Biomonitoring California Program Receives Funding from U.S. Centers for Disease Control and Prevention

The California Environmental Contaminant Biomonitoring Program, also known as Biomonitoring California (BC), is set to receive funding for the next five years by way of a new agreement with the U.S. Centers for Disease Control and Prevention (CDC). Starting Sept. 1, 2014, BC will receive $1 million per year for five years.

The Department of Toxic Substances Control’s Myrto Petreas, a Branch Chief in DTSC’s Environmental Chemistry Lab (ECL) in Berkeley, said the money will help to sustain the BC program, until stable funding is secured.

The BC program is a collaborative effort of DTSC, the Office of Environmental Health Hazard Assessment (OEHHA) and the California Department of Public Health (CDPH) and its three primary purposes are to:

1. Determine levels of environmental chemicals in a representative sample of Californians;
2. Establish trends in the levels of these chemicals over time;
3. Help assess the effectiveness of public health efforts and regulatory programs to decrease exposures to specific chemicals.

Most of the CDC money will be split evenly between DTSC’s Environmental Chemistry Lab and CDPH’s Environmental Health Laboratory Branch. The balance will support some core functions of the program. The ECL will use its share to support two of the four staff members hired with a 2010 CDC grant, and operating expenses. The lab is also in the process of hiring two additional limited-term staff members.

Biomonitoring is the measurement of chemicals in a person’s body fluids or tissues, such as blood or urine. It tells us the amount of the chemical that actually gets into people from all sources (for example, from air, soil, water, dust, and food) combined.
The BC program was created in 2006 and the list of accomplishments is lengthy. Among the discoveries so far: Moms pass chemicals to their newborns; Central Valley residents have elevated arsenic levels; firefighters following safety guidelines have lower levels of chemicals than those who do not; use of illegal cosmetics containing mercury results in clinically dangerous mercury levels in blood.

ECL’s studies demonstrated that levels of PBDEs (flame retardants that were phased out recently) are dropping in human blood. “The program is an important one and our studies so far have shown that interventions work and that biomonitoring can assess the efficacy of such interventions,” Petreas said. “The findings of the studies can inform public health interventions and decision making on chemicals policies.”

For the 2014-15 fiscal year, the BC program will focus on four strategies:

1. Conduct biomonitoring surveillance of pregnant women using blood from the Genetic Diseases Screening Program;
2. Target populations with state-specific or unique exposures;
3. Explore yet-to-be identified chemicals using state-of-the-art equipment;
4. Engage participants, the public and policymakers.