

A. COVER PAGE

Project Title: Western States Occupational Network Meeting (WestOn)	
Grant Number: 5U13OH011134-05	Project/Grant Period: 08/01/2016 - 07/31/2021
Reporting Period: 08/01/2020 - 07/31/2021	Requested Budget Period: 08/01/2020 - 07/31/2021
Report Term Frequency: Annual	Date Submitted: 11/30/2021
Program Director/Principal Investigator Information: ROBERT J HARRISON , MD MPH Phone Number: 510-620-5769 Email: robert.harrison@ucsf.edu	Recipient Organization: COUNCIL OF STATE & TERRITORIAL EPIDEM 2635 Century Parkway NE Suite 700 Atlanta, GA 30345 DUNS: 848136867 EIN: 1237410799A1 RECIPIENT ID:
Change of Contact PD/PI: NA	
Administrative Official: JACQUELINE MCCLAIN 2635 Century Parkway Suite 700 Atlanta, GA 30345 Phone number: 770-458-3811 Email: CSTEGrantAdmin@cste.org	Signing Official: JENNIFER LEMMINGS COUNCIL OF STATE & TERRITORIAL EPIDEM 2872 WOODCOCK BLVD, STE 303 ATLANTA, GA 30341 Phone number: 7704583811 Email: jlemmings@cste.org
Human Subjects: NA	Vertebrate Animals: NA
hESC: No	Inventions/Patents: Not Applicable

B. ACCOMPLISHMENTS

B.1 WHAT ARE THE MAJOR GOALS OF THE PROJECT?

Aim 1. Broaden and solidify western regional partnerships and collaborations among NIOSH-funded academic centers (ERCs, Agricultural Centers and TPGs), state health and labor departments, Tribal agencies, Federal and state OSHA and MSHA, labor and community based organizations;

Aim 2. Strengthen state-based occupational epidemiology capacity in the 19-state Western region, through presentations of active surveillance of work-related injuries and diseases, and investigation of cases and outbreaks;

Aim 3. Promote an applied epidemiology research agenda based on the NIOSH National Occupational Research Agenda (NORA) goals; and

Aim 4. Showcase methods to translate shared knowledge into practice for public health education and prevention.

B.1.a Have the major goals changed since the initial competing award or previous report?

No

B.2 WHAT WAS ACCOMPLISHED UNDER THESE GOALS?

File Uploaded : 1U13OH011134 Western States Occupational Network Meeting.pdf

B.3 COMPETITIVE REVISIONS/ADMINISTRATIVE SUPPLEMENTS

For this reporting period, is there one or more Revision/Supplement associated with this award for which reporting is required?

No

B.4 WHAT OPPORTUNITIES FOR TRAINING AND PROFESSIONAL DEVELOPMENT HAS THE PROJECT PROVIDED?

File Uploaded : WestON Training and Professional Development.pdf

B.5 HOW HAVE THE RESULTS BEEN DISSEMINATED TO COMMUNITIES OF INTEREST?

The WestON meeting presentations are posted online at the CSTE website (see <http://www.cste.org/group/weston>) for dissemination to meeting participants and more broadly to the CSTE membership and occupational health community and accessible to the public

B.6 WHAT DO YOU PLAN TO DO DURING THE NEXT REPORTING PERIOD TO ACCOMPLISH THE GOALS?

Not Applicable

**1U13OH011134 Western States Occupational Network Meeting (WestON)
Final RPPR
Accomplishments**

Throughout WestON meetings held in 2016-2020, CSTE and WestON continued to build and strengthen relationships with organizations representing workers, employers, and health professionals to help share prevention messages and expand the impact of WestON's occupational health work. The essential purpose of the WestON meetings was to bring together 60-80 participants from the 19 Western States from diverse occupational health disciplines and agencies, including NIOSH-funded ERCs, Agricultural Centers, Total Worker Health Centers, and Training Project Grants (TPG); NIOSH Divisions and Branches (Surveillance, Respiratory Disease, Safety Research); Federal, State and Tribal agencies; public health scientists; trainees (students, fellows and residents); and policymakers. The relatively small and informal setting of WestON meetings was highly conducive to the germination of ideas and collaborative activities. In addition, many participants attended the meeting annually, leading to deeper collaborations strengthened over time.

The target population and ultimate beneficiary of the WestON meetings were workers in the 19 Western states. By fostering collaboration and multidisciplinary projects, the WestON meetings resulted in further investigation aimed at hazard reduction and disease prevention. The emerging occupational safety and health challenges currently facing the Western workforce – with an incredible diversity of national origins, language, and education, along with disparities in earnings, employment arrangements, and union representation – are areas of concern for the nation as a whole. The WestON meetings impacted health and safety conditions in the Western States through identification of the health and safety issues associated with the contemporary economy, as well as highlighted the unique needs of underserved worker populations, and stimulated novel interventions to improve workplace conditions.

The WestON meetings invited speakers and presentations on topics that explicitly highlighted the need to reduce or eliminate occupational illness and injury by increased transfer and translation of knowledge, interventions, and technologies into highly effective prevention practices and products into the workplace. Indeed, the underlying principle of the annual WestON meeting was to foster collaborations with partners and stakeholders on the use, adoption, and adaptation of NIOSH knowledge, interventions, and technologies that will move research into practice in order to reduce and eliminate injuries, illness, and fatalities.

In-person meetings attended by 60-80 individuals have been held each September in Denver, CO for 12 years (2008 - 2019) supported by NIOSH under the R13 and U13 conference grant award mechanisms. In 2019, 73 public health professionals attended WestON, including representatives from 15 of the 19 western states, regional ERCs, Agricultural Centers, Training Project Grantees (TPG), National Jewish Health, Western and Midwestern universities, and NIOSH staff from several divisions; in addition, the meeting was livestreamed to 16 registrants. Evaluation results demonstrated that over 80% of the respondents found each of the 25 presentations to be "effective" or "very effective;" the keynote presentation by Center for Public Integrity Jim Morris on "Death in the Oilfields" was extremely well liked. Many attendees noted the presentation and the subsequent discussion on how epidemiologists should proceed with engaging journalists and the media were very informative. The inclusion of short, rapid presentations in the Quick Takes format were also well received, as was the interactive Brain

Buster session (“creating an elevator pitch”). Over the last 10 years, CSTE has continued to maintain a WestON listserv of over 130 members and provided links to meeting agendas, minutes, and presentations (<http://www.cste.org/WestON>).

Due to COVID-19 restrictions, the 2020 WestON meeting was held as a webinar on COVID-19 disparities and response in the workplace (205 registrants). The keynote speaker was Georges Benjamin, MD (Executive Director, APHA), who spoke on “Health equity and the COVID-19 pandemic,” followed by Celeste Monforton (George Washington University) and Aquilino Soriana (Filipino Workers Center), who discussed the local workplace impacts of this historic pandemic. Unfortunately, the 2021 WestON meeting was cancelled because of continued travel and in-person meeting restrictions.

The impacts from the WestON meetings are as follows:

- **Participation in the WestON meetings from States with minimal to no capacity in state-based occupational epidemiology.** Several States in the Western region have robust and well-developed occupational epidemiology programs (CA, OR, WA); other States have developing programs or some capacity (AK, CO, MT, NE, NM, TX, UT, WY); and several States have minimal to no capacity (AZ, HI, ID, KS, NV, ND, SD). The WestON meetings have had a representative from at least 15 states each year, including many from States where occupational epidemiology programs are minimal and where there are critical OHS issues that need to be addressed.
- **Calculation of the OHIs in States without CDC/NIOSH funding for occupational safety and health surveillance.** The OHIs are 25 standardized measures of work-related disease or injury, or workplace exposures, hazards, or interventions, which allow a state to compare its health or risk status with that of other states and evaluate trends over time (see <http://www.cste.org/group/OHIndicators>). Of the 19 Western States, only eight (CA, CO, MT, NE, NM, OR, TX, WA) receive NIOSH funding for state-based surveillance to collect and report these OHIs. As a result of training and collaboration during the WestON meetings, the OHI have been reported for two additional states (WY and ND).
- **Initiation of new OSH efforts in Western states.** As a result of issues discussed at WestON meetings, several states began new activities that may lead to the prevention or reduction of workplace hazards and/or injuries and diseases. These include a proposal to develop and test a large-scale natural language processing system for occupational health (AZ), use of syndromic surveillance data for community health suicide prevention (ND), in-depth analyses of injuries among fire fighters and military veterans (NV), ATV- related safety training and certification (MT), ergonomic interventions among dairy workers (TX, NM, CO), and policy analyses for climate change and worker impact (NIOSH WSD).
- **Model for regional meetings in the Southern and Midwestern states.** After reports from the WestON meetings were presented to the State occupational health workgroup at the CSTE annual meeting, several State-based epidemiologists and NIOSH scientific staff began planning a similar meeting to build capacity in the Southern States (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV). The first Southern States Occupational Network (SouthON) meeting was held in 2011 and was subsequently awarded a five-year conference grant (R13) to convene annual meetings from 2016 through 2020. In addition, states in the midwestern region of the US have begun organizing a Midwest Occupational Safety and Health (MidwestON) meeting modeled after WestON meetings.

**1U13OH011134 Western States Occupational Network Meeting (WestON)
Final RPPR
Training and Professional Development**

Over the years, the WestON meetings provided practical training sessions to improve hands on surveillance techniques for meeting participants. As a tool to build epidemiological capacity in states, the WestON meetings were an innovative approach that brings together more experienced states and states that are just beginning to consider developing an occupational epidemiology program. As signified above, new relationships and partnerships are formed as a result of participating in this meeting. Close collaboration with the NIOSH Western States Division has been an integral part of planning WestON meetings to ensure alignment with NIOSH priority areas and in helping to develop ties between NIOSH and state health departments. Participation from NIOSH-funded ERCs and Agricultural Centers provided an innovative opportunity for discussion about collaboration between academic and state-based occupational epidemiology programs, including the existence of funding opportunities. The WestON meetings from 2016-2020 highlighted numerous successful projects, models, and partnerships that can be used by many states in the western region.

C. PRODUCTS

C.1 PUBLICATIONS

Are there publications or manuscripts accepted for publication in a journal or other publication (e.g., book, one-time publication, monograph) during the reporting period resulting directly from this award?

No

C.2 WEBSITE(S) OR OTHER INTERNET SITE(S)

Category	Explanation
Other	The WestON page is hosted on the CSTE website as www.cste.org/WestON . The page hosts all the meeting agendas and presentations since the inception of WestON

C.3 TECHNOLOGIES OR TECHNIQUES

Not Applicable

C.4 INVENTIONS, PATENT APPLICATIONS, AND/OR LICENSES

Not Applicable

C.5 OTHER PRODUCTS AND RESOURCE SHARING

NOTHING TO REPORT

D. PARTICIPANTS

D.1 WHAT INDIVIDUALS HAVE WORKED ON THE PROJECT?

Commons ID	S/K	Name	Degree(s)	Role	Cal	Aca	Sum	Foreign Org	Country	SS
RHARRISON1	Y	Harrison, Robert J	MPH,MD	PD/PI	3.0	0.0	0.0			NA
	N	Xue, Song	MPH	Program Analyst	2.0	0.0	0.0			NA
	N	Sorrels, Nikka	MPH	Program Analyst	1.0	0.0	0.0			NA
	Y	Mulloy, Karen	DO, MPH	Co-Investigator	3.0	0.0	0.0			NA
	N	Gurkin, Jana	MPH	WestOn Outreach Coordinator	1.0	0.0	0.0			NA

Glossary of acronyms:

S/K - Senior/Key

DOB - Date of Birth

Cal - Person Months (Calendar)

Aca - Person Months (Academic)

Sum - Person Months (Summer)

Foreign Org - Foreign Organization Affiliation

SS - Supplement Support

RE - Reentry Supplement

DI - Diversity Supplement

OT - Other

NA - Not Applicable

D.2 PERSONNEL UPDATES

D.2.a Level of Effort

Not Applicable

D.2.b New Senior/Key Personnel

Not Applicable

D.2.c Changes in Other Support

Not Applicable

D.2.d New Other Significant Contributors

Not Applicable

D.2.e Multi-PI (MPI) Leadership Plan

Not Applicable

E. IMPACT

E.1 WHAT IS THE IMPACT ON THE DEVELOPMENT OF HUMAN RESOURCES?

NOTHING TO REPORT

E.2 WHAT IS THE IMPACT ON PHYSICAL, INSTITUTIONAL, OR INFORMATION RESOURCES THAT FORM INFRASTRUCTURE?

Not Applicable

E.3 WHAT IS THE IMPACT ON TECHNOLOGY TRANSFER?

Not Applicable

E.4 WHAT DOLLAR AMOUNT OF THE AWARD'S BUDGET IS BEING SPENT IN FOREIGN COUNTRY(IES)?

NOTHING TO REPORT

G. SPECIAL REPORTING REQUIREMENTS SPECIAL REPORTING REQUIREMENTS

G.1 SPECIAL NOTICE OF AWARD TERMS AND FUNDING OPPORTUNITIES ANNOUNCEMENT REPORTING REQUIREMENTS

NOTHING TO REPORT

G.2 RESPONSIBLE CONDUCT OF RESEARCH

NOTHING TO REPORT

G.3 MENTOR'S REPORT OR SPONSOR COMMENTS

Not Applicable

G.4 HUMAN SUBJECTS

G.4.a Does the project involve human subjects?

NA

G.4.b Inclusion Enrollment Data

NOTHING TO REPORT

G.4.c ClinicalTrials.gov

Does this project include one or more applicable clinical trials that must be registered in ClinicalTrials.gov under FDAAA?

G.5 HUMAN SUBJECTS EDUCATION REQUIREMENT

Are there personnel on this project who are newly involved in the design or conduct of human subjects research?

G.6 HUMAN EMBRYONIC STEM CELLS (HESCS)

Does this project involve human embryonic stem cells (only hESC lines listed as approved in the NIH Registry may be used in NIH funded research)?

No

G.7 VERTEBRATE ANIMALS

Does this project involve vertebrate animals?

G.8 PROJECT/PERFORMANCE SITES

Not Applicable

G.9 FOREIGN COMPONENT

No foreign component

G.10 ESTIMATED UNOBLIGATED BALANCE

G.10.a Is it anticipated that an estimated unobligated balance (including prior year carryover) will be greater than 25% of the current year's total approved budget?

G.11 PROGRAM INCOME

Is program income anticipated during the next budget period?

G.12 F&A COSTS

Is there a change in performance sites that will affect F&A costs?

I. OUTCOMES

I.1 What were the outcomes of the award?

Outputs from WestON meeting included detailed meeting agenda with speakers; list of meeting participants by agency/health department and attendance type (i.e., in-person vs. streaming); ability for participants to attend the meeting via live, online streaming; successful completion of WestON meeting, as well as archived meeting presentations and completion of WestON meeting evaluation summary.

Short-term outcomes included maintenance of representation by all Western state health departments as measured by participant demographics; general satisfaction with the meeting; usefulness of each session of the meeting; changes in knowledge/abilities pre- and post-meeting; representation and participation by all 19 Western state health departments; as well as engagement by regional ERCs, Agricultural Centers, Total Worker Health Centers, universities and worker organizations.

Intermediate (medium-term) outcomes included improved occupational injury surveillance in Western states; increased occupational injury prevention interventions; identification of Western occupational health priorities and issues; increased completion of occupational health indicators (OHIs) by Western states; and increased collaborative publications and presentations at national conferences.

The key long-term outcome of the WestON meetings was to increase the occupational epidemiology capacity in the 19 Western states. To assess change in occupational epidemiology capacity for future WestON meetings, we will utilize the responses of the 19 Western states to the national CSTE Epidemiology Capacity Assessment, conducted every 2-3 years, with a focus on the responses in the areas related to occupational health surveillance resources (personnel and funding).