

AMENDED IN SENATE MARCH 29, 2005

SENATE BILL

No. 600

Introduced by Senators Ortiz and Perata
(Coauthor: Assembly Member Chan)

February 18, 2005

An act to add Chapter 8 (commencing with Section 105440) to Part 5 of Division 103 of the Health and Safety Code, relating to public health, and making an appropriation therefor.

LEGISLATIVE COUNSEL'S DIGEST

SB 600, as amended, Ortiz. Biomonitoring.

Existing law establishes various programs for the protection of the public from exposure to toxins, including, but not limited to, the Childhood Lead Poisoning Prevention Act, administered by the State Department of Health Services, which imposes a fee upon manufacturers or persons who are responsible for lead contamination and applies the proceeds of the fee to reduction or elimination of the harm caused by the lead contamination.

This bill would require the Division of Environmental and Occupational Disease Control within the department to establish the Healthy Californians Biomonitoring Program to monitor the presence and concentration of designated chemicals, as defined, in Californians.

This bill would require the department and the agency to establish an advisory panel to assist the department and the agency. The bill would establish the Healthy Californians Biomonitoring Fund for deposit of funds, upon appropriation by the Legislature, and would continuously appropriate the fund for the biomonitoring program. The bill would require the department to provide public access to information, and to report to the Legislature and the public.

Vote: majority. Appropriation: yes. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. The Legislature finds and declares all of the
2 following:

3 (a) Chronic disease has reached epidemic proportions in the
4 United States. An estimated 125 million Americans, or 43
5 percent of the population, have at least one chronic illness, while
6 60 million people, or 21 percent of the population, suffer from
7 multiple chronic conditions. Roughly 20 million American
8 children suffer from at least one chronic health problem. Cancer,
9 asthma, birth defects, developmental disabilities, endometriosis,
10 and infertility, are becoming increasingly common, and mounting
11 evidence links incidence and severity of these diseases to
12 exposure to environmental toxicants.

13 (b) Chronic diseases carry enormous costs to California. For
14 example, the estimated total cost of asthma in California is
15 approximately \$1.27 billion annually. For individuals born in
16 1988 with one or more of the 18 most common birth defects,
17 estimated lifetime costs for medical treatment and lost
18 productivity exceed \$1 trillion. Special education for the
19 estimated 1 million California children with learning disabilities,
20 carries an annual price tag of \$12 billion.

21 (c) An estimated 85,000 chemicals are registered for use today
22 in the United States. Another 2,000 chemicals are added each
23 year. Some toxicological screening data exists for only 7 percent
24 of these chemicals. More than 90 percent of these chemicals have
25 never been tested for their effects on human health. Large
26 numbers of these chemicals are found in cosmetics, personal care
27 products, pesticides, food dyes, cleaning products, fuels, and
28 plastics. Because of their ubiquity in modern life, Californians
29 are commonly exposed to multiple chemicals every day. Many of
30 these chemicals persist in the environment, and accumulate and
31 remain in body fat, and have been shown to be toxic.

32 (d) Biomonitoring studies have scientifically demonstrated
33 that human exposure to a multitude of persistent chemicals is
34 both chronic and widespread. The Centers for Disease Control
35 and Prevention has documented the presence of 116
36 environmental chemicals in the blood and urine of Americans of
37 all ages and races. More than 200 synthetic chemicals have been
38 detected in breast milk, many of which are known to cause

1 mammary tumors in animals. Unlike the United States, Germany
2 and Sweden have national breast milk monitoring programs,
3 which have led to policies that have dramatically reduced
4 exposure to environmental toxicants.

5 ~~(e) The presence of toxins in breast milk raises a special health~~
6 ~~concern for breastfeeding mothers, pregnant women, and their~~
7 ~~babies. The developing fetus is at great risk from in utero~~
8 ~~exposure to harmful chemicals, and nursing infants are~~
9 ~~vulnerable because certain persistent toxic chemicals concentrate~~
10 ~~in breast milk.~~

11 ~~(f) While acknowledging the risk for concentration of toxic~~
12 ~~chemicals in breast milk, there is a broad consensus among~~
13 ~~medical providers and maternal and child health advocates that~~
14 ~~breast milk is the most nutritious food for infants. Mother's milk~~
15 ~~helps a nursing infant develop a stronger immune system and~~
16 ~~protects the child from illnesses and allergies, provides vital~~
17 ~~nutrients during critical periods of growth, and offers other~~
18 ~~potential protections against environmental pollutants and~~
19 ~~pathogens.~~

20 ~~(g)~~
21 *(e) The presence of toxins in the environment raises special*
22 *health concerns for California families. The developing fetus is*
23 *at heightened risk from in utero exposure to harmful chemicals*
24 *because the neurological, reproductive, and immunological*
25 *systems of a fetus are still in development. For the same reason,*
26 *nursing infants are vulnerable because certain persistent toxic*
27 *chemicals concentrate in breast milk. It is important to always*
28 *emphasize that studies conducted on breastfeeding consistently*
29 *find that breast milk is the best choice for maximizing a healthy*
30 *start in life for infants. There is broad consensus among*
31 *Medi-Cal providers and maternal and child health advocates*
32 *that mother's milk provides a nursing infant with a stronger*
33 *immune system, protects the child from illnesses and allergies,*
34 *provides vital nutrients during critical periods of growth and*
35 *development, and offers other potential protections against*
36 *environmental pollutants and pathogens.*

37 *(f) Biomonitoring data supports public health by establishing*
38 *trends in chemical exposures, validating modeling and survey*
39 *methods, supporting epidemiological studies, identifying*
40 *impacted communities or particularly vulnerable communities,*

1 *assisting in health responses to unanticipated emergency*
2 *exposures, assessing the effectiveness of current regulations, and*
3 *helping to set priorities for reform, and protecting Californians*
4 *from unanticipated emergency exposures.*

5 ~~—(h)—~~*priorities for reform.*

6 (g) The priority public policy recommendation from the 2002
7 International Summit on Breast Cancer and the Environment was
8 to establish a national biomonitoring program in the United
9 States using breast milk and other biospecimens to assess
10 community health.

11 (i)

12 (h) In September 2001, the Legislature passed Senate Bill 702
13 (Chapter 538, Statutes of 2001), making California the first state
14 in the nation to begin planning a statewide environmental health
15 tracking network for chronic diseases and environmental hazards
16 and exposures. In followup, the Senate Bill 702 Expert Working
17 Group has recommended the establishment of a statewide
18 biomonitoring program.

19 (j)

20 (i) The Legislature, therefore, finds and declares that the
21 establishment of a statewide biomonitoring program is necessary
22 to identify the presence of toxic chemicals in individuals and
23 communities, to educate and counsel affected individuals and
24 communities, and to develop strategies to prevent ~~or minimize~~
25 ~~the harmful effects of the exposures to potentially harmful~~
26 chemicals. A biomonitoring program will expand biomedical,
27 epidemiological, and behavioral public health research.
28 California, an established leader in health promotion, health
29 policy, and health care delivery and response, should encourage
30 and fund this research, which will contribute to the health and
31 well-being of millions of people.

32 SEC. 2. Chapter 8 (commencing with Section 105440) is
33 added to Part 5 of Division 103 of the Health and Safety Code, to
34 read:

CHAPTER 8. HEALTHY CALIFORNIANS
BIOMONITORING PROGRAM

Article 1. General

105440. (a) This chapter shall be known, and may be cited, as the Healthy Californians Biomonitoring Program.

(b) For the purposes of this chapter, the following terms have the following meanings:

(1) “Department” means the State Department of Health Services.

(2) “Agency” means the California Environmental Protection Agency.

(3) “Director” means the Director of Health Services.

(4) “Secretary” means the Secretary for Environmental Protection.

(5) “Division” means the Division of Environmental and Occupational Disease Control within the department.

(6) “Office” means the Office of Environmental Health Hazard Assessment within the agency.

(7) “Biomonitoring” means the process by which the presence and concentration of toxic chemicals and their metabolites are identified within a biospecimen as a means to assess the chemical body burden.

(8) “Biospecimen” means a sample of human blood, hair, urine, breast milk, body fat and other body tissue, or any other biophysical substance that is reasonably available as a medium to measure the presence and concentration of toxic chemicals.

(9) “Panel” means the Healthy Californians Biomonitoring Program Advisory Panel established pursuant to Article 2 (commencing with Section 105448).

(10) “Community” means geographically or nongeographically based populations that may participate in the biomonitoring program. A “nongeographical community” includes, but is not limited to, populations that may share a common chemical exposure through similar occupations, populations experiencing a common health outcome that may be linked to chemical exposures, or populations that may experience similar chemical exposures because of comparable consumption, lifestyle, or product preferences.

(11) “Designated chemicals” means those chemicals that ~~have been demonstrated, through data provided by scientific, peer-reviewed animal, cell, or human studies, to be known to negatively impact, or to be strongly suspected of negatively impacting, human health by contributing to an increase in serious illness or mortality.~~ *are known to, or strongly suspected of, adversely impacting human health or development, based upon scientific, peer-reviewed animal, human, or in vitro studies.*

105441. The division in collaboration with the agency shall establish the Healthy Californians Biomonitoring Program. The division is the lead agency for the program unless otherwise specified in this chapter. The program shall utilize biospecimens, as appropriate, to identify toxic chemicals that are present in the bodies of Californians. Biomonitoring shall take place on a strictly voluntary and confidential basis. Results reported pursuant to this chapter shall not disclose individual confidential information of participants. Appropriate biospecimens shall be used to monitor and assess the presence and concentration of designated chemicals.

105443. (a) All participants shall be evaluated for the presence of ~~toxic designated~~ chemicals as a component of the biomonitoring ~~process. To the extent that resources permit or the department is able to utilize existing resources, participants shall receive process.~~ *Participants shall receive* consultation, health care referrals, and followup counseling, and shall be offered educational activities and materials addressing possible routes of exposure and ways to reduce exposure. *Providers shall receive training in administering the program in an ethical, participatory, and community-based manner.* Any public or private entity, including local agencies, may provide these activities by contract.

~~(b) In instances when a designated chemical is detected in the program participants, any office or department may collaborate~~

(b) After review and analysis of the data, to the extent that program resources permit, any office or department may collaborate to determine the presence of a designated chemical in the environment, and possible routes of exposure. Activities may include, but shall not be limited to, all of the following:

(1) The sharing of existing data and studies, including, but not limited to, archived biospecimens.

1 (2) Assessments of soil, water, air, food, homes, consumer
2 products, or other aspects of a particular community.

3 (3) Community education programs to help avoid exposure or
4 reduce harmful exposures.

5 105444. (a) The department shall adopt guidelines and model
6 protocols that address the science and practice of biomonitoring
7 to implement this chapter that accomplish all of the following:

8 (1) Ensure confidentiality and informed consent, and
9 communicate findings to participants, communities, and the
10 general public.

11 ~~(2) Emphasize that any training program specifically for health~~
12 ~~care providers, health educators, and other program~~
13 ~~administrators emphasize the importance of cultural sensitivity.~~

14 *(2) Emphasize that all aspects of the program are culturally*
15 *sensitive.*

16 (3) Serve as a guide for other biomonitoring programs
17 supported by state funds.

18 (4) For biomonitoring using breast milk as a biospecimen,
19 *provide* guidelines for individual consultation and community
20 education ~~shall ensure that parents understand regarding~~ the
21 importance of breastfeeding so that the program does not have
22 any unintended and unwarranted negative effects upon a parent's
23 decision whether to breastfeed.

24 (c) The department may consider, *and adapt as appropriate*,
25 the analytical methods utilized by the federal Centers for Disease
26 Control and Prevention for the studies known collectively as the
27 National Report on Human Exposure to Environmental
28 Chemicals.

29 (d) The department shall work in collaboration with the
30 California Health Tracking Program.

31 (e) The division, office, and panel shall work and
32 communicate with the Primary Care and Family Health Division
33 of the department, and with other offices concerning interagency
34 information sharing and synchronization of environmental
35 tracking and policy information. However, personal information,
36 as defined in Section 1798.3 of the Civil Code, shall not be
37 shared without the written and informed consent of the individual
38 to whom it pertains.

39 105445. The department, to the extent that funds are
40 available, may enter into contractual agreements with health

1 clinics, health facilities, community-based organizations, or
2 experts in a particular field, to perform any of the activities
3 enumerated in the guidelines adopted pursuant to Section
4 105444.

5 105446. To the extent that funds are available pursuant to this
6 chapter, moneys may be allocated from the fund for the purpose
7 of strengthening the state's laboratory capacity in order to meet
8 the responsibilities enumerated in this chapter.

9
10 Article 2. The Advisory Panel
11

12 105448. (a) The department and agency shall establish the
13 Healthy Californians Biomonitoring Program Advisory Panel.
14 The panel shall be composed of 16 members. ~~Eight members~~
15 *Two of the members appointed by each of the officers set forth in*
16 *subdivision (b), eight members in total, shall have expertise in*
17 *public health, environment, epidemiology, and biology, and the*
18 *other eight members shall have expertise on the special*
19 *vulnerability of children, women of childbearing age, seniors,*
20 *health affected groups, breastfeeding promotion, and other*
21 *communities of concern.*

22 (b) The director, the secretary, the President pro Tempore of
23 the Senate, and the Speaker of the Assembly shall each appoint
24 four members of the panel.

25 (c) All members shall be appointed to the panel by July 1,
26 2007. Each member shall be appointed for a three-year term.
27 Members may be reappointed for additional terms without
28 limitation.

29 (d) The secretary shall appoint the Chair of the Scientific
30 Committee, and the director shall appoint the Chair of the
31 Community Representative Committee from the panel's
32 membership, who shall also serve as cochairs of the panel.

33 (e) The panel shall meet as often as it deems necessary, with
34 consideration of available resources, but at a minimum, twice a
35 year.

36 (f) *Subcommittees of the panel reflecting the composition of*
37 *the community shall be formed to advise the panel regarding*
38 *community-based biomonitoring activities.*

39 (g) Members of the panel and any subcommittees shall serve
40 without compensation, *unless program funding is made available*

1 *for this purpose*, but shall be reimbursed for travel and other
2 necessary expenses incurred in the performance of their duties
3 under this chapter.

4 ~~(g)~~

5 *(h)* The panel shall make recommendations to the division and
6 office regarding the design and implementation of the program.
7 The panel shall review program priorities, draft protocols, study
8 reports, outreach materials, and shall make recommendations to
9 the secretary and the director regarding all of the following:

10 (1) Chemicals that are priorities for biomonitoring in
11 California and communities where biomonitoring will take place.

12 ~~(2) A review of the communication of findings prior to release~~
13 ~~of the findings.~~

14 ~~(h)~~

15 *(2) A review of how findings and reports are communicated*
16 *prior to their release to participants, legislators, and the public.*

17 *(i)* The panel shall consider the criteris and recommendations
18 generated by the department's Biomonitoring Planning Project,
19 the California Environmental Health Tracking Network, the
20 California Environmental Health Tracking Program, and relevant
21 peer-reviewed studies, when making recommendations.

22 23 Article 4. Fiscal Provisions 24

25 105453. Any funds provided, upon appropriation by the
26 Legislature, to the department and the agency exclusively for the
27 purposes of this chapter shall be deposited into the Healthy
28 Californians Biomonitoring Fund, which is hereby established
29 within the State Treasury. Notwithstanding Section 13340 of the
30 Government Code, the fund including all interest earned on
31 moneys in the fund, is hereby continuously appropriated, without
32 regard to fiscal years, to the division for the purposes of this
33 chapter. Administrative costs associated with implementing the
34 program established pursuant to this chapter in any fiscal year
35 shall not exceed 15 percent of the total funds deposited into the
36 fund for that fiscal year.

Article 5. Reporting

105459. (a) By January 1, 2009, the department shall submit ~~a~~ *an interim* report to the Legislature summarizing the activities of the program, including program descriptions, methodology, program outcomes, and assessment of the activities of the various biomonitoring functions conducted pursuant to this chapter.

(b) By January 1, 2010, the department shall submit a report to the Legislature regarding additional activities and recommendations for improving the program based activities and findings to date. ~~Annually~~ *Every two years* thereafter, in consultation with the panel, the department shall forward a report to the Legislature on the program, policy, and relevant inter-agency activities.

(c) The department shall provide the public access to information which they are required to release pursuant to the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) ~~in a manner that is timely and understandable to the average person.~~

(b) The division and office shall disseminate biomonitoring findings to the general public via governmental and other Web sites *in a manner that is understandable to the average person.* All health and environmental exposure data shall be provided to the general public in a summary format to protect the confidentiality of program participants. Within 30 calendar days after the division releases its interim and final report to the Legislature, the reports shall be made available to the public.