

Background:

The Chemicals Education for Cancer Prevention project was part of the Breast Cancer Coalition of Rochester's (BCCR) efforts to eradicate breast cancer through education and advocacy by raising awareness of potentially hazardous environmental exposures. Exposure to chemicals such as phthalates has been shown to disrupt the endocrine system and may be a possible breast cancer carcinogen. Despite no established causal link between breast cancer and these chemicals, a national effort is underway to educate the public - particularly those at highest risk - about the potential connections and how to reduce exposure to such chemicals (www.bcerp.org).

The workplace atlas and mapping, part of a two part chemicals education project conducted by the BCCR, aimed to identify nail salons where employees may be at risk of exposure to harmful chemicals. The study team focused on nail salons because workers are predominately women of childbearing age and research in other cities has found that nail salon workers may be exposed to harmful chemicals on a daily basis. This project was the preliminary step to identifying local demographics of nail salon workers so that future outreach efforts can be appropriately adapted.

Project Summary:

The study team used a cross-sectional approach to look at the demographics of nail salons in Monroe County. They condensed a list of nail salons in Rochester, NY by city quadrant (SE, SW, NE, NW) and by town for salons outside the city limit using online searches on Yelp and Google. In total, the study team visited 38 salons in the City of Rochester and 82 salons outside of the city, for a total sample size of 120.

At each salon visited, the project team recorded the (1) name, (2) location, (3) number of workers, (4) number of manicure stations, (5) number of pedicure stations, (6) primary language of workers (English, Vietnamese, Chinese, Korean, Filipino, other), (7) type of services (nail only, nail and hair, massage/spa, only hair, nail and tanning), (8) type of location (strip mall, stand alone building, busy street, building complex), (9) brands of polish, and (10) notes.

A large percentage of salons were Vietnamese speaking (58, 48.33%) and English speaking (55, 45.83%). Other languages spoken include Chinese (4, 3.33%), Korean (2, 1.67%), and Filipino (1, .83%). Interestingly, the study team found that nail services are offered in a variety of store types beyond the conventional nail only salons, which made up only 66.67% of salons visited (80 salons). Other salon types included hair salons (35, 30.00%), spas (3, 2.50%), and tanning salons (1, 0.83%). These two data points, language and salon type, were loosely compared with Nails Magazine's 2014 survey of nail salons; the data was not directly comparable because different criteria were used. Nails magazine used the categories 'nationality' (Caucasian, African American, Vietnamese, Other) and 'salon environment' (nail salon, full-service salon offering nails, day/hotel/destination spa, other). There appeared to be similar compositions in Monroe County and nationally, though this comparison should be taken with caution.

Understanding the demographics of nail salons workers will help narrow down future outreach efforts. One possible idea can be to investigate nail product supply sources; it may be more efficient to implement public health reform by directly targeting vendors and changing the products used to healthier alternatives. Nail salons may purchase products from local stores or possibly from online vendors or large wholesale warehouses. Another consideration is to identify salons using healthier nail products and procedures. Salons that use healthier alternatives can be identified via a store front sign or plaque stating that they follow certain health guidelines such as using "3-free" nail

polish or LED lamps. This could be an incentive for salons to attract more customers. However, in order for this to work, customers must know of and seek healthier alternatives and salons must consistently follow safety precautions. Interviews can also be set up for salons that adhere to healthy practices and published into community newsletters to promote business.