

NORA Mid-Decade Review

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Table of Contents

Background.....	1
Methods.....	1
Sample.....	2
Results.....	2
Limitations	2
Conclusions and Recommendations	2
Appendix A: Phone Interview Questionnaire	5
Appendix B: Respondents.....	9
Appendix C: Narrative Summary of Responses	10
Overall NORA Experience To-Date.....	10
Challenges to Achieving Impact by 2016.....	11
Opportunities for Improvement	14

Background

In 2011, as the National Occupational Research Agenda (NORA) reached the halfway point of its second decade, the National Institute of Occupational Safety and Health (NIOSH) conducted a review of the NORA structure and progress in ten NORA industry sectors to provide an inter-sector perspective of NORA to date. Comments were sought from the public and stakeholders on the NORA sector processes, activities and accomplishments, and opportunities for adjustments to current NORA sector work for the second half of the decade.

Methods

Due to resource constraints, the review was conducted by NIOSH staff. Telephone interview questions were developed by NIOSH staff with evaluation experience in collaboration with sector council leaders and the NORA program office and are presented in Appendix A. Public comment was solicited through a Federal Register announcement, presentation at the NORA Symposium in July 2011, and through the NIOSH eNews and sector council communications. An email mailbox and a public docket were also established to collect comments.

Sample

Twenty (20) telephone interviews were conducted with council members: nine (9) non-federal employees and eleven (11) Federal employees. Participants were randomly selected from a list of potential respondents generated by each sector council: one Federal and one non-federal interviewee from each council. Only nine non-federal members could be interviewed, so one council had no non-federal members interviewed. One additional Federal member was interviewed to gain the perspective of a member who was also a NIOSH extramural program official. The list of interviewees who agreed to be identified is provided in Appendix B.

Results

The small sample size and potential selection bias limits the generalizability of these results. However, the review did obtain responses from at least one member of each of the councils with nearly equal representation of Federal and non-federal employees.

Telephone Interviews: A total of 20 telephone interviews were conducted with sector council members. The interview respondents were selected from a possible universe of 563 council members and corresponding members, 134 of whom were Federal employees and 429 of whom were non-federal employees. The 20 phone interviewees comprised only 3% of the council members and corresponding members.

Public Comment: Three comments were received by email. Four comments were received in the public docket, available for viewing at

<http://www.cdc.gov/niosh/docket/archive/docket244.html>.

A narrative summary of responses is provided in Appendix C.

Limitations

One of the limitations of this review is the small sample size, which limits the representativeness and generalizability of these findings. Another limitation is the potential for selection bias. While the final selection of interviewees was by random sampling, the sample frame was generated by sector council leaders. Given the small number of interviews, council leaders may have been more likely to suggest individuals who were more experienced with NORA. Council leaders may also have chosen individuals who were more likely to agree to participate or provide specific perspectives.

Conclusions and Recommendations

Successes: In general, responders found their involvement with NORA to be worthwhile. Council leadership, face-to-face council meetings, and the industry sector structure have contributed to the successes of councils. The most prevalent perception was that NORA seems to be balancing short and long term research needs and that NORA has an appropriate balance of basic and translation research.

Information needs: One of the most commonly voiced concerns was the need for more information. Information needs that were identified included surveillance data to identify research priorities and information on intervention effectiveness to increase adoption of best practices in the workplace. Information on activities taking place around the country which are related to goals would help identify gaps that still exist, as well as provide additional insight into the impact NORA has had on research. These data will be helpful in evaluating the impact NORA has had at the end of the decade.



Partnership needs: A frequent recommendation was the need to develop and leverage more partnerships. Increased partnerships were recommended as a strategy to address concerns about funding limitations. Work should continue to increase/strengthen commitments from partners and leverage resources to fund and conduct research activities to achieve goals. Enhanced communication with potential partners would help identify areas of common interest and activity in occupational safety and health.



Communication needs: Some responders suggested ways to improve communication and information sharing. These included clarifying the roles and responsibilities of stakeholder groups, NIOSH, and sector councils in achieving sector goals. More information should be provided on the NIOSH NORA intramural and extramural funding processes. Sector councils should also explore ways to improve internal communication to maximize the effectiveness and use of council member resources.



Resource needs: Recommendations of ways to improve the leveraging of existing resources included asking current partners to help widely communicate support for NORA and occupational safety and health research, which might help with new partnership development and identification of additional funding streams for research. Partners can also help by disseminating existing knowledge about effective interventions which should be transferred to the workplace.



Resource Needs

- Effective use of partner interest and commitment
- Transfer of current knowledge to the workplace for adoption

Structural concerns: There were other concerns raised during this review that are challenges inherent in the structure of NORA and may be useful to include in the end of decade review. These include:

- the difficulty of identifying common goals within a large, diverse sector;
- the limited time that council members have to commit to NORA and the lack of council authority or funding to incentivize goals-related activities; and
- the short, 10-year timeframe for developing goals and achieving impact.



Structural Concerns

- Large, Diverse Sectors
- Limited Authority & Resources
- Short, 10-year Timeframe

NORA was started in 1996 and entered its second decade in 2006. How long have you been involved with NORA and how did your involvement start?

OVERALL NORA (*Assessment of the structure of the overall NORA effort*)

1. Is NORA contributing to an improvement in the relevance and national impact of occupational safety and health research overall? If so, how? If not, why not?

2. During the first decade of NORA, NORA was organized into 21 priority areas of injuries/illnesses and methods. In the second decade, NORA is organized into ten industry sectors. Based on your experience, how has the sector-based approach affected the ability of NORA to address occupational safety and health issues?

3. How do you think NORA should balance attention between basic occupational safety and health research and the translation of that research into the workplace? Do you think this is being done?

4. Do you think NORA adequately addresses both short and long term occupational safety and health needs? Why or why not?

INPUTS: STAKEHOLDERS (*Assessment of the structure and organization of sector councils*)

5. What are the drivers and barriers to your involvement on the council?
Did the sector-based approach affect your involvement? If so, how?

6. Council structure includes sector leadership, types of organizations represented, number of members, level of engagement, and types of activities. Has the structure of your council helped or hindered its success? How?

7. How can the internal communications of your council be improved?
How can communications with those not on the council be improved?
What have been the most successful communication tools?

8. The charge to sector councils states that the council mission is to develop a research strategic plan and promote adoption of improved workplace practices. At this half-way point, are any changes needed to your council to carry out its charge for the remainder of the decade? If so, what changes?

INPUTS: RESOURCES *(Assessment of whether the needs of councils have been met)*

9. Resources include, but are not limited to funding, unique expertise, and network connections. What resources contributed to your council's successes?

Where did those resources come from?

10. To ensure that the desired impacts of NORA are achieved by 2016, are there additional resources that your council needs? If so, what are they?

Where should they come from?

ACTIVITIES: DEVELOPMENT OF THE SECTOR STRATEGIC AGENDA / GOALS

(Assessment of the setting of goals and prioritization, which was some of the early work of councils)

11. Was the process of developing sector-based goals valuable? Why or why not? Did you gain anything from this process that helped in your work in OSH? If yes, please describe. If not, why not?

12. What barriers were encountered during the process of developing your goals?

What facilitated the process of developing your goals?

13. How likely is it that your sector goals will need to be modified based on current and expected availability of resources? If there is a good likelihood, what modifications do you think are needed? If not, why not?

14. Do the goals of your sector adequately prioritize the needs for research and prevention activities? Why or why not?

ACTIVITIES: IMPLEMENTATION *(Assessment of the activities to accomplish goals, which was the focus of most councils after completion of goals development)*

15. Has your council turned its focus towards achievement of the identified goals?

If so, what is going well? What could be improved?

If not, what is the current focus? Do you project that the council will eventually focus on achieving the identified goals? If no, why not?

16. Do you know of any challenges to the development of partnerships to conduct research relevant to NORA goals? If so, what are the challenges?

17. Research to practice activities include, but are not limited to, outputs, meetings, presentations, networking, and initiation and use of new partnerships among stakeholders. How effective has NORA been in generating goals-related research to practice (r2p) activities from NIOSH? From partners? Why?

RESULTS (*Assessment of the future*)

18. Impact is defined as contributing to a safer and healthier workplace. What activities and products have been completed or are in progress that you believe have or will have the most impact?

Were these impacts identified in the sector goals or were they unanticipated?

19. Are there barriers to NORA having a positive impact by 2016? If so, what are they? What can be done to reduce the barriers?

20. Do you feel your involvement has been worth your time and effort? Why or why not?

Do you have additional comments on what is going well or how improvements can be made?

Thank you for your time and thoughts.

Appendix B: Respondents

Phone interview participants who are not federal employees

Name	Sector Council	Organization
Darryl Alexander	Services	American Federation of Teachers
Brett Bowman	Public Safety	Manassas, Virginia, Fire and Rescue Department
Letitia Davis	Construction	Massachusetts Department of Public Health
Robert Harrison	Healthcare and Social Assistance	University of California, Berkley
Barbara Lee	Agriculture, Forestry and Fishing	National Farm Medicine Center, Marshfield Clinic Research Foundation
Frank Renshaw	Manufacturing	Bayberry EHS Consulting
Ed Watt	Transportation, Warehousing & Utilities	Transport Workers Union of America
2 Anonymous Participants		

Phone interview participants who are Federal employees

Name	Sector Council	Title and Organization
Kathleen Fagan	Services	Occupational Safety and Health Administration, U.S. Department of Labor
Thomas Hales	Public Safety	NIOSH
Ted Hitchcock	Transportation, Warehousing & Utilities	NIOSH
Michael Hodgson	Healthcare and Social Assistance	U.S. Department of Veterans Affairs
Jeffery Kravitz	Mining	Mine Safety and Health Administration, U.S. Department of Labor
Brian Lowe	Construction	NIOSH
Marianne McGee	Oil and Gas Extraction	Occupational Safety and Health Administration, U.S. Department of Labor
Allen Robison	Agriculture, Forestry and Fishing	NIOSH
Steve Wurzelbacher	Wholesale and Retail Trade	NIOSH
2 Anonymous Participants		

Individuals who submitted comments to the public docket:

Michael Bowers, Harris Teeter, Inc.

Kermit Davis, University of Cincinnati

James J. Galante, EASE Council, Material Handling Industry of America

James C. Helmkamp, NIOSH

Three anonymous individuals submitted comments by email.

Appendix C: Narrative Summary of Responses

The following is a summary of findings from interviews with 20 NORA council members and from comments submitted to the public docket and via email. This summary is in three sections: experience to-date, challenges to achieving impact by 2016, and opportunities for improvement.

Overall NORA Experience To-Date

Overall, 21 commenters stated that they believed that NORA is a worthwhile effort contributing to a better understanding of occupational safety and health research needs.

- NORA brings people together, fostering dialogue and providing an important opportunity to network.
- As a result of NORA and networking, council members have learned from each other, know what others are doing, and developed new contacts.
- A key factor in the effectiveness of NORA is having input from diverse stakeholders, including academia, government, community groups, labor, and employers, to provide an understanding of issues and gaps in worker safety and health.
- Another benefit of NORA is the involvement of practitioners. Researchers and government agencies found it useful to have the perspective of people in the field regarding research needs.

While there were commenters who believed that some impact has already been made, there were also respondents who were concerned about the difficulty of demonstrating impact.

In general, council leadership and structure are working well.

- Nine commenters cited effective leadership from NIOSH coordinators and staff who facilitate discussion, address council member needs, and give visibility to occupational safety and health in the sectors.
- Four commenters noted that working in subcommittees has been particularly effective for getting tasks completed. It allows the councils members to work on issues relevant to them.
- Fifteen respondents stated that face-to-face meetings have been integral to the success of councils; eight respondents noted the importance of the NIOSH funding for council members to travel to the meetings.

Seventeen commenters believed that the industry sector structure of the second decade of NORA has been beneficial and contributed to their involvement. However, the sector structure posed challenges:

- Eight commenters noted that the sector structure combines many diverse, distinct occupations together, making it difficult to find common goals within a sector. Five thought it would be useful to focus more narrowly, e.g., by occupation or subsector.
- Two commenters thought that the sector structure was not helpful, believing that it took focus away from occupational illnesses in favor of injuries and that it would be ideal for some issues to be addressed across sectors.

Eight commenters stated that NORA seems to adequately balance basic research and translation; in contrast, three commenters thought that there is currently too much importance placed on applied research. Six commenters thought that ensuring adoption in the workplace should be a more important focus than basic research.

Eleven commenters believed that NORA adequately balances short and long-term occupational safety and health needs. Three commenters believed that due to the need to demonstrate impact, there is an emphasis on short-term issues; two of them believed that this led to an emphasis on injuries over illnesses.

Challenges to Achieving Impact by 2016

Feedback was sought on program inputs, activities, and needs for the future. Listed below are the most common concerns raised by respondents.

Inputs: Stakeholders and Resources

Barriers to member involvement on the councils

- Fourteen commenters cited time as a limiting factor for degree of participation on the councils. Council work may not be a part of council members' job descriptions and there are competing demands for time.
- As noted previously, eight commenters noted the importance of NIOSH funding support for council members to travel to meetings.
- One commenter believed that the long process of developing goals may have been frustrating to private sector/industry council members. One industry council member believed that too much time was spent discussing research needs and that most of the research activities identified had already been addressed by industry.

Risks to employers

- Four commenters stated that employers fear that highlighting a worker safety and health issue or being involved in an effort acknowledging a problem would harm the company's reputation and competitiveness and increase regulatory oversight.

Limited financial resources

- Fourteen commenters cited funding as a resource limitation. This was expressed by commenters from labor, research institution, state/local agencies, other Federal agencies, and NIOSH.
- Funding is needed for a variety of activities, including NIOSH staff support for councils; research and intervention projects; and travel for council meetings, reaching out to stakeholders, and workshops/conferences sharing research findings and best practices.

Reliance on NIOSH

- Four commenters noted that NORA is believed to be a NIOSH endeavor and that NIOSH is expected to implement the recommendations of councils.

- Three commenters stated that NIOSH is expected to lead and stimulate research funding.
- Four commenters believed that there needs to be more NIOSH extramural funds to incentivize research related to the goals.

Lack of council authority and funding

- Three commenters noted that the design of NORA does not provide councils with the ability to fund research or translation or the authority to mandate action by others. Councils can only invite or encourage goals-related research and knowledge transfer, with limited ability to ensure that activities are carried out to achieve the goals.
- Goals include actions to be taken by employers and others not on the councils, yet NORA and councils have no authority over other entities.

Activities: Goals Development and Implementation

Reliance on council members in goals development

- Five commenters noted that some subsectors are underrepresented on the council or are less of a priority in the goals and some issues may be overlooked.
- Five commenters were concerned that turnover, attendance, and level of engagement by council members are important when only one person is available to provide expertise on a subsector.

Insufficient data during goals development

- Four commenters thought that more data would have been useful to identify high priority needs and data gaps.
- If a council member with a specific expertise is absent or if a subsector is not represented on the council, then those issues may not have been identified. Having access to and using data on injuries and illnesses would have decreased reliance on council members.

Lack of clarity regarding roles and responsibilities of councils, NORA, goals, and partners

- Six commenters believed that there were some uncertainties about NORA, councils, and partners, including:
 - Councils: What is the council supposed to be doing once goals are developed?
 - NORA: Are goals supposed to be about research, as in the name of “N O *Research A*”? Or are goals supposed to be an action plan which includes moving research into the workplace?
 - Goals: What does it mean to implement the agenda? Who is responsible for carrying out activities to achieve the goals?
 - Partnership: What are the roles of partners?

Insufficient commitment and resources from stakeholders for taking action to achieve goals

- Four commenters believed that there is underrepresentation of employers on their council (two specified the need for small employers).

- Twelve commenters believed that there should be more leveraging of resources from stakeholders to carry out activities to achieve the goals. Although progress toward the goals is desired, it is challenging to have buy-in from partners to commit resources to carry out activities to achieve the goals.
- Universities, manufacturers, other agencies, foundations, employers, and trade organizations were suggested as potential partners in incentivizing research and moving research findings into the workplace.

Lack of clarity and ease of the NIOSH intramural and extramural funding process

- Four commenters thought that it is unclear the degree to which sector goals drive funding decisions and that relevancy to sector goals should be given more weight.
- Five commenters believed that the NIOSH funding cycle process takes too long. Employers and companies may want to complete projects and see results within a fiscal year.
- Four commenters noted the challenges of the NIOSH funding process. It is difficult to develop partnerships for a project that does not have funding, yet having partners is necessary for a project to be approved for funding. It is discouraging to have a partner, yet still not receive funding. The process is cumbersome, and the approval rate is low.

Results

Insufficient data on progress being made and potential impact

- Eleven commenters believed that more information is needed on the activities which have taken place and the progress which has been made toward goals. For example, three commenters said that they did not know the specific activities of funded research or whether NORA has led to more NIOSH-funded extramural research.
- Challenges to collecting data to measure impact include:
 - Identifying the metrics which need to be collected: goals achievement, reductions in injury/illness rates, etc.;
 - Distinguishing between research that would have taken place without NORA and research that is attributable to NORA;
 - Tracking and assessing success in research transfer or workplace adoption; and
 - Analyzing the different formats of data from companies and agencies.

Short timeframe

- Five commenters thought that the timeframe for achieving goals and making an impact may need to be extended.
- The process of forming councils, defining goals, developing partnerships, carrying out research, transferring knowledge, and adopting new practices may take more than ten years.
- Improvements in injury, illness, and fatality rates may not be evident for many years.

Opportunities for Improvement

Feedback was sought on potential adjustments which could be made to help NORA reach its full potential by 2016. Based on comments received, listed below are the common overarching themes.

1. More data are needed to serve as the basis of needs identification and to determine progress.
 - Twelve commenters believed that more information is needed on injury/illness rates and activities related to goals.
 - Even with more data, it would still be difficult to know which activities can be directly attributable to NORA and which would have taken place regardless.
 - Having more quantitative data for goals development would provide more objective and consistent decision making than relying on the experience of council members.
2. Eleven commenters made suggestions on the importance of developing and leveraging more partnerships. Suggestions for communications for developing partnerships included:
 - Illustrate the economic impact of improved worker safety and health.
 - Three commenters noted that to obtain commitment of resources, the right people must be recruited and convinced. Council members who are health and safety professionals in companies may understand the importance of worker safety and health, but their upper management may not.
 - Eight commenters believed that it is important to relate the needs of potential partners to research in occupational safety and health. It would be helpful when approaching potential partners to identify issues which may overlap with worker safety and health (e.g., food safety, sustainability). Two commenters pointed out that this applies to not just employers, but also institutions capable of sponsoring research or with regulatory authority for increasing adoption in the workplace.
 - Two commenters noted the importance of providing products or research findings which demonstrate progress or potential impact on issues of importance to potential partners.
 - Two commenters suggested specifically explaining the role of that the private sector can play in solving problems in worker safety and health, i.e., achieving NORA goals.
 - One respondent noted that it may be helpful to have a specific research request when approaching candidate partners. Another suggested that engaging partners in basic research, not just translation, could increase the likelihood of implementation.
3. Communication Process and Content
 - A. Suggestions were made to increase the information shared with council members.
 - Three commenters suggested having more information sharing with NIOSH cross-sector programs and other councils.

- Knowing about goals, activities, progress, processes, etc. of other councils could lead to collaborations and sharing of best practices. Effective solutions of one sector may be applicable in another sector. There is also interest in learning more about the NIOSH cross-sector programs since those issues cut across all sectors and could highlight goal similarities, which could lead to partnerships.
 - Three commenters suggested having more information about progress and activities contributing to goal achievement.
 - There is some knowledge of NIOSH intramural and extramural projects and little knowledge about activities not funded by NIOSH.
 - Bringing attention to activities of the private sector could serve as a reminder of the ways that employers can help achieve NORA goals. Having information on the findings from research could also facilitate transfer of the findings and adoption. Knowing about activities that have taken place could energize council members.
 - As discussed previously, six commenters mentioned uncertainties about the role of NORA, council members, and partners. Specifying the individual/organizational benefits of participation in NORA would help with recruitment of new council members and partners.
 - One council member suggested having orientations for new council members.
- B. Suggestions were made on ways to improve communication processes. The suggestions may not be relevant to every council, but provide ideas for areas for improvement.
- Two commenters made suggestions to foster engagement.
 - One suggested that to foster more two-way communication, instead of broad requests for feedback or one-way emails/newsletters disseminating information, asking targeted questions could elicit more feedback and dialogue. Another suggestion was to frame partnerships as “solving problems” of mutual interest, not “implementing NORA,” which people may not understand and does not highlight how the target organization would benefit.
 - It was also suggested that council members working on tasks together facilitates networking, cited as one of the key benefits of participation in NORA.
 - Four commenters recommended more frequent (one commenter suggested monthly) communications.
 - One commenter suggested making emails more concise and another explained that it can be burdensome to receive a large amount of information from council leadership just before a meeting/call.
 - Three commenters suggested providing more follow up, such as updates on issues raised during meetings and minutes for non-council members.

4. Transfer of current knowledge to the workplace for adoption
 - Four commenters believed that there are opportunities for NORA partners, including NIOSH, to transfer to the workplace existing research findings and knowledge about effective interventions.
 - Three commenters suggested that technical assistance in translation would be helpful to NIOSH staff whose expertise is not in translation to create materials that are easy to understand that can be used in the workplace.
5. Effective use of partner interest and commitment
 - Three commenters suggested that the interest and energy of council members could be applied toward providing support for NIOSH, research projects, and partnerships. Stakeholders with successful projects could serve as advocates for NIOSH and NORA, assisting with obtaining funding and outreach to potential partners.