



Mount Sinai Children's Environmental Health Center

The Mount Sinai Children's Environmental Health Center (CEHC) commends the efforts of New York City Public Advocate Letitia James in advocating for safe and healthy environments in nail salons in the recent policy report titled "How Safe Is Your Nail Salon?"

http://pubadvocate.nyc.gov/sites/advocate.nyc.gov/files/publicadvocate-annualreport-nail_salon-1.pdf

New York City has an estimated 2000 nail salons. Safe and healthy indoor air environments are especially important given the number of chemicals routinely found in the products used in nail salons. Many of the nail salon workers are women of childbearing age as are many of the consumers who frequent nail salons. This potentially vulnerable period of development warrants special attention to air quality issues at nail salons.

Research at Mount Sinai's Children's Environmental Health Center is studying the potential human health impacts of exposures to chemicals in personal care products including nail polish. For example, nail polish can contain phthalates, which are added to nail polish to minimize chipping. Concerns have been raised about the potential endocrine disrupting properties of chemicals like phthalates. Phthalates are anti-androgenic (or anti-testosterone) and the developing male reproductive tract in utero is uniquely vulnerable to these exposures. For this reason, it is generally recommended that one choose safer nail polishes labelled "three free," that is, products without dibutyl phthalate, and free of formaldehyde and toluene as well.

Some of the chemicals in nail products and their associated health risks include (OSHA, EPA):

- **Acetone** (nail polish remover): headaches; dizziness; and irritated eyes, skin, and throat.
- **Dibutyl phthalate (DBP)** (nail polish): nausea and irritated eyes, skin, nose, mouth, and throat
- **Ethyl methacrylate (EMA)** (artificial nail liquid): asthma; irritated eyes, skin, nose, and mouth; difficulty concentrating.
- **Formaldehyde** (nail polish, nail hardener): difficulty breathing, including coughing, asthma-like attacks, and wheezing; allergic reactions; irritated eyes, skin, and throat. Formaldehyde can cause cancer.
- **Methyl methacrylate (MMA)** (artificial nail products banned for use in many states): asthma; irritated eyes, skin, nose, and mouth; difficulty concentrating; loss of smell.
- **Toluene** (nail polish, fingernail glue): dry or cracked skin; headaches, dizziness, and numbness; irritated eyes, nose, throat, and lungs; damage to liver and kidneys; exposure to very high levels can cause harm to developing fetus.

Safety measures that can be taken in nail salons include:

Environmental controls should be routinely assessed and enforced:

- **Adequate ventilation** in the salon by open doors and windows to let in fresh air; use wall mounted exhaust vent or portable ventilation machines; use ventilated tables when available
- Products should be **properly labelled**, in small containers at work station, and always closed when not in use
- Nail salons in New York City must ensure that MMA containing products are not used or sold at their nail salon.
- Salons can stock products without formaldehyde, dibutyl phthalate, and toluene, termed "**3 free**" products
- **Metal trash can** with self-closing lid are available at every work station

Personal Protective Measures nail salon workers can take:

- Approved **dust masks** (N95 rated) should be used when filing artificial nail enhancements
- **Latex-free nitrile gloves** should be worn by nail salon workers to prevent absorption of solvents through skin
- **No eating**, drinking, or storage of foods at work stations
- **Frequent hand washing**; workers should wash hands before and after every client, before drinking or eating, and after handling products
- Every worker should be trained on how to use the Material Safety Data Sheet (**MSDS**) for each product and where to find them in the salon

In summary, we commend the NY Public Advocate Letitia James' efforts to institute the needed regulatory controls that will enforce healthy nail salon environments throughout New York City.

References and Additional Resources:

- **Centers for Disease Control and Prevention**
 - <http://www.cdc.gov/niosh/topics/manicure/>
- **Environmental Protection Agency (EPA)**
 - <http://www.epa.gov/oppt/salon/nailsalonguide.pdf>
- **Occupational Safety and Health Administration (OSHA)**
 - <https://www.osha.gov/Publications/3542nail-salon-workers-guide.pdf>
- **New York State Department of State**
 - http://www.dos.ny.gov/licensing/pdfs/beauty_salon_guide.pdf
- **California Healthy Nail Salon Collaborative**
 - www.cahealthynailsalons.org
- **Oregon Collaborative for Healthy Nail Salons**
 - www.oregonhealthynailsalons.org