Findings from the CAPABLE Project
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Personal Care Product Use and Chemical Exposure among Black, Latina, and Vietnamese Women in California Communities

May 12, 2022 webinar for Collaborative on Health and the Environment
CAPABLE (Chemicals And Personal care: Asian, Black, and Latina Exposure) Project Aims

- Build a diverse community-research collaborative
- Examine patterns of personal care product use among Asian, Black, and Latina women
- Identify chemicals of relevance to breast cancer toxicity in products
- Empower communities
Why cosmetics? Why women of color?

- Less regulated in the U.S.
- Racial and ethnic disparities in exposure and health outcomes
  - Premenopausal breast cancer
  - Breast cancer death rates

Misconceptions about the U.S. Food & Drug Administration’s (FDA) Authority

• Does **not** have same authority over cosmetics compared to food and drugs
• Does **not** have authority to recall products
• Does **not** require premarket testing for cosmetics

fda.gov/cosmetics

Building Evidence

• Higher use of products associated with higher body burdens of chemicals (e.g., phthalates, parabens)
  (Parlett et al., 2013; Philippat et al., 2015; Berger et al., 2018)

• Racial/ethnic differences in body burdens of chemicals that are found in personal care products
  (Calafat et al., 2010; James-Todd et al., 2017)

• Racial/ethnic differences in personal care product use may contribute to these disparities
  (Branch et al., 2015; McDonald et al., 2018; Llanos et al., 2017; Eberle et al., 2020)
CAPABLE Overview

- Community Survey
- Store “Inventories”
- Product Label Review
- Product Lab Analysis
Partners administered 321 surveys at community events and venues

- How often women use products
  (Hair, Skin, Makeup, Nail, Deodorant/Perfumes, Intimate Care)
- Where women buy these products
- How women choose products
Generally higher use of intimate care products among Black women and Latinas

| Used at least once per month | Black  
<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td>$n = 70$</td>
<td>$n = 73$</td>
<td>$n = 78$</td>
<td>$n = 79$</td>
<td>$n = 18$</td>
</tr>
<tr>
<td>Feminine wipes</td>
<td>29.8%</td>
<td>54.0%</td>
<td>19.8%</td>
<td>18.2%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Feminine wash/cleanser</td>
<td>38.2%</td>
<td>39.7%</td>
<td>30.5%</td>
<td>9.4%</td>
<td>42.0%</td>
</tr>
<tr>
<td>Feminine spray</td>
<td>13.8%</td>
<td>16.9%</td>
<td>8.7%</td>
<td>2.6%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Vaginal douche</td>
<td>8.9%</td>
<td>6.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>13.3%</td>
</tr>
</tbody>
</table>

The following items did not differ by racial/ethnic group and are not included in the table: feminine powder/baby powder, lubricant. Superscripts indicate that mean is significantly higher ($p < 0.05$) in pairwise comparison than mean for Black (B), Latina (L), Vietnamese (V), White (W), or Mixed-Race (M) women, respectively.

Nail products at least once/year – more common among women of color

Collins, et al., 2021

Did not differ among groups: nail polish and remover (not included in graph).
Community Survey: Summary of Findings

**Black Women**
Used professional hair services most frequently, and body butters, essential oils

**Latina Women**
Used makeup, acrylic nails, and home hair dye most frequently

**Vietnamese Women**
Used facial cleansing products and leave-in hair conditioners most frequently

**Latina & Vietnamese Women**
Were less likely to try to avoid certain ingredients in their products

Collins et al., 2021
Women are Concerned about Chemicals

- 30% said they try to avoid specific ingredients
- A few women named:
  - Parabens
  - Phthalates
  - Aluminum
  - Perfumes/Fragrance
  - Sulfates
- Majority of women said they would choose “Fragrance free” if available

Collins et al., 2021
39 Store “Inventories”
Documented products marketed to women in our communities
• Community partners chose products
• Found ingredients online
• Identified products with “chemicals of concern”
Terms

**Chemical of Concern (CoC)**
Chemicals linked to cancer, developmental/reproductive toxicity, or endocrine disruption

**Undisclosed “Fragrance”**
"Fragrance" or "parfum" on a product label represents any number of unidentified substances, some of which may be CoCs
“Chemicals of Concern”
Carcinogens, Developmental/Reproductive Toxicants, Endocrine Disruptors
Product Label Review Findings

- **Total Products**: 546
- **Products with Chemicals of Concern (CoCs)**: >50%
- **Products with undisclosed “fragrance” chemicals**: 74%
Chemicals of **Most** Concern (All 546 Products)
Two-Dimensional Gas Chromatography and Time-of-Flight Mass Spectrometry (GCxGC-TOFMS)

31 products of high concern to community partners: Hair, Skin, Makeup, Intimate care
- 27 CoCs detected
- 6 *sometimes* on labels
- 1 *always* on labels (ethylparaben)
- 20 never on labels
Lack of Labeling Transparency

Lab Analysis
31 Products

31 products tested

Represents CoCs NOT listed on the product label
Represents CoCs listed on the product label
What can I do to protect my health?

- You can avoid many of the chemicals found in these products:
  - Choose products that say “paraben-free” or “fragrance-free” on the label.
  - Promote natural beauty by using fewer products or by making your own products.
  - Before you buy, check product ingredients using apps and online tools that make it easy — CDPH’s California Safe Cosmetics Product Database, Clearya, EWG’s SkinDeep, Detox Me, Think Dirty.
- Take action! Demand that manufacturers remove potentially toxic chemicals from their products. Tell your lawmakers that we need stronger oversight of cosmetics and personal care products.
- Learn more at bit.ly/CAPABLE-Study.
Study Limitations

• May not be able to generalize to all Latinas, Black and Vietnamese women
• Limited number of stores and products
• Relied on online ingredient labels
• Did not include products only available online
• Comparisons were limited - Different product types across communities, no “mainstream” products
• Additional lab methods may have found additional CoCs
Implications of California Policy

- California Safe Cosmetics Act of 2005

- Cosmetic Fragrance and Flavor Ingredient Right to Know Act of 2020

- Toxic Free Cosmetics Act (2025)
  
  **Bans** dibutyl phthalate, diethylhexyl phthalate, formaldehyde, paraformaldehyde, methylene glycol, quaternium-15, mercury, isobutylparaben, isopropylparaben, m-Phenylenediamine and its salts, o-Phenylenediamine and its salts, and several per- and polyfluoroalkyl substances (PFAS) and their salts
Cosmetic Fragrance and Flavor Ingredient Right to Know Act of 2020

All ingredients on 5 lists of Carcinogens / Developmental / Reproductive Toxicants

Fragrance and flavor ingredients on 23 lists adds Endocrine Disruptors, Neurotoxicants, Allergens, PBTs

California Safe Cosmetics Program Database cscpsearch.cdph.ca.gov
CFFIRKA reporting January – April 2022

97 newly reported ingredients, including...

Fragrance Allergens (Thousands of products already)
Lilial – Reproductive toxicant banned in EU 1000+ products
Glycol ethers – Respiratory toxicants 600+ products

Reproductive tox, Endocrine disruptors
Cyclosiloxanes 350+ products
Phthalates 150+ products
Parabens 100+ products

California Safe Cosmetics Program Database cscpsearch.cdph.ca.gov
Conclusion

• There are a lot of chemicals of concern in personal care products!
• Practical tips specific to communities
• Policies – hard to shop your way out of exposures
• Online tools to avoid/choose products

California Safe Cosmetics Program Database
cscpsearch.cdph.ca.gov

California Department of Public Health
Thank you!
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Study participants and advisory boards

CAPABLE Study funded by