# CECBP Program Overview

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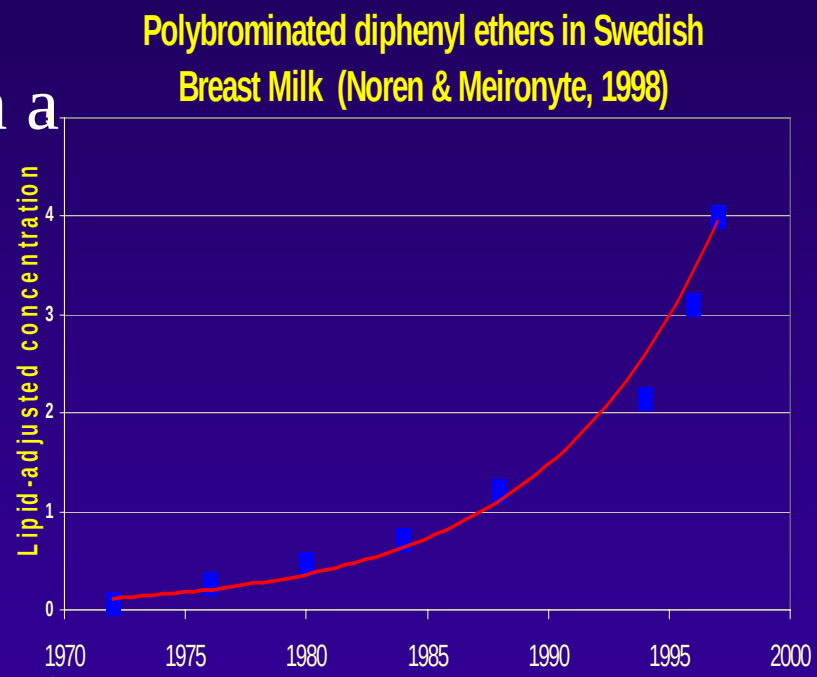
California Environmental Contaminant Biomonitoring Program
Scientific Guidance Panel Meeting
December 17, 2007
Sacramento, California

# California Environmental Contaminant Biomonitoring Program (CECBP)

- Will systematically collect, analyze and archive blood and other human biological samples
- Will merge results of chemical analysis with participants' physiological measurements and questionnaire responses
- Participants will comprise a random sample of Californians (2,000 over 2-year cycles)
- Unlike national program, CECBP will have exposure as primary focus

# CECBP findings will be used to:

- Determine baseline levels of environmental contaminants in a representative sample of Californians
- Establish temporal trends in contaminant levels
- Assess effectiveness of public health efforts and regulatory programs to reduce exposures of Californians to specific chemical contaminants



# CECBP Basic Institutional Structure

- Close collaboration of three departments
  - California Department of Public Health (CDPH)
  - Office of Environmental Health Hazard Assessment (OEHHA)
  - Department of Toxic Substances Control (DTSC)
- Peer review by Scientific Guidance Panel
- Public participation and integration
- Consultation with CDC
- Coordinate with Environmental Health Tracking Program and Environmental Indicators Program

# CECBP Organizational Components

**Scientific Guidance Panel**

| CDPH | DTSC | OEHHA |
| --- | --- | --- |
| • Environmental Health Investigations Branch<br>• Environmental Health Laboratory Branch | • Environmental Chemistry Laboratory | • Reproductive and Cancer Hazard Assessment Branch |

CDPH – Program lead, sampling design*, questionnaire development*, field and clinic work, participant recruitment and enrollment, data management and analysis, results to participants upon request

DTSC, CDPH labs – Laboratory methods development, processing and analyzing biological samples, data analysis

OEHHA – Scientific Guidance Panel support, public outreach efforts, data analysis

**With input from OEHHA and DTSC*

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**OEHHA**

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**Stakeholder and Public Participation**

Provide opportunities for meaningful public participation through stakeholder workshops and meetings, and develop materials that are understandable and sensitive to the diverse needs of Californians.

# Guidance and Input from CDC

Scientific Guidance Panel

| CDPH | DTSC | OEHHA |
| --- | --- | --- |
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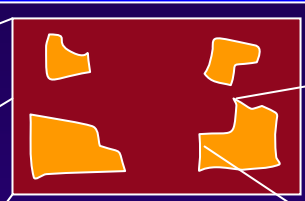
**Centers for Disease Control and Prevention**

- Consultation and technical assistance – sampling strategy, data collection and management
- Methods transfer
- Training of state laboratory staff
- Quality assurance and quality control (QA/QC)

# Overview of Sample Selection Stages

Stage 1 - counties


Stage 2 - segments



Stage 3 - homes

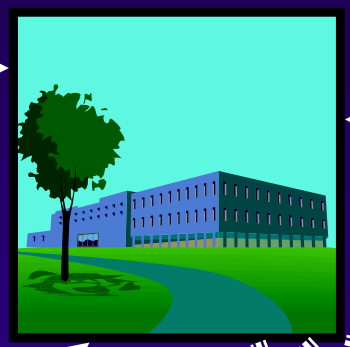
Stage 4 - study participants

# Possible Survey Process

Household interviews

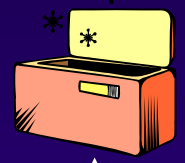
survey data

CECBP offices and labs



samples

Archive at CDPH



Field Clinic

physiological data & biological samples

analysis summary

test results

research data

participants

public

researchers

# Provisional Timeline

- Early 2008 – Complete hiring of initial staff
- June 2008 – Purchase and install initial laboratory equipment; complete information technology feasibility study
- 2007-2010 – Lab methods and QA/QC development
- 2007-2010 – Field survey instruments and protocol development, field testing
- Late 2010 – Dress rehearsal to test all methods and procedures
- Late 2011 – Full program rollout, i.e., first year of two-year sampling cycle

# Selected Issues in Implementation

- ***Resources*** **-** no funding provided in legislation
- ***Analyte selection*** **–** start with CDC list, but focus on California's needs
- ***Program infrastructure*** **–** CDC piggybacks on NHANES; nothing comparable yet in California
- ***Targeted community studies*** **–** contingent on funding
- ***Communicating results to participants*** **–** may be challenging for chemicals with little human toxicity data

# CECBP Implementation

- An ambitious undertaking with many challenges
- Significant promise for environmental public health
- Major opportunities leveraging state-of-the-art research on exposure assessment