

National Occupational Research Agenda: Assessing Burden, Need and Impact

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Background and Context

NIOSH and NORA

NIOSH

The National Institute for Occupational Safety and Health (NIOSH) creates new knowledge in the field of occupational safety and health and transfers it into practice globally.

NIOSH accomplishes this mission through a variety of scientific activities such as:

- Research
- Surveillance
- Field investigations
- Development of guidance and recommendations.

National Occupational Research Agenda (NORA)

- Begun by NIOSH in 1995 as a public-private partnership to engage diverse interests and perspectives to chart a research course
- Recognized no one organization has the resources necessary to fully address the research needs of workers in the United States
- Provided a framework to guide occupational safety and health research for the nation

“Delivering on the Nation’s promise: safety and health at work for all people through research and prevention”

The Evolution of NORA

1996 - 2026

The Evolution of NORA (1996 – 2016)

First Decade (1996 – 2006)	Second Decade (2006 – 2016)	Third Decade (2016 – 2026)
<p>What will the workplace of 2006 look like? What research will be needed to ensure a safe and healthy workplace?</p>	<p>How can research be better moved to practice in the workplace?</p>	<p>What research should be done in 2020 and beyond? Can an efficient and effective structure be found to identify and integrate research priorities?</p>
<p>21 Focus Areas</p>	<p>10 Sectors</p>	<p>10 Sectors and 7 Cross-Sectors</p>
<ul style="list-style-type: none"> NORA became a map by which the occupational safety and health community could identify, generate, design, and fund priority research efforts. No previous occupational research agenda had captured such broad input. 	<ul style="list-style-type: none"> 20 business sectors in the U.S. defined by NAICS codes were organized into groups based on similarities in workplace safety and health issues to identify 8 and then 10 sector groups. During the decade, NIOSH organized 24 intramural cross-sector programs to support Sector goals and priorities. 	<ul style="list-style-type: none"> 10 Sectors Programs whose aim is to prioritize occupational safety and health (OSH) research by the major areas of the US economy. 7 Health and Safety Cross-Sector Programs whose aim is to identify national OSH research priorities according to major issues affecting the US working population. Work in integrated approach to identify and integrate priorities.

First Decade (1996-2006)
21 Focus Areas

Second Decade (2006-2016)
10 Sectors

Third Decade (2016-2026)
10 Sectors and 7 Cross-Sectors

Disease and Prevention

- Allergic and Irritant Dermatitis
- Asthma and Chronic Obstructive Pulmonary Disease
- Fertility and Pregnancy Abnormalities
- Hearing Loss
- Infectious Diseases
- Low Back Disorders
- Musculoskeletal Disorders
- Traumatic Injuries

Sectors

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

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Work Environment & Workforce

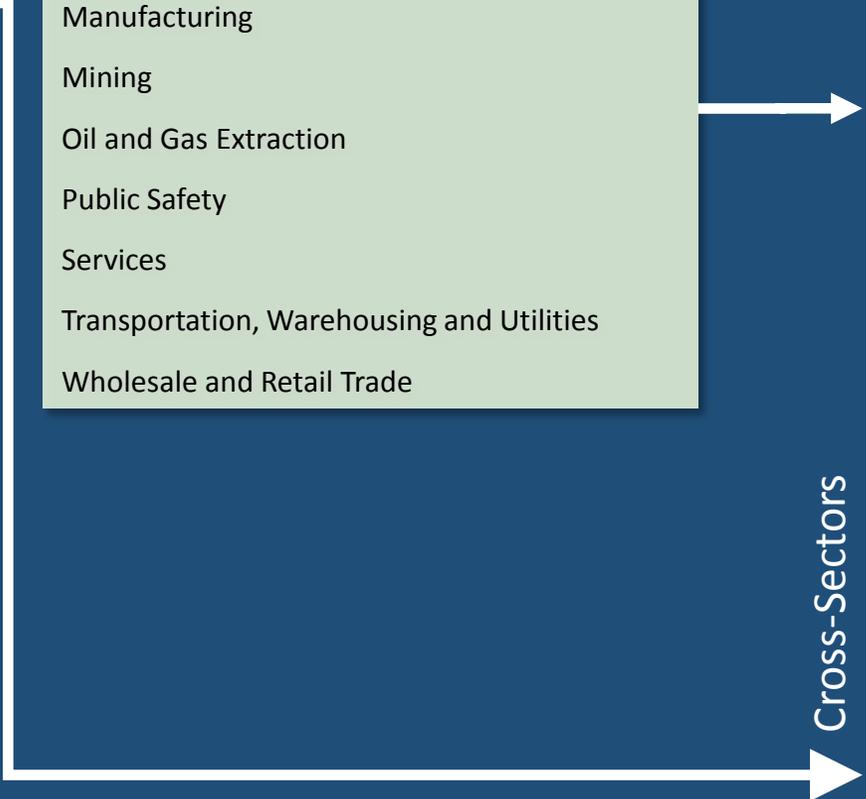
- Emerging Technologies
- Indoor Environment
- Mixed Exposures
- Organization of Work
- Special Populations at Risk

Cross-Sectors

- Cancer, Reproductive and Cardiovascular
- Hearing Loss Prevention
- Immune, Infectious & Dermal
- Musculoskeletal Health
- Respiratory Health
- Traumatic Injury Prevention
- Healthy Work Design and Well-being

Research Tools & Approaches

- Cancer Research Methods
- Control Technology and Personal Protective Equipment
- Exposure Assessment Methods
- Health Services Research
- Intervention Effectiveness Research
- Risk Assessment Methods
- Social and Economic Consequences of Workplace Illness and Injury
- Surveillance Research Methods



Third Decade of NORA

10 Sectors and 7 Cross-Sectors

Industry Sectors

Agriculture, Forestry and Fishing

Construction

Healthcare and Social Assistance

Manufacturing

Mining

Oil and Gas Extraction

Public Safety

Services

Transportation, Warehousing and Utilities

Wholesale and Retail Trade

Health & Safety Cross-Sectors

Cancer, Reproductive and Cardiovascular

Hearing Loss Prevention

Immune, Infectious & Dermal

Musculoskeletal Health

Respiratory Health

Traumatic Injury Prevention

Healthy Work Design and Well-being

Third Decade of NORA Core and Specialty Programs

First Decade Focus Areas

Work
Environment
& Workforce

Emerging Technologies
Indoor Environment
Mixed Exposures
Organization of Work
Special Populations at Risk

Research Tools &
Approaches

- Cancer Research Methods
- Control Technology and Personal Protective Equipment
- Exposure Assessment Methods
- Health Services Research
- Intervention Effectiveness Research
- Risk Assessment Methods
- Social and Economic Consequences of Workplace Illness and Injury
- Surveillance Research Methods

Core and Specialty Programs

Authoritative Recommendations	Nanotechnology
Climate Change	Occupational Health Disparities
Direct Reading & Sensor Technologies	Personal Protective Technologies
Emergency Preparedness and Response	Prevention through Design
Engineering Controls	Productive Aging and Work
Exposure Assessment	Safe, Skilled and Ready Workforce
Global Collaborations	Small Business Assistance
Health Hazard Evaluation	Surveillance
Motor Vehicle Safety	Workers Compensation Studies

Core activities, mandates, special emphasis areas and methodological approaches to research. Work with the appropriate Sectors and Cross-Sectors and participate in priority goal setting activities.

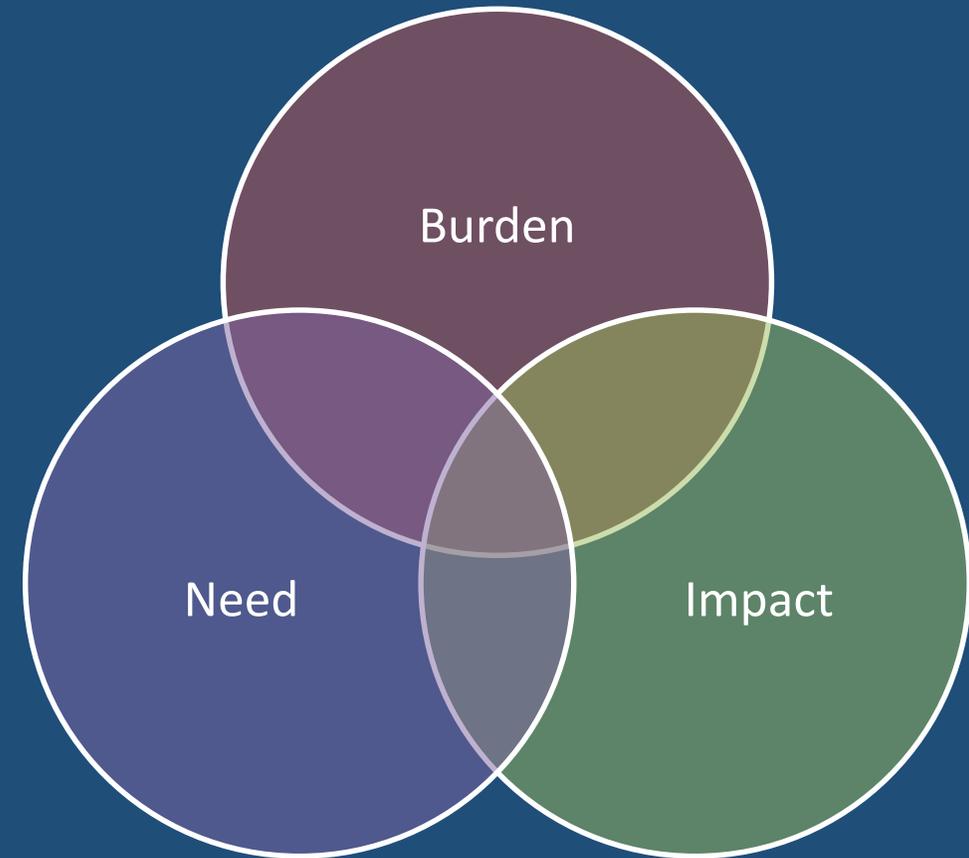
Identifying and Integrating Research Priorities

The Third Decade of NORA

2016 - 2026

How NIOSH Identifies Research Priorities: The BNI Method

- We select the most important work to protect the workforce
- We identify priorities to guide investments
- We base priorities on the evidence of **burden, need and impact.**



What Research Should NIOSH Fund?

- **Burden**

- What is the health & exposure burden on individuals, employers and society?
- What is the economic burden on individuals, employers and society?
- How well is the burden evidence assessed?

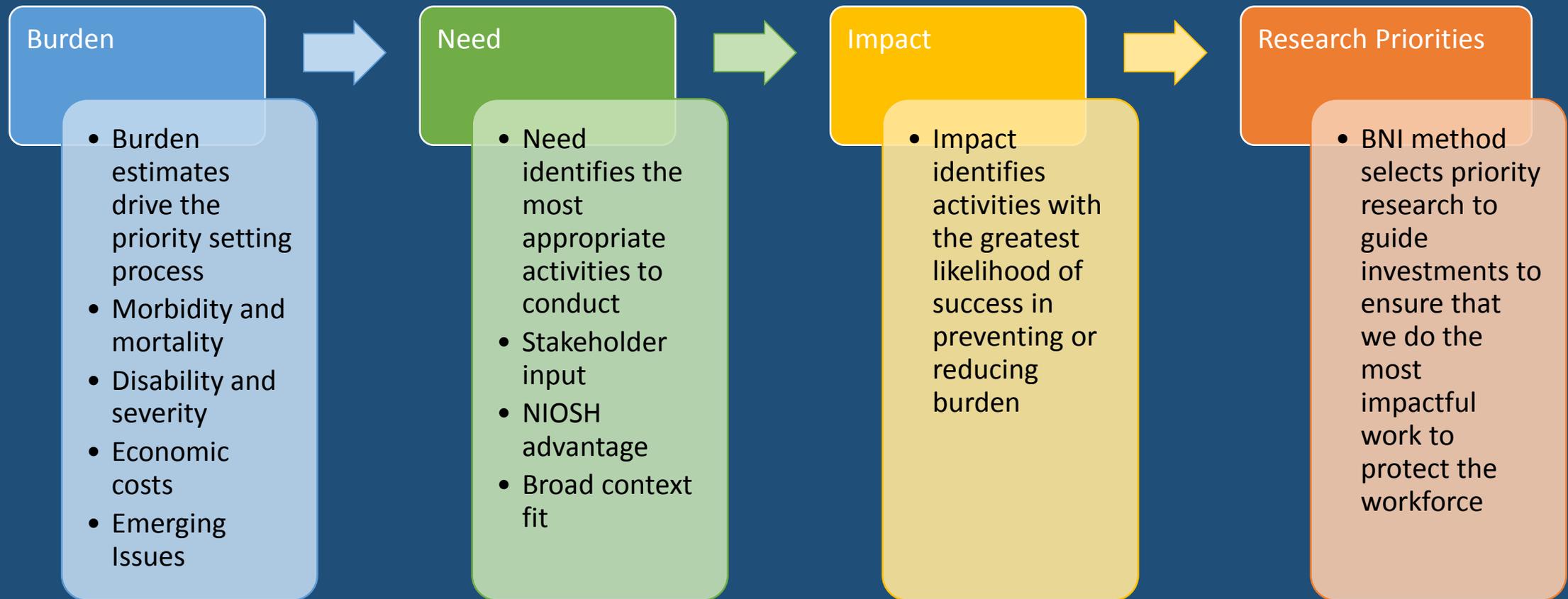
- **Need**

- What meaningful knowledge gap can be filled by the research?
- What advantages does NIOSH have over other funders?
- How well does the research address stakeholder needs?

- **Impact**

- Is the research well conceived, feasible and likely to address the need?
- How can the findings create new knowledge, lead others to act on the findings, promote practical interventions, adopt a new technology, develop evidence-based guidance, aid in standard-setting, or promote other intermediate outcomes?
- How can the findings lead to a decrease in worker injury, illness, disability or death, or enhance worker well-being?

BNI and Research Priorities



Implementing BNI in the Third Decade of NORA

- BNI will be a guiding principle in the third decade of NORA to help Sector and Cross-Sector Programs identify research priorities based on evidence of:
 - Burden
 - Need
 - Impact
- Programs will work in an integrated structure to identify priorities
- NIOSH will use the BNI method to identify and fund research priority input from the NORA Sectors and Cross-Sectors

Rollout of the Third Decade of NORA

- | | |
|--------------|---|
| Summer 2016 | Formally announce plans for NORA 3 structure
Review of second decade of NORA complete
Sectors and Cross-Sectors develop plans for public input into research priority setting process |
| October 2016 | Third decade begins |
| Summer 2017 | State of the Science Meeting (tentative) |

Discussion

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Thank you

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