Miller, Diane M. (CDC/NIOSH/EID)

From: Catherine Porter <catherineaporter@gmail.com>
Sent: Friday, December 30, 2011 1:40 PM
To: NIOSH Docket Office (CDC)
Subject: Docket Number NIOSH-240
Attachments: NIOSH Cancer Policy commnts-NatlHNSA-12.30.11.doc

Attached are the comments re Docket No. NIOSH-240 from the National Healthy Nail and Beauty Salon Alliance.

Thank you,
Catherine Porter
(510) 985-1146

National Healthy Nail and Beauty Salon Alliance

December 30, 2011

John Howard, Director
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
NIOSH Docket Office
Robert A. Taft Laboratories
4676 Columbia Parkway, MS-C34
Cincinnati, Ohio 45226
Submitted by e-mail to: *nioshdocket@cdc.gov.*

RE: Request for Information: Announcement of Carcinogen and Recommended Exposure Limit (REL) Policy Assessment, Docket Number NIOSH-240

Dear Dr. Howard:

The National Healthy Nail and Beauty Salon Alliance is writing to comment on the Carcinogen and Recommended Exposure Limit (REL) Policy.

The National Healthy Nail Salon Alliance (Alliance) was founded in 2007 and is a joint project of Women's Voices for the Earth (WVE), the California Healthy Nail Salon Collaborative (the "Collaborative"), and the National Asian Pacific American Women's Forum (NAPAWF). The Alliance is a nation-wide coalition working to raise the profile of salon worker health and safety issues, to connect and leverage the resources of concerned groups (including workers' rights, labor, environmental and reproductive health and justice, and Asian Pacific Islander groups), to advocate that salon product manufacturers reformulate and produce safer products, and to advocate for greater regulatory protection of salon workers.

The Nail Salon Industry.

In the US, the beauty industry is booming. In the last decade, the number of nail technicians has jumped 374% to more than 380,000 nationwide, with women making up to 96% of the industry's workforce. The majority of nail salon workers are women of color, an estimated 42% nation-wide are Asian immigrants, and most are of reproductive age. One in five manicurists work in California, where up to 80% are Vietnamese women. Many salon workers speak limited English and lack an understanding of and access to regulatory, legal and health care systems. Most tend to earn less than $18,200 a year, lack health insurance and work in conditions that can be hazardous to their health.

Salon products contain chemicals that are linked to a range of acute and chronic conditions such as cancer, as well as respiratory, and developmental and reproductive harm.

While demand for salon services has grown, little attention has been paid to health impacts associated with the occupational exposures experienced by this sector of low-wage workers. On a daily basis, salon workers handle solvents, glues, polishes, dyes and other beauty care products containing a multitude of chemicals known or suspected to cause cancer, allergies, and respiratory, neurological and reproductive harm. Published studies that have measured the level of air contaminants in beauty salons suggest that even when exposures are well below current occupational exposure standards, workers still experience related health problems.[1] [2]

Three chemicals of great concern in nail salon products are toluene, formaldehyde and di-*n*-butyl phthalate (DBP), collectively known as the "toxic trio." Toluene creates a smooth finish across the nail and keeps the pigment from separating in the bottle. It is a common volatile solvent that can impact the central nervous system, cause irritation of the eyes, throat and lungs, and is a possible reproductive toxicant. Formaldehyde, a nail-hardening agent, is also a volatile chemical that evaporates into the air of salons and is known to cause cancer. High concentrations can trigger asthma attacks. Exposure to DBP, added to polishes to provide flexibility and a moisturizing sheen, can affect thyroid function. It has been linked to developmental and reproductive harm, including decreased sperm count in adult men. Products used in salons contain a myriad of other compounds that are harmful or lack any toxicological data.

Relatively little research has been conducted on the long-term, chronic health impacts resulting from occupational exposures in nail and hair salons. Some new studies provide reason for concern, correlating health problems with daily exposure to chemicals in salon products by this worker population. Several studies have shown that nail salon workers have higher - in fact 2-fold higher - levels of DBP than the general population.[3] [4] Another study found that beauticians are likely to have significant exposure to solvents that are linked to birth defects.[5] Other studies have found cosmetologists are at a higher risk for having spontaneous abortions and low birth weight babies.[6] [7]

We appreciate the opportunity to participate in NIOSH's process, one that could result in fewer cancer and other chronic disease diagnoses for American workers. Thank you in advance for considering the following responses to questions you posed to the American public, especially workers and their advocates:

(1) Should there explicitly be a carcinogen policy as opposed to a broader policy on toxicant identification and classification (e.g. carcinogens, reproductive hazards, neurotoxic agents)?

NIOSH should adopt a new, explicit, health-based Carcinogens Policy that captures the best available science. There should also be policies on neurotoxicants, reproductive and developmental hazards, endocrine disruptors, asthmagens and other substances related to occupational disease endpoints. Although these hazards deserve the development of their own NIOSH policies, any way that NIOSH can

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[1] Labrèche, F, et al., "Characterization of Chemical Exposures in Hairdressing Salons," Applied Occupational Health and Environment, 2003; 18: 1014-1021.

[2] Industrial Hygiene Assessment of Toluene and Formaldehyde Concentrations in California Nail and Full Service Salons, Clayton Project, project no. 800-97276.00, Clayton Environmental Consultants, Santa Ana, CA, March 16, 1999.

[3] Hines J, Cynthia et al. "Urinary Phthalate Metabolite Concentrations among Workers in Selected Industries: A Pilot Biomonitoring Study." The Annals of Occupational Hygiene. (2009); 53(1):1-17

[4] Kwapniewski, Rachel et al. Occupational Exposure to Dibutyl Phthalate Among Manicurists." Journal of Occupational and Environmental Medicine (2008); Vol. 50, No.6.

[5] Garlantezec, Monfort, Cordier. "Maternal occupational exposure to solvents and congenital malformations: a prospective study in the general population." Occup. Environ. Med. (2009); 66: 456-463

[6] John, EM, Savitz D, Shy C. "Spontaneous abortions among cosmetologists." Epidemiology. (1994) Mar; 5(2): 147-155

[7] Herdt-Losavio ML. "The risk of having a low birth weight or preterm infant among cosmetologists in New York State." Maternal Child Health Journal. (2009) Jan; 13(1):90-7.

leverage data and information applicable across endpoints to develop more health-protective policy(s) should be implemented. However, the need to develop those policies should not delay the modernization of the Carcinogens Policy.

In revising its carcinogen policy and developing polices for other health endpoints, NIOSH can build upon recent policy recommendations that have emphasized the importance of safer alternative products and chemicals and a precautionary approach to health and environmental policy. The President's Cancer Panel's 2008-2009 Report stated that a "precautionary, prevention-oriented approach should replace current reactionary approaches to environmental contaminants in which human harm must be proven before action is taken to reduce or eliminate exposure." (See Report at http://deainfo.nci.nih.gov/advisory/pcp/annualReports/pcp08-09rpt/PCP_Report_08-09_508.pdf, p. xi.)

Similarly, the CDC-sponsored National Conversation on Public Health and Chemical Exposures concluded: "The current lack of emphasis on primary prevention in U.S. chemicals policy creates missed opportunities to avoid harmful effects from chemical exposures....Standard scientific criteria and protocols also are needed for applying a common-sense, precautionary approach to decisions about chemicals and health that would promote the design and use of safer chemicals." (See Executive Summary, http://www.nationalconversation.us/action-agenda/executive-summary.)

(2) What evidence should form the basis for determining that substances are carcinogens? How should these criteria correspond to nomenclature and categorizations (e.g., known, reasonably anticipated, etc.)?

NIOSH should use all available data when evaluating the carcinogenicity or other toxicity of a substance, including data from epidemiologic and toxicological studies as well as data from rapid screening assays and structure activity studies. NIOSH should revise its carcinogen policy to include reliance on in vitro screening methods to identify carcinogens or other toxicants where appropriate. A policy which uses only animal and human evidence cannot address the enormous problem of new and emerging hazards, let alone the backlog of thousands of untested chemicals already in commerce.

NIOSH's current classification of "potential occupational carcinogen" should no longer be used. Instead NIOSH should expand and harmonize its classification system. Harmonization would allow NIOSH to rely on the decisions of authoritative bodies like IARC and NTP and then focus its review on what the decisions of those bodies mean for American workers. When any authoritative body decides that a substance meets its criteria as a known, reasonably anticipated, probable, possible, presumed or suspected human carcinogen, NIOSH could review those decisions and then make whatever recommendations may be necessary to protect workers from those substances.

(3) Should 1 in 1,000 working lifetime risk (for persons occupationally exposed) be the target level for a recommended exposure limit (REL) for carcinogens or should lower targets be considered?

The risk of 1 cancer in 1,000 workers exposed to a specific carcinogen over a lifetime is ***not*** an acceptable level of risk. The Occupational Safety and Health Act states that NIOSH should "describe exposure levels that are safe for workers." The 1 in 1,000 working lifetime risk cannot reasonably be construed to be "safe for workers." Where it is clear that the recommended exposure limit is no exposure, NIOSH should make that clear to employers and to workers.

(4) In establishing NIOSH RELs, how should the phrase "to the extent feasible" (defined in the 1995 NIOSH Recommended Exposure Limit Policy) be interpreted and applied?

NIOSH's job of establishing recommended exposure limits should be based on health impacts. Feasibility restrictions are an unnecessary and health-compromising limitation for a health agency that develops recommendations for the protection of workers from carcinogens and other health-compromising substances.

"To the extent feasible" is a restriction that may belong in regulations that require the use of control technologies. But any consideration of what may be "feasible" should also include a look to developing safer alternative substances and practices. As stated on NIOSH's website in regard to its program Prevention through Design, "One of the best ways to prevent and control occupational injuries, illnesses, and fatalities is to 'design out' or minimize hazards and risks early in the design process."

(5) In the absence of data, what uncertainties or assumptions are appropriate for use in the development of RELs? What is the utility of a standard "action level" (i.e., an exposure limit set below the REL typically used to trigger risk management actions) and how should it be set? How should NIOSH address worker exposure to complex mixtures?

Where there are uncertainties about evidence of carcinogenicity or other chronic hazard, it is important to assume that there is a reasonable likelihood that a substance is a human carcinogen (or an asthmagen, reproductive or developmental or neuro- toxicant, etc.) and should be treated as such to prevent chronic disease among workers.

It is prudent to assume there is no safe level of a carcinogen and therefore to initiate prevention strategies, especially a search for a substitute chemical, whenever a carcinogen is in use. Under such a scheme, a specific Action Level would not be appropriate.

In conclusion, thank you for your consideration of our comments. We look forward to NIOSH revising/developing cancer and other policies that will lead to standards that prevent chronic illness caused by occupational chemical hazards, particularly as they impact low-income immigrants who are most vulnerable to inadequate regulatory protection.

Sincerely,

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