All F

## DOMANDE PROVA ORALE

**Fattore di rischio: esposizione al videoterminale**

**Fattore di rischio: esposizione al contatto diretto secondo il Titolo III del Dlgs 81/08**

**Fattore di rischio: esposizione al contatto indiretto secondo il Titolo III del Dlgs 81/08**

**Valutazione del rischio esplosione secondo il Dlgs 81/08**

**Valutazione del rischio e conseguente scelta/fornitura di DPI per la Protezione delle Vie Respiratorie nel caso di personale di vigilanza in cantiere di rimozione AMIANTO:**

**Il rischio derivante dall'incompatibilità tra agenti chimici diversi:**

**I dati da rilevare per avere informazioni sugli agenti chimici utilizzati sono:**

**TLV dell'ACGIH (American Conference of Governmental Industrial Hygienists) – fattore tempo di esposizione**

**TLV-TWA dell'ACGIH - definizione**

**I facciali filtranti classi FFP1, FFP2 o FFP3, in base alle caratteristiche costruttive possono proteggere rispettivamente da:**

Att. 8

# 50 YEARS OF NIOSH®

## 1970s

### 1970

- March 10, 1970, the first **Health Hazard Evaluation** is conducted at the Sager Glove Corporation in Murray, Kentucky, where researchers study asbestos exposures.
- NIOSH begins to certify **respirators**.
- December 29, 1970, the **Occupational Safety and Health Act**, creating NIOSH, is signed by President Richard Nixon.

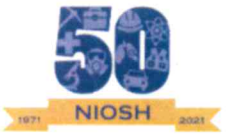
### 1971

- NIOSH begins in May 1971.
- **First toxic substances list** is published.

### 1972

- **The first Criteria Document is published.** Criteria Documents are used for developing comprehensive workplace safety and health standards.

- NIOSH supports **training project grants** that address the burden of OSH in the United States by training the next generation of OSH leaders.




### 1973

- NIOSH is transferred into **the Centers for Disease Control**, which later becomes the Centers for Disease Control and Prevention (CDC).

### 1974

- NIOSH and OSHA develop the **Standards Completion Program,** which includes 387 substance-specific draft standards. This leads to the NIOSH/OSHA Occupational Health Guidelines for Chemical Hazards.
- The ***NIOSH Manual of Analytical Methods (NMAM)*** is first published. The manual is a collection of methods for sampling and analyzing contaminants in workplace air, on surfaces, and in the blood and urine of workers.

### 1975

- First **Current Intelligence Bulletins** published.

### 1977

- First nine **Education and Research Centers (ERCs)** awarded (Harvard University, University of Cincinnati, Johns Hopkins University, University of Texas Houston, University of Minnesota, University of North Carolina, University of Washington, University of Illinois at Chicago, and University of Arizona). ERCs help prepare the future OSH workforce to respond to new challenges posed by the changing nature of work.
- Courts affirm authority to **enter workplaces, look at medical records, and release research findings.**
- ***Occupational Diseases: A Guide to Their Recognition*** informs about how to detect workplace diseases.

### 1978

- The ***Pocket Guide to Chemical Hazards*** is first published. The guide gives information for hundreds of chemicals/classes, helping users recognize and control chemical hazards in the workplace.

1970 1971 1972 1973 1974 1975 1976 1977 1978

### The 8 Locations of NIOSH


At left are the current eight locations of NIOSH facilities.

# 1980s

## 1980

- First **state-based workplace health cooperative agreements** are developed.

## 1982

- The **Fatality Assessment and Control Evaluation (FACE)** program begins. Investigations conducted through the FACE program help identify factors that contribute to fatal injuries. This information is used to develop comprehensive recommendations for preventing similar deaths. NIOSH goes on to publish the first three FACE reports the same year.

## 1984

- First meeting of the **NIOSH Board of Scientific Counselors** convenes. The committee gives advice on NIOSH's workplace safety and health research and prevention programs.

## 1985

- On the 15th anniversary of the OSH Act, the Office of Technology Assessment issues a report concluding that the Act helped to reduce exposures to **vinyl chloride, cotton dust, and lead**.
- NIOSH publishes a **research agenda** focusing on the top 10 most important topics for workplace health and safety at the time. This is considered to be the foundation of the **National Occupational Research Agenda (NORA)**.

## 1986

- Proposed **National Strategies for the Prevention of Leading Work-Related Diseases and Injuries** are published, focusing on actions to prevent occupational musculoskeletal injuries.
- NIOSH, OSHA, and EPA establish **the ONE Committee** to coordinate the agencies' research efforts.
- Collaboration with ILO International Programme on Chemical Safety establishes **hazard communication cards** to give essential safety and health information in a clear and concise way to workers and OSH professionals.

## 1987

- **Sentinel Event Notification System for Occupational Risk (SENSOR)** program established. The program would go on to support changes in federal regulations to reduce pesticide-related health risks, improvements in training and certification for pesticide applicators, safer pest control in schools, and improved labels on pesticide products.
- NIOSH publishes landmark studies showing hazards of exposure to **asbestos-contaminated vermiculite** and lung cancer mortality from Libby, Montana.
- **Adult Blood Lead Epidemiology and Surveillance (ABLES)** launched to help lower the proportion of persons who have elevated blood lead levels from work exposure.

## 1989

- The **Alice Hamilton Award for Excellence in Science in Occupational Safety and Health** recognizes the scientific excellence of technical and instructional materials by NIOSH scientists and engineers in the areas of biological science, engineering and physical science, human studies, and educational materials.
- State **FACE program** established.

1980 1981 1982 1983 1984 1985 1986 1987 1988 1989

## The 10 Sectors of NORA

- Agriculture, Forestry and Fishing
- Construction
- Healthcare and Social Assistance
- Manufacturing
- Mining
- Oil and Gas Extraction
- Public Safety
- Services
- Wholesale and Retail Trade
- Transportation, Warehousing, and Utilities

NORA

The National Occupational Research Agenda (NORA) stimulates research and improved workplace practices.


Coal mining fatalities have declined from nearly 48 per 10,000 workers in 1907 to fewer than 1 per 10,000 workers in 2020.

1990 1991 1992 1993 1994 1995 1996 1997 1998 1999

# 1990s

## 1990

- **Centers for Agricultural Disease and Injury Research, Education, and Prevention** are established. The centers conduct research, education, and prevention projects to address the nation's pressing agricultural, forestry, and fishing health and safety problems in their geographic regions.
- **National Center for Construction Safety and Health Research and Translation** established.

## 1991

- Current Intelligence Bulletin, ***Environmental Tobacco Smoke in the Workplace: Lung Cancer and Other Health Effects*** published, explaining effects of environmental tobacco smoke.
- First **Work-Related Lung Disease (WoRLD)** Surveillance Report published (in 2008 it became an online surveillance system).

## 1993

- ***Preventing Homicide in the Workplace Alert*** released.

## 1994

- **Certified Equipment List**, a searchable database of all NIOSH-approved respirators, published.
- **NIOSH Lifting Equation (NLE)** published. It has contributed to improved risk assessments for manual-lifting jobs. In the late 2010s, the NLE was converted to an app.

## 1996

- **Mine safety research authority** is transferred to NIOSH following the elimination of the U.S. Bureau of Mines.
- **Engineering Control Guidelines for Hot Mix Asphalt Pavers** is published. This represents a new paradigm for conducting research by developing a partnership between labor, industry, and government.
- ***Preventing Allergic Reactions to Natural Rubber Latex in the Workplace Alert*** is published, addressing reports of workers' allergic reactions to latex.
- NIOSH publishes "The Yellow Book," or ***Musculoskeletal Disorders and Workplace Factors: A Critical Review of Epidemiologic Evidence for Work-Related Musculoskeletal Disorders of the Neck, Upper Extremity, and Low Back.***

## 1998

- **Fire Fighter Fatality Investigation and Prevention Program** established.

## 1999

- NIOSH issues recommendations for preventing **job-related stress.**
- NIOSH issues recommendations for preventing **work-related needlestick injuries.**

# 2000s

## 2001

- NIOSH provides technical assistance for responder safety and health in the **World Trade Center rescue and recovery**.

- **NIOSH en Español** website launches.
- NIOSH responds to **Anthrax attacks**.
- NIOSH creates a **coordinated emergency preparedness and response program** to improve its ability to respond to future emergencies and disasters.
- NIOSH designates the role of **compensation analysis and support** from HHS in response to the Energy Employees Occupational Illness Compensation Program Act of 2000.

## 2002

- NIOSH scientists publish their research findings about a new lung disease found in workers at a series of microwave-popcorn plants (***Identification of Flavoring-Related Lung Disease***), giving comprehensive recommendations for preventing similar deaths.

## 2003

- ***eNews***, the NIOSH monthly newsletter, debuts.
- **Steps to a Healthier U.S. Workforce Initiative** is launched. This later became the **Total Worker Health (TWH) program**.

## 2004

- **Research to Practice (r2p)** initiative is established to speed the adoption of new research findings into practice to benefit workers.
- **Nanotechnology Research Center** established.

## 2005

- NIOSH gives technical and humanitarian help after **Hurricane Katrina**.
- "Hot spots" of rapidly progressive **coal workers' Black Lung** in the U.S. are identified.

## 2006

- NIOSH funds **Total Worker Health Centers of Excellence**.
- After Sago mine disaster, the **MINER Act** calls for NIOSH to **conduct mining research**.

## 2007

- **NIOSH Science Blog** debuts.

## 2008

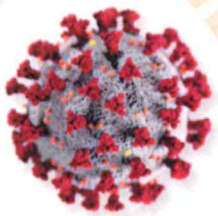
- NIOSH-developed **Coal Dust Explosibility Meter** released to allow mines to measure and remediate areas that need to be treated with rock dust to cut down on their explosibility.

## 2009

- **A new sizing structure** for fall arrest harnesses to better fit the diverse sizes and shapes of construction workers is released.
- NIOSH publishes ***Approaches to Safe Nanotechnology***, the first risk management guidance document on safe handling of engineered nanomaterials to incorporate information about hazard, exposure, and controls.

- Oversight of the **World Trade Center Health Registry** is moved to NIOSH.
- NIOSH responds to **2009 H1N1 influenza** pandemic.
- NIOSH jumps into social media and **joins Twitter**.

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009



NIOSH often sends staff to respond to disasters and outbreaks. Pictured are the World Trade Center (2001), Hurricane Katrina (2005), the Deepwater Horizon oil spill (2010), and COVID-19 (2020–2021).

# 2010s

## U.S. Worker fatalities from 1970 through 2018


U.S. workers killed on the job fell from about 16 per 100,000 in 1970 to fewer than 5 per 100,000 in 2018. Data: U.S. Bureau of Labor Statistics (BLS). Data from 1970s: BLS reports and OSHA estimations. Labor force data from the 1970s: from the U.S. Census.

### 2010

- NIOSH gives technical assistance for responder safety and health in the **Deepwater Horizon** oil spill containment and cleanup.
- **Center for Motor Vehicle Safety** established.
- **Prevention through Design (PtD):** ***Plan for the National Initiative*** published. PtD was noted as the best way to prevent occupational injuries and illnesses.
- New occupational health hazard, **Indium Lung Disease**, identified.

### 2011

- James Zadroga 9/11 Health and Compensation Act of 2010 signed into law 1/02/2011, creating the **World Trade Center Health Program.**
- **Emergency Responder Health Monitoring and Surveillance (ERHMS™)** framework published to help organizations monitor the health and safety of emergency responders.
- NIOSH research and assistance enables ILO standards for using **digital chest radiographs** in worker screening programs.

### 2012

- Start of the **National Falls Prevention Campaign** in Construction.

### 2013

- First mobile application released, **Ladder Safety App**.
- **Occupational Exposure to Carbon Nanotubes and Nanofibers** CIB released.
- **Center for Workers' Compensation Studies** begins.

### 2014

- NIOSH staff respond to the **Ebola epidemic.**
- **Safe Skilled Ready Workforce program** launches.
- **Center for Direct Reading and Sensor Technologies** created.

### 2015

- **National Center for Productive Aging and Work** created.
- **Center for Maritime Safety and Health Studies** established.

### 2016

- **"Emission of Particulate Matter from a Desktop Three-Dimensional (3D) Printer"** publishes.
- Criteria Document on **diacetyl and 2,3-pentanedione** sets a diacetyl recommended exposure limit.

### 2017

- Award-winning video highlights NIOSH research with the **ambulance industry** to increase ambulance safety through standards.
- **Center for Occupational Robotics Research** established.

### 2018

- ***Chemical, Biological, Radiological, and Nuclear (CBRN) Respiratory Protection Handbook*** to guide respirator selection and use is published.
- New tools developed to help identify dampness/mold in schools and buildings.

### 2019

- **Commercial Fishing Occupational Safety Research and Training Program** established.
- **Center for Work and Fatigue Research** established.
- National **robotics research** funded through partnerships.

### 2020

- NIOSH responds to the **COVID-19 pandemic.** It is the longest response activation in NIOSH history.
- **National Firefighter Registry** aids studies of possible links between firefighter exposures and cancer.

Timeline by John Lechliter/NIOSH