Council of State and Territorial Epidemiologists
Occupational Health Surveillance Working Group Meeting

Counting Work-related Injuries and Illnesses: Taking Steps to Close the Gap

April 21-22, 2009
Sheraton Crystal City Hotel, Arlington, VA

Meeting Summary

Introduction
Concrete steps to move forward. Undercount of nonfatal occupational injury and illness surveillance. Recommendations from this meeting should focus on health outcome versus hazard surveillance, non-fatal injury and illnesses, and solutions versus problems. Goal is to drive a coordinated, comprehensive agenda.

Surveillance Exercise
Surveillance is the ongoing systematic collection, analysis, and interpretation of health data essential to the planning, implementation, and evaluation of public health practices, closely integrated with the timely dissemination of these data to those who need to know (CDC, 1988). Other goals of surveillance not identified in the handout:
- Goal 1-Identify real time emergency events for immediate action
- Goal 2-Improve worker health and wellbeing
- Goal 3-Raise social awareness
- Goal 4-Partner with intended users of the data
- Goal 5-Identify individual workers and workers across worksites and estimate costs

Panel- Improving OSHA and BLS data collection
Schmidt: Overview of current events in OSHA Injury and Illness Recordkeeping as of April 2009. There is an ongoing Government Accountability Office (GAO) study to determine:
- Assess OSHA’s efforts to ensure that employers are properly recording injuries and illnesses
- Determine what current studies and research say about the accuracy of employers’ injury and illness rate data
- Determine the role that occupational physicians play in reporting these data
A draft Recordkeeping National Emphasis Program (NEP) is being circulated throughout OSHA for concurrence. The NEP will focus on establishments with low rates of injury and illness reporting in high rate industries, including construction establishments. The NEP will review two years of records.

Seminario: Maintaining the system is important but we need to enhance the foundation. Current issues: There needs to be a clear definition of what needs to be reported and what is work-related, particularly MSDs. Recommendations: would like to see recordkeeping rule re-evaluated; Address the need for clear definition of MSDs; More devoted attention to employer training; Stricter enforcement of recordkeeping (failure to report conditions, especially MSDs); OSHA has to not only compare records but identify what is going on with injury and safety prevention programs (safety bingo); Employer, worker, union training on recordkeeping; OHA data needs to be accessible to all users.

1 The activities of the CSTE Occupational Health Surveillance Work Group are funded in part through a NIOSH Cooperative Agreement with CSTE.
Steve Newell: OSHA and BLS have performed well despite lack of federal re-investment. The core concepts are sound. Recommendations: Employer data makes sense—training is important; the OSHA site-specific targeting (SST) system makes sense although it’s not everything, but it’s a start—a different strategy is needed for health and construction; OSHA data is the sole metric to advise recordkeeping, therefore safety managers care more about their rate than actual safety and health; OSHA must address the core issues with underreporting and need a sustainable fix; BLS needs to look at non-occupational medical files, not OSHA logs.

How to improve system: 1) Clarify grey areas (things aren’t intuitive); 2) Develop an expert system, which takes decision-making and pressure away from recordkeeping; 3) Have some expectation of enforcement; 4) Improve usefulness of data for different end users (for performance management and OSHA should include an employer use column); 5) Don’t just think about surveillance based on the current framework, be thoughtful about what we want; 6) It might be time for another NAS study.

Q&A- Stop calling it SOII; separate study for MSDs and long term illnesses; ask for money to get the data out to the public and not just for collection of data; state level SOII is limited because of small sample size and this surveillance doesn’t do a good job of capturing vulnerable populations; We need established identifiers to be able to link data.

Breakout Group Discussion and Recommendations

Clinical and Administrative Data Sources

Hospital
Data sources were designed for purposes other than occupational health surveillance. For traumatic injuries, hospital discharge data is helpful because you may be able to identify payer.

Recommendation-
- Add industry and occupation (I & O)
- NIOSH work with CDC/NCHS to oversample

ED
Tends to be more severe and collected in a standard way.

Recommendation-
- Industry and occupation is optional, make a requirement.
- NCHS: require “at work” check box on all surveys.
- Expand to improve coverage
- NEMSIS is useful, but need to expand coverage.
- Ambulatory Care Survey—may be interesting to analyze for vulnerable populations.

Death Certificates
- Add industry and occupation

Priorities (short term)
1. In some hospitals, medical records include employer name or industry and occupation, but this is not sent to states. Push for the collection and computerization of employer name or obtain from the employer security group, then link employer and employees and code employer. Need a written statement from workshop participants stating that industry and occupation collection is needed.
2. NEISS.
3. NEMSIS-compile.

Priorities (long term)
1. Include I&O and “at work” on all surveys and death certificates.
2. Collaborate with NCHS (would require money and collaborative intent).
3. CPSC call back authority.

Population-based surveys
Not the best for emerging issues but for filling gaps in illness surveillance.

Priorities (short term)
1. Data mining- there is data out there that has not been used, so develop a list. Promote inter-agency collaboration by detailing a NIOSH epidemiologist to BLS to create this list of data sources.
2. NHIS and BLS-aggregate several years for state-based data usage. This would help illness gap and occupation component of some diseases. It would also address race and ethnicity and disparities gap.
3. Create marketing plan that explains national value of OH&S data. Market occupational health and safety as well as the systems that produce population-based surveys useful to OH.

Priorities (long term)
1. Obtain core annual funding for periodic supplements for national population surveys including NHIS, BRSS, CPS, ACS which can be rotated among these key surveys (because these are large surveys that allow states to drill down for state or local analysis and 3 already have work-relatedness information).
2. Add I & O to core CDC survey for BRFSS. Use similar coding and wording to NHIS and other national surveys so that data can be compared.
3. Standardize questions and coding (of I & O and other variables) on national surveys for comparability.
4. Electronic coding of I & O-proceed with effort to create an electronic automated coding method.

Laboratory and poison control data
Address hazards even though these are not the focus of this meeting. Considered outcomes related to a few poisons, specifically lead, cadmium, and mercury.

Lead priorities
1. Lower reporting level to 10ug/dL.
2. All states collect BLLs and report to NIOSH.
3. Provide additional funding to five states to collect industry information and BLL >10 ug/dL.
4. Partner with EPA on state implementation of renovation, repair and paint rule as well as HUD to provide funding for investigating BLLs at this new action level.

Mercury priorities
1. All states report to NIOSH for Hg at >35 ug/g creatinine in urine and include industry.
2. Request change in state reporting laws (longer term).

Cadmium priorities
1. All states collect and report to NIOSH at >3 ug/g creatinine urine and 5 ug/L blood.

Poison Center data priorities
1. Partner with CDC/NCEH and AAPCC to improve utility of NPDS and make user friendly for occupational surveillance and accessible to all states.
2. Promote understanding and use in occupational surveillance (meeting with states, AAPCC, NIOSH, and CDC/NCEH).

**Priorities (short term)**
1. Compile lead, cadmium, and mercury data.
2. Encourage states with reporting laws to use law for reporting of these 3 conditions.
3. Lower lead reporting level to 10ug/dL.
4. Partner with EPA on state implementation of renovation, repair and paint rule as well as HUD to provide funding for investigating BLLs at this new action level.

**Priorities (long term)**
1. CSTE position statement on mercury and cadmium
2. States should report I&O
3. All states collect elevated blood lead and report to NIOSH
4. Require I&O for lab reporting
5. Make NPDS user friendly for occupational surveillance and accessible to all states.

**Workers compensation records**

**Priorities (short term)**
- Articulate why wc is important for occupational surveillance to insurers and wc agencies
- 5-10 states with wc data send to NIOSH for analytical analysis. Look at comparability across conditions. Initiate working group to help with this analysis including NASI
- Have 6 or more states to link WC and ED data for surveillance
- Survey states to identify who has electronic data and ER identifier

**Priorities (long term)**
1. Incorporate workers compensation (wc) data into an ongoing, national comprehensive system enumerating magnitude and costs of occupational injury and illness system.
2. Augment NIOSH budget to foster comprehensive system of case- and pop-based surveillance
3. OSHA needs more analytic capability, e.g. use of state wc data to assist in targeting enforcement and informing regulations
4. Comparable data across states
5. Worksite-specific data, e.g. establishment identifiers for multi-site employers
6. Worksite and worker identifiers should be available to public health agencies (privacy issues increasing)
7. Ability to link BLS and WC data by individual
8. Real-time monitoring to identify emerging issues/clusters
9. Work with IAIABC to standardize and compile comparable data
10. Build incentives for common data source available to occ health (insurers)
11. Establish a common data center to analyze wc data across states
12. Use pending centennial anniversary of wc to report data and recommend improvements
13. Federal system for comparable denominator data
14. Work with self-insured companies to report detailed data not required to be reported to state wc
15. Explore potential of electronic health records to foster consistency across states, e.g. ICD codes
16. Encourage employer benchmarking based on wc, not just OSHA reportables
17. Based on regulatory agenda, OSHA prospectively utilize wc data and states to gather additional data to inform regulations

Priorities (Research)
1. Pilot wc and SOII eval for reportable conditions (beyond informing soii)
2. Pilot study using wc data to estimate and report cost estimates
3. Research characteristics of wc reporting systems that impact reporting (e.g. employee and physician reporting in addition to employers)
4. Research characteristics of employers that impact wc reporting
5. NAS study of nat'l OSH surveillance, including wc
6. Clinical use of wc, physician behavior
7. Employer behavior
8. Universal health insurance
9. WC insurance co. reporting

Final Recommendations to Improve Existing Surveillance
Green Dots = Most Immediate
• Improve collaboration/coordination between federal agencies and states; include DOT; enhance cross fertilization and staffing; Form an inter-agency surveillance coordination committee/workgroup (17)
• Worker/employee survey ➔ use/analyze current data and report out (data inventory); add on to existing national surveys for national employee survey(8);(47)
• Include I & O and employer name in all medical records (11)
• Obtain work relevant information in electronic medical records (16)
• Get I & O where appropriate in all NCHS and NIH surveys (narratives for I & O and employer name (8)
• Direct access/ user friendly data while assuring quality (14)
• Expand OSHA telephone reporting for employers (8)
• Comprehensive annual surveillance report, including wc (with stories and individual case reports) for all audiences- ID current failures (14)
• Include the self employed in as many systems as possible (3)
• Use/Conduct surveillance to influence standard-setting (4)
• Fund surveillance for academics (5)
• Identify 5-10 states with wc data and send to NIOSH for analytical analysis. Identify work site specific issues and look at comparability across conditions. Initiate working group to help with this analysis including NASI (10)
• Compile hospital/ED discharge data and identify wc payer (7)
• Marketing of surveillance; Information for action (26);(6)
• System to ID and respond to urgent/emerging issues (utilize HHE/FACE) model: infectious disease emerging issues (7)
• Link data to employers ➔ enforcement; unique ID and site ID (4)
• Compile ABLES data (4)
• Robust enforcement audits (7)
• Expand state-based surveillance (15)
• Link cost to surveillance data (5)

Other Dots = Still Very Important
• Revisit NAS report
- Marketing (who we are and why)
- Employer/employee survey linked report for distribution
- Analyze compiled NPDS data for occupational information
- Develop way to capture employment not surveyed by SOII; Develop method to capture "non-traditional" employment in surveys and record systems
- Direct access to data/rapid release of data (user friendly, rapid access) that is web-based
- Improve coordination between federal agencies
- Interested in patterns independent of causation (when analyzing data)
- Legislative action
- Coordination at state and national level
- Active surveillance (follow up, case-based)
- Linking data availability and analytic capability (ex- not all states have capacity to analyze data) - increase capacity
- Surveillance to improve standard setting
- Include self employed in as many systems as possible
- NAICS code misclassification
- Insure quality of user friendly, comprehensive data
- Expand the telephone reporting requirement for any hospital
- WC integrated in comprehensive surveillance report
- Data that we are collecting is actionable/ examples of where the system we have are missing the boat, specific language for employers
- Data linkage of state data sets (probabilistic)
- Improve reliability of employer provided data, be careful of unintended consequences with employers
- Good study of what data is out there (make accessible to everyone)
- Keep in mind existing infrastructure
- Become better communicators and make surveillance sexy (marketing/packaging)
- [unique ID and site ID] link data to employers-enforcement
- Occupational health needs a brand/ID and worker population is a vulnerable population
- Employer identifiers made available
- Marketing-what is being done for prevention, how surveillance is being used successfully
- "Counting injuries because workers count"
- National OH exposure survey-linking to outcome measures
- Use states for identifying emerging issues
- Address misclassification (both NCS and in states)
- WC-work to increase comparability and central storage of state data
- Case based-choose selected conditions and match to SOII
- NEISS
- Compile cadmium/mercury data
- Make SOII comprehensive
- Bias towards active surveillance
- NHIS \rightarrow include ODI questions
- Detail a NIOSH epi to BLS for data mining

**No Dots = Long Term**
- Cancer reports \rightarrow mesothelioma
- Understand incentives \rightarrow don’t create unintended consequences
• Increase funding for comprehensive tracking
• Make certain data sets more accessible

**Connect to ‘protecting workers on the job’ (APHA) priorities:**

• Put worker health and safety first
• Endure health and safety protection of all workers through tough enforcement of existing regulations, new worker protections, and research
• Count all occupational injuries and illnesses and increase funding for federal and state-based public health tracking programs
• Increase worker participation in workplace safety and health programs and protect workers from retaliation
• Eliminate disparities in the high rates of deaths, injuries, and illnesses among all workers
• Reform workers’ compensation programs to ensure appropriate and equitable remedies for the costs of occupational injuries and illnesses for all workers
• Reduce or eliminate widespread use of toxic chemicals to protect workers on the job and to safeguard the communities in which we all work and live

**General Discussion after Group Reports**

**Clinical & Administrative Data Discussion Notes**
- Kaiser has collected I & O data, so partner with them to find out what they have.
- For the most part, we cannot address health in the short term for improvement of undercount issue except for certain conditions (cancer, TB, hepatitis).
- Determine who is using VA data, which codes for I & O, and identify the utility.
- Someone needs to address who will be the regulatory and standards committee for electronic medical records. I & O will improve clinical care; gather data for states and research community.

If you can tie it into a quality metric like the hospital, then the insurance industry may buy in or use because it may help with billing

**Population-based Surveys Discussion Notes**
- Summarize the current surveys and the questions they can address (this overlaps one of the data mining bullets above)
- BLS – aggregate BLS data over years to get state-based data
- Better informatics – create more user friendly web pages and databases
- OSHA logs and medical surveillance – create a web-based system for data entry
- Topics: MSDs, HD, hearing loss, and stress

**Lab & Poison Control Data Discussion Notes**
- Do CSTE position statement add Cd and Hg as nationally notifiable conditions
- All states need to make changes in public health codes to mandate lab reporting of Cd and Hg to state health depts.
- CDC NCPHI: include occupation/industry in electronic lab reporting
- Research on clinical practices
- Potential synergies from partnering with environmental
- Report all positive chest x-rays for pneumoconiosis with I & O
- Analyze I & O in NHANES data (heavy metals and other phthalates and endocrine disruptors)
- Audiograms
- Think about electronic lab reporting for hazard surveillance

**Workers Comp Discussion Notes**
- Require reporting of sentinel cases from insurance companies
- In terms of wc reporting systems: are we talking about claims or 1st report?
- For universal health insurance coverage, what is the impact on wc
- Reconciling NCCI job classifications to NAICS and SIC codes
- Comprehensive system for use at state level. Will encourage states to dump this data in a warehouse for comparability and other uses-advantage is a complete census so you can drill down more and stored at IAIABC
- BLS employer surveys could ask questions about safety programs in the upcoming survey
- Another compilation is the Oregon KATE (?-RATE) study

Strategy

- Special surveys to address disparities and vulnerable population.
- Staff briefing on these issues and schedule a hearing (Marcia Mabee)
- When making recommendations, be clear who each recommendation is wanted to respond. We will be contacting you in X amt of time for a response.
- NIOSH, BLS, and OSHA participants should also make recommendations within their agency for interagency collaboration.
- Each person within the core group should adopt a recommendation and work to make sure that they are carried through. Phone calls and emails. Keep track of your recommendation and how its progressing.
- Put together contact list of offices that you would contact to identify where we are on this issue.
- Larger email list for keeping people informed, smaller email list for those tracking the recommendations.

Who should receive report?

- Congressional report- (fast & extremely specific) make policy recommendations that state “all EMRs shall collect I & O; better coordination should be gathered btw these committees and congress shall form a working committee)
- Public- Marketing
- Other federal agencies- Let them know that PH finds what we do important; build these relationships and establish that what we do is important and suggest buy in from them.
- White House- link with transparency and health care reform.
- Heads of the Executive branch agencies that are not here: MSHA, OSHA, NIH, CDC, HHS and do briefings with the new agency heads
- Hill Visit- convince chamber of commerce of the benefits
- State health departments-
- State legislature- build capacity, minimum guidelines (count cases and do follow up) important obligations to workers.
- People that run population surveys (NCHS, NIH, etc)
- Office of Management and Budget (OMB)-they are charged with standardizing all federal surveys (race and ethnicity; I & O, employer)

Next Steps

- write report and meeting summary
- congressional briefing
- press release when report is released: BNA and other agencies
- short articles for newsletters and partner websites
- Future of the Group: need authoritative people to answer ques. From press, agency heads, etc. This should be the authoritative group, like the arthritis example, to identify gaps and limitations and make recommendations for research agenda.