

Final Progress Report

State-Based Occupational Health Surveillance Meeting (5R13OH009930)

Council of State and Territorial Epidemiologists

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Project Title: State-Based Occupational Health Surveillance Meeting

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List of Terms and Abbreviations

CSTE – Council of State and Territorial Epidemiologists

OH – Occupational Health

SBS – State-based Surveillance

EHR – Electronic Health Record

NIOSH – National Institute for Occupational Safety and Health

CDC – Centers for Disease Control and Prevention

PI – Principal Investigator

SAMHSA – Substance Abuse and Mental Health Services Administration

OSHA – Occupational Safety and Health Administration

Abstract

Epidemiologists working in public health agencies have primary responsibility for surveillance and devising prevention programs that enable the entire community to be healthy. Surveillance provides the foundation for developing public health responses to occupational-related disease or injury threats. Each year, the Council of State and Territorial Epidemiologists (CSTE) hosts a conference for its members and partners working in state, local, tribal, territorial and federal health agencies. The conference serves as the largest meeting of applied epidemiologists in the country, hosting 1,000 epidemiologists and promotes collaboration and sharing of public health epidemiology findings. In conjunction with this conference, CSTE hosts an annual meeting of state-based occupational health epidemiologists and other professionals (Occupational Health Surveillance Meeting). This meeting provides a forum for information sharing and networking of professionals working in occupational health surveillance and epidemiology. This project provides support to state, local, and territorial practitioners to attend the CSTE Annual Conference and state-based occupational health surveillance (SBS) meeting.

The SBS meeting, held in conjunction with the annual CSTE conference, aims to: 1) Provide a resource dense forum and educational experience for occupational health epidemiologists to present and discuss findings and recommendations on occupational health topics during pre-conference workshops, plenary discussion, breakout and poster sessions, and roundtable discussions; 2) Provide an environment for networking with peers working in state, local, and federal health agencies to promote information sharing within the occupational health community and collaboration between occupational health and other public health disciplines; and 3) Support policy discussions, including, nationally notifiable diseases and conditions, electronic health records, electronic disease reporting, surveillance systems initiatives and CSTE Position Statements.

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Section 1

Significant Outputs and/or Activities

The CSTE Annual Conference remains a superior meeting ground for Occupational Health (OH) epidemiologists because epidemiologists from all public health arenas are included. This annual scientific conference is the major forum for discussing policy issues, opportunities, challenges, and advances in practice epidemiology in States, thereby facilitating State-based public health surveillance. While there are other regional and subject specific meetings, there is currently no other national meeting for state-based epidemiologists working in the field of occupational surveillance. This conference grant awarded funding for a total of 40 public health professionals to participate in stimulating discussion or networking sessions and to attend national meetings of occupational public health importance while joining with their colleagues focused on surveillance, prevention, and intervention.

An average of 589 total abstracts were submitted by public health professionals from various backgrounds in public health for presentation at the 2011-2013 CSTE annual conferences. There were 27 abstracts submitted for poster presentations, 111 abstracts for breakout sessions, 2 software demonstrations, and 9 abstracts for roundtable discussions considered by the OH planning committee for incorporation in the OH track during this project period.

During this award period, CSTE membership and members of the CSTE occupational health surveillance subcommittee approved two OH position statements: 1) The Centers for Disease Control and Prevention (CDC) and Cleaning Products Health Messages (2011); and 2) Inclusion of Occupation and Industry as core data elements in Electronic Health Record (EHR) Systems and in Recommended Elements in other Minimum Data Sets (2012). Both position statements were accepted as policy positions that the organization as a whole was interested in engaging partner organizations for collaboration (see www.cste.org for organization responses)

Over 200 CSTE annual conference participants took part in the OH-focused Sunday pre-conference workshop offerings between 2011-2013. Workshops provided training on the following topics: connecting public health surveillance and electronic health records, denominator data, as well as the role of public health surveillance during an environmental disaster. Workshops also offered opportunities for discussion on topics such as: partnership experiences that increase program impact, worker and community exposures, injuries and illnesses in the oil & gas drilling industry, winnable battles, and chemical hazard interventions.

Members of the CSTE OH Surveillance Subcommittee convened a meeting at the 2011-2013 conferences. CSTE staff and Subcommittee co-chairs summarized activities completed throughout the year and highlighted opportunities for further engagement. New OH indicator proposals are discussed or voted on and action plans proposed. Additionally, members sign up for the opportunity to submit articles to the NIOSH e-newsletter, cultivate ideas for subsequent in-person meetings, and collaborate on written guidance proposals or publications that subcommittee members have been engaged in.

Public Health Translation/Relevance

The significant findings of this project express the importance of collaboration to enhance OH surveillance capacity in states and to support knowledge-building. Information provided during the OH track at the annual conference includes information to promote increased awareness in emerging surveillance issues, encouraged sharing of lessons learned and successes across states and programs, and provides an opportunity to highlight epidemiological and statistical findings. Attendees of this meeting receive recommendations from their colleagues on items of technical importance and gain ideas that will assist in improving state, local, tribal and territorial OH infrastructure along with the general public health workforce.

The information shared during the conference often initiates new endeavors and accelerates progress towards new surveillance collaborations. Action items created during conference sessions, including roundtables are recorded by CSTE staff and members and followed up with throughout the year. CSTE published presentations from speakers of previous conferences on the CSTE website: <http://www.cste2.org/confpresentations/default2.aspx>.

Intermediate Outcomes/Impact

The CSTE Annual Conference provides a unique forum for information sharing and networking of professionals working in OH surveillance and epidemiology. The CSTE Annual Conference remains a superior meeting ground for OH epidemiologists, as the multidisciplinary nature of public health warrants the face to face collaboration of epidemiologists across fields. Potential outcomes of convening and attending this OH meeting include replication of studies/interventions in multiple jurisdictions, the creation of new networks for outreach and/or technical assistance, and the opportunity to identify findings and recommendations from colleagues that assist in reducing occupational risk in a participants' jurisdiction. Intermediate outcomes of this activity included new policy positions as well as the consideration of CSTE recommendations to influence practices, legislation, or public health communication messages by our partner agencies.

The effectiveness and the organization of the OH pre-conference session are evaluated using a paper based evaluation form. Evaluation forms are included in the conference packets given to each attendee at the time of registration. The evaluation form is designed utilizing a retrospective pre-post design where participants are asked to provide feedback on their knowledge/abilities on the key objectives prior to the training and then after the training as well. The evaluation form asks individuals to provide feedback on: 1) The quality of the training, 2) Whether participant knowledge/ability on the key objectives was impacted by the training, and 3) How participants plan to use the information when they return to their workplace.

By asking about the quality of the training and the impact on skills/abilities as well as plans for utilization, the evaluation form is designed to provide process and outcome data on the impact of this training. The information received from each evaluation form is compiled and thoroughly read searching for commonalities of comments and suggestions, which are documented and considered for future conferences. Quantitative and qualitative analysis is used to examine all of the data collected from participants. This report is forwarded to the CSTE OH planning committee to provide guidance and feedback about how to improve trainings each year.

Beginning in 2011, Sponsored travelers were required to complete an evaluation form for the conference.

Overall rating of 2011 OH Oral Presentation Sessions

	Excellent (n)(%)	Good (n)(%)	Fair (n)(%)	Poor (n)(%)	Total (N)
OH I	30 (47%)	30 (47%)	4 (6%)	-	64
OH I II	26 (57%)	18 (39%)	2 (4%)	-	46

Rating of 2011 Sunday Pre-conference Workshop

	Excellent (n)(%)	Good (n)(%)	Fair (n)(%)	Poor (n)(%)	Total (N)
National Meeting of Occupational Health Epidemiologists	18 (58%)	11 (35%)	2 (6%)	-	31

In 2012, the majority of meeting participants who attended OH sessions during the conference rated the informational breakout sessions and pre-conference workshop as excellent. The overall rating of OH breakout sessions is represented in Appendix I.

Rating of 2012 Sunday Pre-conference Workshop

	Very (n)(%)	Somewhat (n)(%)	Neutral (n)(%)	Not particularly (n)(%)	Not at all (n)(%)	Total (N)
How useful were the presentations to you in your public health practice?	20 (45%)	21 (48%)	3 (7%)	-	-	44
Did you find the session topics interesting and therefore engaging?	17 (40%)	24 (56%)	2 (5%)	-	-	43

In 2013, most of the participants indicated an increased in confidence in each of the key workshop objectives based on the workshop. Respondents indicated that three of the workshop sections were effective or very effective. Based on the feedback in the 2013 evaluation, the many participants left with action plans that they intended to implement when returning to state offices including more effective ways to gather and process data and increased collaboration with other programs in the health department.

2013 Pre-Conference SBS meeting - Effectiveness of each workshop section

	Very effective (n)(%)	Effective (n)(%)	Neutral (n)(%)	Not effective (n)(%)	Not at all effective (n)(%)
California Occupational Infectious Disease Issues (N=44)	20 (45%)	18 (41%)	6 (14%)	-	-
Chemical Hazard Interventions (N=43)	10 (23%)	23 (53%)	8 (19%)	2 (5%)	-
Work-related Injuries (N=44)	15 (34%)	24 (55%)	4 (9%)	1 (2%)	-
Low-wage workers (N=27)	4 (15%)	8 (30%)	10 (37%)	3 (11%)	2 (7%)

Section 2

Background/Significance

This annual scientific conference is the major forum for discussing opportunities, challenges, and advances in practice epidemiology (including OH) in States, thereby facilitating improvements and innovation in state-based public health surveillance. The opportunity to network with peers within this applied epidemiology community is unprecedented. While there are other regional and subject specific meetings, there is currently no other national meeting for state-based epidemiologists working in the field of OH surveillance.

The conference grant awarded funding for 40 public health professionals to participate in national meetings of occupational public health importance while joining with their colleagues focused on other public health issues. Utilizing the funding available, an average of 13 state personnel were awarded sponsorship each year (2011 – 2013) to attend the state-based OH surveillance meeting and on average, 3 of these travelers were from jurisdictions without specific funding or capacity to conduct OH surveillance and prevention activities. Sponsored travelers represented approximately 20 states, including 9 non-funded states (Alaska, Maine, Missouri, Nevada, North Dakota, Ohio, Oklahoma, Vermont, and Wyoming). Funding was determined by a peer review committee including the Chair of the CSTE Environmental, Occupational and Injury Steering Committee; two co-leads of the CSTE Occupational Health Subcommittee; CSTE national office staff for the Subcommittee; and one CSTE member chosen by the Subcommittee. The following criteria determined prioritization of potential sponsored travelers by the peer review committee: Principal Investigator (PI) prioritization (PIs of funded state-based OH surveillance programs); participation in an annual conference session; and demonstrated commitment to working on CSTE Occupational Health Surveillance Subcommittee activities. Approximately 25% of funds each year were allocated to support travel of participants from non-funded states specifically. Partners from the National Institute for Occupational Safety and Health (NIOSH) provided input to CSTE on the final selection of travelers.

Aim 1. Provide a resource dense forum and educational experience –

An average of 589 total abstracts were submitted by public health professionals from various backgrounds in public health for presentation for the 2011-2013 CSTE annual conferences. On average, 52 abstracts were submitted specifically for presentation during the OH track. The OH track features 16 breakout session presentations, 9 roundtable sessions, and numerous opportunities for poster presentation annually. During the three year project period, there was a total of 111 abstracts submitted to the OH track for breakout sessions, 27 abstracts for poster presentation, 2 software demonstrations, and 9 abstracts for roundtable discussions.

The 2013 Sunday OH pre-conference workshop featured presentations on recent OH and safety issues and investigations in California, including pilot occupational *Coccidioidomycosis* surveillance, OH issues stemming from the Hantavirus outbreak in Yosemite National Park, and new green chemistry regulations. The afternoon included an open forum discussion on the future of NIOSH state-based OH surveillance. The workshop was attended by 70 state and local public

health professionals, representatives from CDC, NIOSH, the U.S. Bureau of Labor Statistics, and other private organizations.

Aim 2. Provide an environment for networking with peers –

The state-based OH Surveillance Meeting supported by this project provides a forum for information sharing and networking of public health professionals working in OH surveillance and epidemiology and contributes to the development of the OH workforce of the future. This conference also provides an important and unique opportunity for OH epidemiologists to network across disciplines such as environmental health, injury, and emergency preparedness and to promote the integration of OH into mainstream public health practice. Thus, the expected outcome of this overall project is a better prepared, trained, and directed public health epidemiology workforce to address the most pressing morbidity and mortality issues facing OH practitioners.

Aim 3. Support policy discussions –

During this three year conference grant, the Subcommittee and CSTE membership approved two OH position statements, on CDC and Cleaning Products Health Messages (2011) and Inclusion of Occupation and Industry as core data elements in EHR Systems and in Recommended Elements in other Minimum Data Sets (2012). Responses to these policy statements have since been received from CDC and NIOSH and are available at www.cste.org.

Activities and Outcomes of the 2013 Annual Conference

The 2013 CSTE Annual Conference convened June 9-13, in Pasadena, California. The agenda included a pre-conference workshop on Sunday, followed by individual oral presentations on Monday through Wednesday. The Workshop highlighted recent occupational infectious disease investigations in California, chemical hazard interventions, and spotlighted state surveillance practices and data sources for occupational injuries.

There were 16, 90-minute breakout sessions on Monday through Wednesday that addressed OH specific topics such as: underreporting of OH data; disparities in OH; exposure hazard surveillance; examining occupational injuries and illnesses using state or national surveys; and collaboration between OH and other public health programs. The agenda also included 15 posters and 3 roundtable presentations on OH surveillance activities in states. A unique feature of the annual conference is the incorporation of designated presentation sessions for several NIOSH state-based programs. NIOSH-sponsored pesticides, occupational lung disease and ABLES breakout sessions were made available to any conference attendee in addition to other planned OH breakout sessions.

Planning for the 2013 meeting began shortly after the June 2012 annual conference in September. The planning committee consisted of epidemiologists from state and federal health agencies. After identifying OH Surveillance topics of interest, the planning committee collected abstracts from CSTE members and partners between November and January 2013. Through monthly conference calls and one in-person meeting, the annual conference planning committee reviewed and selected abstracts to be included in the agenda. The agenda was finalized in March 2013.

The final year of the conference grant awarded funding to 13 public health professionals for full or partial travel scholarships. Sponsored travelers were required to complete a conference evaluation form to describe their experience and utilization of conference offerings. Results from this evaluation are mentioned below.

Evaluation

CSTE has a comprehensive evaluation plan for all conferences including process and outcome evaluation components. The evaluation examines the effectiveness and overall organization of the conference through the use of planning document review and online evaluation assessment. CSTE collects evaluation responses from conference attendees via Survey Monkey after the close of the annual conference. The evaluation form evaluates the following areas:

- Plenary topics
- Concurrent breakout sessions
- Roundtable sessions
- Poster sessions
- Networking opportunities
- Accommodations at the hotel
- Meeting facilities
- Overall satisfaction

Rating of 2013 CSTE Annual Conference

	Excellent (n)(%)	Good (n)(%)	Fair (n)(%)	Poor (n)(%)	Total (N)
Overall Conference Experience	171 (68)	72 (29)	8 (3)	-	251

Separate evaluation forms are utilized for each of the pre-conference Sunday sessions to provide more detailed information on the evaluations for those sessions. The information received from each evaluation form is compiled and thoroughly read, searching for common themes which are documented and considered for future conferences. The purpose of the evaluation is to identify improvements for future conferences and to assess the self-reported change in knowledge or skills on each of the key objectives for the workshop. Please see the following example of feedback received from the 2013 Annual Conference in Pasadena, CA.

Rating of 2013 Sunday Pre-conference Workshop

	Strongly Agree (n)(%)	Agree (n)(%)	Neutral (n)(%)	Disagree (n)(%)	Strongly Disagree (n)(%)
The workshop was well organized (N=47)	28 (60%)	17 (36%)	2 (4%)	-	-
The objectives of the workshop were clearly communicated (N=47)	17 (36%)	16 (34%)	12 (26%)	1 (2%)	1 (2%)
The workshop achieved its objectives (N=46)	14 (30%)	22 (48%)	10 (22%)	-	-

The workshop content was useful to my work (N=47)	20 (43%)	23 (49%)	3 (6%)	1 (2%)	-
The speakers/presenters were knowledgeable in the topic areas (N=47)	39 (83%)	8 (17%)	-	-	-
The presentations and discussion in the workshop were relevant to my public health practice (N=47)	21 (45%)	23 (49%)	3 (6%)	-	-

Publications

There are no publications that resulted from the grant.

Inclusion of gender and minority study subjects

Not Applicable

Inclusion of Children

Not Applicable

Materials available for other investigators

There were no materials created by the project.