

# What's New at NIOSH



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# Overview

- NIOSH Programs
- Western States Offices
- Questions

# NIOSH Mission

- To generate new knowledge in the field of occupational safety and health
- To transfer that knowledge into practice



# NIOSH Programs

- NIOSH Cancer Policy
- IDLH Determination
- NMAM Update
- Nanotechnology Research Center
- Emergency Responder Health Monitoring and Surveillance (ERHMS)
- Workers Compensation Center
- Total Worker Health
- A Few Other Items...
- NIOSH Western States Office

# NIOSH Cancer Policy

- NIOSH is reviewing its cancer (carcinogen) and related Recommended Exposure Limit (REL) policies to ensure that they reflect current scientific and risk management practices.
- Draft NIOSH document is currently available for public comment until February 13, 2014.
  - <http://www.cdc.gov/niosh/topics/cancer/policy.html>



# NIOSH Cancer Policy Concerns

- Use of the term “potential occupational carcinogen”
  - Conveys uncertainty not warranted with many known carcinogens (e.g. asbestos, benzene, and cadmium)
  - Doesn't permit levels of uncertainty to be incorporated
- Technical questions on developing recommended RELs
  - How to establish an appropriate level of risk
    - 1/1000?
  - Meaning of the phrase “to the extent feasible”
  - Utility of the “action level” concept in RELs

# NIOSH Statutory Mandate

“ ... develop criteria dealing with toxic materials and harmful physical agents and substances which will describe exposure levels that are safe for various periods of employment, including but not limited to exposure levels at which **no employee will suffer impaired health or functional capacities or diminished life expectancy as a result of his work experience.**”

*OSH Act, Section 20 (a)(3)*

# NIOSH Cancer Policy History


## 1995 NIOSH REL Policy

NIOSH RELs "will be based on risk evaluations using human or animal health effects data, and on an assessment of what levels can be feasibly achieved by engineering controls and measured by analytical techniques. To the extent feasible, **NIOSH will project not only a no-effect exposure, but also exposure levels at which there may be residual risks. This policy applies to all workplace hazards, including carcinogens...** “



# NIOSH Cancer Policy Topic Page

CDC Home



Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives. Protecting People.™

NIOSH  
All CDC Topics

SEARCH

A-Z Index for All CDC Topics

Workplace Safety & Health Topics

**Workplace Safety and Health Topics**

- Industries & Occupations
- Hazards & Exposures
- Diseases & Injuries
- Asthma and Allergies
- Avian Influenza (Flu)
- Bloodborne Infectious Diseases (HIV/AIDS, Hepatitis B & C)
- Cancer (Occupational)
- Cancer Policy at NIOSH**
- Ergonomics and Musculoskeletal Disorders
- Ergonomics in Mining
- Flavorings-Related Lung Disease
- Flu (Influenza)
- Genetics in the Workplace
- Hearing Loss in Mining
- H1N1 Influenza Virus (Swine Flu)
- Heart Disease
- Latex Allergies
- Lyme Disease
- MRSA
- Musculoskeletal Disorders in Mining
- Noise and Hearing Loss Prevention
- Pneumoconioses
- Reproductive Health
- Respiratory Diseases in Mining
- Severe Acute Respiratory Syndrome (SARS)
- Skin Exposures and

NIOSH > Workplace Safety and Health Topics > Diseases & Injuries > Cancer (Occupational)

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## NIOSH EVALUATION OF ITS CANCER AND REL POLICIES

### Current Evaluation Efforts

NIOSH is currently reviewing its cancer (carcinogen) and related Recommended Exposure Limit (REL) policies to ensure that they reflect current scientific and risk management practices. A [draft NIOSH document](#) is currently available for public comment until February 13, 2014. A public meeting will be held on Monday, December 16, 2013 in Washington, DC to allow the public to provide comments and ask questions about the draft document. Information about providing comments on the draft document and participating in the public meeting is available in the [Federal Register notice](#).

In 2011 NIOSH published a Request for Information and held a public meeting to receive public input on this topic. [NIOSH Docket 240](#) contains the public submissions received. Additional information about the NIOSH re-evaluation of its cancer and REL policies, including other Federal Register notices and the revised draft policies, will be posted on this page when available.

### 2013 Draft for Public Comment, Public Meeting

[NIOSH Press Release: NIOSH Releases Revised Carcinogen Policy for Public Comment](#)

[Draft Current Intelligence Bulletin: Update of NIOSH Carcinogen Classification and Target Risk Level Policy for Chemical Hazards in the Workplace](#)

Federal Register Notice, November 15, 2013  
[Draft Current Intelligence Bulletin: Update of NIOSH Carcinogen Classification and Target Risk Level Policy for Chemical Hazards in the Workplace](#)

[NIOSH Docket 240-A](#)

### 2011 Request for Information, Public Meeting

[NIOSH Docket 240: Announcement of Carcinogen and Recommended Exposure Limit \(REL\) Policy Assessment](#)

Transcript of the NIOSH Public Meeting, December 12, 2011  
[Transcript - 12/12/11 PDF, 525 KB](#)

**On this Page**

- Current Evaluation Efforts
- 2013 Draft for Public Comment, Public Meeting
- 2011 Request for Information, Public Meeting
- NIOSH Cancer Policy History
- NIOSH REL Policy
- NIOSH Occupational Carcinogen Resources
- Other U.S. Cancer Policy Resources
- International Cancer Policy Resources
- Agents Identified as Carcinogens

**Contact Us:**

[National Institute for Occupational Safety and Health \(NIOSH\)](#)  
Centers for Disease Control and Prevention  
800-CDC-INFO  
(800-232-4636)  
TTY:  
(888) 232-6348

New Hours of Operation  
8am-8pm ET/Monday-Friday  
Closed Holidays  
[Contact CDC-INFO](#)

<http://www.cdc.gov/niosh/topics/cancer/policy.html>

# Immediately Dangerous to Life and Health Determinations

- IDLH values were originally determined for 387 substances in 1974 as part of the Standards Completion Program
  - joint project by NIOSH and OSHA
  - for use in assigning respiratory protection equipment
- 1994 NIOSH evaluated the scientific adequacy of IDLH values
  - IDLH values were reviewed/revised
  - document published with IDLH values, basis and references for the current values, and original IDLH values and their documentation

# IDLH Determinations

- **11/2013 CIB 66:**
  - Derivation of Immediately Dangerous to Life or Health (IDLH) Values
  - Methodology, based on the modern principles of risk assessment and toxicology, for the derivation of IDLH values
  - Methodology incorporates the approach established by the National Advisory Committee on Acute Exposure Guideline Levels (AEGs) for Hazardous Substances
  - increase the transparency behind their derivation

<http://www.cdc.gov/niosh/docs/2014-100/>

# NIOSH Manual of Analytical Methods (NMAM)

- First published in 1974
- NMAM 4<sup>th</sup> Ed: over 300 methods
  - Analytical procedure and how to collect samples
  - Provide help on topics such as quality assurance, sampling, and portable instrumentation
  - published in 1994, last version in print form
  - three supplements published in 1996, 1998, and 2003

# NMAM

- **Goals for the Fifth Edition (electronic, target is 2015)**
  - easily searchable for sampling media, analytical technique, equipment, and analyte.
  - 15 new methods
  - chapters on pesticides and direct-reading instrumentation
- **NIOSH and AIHA survey for suggestions on how to improve the NMAM**
  - <https://www.surveymonkey.com/s/DW8LDLN>
- **NIOSH needs labs willing to participate in round robin analyses to more completely evaluate these methods.**
  - Kevin Ashley ( [kea0@cdc.gov](mailto:kea0@cdc.gov)) or Paula Fey O'Connor ( [pfo1@cdc.gov](mailto:pfo1@cdc.gov)).



# Nanotechnology Research Center (NTRC)

- Chartered in 2004
- Over 50 projects; 50 scientists; FY 13 investment of \$10MM
- Cross-Institute matrix for greatest efficiency
- Published over 400 papers in scientific journals
- Developed partnerships with nanotechnology research centers and companies for greatest impact
- Provides strong guidance to protect the nanotechnology workforce
- Leverages collaborations with other government agencies
- Risk-based approach to responsible development of the technology

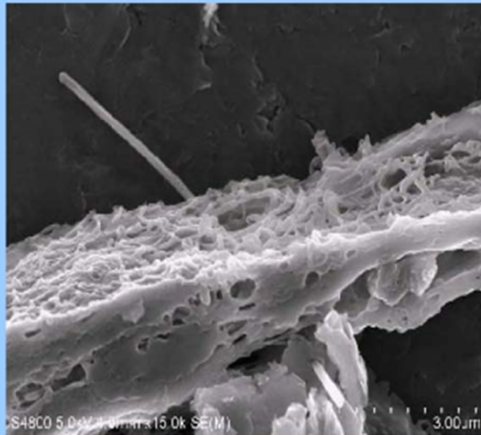
# NTRC Critical Areas

- toxicity and internal dose;
- measurement methods;
- exposure assessment;
- epidemiology and surveillance;
- risk assessment;
- engineering controls and personal protective equipment;
- fire and explosion safety;
- recommendations and guidance;
- global collaborations;
- and applications.

# Current Intelligence Bulletin

## ***NIOSH Current Intelligence Bulletin***

**Occupational Exposure to  
Carbon Nanotubes and Nanofibers**



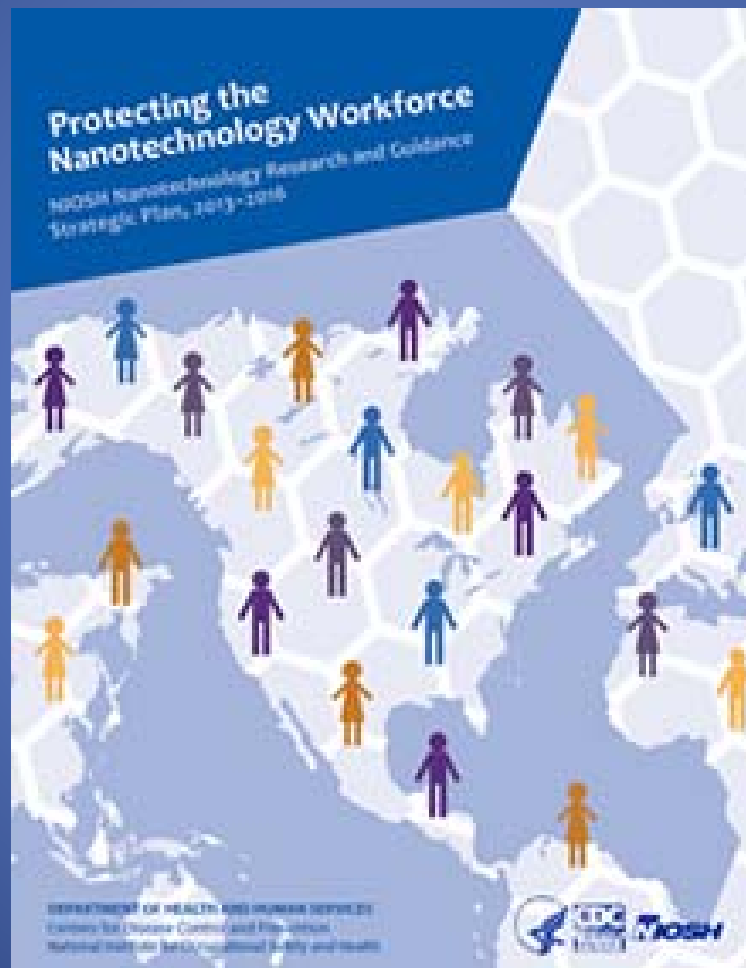
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
National Institute for Occupational Safety and Health

**April 2013**

<http://www.cdc.gov/niosh/docs/2013-145/>

# Protecting the Nanotechnology Workforce: NIOSH Nanotechnology Research and Guidance Strategic Plan, 2013–2016

<http://www.cdc.gov/niosh/docs/2014-106>



# Recent Research

- Inhalation exposure to Multi-Walled Carbon Nanotubes
  - Mouse model
  - Translocation to other organs
  - Pulmonary response
  - Tumor assessment
- Results
  - Persistent alveolar interstitial fibrosis
  - Migration to intrapleural space and systemic organs
  - Strong tumor promotor



# Emergency Responder Health Monitoring System (ERHMS)

- Health monitoring and surveillance framework for emergency responders
- Addresses all phases of a response
  - pre-deployment
  - deployment
  - post-deployment



**NRT**

# Emergency Responder Health Monitoring and Surveillance

National Response Team Technical  
Assistance Document (TAD)

January 20, 2012



Chair



Vice Chair



Member Agencies

**NRT**

# Emergency Responder Health Monitoring and Surveillance (ERHMS):

## A Guide for Key Decision Makers

February 6, 2012



Chair



Vice Chair



Member Agencies



# Training

- Online full course (4 one-hour modules)
  - CDC Train website
  - Hosted on [emergency.cdc.gov](http://emergency.cdc.gov)
  - CE credits: CME, CNE, CEU's, etc.



- IS-930: Emergency Responder Health Monitoring and Surveillance (ERHMS) System: Leadership Training (1 one-hour module)

- FEMA website
- CEU's only
- <http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-930>



# NIOSH Center for Workers' Compensation Studies

- Use workers' compensation (WC) data to identify and track work-related health conditions
  - Understand the use and limits of WC data for public health
  - Identify trends in work-related injuries-illnesses
- Understand and reduce risk factors for injuries/ illnesses through economic and intervention research

Contact: Steve Wurzelbacher  
[srw3@cdc.gov](mailto:srw3@cdc.gov)





# NIOSH Total Worker Health (TWH™)

- Launched June 2011
- Integrates occupational safety and health with health promotion to prevent worker injury and illness and advance health and well-being
- Supports development and adoption of ground-breaking research and best practices that address health risk from both the work environment and individual behavior
- <http://www.cdc.gov/niosh/TWH/>



# Examples of interventions consistent with TWH™

- Respiratory protection programs that simultaneously provide support for tobacco cessation
- Ergonomic consultations that also discuss joint health and arthritis prevention/management
- Training/prevention programs on hazards and risks faced by workers both on and off the job (falls prevention, motor vehicle safety, hearing conservation, stretching/ flexibility, back safety/ lifting safety, eye protection, safer work with chemicals, weight management)



# NIOSH Data and Statistics Gateway

- NIOSH-generated public-use research datasets available for download
- Access to surveillance, statistics and other NIOSH data
- Helps NIOSH achieve transparency-related goals as established by the White House

<http://www.cdc.gov/niosh/data/>

# Other Items of Interest...

- Draft Criteria document "Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments"
  - <http://www.cdc.gov/niosh/docket/review/docket266/default.html>
  - Public meeting (02/13/2014, Cincinnati, OH)
- Request for the Technical Review of 25 Draft Skin Notation Assignments and Skin Notation Profiles
  - <http://www.cdc.gov/niosh/docket/review/docket153B/default.html>
- Development of Inward Leakage Standards for Half-Mask Air-Purifying Particulate Respirators
  - <http://www.cdc.gov/niosh/docket/review/docket250/default.html>



# NIOSH Western States Office



# WSO Office History

- Previously a Regional Office within DHHS Federal Region VIII
- Became a Health Hazard Evaluation Field Office in 1995
- Realigned to NIOSH Office of the Director as NIOSH Western States Office in January 2008
- Located at Denver Federal Center



# Roles and Responsibilities

- Represent NIOSH in the Western U.S.
- Increase national relevance/impact of NIOSH through a regional presence
- Provide timely and quality technical and field assistance to address stakeholder needs
- Maintain focus on highest priority Western OSH issues

# Roles and Responsibilities

- Establish and maintain collaborative relationships (intra- and extra-mural)
- Promote and foster state capacity in OSH surveillance
- Facilitate and support NIOSH projects in the West
- Maintain awareness of emerging Western OSH issues
- Keep NIOSH Leadership informed

# Office Programs/Activities

- Native American Initiative
- Support for NIOSH Programs in the West
- Surveillance and state capacity building
  - WestON Conference
- O&G Health and Safety
- Naturally Occurring Mineral Fibers
- Construction Safety and Health
- Wildland Firefighter Program
- Collaborations, outreach and partnership development
  - CSTE, ERCs, DOI, USGS, EPA, USDA, ATSDR, States
- Emergency Response and Preparedness

# Initiatives (current and planned)

- Underway
  - Native Americans and OSH
  - Oil and Gas Document
- Planned
  - Green Jobs and OSH
  - Renewable Energy
  - Climate Change and OSH
  - Vulnerable Populations



# Questions?

