



November 14, 2003

SB702 Comments
California Environmental Health Tracking Program
Environmental Health Investigations Branch
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Dear Sir:

The American Chemistry Council¹ (ACC) appreciates the opportunity to comment on the report of the SB702 Expert Working Group on Environmental Health Surveillance. Over the last several years, ACC has been engaged in discussions with the Pew Environmental Health Commission, its successor organization, the Trust for America's Health, the Centers for Disease Control and Prevention, and congressional staff concerning environmental health surveillance or "health tracking" systems.

ACC has publicly stated its support for improving the ability of state and federal public health agencies to track priority chronic diseases and risk factors for these diseases in order to provide health professionals with the scientific data needed to investigate possible causes, evaluate interventions and ultimately improve the nation's health. ACC believes that health tracking – if scientifically based --could help improve our understanding about trends in chronic diseases in the U.S. population which in turn could help establish scientifically sound public health priorities.

We are encouraged by the SB 702 Expert Working Group's balanced discussion of the goals of health tracking. At the same time, however, we have concerns about the report's narrow focus on chemical hazards and the report's ambitious scope relative to the diseases and conditions that it recommends be tracked.

In addition to supporting the concept of health tracking, ACC also supports the value and development of biomonitoring information to improve chemical exposure assessments. ACC is concerned, however, that the report treats biomonitoring information as complete

¹ The American Chemistry Council represents the leading companies engaged in the business of chemistry. Council members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. The Council is committed to improved environmental, health and safety performance through Responsible Care[®], common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$435 billion enterprise and a key element of the nation's economy. It is the nation's largest exporter, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies invest more in research and development than any other business sector.

exposure information, without recognizing its limitations (e.g. biomonitoring information alone does not tell us about the source of exposure, the timing, magnitude, duration or frequency of exposure. Additional information is always needed to interpret the results of biomonitoring.”. The report’s reliance on biomonitoring information also reveals the report’s true focus on only chemical hazards and exposures in relation to chronic diseases.

ACC cautions against the report’s underlying assumption that most chronic diseases are caused by the “environment,” by which the report implicitly seems to mean largely chemical hazards and exposures. Health surveillance systems should be based on a broad definition of “environment” to ensure that significant threats to public health are not overlooked. Such a definition should include physical, biological, chemical and social factors that affect our health. As the report notes elsewhere, the causes of diseases are generally thought to be multi-factorial. Yet the report’s recommendations imply that surveillance information on chemical hazards, chemical exposures and diseases will provide easy answers to finding the causes of many complex chronic diseases. To the contrary, focusing on only chemical factors will distort the public’s perceptions about the causes of chronic diseases and therefore has the strong potential to distort public health priorities. Linking databases of chemical hazards and exposures with databases on chronic disease trends has the potential to give rise to numerous false positive findings. As the report declares in some sections, cause and effect cannot be ascertained by linking health surveillance system data with environmental data. Both environmental and health databases are very broad, so integrating them will lead to numerous apparent relationships, many of which will not reflect reality.

Our comments on specific key findings of the report are noted below.

Key Finding#1: Need for Central Clearinghouse for all California Environmental Health Tracking Databases:

ACC supports an inventory and evaluation of the utility of existing health and environmental data collection efforts. We caution against drawing “cause and effect” linkages between such databases, however. Apparent linkages may suggest the need for research to investigate hypotheses, but shouldn’t be used to draw conclusions about causation. Surveillance data should be treated as a survey tool only.

Key Finding #2: Standardization of health tracking data:

ACC supports standardized public health surveillance systems that would both help public health authorities better understand trends in chronic diseases in the U.S. population and would generate hypotheses for broader research on the causes of chronic diseases.

Key Finding #4: The State's Need for More Complete Data on Environmental Hazards in California.

The Expert Working Group's findings and recommendations regarding environmental hazard data raise a number of issues that should be addressed. ACC requests that the Working Group consider the following points in their recommendations.

- The High Production Volume Challenge program referenced in the finding cites outdated data. This program, a voluntary effort of the chemical industry in cooperation with the U.S. Environmental Protection Agency, has made considerable progress in hazard data reporting for the substances that represent more than 90% of chemicals in commerce by volume. The Working Group may wish to update results under the program (see <http://www.epa.gov/chemrtk/>).
- Although ACC agrees that use data could assist in screening chemicals and establishing risk-based priorities for further assessment and potential risk management, the Expert Group's finding and recommendations suggest development of a chemical use inventory. A chemical use inventory, however, is not a good indicator of exposure and associated risk (particularly if it focuses on functional use volumes and product or process streams concentrations). Further, a chemical use inventory will likely exaggerate the picture of chemical use due to multiple counting across functional categories and multiple end-use applications, and the number of sites at which a chemical is used.
- Work by the Alliance for Chemical Awareness (www.chemicalawareness.org) is increasing the amount of exposure and use information that will be provided, and is contributing to the mutual understanding of the need for completeness, transparency and uniformity of such information. This effort has helped demonstrate that flexible approaches to providing and posting use/exposure information are necessary in order to assure meaningful results.

Key Finding #5: There's a Limited Ability to Monitor Human Exposure to Toxic Chemicals in California.

This finding assumes that we know very little about what the public is being exposed to and at what levels; that there's need for background data, especially for pregnant women and for children. Therefore, the report recommends the enhancement of state lab capabilities to conduct biological monitoring of human samples for an array of contaminants including certain pesticides, brominated flame retardants, mercury and other chemicals. This finding also recommends a California NHANES and NHEXAS. With respect to these recommendations, ACC requests that the Working Group consider the following:

- ACC suggests that any enhancement of state lab capabilities for biomonitoring must include certification of the labs as capable of doing biological monitoring and must require that these labs use the same validated methods used by the CDC.
- This recommendation's focus on biological monitoring, however, reveals the report's true focus on only chemical hazards and exposures – not other important “environmental” factors. How does California plan to monitor exposure to physical agents and biological agents? Does California plan to try to survey behavioral risk factors and social and economic factors as well? Will these factors be part of the health surveys? Will this information be linked to the disease surveillance tool data to provide a broader perspective on the environmental factors that may be at work? The report ignores these questions and focuses instead on chemical hazards and exposures. As expressed above, this narrow focus will skew public health priorities in a direction that, in the end, may do little to improve public health.
- Any California health surveys must be conducted in such a way as to ensure that the results are representative of the state level and must ensure confidentiality of the participants, as in the national surveys.

Key Finding #6: Develop surveillance systems for priority environmentally related diseases and improve existing ones.

ACC supports the need to identify priority diseases of concern to Californians for its health surveillance systems. The report makes many assumptions and presumptions, however, that are not supported by fact. ACC requests the Working Group's consideration of the following:

- The report does not support its claim (p. 59) that there is a scientific “weight of evidence” that suggests that “environmental hazards” (defined in the report as chemicals (including environmental tobacco smoke), physical agents, biomechanical stressors or biological toxins, but used in the report primarily as short-hand for chemicals) influence the “initiation, severity and/or progression” of all of the diseases identified as “environmentally related diseases” on p. 60 of the report.
- The report goes even further to assert (without citation) that “environmental exposure may partially contribute to causality for virtually all diseases.” (p. 59). While there have been scientific hypotheses, some studies and much speculation to support this broad sweeping claim, there is no scientific “weight of evidence” to suggest that all of these diseases are “environmentally related” as that term is narrowly defined and/or used in the report.
- In addition, ACC suggests that if these recommendations are implemented, the State of California must spend the time necessary to agree to scientifically based, criteria/definitions of the diseases/conditions which this report recommends be tracked, to ensure consistency in reporting.

Key Finding #7: Health and environmental tracking can provide helpful information to communities that have concerns about local environmental exposures or disease clusters.

- ACC strongly supports the report's recommendation that the California DHS should develop a "uniform set of guidelines" for state and county health authorities for when and how cluster investigations should take place.
- ACC also strongly supports the report's caution that "merely tracking a disease does not link it to an environmental exposure or vice versa. There is need for sound epidemiological research to assess presence and magnitude of such associations." (p. 12)

Other Comments:

Definitions:

Environmental Exposure Tracking: (p. 21) this definition only addresses chemical exposures. None of the other "hazards" referenced in the definition of environmentally related diseases are addressed in the definition of environmental exposure tracking. This would suggest that the report's apparent focus on a broad range of "hazards" is not the real plan, but merely window-dressing for an inappropriately narrow focus on chemical exposures.

Environmental Related Diseases: this definition discusses a broader set of hazards – chemicals, physical agents, biomechanical stressors and biological toxins -- in the environment, but the definition of tracking (above) only speaks to chemicals. Again, here and there, the report suggests that the state should survey a broad range of factors that may be associated with the priority chronic diseases, but the key findings/recommendations, include nothing on social and behavioral risks and little on other environmental factors. The recommendations focus almost exclusively on chemical hazards and exposures.

Disease causation: At p. 20, the report notes that the causes of diseases are multi-factorial – environmental, lifestyle, socio-economic and genetic – but then the report makes a huge leap to a statement that "in most cases" the "environment" serves to influence the initiation, severity or progression of disease. (p. 59) There is no citation for this broad sweeping assertion.

Conclusion:

If the focus of the California health surveillance system recommendations is only on chemical hazards and exposures, then the entire surveillance effort will be riddled with false leads and associations that do little to improve public health. Skewing the surveillance tool in this way will only lead to poor public health policy decisions, and eventually to loss of trust in the true value of surveillance tools.

ACC recommends that the report's bias toward examination of chemical hazards and exposures be corrected. The recommendations should include a broad definition of

“environment” and “environmental factors” and then the report should make recommendations that cover this broad range of factors, prioritizing diseases or causes of morbidity/mortality based on state-level statistics. Further, the report should make even clearer than it does the strengths of surveillance information for identifying trends in diseases and to suggest hypotheses about causation for epidemiological research, as well as the limitations of surveillance information to identify causes of disease.

If you have any questions about these comments, please contact me at 703-741-5159.

Sincerely,

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