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***Health and Safety Advisory
Committee Meeting***

Monday, October 23, 2017

**Crowne Plaza San Diego-Mission Valley
2270 Hotel Circle North
San Diego, CA 92108**

1:00 P.M. – Until Completion of Business

AGENDA

1. Call to Order/Roll Call.
2. Executive Officer's Opening Remarks (Kristy Underwood)
3. Public Comment for Items not on the Agenda.
Note: The Committee may not discuss or take any action on any item raised during this public comment section, except to decide whether to place the matter on the agenda of a future meeting (Government Code Sections 11125, 1125.7(a))
4. Approval of Committee Meeting Minutes
June 26, 2017
5. Update to the Committee on Actions Implemented by Staff Since the Last Meeting. (Kristy Underwood)
6. Discussion and Presentation on the Environmental Impact of Beauty Products. (Swati Sharma and Chris Geiger, San Francisco Department of Environment)
7. Discussion and Presentation on Disinfection Options Available to the Barbering and Beauty Industry. (Leslie Roste, Barbicide)
8. Presentation and Discussion on Understanding Piece Rate Law and Suggestions on How to Bring Awareness of this Law to Board Licensees. (Holly Wright, Department of Industrial Relations)

9. Agenda Items for the Next Meeting

10. Adjournment

Action may be taken on any item on the agenda. The time and order of agenda items are subject to change at the discretion of the Committee and may be taken out of order. In accordance with the Bagley-Keene Open Meeting Act, all meetings of the Board are open to the public.

**Government Code section 11125.7 provides the opportunity for the public to address each agenda item during discussion or consideration by the Committee prior to the Committee taking any action on said item. Members of the public will be provided appropriate opportunities to comment on any issue before the Committee, but the Committee Chair may, at his or her discretion, apportion available time among those who wish to speak. Individuals may appear before the Committee to discuss items not on the agenda; however, the Committee can neither discuss nor take official action on these items at the time of the same meeting (Government Code sections 11125, 11125.7(a)).*

The meeting is accessible to the physically disabled. A person who needs disability-related accommodation or modification in order to participate in the meeting may make a request by contacting: Marcene Melliza at (916) 575-7121, email: marcene.melliza@dca.ca.gov, or send a written request to the Board of Barbering and Cosmetology, PO Box 944226, Sacramento, CA 94244. Providing your request is a least five (5) business days before the meeting will help to ensure availability of the requested accommodations. TDD Line: (916) 322-1700.



DRAFT **HEALTH AND SAFETY ADVISORY COMMITTEE MEETING**

MINUTES OF JUNE 26, 2017

Department of Consumer Affairs
1747 North Market Blvd.
HQ 2 Hearing Room 186, 1st Floor
Sacramento, CA 95834

BOARD MEMBERS PRESENT

Richard Hedges
Lisa Thong

BOARD MEMBERS ABSENT

Kari Williams, PhD, Vice President (alternate)

COMMITTEE MEMBERS PRESENT

Janet Blaschke
Amy Coombe
Deedee Crossett
Fred Jones
Julia Liou
Leslie Roste
Lori Schaumleffel
Dr. Charles H. Washington
Holly Wright

COMMITTEE MEMBERS ABSENT

Teni Adewumi
Shirley Arnett
Anna Marie Brown
Paul Bryson
Delane Sims
Robert Von Essen
Hermine Warren, DNP

STAFF MEMBERS PRESENT

Kristy Underwood, Executive Officer
Rebecca Bon, Board Legal Representative
Tami Guess, Board Project Manager
Marcene Melliza, Board Analyst

1. Agenda Item #1, CALL TO ORDER / ROLL CALL

Ms. Kristy Underwood, the Executive Officer, called the meeting to order at approximately 10:00 a.m., welcomed everyone to the California State Board of Barbering and Cosmetology (Board) Health and Safety Advisory Committee, and asked everyone to introduce themselves.

2. Agenda Item #2, EXECUTIVE OFFICER'S OPENING REMARKS / GOALS OF THE COMMITTEE

Ms. Underwood reviewed the purpose, focus, goals, objectives, and resources for the Committee. She stated staff is in the process of translating all Board licensing application forms. She summarized the changes mandated by legislation since the last meeting, such as, a signed acknowledgment is now required on the licensing

applications and renewal forms, showing that the applicant understands basic labor laws as provided in the Board's publication, *Know Your Workers' Rights*.

3. Agenda Item #3, DISCUSSION AND IDENTIFICATION OF WORKER RIGHTS CONCERNS WITHIN THE INDUSTRY

Ms. Underwood noted that in view of the publicized wage theft issues exposed in New York, the California Legislature have focused attention on making sure that Board licensees are in compliance with labor laws. This is in part why this committee was formed, to discuss trends related to health and safety and workers' rights concerns within the industry. Ms. Underwood summarized the Board's efforts regarding the translation of all Board documents and the development of the *Know Your Workers' Rights* publication. Ms. Underwood referred to the *Know Your Worker's Rights* document in the meeting packet and pointed out a minor change that will be made: that overtime is over eight hours. This document has been approved by this Committee, the Board, and Legal Counsel and will be posted on the website on July 1, 2017. She invited the members to share their workers' rights concerns.

4. Agenda Item #4, DISCUSSION AND POSSIBLE ACTION TO RECOMMEND TO THE BOARD STEPS TO IMPROVE LICENSEES' AWARENESS OF LABOR LAWS. REVIEW OF BOARD PUBLICATION "KNOW YOUR WORKER'S RIGHTS"

Mr. Fred Jones, a Committee Member, suggested using a voice other than the second person pronoun to keep the document objective. There are times when the document only addresses employees. He suggested broadening the title to "Understand Rights and Obligations of California Labor Law." Ms. Underwood stated Mr. Jones's suggestions will be considered for future edits.

Mr. Richard Hedges, a Board Member, stated the document does not discuss State disability insurance. He suggested including information in the workers' compensation portion and adding information on state disability insurance and workers' compensation to the Board's website.

Mr. Jones suggested adding city or municipal permits to future edits.

Ms. Underwood stated the need to focus on what the law requires the Board to do with this document, which is to make licensees aware of basic labor laws. She asked for input on how to better inform the public about their workers' rights.

Public Comment

Wendy Jacobs, Founder, California Esthetician Alliance, stated many estheticians are independent contractors or booth renters. She stated having both an establishment and/or a booth renter license for estheticians may clear up many labor concerns.

DeeDee Crossett, a Committee Member, was concerned that the information in the Board's Health and Safety Training Course would be included in the National-Interstate Council of State Boards of Cosmetology (NIC) exam before schools could incorporate it into their lesson plans. Ms. Underwood stated the information in the Health and Safety Course is required by the Board but will not be part of the NIC exam.

Ms. Crossett suggested the Board do outreach to the major industry shows to help promote the *Health and Safety Training Course*, specifically the section on Workers' Rights.

Julia Liou, a Committee Member, recommended the Board include this information on the NIC exam so that there will be more incentive for students to make an effort to understand it.

Ms. Crossett suggested the Board look into expanding the options for licensees to provide their email address. The Board may consider emailing a PDF of the workers' rights information, at the time license renewal, with a link to the updated health and safety requirements.

Ms. Liou pointed out an inaccuracy in the *Know Your Workers' Rights* publication on page 4, in the minimum wage requirements section. She stated minimum wage is \$10.50 per hour for shops that have 26 employees or more.

Mr. Jones suggested also including the schedule of increases of minimum wage until 2023, on page 4, so the document will not be outdated on January 1st.

Ms. Underwood stated the Board's plan to make licensees aware of this information is to provide them with a link to information, update the website to include a special button for workers' rights, include information on the initial and renewal applications, and possibly email information in a PDF form upon license renewal. She stated staff has been promoting an interested parties email list at industry shows and inspections. In less than one year, the email list has grown from 200 to over 3,000 names.

Lisa Thong, a Board Member, asked if there is a list of partners the Board has worked with in the past, such as community groups, nonprofit organizations, or legislative offices, to help get the word out about this document. Ms. Underwood answered in the affirmative and stated staff will look into sending information to them as well.

Ms. Thong asked to add an opt-in option on this document for licensees to receive information from the Board, and to consider other ways to increase the number of individuals who opt in to receive email notifications from the Board.

Ms. Liou mentioned she would provide staff with a list of media contacts the Board may consider sending the Workers' Rights information out to.

Mr. Hedges suggested adding a link on the website for applicants to click on to verify the current minimum wage, because it is constantly changing.

Mr. Jones suggested referencing the piece rate law - Assembly Bill 1513 (AB 1513). There are frequently asked question (FAQ) pages at the Department of Industrial Relations (DIR) that can be helpful.

Mr. Hedges stated the state laws are more demanding than the federal laws. He suggested changing the contact number for additional information on page 5, to the State number instead of the federal number that is currently in the document.

Ms. Thong asked to separate the federal and state agencies on page 8 for clarity.

Ms. Thong asked to have the Department of Consumer Affairs (DCA) do a press release for this document with the intent of providing the information to ethnic media.

Mr. Jones suggested contacting reporters directly. Ms. Underwood stated staff will consult with the DCA's Public Affairs Office.

Amy Coombe, a Committee Member, stated the Employment Development Department (EDD) and the Labor Commissioner's Office teach free classes for employers on topics, such as independent contractors versus employees, hourly rates, piece rate, commission, minimum wage, overtime, and employment law.

Ms. Thong hoped that the Board could mimic Franchise Tax Board in that they hold 45-minute webinars followed by live question and answer sessions facilitated by subject matter experts from EDD, Franchise Tax Board and the DIR. The webinars are posted to YouTube. She suggested recording a live session with representatives from the Department of Labor, the EDD, and others as an open communication channel for licensees.

Mr. Jones stated AB 1513 noncompliance is greatly due to the lack of knowledge because the law is contrary to long-held customs and norms. He stated the need for the mandates in AB 1513 to be communicated in the most simple, accessible ways to those who have to abide by it. He suggested that the Board post AB 1513 information on the Board's website. He suggested as a future agenda item that DIR do a presentation to the committee on areas of confusion such as what commission wages look like in the year 2017 to bring clarity and increase compliance. He asked that DIR create information that is specific to the Barbering and Beauty industry.

Mr. Hedges suggested adding a section to the Board's website that lists the long-term benefits of paying into the system, such as disability insurance and social security. Ms. Blaschke agreed and suggested providing numerical examples to demonstrate how by contributing a certain dollar amount you reap better results.

Regarding the *Know Your Workers Rights* publication, Ms. Thong asked to move the second-to-the-last paragraph in the 'In Conclusion' section on page 9 to the beginning of the document (the materials provided in this lesson are not all inclusive). Mr. Jones suggested having it in both places. Mr. Hedges agreed.

Ms. Thong suggested using text that is more visual, such as charts and infographics that are easier to understand. It will make the information more shareable and can be put on social media.

Ms. Crossett suggested including places in the document to 'click for further information' to increase interest.

Leslie Roste, a Committee Member, suggested passing the document by a couple of 19- or 20-year-old licensees to ensure they understand all the terms.

Ms. Crossett suggested including the ability to click on terms for their definitions.

Tami Guess, Board Project Manager, read Committee Member, Shirley Arnett's comments regarding the *Know Your Worker's Rights* document, into the minutes as follows:

"I was able to review the publication and found it to be very informative and really touched base with very important issues and concerns in our industry."

*I believe being educated in these areas is the key to satisfying careers and less confusion on expectations from both the employer and employees.
I also like the clear definition of an employee vs. booth rental or independent contractor.*

This can really help support many in our industry.”

Ms. Liou suggested holding a community forum on this document. Ms. Underwood stated the Board is more than willing but must first request travel approval. Mr. Hedges stated he would be willing to attend a community forum in the Bay Area.

Ms. Thong proposed incorporating a community forum or town hall on the same day and location as a regularly scheduled Board meeting, to alleviate travel cost concerns. Ms. Underwood agreed but cautioned that the Board’s role is awareness, not the interpretation of labor law.

5. Agenda Item #5, DISCUSSION REGARDING POTENTIAL HEALTH AND SAFETY CONCERNS WITHIN THE INDUSTRY

Ms. Roste suggested the Board produce an industry bulletin about a licensees’ right to refuse service. She noted salon owners frequently prevent their employees from refusing service so it’s important for licensees know they have a right to refuse service if there is a concern.

Mr. Hedges stated California just passed a law mandating that deductions from employees’ salaries go into a fund that will allow employees to carry it from employer to employer.

Ms. Crossett stated the importance of presenting the Board’s outreach information to all salon owners as a way to help them so salon owners feel comfortable in coming to the Board for information. Information should be presented in a forward focused manner.

Ms. Crossett stated the concern that app based businesses (i.e. Uber-like, Lift-like apps designed to set up licensees with customers for services to be provided outside of a licensed brick and mortar establishment) are heavily recruiting graduates and new students. She expressed that the Board needs to make licensees aware that providing that type of service is engaging in unlicensed activity. She stated many licensees are unaware they are breaking the law. In addition, she suggested the Board provide clear, visible information that licensees cannot perform micro blading, micro needling and permanent makeup.

Public Comment

Ms. Jacobs stated individuals tend to want to use needling devices out of their homes. They pretend to be unlicensed and present themselves as trainers. There is also an increased interest in derma-microblading at home parties. Many instructors tell individuals they do not need to be licensed as a permanent makeup (PMU) person. Also, licensees are reporting that they were ripped off by a tattoo school because they were told they only had to be an esthetician.

Dr. Charles H. Washington, a Committee Member stated barbers are beginning to use the same gloves on multiple clients. Ms. Underwood stated if found, they will be cited for a violation.

Mr. Hedges stated one of the largest problems is the manufacturers who willfully sell products that are against the law. They know they are hurting people but consider the sales more important.

Ms. Liou stated there is confusion about foot spa liners, wipes, disinfectants, and water usage.

Ms. Roste mentioned that California law does not allow for the use of wipes or spray disinfectant on the foot spas. Since the State is concerned with water usage, she questioned why disinfectant wipes are not allowed. As a subject matter expert, wipes and spray disinfectants are effective methods in the disinfection process. She stated California law is very narrow in its approved disinfectants and methods. She also stated the concern that many individuals use bleach as a disinfectant because it is inexpensive but noted that not all bleaches are registered with the Environmental Protection Agency (EPA). She expressed concern that the Board's law, as written, wastes water. She feels the Board may want to look at expanding its disinfectant definition and methods. She feels the way the Board defines disinfectant is vague. The law needs to be simplified. Educational materials need to be written in a simple manner. She mentioned there will be several changes in how disinfectants are going to be labeled in the very near future. There is a disconnect between the law and how disinfectants are labeled. For instance, the term *Hospital Grade* is not an EPA recognized word, yet it appears in California Board law. The term either needs to be removed from law or be defined to eliminate confusion.

Ms. Crossett stated the need to convey that how a disinfectant is mixed affects its effectiveness.

Lori Schaumleffel, a Committee Member, stated the concern that the disinfecting towelettes are not sufficiently moist to reach the proper dwell time. She stated contact time or dwell time should be included in the Board definitions. She stated "contact time" is confusing; she suggested the wording, "how long to keep it wet" as it may be easier to understand.

Mr. Hedges asked Committee Member Leslie Roste, MD, to put together a document on types of disinfectants currently available that would be effective, especially for pedicures.

Ms. Roste stated two services that are not well-addressed by the Board are safety precautions for waxing services and eyelash enhancements (not regulated) and lash extensions. She would like to see wax rollers banned from use and more available information on why it is important not to double dip a wax stick.

Regarding waxing and nail services, Ms. Crossett suggest the Board develop information on fair wage and encourage consumers to think about how they are spending their money. By paying an extremely low price point on a service, it may be considered by the consumer if whether or not they are inadvertently encouraging wage trafficking. She suggested pointing out to the consumer how the math just doesn't add

up if you pay an extremely low price point and expect owners to be in compliance with labor and wage regulations.

Mr. Jones stated the Board may be able to help by encouraging consumers to consider the implications of paying a low price point for a manicure.

Ms. Liou mentioned she has heard of complaints that the inspectors, at the time of the inspection, are not educating licensees on why the licensee is being cited. Ms. Underwood stated the Board has provided language access training to all inspectors and has provided the citations related to nail salons to the establishments in the Vietnamese language. Mr. Hedges noted that at the Disciplinary Review Committee (DRC) members encourage appellants to stay and speak with staff for explanations and answers to their questions, however, many chose not to. He noted that at DRC, the appellants also receive a copy of the photos taken by the inspectors at the time of the inspection.

6. Agenda Item #6, DISCUSSION AND POSSIBLE ACTION REGARDING WAYS TO IMPROVE THE BOARD'S RECOGNITION OF HEALTH AND SAFETY CONCERNS WITHIN THE INDUSTRY

Ms. Liou mentioned the California Healthy Nail Collaborative is in the process of creating a model integrating health and safety advice on how to identify if a shop is really upholding workers' rights and health and safety laws. She suggested collaborating with the Board and addressing the topic as an agenda item at the next meeting.

Ms. Crossett asked that schools receive a report from the Board on how their students did in each area of the NIC exam so schools can adjust their teaching methods accordingly. Ms. Underwood is working with NIC to provide this information.

Ms. Roste suggested the Board use photos taken by Board inspectors of violations as an educational outreach tool for schools. Using these real life examples will make more of an impact with students than just telling students the regulations.

Ms. Schaumleffel mentioned partnering with the California Department of Public Health, which has a website that can be used as a resource and as a way to get consumer information out.

Ms. Thong suggested having informal conversations with beauty supply stores about selling prohibited substances.

Ms. Blaschke noted it is forward thinking to start considering the environmental impact of disinfectants and chemicals used by licensees. It was felt by the members that steps should be considered now to reduce the environmental impact.

Ms. Crossett noted making sure students understand, on a practical side, why exercising proper infection control is so important. She suggested using very visual videos posted the Board's website in order to catch the student's attention.

Ms. Schaumleffel noted the Center for Disease Control's (CDC) website has timely information on infection control. She mentioned that the Association of Professionals

and Infection Control (APIC) produce videos for disease transmission and hand hygiene and these resources are available on their website.

7. Agenda Item #7, DISCUSSION OF FUTURE AGENDA ITEMS

Ms. Underwood stated the next meeting is in October in the San Diego area. At that time, staff will report back to the committee on the consumer awareness information that has been discussed at this meeting and staff will take to the Board recommendations provided by the committee on consumer and labor issues brought forth from the committee. At the next meeting staff will provide an update to this committee on what steps have been taken thus far.

Ms. Crossett suggested a presentation on the environmental impact of disinfectants. Ms. Roste acknowledged Ms. Crossett's concerns and acknowledged the environment is also affected by the large amount of chemicals from the industry that get put back into the environment. Mr. Hedges agreed that a presentation would be appropriate.

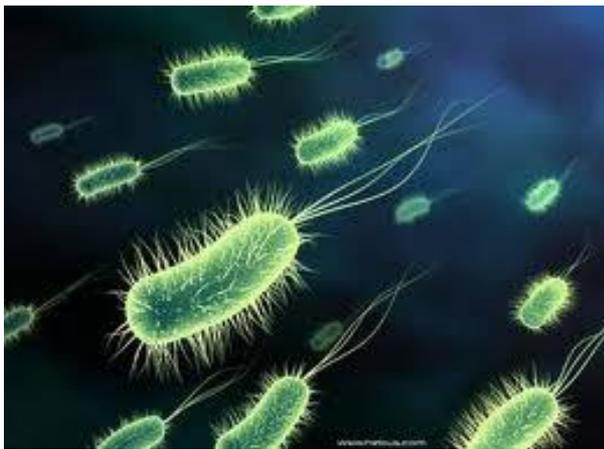
8. Agenda Item #8, PUBLIC COMMENT FOR ITEMS NOT ON AGENDA

Ms. Jacobs asked the Board if there was a regulatory age requirement to receive a Brazilin wax service. Ms. Crossett informed her that determining the age of a client a licensee provides services to falls on the licensee's liability.

9. Agenda Item #9, ADJOURNMENT

There being no further business, the meeting was adjourned.

Disinfectants and Sanitizers in Nail Salons



Chris Geiger, Ph.D.

Swati Sharma

Toxics Reduction Program

San Francisco Department of the Environment



Topics

- Disinfectants in Nail Salons
- The problem
- Definitions
- Methodology
- Findings & recommendations
- Regulatory issues
- Take-home messages



istock

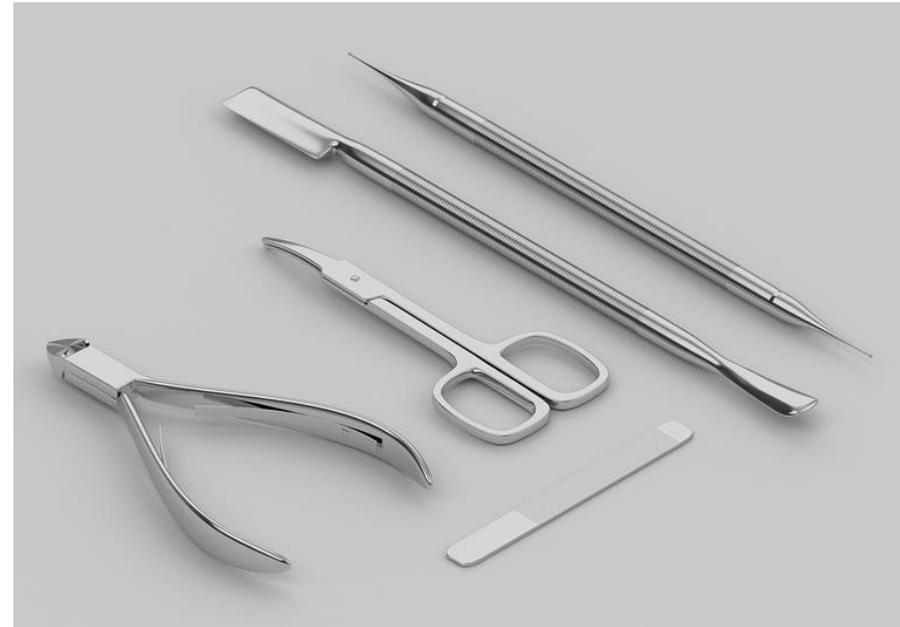


Disinfectant use in Nail salons

Foot Spa



Manicurist Tools



Types of infections in nail salons

- Nail Fungus (onychomycosis)
- Athlete's foot
- Staph infections
- Warts
- Mycobacterium fortuitism
- MRSA
- Hepatitis B or C



Current BBC requirement for disinfecting non-electrical

- *totally immerse in an EPA-registered disinfectant bactericidal, fungicidal, and virucidal activity*



Current BBC requirement for disinfecting electrical

- *Use EPA-registered hospital-liquid disinfectant that is labeled as a bactericide, fungicide and virucide*



Problems with disinfectants



ECOLI



HIV



HERPES



MAD COW



ULCER



MALARIA



POX



EBOLA



COLD



Problems with disinfectants

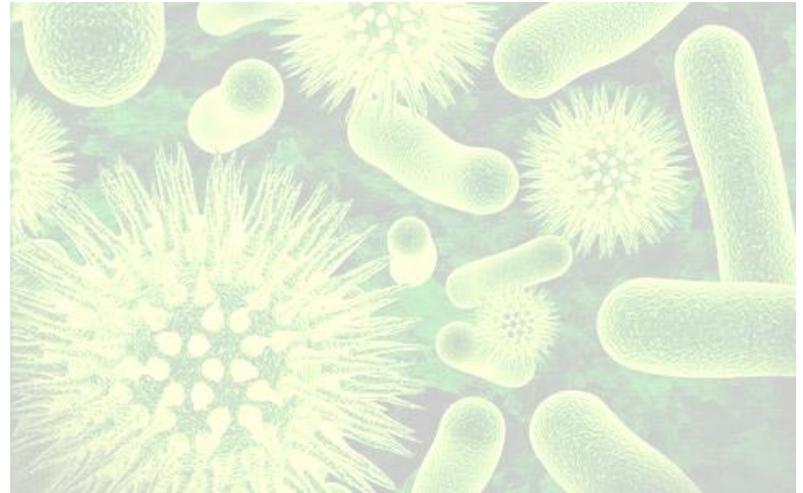


Definitions

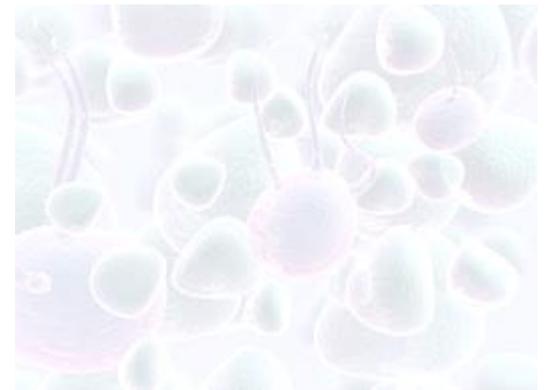
- Non food contact sanitizers

- *Staph*
AND

- Klebsiella pneumoniae* OR *Enterobacter aerogenes*
99.9% in 5 minutes



Definitions



■ Disinfectants

- High-Grade, or Hospital-Grade
 - *Staph*, *Salmonella*, and *Pseudomonas*
99.9999% in 10 minutes
- General
 - *Staph* AND *Salmonella*
99.999% kill in 10 minutes
- Limited
 - *Salmonella* OR *Staph*
99.999% kill in 10 minutes.



Methods

- Active ingredient comparison – USEPA docs, other sources
- Product comparison – label, MSDS review
 - Representative products
- Criteria for products
 - <10 min dwell time for test organisms
 - Efficacy claims for HIV, flu
 - Not carcinogen, repro, asthmagen
 - Low acute toxicity (or delivery system)



Methods

- Factors considered:
 - **Environmental impact:** Labels, MSDS, a.i.
 - **Acute health hazards:** Labels, MSDS
 - **Chronic health hazards:** Labels, MSDS, a.i.
 - **Efficacy:** Mfr claims
 - **Dwell time:** Labels
 - **Cost:** Internet
 - **Registration (CA):** DPR database
 - **Material compatibility:** Labels



Active ingredients considered

- Soap & water
- Hypochlorite “bleach”
- “Quats”
- Hydrogen peroxide
- Pine oil
- Organic acids
(citric/lactic/caprylic)
- Silver + citric acid
- Ortho-phenylphenol
- Thymol
- Steam
- Electrolyzed water



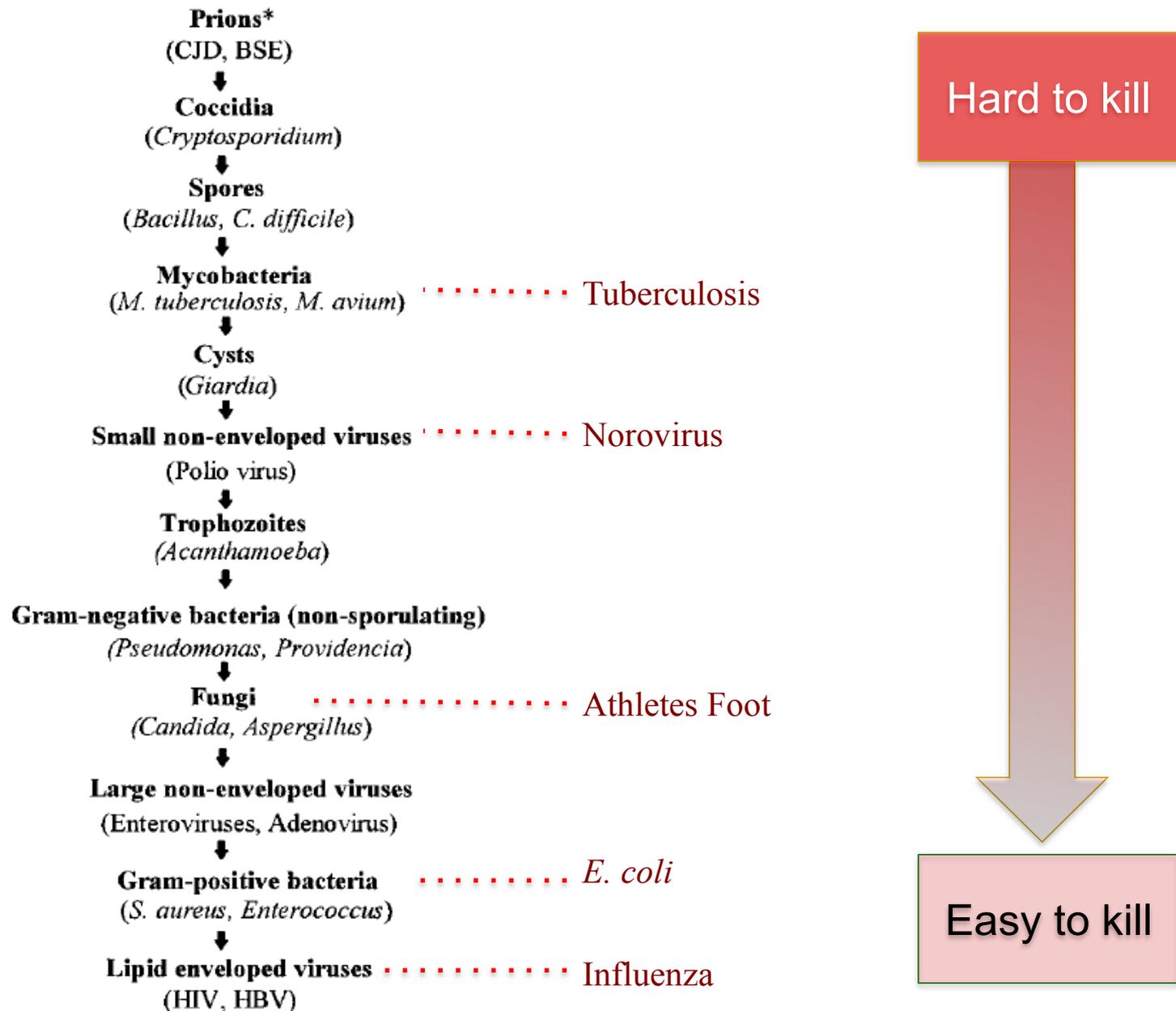
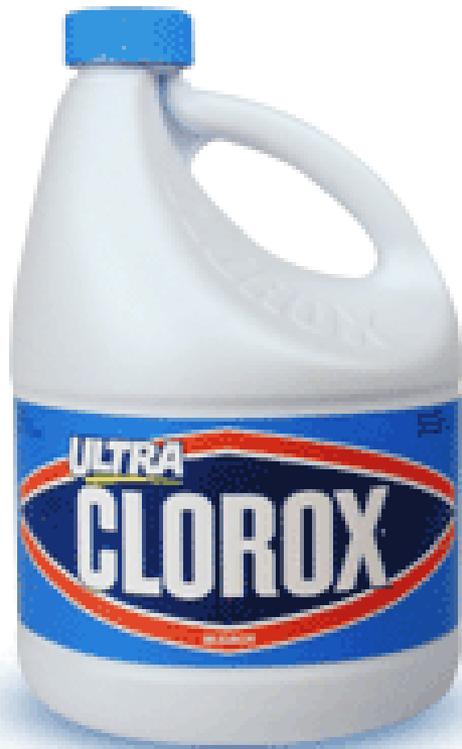


FIG. 1. Descending order of resistance to antiseptics and disinfectants. The asterisk indicates that the conclusions are not yet universally agreed upon.



Option #1: Soap and water





\$1.79 (60 oz)



\$2.00 (10.1 oz)



Typical “Health Care” Disinfectant Dwell Times

| Disinfectant | Dwell Time |
|--|---|
| Bleach (1/2 cup per gallon) | 10 min (B,V,F) |
| Quats (Virex II) | 10 min. (B, V, F) |
| Hydrogen Peroxide (Oxivir TB RTU) | 1 min. (B, V) 10 min. (F) |
| Hydrogen Peroxide (Oxivir 5-16) | 10 min. (B, V, F) |
| Silver Ions + Citric Acid (Critical Care RTU) | 30 sec. -2 min. (B) 1-10 min. (V, F) |
| Citric Acid (Clean-Cide Ready to Use) | 10 min (B,V) |



Quaternary ammonium compounds



| PROS | CONS |
|--|--|
| Widely available, inexpensive | Found in sewage outfalls |
| More stable than bleach | Aquatic toxicity |
| Broader efficacy claims than most other products | Asthmagens; concentrates corrosive |
| Not as sensitive to organics | Forms toxic chloramine gas when mixed with bleach |
| Surfactant – cleans also | Dev & repro toxicity observed (but not Prop 65) |
| Available in neutral pH formulations | More effective in high pH products |
| | Residues toxic and cause sticky build-up (needs rinsing) |



Silver ion compounds



| PROS | CONS |
|--|--|
| Low acute toxicity; Not a skin or respiratory sensitizer | Very high aquatic toxicity |
| Food contact sanitizer and disinfectant – 1-minute dwell time | Persistent, cumulative in herbivores and bivalves |
| Residual antimicrobial action (24 hours; good candidate for “outbreaks”) | Usually formulated with citric acid: Low pH (1.9) – eye hazard |
| Effective against MRSA, Athletes Foot, NoroVirus, E.coli | Not registered for TB |
| Not flammable Low scent | Always RTU – Expensive! |



Pine oil compounds



| PROS | CONS |
|---|---|
| Relatively inexpensive and widely available | Limited efficacy (only gram-neg bacteria, No TB, NoroVirus, Hep, or HIV registrations) |
| Not highly reactive | Eye damage – DANGER labels |
| | Often includes quats, phenols, alcohols |
| | Breaks down into formaldehyde |
| | Some aquatic toxicity |
| | Strong smell, flammable |
| | 10-minute dwell time |
| | Skin sensitizing; possible asthmagen; Absorbs through skin → Neurotoxicity/Kidney effects |



Peroxide compounds



| PROS | CONS |
|---|--|
| Low human toxicity | Eye hazard from concentrates - corrosive |
| Low environmental hazard | Irritating vapors from concentrates |
| Rapidly decomposes to $O_2 + H_2O$ | Animal carcinogen & mutagen, not on Prop 65 list |
| No residues | Some high efficacy products are expensive or only in RTU |
| Effective on full range of microbes | |
| Shorter dwell time than quats, pine oil | |
| Whitens grout; removes stains | |



Thymol



| PROS | CONS |
|--------------------------|--------------------------------------|
| Low environmental hazard | Eye hazard for concentrates |
| Rapidly breaks down | Skin sensitizer |
| Long shelf life | Some aquatic toxicity |
| | Possible repro effects (not Prop 65) |
| | Usually 10 min. dwell time |
| | Strong smell |



Sodium hypochlorite (bleach)



| PROS | CONS |
|---|---|
| CHEAP, widely available | pH 11.5 = severe eye damage |
| Kills wide variety of microbes, versatile; some products kill Tb and/or NoroVirus | Respiratory irritant; Cl_2 and HCl are Asthmagens (AOEC) |
| Leaves no residue | Reacts with organic molecules – environmental hazards |
| | Corrodes metals and floor polish |
| | Not stable – loses potency |
| | Reacts with other chemicals to form toxic gas |



Disinfectants

| Active Ing. | Dwell | Efficacy | (Bact, Virus, Fungi) | Health | Env | |
|--------------------|-------|----------|----------------------|--------|-----|---|
| H PEROXIDE ----- | 1 | BBB | VVV | FF | L | L |
| CAPRYLIC ACID --- | 10 | BBB | VVV | F | M | L |
| CITRIC ACID ----- | 10 | BB | V | 0 | L | L |
| SILVER/CITACID -- | 1 | BBB | VVV | F | L | H |
| LACTIC ACID ----- | 10 | BB | V | 0 | L | L |
| THYMOL ----- | 10 | BB | VV | F | M | L |
| QUATS ----- | 10 | BBB | VVV | FFF | H | M |
| CHLORINE ----- | 1-10 | BBB | VVV | FFF | H | M |
| PINE OIL ----- | 10 | BB | 0 | F | M | L |
| H2O2 + PAA [] --- | 10 | BBB | V | FF | H | L |
| OPP ----- | 10 | BBB | VVV | F | H | H |



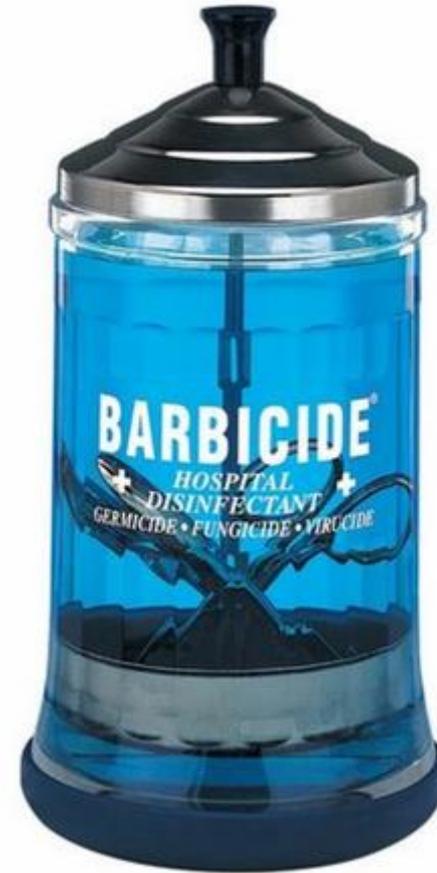


Recommendations

- Sterilize tools using Autoclave



Disinfect tools in closed container



11/20/11



Recommendations for Foot Spa



Recommendations

- Disinfectant
 - Peroxide based health care-grade (e.g., Oxivir Five 16 @ 1:16, Oxivir TB RTU)



Thank You

Chris Geiger

Chris.Geiger@sfgov.org

Swati Sharma

Swati.Sharma@sfgov.org

Toxics Reduction Program

San Francisco Department of the Environment

[Report: Safer Products and Practices for Disinfecting and Sanitizing Surfaces](#)



Disinfectant—A product registered by the U.S. Environmental Protection Agency

| Product | Meets CA Reqs | Disinfectant | EPA Registered | Pre-Cleaning | Mechanism of action |
|--|---------------|--------------|----------------|--------------|--|
| Hydrogen Peroxide | Y | Y | Y | Y | Redox action that destroys cell walls through oxidation |
| Quaternary Ammonium & Isopropal Alcohol Blends | Y | Y | Y | Y | Attaches to cell wall and affects the proteins and cell membrane |
| Accelerated Hydrogen Peroxides | Y | Y | Y | N | Destroys cell walls through oxidation |

| | | | | | |
|--------------------------------|-------------------------|----------|------------------------------------|---|--|
| Chlorine Compounds (bleach) | Y - Chlorine only | Y | SOME | Y | Hypochlorous acid allows O ₂ to bind to protoplasm and inhibits enzymatic activities - destroys cell |
| Alcohols (70% Isopropyl) | Y - Some | Y - Some | Ethanol / Isopropy l Alcohol | Y | Require water as catalyst |
| Iodophors | Y | Y | N | Y | Free Iodine binds with cellular components - creates disorder of protein synthesis due to oxidation of amino acids |

| | | | | | |
|-----------|---|---|------|---|---------------------|
| Phenolics | Y | Y | Some | Y | Destroys cell walls |
|-----------|---|---|------|---|---------------------|

STERILIZATION

| Product | Meets CA Reqs | Disinfectant | EPA Registered | Pre-Cleaning | Mechanism of action |
|---------------------|---------------|--------------|----------------|--------------|---------------------------------------|
| Auto Clave | Y | Sterilizer | FDA | Y | High pressure saturated steam at 121C |
| Dry Heat Sterilizer | Y | Sterilizer | FDA | Y | Dry heat for long periods of time |

| | | | | | |
|----------------|---|---|--|---|-----------------------------------|
| Gluteraldehyde | N | Y | | Y | Highly reactive towards protein F |
|----------------|---|---|--|---|-----------------------------------|

DO NOT MEET CA REQUIREMENTS

| Product | Meets CA Reqs | Disinfectant | EPA Registered | Pre-Cleaning | Mechanism of action |
|--------------|---------------|--------------|----------------|--------------|---------------------|
| Ammonia | N | Minimal | | | |
| Tea Tree Oil | N | N | | | |
| Vinegar | N | Minimal | | | |

ency (EP A).

| Process | Blood | MRSA | Oxidizer | Advantages |
|-----------------------------|-------|------|----------|--|
| Immersion Spray Wipes | Y | Y | Y | Degrades to oxygen and water Readily available |
| Immersion Spray Wipes | Y | Y | N | Rapid action Colorless Odorless Highly stable - 2 year shelf life Broad spectrum kill Readily available Does not damage surfaces |
| Immersion Spray Wipes | Y | Y | Y | Short contact time - 5 minutes Non-corrosive when diluted |

| | | | | |
|---|----------|----------|----------|---|
| <p>Immersion Non-aerosol spray. Aerosol can be irritating to eyes/respiratory tract</p> | <p>Y</p> | <p>Y</p> | <p>Y</p> | <p>Inexpensive Unaffected by hard water Kills wide range of organisms Easy to purchase</p> |
| <p>Spray Wipes</p> | <p>Y</p> | <p>N</p> | <p>N</p> | <p>Inexpensive 2 year shelf life in sealed container Remains bactericidal in the presence of organic matter</p> |
| <p>Spray Wipe</p> | <p>N</p> | <p>Y</p> | <p>Y</p> | <p>2 year shelf life in sealed container away from light When colorless, no longer effective Non-toxic and non-irritating Stable over wide pH range</p> |

| | | | | |
|-----------------|---|------|---|--|
| Immersion spray | y | Some | N | Readily available some efficacy even in the presence of hard water some efficacy in the presence of organic material |
|-----------------|---|------|---|--|

| Process | Blood | MRSAOxidizer | | Advantages |
|---------|-------|--------------|---|---|
| | Y | Y | N | Eradicates all microbial life (including spores), no use of chemicals |
| | Y | Y | N | penetrates materials relatively low cost |

| | | | | |
|--|---|---|---|-----------------------|
| | Y | Y | N | Colorless Odorless |
|--|---|---|---|-----------------------|

| Process | Blood | MRS A | Oxidize r | Advantages |
|---------|-------|----------|--------------|------------|
| | | | | |
| | | | | |
| | | | | |

| Disadvantages | EPA Toxicity Rating | Cost: Time* |
|---|---------------------|-------------------------------|
| <p>Strong odor</p> <p>Bleaches surfaces / fabrics</p> <p>Unstable</p> <p>Corrosive</p> <p>Carcinogen</p> | <p>I</p> | <p>10 minute contact time</p> |
| <p>Not sporocidal</p> <p>Effectiveness influenced by hard water</p> <p>Requires cleaning prior</p> <p>Some respiratory sensitization in asthma</p> <p>Toxic to aquatic animals as concentrate</p> <p>Not effective on non-enveloped viruses</p> <p>Organic matter reduces effectiveness</p> | <p>III</p> | <p>2-10 minutes</p> |
| <p>2 year shelf life</p> <p>Expensive</p> <p>Excessive Packing Waste</p> | <p>II or IV</p> | <p>5 minutes</p> |

| | | |
|--|-----------|--|
| <p>3 month shelf life Corrosive Organic matter reduces effectiveness Increased alkalinity decreases bactericidal property Irritant to eye mucosa /respiratory tract Poisonous gas created by mixing with common household chemicals (ammonia / vinegar) Corrosive to eyes/skin Suspected toxicant Must be stored separately from flammable substances Requires cleaning prior Toxic to aquatic organisms</p> | <p>I</p> | <p>5-10 minutes</p> |
| <p><50% and >70% not effective Highly flammable Eye irritant Toxic Neutralized by organic matter Evaporates quickly - contact time cannot be met May burn skin / mucous membranes Can harden and ruin plastics and rubber</p> | <p>IV</p> | <p>20-30 minutes</p> |
| <p>Variable bactericidal efficacy Staining to skin, surfaces and clothing Neutralized by organic matter Cannot be used on copper or aluminum Highly toxic to aquatic life Expensive Strong Oxidizer</p> | <p>I</p> | <p>Not recommended for hard surfaces</p> |

| | | |
|--|----------------|--------------|
| <p>1 year shelf life Suspected carcinogen Concentrates potentially not available after 2018 Destructive to plastics and metals Irritant to mucosa of eyes, skin and mucous membranes Toxic to all animals Residual amounts remain in environment May damage floor finishes Leaves residue - requires rinsing Not effective against some non-enveloped viruses and some gram negative bacteria</p> | I or II | 2-10 minutes |
|--|----------------|--------------|

| Disadvantages | EPA Toxicity Rating | Cost: Time* |
|---|---------------------|---|
| <p>Not suitable for plastics (requires Ethylene Oxide processing) Expensive Must be spore tested monthly with results verified through independent lab Extensive preparation High energy (electrical) use</p> | | 30 minutes as 250F at 15 PSI + 30 minute dry time |
| <p>Time Cost electrical use temperature can inconsistent in chamber Can ruin plastics and rubber</p> | | 1-2 hours |

| | | |
|---|-----------|---------------------------|
| <p>Pungent smell Throat/lung irritation, asthma , skin irritant, sneezing, wheezing, burning eyes, conjunctivitis Toxic Requires a deactivation compound to dispose of</p> | <p>II</p> | <p>12 minutes at 20 C</p> |
|---|-----------|---------------------------|

| Disadvantages | EPA Toxicity Rating | Cost: Time* |
|---------------|---------------------|-------------|
| | | |
| | | |
| | | |

| Cost: Price* | Cost: Environmental* | Notes |
|--------------------------------------|----------------------|---|
| \$20.00/Gallon RTU | | |
| 2 oz. per jar / day = 10 oz/ week | | |
| \$205.48 / gallon ready to use | | * Listed as one step product, but cleaning prior is recommended |

| | | |
|---|---|--|
| <p>\$5.00/ gallon 3 Tablespoons to 1 Gallon</p> | <p>Corrosive Toxic to aquatic organisms</p> | |
| <p>\$37.34 / Gallon RTU</p> | | |
| | | |

| | | |
|--------|--------------------------------------|--|
| Varies | Harmful to environment when disposed | |
|--------|--------------------------------------|--|

| Cost: Price* | Cost: Environmental* | Notes |
|--|----------------------------------|-------|
| Varies widely - must also purchase pouches and test tape | Electricity, pouches in landfill | |
| Sterilizer, pouches, electricity | Electricity, pouches in landfill | |

| | | |
|----------------------|---|--|
| \$56/84 / gallon RTU | Difficult to dispose of in environmentally conscious manner | |
|----------------------|---|--|

| Cost: Price* | Cost: Environmental* | Notes |
|--------------|----------------------|-------|
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| | | |
| | | |

Disinfecting Options

October 2017

Clean, Sanitize, Disinfect... Sterilize

Setting the Terms Straight

- ▶ Clean: Removal of surface/visible debris. Prepares a non-porous item for disinfection or sterilization. Maximum achievable infection control for porous items.
- ▶ Sanitize: Effective against “some bacteria” - no viruses, fungi. Not acceptable for multi-use implements.
- ▶ Disinfect: Destruction/Denaturing of bacteria, viruses & fungi on non-porous surfaces/implements. Acceptable for multi-use items.
- ▶ Sterilize: Destruction of all microbial life. Generally done in this industry with autoclave. Acceptable for multi-use items.

California Requirements

- ▶ Disinfectant—A product registered by the U.S. Environmental Protection Agency (EPA) that has demonstrated bactericidal, fungicidal and virucidal activity. The products used must include a label from the manufacturer that indicates the EPA registration and must be in liquid form to disinfect non-electrical tools and spray or wipe form to disinfect electrical tools and shears. Requires immersion - except shears/electrical
- ▶ Sterilize or Sterilization—The process which removes or kills all forms of microbial life, including transmissible agents (such as fungi, bacteria, viruses and spore forms) by use of an autoclave or dry heat sterilizer.
 - ▶ Autoclave—A device used to sterilize tools, equipment and supplies by subjecting them to high-pressure saturated steam.
 - ▶ Dry Heat Sterilizer—A device used to sterilize equipment and supplies by use of hot air that is nearly or completely free of water vapor.

Costs

- ▶ "Costs" determined based on 1 stylist, 50 clients/week
- ▶ Financial Cost
 - ▶ Materials required to disinfect
 - ▶ Deterioration to implements
- ▶ Time
 - ▶ Amount of time required to complete disinfection properly
 - ▶ Contact Time
- ▶ Environmental
 - ▶ Electricity, water
 - ▶ Disposal

Considerations for Compliance

- ▶ Cost
 - ▶ Highly cost sensitive industry
 - ▶ Shipping/Storage of large volumes (RTU's)
- ▶ Time
 - ▶ Process
 - ▶ Daily
- ▶ Availability
 - ▶ Difficult to obtain = poor compliance

State Labor Law

Piece-rate

Mission Statement

- ▶ The mission of the California Labor Commissioner's Office is to ensure a just day's pay in every workplace in the state and to promote economic justice through robust enforcement of labor laws. By combating wage theft, protecting workers from retaliation, and educating the public, we put earned wages into workers' pockets and help level the playing field for law-abiding employers. This office is also known as the Division of Labor Standards Enforcement (DLSE).

AB 1513

- ▶ AB 1513 adds section 226.2 to the California Labor Code, which applies “for employees who are compensated on a piece-rate basis for any work performed during a pay period.”

Piece-Rate Compensation

- ▶ Piece-rate wages cannot be used to satisfy the employer's obligation to pay minimum wage for non piece-rate work. Each hour of non piece-rate work must be separately compensated by an additional payment equal to or exceeding the minimum wage. (*Gonzalez v. Downtown LA Motors, LP* (2013) 215 Cal.app.4th 36)
- ▶ The time spent taking a rest period must be separately compensated by an additional payment that compensates the employee at the applicable rate of pay. (*Bluford v. Safeway Stores, Inc.* (2013) 216 Cal.App.4th 864)

Piece-Rate Compensation

- ▶ The rate of compensation for rest periods shall be the *higher* of:
 - ▶ An average hourly rate determined by dividing the total compensation for the workweek, exclusive of compensation for rest and recovery periods and any premium compensation for overtime, by the total hours worked during the workweek, exclusive of rest and recovery periods.
 - ▶ The applicable minimum wage.

How to Determine the Average Hourly Rate to be Paid for Rest Periods if Employees are Paid by Piece-Rate

An employee is assigned to perform piece-rate work each day, five days per week, from 8:00 a.m. to 4:30 p.m. The employee takes a 30-minute meal period each day and two ten-minute rest periods each day. The employee is continuously engaged in piece-rate work except for the daily 30-minute meal period and the daily two 10-minute breaks. Employee's total piece-rate earnings for the week are \$500.00.

- Hours assigned to piece-rate work = 40 hrs.
- Rest period hours = 100 minutes/60 minutes = 1.67 hrs.
- Piece-rate hours = 40 hrs. - 1.67hrs. = 38.33 hrs.
- Hourly piece-rate wage = \$500.00/38.33 hrs. = \$13.04
- Rest period payment = \$13.04 x 1.67 hours = \$21.78
- Total Compensation = \$500.00 + \$21.78 = \$521.78