

*The National Academies of*  
SCIENCES • ENGINEERING • MEDICINE

BOARD ON AGRICULTURE AND NATURAL RESOURCES  
COMMITTEE ON NATIONAL STATISTICS  
BOARD ON HEALTH SCIENCES POLICY

**Developing a Smarter National Surveillance System for  
Occupational Safety and Health in the 21<sup>st</sup> Century**

***Statement of Task***

A more coordinated, cost-effective set of approaches for occupational safety and health surveillance is needed in the United States. A committee of the National Academies of Science, Engineering, and Medicine will study opportunities and provide recommendations for developing a “smarter” system.

In the course of its study, the committee will gather information about the strengths and limitations of existing national and state approaches and also review different methodologies and approaches for occupational safety and health surveillance, particularly with respect to usefulness and cost-effectiveness.

Based on information gathered during the study, the committee will develop a vision for a “smarter” cost-effective occupational safety and health surveillance system; describe system components and their attributes; and recommend key steps for developing such a system. As part of its vision, the committee will:

- define essential requirements and goals for a modern occupational safety and health surveillance system, identify critical gaps to fill, and reflect on how the methods, tools, and goals of surveillance may have changed since the 1987 NRC surveillance report was issued; and draw also upon other subsequent reports (for example, CDC’s Vision for Public Health Surveillance in the 21<sup>st</sup> Century, the Council of State and Territorial Epidemiologists meeting summaries from 2009 and 2013, and other NRC reports);
- conceptualize ways that some surveillance data might be collected and disseminated more cost-effectively or innovatively (including identifying novel or underutilized means of collecting data, collecting data at different scales or different interfaces, and creating collaborations across public health and other domains); and where possible, identify new data opportunities given current and emerging technological advancements in information technology (such as electronic health records and electronic submission of OSHA 300 logs);
- explore the respective current and potential roles of various federal and state agencies and private partners (such as employers and labor unions) in collecting and leveraging occupational safety and health surveillance information.

The committee will identify cost, data quality and management, and other tradeoffs inherent in different aspects of or different approaches to conducting surveillance (including the implications of using existing data systems versus collecting additional original data). It may also draw from surveillance approaches that offer insights relevant to the U.S. that are represented in the experience of other nations or from other fields.

The committee’s recommendations will include the strengths and weaknesses of the envisioned system relative to the status quo and identify key actors (i.e., NIOSH, BLS, OSHA, etc.) and both short- and long-term actions and strategies needed to bring about a progressive evolution of the current system.