

Nail Salon Podcast

Anne Johnson: Welcome to Environmental Health Chat, a podcast about how the environment affects our health, from the National Institute of Environmental Health Sciences. I'm your host, Anne Johnson.

As summer heats up, many of us are heading to the beach or a neighborhood pool. For lots of women, the start of sandal season means first stopping at a local nail salon for a manicure and pedicure. But along with those nice colorful nails, you might also be getting a dose of chemicals from the many products used in nail salons. These chemicals may pose a health risk to you and especially to the nail salon workers who are exposed to them day in and day out.

Dr. Thu Quach is a research scientist at the Cancer Prevention Institute of California. She studies the environmental health hazards associated with nail salons. I spoke with her recently about her work. She said most of the potential harm from nail products comes down to something called the toxic trio.

Dr. Thu Quach: When we've looked at this work, the three compounds, what we call the toxic trio, has included phthalates, toluene, and formaldehyde. Dibutyl phthalates are included in a lot of products because they're sort of the plasticizers. Phthalates can cause endocrine disruption. So it can really disrupt your endocrine system. It can also have developmental and reproductive effects.

Another chemical that has been of concern is formaldehyde. And formaldehyde is known to cause cancer. It's been deemed as a cancer-causing agent. And then the last chemical, toluene, is used a lot in nail care products. There's been a lot of concerns in terms of the reproductive effects.

Anne Johnson: But to have these effects, the chemicals have to get into your body. Thu said there are several ways this could happen, especially for workers who spend their days in the salon.

Dr. Thu Quach: It's multiple routes of exposure. The biggest one that we've been looking at has been through inhalation. A lot of these compounds are very volatile. So formaldehyde, it volatilizes in the air, toluene. And so the inhalation becomes one of the big routes of exposure. But then there's also dermal absorption. There are studies looking at phthalates that show that women who work in a nail salon that wear gloves have less exposure.

And then because a lot of the workers, nail salon workers are working in salons and often eating in the salon, we've worried about ingestion, whether some of the chemicals are contaminating the food and water that they're drinking. So that's also a possible route of exposure.

Anne Johnson: Because nail salon workers spend so much time around these chemicals, researchers are concerned about the potential health impacts.

Dr. Thu Quach: Workers are reporting more acute health symptoms like headaches, skin irritations, and some breathing problems. And there's been another study that looked at some of the neurocognitive symptoms, and have shown higher neurocognitive problems.

Anne Johnson: Those problems include things like trouble thinking clearly or forgetting things. Researchers are concerned these workers may also be at high risk for some long-term health effects, like cancer or respiratory problems. But Thu said it's hard to study those effects. If you walk into a salon today and survey workers, you're missing any workers who might have gotten sick and left the workforce. But, she says, even if we don't yet know exactly what all the long-term effects are, we do know that there are things employers, workers, and even customers can do to make nail salons safer.

Dr. Thu Quach: The first is to select products, nail polishes that actually don't contain the toxic trio. So if they're picking products that contain less of the chemicals, there would be less in their workplace. Now, second to that, we encourage ventilation systems, particularly at key stations like where they're doing artificial nails, when they're using a lot of harmful chemicals. And then the later ones would be wearing protective gloves that would reduce the dermal absorption of chemicals.

Anne Johnson: She also added that there are also a lot of basic things like storing chemicals safely, taking frequent breaks, and keeping food away from the workstations. With funding from NIEHS, Thu is partnering with two community-based organizations to spread the word about how nail salon workers can protect themselves.

Dr. Thu Quach: We go in and we recruit nail salon owners and we train them, and then we ask them to turn around and conduct that training with their workers.

Anne Johnson: One of the partners in this effort is the California Healthy Nail Salon Collaborative, a group of nonprofits, researchers, and nail salon workers and owners focused on environmental justice and health issues in the nail salon workforce. Another partner is the University of California at San Francisco, Vietnamese Community Health Promotion Project. They're involved because an estimated 60% to 80% of California's nail salon workers are Vietnamese immigrants. Thu says that fact is key when you're developing training and outreach materials.

Dr. Thu Quach: It's important that the materials and the information that we disseminate really are tailored to them. When you're looking at many of the immigrant workforces, language is always a barrier, and then when you get to dealing with chemicals, sort of the accessibility of the information becomes a greater barrier.

Anne Johnson: But even if you don't speak Vietnamese or know a lot of chemistry, Thu said there are lots of things customers can do to make sure their nail salon is adequately protecting its workers and its customers.

Dr. Thu Quach: If you're going out to salons, talking to them about what products they're using and what they're doing to really protect themselves really is helpful because a lot of times one of the biggest barriers when we go into doing these educations with nail salons is they say, well the customers drive everything. So if they're hearing from the customers that they want safer products, it's an incentive to only provide those safer nail polishes.

Anne Johnson: You can learn more about the toxic trio and find other best practices for chemicals in the salon by visiting the links on our website. I want to thank Dr. Thu Quach for telling me about her work. You've been listening to Environmental Health Chat. I'm your host, Anne Johnson, and our podcast is brought to you by the Partnerships for Environmental Public Health, a program of the National Institute of Environmental Health Sciences. Find us online at niehs.nih.gov/podcasts/.