Using Research to Advance Nail Salon Worker Health, Safety, and Rights Agenda

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Presentation Outline

• Role of Research Subcommittee
• Multi-Stakeholder Research Convening
• Multi-disciplinary Research Advisory Committee
• Research Studies and Findings
State of the Science

• Nail salon workers handle products containing a multitude of harmful compounds
• Exposed at higher levels than consumers
• Vietnamese immigrants dominate the California workforce
• Workforce is understudied and extremely vulnerable
• **BUT** little research exists on their health and safety needs.
Role of Research Subcommittee

**Purpose:** Provide research expertise to the California Healthy Nail Salon Collaborative (Collaborative), including scientific credibility to the work.

**Main Activities:**
- Convene a Research Advisory Committee to provide technical expertise
- Conduct research projects that support the Collaborative’s mission
- Facilitate research collaborations among members and allies
- Provide additional funding support through research mechanisms
Multi-Stakeholder Research Convening

Purpose: To gather input from workforce members, researchers, cosmetic industry, regulators, and advocates to develop a proactive research agenda for this sector

• Held in Oakland, California on April 27-28, 2009
• 120 attendees, including workers and owners (simultaneous translation)
• Four plenary sessions:
  (1) salon workforce demographics;
  (2) occupational exposures & health outcomes;
  (3) greening the industry; and
  (4) government and regulatory agencies.
Convening Recommendation Highlights

• Establish a multi-disciplinary research advisory committee (RAC).
• Promote research that investigates the cumulative and synergetic impacts of numerous compounds over long periods of time.
• Develop a health surveillance program to track health problems.
• Develop culturally and linguistically appropriate education that focus on workplace chemical exposure reduction.
• Explore ways to advance green chemistry efforts.
Research Advisory Committee

**Purpose:** Provide technical expertise and scientific credibility

**Membership:**

Ann Blake, PhD - Molecular Geneticist & Neural Development
Michael DiBartolomeis, PhD, DABT - Toxicologist
Lori Edwards, RN, MPH - Nursing
Mark Lim, PhD - Chemist
Tuan Nguyen, CSP, CIH, ARM - Industrial Hygienist
Julia Quint, PhD - Biochemist
Peggy Reynolds, PhD - Epidemiologist
Cora Roelofs, ScD - Industrial Hygienist
Alexandra Scranton, MES - Environmental Scientist
Michelle Sommargren, PhD - Neurobiologist/ Environmental & Occupational Scientist
Mark Valentini, PhD - Chemist
Ami Zota, ScD - Environmental Health Scientist
Adelina Voutchkova, PhD - Green Chemistry Scientist
A Pilot Study to Characterize Workforce

Community-Research Collaboration: Asian Health Services and Cancer Prevention Institute of California

Research methods:
1) Two focus groups (N=20 workers and owners)
2) In-person surveys in salons (N=201 workers from 74 salons)*
   *conducted by former and current nail salon workers

Major findings:
▪ Half the salons had poor methods for ventilation
▪ 80% of workers reported health concerns due to work
▪ Nearly 50% of workers reported acute health symptoms (headaches, dizziness, difficulty breathing, skin irritations)

Follow-up Study of Workforce (PART I)

Do nail salon workers have higher cancer rates than the general population in California?

**RESULTS:** No excess cancer risk found for any sites

**CONSIDERATIONS:** Workforce is still fairly young and short observation time; may require extending years of study

Follow-up Study of Workforce (PART II)

What are the predictors of exposures to organic solvents among Vietnamese nail salon workers?

• Personal air monitoring with 80 Vietnamese salon workers from 20 salons
• Test for select compounds (e.g., toluene) around breathing zone
• Each worker wears the air monitor during work-shift
Follow-up Study of Workforce (PART II)

Findings:

- Toluene levels 2x higher than recommended indoor air by Cal EPA.

Additional measurements at 3 salons:

- Detected methyl methacrylate, a compound banned from nail products since 1974

- Total volatile organic compounds (TVOC) - a general measure for multiple airborne chemicals - at higher levels than recommended indoor air by Cal EPA

- Over 25% of workers reported uncomfortable health symptoms (headaches, skin irritations, breathing problems).

Reducing Chemical Exposure Education

- Pilot education /“intervention” study to reduce chemical exposures and build community capacity
- Recruit Vietnamese nail salon owners and provide in-depth training
- Owners train workers within their salon
- Workers and owners work to collectively reduce workplace chemical exposures - community capacity-building and relationship building
Future Research Interests

EXPOSURE
- Explore additional ways to better describe workers’ exposures

HEALTH
- Continue to examine cancer risk
- Examine reproductive health effects
- Explore ways to examine respiratory health effects

REDUCTION
- Implement a large-scale intervention/education program on strategies to reduce exposure - to owners and workers