Prioritization Process Overview and Application of Epidemiologic Data Screen

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Prioritization Process Overview

Process for Prioritizing Chemicals for Consideration Under Proposition 65 by the State's Qualified Experts (OEHHA, December 2004)

 Developed in consultation with the Developmental and Reproductive Toxicant Identification Committee and the Carcinogen Identification Committee



Prioritization Process Overview (continued)

- Purpose to identify chemicals for evaluation by the DART IC
- **Goal** to focus the efforts of the DART IC on chemicals that may pose significant hazards to Californians

Prioritization is a **preliminary appraisal** of the evidence of hazard, based on **abstracts** of studies



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Prioritization Process

Tracking Database

—Chemicals identified from literature searches, suggestions from the DART IC, state agencies, the scientific community, and the general public; with data suggesting the potential to cause developmental or reproductive toxicity

Candidate Chemicals

> —**Tracked** chemicals with data suggesting the potential for exposure in California



Prioritization Process

Tracking Database **Candidate Chemicals Screens: Focused Literature Review** Chemicals Proposed for Committee Consideration Consultation with the Committee on Chemicals for Review **OEHHA Selection of Chemicals for Preparation of Hazard Identification Materials**



Hazard Identification by the DART IC

Data Call-In on Selected Chemicals \leftarrow Public Data Submission Hazard Identification Materials Prepared on Chemicals for Committee **Committee Review** \leftarrow **Public Comments** and Listing Decision



Application of Epidemiologic Data Screen to Candidate Chemicals (n = 286)

- Online literature database search (TOXLINE, PubMed)
- Identification of epidemiologic studies reporting an association between exposure to the chemical and increased risk of adverse developmental or reproductive outcome
- Two or more analytical studies of sufficient quality required
- Descriptive studies or case reports alone not sufficient to satisfy the screen



Preliminary Toxicological Evaluation of Chemicals Identified by the Epidemiologic Data Screen

- Literature search to identify experimental animal studies, other relevant data (e.g., mechanisms of action, metabolism and pharmacokinetics, *etc*.)
- Preliminary toxicological evaluation of the overall evidence of developmental or reproductive toxicity, based on abstracts of studies



Chemicals Proposed for Committee Consideration

Chemicals identified by the epidemiologic data screen for which a *preliminary* evaluation of the *overall evidence* indicates that developmental or reproductive toxicity may be a concern

- Bisphenol-A
- Bromodichloromethane
- Caffeine
- Chlorpyrifos

- Chromium (hexavalent)
- DDE
- Methylisocyanate
- Sulfur dioxide



Chemicals Proposed for Committee Consideration (continued)

For each of the proposed chemicals:

- Compiled abstracts of
 - epidemiologic studies
 - experimental animal studies
 - other relevant data

identified during the preliminary toxicological evaluation

- Provided to the DART IC and released to the public for 60 day comment period
- Public comments received were provided to the DART IC prior to today's meeting



Consultation with the Committee on Chemicals for Review

- DART IC advises OEHHA on the chemicals that should undergo the development of hazard identification materials
- Additional opportunity for public comment

