Evaluation of the role and impact of NIOSH extramural Centers in COVID-19 response: gaps and opportunities for future emergency preparedness and response

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### **Starting with the WHY?**



## Background: Initial Survey | Spring 2020

- Ad Hoc Committee created to identify how to collect information from all extramural Centers:
  - University of Illinois at Chicago Great Lakes Center for Occupational Heathy and Safety and Center for Healthy Work
  - University of Colorado Center for Health, Work & Environment
  - University of North Carolina Occupational Safety and Health Education and Research Center
- Survey sent to all NIOSH-funded Extramural Centers in early April 2020 and a follow-up sent in July 2020
  - Focus on sharing COVID-19 related tools, activities, webinars, research, and training that had been developed
  - Identifying opportunities for research collaborations
  - Disseminate resources that benefit all of us, and the stakeholders we serve
  - Share common goals and concerns related to conducting research and outreach during COVID-19

#### **NIOSH Extramural Centers' COVID-19 Response**



#### Worker Health is Public Health

The mission of The National Institute for Occupational Safety and Health (NIOSH) is to develop new knowledge in the field of occupational safety and health and to transfer that knowledge into practice.

NIOSH's Office of Extramural Programs aims to lead and support national occupational safety and health research and training programs reduce work-related injuries and illnesses through a diversified portfolio of high quality extramural research, education, and training in collaboration with global partners.

On this page, you will find resources to respond to COVID-19 from each of the NIOSH Extramural Centers. NIOSH funds six Centers of Excellence for *Total Worker Health*(R), eleven Centers for Agricultural Safety and Health, and eighteen Education Research Centers which serve as a research and education resource for employers and their employees, community organizations, and policymakers.

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**93%** 

93% of Centers have responded to requests for COVID-19 Content Expertise



74% of Centers have responded to requests for COVID-19 Resource Development 74%

74% of Centers have responded to requests for COVID-19 Policy Recommendations

## Background: Follow-up Evaluation | Fall 2020

- NIOSH COVID-19 IPA Program in Summer 2020
- Some interest in a more in-depth evaluation of the extramural centers
- Collaborators
  - NIOSH
    - IPA Program Project officer
    - Office of Policy, Planning, and Evaluation
    - Program Officers for ERCs, TWH Centers, Construction and Ag Centers.
  - Extramural Centers
    - University of Illinois at Chicago Great Lakes Center for Occupational Heathy and Safety and Center for Healthy Work
    - University of Colorado Center for Health, Work & Environment
    - University of North Carolina Occupational Safety and Health Education and Research Center
    - University of Washington Northwest Center for Occupational Health and Safety

### Goals

- Document COVID-19 related research and outreach collaborations and partnerships during the pandemic.
  - facilitators and barriers to response
  - success stories
- Identify best practices and needs for improving resources and preparedness of NIOSH extramural-funded centers in future response
  - role of NIOSH extramural-funded Centers in future preparedness and response activities
  - facilitators and barriers to collaborations

## Approach

- Protocol was deemed exempt by University of Colorado IRB
- Several cycles of input from all collaborators
- Survey 2.0 (built in Qualtrics)
- Interviews
  - Nine key informant interviews
  - Across all centers/ geographic areas
  - Input from annual reports and NIOSH

# Results | Survey (N=30)

• 26 complete responses



## Results | Survey

- Top industries served by Centers (n=27):
  - Healthcare (10)
  - Agriculture (7)
  - Construction (5)
  - Local Health Departments (4)
  - Academia (4)



## Results |Survey

In the past 12 months, what stakeholders have you received requests from for COVID-19- related response? (Check all that apply)



## Results |Survey

In the past 12 months, what type of COVID-19-related requests for assistance have you received? (Check all that apply)



## Results | Outreach

- Top COVID-19 related outreach activities:
  - Webinar (81%)
  - Technical assistance (67%)
  - Communications product (67%)
  - Training (59%)
  - Resource guide (55%)
  - Fact sheet (37%)
  - Online course (18%)
  - Toolkit (18%)

### Webinar topics:

- Prevention guidance (68%)
- Essential workers (55%)
- Return to work (50%)
- Mental health (45%)
- Cleaning and disinfecting (41%)
- Remote work (41%)
- Ergonomics (41%)
- Vulnerable populations (36%)
- Testing (32%)
- Contact tracing (14%)
- Workers' rights (14%)

we had built our outreach programs in a way that allowed us to pivot ...., without any sort of ethical or...., legal

challenges for us.

"<u>trying to piece these</u> guidelines .....out and see what works for employers, businesses and communities of workers ....what's common ...."

"sort of playing the role as the experts and facilitators.... <u>In bringing together</u> <u>critical groups to try to actually get</u> <u>something done on the ground</u>.....I mean, people in our extension service....in the college of Ag never had really talked to the people over in the school of medicine.....you know, it's two different worlds and, and we bridged that gap" " <u>surely increased visibility of our Center within our</u> <u>academic institutions, ...in the media</u>.... extremely helpful in terms of providing a different perspective for individuals who might not otherwise understand occupational health issues"

> "the initial guidance was okay.... information was rapidly evolving .....<u>our partners needed help with</u> <u>operationalizing this guidance"</u>

> > " we were the local expertise and targeted information and awareness based on what the situation is within the state, what the problems were, and to be perfectly honest ways to sidestep the political issues"

Gatekeepers of information flowing in from CDC, OSHA, Health Departments, Governor's Office

### **Results | Research Activities**

- 76 COVID-19 related studies
- Large range of study participants, including:
  - Bus operators
  - Correction officers
  - Small business
  - Agriculture workers
  - University staff
  - Healthcare workers
  - Uber drivers
  - Teachers
  - Firefighters
  - Remote workers

# Results | Facilitators and Barriers to

### response

#### Common facilitators:

- Expertise within the centers
- Flexibility to use travel funds and Directors' funds to support activities
- New funding from other partners- mini-grants from other sources- USDA, CARES Act, university based innovation grants.
- Increased reach and collaborations due to virtual formats
- Strong existing networks and collaborations with local partners

#### Common barriers:

- Short time- rapidly changing needs
- Survey fatigue
- Limited bandwidth
- Limited onsite access
- Lack of rapid response funding
- Communication
- Political environment
- Guidance lacking local context

## Results | New Partners & Collaborations

- Small businesses
- Institutions & academic centers
- Trade associations
- Veterans Administration
- Industry groups
- Labor groups
- Healthcare









### Results | Collaborations- What?

- Cross center collaborations
  - "good center collaborations and engagement from Ag centers"
  - CE programs working together to coordinate or share webinars and trainings
  - some individual investigators working across centers.
  - collaborations between Ag centers and ERCs, or ERCs and TWH centers that were part of the same institution
- Collaborations with NIOSH
  - Construction center working with NIOSH on developing guidance during the pandemic.
  - "the initial CDC guidance for meat production came out of the work that our industrial hygiene and occupational medicine teams did out here in Colorado starting the first week of April of 2020"

# Results | Collaborations- So what?

#### • Strengths

- Expertise across centers and regions of the US
- Existing Outreach and CE structure that can be leveraged for immediate/rapid response- we have a system that works!!!
- Existing structure of communication directors meeting, monthly Zoom meetings, outreach meeting, NIOSH intramural/extramural webinar series, "appreciate OEP efforts to create better channels of communication"
- IPA is a great mechanism to continue collaborations across centers and with NIOSH.
- "I do appreciate the idea that we are supposed to be a resource and that NIOSH has committed resources to allow us to be a resource to our partners "

#### Challenges

- Centers still very siloed- have to compete with each other for funding
- Center researchers and NIOSH researchers really stretched thin- we are all wearing multiple hats
- Our parent universities/institutions have very high fringe rates
- IPAs have limitations not accessible to everyone, and not sustainable
- Several partners had needs we could not address through research

# Results | Collaborations- Now what?

#### • Opportunities

- Can we create a centralized system that categorizes centers by strengths/ industries/ types of worker groups they serve – go where are the relationships vs centers working together by region
- How can surveillance data be used to better identify the needs that are shared across the centers to address the issues collectively ?
- Can we think of a a more flexible funding mechanism for emergency response?
- What evaluation metrics can help us capture collaborations with our partners, across centers etc?
- How can centers elevate the role of NIOSH?
- Can we create an emergency response work group across centers to work with NIOSH? Have something structurally in place... even if in the background. Including a command chain?

## THANK YOU!!!

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## Questions?

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