

A bill for an act
relating to public health; establishing an environmental health tracking and
biomonitoring program; appropriating money; proposing coding for new law in
Minnesota Statutes, chapter 144.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. **[144.995] DEFINITIONS.**

(a) For purposes of sections 144.995 to 144.998, the terms in this section have
the meanings given.

(b) "Biomonitoring" means the process by which the presence and concentration of
hazardous chemicals and their metabolites are identified within a biospecimen as a means
to assess the accumulation of hazardous chemicals in a human body.

(c) "Biospecimen" means a sample of human fluid, serum, or tissue that is reasonably
available as a medium to measure the presence and concentration of hazardous chemicals
or their metabolites in a human body.

(d) "Commissioner" means the commissioner of the Department of Health.

(e) "Department" means the Department of Health.

(f) "Environmental health tracking" means collection, integration, analysis, and
dissemination of data on human exposures to hazardous chemicals in the environment and
on diseases potentially caused or aggravated by those chemicals.

(g) "Exposed group" means a group of people who are candidates for biomonitoring
because of shared location or experience that indicates likely exposure to a hazardous
chemical.

(h) "Hazardous chemical" means a chemical, metal, or other substance for which scientific, peer-reviewed studies of humans, animals, or cells have demonstrated that the chemical is known or reasonably anticipated to adversely impact human health.

(i) "Advisory panel" means the Environmental Health Tracking and Biomonitoring Advisory Panel established under section 144.998.

Sec. 2. [144.996] ENVIRONMENTAL HEALTH TRACKING; BIOMONITORING.

Subdivision 1. **Environmental health tracking.** The commissioner shall direct the department's Health Promotion and Chronic Disease Division to:

(1) coordinate data collection activities with the Minnesota Pollution Control Agency, Department of Agriculture, University of Minnesota, and any other relevant state agency and work to promote the sharing of and access to health and environmental databases in order to develop an environmental health tracking system for Minnesota;

(2) facilitate the dissemination of health tracking data to the public and researchers in accessible format and provide technical assistance on interpreting the data;

(3) develop written data sharing agreements with the Minnesota Pollution Control Agency, Department of Agriculture, and other relevant state agencies and organizations, and develop additional procedures as needed to protect individual privacy;

(4) develop a strategic plan that includes a mission statement, the identification of core priorities for research and epidemiologic surveillance, the identification of internal and external stakeholders, and a work plan describing future program development;

(5) organize, analyze, and interpret available data, in order to:

(i) characterize statewide and localized trends and geographic patterns of prevalence and incidence of chronic diseases, including, but not limited to, cancer, respiratory diseases, reproductive problems, birth defects, neurologic diseases, and developmental disorders;

(ii) recommend to the commissioner methods to improve data collection on statewide population rates of chronic diseases and the occurrence of environmental hazards and exposures;

(iii) characterize statewide and localized trends and geographic patterns in the occurrence of environmental hazards and exposures;

(iv) comprehensively assess the level of correlation with disease rate data and indicators of exposure such as biomonitoring data, and other health and environmental data;

(v) apply newly collected and existing health tracking and biomonitoring data toward identifying exposed groups with elevated rates of chronic disease, higher likelihood of exposure to environmental pollutants, or both;

(vi) analyze occurrence of environmental hazards, exposures, and diseases with relation to socioeconomic status, race, and ethnicity;

(vii) develop and implement targeted plans to conduct more intensive health tracking and biomonitoring among exposed groups;

(viii) work with the Pollution Control Agency, the Department of Agriculture, and other relevant state agency personnel and organizations to develop, implement, and evaluate preventive measures to reduce elevated rates of diseases and exposures identified through activities performed under sections 144.995 to 144.998; and

(ix) provide baseline data and present descriptive information relevant to policy formation that are consistent with existing goals of the department; and

(6) submit a biennial report to the legislature by January 15, beginning January 15, 2008, on the status of environmental health tracking activities and related research programs, and making recommendations regarding the continuation and improvement of the programs.

Subd. 2. **Biomonitoring.** The commissioner shall direct the department's environmental laboratory section to:

(1) conduct biomonitoring of exposed groups on a voluntary and confidential basis by collecting and analyzing biospecimens, as appropriate, to assess environmental exposures to hazardous chemicals;

(2) conduct biomonitoring of pregnant women and minors, when scientifically appropriate;

(3) share analytical results with the department's Health Promotion and Chronic Disease Division, and work with division staff to interpret results, communicate findings to the public, and plan ensuing stages of biomonitoring and disease tracking work to further develop and refine the integrated analysis;

(4) share analytical results with the advisory panel and work with the panel to interpret results, communicate findings to the public, and plan ensuing stages of biomonitoring work; and

(5) submit a biennial report to the legislature by January 15, beginning January 15, 2008, on the status of the biomonitoring program and any recommendations for improvement.

Sec. 3. **[144.997] BIOMONITORING PILOT PROGRAM.**

4.1 Subdivision 1. **Pilot program.** The department's environmental laboratory
4.2 section shall develop a biomonitoring pilot program. The program shall collect one
4.3 biospecimen from each of the voluntary participants. The biospecimen selected must be
4.4 the biospecimen that most accurately represents body concentration of the chemical of
4.5 interest. Each biospecimen from the voluntary participants must be analyzed for one type
4.6 or class of related chemicals or metals, based on recommendations from the advisory
4.7 panel. The panel shall determine the chemical or class of chemicals that community
4.8 members were most likely exposed to. The program shall collect and assess biospecimens
4.9 in accordance with the following:

4.10 (1) 30 voluntary participants from each of three exposed groups that the advisory
4.11 panel identifies as likely to have been exposed to hazardous chemicals;

4.12 (2) 100 voluntary participants from each of two exposed groups: (i) that the advisory
4.13 panel identifies as likely to have been exposed to arsenic and (ii) that the advisory panel
4.14 identifies as likely to have been exposed to mercury; and

4.15 (3) 100 voluntary participants from each of two exposed groups that the advisory
4.16 panel identifies as likely to have been exposed to perfluorinated chemicals.

4.17 Subd. 2. **Base program.** Following the conclusion of the pilot program and within
4.18 the appropriations available, the program shall:

4.19 (1) collect and assess biospecimens from at least as many voluntary participants and
4.20 exposed groups as identified in subdivision 1, clause (1); and

4.21 (2) work with the advisory panel to assess the usefulness of continuing biomonitoring
4.22 among members of exposed groups assessed during the initial phase of the program,
4.23 and to identify other exposed groups and other hazardous chemicals to be assessed via
4.24 biomonitoring.

4.25 Subd. 3. **Participation.** (a) Participation in the biomonitoring program by providing
4.26 biospecimens is voluntary. Minors may participate in the program if a written consent
4.27 is signed by the minor's parent or legal guardian. The written consent must include the
4.28 information required to be provided under this subdivision to all voluntary participants.

4.29 (b) Voluntary participants shall receive an explanation regarding the chemical for
4.30 which the biospecimen is being collected and the health ramifications, if any, of the testing
4.31 process. Voluntary participants shall also receive consultation, health care referrals, and
4.32 follow-up counseling and shall be offered educational materials, including information
4.33 regarding possible routes of exposure, ways to reduce exposure, and the availability of
4.34 state and local resources. Test results shall be available to voluntary participants upon
4.35 request, along with explanatory information.

(c) Data collected under the biomonitoring program are health data for purposes of section 13.3805, and the identity of participants shall not be made public without the written and informed consent of the individual to whom it pertains.

Subd. 4. **Program guidelines.** (a) The commissioner, in consultation with the advisory panel, shall develop:

(1) protocols or program guidelines that address the science and practice of biomonitoring to be utilized and procedures for changing those protocols to incorporate new and more accurate or efficient technologies as they become available. The protocols shall be developed utilizing a peer-review process in a manner that is participatory and community-based in design, implementation, and evaluation;

(2) guidelines for ensuring confidentiality; informed consent; follow-up counseling and support; and communicating findings to participants, communities, and the general public. The informed consent used for the program must meet the informed consent protocols developed by the National Institutes of Health;

(3) educational and outreach materials that are culturally appropriate for dissemination to program participants and communities. Priority shall be given to the development of materials specifically designed to ensure that parents are informed about all of the benefits of breast-feeding so that the program does not result in an unjustified fear of toxins in breast milk, which might inadvertently lead parents to avoid breast-feeding. The materials shall communicate relevant scientific findings; data on the accumulation of pollutants to community health; and the required responses by local, state, and other governmental entities in regulating toxicant exposures;

(4) a training program that is culturally sensitive specifically for health care providers, health educators, and other program administrators;

(5) a designation process for state and private laboratories that are qualified to analyze biospecimens and report the findings; and

(6) a method for informing affected communities and local governments representing those communities concerning biomonitoring activities and for receiving comments from citizens concerning those activities.

(b) The commissioner may enter into contractual agreements with health clinics, community-based organizations, or experts in a particular field to perform any of the activities described under this section.

Sec. 4. [144.998] ENVIRONMENTAL HEALTH TRACKING AND BIOMONITORING ADVISORY PANEL.

Subdivision 1. **Creation.** The commissioner shall establish the Environmental Health Tracking and Biomonitoring Advisory Panel. The commissioner shall appoint, from the panel's membership, a chair. The panel shall meet as often as it deems necessary but, at a minimum, on a quarterly basis. Members of the panel shall serve without compensation but shall be reimbursed for travel and other necessary expenses incurred through performance of their duties. Members appointed under this subdivision are appointed for a three-year term and may be reappointed.

Subd. 2. **Members.** The commissioner shall appoint:

(1) four members who have backgrounds or training in designing, implementing, and interpreting health tracking and biomonitoring studies or in related fields of science, including epidemiology, biostatistics, environmental health, laboratory sciences, occupational health, industrial hygiene, toxicology, and public health;

(2) four members who represent nongovernmental organizations with a focus on environmental health, environmental justice, children's health, or on specific chronic diseases;

(3) one member representing each of the following departments or divisions: the department's Health Promotion and Chronic Disease Division, the Pollution Control Agency, and the Department of Agriculture; and

(4) a representative of the University of Minnesota.

Subd. 3. **Duties.** The advisory panel shall make recommendations to the commissioner and the legislature on:

(1) priorities for health tracking;

(2) priorities for biomonitoring;

(3) specific chronic diseases to study under the environmental health tracking system;

(4) specific environmental pollutant exposures to study under the environmental health tracking system;

(5) specific communities and geographic areas on which to focus environmental health tracking and biomonitoring efforts;

(6) specific chemicals and metals to study under the biomonitoring program; and

(7) other aspects of the design, implementation, and evaluation of the environmental health tracking and biomonitoring system, including, but not limited to:

(i) identifying possible community partners and sources of additional public or private funding;

(ii) developing outreach and educational methods and materials; and

(iii) disseminating environmental health tracking and biomonitoring findings to the public.

7.1 Subd. 4. **Liability.** No member of the panel shall be held civilly or criminally liable
7.2 for an act or omission by that person if the act or omission was in good faith and within
7.3 the scope of the member's responsibilities under sections 144.995 to 144.998.

7.4 Sec. 5. **INFORMATION SHARING.**

7.5 On or before August 1, 2007, the commissioner of health, the Minnesota Pollution
7.6 Control Agency, the commissioner of agriculture, and the University of Minnesota are
7.7 requested to jointly develop and sign a memorandum of understanding declaring their
7.8 intent to share new and existing environmental hazard, exposure, and health outcome
7.9 data, and to cooperate and communicate effectively to ensure sufficient clarity and
7.10 understanding of the data by divisions and offices within both departments.

7.11 Sec. 6. **APPROPRIATION.**

7.12 \$..... in fiscal year 2008 and \$..... in fiscal year 2009 are appropriated from the
7.13 environmental fund to the commissioner of the Pollution Control Agency to be transferred
7.14 to the commissioner of health for the environmental health tracking and biomonitoring
7.15 program.