

Western States Occupational Network (WESTON)
September 25-26, 2008
Denver, CO

On September 25-26, 2008, the first meeting of the Western States Occupational Network (WESTON) was convened in Denver, CO. The purpose of this meeting was to bring together state occupational health representatives to foster interaction and development of state-based occupational health and safety surveillance/capacity. The meeting provided a venue for OS&H colleagues in the west to meet, establish more effective relationships, discuss OS&H issues in their respective states, and develop collaborative projects.

A total of 45 participants attended, with all 19 Western States represented except South Dakota and Texas. Also in attendance were colleagues from the Western States NIOSH-funded ERCs (four of five), four agricultural centers, and numerous scientists from the NIOSH Surveillance Branch, Alaska Pacific Regional Office, DSHEFS, DSR, OEP, DRDS, Spokane Research Laboratory, and HETAB. The meeting attendees were welcomed by Dr. Christine Branche, the Acting Director of NIOSH.

Significance of health and safety problems in the West: summary facts

The western states have a number of unique workplace health and safety concerns which were highlighted by Max Kiefer at the beginning of the meeting.

Demographics

- 103,000,000 people live in western states
- 9 of 10 fastest growing states are in the west
- Employment in the West has outpaced national average, leading to more injuries/illness. This high injury and illness rate has a large economic impact
- Hispanic immigrant population is large and growing, many work in agriculture, construction

Work-related fatalities

- Work-related fatality rates in the Western states are above the national average; Alaska has much higher fatality rate than rest of nation
- Western states highly represented in high fatality industries.

Mining/oil and gas industries

- Large onshore oil and gas resources have resulted in a rapidly expanding industry. Fatality rate for oil and gas extraction workers is 30.5/100,000 workers (national rate is 4/100,000), mostly caused by motor vehicles and being struck by equipment.
- WY produces 4X more coal than any other state

- In CA and WA wind energy is being used and developed
- WY, NM, and CO have large uranium deposits, uranium price has quadrupled since 1980; 26 new nuclear power plant applications in U.S.

Emerging technologies in the west – semiconductors, nanotech, biotech, defense

Unique western hazards –climate, altitude, remote locations, wild-land fires

- Climate change may lead to more heat stress/illness in the western states

Occupational Epidemiology in the West

California Department of Public Health - Jennifer Flattery

Jennifer presented data on hospital discharge data, emergency department data, workers' comp data, BLS data, and [Behavioral Risk Factor Surveillance System](#) to focus interventions on high rate industries and occupations.

- BRFSS questions are useful to be added for areas of interest.
- More than the occupational health indicators possible with these data sources.
- Minimal resources required to analyze indicators.
- with identifiers can evaluate capture from each source. Even without identifiers, can make strong case for extent and nature of occupational injuries and illness in the state.

WA State Department of Labor and Industries - Dave Bonauto

Dave uses data to drive the prioritization of research and prevention activities by calculating a “prevention index”. The prevention index = (industry rate rank + industry count)/2

- Workers' comp resources for states:
- [US Chamber of Commerce workers' comp laws](#)
- [National Council of Compensation Insurance \(NCCI\)](#)
- [Oregon workers' compensation rate study](#)

Potential occupational health impacts

There are multiple examples of where surveillance findings can be applied in practice to prevent work-related injuries and illnesses

Research to practice (RtP)

The NIOSH concept of RtP can be utilized by many States:

- Fatality investigations have produced FACE Fact Sheet educational material aimed at reducing work related fatalities
- It is possible to place occupational health message into general health outreach materials.
- In 2001 the occupational health indicator criteria were developed which recommended a number of conditions be tracked. Now states can compare rates/problems with other states and use the indicators to show occupational health problems to state legislators, NIOSH, industry, professional associations, and other funding sources.

Examples of Ongoing Interventions

There are many examples of successful State-based interventions, including:

- Safe patient handling legislation.
- Auto repair health and safety project.
- Fall hazard prevention checklist in construction.
- Occupational health disparities.
- Workplace violence prevention.
- Heat-related illness.

Possibilities for building a successful state program

States can build occupational epidemiology programs with a variety of strategies:

- “Quick occupational health wins” can draw positive attention to your program, and help to build a program. A needs assessment and a steering committee can help find a quick win.
- Use existing state and federal resources to build programs.
- Work related fatality prevention has broad support from business, labor, and others.
- States can use [FACE](#) narratives and educational materials that have already been developed.
- Use a strategic opening to develop state interest in occupational health and safety. A problem in a bordering state may be a problem in your state as well.

Problems/obstacles

Several problems and obstacles to developing and sustaining a State-based occupational epidemiology program were identified.

- Working with an immigrant workforce presents special challenges
- There are limited resources and flat funding from NIOSH.
- Surveillance programs are fragmented but need to be integrated.
- Sometimes difficult to find state data to complete indicators, and the indicators are not currently collected by all western states.

- It is difficult to find and count people who are “off the grid”. WA looked at industry and occupation vs. underreporting of injury/illness; agriculture was the most under-reported.
- Duplication of work between agencies can have negative effects. During budget cuts duplication is one of the first things looked at.
- The ERCs and Ag Centers agree that bureaucracy and the academic calendar make getting projects funded and completed difficult
- Are the indicators useful, is it worth the trouble? Will they be used? Are they too difficult to prepare? Several states feel that making the connections required to get the numerators is important. NM reports that the indicators were great for jump starting their program. The indicators were intended to be a car battery that would start the car, get the motor running. Tish Davis (Massachusetts) has worked on an evaluation of the indicators which should be available. Some felt that the indicators will be more useful as they mature, which will enable us to compare rates over time within states.

Opportunities for collaboration

Multiple opportunities for collaboration were identified.

Collaboration with NIOSH funding

- A fundamental program requires states to collect the Occupational Health Indicators (OHI).
- Expanded projects have to collect OHI, and a priority condition, population, or exposure. Current enhanced projects include FACE, asthma, silicosis, teens, and pesticides
- 15 states funded to 2010, and 10 states have an expanded program.
- The new announcement is coming out in spring 09, and the announcement will be on <http://grants.gov> and sent through the COSS listserv.
- NIOSH is very interested in new states, they are in the brainstorming stage and are hesitant to say how many states are targeted
- Only state health departments are eligible
- New states will not be competing against states doing the work for many years
- NIOSH is still working on budget, last time 100K for fundamental, 400K for expanded, budgets for next announcement have not yet been determined.
- “[CRISP](#)” describes all NIOSH projects, this is helpful for states to see what has been done in the past.
- The NIOSH [OEP page](#) will have funding announcements in the funding opportunities section
- The minimum guidelines will help states develop their programs and application.
- NIOSH [web topic pages](#) and [Worker health chart book](#) are good guides for program development
- The pesticide “[how to](#)” is a good example of how to develop a program.
- NIOSH [surveillance data coordination portfolio](#), has all surveillance information on one page

- [BLS](#) site may help states determine areas of interest by looking at rates

NIOSH Health Hazard Evaluation (HHE) program

- HHE's are worksite investigation in response to a request from employees, employers, or unions to determine if harmful exposures or dangerous practices are present. NIOSH is not a regulatory agency; HHE investigations are problem identification and resolution, not regulatory.
- HHE free to state!
- NIOSH will also provide technical assistance to governmental agencies and state health departments.
- NIOSH does about 7 HHEs per year in the western states. They recommend substitutions, engineering controls, administrative changes, and PPE.
- The end result is report of what NIOSH did, what NIOSH found, what management can do, and what employees can do to fix the problem.
- The HHE group is the "face" of NIOSH, and they work with all types of hazards. They have access to workers and worksites. They perform follow-up to make sure recommendations are implemented. An HHE can highlight a specific problem in a state and bring the issue to the forefront. There is a database of completed HHEs on the NIOSH website.

Examples of state collaborations

Washington Department of Labor and Industry has works closely with the Department of Health. Their Pesticide project is contracted to the DOH, they share data and ideas. They collaborate closely with UW clinic, have MOUs for data sharing, and use their clinical resources for follow up investigations. WA has great educational materials that they are willing to share. States can use any educational materials, put their own brand on it and use it for R2P. NIOSH would like to develop a clearing house for materials, so that all the states could share educational products and make products available to general public.

New Mexico collaborated with TX to start a pesticide surveillance program, TX acted as a mentor. The NM pesticide group contacted the NM poison control center and arranged an agreement to share data. They held multi agency meetings to decide what needed to be done concerning pesticide poisoning, and applied for several grants including an ERC grant. They now have a CSTE fellow and a small amount of money. They collaborated with NC and used NC's survey instrument to interview fieldworkers. They are collaborating with groups who provide WPS training such as clinics, State Department of Agriculture, non-profits, workforce training centers. They have established a relationship with health clinics and collaborate with regulatory agencies, workers comp, and farmers to get the message out.

Oregon collaborates with workers comp insurers to get injury and illness data. Liberty Northwest is an industry innovator interested in a low risk/high gain collaborative relationship. The relationship is considered "high gain" because the health department

analyzes the data from an epidemiologic perspective for free. NIOSH wrote a letter to Liberty Northwest inviting them into the relationship, which seemed to work well. They focused on discretion and trust in developing their relationship. Both parties feel the relationship is a peer to peer relationship. Liberty one of the largest private insurance companies nationwide, it may be possible for other states to build off the relationship that Oregon has developed. Liberty Northwest has WA and Idaho data so a regional analysis might be a good first step in getting other states involved. There may be subsidiaries of Liberty that are also interested in collaboration. They have developed a collaborative relationship with the Oregon burn center, the restaurant association (Liberty Northwest's largest client), Evergreen Logging Company, plumbers and pipe fitters unions. They also have an academic collaboration with OSHU's Center for Occupational and Environmental Toxicology, schools of public health and preventive medicine, and the poison center. They have connections to Portland State University Urban Studies and School of Community Health, the Oregon State University School of Public Health, and the University of Oregon labor education resources center

Collaboration with the ERCs

Northwest ERC is currently preparing a summary of 19 indicators in collaboration with Denver ERC.

Colorado ERC held a symposium on uranium mining to collaborate with uranium workers. They are also looking to work with states in the region in a systematic manner.

Texas ERC works actively with the State Health Department. They are funded through the Ag Center so they work closely with the Ag Center. They see the possibility for more collaboration. One student is looking at occupational aspects of the indicators. The ERC also collaborates with the cancer registry and birth defects registry folks. They would like to collaborate further with the State Health Department who perform asbestos, pesticide, and adult lead research.

Utah ERC has built collaborative relationships through past students who are now in the workforce. They work with an advisory committee which includes workers' comp and the legislature. They have worked with fire and police unions to pass state legislation and received funding to study cancer in fire and police workers. They are working with cancer research centers to get data.

Collaboration with the Ag Centers

The California Ag Center has an advisory committee that includes the Department of Public Health and the Department of Agriculture. They do get funding from the state, and work with the State Department of Public Health. They use student placements to foster collaborations with state agencies. They collaborate with the Health Department on heat illness, and have contacts with the Cal-OSHA regulatory group

The Colorado Ag Center has collaborated with workers' comp in several states, but is working closely in CO with Pinnacle. They work with the cooperative extension who have lost funding for occupational safety and health but have great connections. They have small grants aimed at jump starting problem based projects.

The University of Washington Ag Center. Collaboration comes through outreach. Work with PERT (pesticide group) and provide technical assistance. Assisted with their website. They provide IH assistance to look at route cause of exposure. They are working with pesticide cases to teach doctors and nurses about pesticide poisoning. They developed educational materials on poison oak. They used workers' comp data to look at orchard injuries. They are on the advisory committee for the state cholinesterase monitoring project. They use fatality data from the FACE program to come up with research priorities. They are looking at heat related illness data with the Department of Labor and Industry. Have some funds for pilot projects that are research related. They have the ability to work around data sharing issues. They would like to use an expert research group to do environmental medical investigations based on surveillance data.

The Texas Ag center -- Collaborates with the Texas ERC and occupational and environmental health experts to look for research areas. They are working on a statewide survey to show that an "agribility program" is needed in the state. Used the national ag statistics center data to discover which commodities are dangerous. Looking at forestry contract workers who are under the radar. Working to develop trust with the migrant and immigrant population. They also support research projects, feel strongly about r2p. Would like to explore relationships with Departments of Health, Industry, and workers' comp.

Summary of ag centers and ERC issues

Seven areas of collaboration were identified between State Health Departments and the ERCs and Ag Centers

1. Students and training
2. Pilot grants for research
3. Capability for outbreak response using the HHE and state epidemiologists
4. Help with indicators, "putting the battery in the car"
5. Outreach and education, using cases for teaching, and evaluating materials
6. Setting a research agenda and developing advisory committees.
7. Evaluation and impact, using surveillance data available

Specific action items/next steps/recommendations

- Attendees should sign up for [Enews](#) from NIOSH
- ERCs should help states to develop proposals. If a large number of states submit proposals it will show demand/need and funding could follow.
- We need to utilize new technologies for dissemination (web, gis).

- We need to build a national occupational epidemiology network that will allow us to tie data to prevention and practice.
- Create a western states listserv so that we can learn about HHEs in our area that might concern similar problems.
- Attendees should sign up for epiX
- NIOSH used to have 15 offices around the country; the concept of the CDC assigning scientists to support states/regions with epidemiological problems needs to be reinstated.
- Get MA's evaluation of occupational indicators out to the group.
- Think about how the ERCs and Ag Centers can help with surveillance funding
- NIOSH surveillance data should be utilized by the ERCs and Ag Centers.

Meeting Evaluation

- Small groups/breakout sessions would be good in future meetings. We should cluster regions to make better connections.
- It is exciting to have a large group of occupational health professionals from many different funding sources. Many things are specific to the west, so this group is important.
- Thanks to NOISH/CSTE for paying for travel for unfunded states.
- The west has a specific work practices (ag, forestry, mining) and workforce so the WESTON group is important. Mexico should be invited next time.
- Very successful meeting with important emphasis, hopeful that this meeting will happen again.