# Cardiovascular Disease Program

May 2016

### What are our priorities?

The National Institute for Occupational Safety and Health (NIOSH) Cancer, Reproductive Health and Cardiovascular Disease (CRC) Program works with partners in industry, labor, trade associations, professional organizations, and academia. The program focuses on these areas:

- Preventing and reducing occupational cancer
- Preventing and reducing adverse reproductive outcomes related to work
- Preventing and reducing occupational cardiovascular disease (CVD)

### What do we do?

- Conduct and communicate occupational cancer research of worker populations and exposures determined to be of high-priority.
- Conduct and communicate results of studies of high-priority agents to identify and quantify risk of adverse reproductive health outcomes associated with the workplace.
- Assess the association of workplace factors and exposures with sub-clinical/clinical CVD in workers or laboratory animals using biomonitoring, toxicological, or other methods.
- Create guidance documents to assist stakeholders in CRC prevention efforts.
- Promote use of CRC research by authoritative organizations such as International Agency for Research on Cancer and National Fire Protection Agency.
- Maximize CRC resources by collaborating with external researchers to evaluate occupational risk factors in pre-existing health studies.

## What have we accomplished?

- Found bladder cancer incidence highly elevated among rubber manufacturing workers and strongly associated with ortho-toluidine exposure. The National Toxicology Program used this study in its 13th Report on Carcinogens.
- Disseminated results of a 'largest-of-its kind' cohort study of U.S. firefighters which revealed higher than expected rates of overall cancer and of several specific cancers – supporting the link between firefighting exposures and cancer.
- Recommendations from the NIOSH Alert "Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings" were adopted by three States; the related NIOSH Hazardous Drug List was

- adopted by the U.S. Pharmacopeial Convention and The Joint Commission.
- Completed NIOSH Topic Page "Reproductive Health and the Workplace" which serves as an international reproductive health resource.
- Published results from the National Survey of U.S. Long-Haul Truck Driver Health and Injury which documented a constellation of CVD risk factors and suggests the need for targeted interventions among this group of understudied workers.
- Published the NIOSH Current Intelligence Bulletin "Promoting Health and Preventing Disease and Injury Through Workplace Tobacco Policies."

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• Update the NIOSH Hazardous Drug List and the NIOSH Alert: "Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings."

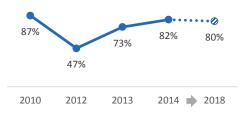
What's next?

- Complete the NIOSH Current Intelligence Bulletin "Recommended Weight Limits for Manual Lifting During Pregnancy."
- Extend existing (and initiate new) collaborations to assess occupational effects on CRC health outcomes. Existing collaborations include: the Birth Defects Study to Evaluate Pregnancy Exposures, Nurses' Health Study, Wo-
- men's Health Initiative, Reasons for Geographic and Racial Differences in Stroke, and the Buffalo Cardio-metabolic Occupational Police Stress Study.
- Collaborate with the NIOSH Nanotechnology Research Center to publish 3 peer-reviewed manuscripts that expand our understanding of the relationship between worker exposure to carbon nanotubes or carbon nanofibers and cancer, cardiovascular or other health risks.
- Complete external review of the revised NIOSH Cancer Policy.

### At-A-Glance

The Cancer, Reproductive Health and Cardiovascular Disease (CRC) Program provides leadership in preventing work-related diseases related to many types of cancer, reproductive health, and cardiovascular diseases, as well as occupational neurologic and renal disease. This snapshot shows recent accomplishments and upcoming work.

#### Percent of International Agency for Research on Cancer Evaluations citing CRC Program work



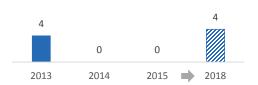
Source: International Agency for Research on Cancer (IARC) No evaluations were published in 2011; Includes only evaluations of occupationally relevant agents

# Number of new associations between workplace exposures and reproductive health outcomes documented by CRC Program research



Source: NIOSH program records

#### Number of National Fire Protection Agency quidelines directly impacted by CRC research



Source: National Fire Protection Association (NFPA)
Guidelines are updated periodically, rather than annually

