

Cancer, Reproductive, Cardiovascular, and Other Chronic Disease Prevention Program

What are our priorities?

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

- Occupational cancer incidence
- Incidence of adverse reproductive outcomes related to work
- Occupational cardiovascular disease (CVD) incidence
- Occupational neurologic and renal disease incidence

What do we do?

- Conduct research on occupational cancer in high priority worker populations.
- Conduct research on high-priority items to identify and quantify risk of adverse reproductive health outcomes associated with workplace factors.
- Assess the association of workplace factors and exposures with sub-clinical/clinical CVD.
- Investigate emerging diseases such as chronic kidney disease in agricultural workers.
- Communicate findings through documents, videos, and other methods to assist stakeholders in CRC prevention efforts. Develop documents to assist stakeholders in CRC prevention efforts.
- Promote use of CRC research by well-respected organizations, such as the Occupational Safety and Health Administration, National Toxicology Program, International Agency for Research on Cancer, and National Fire Protection Association.
- Collaborate with external researchers to evaluate occupational risk factors in preexisting health studies.

What have we accomplished?

- Established the National Firefighter Registry (NFR) Advisory Committee and developed communication channels including a quarterly NFR newsletter, [website](#), and unique NFR [email address](#) to respond to public questions.
- [Published](#) a study reporting welding fume exposure *in vitro* toxicity by increasing oxidative stress and inflammatory signals in first trimester embryo feeder cells from the placenta.
- [Published](#) a study that found night work and frequent rotational work to be associated with higher risk for hypertension.
- Contributed cancer-related findings and recommendations to the [NIOSH Practices in Occupational Risk Assessment](#) guidance document.
- Posted a NIOSH [Science Blog](#) titled “Promoting Worker Well-Being through Maternal and Child Health: Breastfeeding Accommodations in the Workplace” which discusses the benefits of and resources for developing workplace lactation programs. The blog has received over 2,000 visits since posting.
- [Published](#) a review on how nanomaterial inhalation exposure impacts the cardiovascular system and the role of the nervous system on these effects.
- [Published](#) a study evaluating a new robotic method to measure the spatial-concentration of volatile organic compounds in real time.

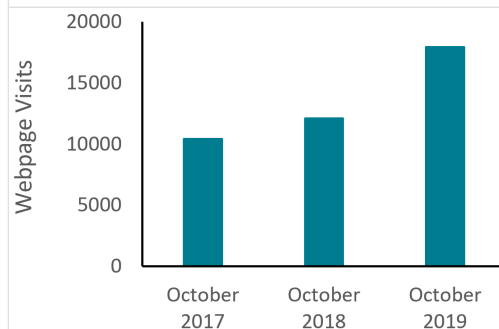
What's next?

- Publish a series of studies assessing pulmonary toxicity of carbon nanotubes and nanofibers from U.S. facilities.
- Present a webinar on the impacts of shift work on occupational cancer, in collaboration with the International Agency for Research on Cancer.
- Update the NIOSH *List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings* and publish NIOSH Document on *Managing the Occupational Health Risks of Hazardous Drug Exposure in Healthcare Settings*.
- Seek NIOSH approval of the National Firefighter Registry protocol.
- Evaluate risks of cancer and other chronic diseases from long-term, low-dose occupational radiation exposures, among 140,000 workers.

At-A-Glance

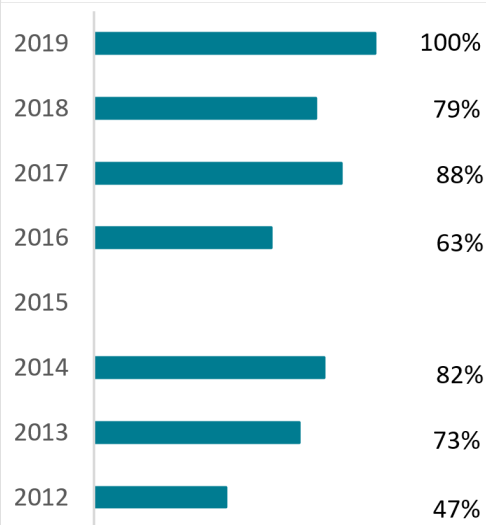
The Cancer, Reproductive, Cardiovascular, and Other Chronic Disease Prevention Program provides leadership in preventing work-related diseases related to many types of cancer, reproductive health, and cardiovascular diseases, as well as occupational neurologic and renal diseases. This snapshot shows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

In 2019, visits to the NIOSH Reproductive Health webpages increased by 72 percent from 2017.



Source: NIOSH records

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



Source: International Agency for Research on Cancer (IARC) Note: No evaluations were published in 2015; Includes only evaluations of occupationally relevant agents

To learn more, visit www.cdc.gov/niosh/programs/crcd October 2020



Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

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