Planning for Chemical Selection

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Scientific Guidance Panel Meeting

December 17, 2007
Sacramento, California

Outline

- Chemical selection process overview
  - **Designated chemicals**
  - **Priority chemicals** for study, drawn from designated chemicals
- Next Steps

Chemical Selection Process

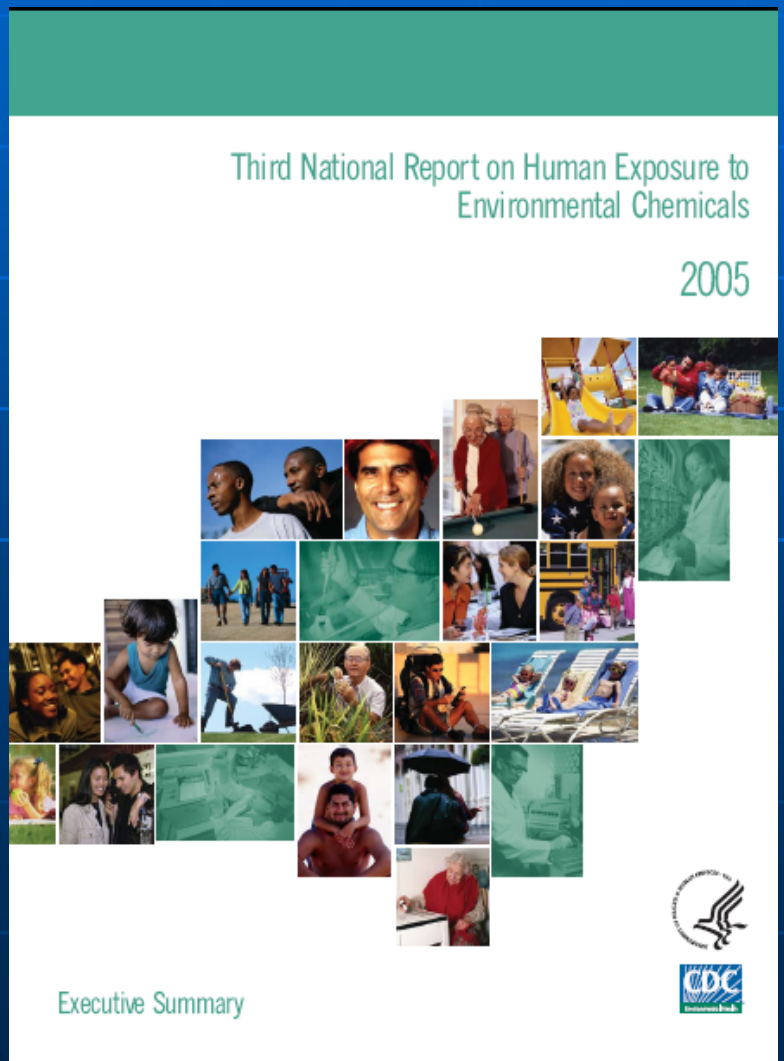
- Step 1. Assemble listing of *Designated Chemicals*
- Step 2. SGP recommends *Priority Chemicals* for biomonitoring, from Designated Chemicals
- Step 3. Program selects chemicals for biomonitoring study

Step 1. Designating Chemicals
(CH&S Code Chapter 8, Section 105440(b)(6))

- "those chemicals known to, or strongly suspected of, adversely impacting human health or development"
- "based upon scientific, peer-reviewed animal, human, or in vitro studies"
- And substances included:

1) In the federal CDC NHANES or
2) Recommended by the SGP, per Section 105449

Designated Chemicals: A) CDC NHANES



CDC National Reports on Human Exposure to Environmental Chemicals

2001 report 27 chemicals

2003 report 116 chemicals
(on 1999-2000 NHANES participants)

2005 report 148 chemicals
(on 2001-2002 NHANES participants)

On-Going CDC Activities

2003-2004 NHANES 276 chemicals
2007-2009 NHANES >300 chemicals

Designated Chemicals:
B) SGP Additions
CH&S Code Chapter 8 section 105449 (c)

Criteria:

1. Exposure or potential exposure
2. Known or suspected health effects
3. The need to assess the efficacy of actions to reduce exposure to a chemical
4. The availability of an adequate analytical method
5. The availability of adequate biospecimen samples
6. The incremental analytical cost to perform the biomonitoring analysis

Step 2. SGP Recommends Priority Chemicals

- From among Designated Chemicals
- Using criteria specified in Section 105449(b)

Selecting Priority Chemicals: SGP Criteria

1. The degree of potential exposure to the public or specific subgroups
2. The likelihood of a chemical being a carcinogen or toxicant based on
    a. peer-reviewed health data,
    b. the chemical structure, or
    c. the toxicology of chemically related compounds
3. The limits of laboratory detection for the chemical (e.g., ability to detect the chemical at low enough levels)
4. Other criteria that the panel may agree to

Next Steps

- How can CECBP assist the SGP in identifying additional **designated chemicals**?
  - Identify chemicals included in other biomonitoring programs
  - Identify chemicals from published studies of biomonitoring in scientific literature
  - Other
- How would the SGP like to receive public input on this aspect of chemical selection?

Next Steps

- How can CECBP assist the SGP in recommending **priority chemicals**?
  - Explore additional criteria for SGP use
  - What types of information will be most useful to the SGP in making recommendations
  - Which designated chemicals to focus on

- How would the SGP like to receive public input on this aspect of chemical selection?