

# Safety and health hazards in nail salons



*Certified nail technicians can be exposed to chemical, biological, and ergonomic hazards while providing services such as manicures, pedicures, and applying artificial nails. Prolonged exposure to chemicals in nail-care products may be harmful, but technicians and nail salon owners can take action to minimize exposure.*

## Products found in nail salons

- Nail enamels and hardeners may contain formaldehyde, toluene, and dibutyl phthalate (DBP).
- Nail polish removers and solvents may contain acetone, toluene, and methyl ethyl ketone, which are extremely volatile and flammable.
- Nail tips and wraps are glued with a solvent-based acrylic nail adhesive and may contain cyanoacrylate adhesives — sometimes known as “instant adhesives.”
- Acrylic and gel nail systems use a liquid monomer and powder polymer that may contain methyl methacrylate (MMA), ethyl methacrylate (EMA), or benzoyl peroxide as a hardener.

## Chemicals and health risks

- Formaldehyde is a suspected carcinogen that irritates the eyes, nose, skin, and respiratory track. Prolonged exposure may cause asthma-like symptoms.
- MMA and EMA irritate the eyes, mucous membrane, and respiratory tract, and may cause

contact dermatitis. MMA is highly toxic, may cause asthma, and is banned in many states.

- DBP irritates the eyes and upper respiratory system. Prolonged exposure is linked to reproductive effects and is banned in Europe.
- Solvents such as acetone, methyl ethyl ketone, xylene, and toluene can affect the nervous system and may cause headaches, nausea, or dizziness. Long-term exposure can affect learning and concentration. In addition, studies have shown that long-term, high-level exposure to toluene could result in reproductive harm. Solvents can also irritate the skin and be absorbed into the bloodstream, which may increase overall exposure.

## Biological hazards

- Employees should know the risk of biological hazards such as bacteria and fungi.
- Employees should receive training regarding exposure to blood, body fluids, and other infectious materials and how to prevent these exposures.

## Ergonomic hazards

- Employees should be given enough breaks to relieve stress from repetitive tasks.
- Furniture should be adjusted to minimize body strain.
- Each employee should be able to relax their wrists without having to hold their elbows away from the body.

## What nail salon owners and staff can do to minimize exposure

### Choose less toxic products

Offer product substitutions that are less toxic or nontoxic when possible. Examples include products free from: formaldehyde, camphor, toluene, and xylene.

### Prepare a hazard communication plan

The plan must identify hazardous chemicals in the workplace and describe how safety data sheets (SDS), warning labels, and training will protect and inform employees about the chemical hazards. A SDS for each product that contains a hazardous chemical must be readily accessible for employees who want to know about the product's hazards and how to protect themselves from overexposure.

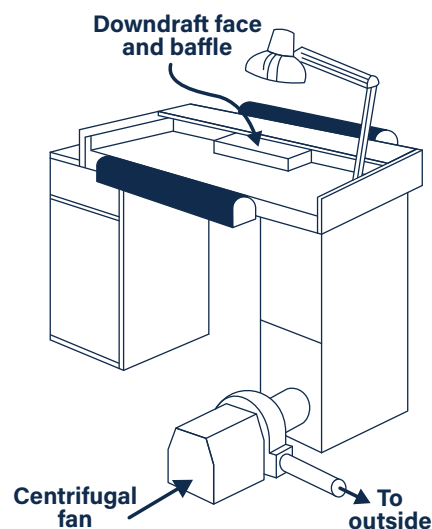


## Ensure adequate ventilation

The salon should have ventilation of at least 25 cubic feet per minute of outdoor fresh air per person during business hours. Each newly installed manicure or pedicure station must have an additional exhaust system that captures contaminants and odors at their source and exhausts them directly outside the building at a minimum 50 cubic feet per minute. A ventilation table protects the nail technician best against breathing EMA. The ventilated table is the most important engineering control for getting rid of EMA in a nail salon, as the vented table places local exhaust ventilation close to the work area.

### Provide employees with appropriate personal protective equipment (PPE)

Nitrile gloves, goggles, and proper respiratory protection can reduce employee exposure to nail particles, chemicals, and chemical vapors, and work to prevent infection or illness. Some microbes are not visible; reduce exposure by wearing gloves and a properly fitting mask.



## Use appropriate dispenser bottles and tool sanitization

Dispenser bottles should have openings just large enough for the application brush. No more than the needed amount of fingernail liquid should be poured into the closed dispenser bottle. The bottle stoppers should be pressure sensitive. Professional-grade disinfectant should be used to clean pedicure bowls after each client service, as well as for cleaning and sanitizing tools for a minimum of 15 minutes. Disposable nail products should be used on only one customer. Use an EPA-registered, hospital disinfectant labeled as viricidal, bactericidal, or fungicidal, or a disinfectant prescribed by the state's cosmetology board. Follow usage instructions exactly.

## Discard waste properly

Place chemical-soaked gauze pads in a sealed bag before disposing them in a metal trash can. Close the lid securely, and change trash-can liners daily.

## Require good hygiene work habits

Ensure that technicians wash their hands before eating or smoking and between client appointments. Also make sure technicians do not eat or drink at their workstations or near stored chemicals.



Visit Oregon OSHA

### Workers

Your employer cannot retaliate against you for reporting a workplace health or safety concern or violation. For more information on your rights, visit the Oregon OSHA website.

## Workplace safety requirements for nail salons

### Oregon OSHA

- 29 CFR 1910.1200: Hazard communication/GHS
- 29 CFR 1910.132: Personal protective equipment, and 29 CFR 1910.134: Respiratory Protection
- 29 CFR 1910.106: Flammable and combustible liquids
- OAR 437-002-0382: Oregon rules for air contaminants
- OAR 437-002-141: Sanitation
- Oregon Building Codes Division
- Oregon Mechanical Specialty Code, Chapter 4, Ventilation

### Additional resources

- 🔗 [Federal OSHA: Health Hazards in Nail Salons](#)
- 🔗 [CDC/NIOSH: Nail Technicians' Health & Workplace Exposure Control](#)
- 🔗 [Federal OSHA: A Guide for Nail Salon Workers](#)
- 🔗 [EPA: Protecting the Health of Nail Salon Workers](#)
- 🔗 [FDA: Nail Care Products](#)
- 🔗 [Oregon Institute of Occupational Health Sciences: Healthy Nail Salons](#)
- 🔗 [California Healthy Nail Salon Collaborative](#)

### Checklists, fact sheets for nail salons

- 🔗 [Best Practices Checklist for Nail Salons](#)
- 🔗 [Best Practices Checklist for Nail Salons companion guide](#)
- 🔗 [Best Practices in the Nail Salon: An Owners Guide to Safety](#)
- 🔗 [Safety Data Sheets](#)
- 🔗 [Ergonomics in the Nail Salon](#)