

# California Senate Bill 702 (Escutia, 2001)

## EXPERT WORKING GROUP on Environmental Health Surveillance

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## FREQUENTLY ASKED QUESTIONS

### Strategies for Establishing an Environmental Health Surveillance System in California: A Report of the SB 702 Expert Working Group.

#### What is the Timeline for this Report?

This report was requested by the legislature pursuant to Senate Bill 702 (Escutia). The draft report was developed by the Expert Working Group in just over one year. The final report release is February 23, 2004.

#### What did the Legislature Have in Mind?

The Legislature requested that the Working Group develop a blue-print for a tracking system designed to provide ongoing surveillance (tracking) of environmental exposures and diseases affecting Californians. The Legislature requested that the Working Group focus on the determinants of chronic diseases and birth defects.

#### What is the Problem?

The report documents the critical role the environment plays in initiating or exacerbating disease. Further, with double digit increases in health care costs, environmentally-related chronic diseases are taking a fiscal and human toll on Californians. For example, childhood asthma, cancer, birth defects and neurobehavioral disorders cost Californians an estimated \$10 billion per year, or \$288 per person (see [Table 3.5 on page 4](#)). Some of these illnesses are on the rise. From 1984 to 2003, asthma prevalence increased 76%. An estimated 3.9 million adults and children have had asthma in their lives.

#### Why Track?

The benefits of targeted environmental policies have been shown to greatly exceed their cost. If an environmental health tracking system were able to decrease the burden of environmentally related diseases in California by only 1 percent, the annual savings to the State would exceed \$100 million. The estimated total annual net benefits of Federal environmental policies between 1992 and 2002 range from \$110 to \$188 billion. Effective public health and environmental policies begin with accurate information about exposures and disease. The fundamental objective of environmental health tracking is to coordinate and enhance existing information systems in order to reduce the crippling burden of disease in California.

#### *What Specific Information Would Tracking Provide?*

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An Environmental Health Tracking System would:

- Document exposures to environmental pollutants in California;
- Track disease trends over time and geography to document health trends;
- Enable better linkage between exposure and disease in order to generate new hypotheses about possible connections;
- Provide the scientific basis for evaluating and developing public health and environmental protection policies; and
- Facilitate the public's right-to-know about environmental health issues.

#### *What is New About this Approach?*

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There are multiple agencies in California that collect and manage health and environmental data. The Working Group believes there is an urgent need to promote further collaboration among these agencies to support health research, planning and policy making. The Working Group has provided a number of specific recommendations for improving data collection and integration. Implementation of these recommendations would provide new tools for researchers, policymakers and the public to examine relationships between health and the environment. For example, tracking data can be used to examine simultaneously the relationship between exposure to multiple pollutants and health outcomes over time.

#### *What are Some Specific Recommendations?*

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- An Inter-Agency CDHS/Cal-EPA Office of Environmental Health Tracking (OEHT) should be established by the CDHS and Cal-EPA. The OEHT would have the following functions, which would be phased-in as funding becomes available:
  - ◆ Coordinate the multiple tracking data collection activities across various state agencies;
  - ◆ Oversee the implementation of the recommendations of the final report of the Working Group for SB 702;
  - ◆ Act as data stewards of hazard, exposure, and chronic disease data in formats that would include restricted access and public use data files;
  - ◆ Develop a strategic plan, and a OEHT work plan;
  - ◆ Collate and analyze the data;
  - ◆ Conduct intramural research and issue extramural research requests for proposals on possible linkages between health outcomes and hazard/exposure data;
  - ◆ Produce a biennial report to the legislature on the status of surveillance and research programs and activities.
- Restore and maintain key existing registries tracking birth defects, cancer and lead poisoning.
- Explore working with health care providers to develop a Parkinson's and Alzheimer's registry. This public private partnership could provide a cost-effective mechanism to gather important information about the devastating disease.
- Coordinate and integrate data from state agencies in a uniform way and develop a web-enabled interface which would allow local residents to view multiple hazards in their neighborhoods.

- Collect diet, health and exposure information for a sample of Californians similar to the National Health and Nutrition Examination Survey.
- Investigate the feasibility and cost of establishing an employer-based reporting system for occupational history.
- Improve insurer submissions of Doctor's First Reports (DFRs) and provide outreach and education for health care practitioners about work-related illness.

#### ***Don't we already have programs and registries which track these diseases? I thought we already had a cancer and birth defects registry. What will this program do that isn't already being done?***

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For cancer and birth defects, we do already have nationally-recognized programs for analyzing disease events and trends, but for many other chronic diseases, including asthma, neurological conditions such as Parkinson's and Alzheimer's, learning disabilities, autism, endometriosis, and lupus, which have suspected environmental links, no statewide registries exist. For all these conditions, including cancer and birth defects, we do not have a routine linkage of these data to information on environmental hazards and human exposures.

#### ***What is the benefit of linking chronic disease data to environmental exposures?***

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Health and environmental data have been collected for decades but have rarely linked and analyzed together. A linked tracking network could allow us to respond more intelligently to environmentally-related disease outbreaks, and can form the basis for more in-depth research studies.

#### ***Why don't we just measure levels of all contaminants in Californians?***

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The report recommends a limited California HANES. For some contaminants, the laboratory methods have been developed, but for many more, no laboratory methods exist. We also need to be able to interpret the results of these tests. For many compounds, no reference levels for the general population are available, so it is hard to know what a single test result means. Biological monitoring is expensive, so it may be infeasible to do on a large scale. Finally, insuring the confidentiality of participants should be a high priority.

#### ***Doesn't behavior or genetics have a bigger impact on public health?***

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The causes of human disease are multi-factorial – resulting from a mixture of environmental, lifestyle, socio-economic and genetic factors acting over the life time of the individual. For any particular individual any one of these factors may be more or less important with regard to disease risk. However, in most cases the environment will serve, in varying degrees, to influence the initiation, severity and/or progression of disease. The Working Group documents these links in the report. Environmental health tracking enables us to consider environmental factors in relationship to disease.

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Table 3.5  
Total Documented Cost of Nine Environmentally Related Diseases in California

Diseases	Study Year	Cost (thousands)	Estimated Cost 2000 <sup>a</sup> (thousands)
Prostate Cancer <sup>b</sup>	1998	\$ 360,501	\$ 400,000
Cervical Cancer <sup>c</sup>	1998	205,657	227,000
Ovarian Cancer <sup>c</sup>	1998	292,074	323,000
Uterine Cancer <sup>c</sup>	1998	126,178	140,000
Childhood Cancer <sup>d</sup>	1997	332,000	47,000
Child Lead Poisoning <sup>d</sup>	1997	43,400,000	6,031,000
Childhood Asthma <sup>d</sup>	1997	1,980,000	278,000
Neurodevelopmental Disorders <sup>d</sup>	1997	9,200,000	1,293,000
Birth Defects <sup>e</sup>	1988	1,087,054	1,829,000
Total Cost			10,568,000

Note:  
This list is not exhaustive, but includes only diseases for which reliable cost estimates are available  
<sup>a</sup> Estimated by applying the percentage increase from the study year to 2000 in personal health care spending for direct costs and in the index of compensation per hour for indirect costs. See Levit KL. et al., 2002. Compensation per hour from: U.S. Census Bureau. *Statistical Abstract of the United States*. U.S. Government Printing Office. Washington, DC. Table 613, page 399.  
<sup>b</sup> Source: Max W, et al., 2002. Costs are not available for Environmental Attributable Fractions.  
<sup>c</sup> Source: Max W, et al., 2003. Costs are not available for Environmental Attributable Fractions.  
<sup>d</sup> Based on data for the United States assuming that 12% of costs are for California. Source: Landrigan PJ, et al., 2002.  
<sup>e</sup> Source: Waitzman NJ, et al., 1994; 33(Summer):188-205.

**From:** *Strategies for Establishing an Environmental Health Surveillance System in California: A Report of the SB 702 Expert Working Group*

The SB 702 report was partially funded by The California Wellness Foundation and the Centers for Disease Control and Prevention. The complete report may be found at [www.catracking.com](http://www.catracking.com).