

Promoting Health and Safety in Nail Salons through the Michigan Healthy Nail Salon Cooperative

Presentation by Stephanie K. Sayler, MS, CIH University of Michigan School of Public Health Department of Environmental Health Sciences



Center for Health, Work & Environment

colorado school of public health



Outline

- Why we got started
 - The Need
 - The Partnerships
 - The Framework
- How we got started
 - The Beginning
 - The Air Sample Results
 - The First Meeting
 - The Focus Groups
- Where we are now
- Where we are going

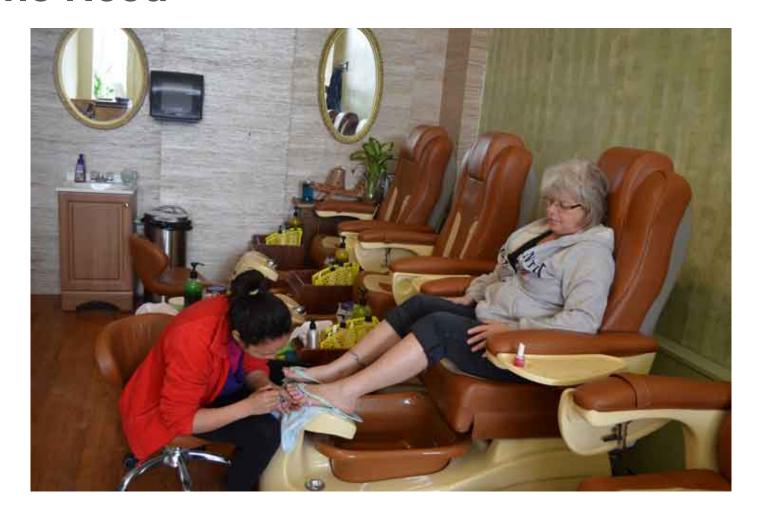


The Need





The Need





The Need







Search this site

Home Research People

Batterman Lab - Exposure and Environmental Impact Assessment

Description



Our teaching and research address a wide range of topics in occupational, indoor and environmental settings. Topics include exposure assessment (especially for particulate matter and volatile organic compounds or VOCs); emerging contaminants in occupational, ecological and environmental settings (e.g., brominated flame retardants); biological monitoring (e.g., blood, breath); air quality monitoring (indoor, outdoor); air pollution control engineering (e.g., vapor and particle air filtration); and environmental epidemiology. Other research activities include characterization of VOCs and SVOCs in air, soils and fuels, environmental impact assessment, risk assessment, environmental statistics, uncertainty analysis; VOC measurement techniques, disinfection by-products in drinking water; hazardous waste/medical waste management; environmental justice; sustainable systems; urban scale air pollutant modeling; environmental impacts of energy production; infectious water-related diseases; and life cycle analysis. Much of this work is done internationally, especially in Africa and Europe.

Leader



Stuart Batterman, Ph.D.

Professor, Environmental Health Sciences, School of Public Health

Professor, Water Resources and Environmental Engineering, College of Engineering

Professor, Faculty of Science and Technology, University of Coimbra, Portugal

Workplace Health Without Borders – US Branch

Dedicated to ensuring healthy working conditions for workers everywhere



Projects

WHWB-US presently are working on, developing and supporting the following projects which strive to build occupational health and safety capacity or help improve the lives of under represented worker populations. We help support our members who may need additional resources to participate in conferences or joint projects with other non-governmental organizations. The following are a list of on-going projects:

- OHTA Learnings Project
- Student Project/Travel Grants
- Brick kilns Project
- Healthy Nail Salons Project

Donate to WHWB-US

US tax deductible donations go to WHWB-US for projects in the USA and around the world as well as helping support operations of the organization. All time is volunteered, there are no paid staff so more funds and resources can go to where it is needed.







Who We Are What We Do

Healthy Salons Resources Join Us & Take Action



Our Mission

The Collaborative's mission is to improve the health. safety, and rights of the nail and beauty care workforce to achieve a healthier, more sustainable, and just industry.

We are winning worker protections, fostering the creation of "healthy salons," and improving public health.

The Latest News



Why not put ingredients on professional cosmetics?

Currently, the law requires that ingredients have to be listed on the labels of the cosmetics and personal care products you and I buy at drugstores and department stores products like make-up, body lotions, shampoo, nail polish, hair perm kits



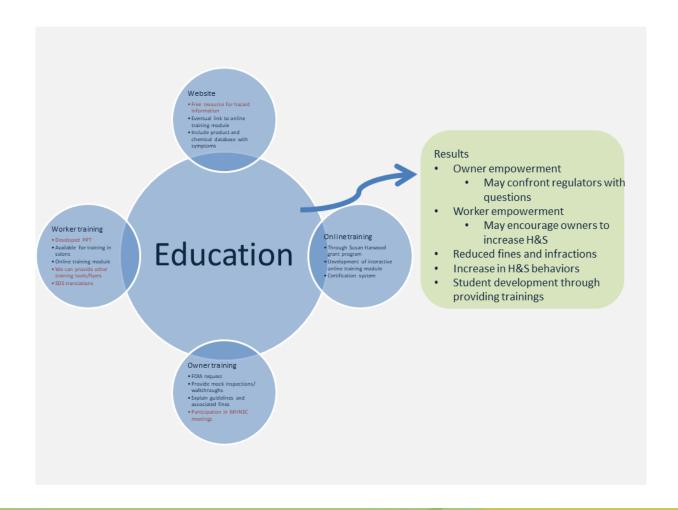


















Potential Funding Sources





Find it in OSHA

Q A TO Z INDEX

Occupational Safety and Health Administration

English | Spanish

ABOUT OSHA * WORKERS * EMPLOYERS * REGULATIONS * ENFORCEMENT * TOPICS * NEWS & PUBLICATIONS * DATA * TRAINING *



Susan Harwood Training Grant Program

The Susan Harwood Training Grant Program awards grants to nonprofit organizations on a competitive basis. Awards are issued annually based on Congressional appropriation.

The focus of the program is to provide training and education for workers and employers on the recognition, avoidance, and prevention of safety and health hazards in their workplaces, and to inform workers of their rights and employers of their responsibilities under the OSH Act. Target audiences include underserved, low-literacy, and workers in high-hazard industries. Since 1978, over 2.1 million workers have been trained through this program

In Focus

- U.S. Department of Labor Awards \$10.5 Million in Training Grants To 80 Nonprofit Organizations for Workplace Safety and Health
- Prior Year Funding Opportunities and Award Announcements

Quick Links

FY 2017 Susan Harwood Targeted
 Topic Grant Recipients

mihealthysalons.org

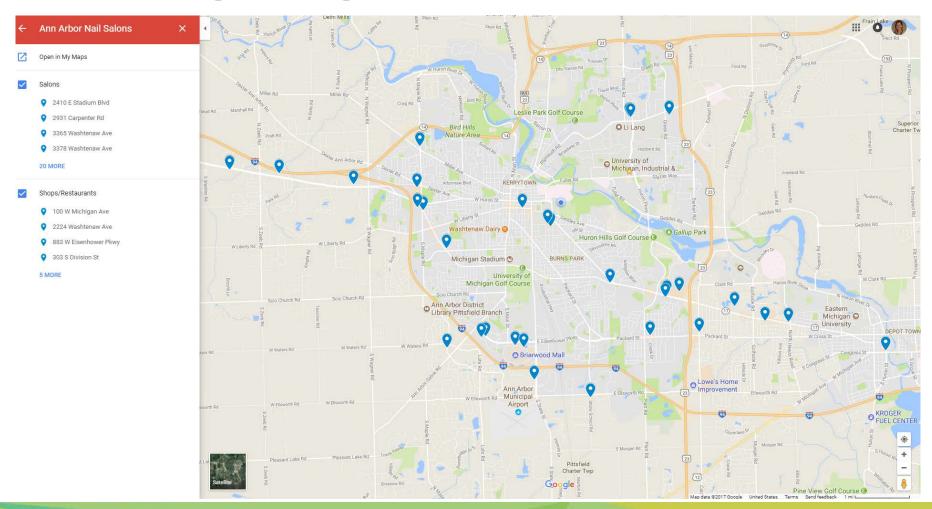
About What we do Resources Contact

MICHIGAN HEALTHY NAIL SALON COOPERATIVE WORKING TOGETHER TODAY, FOR A HEALTHIER TOMORROW

Search search









Study ID: HUM00129905 IRB: Health Sciences and Behavioral Sciences Date Approved: 4/27/2017

UNIVERSITY OF MICHIGAN
SCHOOL OF PUBLIC HEALTH
HEALTHY NAIL SALON PROGRAM





- Come share your thoughts
- Get paid for participating

The University of Michigan is conducting a study among nail salons in Michigan to gather information on salon workers and their health.

Please consider 'joining hands' with us to learn more about the growing community of healthy nail salons across the country.

Participation is simple and easy. Come to our focus group dinner and receive money for participating.

nailsalonstudy@umich.edu	nailsalonstudy@umich.edu	nailsalonstudy@umich.edu	nailsalonstudy@umich.edu	nailsalonstudy@umich.edu	nailsalonstudy@umich.edu
734-647-4379	734-647-4379	734-647-4379	734-647-4379	734-647-4379	734-647-4379

LIÊN HIỆP NGÀNH NAIL LÀNH MẠNH ĐẠI HỌC UNIVERSITY OF MICHIGAN





- Đến chia sẻ suy nghĩ
- Tham gia và nhân tiền

Đại học Michigan đang tiến hành một nghiên cứu của các tiệm móng tay ở tiểu bang Michigan để thu thập thông tin về thợ và sức khỏe của họ.

Vui lòng xem xét 'nắm tay' với chúng tôi để tìm hiểu thêm về cộng đồng tiệm móng tay an toàn trên khắp đất nước.

Việc tham gia rất dễ dàng. Đến cuộc hợp nhóm tập trung của chúng tôi, ăn một bữa ăn tối, và nhận tiền mặt khi cuộc hợp này xong!

nailsalonstudy@umich.edu 734-647-4379 nailsalonstudy@umich.edu 734-647-4379	nailsalonstudy@umich.edu 734-647-4379	nailsalonstudy@umich.edu 734-647-4379	nailsalonstudy@umich.edu 734-647-4379	nailsalonstudy@umich.edu
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University of Michigan Nail Salon Survey - 2016

1. How many years	has your salon been i	n business at this cur	rent location?	(years)
2. Approximately h	ow many workers in y	our salon provide na	ils services?	
3. Do you belong to	any trade association	ns or other profession	al organization	is? If so, please list:
4. What is/are the	primary language(s) s	poken in your shop? (Check all that a	pply)
\square_1 English	\square_2 Vietnamese	\square_3 Chinese/I	Mandarin	□ ₄ Cantonese
\square_5 Filipino/Tagalog	\square_6 Spanish	□ ₇ Arabic		□ ₈ Portuguese
□ ₉ Hindi	□ ₁₀ Khmer	\square_{11} Korean		□ ₁₂ Other:
\square_1 Manicure/pedicur \square_3 Manicure/pedicur	_	□ ₂ Manicure,		icial nail application or finish (shellac, gel, etc.)
6. What other salor	n services are offered	here? (Check all that	apply)	
\square_1 Hair/make-up		□₂Massages		□₃Waxing
□ ₄ Dermatological		□ ₅ Spray tanning		□ ₆ Tanning beds
□ ₇ Other:		-		
7. Approximately w	hat percentage of yo	ur business involves n	ail services?	
□ ₁ <25%	□₂ 25-50%	□₃ 50-75%	□ ₄ >75%	

www.useconterence.com



2 months – 17 years



1. How many years	nas your salon been	in business at this curi	rent location?	(years)
2. Approximately h	ow many workers in	your salon provide nai	ls services?_	
3. Do you belong to	o any trade associatio	ns or other profession	al organizatio	ns? If so, please list:
4. What is/are the	primary language(s) s	poken in your shop? (Check all that	apply)
\square_1 English	\square_2 Vietnamese	\square_3 Chinese/N	Mandarin	□ ₄ Cantonese
□₅ Filipino/Tagalog	□ ₆ Spanish	□ ₇ Arabic		□ ₈ Portuguese
□ ₉ Hindi	□ ₁₀ Khmer	\square_{11} Korean		□ ₁₂ Other:
\square_1 Manicure/pedicu	ces are offered here? re, regular or French re, acrylic	□ ₂ Manicure,		ificial nail application er finish (shellac, gel, etc.)
6. What other salor	n services are offered	here? (Check all that a	apply)	□₃Waxing
□ ₄ Dermatological		□ ₅ Spray tanning		□ ₆ Tanning beds
□ ₇ Other:		-		
7. Approximately w	vhat percentage of yo	ur business involves n	ail services?	
□. <25%	□- 25-50%	□- 50-75%	□.>75%	





□1 <25%</p>

□₂ 25-50%

University of Michigan Nail Salon Survey - 2016

1. How many years	has your salon been	in business at this current location	?(years)
2. Approximately h	ow many workers in	your salon provide nails services?	
3. Do you belong to	o any trade associatio	ns or other professional organizati	ions? If so, please list:
4. What is/are the	primary language(s) s	poken in your shop? (Check all tha	rt apply)
□ ₁ English	□ ₂ Vietnamese	□ ₃ Chinese/Mandarin	□ ₄ Cantonese
□ ₅ Filipino/Tagalog	□ ₆ Spanish	□ ₇ Arabic	□ ₈ Portuguese
□ ₉ Hindi	□ ₁₀ Khmer	□₁₁Korean	□ ₁₂ Other:
□₁Manicure/pedicu	re, regular or French re, acrylic	\square_2 Manicure/pedicure, ar \square_4 Manicure/pedicure, ot	tificial nail application ther finish (shellac, gel, etc
□₅Other:		_	
6. What other salo	n services are offered	here? (Check all that apply)	
□1Hair/make-up		□₂Massages	□₃Waxing
□ ₄ Dermatological		□ ₅ Spray tanning	□ ₆ Tanning beds
-			

□3 50-75%

4-20 workers

□₄ >75%

All "no" ·



1. How many years	has your salon been	in business at this current	t location?	(years)
2. Approximately h	ow many workers in	your salon provide nails s	ervices?	
3. Do you belong to	o any trade associatio	ns or other professional o	organizations? I	f so, please list:
4. What is/are the	primary language(s) s	poken in your shop? (Che	ck all that apply	v)
□ ₁ English	□ ₂ Vietnamese	\square_3 Chinese/Mar	ndarin 🗆	4 Cantonese
□₅ Filipino/Tagalog	□ ₆ Spanish	□ ₇ Arabic		8 Portuguese
□ ₉ Hindi	□ ₁₀ Khmer	\square_{11} Korean		12 Other:
5. Which nail service	ces are offered here?	(Check all that apply)		
□₁Manicure/pedicu	re, regular or French	□ ₂ Manicure/pe	dicure, artificial	nail application
□ ₃ Manicure/pedicu	re, acrylic	\square_4 Manicure/pe	dicure, other fin	ish (shellac, gel, etc.
□₅Other:				
6. What other salo	n services are offered	here? (Check all that app	ly)	
\square_1 Hair/make-up		□₂Massages		₃Waxing
□ ₄ Dermatological		□ ₅ Spray tanning		Tanning beds
□ ₇ Other:				
7. Approximately v	what percentage of yo	our business involves nail s	services?	
□ ₁ <25%	□₂ 25-50%	□₃ 50-75% □]4>75%	





□1 <25%</p>

University of Michigan Nail Salon Survey - 2016

1. How many years	has your salon been i	n business at this current location? _	(years)
2. Approximately h	ow many workers in y	our salon provide nails services?	
3. Do you belong to	any trade association	s or other professional organization	s? If so, please list:
4. What is/are the p	primary language(s) sp	ooken in your shop? (Check all that a	pply)
□₁ English	□ ₂ Vietnamese	\square_3 Chinese/Mandarin	\square_4 Cantonese
□₅ Filipino/Tagalog	□ ₆ Spanish	□ ₇ Arabic	□ ₈ Portuguese
□ ₉ Hindi	□ ₁₀ Khmer	□11Korean	□ ₁₂ Other:
5. Which nail service □₁Manicure/pedicure	es are offered here? (Check all that apply) □₂Manicure/pedicure, artifi	icial nail application
□₃Manicure/pedicur	e, acrylic	\square_4 Manicure/pedicure, othe	r finish (shellac, gel, etc.)
□₅Other:		-	
6. What other salor	services are offered l	nere? (Check all that apply)	
□₁Hair/make-up		□₂Massages	□₃Waxing
□ ₄ Dermatological		□ ₅ Spray tanning	□ ₆ Tanning beds
□ ₇ Other:		-	

4 English and 2 Vietnamese

7. Approximately what percentage of your business involves nail services?

□₂ 25-50%



University of Michigan Nail Salon Survey - 2016

1. How many years	s has your salon been	in business at this current location?	(years)
2. Approximately h	now many workers in y	your salon provide nails services? _	
3. Do you belong to	o any trade association	ns or other professional organizatio	ns? If so, please list:
4. What is/are the	primary language(s) s	poken in your shop? (Check all that	apply)
\square_1 English	\square_2 Vietnamese	\square_3 Chinese/Mandarin	□ ₄ Cantonese
□ ₅ Filipino/Tagalog	\square_6 Spanish	□ ₇ Arabic	□ ₈ Portuguese
□ ₉ Hindi	□ ₁₀ Khmer	\square_{11} Korean	□ ₁₂ Other:
	ces are offered here?	(Check all that apply) □2Manicure/pedicure, art	ificial nail application
□₃Manicure/pedicu	re, acrylic	\square_4 Manicure/pedicure, oth	er finish (shellac, gel, etc.)
□₅Other:		_	
6. What other salo	n services are offered	here? (Check all that apply)	
\square_1 Hair/make-up		□₂Massages	□₃Waxing
\square_4 Dermatological		□₅Spray tanning	□ ₆ Tanning beds
□ ₇ Other:		_	

4 ">75%" and 1 "50-75%"



7. Approximately what percentage of your business involves nail services?

□₁<25%

□₂ 25-50%

□₃ 50-75%

□₄ >75%



☐ Wholesale suppliers ☐ Competitors ☐ Professional aggregation (trade association)	
7. Customors	
□ ₅ Customers □ ₆ Professional organization/trade associatio	on
□ ₇ Magazines □ ₈ Other:	_
9. How do nail technicians learn about new techniques and new products? (Check all t	hat apply)
\square_1 Shadowing/On-the job learning \square_2 At a technical school/program	
□₃ Online resources □₄ Through books/pamphlets	
□ 5 Other:	
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Government regulations Marketing and advertising costs Employee recruitment and hiring Employee training costs and resources Employee retention – employees quit often Employee health – employees often call in sick or hurt	





□1 Manufacturers	\square_2 Friends/Family
J₃ Wholesale suppliers	□ ₄ Competitors
J ₅ Customers	\square_6 Professional organization/trade association
□ ₇ Magazines	□ ₈ Other:
). How do nail technicians learn	n about new techniques and new products? (Check all that apply)
J₁ Shadowing/On-the job learnir	ng □₂ At a technical school/program
☐3 Online resources	□ ₄ Through books/pamphlets
J ₅ Other:	
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\square_1	Manufacturers	\square_2 Friends/Family
Πз	Wholesale suppliers	□ ₄ Competitors
□₅	Customers	☐ ₆ Professional organization/trade association
□ ₇	Magazines	□ ₈ Other:
9.	How do nail technicians learn about ne	ew techniques and new products? (Check all that apply)
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\square_3	Online resources	\square_4 Through books/pamphlets
□₅		
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\beth_1	Manufacturers	\square_2 Friends/Family
J₃	Wholesale suppliers	□ ₄ Competitors
□ 5	Customers	\square_6 Professional organization/trade association
□ ₇	Magazines	□ ₈ Other:
9.	How do nail technicians learn about r	new techniques and new products? (Check all that apply
	Shadowing/On-the job learning	\square_2 At a technical school/program
۵	Online resources	□4 Through books/pamphlets
10.	Other:	
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1 Manufacturers	\square_2 Friends/Family
3 Wholesale suppliers	□ ₄ Competitors
5 Customers	☐ ₆ Professional organization/trade association
7 Magazines	□ ₈ Other:
How do nail technicians learn abo	ut new techniques and new products? (Check all that apply)
Shadowing/On-the job learning	\square_2 At a technical school/program
3 Online resources	□4 Through books/pamphlets
5 Other:	
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8. Where does your business get inform	nation on new products and beauty trends? (Check all that apply)
\square_1 Manufacturers	\square_2 Friends/Family
□ ₃ Wholesale suppliers	\square_4 Competitors
□ ₅ Customers	\square_6 Professional organization/trade association
□ ₇ Magazines	□ ₈ Other:
9. How do nail technicians learn about	new techniques and new products? (Check all that apply)
\square_1 Shadowing/On-the job learning	\square_2 At a technical school/program
\square_3 Online resources	□ ₄ Through books/pamphlets
□ ₅ Other:	
	hallenges to success in the nail salon business: A moderate challenge to success 3 = A large challenge
Marketing and advertising costs	
Employee recruitment and hiring	
Employee training costs and resource	es
Employee retention – employees qu	it often
Employee health – employees often	call in sick or hurt
	ucts do not last long or provide customer satisfaction
	quipment breaks often or performs poorly
Difficulty communicating with custor	mers or regulators
	n a more detailed follow-up survey with the University of Michigan?
□1 Yes □0 No □3 Maybe/	Unsure





University of Michigan Nail Salon Survey - 2016

\square_1 Manufacturers	\square_2 Friends/Family
\square_3 Wholesale suppliers	\square_4 Competitors
□ ₅ Customers	\square_{6} Professional organization/trade association
□ ₇ Magazines	□ ₈ Other:
9. How do nail technicians learn about	new techniques and new products? (Check all that apply)
\square_1 Shadowing/On-the job learning	\square_2 At a technical school/program
□ ₃ Online resources	□4Through books/pamphlets
1 = Not a challenge/small challenge 2 =	A moderate challenge to success 3 = A large challenge
	A moderate challenge to success 3 = A large challenge
Government regulations	A moderate challenge to success 3 = A large challenge
	A moderate challenge to success 3 = A large challenge
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Government regulations Marketing and advertising costs Employee recruitment and hiring	ces
Government regulations Marketing and advertising costs Employee recruitment and hiring Employee training costs and resource	ces uit often
Government regulations Marketing and advertising costs Employee recruitment and hiring Employee training costs and resource Employee retention – employees queen training costs and resource Employee health – employees often	ces uit often
Government regulations Marketing and advertising costs Employee recruitment and hiring Employee training costs and resource Employee retention – employees que Employee health – employees often Product prices and/or quality – product	ces uit often n call in sick or hurt
Government regulations Marketing and advertising costs Employee recruitment and hiring Employee training costs and resource Employee retention – employees que Employee health – employees often Product prices and/or quality – product	ces uit often n call in sick or hurt ducts do not last long or provide customer satisfaction equipment breaks often or performs poorly
Government regulations Marketing and advertising costs Employee recruitment and hiring Employee training costs and resource Employee retention – employees que Employee health – employees often Product prices and/or quality – product prices and/or quality – e	ces uit often n call in sick or hurt ducts do not last long or provide customer satisfaction equipment breaks often or performs poorly
Government regulations Marketing and advertising costs Employee recruitment and hiring Employee training costs and resource Employee retention – employees que Employee health – employees often Product prices and/or quality – product prices and/or quality – employees Difficulty communicating with custors	ces uit often n call in sick or hurt ducts do not last long or provide customer satisfaction equipment breaks often or performs poorly
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2 "yes" and 4 "maybe/unsure"







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b. Where does your business get inform	nation of new products and beauty trends: (check all that apply)
□ ₁ Manufacturers	\square_2 Friends/Family
□ ₃ Wholesale suppliers	\square_4 Competitors
□ ₅ Customers	\square_6 Professional organization/trade association
□ ₇ Magazines	□ ₈ Other:
9. How do nail technicians learn about	new techniques and new products? (Check all that apply)
\square_1 Shadowing/On-the job learning	□ ₂ At a technical school/program
□ ₃ Online resources	□4 Through books/pamphlets
□ ₅ Other:	
Government regulations Marketing and advertising costs Employee recruitment and hiring	A moderate challenge to success 3 = A large challenge
Employee recruitment and niring Employee training costs and resourc	es es
Employee retention – employees qu	
Employee health – employees often	
Product prices and/or quality – prod	lucts do not last long or provide customer satisfaction
Equipment prices and/or quality – ed	quipment breaks often or performs poorly
Difficulty communicating with custo	mers or regulators
11. Would you be willing to participate i	in a more detailed follow-up survey with the University of Michigan?
□ ₁ Yes □ ₀ No □ ₃ Maybe/	unsure

	_	Customer personal air (n=34)					
VOC	DF	Mean	Median	Range		ACGIH TLV	
	(%)	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$		(mg/m^3)	
Ethyl acetate	100	1903	1100	171-9652		1400	
Isopropyl acetate	71	29	18	<5-163		418	
n-propyl acetate	79	62	31	<5-289		835	
n-butyl acetate	100	628	297	60-4498		713	
MMA	85	4820	974	<2.5-35847		205	
EMA	15	75	0.5	<0.5-1917		NA	
Heptane	88	84	77	<0.2-187		1640	
Benzene	18	4	0.1	<0.1-30		1.6	
Toluene	94	107	70	<0.1-646		75	
d-Limonene	41	28	0.2	<0.2-295		NA	
Formaldehyde	NA	NA	NA	NA		0.37	
TVOC	100	7834	3052	571-48413		NA	



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8 hrs vs 1 hr sample

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The First Meeting





The Focus Groups: Hazards

- "We have to read through [the SDS] but the safety guidelines are always vague and there are times when something is written a bit too clearly or a bit too specifically, and the instructions get lost in a bunch of fluffy words. They are all in English which creates another problem, because not all nail techs read English, so at that point it's up to the manager or someone like me who is a bit more fluent in English to translate the information. But I am not a professional translator and nor is my manager, and so the amount of information that they give the safety regulations is.... Sufficient but cannot be translated into Vietnamese."
- "The first thing acetone. The second is the liquid which we associate with the acrylic nails, but I don't know clearly what the chemical is."
- "You work like all day, 8, 9 hours you hurt. Usually we just stand up and then walk around kind of shake out. This only happen on like on really busy day. We have to work many hours."
- "We provide out own tools and own gloves so we have the option of getting rid of those tools and cleaning them up and changing out gloves."



The Focus Groups: Training

- "There are always new products being released on the market for example we just got a new um type of nail product called the 'dipping powder' and it's something that we haven't worked with before, and that we haven't studied in nail school, which makes it a bit more difficult for us to... I don't know... adapt to a sudden change in situation and sudden change in demand."
- "The information can be provided in a video, or online, or brochures in both English and Vietnamese. We also have a lot of Thai people working at both salons so maybe even in Thai so it is easily accessible at home. Because just like spending an entire day at a salon or just like 10-7 is a nine hour day and maybe even working overtime would make it ten hours or eleven hours even. That makes it kind of hard to get to a class."

Where We Are Now: Giving back

Common Fungal Infections Distal Subungual Onychomycosis (DSO)



Photo courtey of American Academy of Family Physicians.

Overview: This may cause the nail to turn yellow or white. The nail may crumble and split. This infection can be lifelong and difficult to treat.

Transmission: This may be caused by wearing shoes that are too tight, being exposed to the fungus on a surface, or from direct contact.

White Superficial Onychomycosis (WSO)



Photo courtesy of American Academy of Family Physicians

Overview: This infection happens on the top layer of the nail. Characterized by white spots and chalky powder on the nail, this can be easily treated.

Transmission: This may be caused by wearing shoes that are too tight, being exposed to the fungus on a surface, or from direct contact.

Candida Onvchomycosis



Photo courtesy of American Academy of Family Physicians.

Overview: This infection is more common in fingernails. It may cause the nail to separate from the nailbed, become discolored and oddly shaped.

Transmission: This condition may occur in individuals with previous nail infections or trauma.

This condition does not seem to be contagious.

Safety and Prevention

Overview: The Center for Disease Control (CDC) lists several guidelines for the prevention of infection and the spread of infection. These relate to both equipment usage and personal hygiene practices. Any surface that contacts a client is considered contaminated, and must be both cleaned and disinfected. Products may become contaminated if an instrument that touches the client also touches the product.

Single Use Products



It is unsafe to reuse single use products such as a cotton ball, toe separators, and wooden sticks. By touching the client, the product becomes contaminated. This means that the product can now transport microorganisms from client to client if it is not disposed of after the single use.

Multi-use Equipment Sterilization



Your state's cosmetology board sets standards for equipment sterilization. Always use clean and sterilized equipment and practice safe and sterile storage practices between use even if the equipment is exclusively for one client. Nail techs may also want to wear disposable gloves during work.

Cleaning Examples

Method Equipment (How to Clean) (What to clean using this method) Abrasive files & Scrub Brush Buffers Metal pushers Ultrasonic Cleaner & Nippers Acetone Soak Metal electric file bits Cloth towels & linens Washing Machine chamois Electrical equipment & Table tops Towelette/Wipe



Where We Are Going



Special Thanks

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- Dr. Marie-Anne Rosemberg, UM Nursing
- Albert Tien, WHWB
- Lexuan Zhong, Stuart Batterman Lab
- Ritu Pandit, IH Research Staff
- Students: Khang Huynh, Rachel Neuenfeldt, Sandar Bregg, So Rah Oh, Allyson O'Connell, Mary-Catherine Goddard, Dylan Gooch, Elizabeth Guthrie, Michelle Nguyen, Courtney Crawford, Xenia Chan, and Yang-Ju Chen
- Participating salon workers, owners, and managers
- Air sampling results support from the Pilot Project Research Training (PPRT) program, which is supported by grant T42OH008455 from the National Institute for Occupational Safety and Health and the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.



Thank you!