



## Healthy Nail Technicians Project - Protecting Your Hands at Work

### SUMMARY OF WORKSHOP SURVEYS

May 2015

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# Protecting Your Hands at Work – Summary of Workshop Surveys

## Introduction

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As part of its Healthy Nail Technicians Project, the Central Toronto Community Health Centres (CTCHC) launched peer-led workshops for nail technicians focused on building awareness, knowledge and skills around how to protect their hands at work. The goals of the project are to reduce the risk of dermatitis, skin irritations and exposure to chemicals through the route of skin absorption. The project is funded by the Ministry of Labour, through the Centre for Research Expertise in Occupational Disease (CREOD).

Based on a train-the-trainer model, four nail technicians from the Chinese community were recruited, hired as Peer Health Workers and provided with training. Professionals in the areas of occupational health, facilitation, social work and community development trained the peers and prepared them to deliver educational workshops to nail salon owners and technicians. These peer educators delivered seven workshops at salons across Toronto in February and March, 2015. Each workshop was approximately forty-five minutes in length covered topics such as chemicals, Personal Protective Equipment (PPE), hand washing and hand creams. The training curriculum is presented in Appendix A. The salon owners and salon workers were given an honorarium, gloves, creams and educational material for attending the training.

This report summarizes findings from surveys completed by workshop participants. The surveys explore the quality of the workshops as well as the effectiveness of the workshops in improving skin care and reducing the risks of occupational skin disease. The findings will help inform the development of future prevention focused projects for nail technicians.

## Research methods

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Participants were invited to complete a series of three surveys. The first survey (pre-training survey) was administered immediately before the workshop. This survey explored participants' attitudes and behavior with respect to caring for their hands at work. The second survey (post-training survey) was administered at the end of the workshop and explored the participants' experience of the training (e.g., quality of the workshop, what worked well and what could be improved). The third survey (follow up survey) was administered 2-3 weeks after the training and explored changes in attitudes and behavior as a result of the training. Copies of the surveys are presented in Appendix B. Surveys were distributed to workshop participants by the peer educator. Mandarin and Vietnamese surveys were available to allow participants to respond in their language of choice.

Descriptive statistics (e.g., frequencies, comparison of means) were used to explore quantitative survey data, including changes in attitudes and behaviors between the pre-training survey and the follow-up. Due to the small sample size, tests for statistical significance were not performed. It should also be noted that without a control group, it is not possible to determine

if the changes are attributable to the CTCHC training or other factors (e.g., other occupational training, changes in company policies etc.).<sup>1</sup>

## Participation

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Twenty-five (25) salon owners and nail technicians participated in one of seven workshops delivered at salons across Toronto. Two of the workshops consisted of owners and technicians from two salons, for a total of nine salons involved. Attendance at each workshop was between two and five participants. A summary of survey response rates is presented below.

	# of respondents	Response rate
<b>Pre-training survey</b>	23	92%
<b>Post-training survey</b>	22	88%
<b>Follow-up survey</b>	17	68%

## Participant Profile

Close to half of participants worked in a nail salon in Canada for 5 years or more.

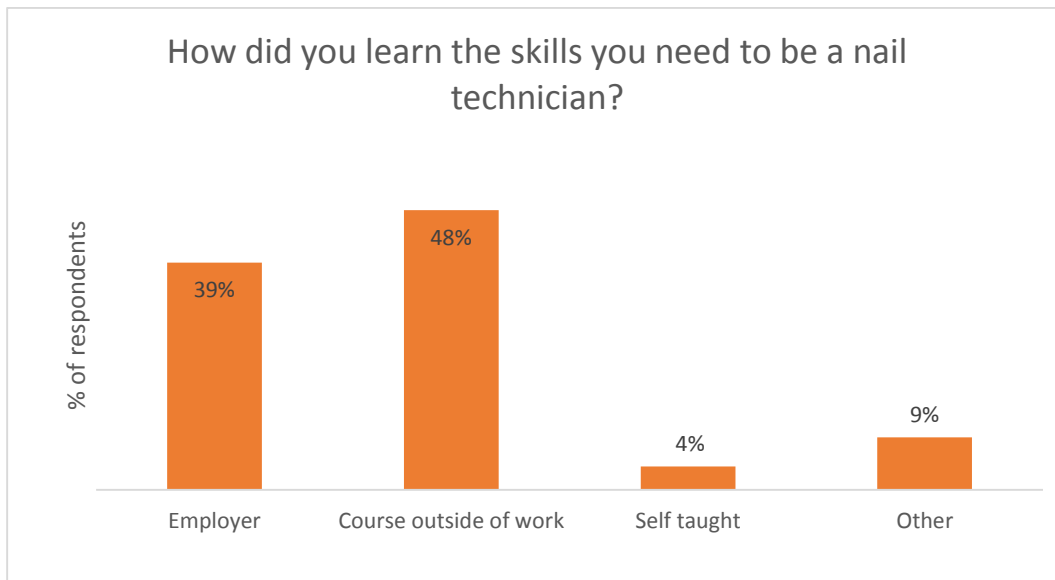


n=23

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<sup>1</sup> We attempted to control for 'other occupational training' by asking participant if they had engaged in other training between the pre-survey and follow up survey. Almost half of the participants indicated that they had engaged in other training. This finding is unusually high for this population of workers, according to recent research conducted by the CTCHC. It's possible that respondents were referring to the current CTCHC workshop when they answered this question.

The majority of participants acquired the skills needed to work in the nail salon from their employer or from a course completed outside of work<sup>2</sup>.

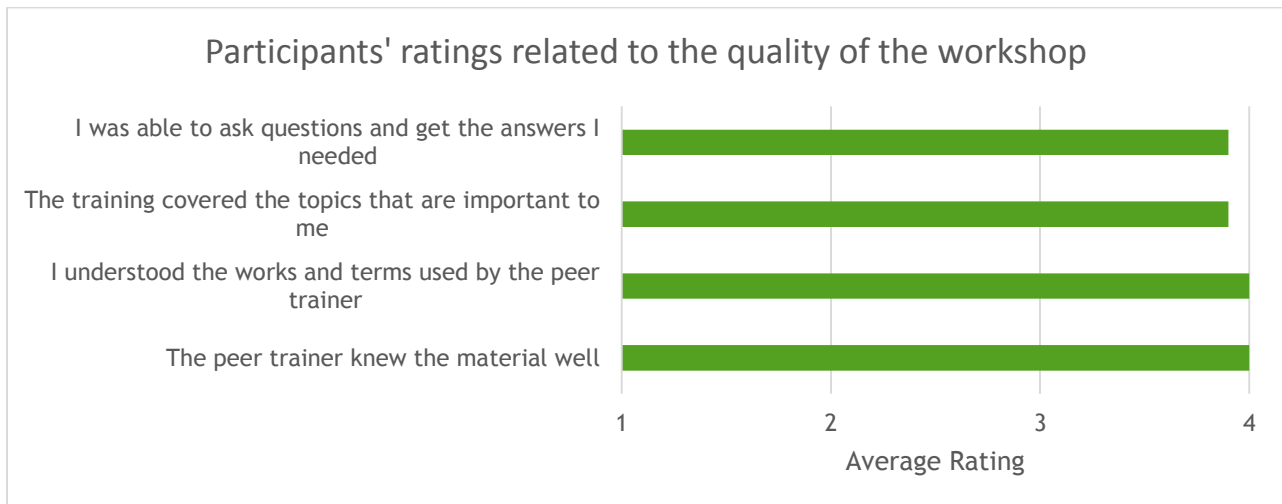


n=23

## Findings

### Quality of workshops

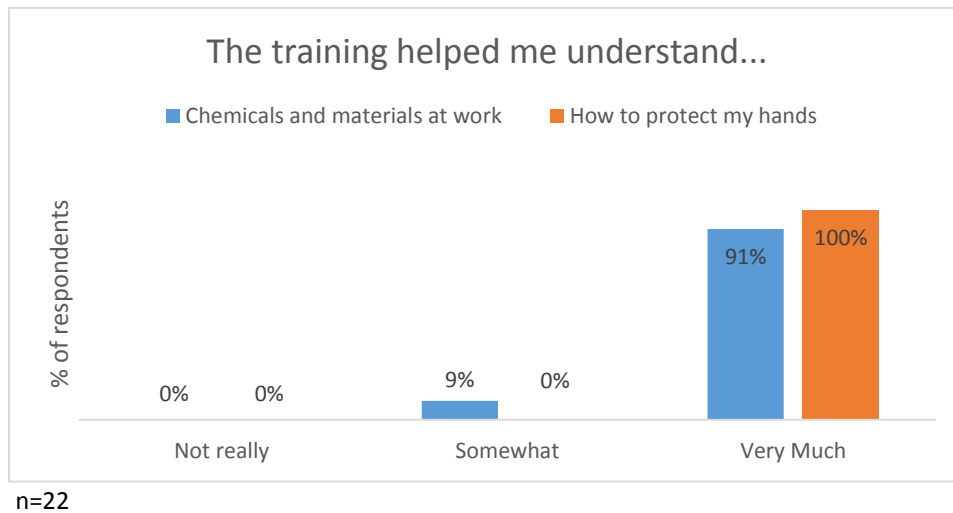
Participants' rated the workshops very positively. They felt that the peer trainers were well informed, the topics were relevant and the content was easy to understand.



Where 1=Not really, 4=Very much  
n=21

<sup>2</sup> 48% of respondents indicated that they learned skills from a course outside of work. This contradicts recent research completed by the CTCHC, which found that nail technicians rarely seek training outside of work. It's possible that respondents were referring to the current CTCHC workshop when they answered this question, misunderstood the question, or felt that this was the "correct" response.

Participants felt that the training helped them better understand the chemicals used at work and how to protect their hands.



When asked **what was most valuable about the workshops**, participants indicated that the information about how to protect and care for their hands was useful. Specifically, they appreciated learning about:

- how to choose gloves,
- how to take off the gloves correctly,
- how to wash hands correctly, and
- how to protect themselves and clients from chemicals.

Two participants noted that the workshop was *“very professional”*. Two others appreciated the light demonstration. One of these participants stated, *“I liked using the light to demonstrate how washing hands the right away eliminates germs”*.

When asked **how the workshop could be improved**, some participants noted that they would like more details and more workshops. Others noted that they wouldn't make any changes to the workshop. Examples of participant feedback include:

- If there are other workshops, we would like to attend frequently. Very good for us and our clients.
- I want to know more details
- I would not change anything about this training class
- I think it's already good enough. Very professional.

When asked if they would like to learn about protecting themselves at work, 81% of participants said “yes”. Similarly, when asked what else the health center could do to make it easier to protect themselves at work, seven participants noted that would like more training and information. One participant would like help from the health center to buy gloves.

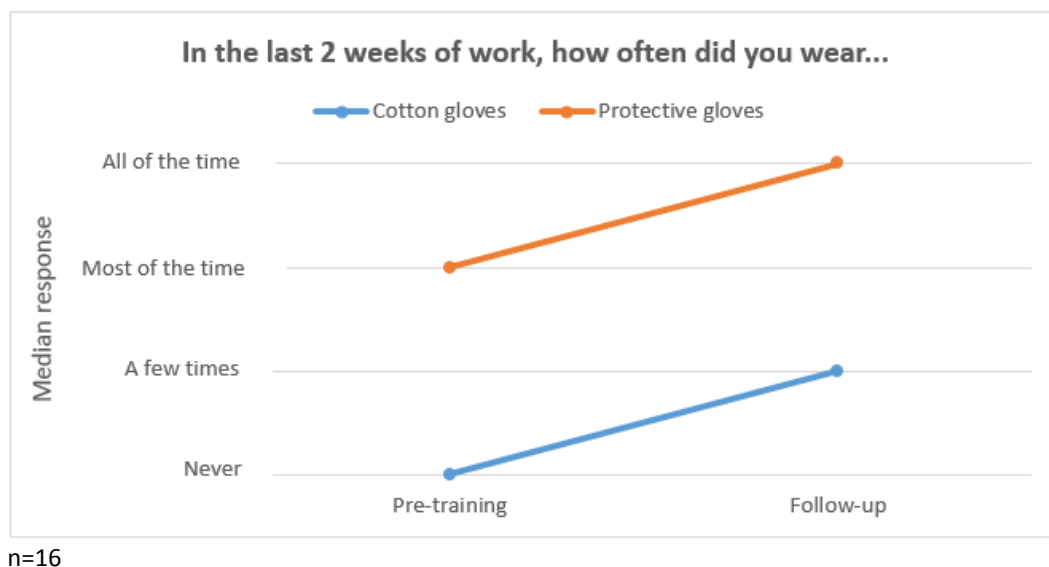
## Outcomes

Participants' attitudes about the importance of wearing cotton gloves appear to have changed after the training. Survey findings show that the average importance rating increased by 1.8 points (where 1=not at all important, 5=very important) between the pre-survey and the follow up survey. Participants' attitudes about the importance of hand washing and using hand cream stayed relatively the same.



### Use of protective gloves

Participants' use of protective gloves and cotton gloves appears to have increased after the training. When asked how often they used protective gloves in the last two weeks, the median response before the training was "Most of the time". After the workshop, the median response moved to "All of the time".



The type of protective gloves used by participants also changed after the training. The proportion of participants using nitrile gloves increased by 47% between the pre-survey and the follow up survey.

Type of glove	% of respondents		
	Time 1 (n=23)	Time 2 (n=19)	% change
Latex	74%	53%	- 21%
Nitrile	0%	47%	+ 47%
Don't know	26%	0%	- 26%

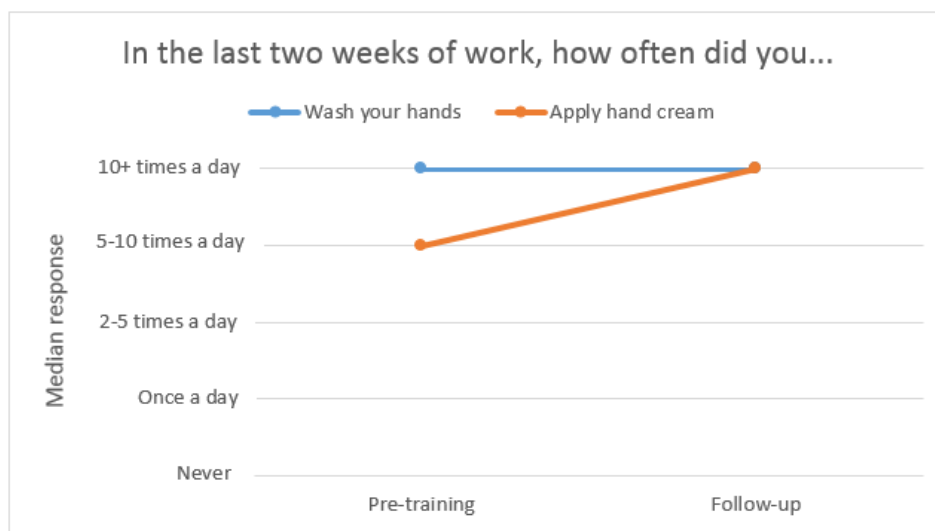
When asked if there was anything that made it difficult to wear protective gloves at work, participants reported the following barriers:

- I don't have time (3 participants)
- They are too expensive (1 participant)
- The customers don't like them (1 participant)
- It's too hot to wear cotton gloves (1 participant)
- Cotton gloves are too hard to operate (1 participant)
- It's hard to find nitrile gloves at the supply shop (1 participant)

The other 11 participants did not identify barriers to wearing gloves.

#### Hand washing and use of hand creams

Participants' self-reported hand washing behaviors appear to have stayed the same after the training, while their use of hand cream appears to have increased. When asked how often they applied hand cream in the last two weeks, the median response before the training was "5-10 times a day". After the workshop, the median response moved to "10 or more times a day".



n=16

When asked if there was anything that made it difficult to apply hand cream at work, five participants reported that they didn't have time. Ten participants reported "None of the above" and two reported "Other".<sup>3</sup>

Other outcomes

In the follow-up survey, participants were asked what they have started (and stopped) doing because of the training. Responses were consistent with the findings presented above. Examples of participants' responses include:

Because of the training I have started to:	Because of the training I have stopped:
Wear gloves all the time Use nitrile gloves Apply hand cream each time after washing my hands Pay more attention to protecting my hands Use appropriate methods to protect hand skin and health	Using latex gloves that I had been using before the training Wash my hands for just a second Direct contact to chemicals using my hands without protection

Summary

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According to survey findings, the CTCHC peer-led workshops appear to positively influence participants' attitudes and behaviors related to protecting their hands at work. Participants rated the quality of the workshops very positively and many indicated that they would appreciate additional training and information about how to protect themselves at work.

Although the results show a positive trend in attitudes and behaviors, further research using a larger sample size is required to determine if these changes are statistically significant or simply due to chance.

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<sup>3</sup> Respondents did not provide details related to 'other' difficulties



## Appendix A: Workshop curriculum

Guide for CTCHC outreach (CREOD funded pilot) – based on CREOD/OCRC Skin Workshop (July 2014)

GOAL: 30-45 minute training on work-related skin disease and how to prevent it

	Intro & Background
Introduction	<p>We are part of a group of nail technicians, health promoters and researchers who are working to improve the health of nail technicians. We are not employees of the Ministry of Labour or the Public Health Unit.</p> <p>We're going to talk about our skin, things in nail salons that may be hazardous to our skin and ways we can protect and care for our skin</p>
Why is this important?	<p>Many nail technicians have painful skin or itchy rashes. Many things in the nail salon can cause these problems with your skin, including chemicals, but also contact with water when doing pedicures and washing your hands.</p>
What do you need to know?	<p>There is a lot of information on health and nail salons, but we are going to focus on skin specifically, including: what things to avoid, what gloves to wear and how to wear them properly, as well as how to take care of your skin</p> <p>It's important to remember that many of the things that will help protect your skin will also make things safer for your clients.</p> <p>Many people don't know what skin disease looks like, we have some images that show what skin disease looks like. Do your hands look like any in the pictures? <i>(Handout with images)</i></p> <p>It is important to treat the skin disease when it looks "mild" because it is much harder to deal with when it becomes "severe"</p>
Possible Questions	<p>What are you doing here? (have info sheet on hand)</p> <p>Who do you work for?</p> <p>If I have skin disease how do I get help? <i>(primary care and OHCOW contact info – need to be referred to the St Mike's clinic)</i></p>

	1
Topic	Chemicals
Introduction	Many chemicals are present in nail salons. Some of these chemicals can cause skin disease. If you can, you want to try to avoid them.
Why is this important?	Chemicals can cause skin disease by damaging the skin. We're going to show you an example using acetone, a chemical used in nail salons regularly
Activity	Acetone and Styrofoam
What do you need to know?	There are many chemicals in our environment and in our workplace, some of these are hazardous. If you can, you want to remove them from the nail salon. If you cannot remove them from your workplace, then using personal protective equipment is the best option
Possible questions	<p>What chemicals?</p> <p>What products?</p> <p>How do I know which products are harmful? (<i>WHMIS MSDS example, Beauty and Beast table handout</i>)</p> <p>What types of problems do the chemicals cause?</p>

2	
Topic	Personal Protective Equipment (PPE)
Introduction	<p>If there are chemicals in your workplace that cannot be removed, you should use personal protective equipment (PPE) to protect yourself.</p> <p>Gloves are a type of personal protective equipment (PPE). When using gloves you need to select the right glove for the chemicals you are using. You also need to make sure you take them off properly so that you don't spread chemicals on your skin and around your workplace. Wearing thin cotton gloves underneath your protective gloves can help to prevent skin disease, they can also help people who already have skin problems to feel more comfortable in gloves</p>
Why is this important?	<p>Gloves help protect you from chemicals and water, and they also protect your client.</p> <p>When you remove gloves that are covered in chemical you can contaminate your skin. If you contaminate your skin you put yourself at risk of skin disease, but can also spread chemicals around the nail salon without realizing it</p> <p>The cotton liners are a soft layer between the skin and the nitrile gloves. They help to absorb some of the moisture that may build up under the nitrile gloves and will help keep your hands dry. They can also provide comfort for people who have skin problems, allowing for healing of the skin.</p>
Activity	<p>Boxes of gloves – try different sizes and thicknesses. Which one is best?</p> <p>Put glove liner under the nitrile gloves. How does it feel?</p> <p>Fluorescent powder and black light – test yourself when removing the gloves.</p>
What do you need to know?	<p>There is no good glove for protection against chemicals in the nail salon. The best choice is <b>nitrile gloves</b> in the correct size. You should change the nitrile gloves often, as frequently as every 20 minutes. Wearing cotton gloves underneath the nitrile gloves is also recommended. The cotton gloves are washable and can be reused. The nitrile gloves should never be reused.</p> <p>You also need to know how to take gloves off without contaminating your hand (<i>UK Health and Safety Executive (HSE) poster</i>)</p>
Possible questions	<p>What type of gloves and cotton liners?</p> <p>Where can I get them?</p> <p>How much do they cost?</p> <p>How do I know I'm taking my gloves off right?</p>

3	
Topic	Hand Creams

Introduction	Hand creams are a very important part of skin care – both at work and home. They moisturize your skin and help keep it healthy
Why is this important?	Creams protect the skin and help to maintain the barrier between the body and the environment.
Activity	Acetone, styrofoam and hand cream
What do you need to know?	Hand creams should be applied multiple times throughout the day, especially after work, before bed and after washing your hands.  When selecting a cream you want to avoid fragrances, perfumes and dyes as well as alcohols. Many people find that vaseline is a good option, especially at night, and is relatively inexpensive.
Possible questions	What creams do I use?  What brands?  Where can I get them?  How much do they cost?

	4
Topic	Hand Washing
Introduction	Hand washing is critical in stopping the spread of infection and to remove chemicals from your hands. However, hand washing also exposes your hands to water -- one of the biggest hazards to your skin.
Why is this important?	You need to wash your hands for infection control, but you also need to care for your own skin. Water is a hazard for your skin, so you need to take care to dry your skin thoroughly after washing to apply skin creams regularly.
Activity	Fluorescent cream and a sink ( <i>see Toronto Public Health (TPH) poster</i> )
What do you need to know?	Hand washing is very important for keeping your hands free of chemicals and germs.  Because water is also a hazard for our skin, you need to ensure that you dry your hands completely and apply moisturizer regularly.  When washing your hands you can also take this moment to examine your own hands for any signs of redness or signs of skin disease.
Possible questions	What soaps should I use?  How do I dry my hands completely?  How often do I need to use hand creams?

Appendix B: Workshop surveys

**Workshop: Protecting your hands at work**

Pre-training survey

Please take a few minutes to complete this survey. Answering honestly will help us improve this workshop. *Your answers will be kept private and your name will not be used in any reports.*

Name \_\_\_\_\_

**1. How long have you been working in a nail salon in Canada?**

- 0-6 months
- 6 months -1 year
- 1-2 years
- 2-5 years
- 5 years or more

**2. Did you work in a nail salon before coming to Canada?**

- Yes
- No
- If yes, for how many years? \_\_\_\_\_

**3. How did you learn the skills you need to be a nail technician? (check all that apply)**

- From my employer(s)
- I took a course outside of work
- I taught myself
- Other \_\_\_\_\_

**4. From your perspective, how important is to it to protect your skin using...**

	Not at all important			Very important	
Protective gloves	1	2	3	4	5
Cotton gloves under your protective gloves	1	2	3	4	5
Hand cream	1	2	3	4	5

***Please flip over →***

Thinking about the last two weeks of work...

**5. How often did you wear protective gloves?**

- Never
- A few times
- Most of the time
- All of the time

**6. What type of gloves did you use?**

- Latex
- Nitrile
- Cotton
- I don't know
- Not applicable (I didn't use gloves)

**7. How often did you wear cotton gloves under your protective gloves?**

- Never
- A few times
- Most of the time
- All of the time
- Not applicable (I didn't use protective gloves)

**8. How often did you wash your hands?**

- Never
- Once a day
- 2-5 times a day
- 5-10 times a day
- 10 times a day or more

**9. How often did you apply hand cream to your hands?**

- Never
- Once a day
- 2-5 times a day
- 5-10 times a day
- 10 times a day or more

## Workshop: Protecting your hands at work

### Post-training Feedback

Thank you for taking part in this training! Please provide us with your feedback below. It will help us develop and improve our workshop.

<b><i>Please rate the following:</i></b>	<b>Not Really</b>			<b>Very Much</b>
The peer trainer knew the information well	1	2	3	4
I understood the words and terms used by the peer trainer	1	2	3	4
The training covered the topics that are important to me	1	2	3	4
I was able to ask questions and get the answers I needed	1	2	3	4

**1. The training helped me understand the chemicals and materials that I work with in my job**

- Not really
- Somewhat
- Very much

**2. The training helped me better understand how to protect my hands at work**

- Not really
- Somewhat
- Very much

**3. The most valuable part of the training was:**

**4. The training would be better if:**

**5. I would like to learn more about healthy ways to do my work**

- Yes
- No

**a) Health issues I would like to learn more about are:**

**6. If you would like information about a Nail Technician Association, please write your email here:**

## Workshop: Protecting your hands at work

### Follow-up survey

Please take a few minutes to complete this survey. Answering honestly will help us improve this workshop. *Your answers will be kept private and your name will not be used in any reports.*

Name \_\_\_\_\_

#### 1. Since the peer training have you taken any other training, workshops or courses related to your work at the nail salon?

- No
- Yes,
- If yes, please explain \_\_\_\_\_

#### 2. From your perspective, how important is to it to protect your skin using...

	Not at all important			Very important	
Protective gloves	1	2	3	4	5
Cotton gloves under your protective gloves	1	2	3	4	5
Hand cream	1	2	3	4	5

Thinking about the last two weeks of work...

#### 3. How often did you wear protective gloves?

- Never
- A few times
- Most of the time
- All of the time

#### 4. What type of gloves did you use?

- Latex
- Nitrile
- Cotton
- Don't know
- Not applicable (I didn't use gloves)

#### 5. How often did you wear cotton gloves under your protective gloves?

- Never
- A few times
- Most of the time
- All of the time
- Not applicable (I didn't use protective gloves)



**6. Is there anything that made it difficult for you to use protective gloves?**

- They are not readily available
- They are too expensive
- They do not help protect my hands
- The customers don't like them
- They are uncomfortable (or painful)
- I don't have time
- None of the above
- Other (please specify):

**7. How often did you wash your hands?**

- Never
- Once a day
- 2-5 times a day
- 5-10 times a day
- 10 times a day or more

**8. How often did you apply hand cream to your hands?**

- Never
- Once a day
- 2-5 times a day
- 5-10 times a day
- 10 times a day or more

- Is there anything that prevented you from using hand cream?** It is not readily available
- It is too expensive
- It does not help protect my hands
- The customers don't like it
- It is uncomfortable (or painful)
- I don't have time
- None of the above
- Other (please specify):

***Thinking about the training...***

9. Because of the training, I have started to:

10. Because of the training, I have stopped:

11. It is difficult for me to apply what I learned at the training to my job because:

12. Is there anything the health centre could do to make it easier for you to do these things?

## Appendix C: Frequency tables

From your perspective, how important is to it to protect your skin using...	Protective gloves		Cotton gloves		Hand cream	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
	n=22	n=20	n=19	n=20	n=21	n=20
1 (not at all important)	1	0	11	2	0	0
2	0	0	1	0	0	0
3	0	0	4	4	2	0
4	2	0	0	4	4	1
5 (very important)	19	20	3	10	15	19

In the last two weeks of work, how often did you wear protective gloves?	Time 1	Time 2
	n=21	n=18
Never	0	0
A few times	3	1
Most of the time	12	6
All of the time	6	11

What type of gloves did you use?	Time 1	Time 2
	n=23	n=19
Latex	17	10
Nitrile	0	9
Cotton	0	0
Don't know	6	0
Not applicable	0	0

Is there anything that made it difficult for you to use protective gloves?	Time 2
	n=17
They are not readily available	0
They are too expensive	1
They do not help protect my hands	0
The customers don't like them	1
They are uncomfortable	0
I don't have time	3
None of the above	11
Other	3

<b>In the last two weeks of work, how often did you wear cotton gloves under your protective gloves?</b>	Time 1	Time 2
	n=22	n=19
Never	18	6
A few times	3	8
Most of the time	1	2
All of the time	0	3

<b>In the last two weeks of work, how often did you wash your hands</b>	Time 1	Time 2
	n=23	n=20
Never	0	0
Once a day	0	0
2-5 times a day	0	0
5-10 times a day	4	4
10 times or more a day	19	16

<b>In the last two weeks of work, how often did you apply hand cream to your hands?</b>	Time 1	Time 2
	n=23	n=18
Never	0	0
Once a day	4	0
2-5 times a day	8	1
5-10 times a day	2	4
10 times or more a day	9	13

<b>Is there anything that prevented you from using hand cream?</b>	Time 2
	n=17
It is not readily available	0
It is too expensive	0
It does not help protect my hands	0
The customers don't like it	0
It is uncomfortable	0
I don't have time	5
None of the above	10
Other	2