



WORK-RELATED CANCERS

WHAT IS THE PUBLIC HEALTH PROBLEM?

- Each year over 20,000 cancer deaths in the United States are attributable to occupational exposure to carcinogenic substances and chemicals and to sources of ionizing radiation.
- Millions of U.S. workers are exposed to substances that have been shown to be carcinogenic in animal studies.

WHAT HAS NIOSH ACCOMPLISHED?

The National Institute for Occupational Safety and Health (NIOSH) conducts and funds research and public health activities to prevent and reduce the incidence of work-associated cancers. Accomplishments include:

- Publication of studies and risk assessments leading to widespread recognition of the hazards of arsenic, asbestos, benzene, beryllium, cadmium, chromium diesel fumes, ethylene oxide, nickel, radon, silica, sulfuric acid, and vinyl chloride;
- Establishment of the scientific basis and protection strategies used under U.S. occupational health standards to control workplace exposures to these agents;
- Establishment of the scientific basis for compensating U.S. uranium miners under the Radiation Exposure Compensation Act;
- Participation in the nomination and review process for adding to the National Toxicology Program's 11th Report on Carcinogens (2003) 14 substances or exposures occurring in the workplace that are classified as "known" or "reasonably anticipated" to be human carcinogens.

WHAT ARE THE NEXT STEPS?

NIOSH research programs are focused on issues of current public health concern (e.g., occupational causes of breast cancer among women and the biological mechanisms underlying occupational cancer).

- In partnership with other agencies in the National Toxicology Program, NIOSH researchers continue to evaluate the scientific evidence to identify carcinogens and to develop priorities for testing potential occupational carcinogens. Specifically, testing of complex mixtures or exposures in the workplace is a priority; abrasive blasting materials, welding fumes, and metal working fluids are being targeted for such testing.
- NIOSH is collaborating with the National Cancer Institute and other organizations to develop improved occupational cancer research methods by using advances in the field of genetics and integrating human, animal, and mechanistic cancer research findings.
- NIOSH also is initiating a new National Exposures at Work Survey, which will provide data on current workplace exposures to potential carcinogens.

Additional information is available at www.cdc.gov/niosh/topics/cancer/. For more information on other NIOSH programs, visit www.cdc.gov/niosh/docs/pib/.

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