blank spaces that are not completed) then the employer should request a new one from the manufacturer. If the request does not produce the information needed, then the employer should contact the local OSHA Area Office for assistance in obtaining the MSDS.

Be aware that an MSDS may not contain all of the hazard information required, as initially found in the case of Brazilian Blowout products. In the Oregon case, it was only after a stylist reported health problems while using the products that the investigation began. Workers need to report any health problems they think are from the products they use in the workplace to their employer and employers need to follow up on reports of health problems from workers.

When are manufacturers, importers, and distributors of hair smoothing products required to list formaldehyde as an ingredient in their products?

OSHA requires manufacturers of products that contain or release formaldehyde to include information about formaldehyde and its hazards on the label and in the MSDS. Formaldehyde must be listed if it is in the product at 0.1% or more (as a gas or in solution) or if the product releases formaldehyde above 0.1 parts of formaldehyde per million parts (ppm) of air. Salons and other employers that directly import hair smoothing products from other countries have the same responsibilities as a manufacturer under the Hazard Communication standard - they must determine the hazards of the product and develop labels and MSDSs that communicate the hazards to users.

If a product contains 0.1% or more formaldehyde or can release formaldehyde into the air above 0.1 ppm, then the product label must include the following information, as required by OSHA’s Formaldehyde standard, 29 CFR 1910.1048(m)(3):

- a statement that the product has formaldehyde in it;
- the name and address of the manufacturer, importer, or other company responsible for the product;
- a statement that the employer and MSDSs can readily give health hazard information.
Additionally, if the product can release formaldehyde into the air above 0.5 ppm, the label must also have the following information:

• a list of all product health and safety hazards;
• the phrase “Potential Cancer Hazard.”

The MSDS must include the following information, as required by OSHA’s Formaldehyde standard, 29 CFR 1910.1048(m)(4) and OSHA’s Hazard Communication standard, 29 CFR 1910.1200(g):

• name of the product used on its label
• name (including common names) of all hazardous chemicals in the product at more than 1% (or more than 0.1% for carcinogens such as formaldehyde), or that could be released into the air above the limits set by OSHA or the American Conference of Governmental Industrial Hygienists (ACGIH), or could be a health risk to employees
• health and safety information for each listed hazardous chemical – including physical properties and health hazards
• common ways that people are exposed to the product and its hazardous ingredients
• exposure limits (the limit of how much can be in the air)
• whether the chemical is listed as a carcinogen by OSHA, the International Agency for Research on Cancer (IARC) or the National Toxicology Program (NTP)
• how to safely store and use the product, including what protective equipment to wear and what to do in an emergency
• the name, address, and telephone number of the company or person responsible for preparing the MSDS, and the date it was made or last changed

What can I do to reduce exposure to formaldehyde when using formaldehyde releasing hair smoothing/straightening products?

Employers, stylists, and other salon workers should read the product information and MSDSs for the products they buy and use so that they know what chemicals are in them and how to use them safely in the workplace. The best way to control exposure to formaldehyde is to use products that do not list formaldehyde, formalin, methylene glycol, or any of the other names for formaldehyde listed above on the label or in the MSDS. Beauty care companies are now making and selling products that they claim do not contain formaldehyde in the solution. Choosing one of these products might eliminate the risk of formaldehyde exposure. Note that just because a product doesn’t list formaldehyde, formalin, or methylene glycol does not mean that it does not contain any other hazardous ingredients.

If salon owners decide to use products that contain or release formaldehyde, then they must follow the requirements in OSHA’s Formaldehyde standard. The standard requires that employers test the air to find out the level of formaldehyde present in the air when the product is being used. If the test shows that formaldehyde is present at levels above OSHA’s limits (0.75 parts of formaldehyde per million parts (or ppm) of air during an 8-hour work shift or 2 ppm during any 15-minute period), then the employer must:

• Install air ventilation systems in the areas where these products are mixed and used to help keep formaldehyde levels below OSHA’s limit and perform regular maintenance to make sure the systems work correctly;
• When possible, require workers to use lower heat settings on blow-dryers and flat irons used during the process;
• Give workers respirators, if needed; train them to use the respirator properly; and meet the other requirements in OSHA’s Respiratory Protection standard;
• Ensure workers understand the information on a product’s label and MSDS;
• Post signs at entryways to any area where formaldehyde is above OSHA’s limit to tell workers of the danger and stating that only authorized personnel may enter;
• Tell workers about the health effects of formaldehyde, how to use the product safely, and what personal protective equipment to wear while using the product; and
• Train workers how to safely clean up spills and properly throw products out.

In addition, where the tests show that formaldehyde is present in the air at a level of 0.5 ppm during an 8-hour work shift or 2 ppm during any 15-minute period, then the employer must:

• Get workers the right medical attention (e.g., doctor exams), and
• Test the air periodically to make sure that formaldehyde levels are below OSHA’s limits.

Whether or not air tests show formaldehyde levels above OSHA’s limits, employers must follow certain parts of the standard if a product contains formaldehyde:
• Give employees appropriate gloves and other personal protective equipment (e.g., face shield, chemical splash goggles, chemical-resistant aprons) and train them on how to use this equipment while mixing and applying the products;
• Explain to workers how to read and understand the information on a product’s label and MSDS;
• Make sure the workplace has eye and skin washing equipment if products that contain formaldehyde could be splashed onto the workers’ skin or into their eyes;
• Train workers how to safely clean up spills and properly throw products out; and
• Get workers the right medical attention (e.g., doctor exams) if they develop signs and symptoms of an exposure to formaldehyde or are exposed to large amounts of formaldehyde during an emergency (e.g., a large spill).

Employers must also keep records of the air tests they perform, any medical attention needed by their employees, and respirator fit-testing.

For more information about how to control formaldehyde exposures in hair salons, read Oregon OSHA’s hazard alert [495 KB PDF, 2 pages] and Cal/OSHA’s Advisory.

**How can OSHA help you?**

OSHA continues to monitor ongoing inspections that may have nationwide impact to ensure that health hazards and appropriate protections for products containing hazardous chemicals are communicated properly on the labels and MSDS. OSHA developed this alert to give workers and employers useful, up-to-date information on formaldehyde hazards that might be present when using hair smoothing products that contain or release formaldehyde. Employers and workers should read OSHA’s Formaldehyde Fact Sheet [43 KB PDF*, 2 pages] for more information about formaldehyde hazards and how to work with it safely. Contact your local OSHA office if you have any questions about a product that you are using or its MSDS. Hair salon owners can also contact OSHA’s free and confidential consultation service to help determine if there are hazards at their workplace. On-site consultations do not result in penalties or citations. To contact OSHA's consultation service, visit OSHA's website or call 1-800-321-6742.

**What rights do workers have?**

Workers have a right to a safe workplace. The Occupational Safety and Health Act of 1970 (OSH Act) was passed to prevent workers from being killed or seriously harmed at work. The law requires employers to provide their employees with working conditions that are free of known dangers. The OSH Act created the Occupational Safety and Health Administration (OSHA), which sets and enforces protective workplace safety and health standards. OSHA also provides information, training and assistance to workers and employers. Workers may file a complaint to have OSHA inspect their workplace if they believe that their employer is not following OSHA standards or that there are serious hazards.

Contact us if you have questions or want to file a complaint. We will keep your information confidential. We are here to help you.

For other valuable worker protection information, such as Workers’ Rights, Employer Responsibilities, and other services OSHA offers, visit OSHA’s Workers page.

U.S. Department of Labor
Hilda L. Solis, Secretary of Labor

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