



Nail Salons: Environmental Hazards & Regulations

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Overview

- Nail Salon Industry overview
- Salon Environmental Hazards
- State Regulations
- BPHC Outreach & Regulations
- Impact



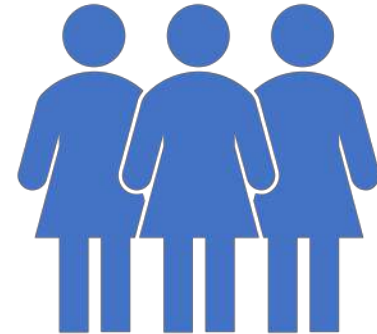
Nail Salon Industry in Boston

- Approx. 190 nail salons in the city
- Most are storefronts in rented space
- Vary greatly in size:
 - Range: 1 – 32 stations
 - Average: 10.88 stations
 - Mode: 10
 - Median: 10



Nail Salon Industry in Boston

- Employ an estimated 950 people
- Many are:
 - Vietnamese
 - Women of child bearing age
 - Recent immigrants
- Employees can work more than 8 hours per day and more than 5 days a week
- See tens of thousands of client visits per year
- Family members (children) of employees and clients often present



Consumer demand for low cost drives down wages and working conditions

TIME

The Worst Jobs in America

By Jeremy Caplan and Laura Fitzpatrick Monday, Jul. 30, 2007

Manicurists and pedicurists in the U.S. number 155,000, and the industry has tripled over the last two decades. Forty-two percent of nail technicians are Asian immigrant women, according to industry estimates, and many have little recourse when exposed to dangerous health conditions. **Cosmetics ingredients don't fall under the jurisdiction of either the EPA or the Food and Drug Administration**, and many such products sold in the U.S. today contain known toxins. **Formaldehyde** and **toluene**, both identified by the EPA as carcinogens, are part of the mix in many common cosmetics, as are **phthalates**, chemicals that have been linked to birth defects. For the average consumer, opening a bottle of nail polish once every so often is a negligible risk. But for professionals exposed to them consistently, it can be a bigger problem.



Salon Environmental Hazards

Public Health Concerns



Businesses are difficult to track for purposes of public health outreach and training



Chemical Exposure



Infection Risks



Injury and Safety Risks



Social Justice and Worker Exploitation

Chemical Exposure

- Few non-toxic alternatives for salon chemicals
- Ventilation systems in salons are inadequate
- Chemicals not properly stored – unmarked containers, open containers, etc.
- Chemical information not available



Chemicals of Concern

Formaldehyde
Phthalates
Methacrylates
Acrylic monomers
Toluene
Acetone
Other VOCs



Associated Health Effects

Skin rashes
Eye and nose irritation
Neurological damage
Occupational asthma
Cancer
Birth defects & miscarriages
Endocrine disruption

Chemical Exposure

Nail Salon Worker Focus Group (2008)

“I experienced nose bleeding and troubled breathing.”

“Want to know if the chemicals such as acetone damage my brain. My hands become shaking.”

“I fear that chemicals affect my brain. I experienced terrible headache.”

“My sister has worked in nail salon for 20 years, my brother worked for 17, and I work in nail salon for 5 years. My brother has had a so terrible headache that he thought of suicide.”

“Work for few months. There is noticeable change in my face skin- becoming darker and have more acne.”



Infection Risks

- Infections from metal tools not properly cleaned/disinfected
- Reuse of disposable single use items
- Sanitation/disinfection method/processes often confusing
- Use of skin graters, credo blades, etc.



Infection Risks

- Infection outbreaks traced back to footbaths in:

- California: Mycobacterial furunculosis

Winthrop KL, Abrams M, Yakrus M, et al. **An outbreak of mycobacterial furunculosis associated with footbaths at a nail salon.** New England Journal of Medicine, 2002; 346: 1366-71.

- Georgia: Mycobacterium cosmeticum

Cooksey RC, de Waard JH, Yakrus, M, et al. **Mycobacterium cosmeticum sp. Nov., a novel rapidly growing species isolated from a cosmetic infection and from a nail salon.** International Journal of Systematic and Evolutionary Microbiology (2004), 54, 2385-2391.

- Ohio and Kentucky: Atypical Mycobacterium furunculosis

Redbord KP, MD, Shearer DA, MD, Gloster H, MD, et al. **Atypical Mycobacterium furunculosis occurring after pedicures.** Journal of the American Academy of Dermatology (March 2006), Vol. 54, No. 3: 520-524.

- Findings in Boston

- In 2009, **56 of 163** Boston salons inspected by the Board of Cosmetology **were cited for sanitation and licensure violations.**
- In December 2009, BPHC was involved in temporarily closing a nail salon after **a patron was hospitalized from an infection** traced back to unsanitary salon conditions.
- In February to May 2010, **41 out of 49** nail salons inspected by BPHC were referred to training with our Safe Shops Program for environmental or sanitation issues. The Safe Shops Program now receives regular consumer complaints regarding infections, injuries and concerns about sanitary conditions.



Mycobacterium Fortium infection in the legs of a 14 yr old CA girl after her first pedicure

Photo courtesy of CA Department of Health Services, Division of Communicable Disease Control

Injury and Safety Risks



A 2006 survey of Boston nail salon workers + 2008 focus group of 26 salon workers point to work-related health concerns:

- Musculoskeletal disorders
- Skin rashes/irritation
- Respiratory irritation and difficulty breathing
- Neurological problems such as headaches and shaking hands
- Nose bleeds
- Reproductive issues

What is wrong with this picture?



What improvements do you see?



Injury and Safety Risks

- Repetitive stress injuries and ergonomics
- Burning of incense or candles in salons presents a fire hazard due to flammable solvents

Social Justice and Worker Exploitation

Low pay and no benefits – often only tips

Information (chemicals and regulations) only available in English

Lack of oversight over chemical ingredients by anyone besides industry

Buying licenses or working without licenses opens workers to abuse

Workers have little/no recourse to address problems

Social Justice and Worker Exploitation

Czech T. Daily Record/Sunday News – December 2008, three charged with arranging fraudulent marriages to smuggle Vietnamese women into the U.S., then forcing them to work at several area nail salons.

Allston/Brighton TAB 1/15/2010 – Framingham nail salon owner kept young women used for sex.

New York Daily News/York Sunday News 2/11/2010 – Nail salon owner sentenced to 90 days in jail for participating in human trafficking

Indiana News and Tribune 4/19/2010 – **Clients at New Albany nail salon recruited for phony marriages** “The Americans were treated to restaurants, beaches, nightclubs and brothels. Sophea Lim even accompanied some of the Americans to Cambodia and offered to let young girls perform sexual favors for \$7.”



Massachusetts State Regulations

- 240 CMR 3 governs salons at the state level
- Administered by Massachusetts Board of Cosmetology and Barbering, part of the DPL
- Just 4.5 pages to cover:
 - Licensure
 - Operations
 - Equipment and Hygiene
 - Advertising and Prices
- Revised regulations to be released June 1, 2019
- Policy Bulletins and advisories
- Also MGL c. 112 s. 87T-87KK

Massachusetts State Regulations

- 240 CMR 3.01(4) - The Board will not issue a license for any premises if required local permits and certificates have not been obtained...
- 240 CMR 3.02(1)(d) - Every salon shall be equipped with proper and adequate lighting and ventilation and kept in clean, orderly and sanitary condition.
- 240 CMR 3.03(17) – instrument sanitation by:
 - Boiling water, steam, alcohol, UV light
 - Formalin, steri-dry, hospital grade disinfectants
 - Bleach solution
- Policy bulletin 2017-001 prohibits tattooing, tanning, injections, lasers, ear candling, teeth whitening, acupuncture, callus blades, use of animals or fish for procedures



Regulatory Gaps

State
regulations
did not...

Specify or require footbath sanitization

Prohibit the re-use of single-use items

Specify appropriate sanitation methods for multi-use items

Identify proper PPE or protective measures

Address chemical storage and handling hazards

Specify adequate ventilation

Safe Shops Program (est. 2004)



BPHC.org/SafeShops

Safe Shops Program

- Started with Auto Shops in 2004
- Expanded to nail salons in 2007
- Purpose: Protect workers and the public from exposure to hazardous chemicals and air pollution in nail salons
- Free program
- Staffing: Program coordinator + 3 outreach workers (2 who go to nail salons)
- Offer on-site trainings to owners and their employees
 - Offered in both English and Vietnamese
 - Focuses on proper cleaning and sterilization procedures
 - Educates on how to maintain compliance with our regulations



Safe Shops Program: Nail Salon Outreach CY 2018

- 1,190 outreach visits
- 27 training sessions



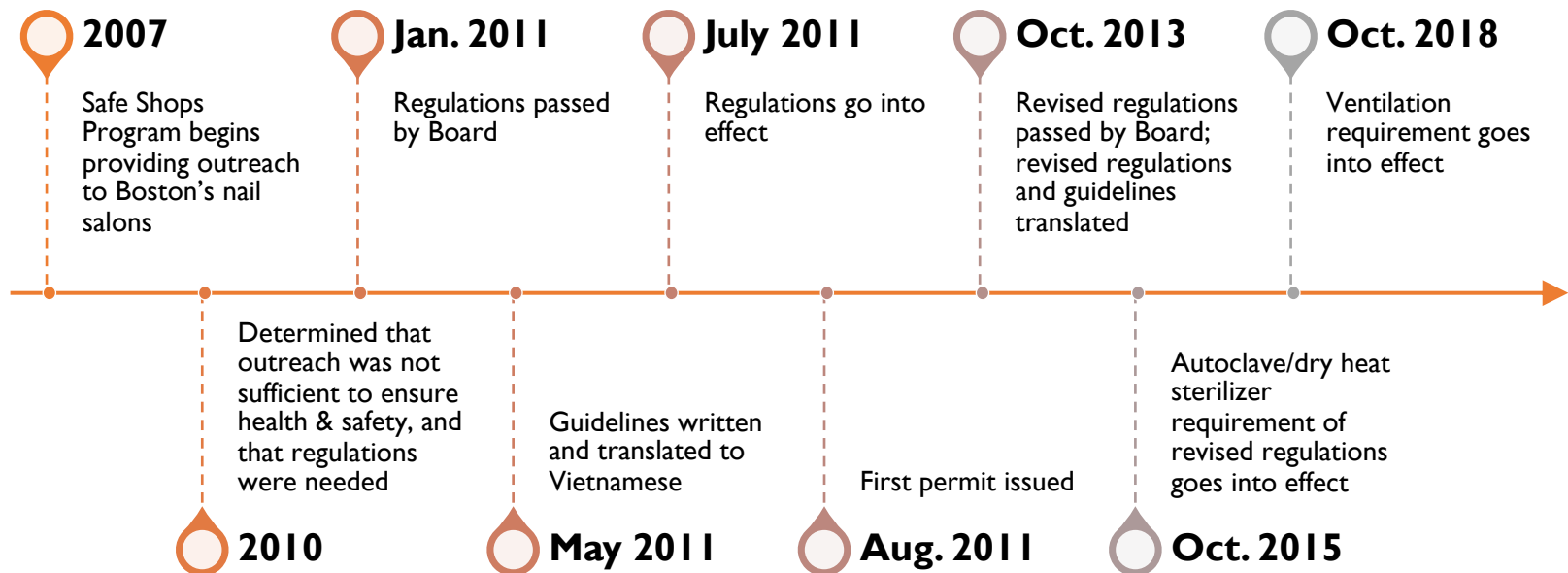
Green & Clean



- Began in 2013
- Recognizes businesses that go beyond regulatory requirements to reduce chemical exposure and protect the environment
- Regular trainings + annual renewal process (walkthrough assessment)
- BPHC promotes Green & Clean businesses
- As of 5/3/19, 32 nail salons recognized as Green & Clean

BPHC.org/Greenandclean

BPHC Nail Salon Regulation



BPHC.org/regulations

BPHC Regulatory Requirements

Annual operating permit
with pre-permit
inspection

Proper chemical storage:
closed, labeled
containers and
flammable storage
cabinet

Posting of a public
health notice and
keeping MSDS
paperwork available

Sterilization of multi-use
tools with autoclave or
dry heat sterilizer and
maintaining logbook of
use

Ventilation matching the
standards of the 2015
International
Mechanical Code

Cleaning of foot baths
and nail stations after
each client and daily

Eye wash station and
first aid kit on site

Prohibits reuses of single
use tools and certain
equipment and
chemicals

Inspections



Permit inspection (annual)



Random inspections



Complaint-based inspections

If violations are found:

- Salon is issued a warning, fined, and/or required to receive a training from the Safe Shops Program
- Inspector continues to do follow-up inspections until full compliance is achieved

Challenges

Single-use vs multi-use
tools

Dry heat
sterilizer/autoclave use

Foot bath sanitation

Ventilation system
compliance

Single-Use vs Multi-Use Tools



VS

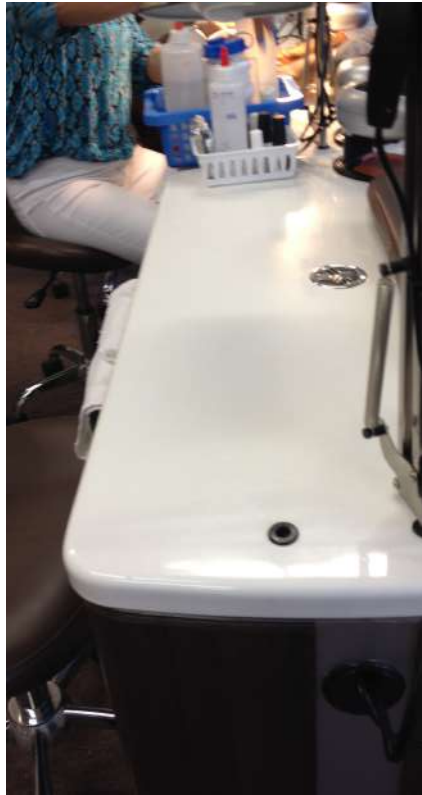


Dry Heat Sterilizer & Autoclave

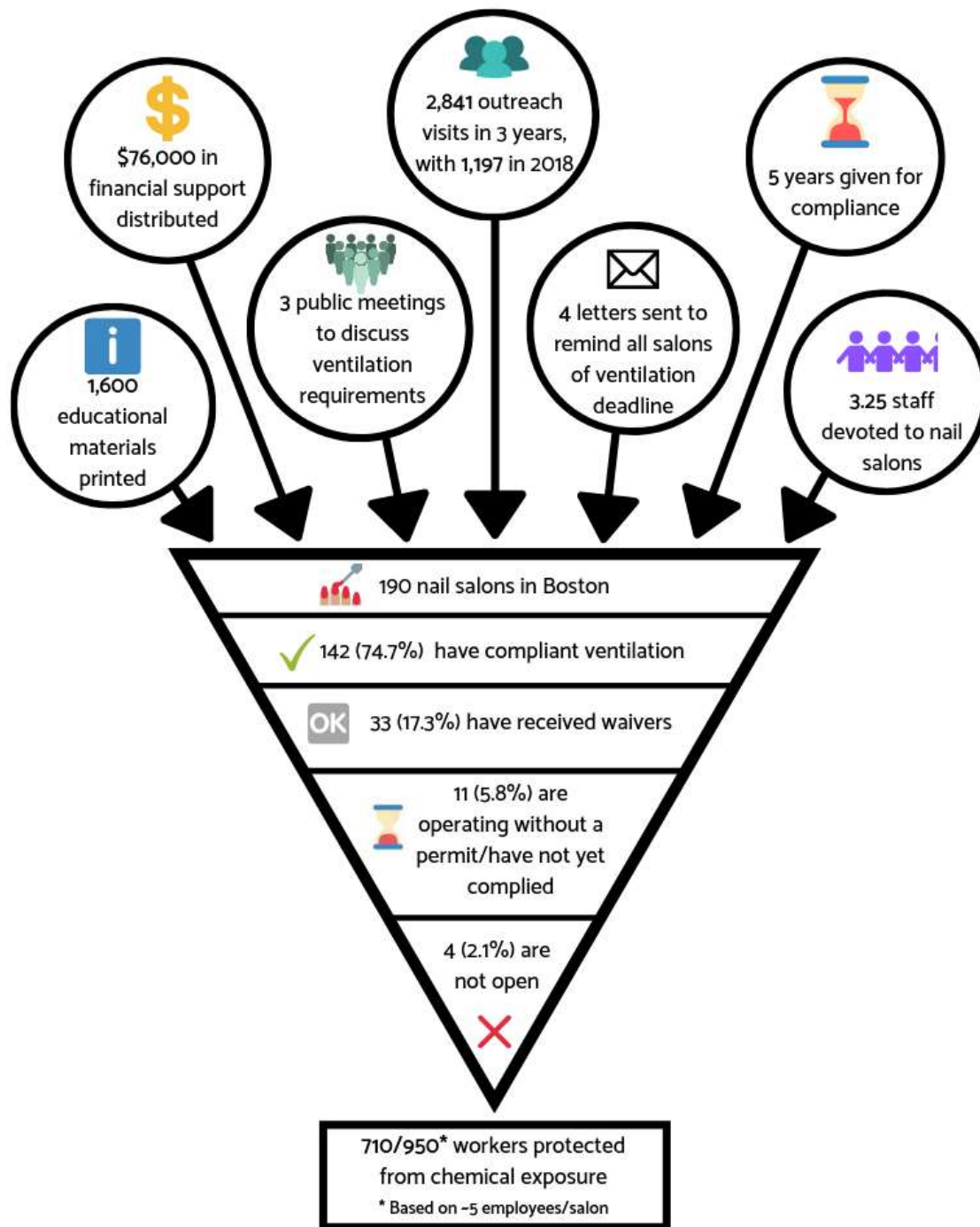




Foot Bath Sanitation



Ventilation



Ventilation Compliance

(as of 5/3/19)

Thank You!

Questions?

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