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Theodore R. Kulongoski, Governor

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December 31, 2003

Dave Staudt
Contract Specialist
CDC - Procurement and Grants Office
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P.O. Box 18070, Cochrans Mill Road
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Dear Mr. Staudt:

Please find enclosed the original and 2 copies of Oregon Health Services Final Progress Report and Final Program Evaluation Report for Grant Number 5 U01 OH007300-03, Model Occupational Dermatitis Surveillance/Interventions.

Note that the Program Evaluation Report, located in Attachment 2 of the Final Progress Report, is a draft version and will be further edited and refined prior to submission to the SOSC Evaluation Subcommittee and distribution to other states. We welcome your edits and comments on this draft document.

If you have any questions, please call Michael Heumann, Program Manager at (503) 731-4025 x438, or e-mail michael.a.heumann@ state.or.us.

Sincerely,

Michael Heumann
Program Manager
Oregon Health Services
Environmental & Occupational Epidemiology

cc: Boris Lushniak, MD

OREGON DEPARTMENT OF HUMAN SERVICES - HEALTH SERVICES
Model Occupational Dermatitis Surveillance/Interventions
Grant Number 5 U01 OH007300-03
YEAR 3 FINAL PROGRESS REPORT
Time Period: April 1, 2002 – September 30, 2003
(SUBMITTED December 2003)

I. Project Description for Oregon's Model Occupational Dermatitis Surveillance/Interventions

As a general description of activities under Year 3 funding for the Model Enhanced Occupational Dermatitis Surveillance/Interventions program, we followed-up on the data already collected; followed up on previously identified hazards; carried out an intervention project; completed program evaluation, and disseminated project findings

The aims for Oregon's project were revised for the final year of this grant as follows.

Aim 1. Determine the impact of unresolved hazards, identify new hazards and identify higher risk occupations, industries and populations.

Aim 2. Develop and implement intervention strategies to address the hazards identified in target industries and occupations.

Aim 3. Evaluate and disseminate the findings of the Model Occupational Dermatitis Surveillance/Interventions program.

II. Surveillance System

Data Overview

Over the total funding timeframe, we've expanded the state data sharing agreement with the Oregon Department of Consumer and Business Services (DCBS) to include all workers' compensation claims, with no filter for specific conditions, In addition to receiving monthly downloads from DCBS of the Claims Information System data, we also wrote a new agreement to receive the medical encounter database, which includes extensive cost data. Thus far we have not had the resources to analyze the medical encounter database.

We also entered into an agreement with the state Employment Department to receive data that will allow us to calculate rates of injury/illness in targeted populations, to plan for targeted data analyses and interventions.

The dermatitis surveillance system was transferred to the SENSOR grant during the first year (10/1/02- 9/30/03) of the SENSOR Program, which was the final year for Oregon's Model Occupational Dermatitis Surveillance/Interventions project. We've conducted surveillance with existing and expanded data sources, and analyzed data to characterize and identify new sources of occupational dermatitis (in addition to the other target conditions).

Data sources for EOE on this occupational condition are the Oregon Workers= Compensation Claims Information System (OWC) from DCBS; the Oregon Health and Sciences University (OHSU) Contact Dermatitis Clinic; and a private workers= compensation insurance, Liberty Northwest (Company A). Detailed dermatitis data analyses will be included in the SENSOR progress reports.

Because the aims of the project are so closely related to the data, and because this is the last year for this grant, we are including summary data from each of our data sources for the reporting period:

Summary DERMATITIS Data – all existing data sources Time frame: 4/1/03 – 9/30/03		
Oregon Workers' Compensation	Total Accepted Disabling Claims	19
OHSU Contact Dermatitis Clinic	Total Case Reports	14
Company A	Total Accepted Claims (Disabling & Medical Only)	156

III. Accomplishments related to specific aims for Year 3

Aim 1. Determine the impact of unresolved hazards, identify new hazards and identify higher risk occupations, industries and populations.

Unresolved hazards & Identify higher risk occupations, industries and populations - Latex glove use

The use of latex gloves in food service and other occupations is one health hazard that we regard as unresolved. This will be discussed in greater detail under Aim 2.

Identify new hazards & Identify higher risk occupations, industries and populations – Dextron III

During the previous reporting period EOE staff had discussions with NIOSH, the OHSU Contact Dermatitis Clinic, and the Oregon Sate Association of Occupational Health Nurses (OSAOHN) network regarding case reports of severe skin reactions in automatic transmission workers associated with the use of Dextron III transmission fluid. Two case reports had been received from the OHSU clinic. The rash presented as blisters, cracking, and itching on the forearms and hands. Skin patch testing at the OHSU clinic yielded positive to Dextron III/Mercon transmission fluid. A preservative in the transmission fluid is believed to be the sensitizer. This presents a problem for dermatologists when they patch test, because they don't know what to patch test for. The OHSU clinic staff contacted the manufacturer to determine the exact ingredients of the Dextron III package, with no success.

No recent reports of contact dermatitis affiliated with Dextron III have been received from OHSU, OSAOHN, or NIOSH. Nevertheless, we remain on alert for additional data and case reports associated with the product and industry, because this automatic transmission fluid may represent a new source for contact dermatitis in the automotive repair industry. The hazard identified will continue to be investigated through existing sentinel data sources, as well as through collaboration with NIOSH colleagues and other states.

Identifying new hazards and higher risk occupations, industries, and populations through partnership collaboration

In addition to our on-going relations with workers' compensation insurance companies, the state WC agency, and now the Employment Department, we have strengthened our ties with the state OSHA. Based in part upon our data analysis, the Oregon OSHA (OR-OSHA) Consultation section invited our participation in planning and presenting a 2-day training on occupational dermatitis in November 2002. More than 60 staff from the consultation, enforcement, and the laboratory divisions of OR-OSHA attended. We have discussed the possibility of sharing more information and OR-OSHA referring difficult dermatitis issues to our offices. The training was positively received, and opened the door for further developing this relationship.

During the reporting period, there has been no further formal discussion with OR-OSHA on working collaboratively. We'll continue to pursue collaboration with OR-OSHA Consultation after this project's ending. We anticipate that this will take considerable developmental time, and anticipate that OR-OSHA higher management approval, and a stated and agreed-to outcome will be essential to this process.

Aim 2. Develop and implement intervention strategies to address the hazards identified in target industries and occupations.

Poison Oak Prevention Project

EOE and the Oregon Department of Forestry (ODF) joined in an intervention project to assess the effectiveness of a poison oak skin protectant product among ODF wildland firefighters during the 2003 fire season. Concurrent use of sunscreens and/or insect repellants was also monitored to determine if either impacts the effectiveness of the product. ODF recruited over 250 volunteers (individuals from fire districts having a history of encountering poison oak during a fire) at the ODF pre-season Fire Training School in July 2003. After reading and signing the project consent form, volunteers completed an initial poison oak questionnaire, received training in poison oak recognition and avoidance, and instructions in the use of the skin protectant IvyBlock Lotion®. Volunteers followed the current practice of showering with a detergent-based cleanser after suspected exposure to poison oak.

A major objective of ODF is to determine the effectiveness of using the poison oak protectant product for up to 12 hours at a time (the length of fire fighting work shifts) without repeat application. This special project extended through the end of the 2003 fire season. There were no case reports from the ODF project, not for lack of wild fires, but because most of the wildfire areas where fire fighters were assigned, have been in higher altitudes where there is no poison oak. The project officially ended November 1, the final data are still being collected, and the project summary has not been completed yet.

Other poison plant related education & outreach

EOE staff did a brief consultation with West Linn Police Dept. on the use of skin protectant for their crews and the local Tualatin Valley Association fire crew (representing the largest fire district in the state) who were in the midst of firefighting and mop up in a local park and recreation area.

Latex Allergy Prevention

- Oregon Food Code Prohibition of Latex Gloves
  On March 1, 2003, a new Food Code Rule that prohibits the use of latex gloves in all food service establishments and mobile food units in Oregon went into effect. Oregon joins Rhode Island and Arizona as the only states that have successfully legislated against the use of latex gloves in food service establishments. The rule change was brought about through intensive collaboration between EOE and the Environmental Services & Consultation (ESC) section of OHS that is responsible for making Food Sanitation Rules. The Food Code Rule change went into effect despite the withdrawal of support from an industry association, legislative action to overturn the rule (see explanation below), and in the face of resistance from the Malaysian Rubber Export Council. Evaluation of the impact of the rule change is underway through a county restaurant inspections surveys, and there will be additional analysis of WC claims data for claims involving glove use. We are also tracking reports of restaurant customers affected by latex reactions from food contact.

- Legislative Action to overturn Food Code Rule Prohibiting use of Latex Gloves in Food Service Establishments
  In February 2003 an Oregon Senate Bill (SB 657) was introduced that would effectively overturn the Food Code Rule. EOE contributed considerable time and effort for completion of the Bill Analysis, notifying interested parties about the bill, and lining up individuals for testimony in the event that SB 657 went to a public hearing. SB 657 was put to rest within the Oregon Senate Human Resources Committee.

- County Restaurant Inspection Glove Use Survey
  Because county registered sanitarians have the most direct contact with restaurant personnel (food handling training & restaurant inspections), they are most likely to observe glove use and glove inventory in restaurants. A section for noting glove material has been added to the county restaurant inspection forms, which are now completed via electronic format during every restaurant evaluation. Glove use is optional per the Oregon Food Code, and restaurant personnel are reminded that gloves are not a substitute for frequent and thorough handwashing. Restaurant personnel are also reminded that there are cost effective, non-latex glove alternatives readily available.

  As part of our program evaluation process, EOE contracted with an outside consultant to conduct a telephone survey of glove use involving 10

local county health departments. The survey was conducted with registered sanitarians that perform scheduled restaurant inspections, and included both quantitative and qualitative questions about latex glove use in restaurants prior to, and since the March 2003 Food Code Rule (prohibiting the use of latex gloves) was adopted. The new electronic restaurant inspection formats may facilitate tracking latex glove presence or absence in the inspection reports from March 1, 2003 forward. See Attachment 2 for a copy of the County Glove Use Survey and summary report that are part of the SOSC Program Evaluation Report.

- Latex Allergy Prevention in School Health
  A new Latex Allergy Alert was developed that targets school health professionals. The School Health Worker Alert became part of the annual mailing to 1200 school health professionals in Oregon schools. The September 2003 mailing was part of the Healthy Kids Learn Better Partnership, sponsored by the Oregon Dept. of Education. See **Attachment 1** for a copy of the Latex Allergy Alert for School Health Workers. The Alert was added to the EOE Dermatitis website: www. healthoregon.org/dermatitis.

  OHS continues to receive a variety of responses and inquiries regarding Latex Allergy, latex gloves, and latex glove prohibition. An example from health care and food service industries follows.

  A multi-state health care management corporation contacted EOE staff seeking information regarding the ban on latex gloves in Oregon. The representative was seeking direction for developing a corporate glove policy for their assisted living and memory care facilities in Oregon. The representative was provided with Latex Safe policy information and directed to additional internet resources on glove policy for health care facilities.

  The manager of a catering firm phoned EOE staff about the Food Code Rule. He had been purchasing nitrile gloves for his workers, because he had several workers who are latex sensitive. The manager was upset and complained that nitrile gloves are twice as expensive as latex gloves. EOE staff provided information about latex allergy, the public health rationale for the ban on latex gloves, and information on cost effective, single use, form fitting alternatives. The manager expressed satisfaction with the information provided.

We plan to continue to work through partner organizations to educate various worker groups about latex sensitivity and allergies, plant-related

dermatitis and other preventable OD. High-risk groups identified through the second aim will be targeted for interventions, likely involving new expanded partnerships.

Aim 3. Evaluate and disseminate the findings of the Model Occupational Dermatitis Surveillance/Interventions program.

Program Evaluation

Evaluation is an important part of our on-going work. EOE retained the services of the external, but agency-affiliated, Program Design and Evaluation Services to carry out plans for evaluating this and other programs within our section. We initiated the evaluation process early in Year 3, using the SOSC Evaluation Subcommittee's 8/2/02 "Plan for Evaluating Core/Enhanced/New States" Occupational Surveillance Projects" as a guide.

Our surveillance system was evaluated using the CDC guidelines (Updated Guidelines for Evaluating Public Health Surveillance Systems, MMWR July 27, 2001/Vol. 50/No. RR-13). The primary goal of our program was to identify aspects of the Oregon Dermatitis Surveillance model that can be replicated and can contribute to the creation of a comprehensive surveillance system for occupational illness and injury in the U. S. Additionally, the program evaluation has served as the basis for program continuous quality improvement, and for continued funding justification. Partners and stakeholders were included in the evaluation process. The independent evaluator conducted a qualitative evaluation of the data gathering partnership between EOE and Liberty Northwest.

Refer to **Attachment 2** for the comprehensive SOSC Program Evaluation Report.

Dissemination of Findings

We continuously seek opportunities for dissemination of findings of the Model Occupational Dermatitis Surveillance/Interventions program. EOE will seek additional opportunities for dissemination of the findings of the Model Occupational Dermatitis Surveillance/Interventions program after program evaluation and special projects are wrapped up, published, etc. We plan to attend professional meetings and publish articles to ensure that others can learn and benefit from our work.

Presentations/Outreach Opportunities

June 23 - 24, 2003
NORA Symposium, Hilton, Crystal City, Arlington, VA.
Conference theme: Working Partnerships – Research to Practice

EOE and Company A, winners of the 2001 NORA Partnering Award, sent staff to participate in the 2003 NORA Award presentation per NIOSH's request. EOE and Company A staff provided an approximately 20 min. presentation to the audience of several hundred occupational safety and health researchers, stakeholders, and policymakers from both private and public sectors addressing our progress in workplace safety and health since winning the 2001 award. Presentation was entitled "Life After the 2001 NORA Partnering Award: Continuing and New Collaborations in Oregon". See **Attachment 3** for a copy of the presentation.

August 26 - 27, 2003

Oregon Health Services staff was invited to testify in Washington, DC at the FDA subcommittee meeting. The presentation, entitled "Restricting Latex Glove Use in Food Service Establishments in Oregon" was presented to a panel of scientific experts who were seeking input on the issue of a possible FDA ban on the use of latex gloves in food service. The questions posed and the discussion that followed the OHS/EOE presentation focused on the need for consumer case report data on latex reactions occurring in restaurants. Worker exposure and work related latex allergy were not considered to be an issue by this subcommittee. We foresee the need for publishing our findings in peer reviewed literature in order to gain attention and credibility for both customer and worker exposure in the food service industry. See **Attachment 4** for copy of the presentation.

October 6, 2003

Child Health Day Information and Networking day. This event was sponsored by the Child Health Section of the Oregon Department of Human Services, Office of Family Health. The purpose of this event was to bring together DHS-HS staff from the many programs that work to assess or assure the health and safety of children in Oregon.
The main goals of the event – to increase awareness of the variety of programs and people within our agency who work on child health related projects, and to foster internal partnerships and collaborative efforts through networking and information sharing – was realized.
Approximately 50 staff attended the networking session. EOE set up a display table that included information relevant to children's health issues. Latex Alerts for Childcare (English & Spanish versions), Restaurant (English & Spanish versions) and School Health; latex websites, latex free product information and NIOSH Latex Alerts were provided.

October 14 -15, 2003

CSTE Occupational Health Surveillance Work Group meeting and SOSC meeting, San Diego, California. EOE staff, as well as our external program

evaluator attended and presented at this meeting. Our program evaluation process and progress was presented and an Oregon Dermatitis SOSC Evaluation Handout was provided for the group (See **Attachment 5**). The SOSC core and enhanced states presented overviews of their projects, evaluation reports, shared success stories, and participated in candid discussion of future directions for NIOSH funding of states.

Attachment 1

SCHOOL HEALTH WORKERS ALERT
Latex Gloves Can Cause Dangerous Allergic Reactions

Some children exposed to latex gloves, and some people who work with latex gloves, may have serious allergic reactions.

Latex gloves can cause:

- Red, itchy skin rash
- Hives
- Itchy, watery eyes
- Runny nose
- Sinus problems
- Breathing problems (asthma)
- Life-threatening reactions

How can you get an allergic reaction from latex gloves?

- If you wear or touch latex gloves, or latex finger cots
- If you touch something that has been touched with latex gloves
- If you breathe latex particles in the air

Who can get allergic problems from latex gloves and other latex items?

- Workers who wear latex gloves a lot
- Children and adults who already have allergies, hay fever, asthma or skin problems
- Babies and children who have allergies or are more sensitive, and have been close to or touched by latex gloves

How can you prevent Latex Allergy problems?

The National Institute for Occupational Safety and Health (NIOSH) says latex gloves can cause serious allergic reactions. Protect school health workers, food service workers and school children from allergic reactions that are easy to prevent.

School Districts should follow these directions:

- Do not use latex gloves in school settings.
- Employers should provide workers with vinyl, polyvinyl chloride or other non-latex gloves.
- Remember, even when wearing gloves, wash your hands often to stop the spread of disease.
- Be aware that there are other latex items besides gloves that may be problematic for sensitive people (e.g. rubber bands, erasers, band aids, catheters, etc.).

For further information, or if you have a disability and need this in an alternate format contact:

Oregon Department of Human Services
Environmental & Occupational Epidemiology
Ph: 503.731.4025
website: www.healthoregon.org/dermatitis/

Published 8/2003

DHS
oregon department of human services

Attachment 2

I. Overview

A. Specific Aims

In the May 2000 grant application, the specific aims of the Oregon's Model Occupational Dermatitis (OD) Surveillance/Interventions project were:

1. **Enhance Existing Surveillance System**
   a. Continue Surveillance of OD Case Reports from Current System
   b. Expand reporting from State Worker's Compensation (WC) agency to include all claims
   c. Expand OD Case Surveillance for WC Insurance Companies Data
   d. Assess feasibility and Utility of Analyzing the OWC Medical Encounter Database

2. **Conduct Studies to Identify OD Hazards in Target Industries and Occupations (farm, food service, hairdresser, HCW, janitorial, logging, plant nursery worker)**
   a. Determine current use of latex gloves in selected industries (Restaurant, Health care and allied industries)
   b. Analyze Oregon Population Survey (OPS) responses regarding worker's compensation
   c. Targeted Evaluation of OD among licensed hairdressers in Oregon.

3. **Design and Implement Intervention Strategies and Evaluate Effectiveness**
   a. Create latex-safe environments in health care and non-health care settings
   b. Evaluate effectiveness of skin protectants to reduce plant-related dermatitis
   c. Other Intervention opportunities identified through surveillance activities

4. **Overall Program Evaluation**
   a. feasibility and effectiveness in meeting stated goal
   b. efficiency of the effort needed to make this work
   c. usefulness for surveillance and prevention
   d. usefulness to the interests of our partners
   e. likely usefulness for surveillance programs in other states.

B. Changes to Specific Aims

In September 2002, the aims of the project were revised to distinguish between work to be done under the SOSC project and the newly funded SENSOR-dermatitis project. The revised aims are:

1. **Determine the impact of unresolved hazards, identify new hazards and identify higher risk occupations, industries and populations**. The use of latex gloves in food service and other non-health occupations was identified as an unresolved health hazard. We were approached by the state OSHA Consultation Section staff for assistance in making dermatitis a priority enforcement condition. Dextron III, an automatic transmission fluid, was identified as a new potential skin hazard for automotive mechanics in the automotive repair services industry. The original objective 2.c. specifically targeted OD among licensed hairdressers in Oregon to follow up previous work. Due to staff and other resource shortages, this was not feasible.

2. **Develop and implement intervention strategies to address the hazards identified in target industries and occupations.** EOE continued to work extensively through partner organizations to educate workers about hazards and preventable OD, such as Latex Allergy and plant-related dermatitis. Higher risk industries and occupations were targeted for interventions, by expanding existing relationships and cultivating new collaborations.

3. **Evaluate and disseminate the findings of the Enhanced OD Surveillance/Interventions Program.** The evaluation of the SOSC project was enhanced in 2002 by the addition of an independent evaluator who assists this and other EOE programs to develop systematic evaluation strategies, assessment tools, and capacity.

C. Environment/Context

In grant Years 1 and 2 (10/2000 – 9/2002) of Oregon's Enhanced Model for OD Surveillance, staffing and funding levels were essentially the same. Staff included a Program Representative, Industrial Hygienist, Epidemiologist, Office Specialist, Research Analyst, Principal Investigator, and Medical Epidemiologist, for a total of 1.70 FTE, of which 0.45 FTE was In-Kind. Funds for Year 1 and Year 2 were $107,000 and $111,300 respectively.

At the end of Year 2, EOE was awarded a SENSOR grant for surveillance of Occupational Dermatitis, Burns and Pesticide. Staffing and resource changes were made related to the need to separate Enhanced Model and SENSOR OD surveillance work. As of Year 3 (2002-2003) of the Model Surveillance cost extension grant, staffing and resources were shifted to focus on existing claims data sets, and intervention & prevention projects in progress. The on-going data collection and all new projects were shifted to the SENSOR grant. Staffing in Year 3 consisted of a portion of each of a Program Representative, Epidemiologist, Research Analyst, and Office Specialist, for a total of 1.35 FTE, at a funding level of $98,408.

Most of the primary dermatitis surveillance partners remained the same for the duration of the 3-year funding cycle. However, in Year 3 of the project, enhanced partnerships were developed with DCBS/OWC, OHSU Contact Dermatitis Clinic, and Liberty NW Insurance Company (Claims Data and Interventions). New partnerships were developed with SIEU Local 49 labor union, the Oregon Dept. of Forestry, and the Oregon Association of Occupational Health Nurses (OSAOHN).

EOE strategic program and staff expansion that occurred in 2002 necessitated moving to larger office space. During the Fall of 2002, EOE prepared for a section move that was accomplished late December, 2002. The move to private sector office space outside of the Portland State Office building disrupted business as usual for a period of six months. Office space was reconfigured, and phone systems, file and data security, computer, and administrative support systems were put into place.

D. Unplanned Outcomes

Negative Outcomes

Continued Unavailability of Claims Data

EOE has only obtained claims data from the WC insurance company with the largest market share in Oregon for a retrospective dermatitis data analysis project and for a joint project with an

academic partner. During this enhanced OD surveillance program, EOE was not able to develop a new data sharing agreement for the targeted condition. The reason the company continues to provide for not participating is that they report thoroughly analyzing data internally, for loss prevention purposes, and do not feel that special surveillance studies will provide any information that would reduce their claims costs.

Departure from WC Market of Data Partner

EOE was in the process of re-negotiating a claims data sharing agreement with PAULA (Pan American Underwriters of Los Angeles) in 2001 and early 2002. Due to the highly competitive open rating system in the California commercial insurance market in the late 1990s, PAULA stopped writing Oregon WC insurance policies in March 2002, and the opportunity for a data partnership therefore ended.

Positive Outcomes

Latex Glove Prohibited by State Food Code Rule

The Food Code Rule change was a very positive outcome of the project. Oregon Health Services (OHS) passed a new Food Code Rule in August of 2002 that prohibits the use of latex gloves in all food service establishments and mobile food units in Oregon. The rule went into effect on March 1, 2003. Oregon joins Rhode Island and Arizona the only three U. S. states to successfully legislate the use of latex gloves in food service. The rule change was brought about through intensive collaborative efforts between EOE and the Environmental Services & Consultation (ESC) section of OHS that is responsible for making Food Sanitation Rules.

However, there was one unexpected, negative aspect of the rule making process. At the March 2002 Public Hearing regarding changes in the Food Code, an Oregon Restaurant Association (ORA) representative voiced opposition to the proposed Food Code rule change prohibiting the use of latex gloves in food service. *This was surprising and disappointing.* The ORA initially voiced support for OHS Latex Allergy prevention efforts in the food service industry, and was a fellow recipient of the NORA Partnering Award for latex allergy prevention. The ORA's stated that they preferred that latex allergy prevention in food service be accomplished through education, and not through legislation (i.e. voluntary vs mandatory compliance).

National Restaurant Supplier Considers Ceasing Sales of Latex Gloves

Through a sales representative contact, a large national restaurant supplier received information from EOE about latex exposure in food service, and specifically about the Oregon Food Code Rule prohibiting latex glove use. Based upon this information, the supplier ceased selling latex gloves to restaurants and associated customers in Oregon, and recommended to the national company a similar policy.

2001 National Occupational Research Agenda (NORA) Award

During the Fall of 2000, OHS/EOE and Liberty Northwest Insurance Company submitted a joint nomination for the 2001 NORA Partnering in Health & Safety Research Award. This biannual NIOSH award, honors organizations that have joined in research partnerships to develop new equipment, practices, products, procedures, or policies for protecting workers from job-related injury, illness, or death. EOE partnered with Liberty Northwest for access to workers' compensation claims data that allowed EOE to identify cases of occupational dermatitis. Based

upon analysis of these data, EOE, Liberty Northwest, Columbia Helicopters and Enviroderm Pharmaceuticals collaborated on a program for loggers to prevent dermatitis from poison oak exposure. During the intervention project, no participating loggers filed workers' compensation claims for dermatitis. Data led to other partnerships: EOE and Liberty NW collaborated with the Oregon Restaurant Association, the UFCW, Local 555, and five local county health departments (Clackamas, Coos, Hood River, Jackson, and Marion) to provide food service employers and employees with information for recognizing and reducing the risk of latex allergy. The award was presented to EOE and partners at the National NORA Symposium, hosted by CDC and NIOSH, in Washington, DC in June 2001.

II. Sentinel and Population-Based Surveillance System

A. Enhanced Surveillance System for Occupational Dermatitis

The Oregon Environmental and Occupational Epidemiology (EOE) Occupational Dermatitis (OD) Surveillance System identifies and addresses dermatitis hazards through state and private insurer workers' compensation (WC) claims data.

Main Features

Public Health Importance

The surveillance system initially has been used to examine the prevalence of OD in Oregon. While the number of lost work days resulting from dermatitis is lower than in other occupational conditions, Oregon's initial OD surveillance work found high numbers of claims for medical expenses only, and also identified many workers who did not file claims. OD also presents a good potential for preventability: latex substitutes are readily available at moderate cost, and skin barriers reduce exposure to plant irritants.

In addition to maintenance of quality of life, prevention of avoidable exposure to latex in the restaurant and other industries will reduce the likelihood of latex allergies or sensitization, preserving their use for the occasional and more-necessary use of latex products, such as in surgery. Prevention of occupational poison oak and other allergic reactions to plant substances avoids significant decreases in worker comfort, productivity, and quality of life. These data have allowed EOE to better understand the magnitude and severity of target conditions, evaluate other reporting sources, and identify new trends and hazards.

Purpose and Operation

The overall objective of the system is to use state and private workers compensation claims data to identify significant and preventable occupational hazards. EOE receives periodic claims data from the State and from a private WC insurer. In response to the receipt of claims data, EOE provides: 1) rapid analysis of claims data, 2) periodic reports of findings to insurers; 3) identification of new sources of exposure and clusters of claims by employer or employer type; 4) joint investigation of cases involving new sources and selected clusters; 5) written reports and recommendations for intervention; 6) collaborative intervention/claims reduction efforts with state and private insurers; and 7) evaluation of the interventions as possible.

Case Definition

EOE's OD surveillance program originally used the NORA definition of Contact and Allergic

Dermatitis. With this funding to enhance the surveillance model, the definition was expanded to include all "diseases and conditions of the skin and subcutaneous tissue", including thermal, chemical and electrical burns.

Context of the System

The workers compensation claims surveillance system is located in the EOE Section of the Office of Disease Prevention and Epidemiology (ODPE), in the State of Oregon's Division of Health Services. There is no specific legal authority to collect occupational surveillance data, however the program does rely upon statutory and administrative rules for special studies of public health significance. The State Epidemiologist supervises the work of ODPE Sections. The environment is intellectually stimulating and supportive of occupational surveillance efforts by EOE, although state budget cuts have resulted in EOE having to rely exclusively on federal funds for most surveillance work.

Level of Integration with Other Systems

The occupational claims data surveillance system at this time is not electronically integrated with other systems. Given a difference in data sources and needs, we have not been able to made use of the information collected through the state's National Electronic Data Surveillance System (NEDSS) program, as it only collects limited Electronic Laboratory Reports (currently used for Adult Blood Lead surveillance) and some Emergency Department data—neither is a likely source of dermatitis data. However, as a result of an Environmental Public Health Tracking Network grant currently underway at EOE, claims data may be integrated into a larger system, subject to partner approval.

System Components

All worker claims are processed and electronically recorded by the state WC agency are submitted quarterly to EOE through a secure FTP using identification and password on that state agency's mini-computer. Claims submitted to and updated by a private WC insurance carrier are transferred monthly to EOE on transportable computer medium (CD-ROM). It is estimated that these two data sources comprise slightly less than 50% of claims filed in Oregon.
An EOE Research Analyst processes the data received, using a programmed syntax to update and append claims data from other software formats to SPSS, for each data source individually.

Data from sentinel providers are currently stored in an older EpiInfo format (this is being updated to allow linking to other data and possible appending to a larger data set).
As part of the routine analysis process, coding and other errors may be identified, but within larger WC data sets that are updated, no corrections are made, as they could be overwritten.
Oregon's OD and other occupational surveillance systems comply with applicable coding schemes—NCCI, ICD-9, OIICS—where the data are available. A goal of this project and other Oregon projects is to identify components of a standard for data formats for data from multiple WC claims systems. This has been realized with the current coding systems in the structure of the analytic files used for the project, particularly in creating methods to combine or link data from disparate sources.

Confidentially is assured by storing data within the state public health agency's local area network, which resides behind a firewall created to meet HIV reporting standards. This system is

backed up daily in a secure environment. Data are kept on secure directories that are only accessible on certain workstations, each of which is password protected. Paper copies of analyses with identifiers and all transportable media are kept in locked storage cabinets, most within a locked room, to prevent possible release of personal identifiers or proprietary information. EOE enforces strict policies for protecting information at desks during work hours, including locking away confidential papers when leaving the desk, and automatically locking the computer workstation within five minutes of no activity.

The data have been analyzed using various versions of the statistical software, SPSS (versions 8-11.5). Data summaries and analysis results were prepared on an aperiodic basis and disseminated to the state and private partners as requested or offered. Scheduled discussions with insurers were held to review the data and to formulate prevention intervention/claims reduction plans as needed.

Overall Assessment of the System

The evaluation of the system consists of descriptive information about the entire system, and two systematic evaluations: the health of public private partnership (process evaluation of system acceptability) and changes in latex glove use in restaurants prior to and after the Food Code Rule in 1 March 2003 banning latex glove use (outcomes evaluation). There is no current formal logic model for the program.

Goals of the System

1. Determine the impact of unresolved dermal hazards, identify new hazards and identify higher risk occupations, industries and populations.
2. Develop and implement intervention strategies to address the hazards identified in target industries and occupations.
3. Evaluate and disseminate the findings of the Model Occupational Dermatitis Surveillance/Interventions Program.

Goals Achieved

1. We greatly expanded the scope and amount of data collected and analyzed, increasing our understanding of the frequency and severity of occupational dermatitis in Oregon.
2. In collaboration with NIOSH, we addressed a possible new dermal hazard.
3. With partners, we used data to focus our, their and joint prevention efforts, including developing and distributing educational materials and changing a state rule.
4. An independent evaluator is working with our and other programs to develop and implement a systematic evaluation strategy, assessment tools, and to build evaluation expertise.

Major Achievements/Successes

1. Expanded the state inter-agency data sharing agreement to include all workers' compensation claims (no filter for specific conditions), and wrote a new agreement to receive data on all WC-related medical encounters, which includes extensive cost data.
2. An agreement with the state Employment Department permits us to receive data that allows for calculation of rates of injury/illness, which can help target data analyses and interventions.

3. Identified latex glove-related contact dermatitis in the restaurant and other industries, then pursued various interventions, from targeted education to policy change. Details of the impact are in Section V.
4. Captured a portion medical-only (non-disabling) dermatitis claims data.
5. Used and improved use of narrative fields to increase the sensitivity of case identification.
6. Initiated systematic surveillance model and program evaluation.
7. Reduced contact dermatitis via collaborative interventions with state and private insurers, and voluntary efforts by employers. A partner private WC insurer has worked extensively with individual employers, with industry groups, and has published educational materials in their newsletter, which they distribute to all clients.
8. Successful public/private partnership for dermatitis prevention and claims reduction that can be used as a model for other states. In addition to our on-going relations with workers' compensation insurance companies, the state WC agency and now the Employment Department, we have strengthened our ties with the state OSHA. Issues of confidentiality and legality continue to hamper routine referrals from the state OSHA enforcement section, however the consultation program is very interested in offering employers our expertise for difficult dermatitis issues.

Major Barriers Encountered in Surveillance and Interventions

1. State WC agency's more comprehensive data set does not include all claims (medical expenses only are not electronically available).
2. Lack of identifiers in some data sets makes it difficult to identify duplicate cases or otherwise combine data, to accurately characterize this aspect of the surveillance system, particularly to determine sensitivity or specificity.
3. Inconsistent coding and definition systems among the data from various partners make data comparison and interpretation difficult.
4. Withdrawal of support from an industry association from efforts to reduce latex glove use, and opposition from the Malaysian Rubber Export Promotion Council, slowed and even endangered passage of the change in the Food Code Rule.
5. Employment data are of limited use because they are based upon the number of employees in the firm, not at a given location, making them less useful for large companies.
6. Although cost information is included in the medical encounter data set, extensive manipulation is required to combine all the records associated with an individual claim to calculate the total cost.
7. Coding, spelling and typographical errors present a large problem for analysis of narrative fields.

Lessons Learned

1. Using narrative data fields increased positive case identification by 85%.
2. Carefully define roles and responsibilities in surveillance partnerships to ensure expectations are met for data exchange and for interventions; monitor the health of the partnerships on an ongoing basis.
3. Identifiers are needed, at least at the employer and geographic location levels, to accurately determine the industry, to identify duplicate cases, and to match information from other data sources, such as sentinel providers, to better characterize OD or any other condition.

4. The lack of a single standard coding system will continue to hamper efforts to use data from different sources, and will only worsen with new versions of each coding scheme.
5. Metadata are vitally important, including an understanding of why the data were collected, when and by whom, who entered them and what, if any, quality control and/or assurance processes are followed. Even with documentation, be cautious of data quality.

Current Surveillance Needs

Occupational health surveillance suffers from a lack of common case definitions and common coding systems. Our program would appreciate access to computer coding or other mechanisms to test for compatibility of data fields and/or to translate between coding systems (to enable automatic linking of similar conditions that have different codes, for example). Stable funding is another need for surveillance, as are better methods for identifying and categorizing occupation.

Systematic Evaluations

Three systematic evaluations were conducted:
A qualitative and quantitative evaluation of the working relationships and needs of the EOE/private insurer partnership (see Section C below); and
A systematic survey of latex glove use in restaurants before and after March 1, 2003, the date the Food Code Rule banning latex gloves went into effect (see Section V and Appendix A).
Effectiveness of the poison oak rash prevention efforts for both the loggers and the wildland firefighters has been conducted—the latter was not completed at the time of this report, but is briefly described in Section V.

B. Surveillance Data Sources

Description and evaluation of each data source

a. A major university hospital has a contact dermatitis clinic that is a sentinel provider for EOE's OD surveillance system. Despite the inconsistency in the timing, amount and scope of the data provided, this has given us extensive anecdotal or qualitative information about possible new sources, plus indirect links with North American Contact Dermatitis Group.
b. EOE electronically received OWC-CI claims case-defined data (electronic)
c. Upon request, the state WC agency readily provided EOE with the complete electronic file of WC claims. Limitations, frequency and other information are included in Section III.
   The state WC agency has given EOE access to the Medical Encounter Database that they maintain. Of most interest is the inclusion of cost fields in these records, however linking the multiple health care provider visits for a single claim to calculate the total cost has proved challenging. These data were not terribly useful during this project, but we remain hopeful they will play an important part in future surveillance.
   A private WC insurance company provides proscribed access to their electronic administrative file of WC claims. Further description and evaluation of each of these data sources in included in Section III of this report.

C. Surveillance System Evaluation

Although not required for enhanced surveillance model states, EOE intends to perform some of the tests described in the CDC Guidelines for Evaluation of Surveillance Programs. Given our reliance on partners for all aspects of our program, we felt that this is the most critical area for evaluating the health and sustainability of our model.

Evaluation of OD Program Partnerships

A formal evaluation of a critical partnership with a private WC insurance company was undertaken. The full report is included in Appendix A.

1. CDC Guideline attributes of acceptability and timeliness for both partners were examined. Interventions based on surveillance findings and impacts on the organization were also evaluated in the survey.
2. Qualitative aspects of survey ensured complexity of relationships and collaboration were captured.
3. Advantages of using independent evaluator to conduct the survey were:
   a. Confidentiality facilitated open and honest responses - themes derived from narrative responses identify issues without identifying individuals.
   b. Surveillance program staff were considered partners and are survey respondents, ensuring a comprehensive picture of the partnership.
4. Narrative themes provide basis for understanding without implying fault – providing a basis for discussions that strengthen the partnership.
5. Themes were reported back to all partners for discussion.

In general, both EOE and the private WC insurer valued their 2-way partnership but were dissatisfied with a former 3-way collaboration. Both organizations wanted to continue the 2-way partnership, but with increases in clarity and structure in the collaborative efforts. There was a desire to explore new intervention opportunities, to increase communications and feedback from each partner, and to ensure that resources are available to support the work.

III. Model Systems

Oregon's Model Occupational Dermatitis (OD) Surveillance System is based upon data from Workers' Compensation (WC) claims data. The model is outlined below, as is the assistance from and to other state surveillance programs attempting to make use of WC data.

A. Potential for Adoption of WC-based Surveillance in Other States and for Other Conditions

The potential usefulness of this model for other states will vary. Following is a broad outline of how Oregon has used WC data for surveillance and guidance for other states interested in WC data, including parameters for deciding if this is feasible or worthwhile.

1. Identifying Locations and Limits of WC Data

Like most states, Oregon's workers' compensation (WC) market is open and competitive (45 states, according to 2001US DOL documents). Most competitive states only electronically process accepted, "disabling" (those involving a threshold of lost work days) claims. Oregon's WC agency also enters denied claims.

Missing from the Oregon's state WC agency's electronic data are accepted "medical only" claims (only for reimbursement of expenses related to medical treatment). This information can be vitally important to understanding the scope and magnitude of conditions, particularly those that often do not result in lost workdays, such as dermatitis. In Oregon, each WC insurance company maintains their own electronic data on all submitted claims.

It is critical to keep in mind that these claims data are collected for particular reason by each entity. Insurance companies may maintain multiple databases in order to make and track payments, to determine the risk of the employer and to report to the state agency. Oregon's state agency collects information to fulfill regulatory and oversight roles, to meet federal reporting requirements, and to provide information to the state OSHA program. Not every system will contain data useful for surveillance. Timeliness may also be an issue, depending upon reporting requirements, delays in data entry and case acceptance/denial and closure. If data are not available electronically, this data source may not be appropriate for surveillance efforts (however, California has experience with using paper copies of WC claims for pesticide poisoning surveillance).

2. Gaining Access to Data

The first step is to identify common goals between the surveillance program and the WC data source. Although the state WC agency also seeks to prevent worker injuries and illnesses, issues of research priorities, confidentiality, understanding of agency roles and responsibilities, and even mechanisms for communication can hinder establishment of a collaborative relationship needed for data sharing. In some states, statutory or administrative rules may be needed to gain access to WC data; in others a request may be sufficient. Establishing trust and a cooperative relationship is essential, but also depends upon many external factors beyond the control of the surveillance agency, such as current economic conditions, the WC market share in the state, the political environment of insurance industry regulation, and trends in WC claims costs.

WC insurance companies also seek to reduce worker injuries and illnesses in order to contain costs. A formal agreement is preferable to provide assurances of how data are to be used, findings shared and published, and to ensure on-going access, as personnel and priorities may change over time. Model public and private Memoranda of Agreement (MOA) is included in Appendix A.

After successfully establishing a partnership, consistent maintenance is needed to ensure the continued collaboration. Using existing instruments and known concerns of partners on both sides, EOE conducted a survey of partner satisfaction. This partner evaluation tool is attached as Appendix A. It found that routine, agreed upon communication patterns are important, as is the demonstration of how information is used by all parties. Partners agreed to conduct periodic follow-up evaluations to ensure expectations are met.

Myriad technical issues also must be addressed in order to obtain and use these data. Format used by collecting organization, data base size, security during transmission, security assurances at surveillance agency, are all critical issues that must be addressed to the mutual satisfaction of all partners. For reasons explained below, surveillance programs should seek to have data transmitted with minimal filtering.

3. Defining a Case

Numerous decisions must be made to determine which WC data will be captured and how they will be identified. Taking into account any limits to WC claim availability (completeness) from either a public or private source, the following should be considered: a) claim acceptance status; b) various coded fields that might indicate either a condition (e.g. dermatitis) or source (e.g. pesticides); and c) narrative fields, including what kinds of information are recorded and if/how conditions or sources might be identified.

Perhaps the most difficult aspect of case definition for Oregon was defining the date range. Date of injury will not capture a complete set of data for several months after the final date, due to delays in reporting, changes in claim status (and possibly other variables), and time lag inherent in data entry. Particular caution should be exercised in selecting the time frame for each reporting period. For this reason, Oregon settled on the set-up date of the claim to define the time range.

The aspect of Oregon's surveillance model that has the most potential for adoption by other states is the algorithm development process. EOE developed and thoroughly tested computer (SPSS) code that identifies claims related to the target conditions. Through extensive data manipulation and programming, EOE has successfully improved OD identification and characterization. We also successfully captured claims for pesticide poisoning, burns, musculoskeletal disorders, asthma, and eye injuries from WC data files. These SPSS algorithms are available upon request.

Narrative Fields

A significant finding has been the importance of narrative or text fields. Narrative fields of use have contained descriptive details of the incident or event that caused the injury or illness and of the injury itself. It may also contain specific information about the cause of the claim (e.g. naming latex in either type of field) that we could not capture from any other electronic data source because of the lack of specificity in coding systems.

The value of narrative data fields has been repeatedly demonstrated by improving the sensitivity of case identification: 35% of WC claims were only identified by the text. Text fields also proved important for specificity, helping to exclude false-positive matches on too general of coding classifications. Unfortunately, these narrative data are not available in the state WC agency data. EOE has also combined private and state WC data sets to provide more comprehensive data needed to identify patterns of problems that exist industry-wide in Oregon.

4. Analyses of Interest

Depending upon the number, format and quality of variables available, WC data can prove useful for a variety of analyses. Other data sources are likely needed for certain calculations, such as total employment by industry or employer, in order to determine injury or illness rates.

Comparison of WC data with other surveillance data can be used to better estimate of actual incidence or prevalence of a given occupational injury or illness. Techniques such as capture-recapture can be employed. Tracking conditions over time can identify changes in patterns, and can be used to measure the impact of interventions, by industry, occupation or even condition. However differences in coding systems must be identified, and can make linking, comparing or contrasting data sets challenging.

On-going changes to coding systems can also present a challenge. Industry and diagnostic coding, for example, are transitioning to new structures that do not provide for translation across systems, much less over time. Other variables may not be in a useful format. In Oregon, for example, occupation has generally been transcribed directly from the narrative written on the forms, with frequent misspellings and inconsistent titles. Such data are impossible to analyze.

5. Model for Interventions

The partnerships established for data sharing also have proved successful for pursuing interventions. The state WC agency can pass information for EOE analyses to the state OSHA program. WC insurance company loss prevention staff made use of clusters, trends and patterns identified to target specific employers or industry categories.

B. Interstate Collaborations and Technical Assistance

EOE has provided materials and consultation to several states. The New Jersey Department of Health and Senior Services, Occupational Health program contacted EOE following conversations at the 2002 CSTE annual meeting to discuss how to approach the state WC agency. In addition to offering justifications for enforcement and surveillance programs to work together and for health department surveillance to have access to WC data, EOE advised occupational surveillance program representatives to request all data and not ask the WC agency to filter in any way.

Oregon has consulted extensively with the Washington State SHARP program regarding codes, text fields and building algorithms to identify specific conditions within WC data. Washington has also provided information and materials on poison oak, and allowed the adoption of educational materials they produced in Oregon.

IV. Integration of Occupational Health and Safety Surveillance into Mainstream Public Health

A. Coordination with Public Health Informatics

Coordination with Public Health Informatics (PHI) programs has been a priority for Oregon's occupational surveillance section since those programs began. We work closely with that section on data formats and other standards, with close communication through section representatives.

The most obvious link to PHI is the potential to gain access to data through the National Electronic Disease Surveillance System (NEDSS). The NEDSS program currently focuses on data from Emergency Department (ED) visits. Programs that wish to have access to these data must pay for initial programming, and may incur further costs. Given that workers with acute or even chronic dermatitis are rarely seen in ED and that personal identifiers are not available, EOE has chosen to pursue other data sources for Occupational Dermatitis (OD), but continues to work with and monitor the progress of NEDSS.

OD is not a reportable condition in the state of Oregon. Thus, treatment and billing of OD illnesses are currently identified and tracked through distinct data systems, but we continue to communicate with PHI programs to ensure that occupational data are or will be integrated and captured whenever possible.

EOE has also actively engaged the state Biological and Chemical Terrorism preparedness and the Emerging Infections programs to integrate occupational health into those response and information systems.

B. Occupational Health Involvement in Other Public Health Programs and Organizations
EOE continually seeks ways to include occupational health in other Public Health (PH) programs, and has had some success. Within the Office for Disease Prevention and Epidemiology (ODPE), we continue to maintain information sharing relationships with the Injury Prevention and Epidemiology (IPE) and Asthma programs, both of which used to reside in EOE. Our staff play an active role in the Asthma program, now part of the Health Promotion and Chronic Disease Prevention section where we also work with Cancer Registry and Tobacco programs to address occupational issues.

In collaboration with ODPE's Acute and Communicable Disease section (ACD), we have been successful in working on latex glove usage in health care. Through ACD, we raised the issue with the Association of Professionals in Infection Control (APIC) and conducted a survey of Oregon's APIC membership regarding latex-safe policies. This activity increased their awareness of EOE expertise and resources, and we have directly assisted APIC members in the development and implementation of Latex Safe policy for individual health care facilities.

We've been highly successful in coordinating efforts with the Environmental Services & Consultation (ESC) section of OPHS in Latex Allergy prevention. Our collaboration with ESC has helped them to understand the risk to food service and other workers using latex gloves, to employees and clients. As the regulating agency for restaurants, they have been key partners in outreach to the restaurant industry, directly and through local health department personnel, who train and certify food service workers and inspect restaurants and day care centers. EOE staff sought input from the Office of Family Health's Perinatal and Child Health section in developing a Latex glove Health Alert for childcare workers. Our desire to protect the workers coincided with their concern for infant exposure during diaper changes and food preparation.

With an established relationship, we have also assisted in the compiling and editing of a childcare manual to ensure appropriate language on glove safety and the recommendation to use non-latex glove alternatives. We have also participated in the Healthy Kids Learn Better initiative between public health and the state Department of Education, raising issues regarding the environment in which staff work and children learn.

A rash outbreak in public schools called for cooperation among state agencies/entities. EOE's participation in the outbreak initially came through our ACD section. EOE's medical epidemiologist and industrial hygienist worked closely with local health department (LHD) staff to investigate the high number of rashes among staff and schoolchildren in seven counties. Oregon was the only state identified with multiple workers (teachers and staff) affected. Latex allergy prevention information became part of the follow up to providers in the school districts where the outbreaks occurred. EOE staff contributed to an article entitled "Rashes Among Schoolchildren – 14 States, October 2, 2001 – February 27, 2002" appeared in the March 1, 2002/Vol. 51/No. 8 Morbidity and Mortality Weekly Report (MMWR) Visit the MMWR website for the article: http://www.cdc.gov/mmwr/PDF/wk/mm5108.pdf.

We have made concerted efforts to integrate occupational health into the state Bioterrorism (BT) preparedness program, housed in ACD, and with the Emergency Medical Services (EMS) section of Office of Public Health Systems (OPHS). We continue to emphasize that most of the

reported bioterrorism-related exposures were occupational, however our role has remained peripheral. The EOE Industrial Hygienist has worked part-time on the BT program in the state and worked with other states to address chemical and occupational hazards. In response to anthrax concerns, EOE gathered information, developed and distributed guidelines on appropriate personal protective equipment (PPE) for emergency responders and medical staff when evaluating the reports of suspected anthrax. EOE also developed guidelines for postal and mail-handling workers. These guidelines were mailed to target groups, posted on the web, and used by federal OSHA and officials in other states. We also have educated other public health staff about possible skin reactions to the smallpox vaccine.

EOE seeks opportunities to increase awareness and response to occupational injuries and illnesses in Local Health Departments (LHD). Almost 90% of LHDs participated in a 2001 occupational health needs/capacity assessment survey. They identified dermatitis among the top five occupational health priorities and more than half reported that they have responded to questions from the public about occupational health. LHD staff requested EOE assistance with occupational health issues, including education, dissemination of information, and technical assistance and training.

EOE began producing a newsletter for LHD staff and other interested parties in the state, to keep them informed about programs, and educate them in their specific areas of interest and concern. The EOE electronic newsletters that were initiated in 2002 address many of the informational needs stated in the summary needs/capacity report. EOE regularly participates in the annual Oregon Epidemiology (OR-Epi) meeting, and includes occupational health presentations to this diverse group of LHD personnel as often as possible.

EOE also actively encourages LHD staff attendance at the annual Western Regional Epidemiology Network meeting (WREN), ensuring that multiple people from each office receive invitations and soliciting those in the area to present and/or give input on topics.

EOE collaborates with a variety of private and public organizations to increase awareness and knowledge of occupational risks, hazards, and the resources available through our section and others. These partners have included industry groups (ORA, APIC), labor (UFCW Local 555, SEIU Local 49), a private worker's compensation insurance carriers, and Oregon Departments of Agriculture, Forestry, and Fish and Wildlife. With all of these organizations, continued contact is critical to maintain their awareness of our programs and resources. Given on-going contact, we are confident that the frequency of referrals, questions and contacts will continue to increase.

C. Involvement of Other Public Health Programs/Organizations in Occupational Health

Most Public Health programs are not occupation-oriented, therefore it has been a continuous challenge to increase awareness of OD and other work-related conditions, particularly given the numerous competing priorities.

ODPE's Acute & Communicable Disease (ACD) section routinely refers non-infectious case reports to EOE. In the past several years they have referred occupational and environmental issues of concern from Local Health Departments and health care providers, including pesticide poisoning, dermatitis, mold and other Indoor Air Quality (IAQ) issues in the workplace, and

general inquiries. Because this relationship is based upon communications with ACD staff who are familiar with EOE expertise and programs, there is a danger that if these staff leave, referrals might not continue. This is particularly problematic with the physical distance that now exists between the sections. We are also not certain how complete referrals are from ACD.

OPHS' ESC has asked EOE for consultation and input for testimony related to latex allergy issues. They relied upon us for the scientific input for public hearing and legislative testimony preparation. The Oregon Environmental Health Association occasionally contacts us or we contact them regarding work-related and environmental issues.

EOE staff participates in the Oregon State Association of Occupational Health Nurses (OSAOHN). A membership in the Oregon State Association of Occupational Health Nurses (OSAOHN) is an excellent means for EOE to expand it's networking and partnering capacity with Oregon's occupational community. In 2002, members of OSAOHN's Governmental Affairs committee began networking with 8 various organizations, including the Oregon Department of Human Services, EOE, that have some involvement in occupational and environmental health. . EOE submitted an article requesting case reports on contact dermatitis from Dextron III, transmission fluid in the November 2002 Newsletter Volume 3, Issue 2.

V. Prevention and Intervention Activities

Oregon's occupational dermatitis (OD) surveillance program strongly feels that applying the data gathered to identifying, prioritizing, carrying out and evaluating prevention activities is the ultimate purpose of surveillance. Following is the outline of how this process was conducted, with explanations and evaluation results.

A. Identification and Prioritization of Prevention Needs

Data from all sources are reviewed and analyzed, as explained in Section II. The trends and patterns seen highlight possible areas for intervention. Considerations for prioritizing conditions and causal factors include not only the basic frequencies and rates, but also the severity of the problems. The number or percentage of people affected is weighted by the extent of the health impact (disabling), the potential for impact on future work and for disrupting other aspects of the workers' lives, and recurrence.

While these data and analyses provide a starting point for consideration areas for action, EOE also takes into account the environment. We also examine other sources of data to gauge if this problem is common elsewhere, what, if any, prevention strategies have been tried. These data were often not published, but elicited from contacts and relationships with NIOSH and other funded states.

Many other questions are asked to prioritize prevention targets. Is there a readily identifiable target population? Does prevention seem possible, even easy, or is there no obvious mechanism for implementing change? Are current partners likely to be interested in the topic? Is it in their self-interest? (Will it financially help them, enhance their status or ability to recruit/market?) Might other entities be interested? Who is most able to make or facilitate an intervention?

B. Developing Intervention Strategies

While EOE does this initial review of the potential for prevention, findings are shared with data partners and others, as widely as possible, given the confidentiality constraints of all collaborators. The addition of multiple perspectives is invaluable to determining realistic priorities and strategies, but also to ensuring the commitment of partners to the longer-term process.

The recruitment of new or additional partners has not always been smooth. Many potential partners were not aware of the hazard or risk. Educating employers and industry groups on the health impact of a hazard on their workers and potential for staff turnover is not always sufficient to elicit interest or collaboration, and other issues in their self-interest should be identified and pursued. For example, restaurant owners, the industry group and suppliers did not respond quickly or in great number to the data on workers' compensation claims from reactions to latex glove use in their business. However, they became quite concerned upon learning about cases of sensitized customers having reactions to the latex proteins that are deposited on the food they consume and the potential for legal action should a very someone suffer an anaphylactic shock from exposure at their restaurant.

Development of educational materials with recommendations for reducing or preventing OD is usually the starting point for data-driven interventions conducted by EOE, because this can be done fairly quickly with limited staff and other resources. Refinement of materials and dissemination is generally done in collaboration with as many partners as possible. More intensive educational efforts are encouraged among partners with access to target groups and resources to organize and facilitate efforts.

C. Evaluation of Prevention and Intervention Strategies

Evaluation is a critical component of all intervention efforts. The difficulty in measuring final outcomes in public health interventions is widely recognized, and the Oregon dermatitis surveillance project has employed a dual strategy to evaluate interventions in occupational dermatitis. Below are descriptions of the attempts to evaluate EOE intervention efforts, including materials developed and disseminated; publication of findings; media; presentations and outreach; individual assistance; and policy change.

1. Educational Materials Developed and Disseminated

Oregon's OD surveillance program employs a variety of ways to disseminate data and communicate information relevant to education and prevention in order to prompt voluntary prevention actions, and serve to build alliances among constituents who seek to prevent cases in occupational settings. In many instances, data are incorporated into prevention communications.

In the OD surveillance program, interventions are implemented using public and private mechanisms. For example, a private workers compensation insurer takes EOE prevention recommendations and communicates them to those insured customers who are potentially impacted by the hazard. This provides further awareness of the issues and incentive for voluntary participation among the affected industries.

Types of Information Disseminated
• Aggregate data summaries
• Case histories
• Data analysis
• Hazard information
• Prevention information
• Program progress
• Prevention resources
Venues for Dissemination
• Phone calls and E-mail requests
• Listserv distribution
• Presentations at:
o Legislative and Public hearings
o Meetings and conferences
• Communiqués
• Articles in trade and professional periodical Newsletters
• OHS website and website linkages
• Peer-reviewed publications
• Verbally in the course of:
o participation on committees and consortiums
o networking with occupational health professionals & providers
o collaborations (with agencies, employers, unions, organizations, etc.)
o contacts with the general public, employers, and workers
Targets for Dissemination
• General public
• Local, regional, and national advocacy and other community-based organizations
• Occupational health professionals and providers, other public health professionals
• Labor organizations
• Employers, management and workers
• Industry organizations
• Federal, state, local and tribal government agencies (health and other)
• Loss-prevention personnel at WC insurance companies

Two major categories of educational materials were developed as part of this project. Copies of these educational materials are included in Appendix B.

a) Latex Allergy Alerts that describe contact dermatitis and allergic reactions that can develop with the use of latex gloves in the work place. The content and style of the Alerts were tailored to different target industries. The Alerts also provided information on alternatives to latex gloves in several occupational settings. Based upon our on-going relationship, an Oregon Department of Agriculture (ODA) inspector reported latex glove use by workers at a nutritional supplement manufacturer. EOE staff developed and provided ODA with a Latex Allergy Alert for the Nutritional Foods & Supplements Industry. The inspector shared the information with the company's health and safety manager. The inspector was encouraged to use the Alert in his field

inspections and was directed to our website for further information. Alerts are on our website http://www.healthoregon.org/dermatitis.
Feedback/Measures of Success: Approximately 40,000 Latex Glove alerts were distributed, in English and Spanish, to target groups (restaurants, child care centers, grocers and distributors, agriculture, food processing establishments, and the nutritional foods and supplements industry). A list of disseminating organizations is included in Appendix C. Many of these organizations not only promoted replacement of latex gloves with safer alternatives, but also supported the change in the Oregon Food Code Rule prohibiting the use of latex gloves in the food industry went into effect. A systematic evaluation was conducted and is detailed in Section C below.

b) A poison oak poster, information about a skin protectant protocol, and training documents that facilitate identification of poisonous plants and provide guidance on minimizing contact with these plants were developed and distributed to logging, agriculture and construction industries through WC insurance companies' loss prevention personnel.
Feedback/Measures of Success: Helicopter logging workers liked using the skin protectant product; also wilderness forest fighters that have been using it and similar products. There was a dramatic reduction in plant related dermatitis claims in the targeted industry. There were no plant related dermatitis claims during the course of the intervention with the heli-logging firm, and for a period of time thereafter.

c) EOE staff met with the OHS Child Care Coordinator, to discuss ways that the Latex Allergy prevention messages might be disseminated more widely among childcare providers. Through EOE staff participation on the agency's childcare committee, we were able to have latex allergy prevention information included in the Oregon Child Care Health & Safety Handbook. 5000 copies were distributed in Fall 2002 alone, with many subsequent copies distributed via Portland State University. This information has now become a permanent part of the policy information for all childcare providers throughout the state.

2. EOE Website

In addition to the printed educational materials, much education about occupational hazards and prevention occurs as presentations, trainings, and as individualized responses to inquiries in the form of letters, and through the print and electronic media, and by visits to the project website The EOE website, **http://www.healthoregon.org/dermatitis,** continues to serve as a conduit for OD information. The website generates requests and inquiries within Oregon, as well as from other states and even internationally.

Feedback/Measures of Success

The EOE/OD website received 7616 visits in a 6-month period, over 900 more than the previous reporting period.

3. Publication of Finding.

An article based on the Poison Oak Prevention Project, "The Feasibility of Using Skin Protectant Products and Education to Prevent Poison Oak in Loggers", was published in the September 2002 issue of the *Wilderness & Environmental Medicine* journal. See Appendix C for a copy of the article. Based upon investigation of multiple workers and numerous children affected by rashes in schools, EOE staff contributed to an MMWR article (March 1, 2002/ Vol. 51 / No. 8) "Rashes Among Schoolchildren – 14 States, October 4, 2001 – February 27, 2002".

We also put an informal alert out to the occupational health provider network via the Oregon State Association of Occupational Health Nurses (OSAOHN). EOE staff enlisted the membership's help in reporting case information regarding Dextron III. This was subsequently presented to OSAOHN membership at their November 2002 meeting, and an article was included in the Government Affairs section of the November 2002 and February 2003 OSAOHN newsletters *(Information, Education)* To date, we have not received any actual case reports or anecdotal reports of contact dermatitis due to the use of Dexton III.

4. Media

On November 12 and 13, 2002, an interview with EOE staff was aired on Oregon Public Broadcasting. The interview was in response to a call from a reporter asking about our reaction to the ½ page Malaysian Rubber Export Promotion Council (MREPC) ad that appeared in the Oregonian on 11/06. EOE staff provided the reporter with background information about the public health risks associated with exposure to powdered latex among sensitized individuals. The part of the interview that was aired included information about risks from exposure to powdered latex gloves among employees and sensitized customers. Oregon Public Broadcasting also aired information about the fact that DEHP is not linked to vinyl gloves, but may be linked to other plastic items that people (especially children) can have prolonged contact with.

5. Presentations/Outreach

EOE conducted numerous educational and outreach presentations under the Occupational Dermatitis Surveillance program that have been reported in the semi-annual progress reports to NIOSH. These efforts included trainings and presentations for specific agencies and organizations, the medical school and schools of public health in Oregon, medical and occupational health professional associations, workers' compensation insurance companies, hospitals.

Of particular note, EOE helped Oregon-OSHA plan and deliver a two-day OD training for their entire consultation and enforcement staff. EOE, NIOSH and federal OSHA staff participated in the OR-OSHA Training Nov. 13 -14, 2002, in Salem, OR. *(Education)*

6. Assistance to Individual Establishments

EOE Staff assisted the Oregon State Hospital, Lebanon Community Hospital, Saint Charles Hospital and Rogue Valley Medical Center in the process of developing facility-wide latex safe policies. Staff worked with the Infection Control Nurses at each facility. We suggested the formation of a focused committee to address the issue of latex allergy recognition and prevention, along with evaluating information about appropriate alternative products. The importance of including surgical, medical unit, housekeeping, purchasing, volunteer, and food service staff was emphasized. A packet of information was mailed to the facility that included NIOSH Alerts, websites and glove resources

7. Policy Change

A major component of our strategy is to simultaneously work within the State administrative structure to seek policy change, rule change, or legislation that will mandate occupational dermatitis prevention within targeted occupations and industries. The increased awareness among various interested parties, and the experiences of employers who have made voluntary changes

(often showing the economic feasibility of dermatitis prevention, and providing data on the effectiveness of preventive efforts), serve to increase the constituency for proposed policy and rule change. Once policy and rule changes have been adopted, information on these policy and rule changes is incorporated into a further round of information dissemination. This strategy has been particularly effective in preventing latex glove allergies (see case report below) in the restaurant industry.

D. Case Study – Latex Gloves in Food Service

The following latex allergy in food service case report illustrates how surveillance data and EOE dissemination activities resulted in policy changes and in stimulating the actions of other organizations that have a direct impact on latex glove use. The ability of EOE to directly measure the impact or success of dissemination efforts on other agencies is more direct than the impact on the public served by those agencies. EOE's understanding of the impact of education, data dissemination, and intervention activities on prevention has previously been based on responses, inquiries, and requests for assistance from intermediary agencies and industries, rather than on direct access to affected workers. However, the implementation of the Oregon rule prohibiting the use of latex gloves in industries that process or serve food on March 1, 2002, provides an opportunity for the systematic evaluation of that policy change on glove use. A systematic evaluation of the impact of the rule is currently being conducted in collaboration with local county health department restaurant inspectors in 10 of Oregon's 36 counties.

EOE proposed the rule change to ban the use of latex gloves in all food service establishments after several years of efforts to promote voluntary changes in the restaurant industry. While being successful in achieving changes with many restaurants, especially larger independent and chain restaurants, it was difficult to reach many of the small family-owned facilities throughout the state. Reports of worker and customer reactions continued to be received, indicating that the impacts of voluntary efforts alone were limited. Because the state food code was opened to adopt new national regulations, EOE was able to propose language to the rule change. This was done with the initial support of the Oregon Restaurant Association (ORA), the leading industry trade association.

EOE staff prepared verbal and written testimony for a March 20, 2002 Proposed Rulemaking Public Hearing that included a prohibition on the use of latex gloves in food service establishments. EOE input addressed: 1) the health risks related to latex, 2) latex as a food safety issue (food contamination/adulteration), and 3) the public health rationale of prohibiting latex gloves in food service. We were disappointed by testimony by the ORA, who suddenly reversed their prior support for the rule change. The ORA representative voiced a preference for non-legislative solutions and phasing out latex through voluntary and educational efforts. Opposition to the rule change was also voiced by the Washington D.C.-based Malaysian Rubber Export Promotion Council.

The rule change was adopted, after which EOE and ESC collaborated in developing a communiqué targeting restaurant owners, managers, and workers regarding the upcoming prohibition on latex gloves. We felt it important to continue giving advance notice on the latex glove prohibition in food service and encourage restaurants to make the change before the March 1, 2003 deadline. An e-mail was sent to all county Environmental Services managers in Sept. 2002, giving them a heads up

that a supply of communiqués and two new Latex Allergy Restaurant Alerts would be shipped to county health departments by the first of October. Copy of the communiqué and the alerts were also sent electronically. Printed hard copies (36,000 copies) of the materials were mailed to local county health department for distribution during scheduled restaurant inspections. Every restaurant and mobile food unit in the state is inspected twice per year. Thus, all restaurants received the handouts by March 2003, the effective date of the latex glove prohibition.

The Press Release announcing the new Food Code Rule resulted in an increase in phone calls, e-mails and project work related to Latex Allergy education and prevention. A complete listing of these communications is detailed in Appendix C.

Federal testimony. The U.S. Food and Drug Administration (FDA) invited EOE staff to present testimony at a hearing in Washington, D.C. on hazards of latex glove use in restaurants. FDA is evaluating the need to ban latex glove use in food services. No formal action has yet been taken.

E. Systematic Evaluation of Prevention and Intervention Efforts

The formal evaluation of the occupational dermatitis program prevention and intervention efforts began largely after they had occurred. Therefore, the evaluation does not contain a typical process evaluation, comparing the actual with the intended intervention, but focuses instead on a description of the interventions, the apparent intervention strategies used, and on identification and/or assessment of the public health impact of the programs.

Measures of Effectiveness

SOSC's understanding of the impact of education, data dissemination, and intervention activities on prevention has previously been based on responses, inquiries, and requests for assistance from intermediary agencies and industries, rather than on direct access to affected workers. Collecting effectiveness or outcome data from voluntary preventive efforts adopted by various industries has been limited to anecdotal data because of the lack of systematic data collection. However, in the past year, planning for more formal evaluations of the impact of latex glove policy has been accomplished after Rule adoption. For example, a systematic evaluation of the impact on glove use of the March 1, 2003 Oregon Rule prohibiting the use of latex gloves in the food service industry is currently being conducted in collaboration with health department restaurant inspectors in 10 counties. The addition of latex gloves to the county health department restaurant inspection criteria as specified by the Rule provides the data collection basis for a systematic evaluation that otherwise would have been significantly biased or anecdotal. Program process evaluations planned for the future will be based on a formal logic. Estimation of impact of educational and preventive efforts on public health also comes from responses and requests for technical assistance from affected industries, regulatory agencies at the local, state, and federal level, and from other sources. While obviously non-systematic, this information and requests are valuable sources of evaluation data, and identify the needs of collaborating agencies and industries.

Impact Evaluation: Oregon Restaurant Latex Glove Use Survey

In June 2003, EOE contracted with Strategic Options Consulting, Inc. to conduct a telephone survey that will assess the impact of the March 1, 2003 Food Code Rule prohibiting the use of latex gloves in restaurants in Oregon. The survey is being conducted with 10 local county health

department environmental health specialists that perform scheduled restaurant inspections in August 2003. The telephone survey will include questions about the frequency of latex glove usage in restaurants prior to and after the implementation of the Rule, and narrative comments. Reductions in the use of latex gloves will serve as the primary means of evaluating the impact of the mandatory Food Code Rule.

There will be additional impact evaluation follow-up on this project, including obtaining data from an additional county that is one of the most populous counties in Oregon. We will seek quantitative data from actual restaurant inspection reports on the number of violations of rule 9B (use of latex gloves) in fixed restaurant establishments and in temporary restaurant establishments. Once we have this data, we can compare data for the same timeframe in 2004 to ascertain changes in glove usage and in rule compliance over time.

Overall, based upon this qualitative assessment the rule change has been effective, with few restaurants using latex gloves for food preparation and service after the March 1, 2003 rule change. Anecdotally, there is a great deal of variation from county to county as to how many restaurants use any type of gloves for food preparation and service. Outreach to temporary restaurants, and to glove suppliers used by the restaurant industry might help reduce latex glove use further. This outreach should include mail order suppliers that advertise in restaurant trade journals. The restaurant latex glove use survey tool is included in Appendix A.

The Poison Oak wildland firefighters pilot intervention report and the tools to evaluate the project will be submitted and distributed as soon as practical.

Section VI. Federal and State Relationships

A. NIOSH Support Provided

Overall, EOE has been pleased with the support received from NIOSH. Unfortunately, without NIOSH's financial support, occupational surveillance would not exist in Oregon. EOE staff has collaborated with the lead NIOSH expert in occupational dermatitis (OD) from previous SENSOR-dermatitis funding cycles, and he continued to act as our unofficial project officer for technical issues. He and his colleague were particularly helpful in our investigation of dermal reactions associated with auto mechanics using Dextron III automatic transmission fluid. He was familiar with another state looking into the same product, and facilitated communications.

NIOSH has also been very supportive and enthusiastic about our surveillance model and our accomplishments. A letter that our NIOSH technical advisors elicited from the Director of NIOSH was sent to a private insurance company in an effort to open the door for a claims data sharing agreement. This letter was instrumental in establishing the private/public collaboration and a unique partnership that has greatly enhanced our OD surveillance system.

The State Occupational Surveillance Consortium (SOSC) listserv established by NIOSH has provided a mechanism for sharing important information and resources, as well as a forum for raising issues of debate among representatives of the funded states. NIOSH has organized meetings that were beneficial for program development and more intensive sharing of method for dealing with challenges, new approaches to data collection and analysis, and technical

aspects of surveillance. Much of the organization, however, ultimately fell to the states with core surveillance funding, with the late assignment and early departure of the SOSC Project Officer. The lack of a replacement key contact did not signal great support.

B. Assessment of SOSC

The SOSC structure and process has had a positive effect on program development. The Consortium model promoted collaboration, rather than competition, among the funded states. While the SOSC listserv was helpful, the fact that it was supported by federal agency meant that care had to be taken to avoid making statements that could be construed as lobbying. A more open forum, including others involved in occupational health surveillance, would be helpful, perhaps in addition to listserv dedicated to individual funding sources.

More regular meetings helped to enhance relationships among states and created more opportunities for collaboration on projects. More frequent and relatively small meetings promote cross-border partnerships. Our state so firmly believes in the value of interaction between states that we took the initiative to organize a SOSC-based meeting in conjunction with our annual Western Regional Epidemiology Network meeting.
The extension of the SOSC states' work to include piloting of the CSTE indicators is an example of a very productive and positive outcome of this network.

C. State Support Provided

Oregon's public health agency receives no state funding for most public health functions, and especially for occupational surveillance. The nature of state support has been demonstrated by giving permission to respond to occupational health Requests for Application and approving EOE staff to travel when required by the cooperative agreement or to participate in national workgroups (when the travel is sponsored). EOE strongly believes that the state should support this work, we hope to identify and to secure stable state funding to build and maintain core occupational surveillance capacity. However, in the current tight fiscal times, such support is not likely.

VII. Recommendations

Following are EOE recommendations based upon our experience under this Enhanced Surveillance Model cooperative agreement with NIOSH, and building on previous and concurrent surveillance projects. Suggestions are separated into those for other states and those for NIOSH. Each has an introduction with general recommendations, followed by three categories: Partnerships, Surveillance Systems, and Interventions.

A. State Surveillance Programs

In addition to the following specific recommendations, Oregon strongly advises other states to determine measures for evaluation from the start, when the goals and aims for an occupational health surveillance program are established. We also gained tremendously from building relationships and working with other states, particularly neighboring states, and highly recommend building those linkages whenever possible.

Partnerships

1. If you can identify common goals, the correct person and the company's circumstances allow, we strongly recommend developing partnerships with private sector insurers for sharing claims data and for developing and implementing prevention programs.
2. For each private or public partner, develop a formal agreement, clearly defining roles and responsibilities, and include specific language for how and when tasks will be done, such as data sharing, data management, analysis, data use, reporting and publication.
3. Formal (survey conducted by third party) or informal (discussion) evaluation of partnerships is very helpful, and should be done routinely to ensure expectations are being met by all participants, so that they will continue to collaborate.

Surveillance Systems

1. Collect complete metadata for each electronic data source used. Be sure to understand why the data were collected, when and by whom, who entered them and what, if any, quality control and/or assurance processes are followed. Be cautious of data quality. Document well all data management protocols, data sets used and analysis steps.
2. Explore all possible uses of the fields of the data sets you access, for case identification and for detecting causal agents or circumstances that will be useful for interventions. Analyze narrative fields, when available, for both.
3. Collect as many identifiers as possible, but always protect confidentiality—your program's reputation and partnerships depend upon trust.
4. If using multiple data sources, accept the limitations of multiple coding systems and prepare for future changes with new versions of each coding scheme.
5. Core Surveillance program focus, rather than condition specific surveillance, builds capacity at the state level that can be flexible enough to meet local needs and better respond to partner priorities.

Interventions

EOE strongly believes that surveillance programs must use the data collected and analyzed to prevent or reduce occupational injuries or illnesses. The most basic and easiest method is to develop and disseminate educational materials based upon relevant, local data. While certain subjects and types of materials may have limited audiences, we advocate targeting multiple levels concurrently: workers (e.g. unions, other organizations, employers or site inspectors), employers/management (e.g. industry or trade groups, insurers or regulatory agencies), and safety or loss prevention groups (e.g. WC insurers, health care organizations, condition-specific advocacy groups, company or industry safety committees).

Whenever possible, leverage public interest and contacts made through education efforts with the data and local stories to encourage policy change. This offers the best chance for making the greatest and longest lasting difference.

Another important strategy is to consider the entire cycle of the hazard – from production to supply to use – to identify opportunities to make changes. The responsible parties may extend beyond state borders, as can the benefits.

B. NIOSH

While NIOSH's help has been invaluable in this process, there are several ways the agency can further promote occupational surveillance at the state level. Perhaps the greatest challenge facing Oregon and many other states is the current fiscal crisis at the state level and the lack of certainty about future federal funding. This long-term instability has created a turnover in staff and with each new funding cycle and change in national focus, the occupational health capacity and infrastructure are threatened in states that rely exclusively on federal resources. Expanding capacity to new states is desirable, but should not be done at the expense of established programs. While it may be beyond the purview of NIOSH, longer funding periods would also provide greater stability.

The cooperative agreement model is an excellent one for occupational health surveillance. Under this particular program, however, the agency lacked a key formal contact person. While other NIOSH staff were very available and helpful, a central staff connection would be very helpful.

Improvements in the NIOSH website have been very much appreciated. This resource could be even more useful to states if it provided an on-line clearinghouse of occupational health surveillance documents and materials, by state and topic area. This would assist new programs and those expanding into new areas. Information about data sources and interventions that has not yet been published could at least be referenced on the website with a state contact.

Partnerships

1. Although the state occupational health surveillance community is currently fairly small, there are a number of other players involved in many of our program areas. A centralized effort through NIOSH to identify and at least provide basic information and web links for these organizations or institutions would be very helpful.
2. EOE advocates publicizing and otherwise recognizing Public/Private and other unique partnerships in order to encourage them in other jurisdictions. EOE's receipt of the NORA award helped gain acceptance of the existing partnerships and may provide incentive for further collaborations.
3. If NIOSH were able to create a very public, strong relationship with federal OSHA, perhaps for a specific project that included sharing of data, state OSHA agencies might be encouraged to follow the model and become more involved in surveillance activities.

Surveillance Systems

NIOSH, perhaps with the Bureau of Labor Statistics, would greatly advance the work of occupational health surveillance in states if they could create or lead efforts to standardize or develop compatible occupational illness and injury-related coding systems that link with those used in the private and public sectors so that data will be more comparable for analysis. (e.g. nature of injury and illness codes; occupation coding; industry coding). If a standard is not possible, the creation of common tool for translating between systems would be invaluable.

Interventions

NIOSH could provide a clearinghouse for educational materials developed by each state. Background information should be included, such as what, if any, testing was undertaken, which states have adopted, reading level and into what languages it has been translated.

Appendix A

Models for Other States

Occupational Dermatitis Program Partnership Evaluation Report: Quantitative and Qualitative Evaluation of Partner's Narrative Survey Responses

Evaluation Report Prepared and Submitted by:

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Purpose of Survey:

The purpose of the survey of partners in the Occupational Dermatitis Surveillance Program was to evaluate the strengths of and challenges to the collaboration or partnership with Xxxx. Because these ratings include the ratings of OHS and Xxxx partners, the findings reflect the functioning of the collaboration and the partnership and do not constitute an independent evaluation of the Occupational Dermatitis program, per se. The partnership is defined as the collaboration of organizations and individuals involved in the project. The information obtained from the survey will be used to strengthen the partnership and optimize the program.

Survey and Response Analysis Methods:

A written survey was developed in April-June 2003 by the evaluator in collaboration with EOE staff. Three surveys tailored to the roles of partners were developed: 1) A survey for 3 Xxxx loss prevention staff, 2) The same survey containing a supplemental question relevant to a single Xxxx information systems staff person, and 3) Differently-worded survey tailored to the roles of four EOE staff persons. A copy of the three surveys are attached to this report. The surveys for Xxxx loss prevention and EOE staffs were supplemented with additional questions in late June 2003, when additional important partnership issues were identified as being important for the survey. The supplemental questions for both partners were identical, and consisted of 2 closed and 2 open-ended questions (supplemental questions are attached to the primary surveys).

The primary survey consisted of open-ended questions that necessitated narrative responses (9 in the Xxxx, and 6 in the EOE surveys, respectively). There also were closed questions to which a quantitative rating on a 5-point scale could be applied (10 in the Xxxx and 4 in the EOE surveys, respectively).

The initial survey was mailed in May 2003 and the supplemented survey was re-mailed to the same partners on June 19th.

The respondents were informed that the survey was an independent evaluation of the occupational dermatitis partnership. Respondents also were informed that the survey was confidential and that individual responses would not be revealed to other Occupational Dermatitis Surveillance Program collaborators. Only themes and information that did not reveal

the identity of individuals would be shared with partners. All members of the collaboration received surveys, including OHS/Occupational Dermatitis staff.

Each of the two survey mailings included a self-addressed stamped envelope in which the respondent could return his/her completed survey to the evaluator. The name and contact information of the evaluator was included in the survey cover sheet in case respondents had questions about the survey or confidentiality procedures.

All responses to the survey were entered by the evaluator verbatim into an MS Access database created for the survey. After checking the entries against returned surveys, quantitative and narrative responses were downloaded into an Excel spreadsheet for analysis.

Quantitative ratings were averaged across respondents. Narrative responses were analyzed by identifying and coding topics and key words. Domains and subcategories were first developed by examining each response in the context of all responses for that respondent, and then themes for that respondent were synthesized. The themes were then combined and categorized across respondents (Patton, M. Qualitative Research & Evaluation Methods (3rd Ed.), Thousand Oaks, CA: Sage Publications, 2002).

Levels of Survey Participation:

Survey Return Rate: Surveys were mailed to four Xxxx and to four OHS staff persons. Five completed surveys were received, for an overall participation rate of 63% for individuals; both organizations sent surveys were represented. The surveys received from Xxxx were from loss prevention staff only.

Completeness of Surveys: In the 5 surveys that were returned to the evaluator, there were a total of 46 open ended questions. Of those, 17 (37%) were not completed (left blank) by respondents.

Survey Completion Dates:

Respondents were asked to write the date they completed the survey. Surveys were completed in the period June 25, 2003 through July 18, 2003, and received by the evaluator between June 30th and July 25th, 2003.

Duration of Participation in Occupational Dermatitis partnership:

Respondents were asked to indicate how long they had been collaborating or participating in the program. The five respondents persons indicated they had been involved for 48-108 months (range), with an average of 65 months (5.4 years). [No other demographic or descriptive information was requested in the survey.] The extensive durations of participation in the Occupational Dermatitis Surveillance collaboration would suggest that all respondents had extensive working knowledge of the program.

Quantitative Survey Responses:

There were questions in the survey that asked respondents to rate their agreement with a statement on a 5-point scale (Question 2a. – 9b. and Supplement b.) or asked for a comparative satisfaction rating (Question 10 and Supplement a.). The "Agreement" and "Satisfaction" rating scales are reproduced below. The mean rating for each question by the Xxxx and the EOE respondents are listed in **Table 1**.

Agreement Question Scale:

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

Satisfaction Question Scale:

5__ Very Satisfied 4__ Satisfied 3__Neutral 2__ Dissatisfied 1__ Very Dissatisfied

0__ Not Applicable (I have not been involved with other data sharing collaborations.)

Table 1: Quantitative Ratings		
Survey Question	Xxxx Average Rating	EOE Average Rating
2a. The benefits outweigh the time and effort needed to participate in the Occupational Dermatitis Surveillance program.	5.0	5.0
3a. XXXX: My working relationships with staff at the Occupational Dermatitis Surveillance program (or Xxxx Insurance Company) are good.	5.0	
3a. EOE: My working relationships with staff at the Xxxx Insurance Company are good.		3.0
4a. My organization has no trouble in providing the agreed upon data at the agreed upon frequency.	5	3-4
5a. XXXX: The data summaries that I receive from the Occupational Dermatitis Surveillance program are useful to my organization.	5	
5a. EOE: The Xxxx data summaries are useful to my organization.		4.0
6a. XXXX: The intervention strategies that are recommended by the Occupational Dermatitis Surveillance program are good.	3.5	
7a. XXXX: The support for loss prevention provided by the Occupational Dermatitis Surveillance program is good.	4.5	
8a. XXXX: The support for claims reduction provided by the Occupational Dermatitis Surveillance program is good.	4.0	
9a. XXXX: I would recommend that other Workers Compensation insurance companies in Oregon work with the Occupational Dermatitis Surveillance program.	4.0	
9b. XXXX: I would recommend that my parent or affiliate companies in other states work in a similar relationship with their occupational programs in their state health departments.	4.0	
10. XXXX: Compared with other data sharing collaborations you have been involved with, how would you rate your overall satisfaction with your participation in the Occupational Dermatitis surveillance program?	0.0 (N/A)	
Supplement a. Please rate your satisfaction with the Xxxx/ Oregon Health Services EOE/ XXXX three-way partnership that was initiated for the NORA Partnerships in Surveillance and Prevention Grant (7/1/2000 thru 6/30/2003)	2.0	1.7
Supplement b. Please rate your agreement with the following statement: "I would consider joining a three-way partnership with Xxxx and XXXX in the future."	2.0	2.0

Both Xxxx and EOE highly rated the benefits of participating in the collaboration. Xxxx ratings were higher than EOE ratings on ratings of working relationships and on ability to provide the agreed-upon data. Both organizations found the respective data summaries useful to them, but Xxxx found that recommended intervention strategies, support for loss prevention and claims reduction were somewhat less useful. Xxxx would recommend this type of partnership to others. Xxxx staff were unable to do a comparative satisfaction rating because they had not participated in other similar partnerships. While the working relationships between Xxxx and EOE were rated highly by both partners, the three-way partnership (between Xxxx, EOE, and XXXX) was much less valued by Xxxx or EOE (supplemental questions a. and b.).

Open-Ended Survey Responses:

Open-Ended Questions:

The following is a list of survey open-ended questions to which a narrative response was requested:

Xxxx Survey Questions:

a. In your own words, please describe the benefits that you and your organization are getting from participation in the Occupational Dermatitis Surveillance Program?
b. Are there expected benefits you or your organization are not getting? If yes, please describe.
c. Please describe any changes you would like to see in the working relationships.
d. Please describe any changes you would like to make in providing the agreed upon data.
e. Please describe any changes you would like to see in the data summaries you receive.
f. Please describe any changes you would like to see in the intervention strategies.
g. Please describe any changes you would like to see in loss prevention support.
h. Please describe any changes you would like to see in claims reduction support.
i. Is there anything else that you would like to say about the Occupational Dermatitis Surveillance Program?

EOE Survey Questions:

a. In your own words, please describe the benefits that you and your organization are getting from participation with Xxxx in Occupational Dermatitis Surveillance?
b. Are there expected benefits you or your organization are not getting? If yes, please describe.
c. Please describe any changes you would like to see in the working relationships.
d. Please describe any changes you would like to make in providing the agreed upon data.
e. Please describe any changes you would like to see in the data summaries you provide to Xxxx.
f. Is there anything else that you would like to say about the Occupational Dermatitis Surveillance Program?

Supplemental Questions on EOE and Xxxx Surveys:

a. If you answered either Not Sure, Disagree Somewhat, or Definitely Disagree to the following statement: "I would consider joining a three-way partnership with OHS-EOE and XXXX in the future.", please indicate below why you would not consider joining this 3-way partnership or are unsure.

b. Please describe any changes that you would like to see happen in the Occupational Dermatitis Surveillance Program partnership in the future (e.g., choice of participating partners, project components, agreements, etc.)

Partnership Themes based on Narrative Responses:

Theme Development Procedures:

The following themes have been constructed from specific statements made by respondents. The narrative survey responses are not organized according to the question that was asked, but according to commonalities in the themes contained in the responses to all the questions. The themes are necessarily overlapping and not mutually exclusive, and examination of the themes as a group is likely to lead to the most comprehensive understanding of narrative survey responses.

Symmetry in Activities:

Although many of the questions are about the same activities in both organizations or symmetrical in that the activities are similar, some aspects of the partnership are uni-directional (e.g., support for Xxxx loss prevention and claims reduction by EOE). Some themes therefore only will apply to one organization.

Themes Absent from the Narrative Responses:

In an analysis of narrative responses, it is as important to note what was not said in addition to what was said. In a confidential, survey of a partnership, one might expect respondents to provide critical and negative statements about the collaboration or about individuals. Among the narrative responses received by the evaluator, there were no direct criticisms of organizations or individuals, and there were no statements that questioned the value of the partnership between Xxxx and EOE. The evaluator interprets this lack of criticism as an indirect affirmation of the value of the Occupational Dermatitis Surveillance Program to these two partners. The affirmation of value is supported by positive themes described below. [However, both EOE and Xxxx respondents were generally negative about the 3-way partnership involving XXXX.]

Narrative Themes Common to Xxxx and to OHS Respondents:

2-Way Collaboration (Xxxx and OHS):

In general, Xxxx survey respondents valued the collaboration with OHS as an organization and with talented OHS staff. They also found that the collaboration had multiple benefits to them, including obtaining data not otherwise available, the satisfaction of collaboratively developing intervention strategies, and the opportunity to have a positive effect on worker health. There is a desire to continue the collaboration with OHS even though a considerable time commitment has been needed for a successful partnership.

OHS respondents similarly valued the 2-way collaboration with XXXX and there was a strong desire to continue the partnership. OHS staff mentioned benefits of collaboration that were similar to XXXX: helping improve worker health through interventions and policy change, access to data not otherwise available, satisfying work on important problems, and the opening of a unique connection with the private sector.

Discussion/Interpretation: Both XXXX and OHS gave the most favorable numerical rating to the question about the benefits of the partnership outweighing the time and effort needed for participation. These ratings are consistent with the very favorable view of the partnership evident above in the XXXX and OHS narratives. The satisfactions gained from the partnership seem to be similar in both organizations. However, in response to the question about whether working relationships with XXXX were good, OHS respondents provided an average rating of 3 ['not sure']. The reasons for the 'not sure' average rating may be useful for OHS and perhaps XXXX to explore.

3-Way Collaboration (XXXX, OHS, and XXXX):

XXXX survey respondents were largely negative about the 3-way collaboration, and described poor communications, coordination, and decision making within that partnership. They also pointed out that the collaboration lacked value to them, and that important benefits of collaboration were denied to them by unilateral actions of one partner, which has resulted (is resulting) in actual harm occurring to their reputations and organization.

OHS staff also were negative about the 3-way partnership, citing the damage to the collaboration from the actions of one partner. There was great reluctance to engage in such a partnership in the future, perhaps considering it only if there were a formalized process with extensive proscriptive rules.

Discussion/Interpretation: In contrast to the high degree of satisfaction with the 2-way partnership voiced by XXXX and OHS, both sets of respondents were very dissatisfied with the 3-way partnership that included XXXX. These negative assessments also were evident in the low numerical ratings given in response to Supplemental question a, which ranged from dissatisfied to very dissatisfied. There was significant reluctance about future 3-way partnerships, with respondents either declining or considering a new 3-way with the same partners only after very extensive safeguards and standards had been established. Whether or not the continuing negative consequences to XXXX or OHS organizations, or to the 2-way

partnership, from the experience with the 3-way partnership can be minimized may be an important issue.

Clarity and Structure:

A desire for more clarity of roles and responsibilities, and a formalization of future collaborative process and structure was voiced by XXXX respondents. More frequent communications and written agreements also were mentioned as desirable changes in any future collaborations with EOE or others.

Similarly OHS survey respondents emphasized having more structure and contact within the partnership, more meetings and communications about interventions, and formal schedules for reports and data summaries.

Discussion/Interpretation: Both partners express similar desires for a more clearly defined, formalized, and structured 2-way partnership, with more frequent meetings and communication. Avoiding the problems that occurred in the 3-way partnership, improving the 2-way partnership, and optimizing work flow and interventions are four sub-themes that are plausibly related to the desire for clarity and structure.

Existing and New Interventions:

Despite other multiple benefits of the 2-way collaboration and the assessment of the dermatitis intervention as a success, the financial impact of XXXX claims reduction from the dermatitis intervention has been modest so far. There is a desire to seek other interventions for other hazards that will benefit the health of restaurant workers and XXXX. A larger database was mentioned as one way to identify other potential areas of successful intervention. In this regard, information on other potential hazards from OHS is desired.

OHS respondents also expressed interest in meeting with XXXX to explore other areas of intervention that would result in benefits to worker health and XXXX claims reduction.

Discussion/Interpretation: XXXX benefits from and appreciates the interventions that emerge from the 2-way partnership. In a numerical ratings question, there was some agreement within XXXX that interventions strategies recommended by the Occupational Dermatitis Surveillance program were good (mean rating of 3.5). However, an important consideration for XXXX is the magnitude of cost savings generated by the interventions emerging from the collaboration. Seeking ways to facilitate claims reduction savings at XXXX (and cost reductions at OHS) as part of newly identified interventions may strengthen support for the partnership and further sustain the collaboration. The desire to identify new interventions also raises the question of whether most of the benefits from existing occupational dermatitis interventions may already have been realized. XXXX is seeking new information from OHS that would help the partnership to identify new potential intervention areas.

Xxxx – Only Themes:

Needs or Changes Not Identified:

XXXX staff did not identify any expected benefits from the 2-way collaboration that they were not getting. They also saw no need for changes in data provision or in data summaries

provided to them. They also did not identify any changes that were needed in loss prevention support.

OHS-Only Themes:

Desire to provide good data to Xxxx:

OHS respondents felt that it was important to understand how useful the data summaries and other aspects of the partnership were to XXXX. In that regard, more feedback from XXXX about the value of OHS work and the actions taken by XXXX was desired. Also, learning how OHS work has assisted XXXX to take actions to decrease occupational dermatitis would help improve the usefulness of products and the identification of new data that might be useful to XXXX. A streamlined, standardized format and more-frequent schedule of data summary provision to XXXX was one example of a proposed change that could increase value.

Partnership with Xxxx as Prototype:

OHS respondents saw the partnership with Xxxx as unique and could therefore serve as a model for others. The development of similar partnerships with other insurance carriers might also be sought.

OHS Resources:

More resources will be needed in OHS if additional intervention areas are identified with XXXX, if an increased schedule of reports and data summaries are to be provided, if the usefulness of reports to XXXX is to be increased, and if the partnership is to become more structured with more frequent meetings and communications. The concern about resources may help explain the 'not sure' to "agree somewhat' ratings provided to the question about whether OHS had no trouble in providing the agreed upon data at the agreed upon frequency (average rating of 3-4).

Summary:

In general, both organizations valued the 2-way partnership but were dissatisfied with the 3-way collaboration. Both wanted to continue the 2-way partnership, but with increases in clarity and structure in the collaborative efforts. There was a desire to explore new intervention opportunities, to increase communications and feedback from each partner, and to ensure that resources are available to support the work.

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503-988-3663 x22290
John.X.Dougherty@co.multnomah.or.us

Supplemental Questions (6-16-03 draft) (Occup Derm Suppl)

a. Please rate your satisfaction with the Liberty NW/ Oregon Health Services EOE/ OHSU three-way partnership that was initiated for the NORA Partnerships in Surveillance and Prevention Grant (7/1/2000 thru 6/30/2003): (please circle or check one response)

5__ Very Satisfied 4__ Satisfied 3__Neutral 2__ Dissatisfied 1__ Very Dissatisfied

0__ Not Applicable

b. Please rate your agreement with the following statement: "I would consider joining a three-way partnership with OHS-EOE and OHSU in the future."

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

c. If you answered either 1, 2, or 3 to question b., please indicate below why you would not consider joining this 3-way partnership or are unsure:

_____

_____

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_____

d. Please describe any changes that you would like to see happen in the Occupational Dermatitis Surveillance Program partnership in the future (e.g., choice of participating partners, project components, agreements, etc.)

_____

_____

_____

_____

_____

_____

_____

Occupational Dermatitis Surveillance Survey (May 2003)

Today's Date: _____

1. **How long have you been a collaborating with Oregon Health Services (Environmental and Occupational Epidemiology) in the Occupational Dermatitis Surveillance program?** _____

2. **Expectations and Benefits of Participation:**

   a. Please rate your agreement with the following statement: **"The benefits outweigh the time and effort needed to participate in the Occupational Dermatitis Surveillance program."** (please circle or check one response)

   5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

   2__ Disagree Somewhat 1__ Definitely Disagree

   b. In your own words, please describe the benefits that you and your organization are getting from participation in the Occupational Dermatitis Surveillance Program?

   _____

   _____

   _____

   _____

   _____

   _____

   c. Are there expected benefits you or your organization not getting? If yes, please describe:

   _____

   _____

   _____

   _____

   _____

   _____

3. Working Relationships:

a. Please rate your agreement with the following statement: **"My working relationships with staff at the Occupational Dermatitis Surveillance program are good."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to see in the working relationships:

_____

_____

_____

_____

4. Data Provision:

a. Please rate your agreement with the following statement: **"My organization has no trouble in providing the agreed upon data at the agreed upon frequency."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to make in providing the agreed upon data.

_____

_____

_____

_____

5. Usefulness of the Data Analyses:

a. Please rate your agreement with the following statement: **"The data summaries that I receive from the Occupational Dermatitis Surveillance program are useful to my organization."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to see in the data summaries you receive:

_____

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_____

6. Usefulness of Intervention Strategies:

a. Please rate your agreement with the following statement: **"The intervention strategies that are recommended by the Occupational Dermatitis Surveillance program are good."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to see in the intervention strategies:

_____

_____

_____

_____

7. Value of Support for Loss Prevention Efforts:

a. Please rate your agreement with the following statement: **"The support for loss prevention provided by the Occupational Dermatitis Surveillance program is good."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to see in the loss prevention support:

_____

_____

_____

_____

8. Value of Support for Claims Reduction:

a. Please rate your agreement with the following statement: **"The support for claims reduction provided by the Occupational Dermatitis Surveillance program is good."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to see in the claims reduction support:

_____

_____

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_____

9. Recommendations:

a. Please rate your agreement with the following statement: **"I would recommend that other Workers Compensation insurance companies in Oregon work with the Occupational Dermatitis Surveillance program."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please rate your agreement with the following statement: **"I would recommend that my parent or affiliate companies in other states work in a similar relationship with their occupational programs in their state health departments."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

10. Overall Comparative Satisfaction:

Compared with other data sharing collaborations you have been involved with, how would you rate your overall satisfaction with your participation in the Occupational Dermatitis surveillance program? (please circle or check one response)

5__ Very Satisfied 4__ Satisfied 3__Neutral 2__ Dissatisfied 1__ Very Dissatisfied

0__ Not Applicable (I have not been involved with other data sharing collaborations.)

11. Is there anything else that you would like to say about the Occupational Dermatitis Surveillance program?

Thank you for completing the survey; your confidential feedback will be very helpful in optimizing the program.

Survey of Occupational Dermatitis Surveillance Program Participants – EOE Version

6-25-03 DDB/JAD

Introduction

In June 2003, a revised survey regarding the Occupational Dermatitis Surveillance Program was sent to [redacted] loss prevention and information systems staff. The revised survey included questions relating to the OHSU component of the partnership.

Feedback from EOE participants in the partnership is an important component of the evaluation. Therefore, the [redacted] survey has been revised to include questions relevant to EOE's experience with all partnership components. Questions that are from a loss prevention perspective are not included in the EOE version of the survey – the remaining questions are essentially the same.

As an EOE staff person involved in the partnership with [redacted] and/or [redacted] please consider filling out this survey. This survey is confidential. Your responses to this survey will be known only to the evaluator; identities of respondents and individual responses will not be revealed to any Oregon Health Services staff person. The responses to the questions will be pooled and issues and themes identified. Only themes that do not reveal the identity of individuals will be shared (example: "program products are valued positively and more frequent dissemination of information was desired"). However, it is likely that some themes will be identified as being more likely to have originated from EOE than from [redacted]. [This survey was not sent to [redacted]J.]

The questions are a mixture of survey items on which to rate your agreement or disagreement, and spaces for you to write your comments. The survey should take about 20 minutes to complete. Please return completed surveys to John Dougherty's mailbox in a sealed envelope by July 11th.

Yours truly, John Dougherty

John A. Dougherty, PhD
Program Design and Evaluation Services
426 SW Stark St, 6th Floor
Portland, OR 97204
503-988-3663 x22290
John.X.Dougherty@co.multnomah.or.us

If you have questions about the purpose, confidentiality, uses or other aspects of the survey, please feel free to contact me directly.

Supplemental Questions (EOE Occup Derm Suppl)

a. Please rate your satisfaction with the [redacted] EOE/ [redacted] three-way partnership that was initiated for the NORA Partnerships in Surveillance and Prevention Grant (7/1/2000 thru 6/30/2003): (please circle or check one response)

5__ Very Satisfied 4__ Satisfied 3__Neutral 2__ Dissatisfied 1__ Very Dissatisfied

0__ Not Applicable

b. Please rate your agreement with the following statement: "I would consider joining a three-way partnership with [redacted] in the future."

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

c. If you answered either 1, 2, or 3 to question b., please indicate below why you would not consider joining this 3-way partnership or are unsure:

_____

_____

_____

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_____

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_____

d. Please describe any changes that you would like to see happen in the Occupational Dermatitis Surveillance Program partnership in the future (e.g., choice of participating partners, project components, agreements, etc.)

_____

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_____

Occupational Dermatitis Surveillance Survey – EOE Version

Today's Date: _____

1. **How long have you been collaborating with [redacted] in Occupational Dermatitis Surveillance?** _____

2. **Expectations and Benefits of Participation:**

   a. Please rate your agreement with the following statement: **"The benefits outweigh the time and effort needed to participate with [redacted] in Occupational Dermatitis Surveillance."** (please circle or check one response)

   5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

   2__ Disagree Somewhat 1__ Definitely Disagree

   b. In your own words, please describe the benefits that you and your organization are getting from participation with [redacted] in Occupational Dermatitis Surveillance.

_____

_____

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_____

   c. Are there expected benefits you or your organization are <u>not</u> getting? <u>If yes</u>, please describe:

_____

_____

_____

_____

_____

_____

3. **Working Relationships:**

a. Please rate your agreement with the following statement: **"My working relationships with the staff at [redacted] are good."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to see in the working relationships:

_____

_____

_____

_____

4. **Data Analysis Reports Provision:**

a. Please rate your agreement with the following statement: **"My organization has no trouble in providing the agreed upon claims data analysis reports at the agreed upon frequency."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to make in providing the agreed-upon data.

_____

_____

_____

_____

5. **Usefulness of Data Summaries:**

a. Please rate your agreement with the following statement: **"The [redacted] data summaries are useful to my organization."** (please circle or check one response)

5__ Definitely Agree 4__ Agree Somewhat 3__ Not Sure

2__ Disagree Somewhat 1__ Definitely Disagree

b. Please describe any changes you would like to see in the data summaries you provide to [redacted]:

6. **Is there anything else that you would like to say about the Occupational Dermatitis Surveillance program?**

Thank you for completing the survey; your confidential feedback will be very helpful in optimizing the program.

MEMORANDUM

Date: May 7, 2002

To: Graham Slater, Research Manager
Oregon Employment Department

From: Michael Heumann, MPH, MA
Karen Southwick, MD, MPH
Department of Human Services, Health Services
Environmental & Occupational Epidemiology
800 NE Oregon Street, Suite 772
Portland, Oregon 97232

RE: Application for Access to Confidential Information for Conduct of Special Public Health Studies related to Occupational Disease and Illness

The Environmental and Occupational Epidemiology (EOE) section of the Oregon Department of Human Services is charged with disease/injury tracking and surveillance, in order to identify causes of these events and plan for interventions to prevent work-related diseases and injuries. One of our goals is to lower workers' compensation claims by reducing the risks associated with some Oregon occupations and industries.

EOE uses Workers' Compensation data from the Department of Consumer and Business Services (DCBS) to identify trends and patterns in occupational injuries and illnesses. However, the DCBS does not include information on the number of employees within a given company, industry or occupation. This information is essential for calculating rates of injury and disease and, therefore determining which Oregon workers are at higher risk.

In order to complete needed planning for our public health mission to reduce the burden of occupational injury and disease among Oregonians, we request access to this confidential information held by the Oregon Employment Department. An Oregon Employment Department law (ORS 657.665) allows for the use of confidential information by other governmental agencies. This sharing of information is both allowed and encouraged in areas of special public health studies. We are specifically requesting access to the database, Covered Employment and Wages (ES202).

This information will be used only in the conduct of epidemiological research on work-related injuries and illness in Oregon, and to assist the planning efforts of EOE and other government agencies responsible for preventing these illnesses or injuries or for serving injured workers. EOE will also use this information in planning efforts to assist employers and employees in preventing these injuries through our education, outreach, and policy consultation services.

The following are the citations of the enabling legislation and administrative rules for the Health Services branch of the Oregon Department of Human Services that cover general powers, special studies and confidentiality. (Note: The agency name was legislatively changed in 2001, and the agency formerly known as the Oregon Health Division is currently being referred to as Oregon Health Services.) Please also be assured that only employees with a need to use this data would have access and all have signed our agency's confidentiality agreement.

ORS 431.110 General powers of the Health Division (3) Make sanitary surveys and investigations and inquiries respecting the causes and prevention of diseases, especially epidemics.

OAR 333-19-005 (1-3) Conduct of Special Studies by the Division

(1) Authority. Pursuant to ORS 431.110 (3), the Division may conduct special studies with respect to the causes and prevention of diseases. Special studies shall be considered to include any collection of information about the health status of individuals or groups of individuals, other than the routine collection of birth, death, and marriage information as prescribed in ORS 423.

(2) Confidentiality of information. Pursuant to ORS 423.060 (1) all records of interviews, reports, studies and statements procured by or furnished to the Division in connection with these studies shall be confidential for the identity of individual patients.

(3) Protection of parties releasing information to Division. Pursuant to ORS 432.060 (2), the furnishing of morbidity and mortality information to the Division or to its authorized representatives does not subject any party furnishing such information to an action for damages.

Please let us know if you need any further information about this request, how we plan to use the data to develop risk reduction strategies, or the rules governing EOE. Also, we can provide a copy of the formal Memorandum of Agreemeent that we have signed with the Workers' Compensation Division of DCBS, which may serve as a model for an agreement between our agencies.

We appreciate this opportunity to work with the Oregon Employment Department in our effort to promote a safe and healthy working environment for all Oregonians.

Agreement Between
STATE OF OREGON
DEPARTMENT OF CONSUMER AND BUSINESS SERVICES
and
STATE OF OREGON
DEPARTMENT OF HUMAN RESOURCES
for
EXCHANGE OF CONFIDENTIAL INFORMATION

I. PURPOSE

This agreement is entered into by the State of Oregon, Department of Consumer and Business Services (DCBS) and the State of Oregon, Department of Human Resources to facilitate the authorized release of information and to protect the confidentiality of that information.

II. LIAISON AND COORDINATION

Ed Bissell, Manager of the Research and Analysis Section, is designated the point of contact on all matters associated with the implementation and administration of this agreement for the Department of Consumer and Business Services.

Michael Heumann, Epidemiologist, is designated the point of contact on all matters associated with the implementation of this agreement for the Department of Human Resources.

III. RESPONSIBILITIES

The Department of Consumer and Business Services will provide to the Department of Human Resources in an electronic medium certain workers' compensation claimant and injury information including, but not limited to:

Claimant characteristics such as name, address, occupation, industry, employer name and employer address,

Claim characteristics such as nature, body part, event, and source of injury,

The cost of providing this information will be paid by the Department of Consumer and Business Services.

The Department of Human Resources will provide to the Oregon Department of Consumer and Business Services:

Copies of all published articles and reports resulting from the research on Oregon injured workers.

The cost of providing this information will be paid by the Oregon Health Division.

IV. CONFIDENTIALITY

The worker information provided by DCBS to the Department of Human Resources is confidential and may not be disclosed to individuals or to the public, or to public agencies, federal, state or local except as provided by law and administrative rules. Accordingly, the Department of Human Resources agrees to:

Strictly enforce the confidentiality of workers' compensation claimant records,

Prohibit access to all individuals who are not employees of the Health Division of the Department of Human Resources,

Administer appropriate disciplinary action should a confirmed breach of confidentiality occur and notify DCBS of the incident and the action taken, and

Have all individuals with access to this information sign a confidentiality agreement.

V. AMENDMENTS

This agreement may be amended at any time with the concurrence of both parties. Amendments become part of this agreement only after the written amendment has been signed by the parties.

VI. TERM OF THE AGREEMENT

This agreement shall be in effect from the date signed by both parties through December 31, 2001.

Elinor Hall, Administrator	Dan Adelman, Administrator
Oregon Health Division	Information Management Division
Department of Human Resources	Department of Consumer and Business Services
Date	Date

FIREFIGHTER POISON OAK PROJECT – 2003 FIRE SEASON
HISTORY QUESTIONNAIRE

Your information will be kept confidential. Name and birth date are only needed to link the history with rash reports. Please complete the entire form and PLEASE PRINT.

Name: _____ Birth Date: _____ (mm/dd/yy)

Job Title: _____ Sex: Male Female

Fire District: _____ Contact Phone: (____) _____

1. How many wildland fires have you worked on in the last 5 years? _____

2. Have you ever had a rash from poison oak or poison ivy? Yes ____ No ____
(If No, Skip to question # 6)

3. How many times did you get poison oak during the last 5 years? _____

4. How many times did you get poison oak fighting wildland fires in the last 5 years? _____
   a. Have you left a fire due to poison oak rash in the last 5 years? Yes ____ No ____
   b. Did you lose work time due to poison oak in the last 5 years? Yes ____ No ____
   c. Did you file a workers' compensation claim for a poison oak rash in that time? Yes ____ No ____

5. Describe your typical rash reaction (please ✓one):

   Mild (some parts of body affected, no work lost) ____
   Moderate (some or all of body affected, 1-5 work days lost) ____
   Severe (most or all of body affected, 5 or more work days lost) ____

6. Please check (✓) if you have ever had any of the following:

   Asthma ____ Hay Fever ____ Hives ____ Eczema ____ Other Allergies ____

7. Please check (✓) if you have ever had a skin reaction to the following:

   Sunscreen ____ Insect Repellant ___ Poison Oak Skin Protectant ___ Other Skin Product ____

8. Please check (✓) any skin products you generally use while fighting wildland fires:

   Sunscreen ____ Insect Repellant ____ Poison Oak Skin Protectant ____ Lotion ____

9. Please list any skin medications you currently use:

   _____

Thank you for participating!

FIREFIGHTER POISON OAK PROJECT – 2003 FIRE SEASON

Oregon Department of Forestry
Oregon DHS – Health Service, Environmental and Occupational Epidemiology

CONSENT TO PARTICIPATE

The Oregon Department of Forestry (ODF) and the Oregon Department of Human Services-Health Services (DHS-HS) want to evaluate the effectiveness of skin protectants to help you and your crew mates prevent poison oak rash when fighting wildland fires. Enviroderm and Stockhausen, manufacturer and distributor of the skin product, have joined in this project. If you participate in this program, you will help us find out how to best prevent allergic contact dermatitis from poison oak under your work conditions.

Being in this research project is voluntary. If you decide to participate in this project, you will not have to give any information you do not want to give, and you are not bound in any way by this consent form to remain in the project if you do not wish.

What happens when you participate in the project? After you sign this consent, you will be asked to complete the History Questionnaire on the other side of this form. It asks about your history of poison oak rash during fire fighting activities. There are also questions about any allergies and your use of poison oak skin protectants, sunscreens and insect repellants.

You will receive training on identification and avoidance of poison oak, and how to use the skin protection product. By volunteering for this project you agree to follow the directions for use of skin products provided to your crew.

If you get a poison oak rash during the project, you are asked to complete a brief Rash Report. This short form helps describe when and on what part(s) of your body you developed the rash, how severe it is, how you treated it, and your use of skin products. We request you complete a Rash Report each time you get a rash while fire fighting. The Rash Report forms will be collected by the fire crew supervisor and forwarded to the ODF Safety Manager. ODF will forward copies of Questionnaires and Rash Reports to DHS-HS for analysis, then results will be reported back to ODF to be shared with all volunteers.

Confidentiality. All information you give us in the History Questionnaire and the Rash Report is confidential. All project staff members have signed a confidentiality agreement to keep your information confidential. Your name will not be in the same computer file with your Questionnaire or any Rash Report. Paper copies will be destroyed and final reports will present information about groups of firefighters, never identifying any individual.

If you have any questions about the project, contact either Deb Bogart, ODF Safety Manager at 503-945-7295 or Marilyn Scott, DHS-HS Industrial Hygienist at 503-731-4504.

Thank you for volunteering for this very important project!

I agree to participate in the ODF/DHS-HS Firefighter Poison Oak Project for the 2003 Fire Season.

_____ _____

Signature **Date**

Local Needs Assessment for Environmental and Occupational Health September 2002

Background

In 2001, the Environmental and Occupational Epidemiology Section of Oregon's Department of Human Services (DHS) developed a strategic plan and conducted a needs assessment to determine how it could best respond to counties' priorities in environmental and occupational health.

The needs assessment consisted of two components:

- Assessing Oregon's capabilities related to Healthy People 2010 goals and
- Conducting a survey of local health departments

Healthy People 2010 Goals

Healthy People 2010 has five major categories of goals for environmental and occupational health.

1. Outdoor air quality
2. Water quality
3. Toxics and waste
4. Healthy homes & communities
5. Infrastructure and surveillance

Data tables are available (see web address for data tables) that review Oregon's capabilities; in summary, Oregon's gaps in capabilities involve the following goals:

Toxics and Waste	**No consistent public health tracking for toxics**
Healthy Homes & Communities	**No consistent public health tracking**
Infrastructure and Surveillance	**Most goals tracked and addressed by Oregon data, but not all**

Outdoor air quality is addressed by the Department of Environmental Quality (DEQ), and some pollutants are tracked in parts of the state. Drinking water quality is addressed and tracked by DHS Drinking Water Program.

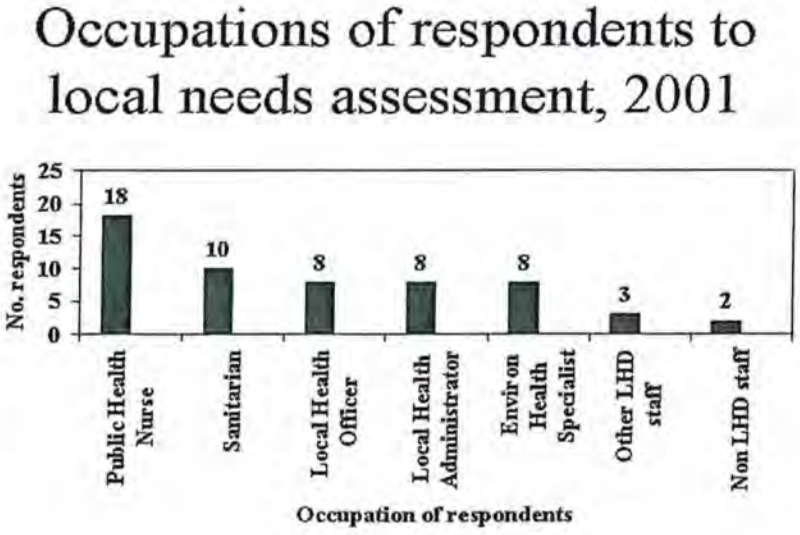
Local Needs Assessment Survey

We distributed written questionnaires during the Oregon Epidemiologists' Meeting (Or-Epi) 2001 and during two subsequent mailings in 2001 to local health departments.

We received surveys from 50 (a nice round number) respondents representing 33 (94%) of the 35 health departments or districts in the state. The map below shows the counties that participated in the survey.

Health departments and districts that participated in survey

People in a variety of different job positions responded to the survey:



Seven people indicated that they work under more than one job description.

Gaps in Services for Environmental Health

50% of respondents said that they need services not currently provided by DHS

The most common choices of gaps in services included expertise on:

- Indoor air quality (5 respondents)
- Mold and mildew (4 respondents)
- Issues of inadequate housing that impact health (2 respondents)
- Health in jails (2 respondents)
- Health effects of air quality (2 respondents)
- Ergonomics and repetitive motion injury (2 respondents)

All of the other issues were mentioned by only one respondent. A list of these gaps in services is included in Appendix A.

Local Priorities for Environmental Health

We asked survey respondents to identify their county's most important priority for environmental health. The most common top priority identified by counties was asthma, followed closely by mold/mildew and indoor air quality.

Top Priority Area	Number of responses (%)	
Asthma	8	(16%)
Mold/Mildew	7	(14%)
Indoor air quality	6	(12%)

Next we examined each county's three most important environmental health priorities.

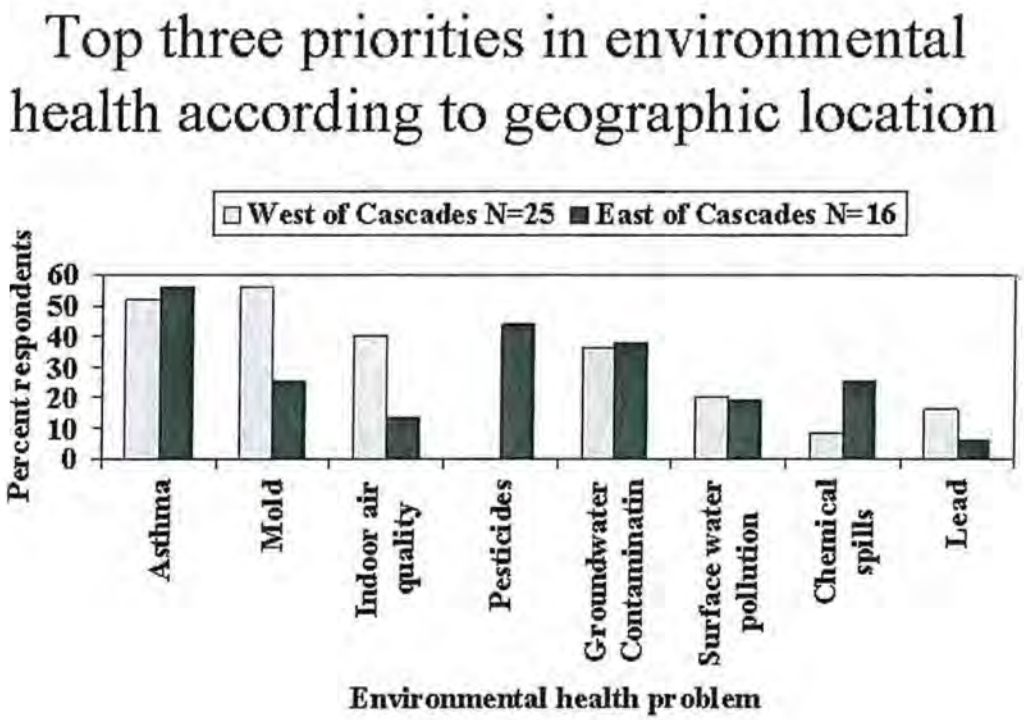
Asthma was mentioned by almost half the respondents as one of their three top environmental health priorities

The rest of the counties' three most important priorities are in Appendix B.

Differences in priorities between counties east and west of the Cascades

It's not surprising that the eastern and western counties had somewhat different environmental health priorities. For example, almost one quarter of the western counties said that mold was their top problem, while none of the eastern counties cited mold. Pesticide exposure was common as one of the top three priorities in eastern Oregon.

Similarly, there were some differences geographically with the top three environmental health priorities.



Eighteen respondents represented counties east of the Cascades and 31 respondents represented counties west of the Cascades. Eight respondents did not rank their priorities.

Calls from the public with environmental health questions

The majority of the respondents said that they are called upon by the public to answer phone questions about environmental health. More than 75% of all responding public health nurses, local health officers, and local health department administrators stated that the public asks them environmental health questions.

What are the topics the public asks about? The most common environmental health phone call questions were about mold/mildew (33%), indoor air quality (16%), quality of ground water (14%), asthma (10%), and lead (10%).

How can Oregon Public Health best help local health departments and districts with their environmental health issues?

The comments we received fall into four categories. The following are the categories and some examples of the comments.

1. Provide education and help with dissemination of information

Keep us updated on research on links between environmental factors and disease incidence (eg. specific air pollutants and asthma; pesticide exposure and Parkinson's etc.).

Keep providing information about agencies that will give public information. Keep providing information about health effects.

Develop pamphlets and other materials for public distribution. Develop an inventory of resources for consumers.

2. Provide technical assistance and training, including helping to take samples

Act as a referral agency when we don't have answers.

Provide training and engineering advice.

Provide information, consultation, on-site help in some cases. Testing of samples related to indoor air quality and molds/mildews.

Provide notification to local health departments with most current sampling results by zip code (mold/mildew, radon, asthma).

3. Provide moral support to counties

Validate answers provided by counties.

Joining LHD staff at community meetings.

Provide more visible support for agencies which are trying to maintain water quality in the Columbia River. DHS/HS has been deafeningly silent on the matter of dredging and stirring up contaminate sediments.

4. Provide financial aid

Dollars – pursue grants. LHD cannot afford programs!

Priorities for Occupational Health

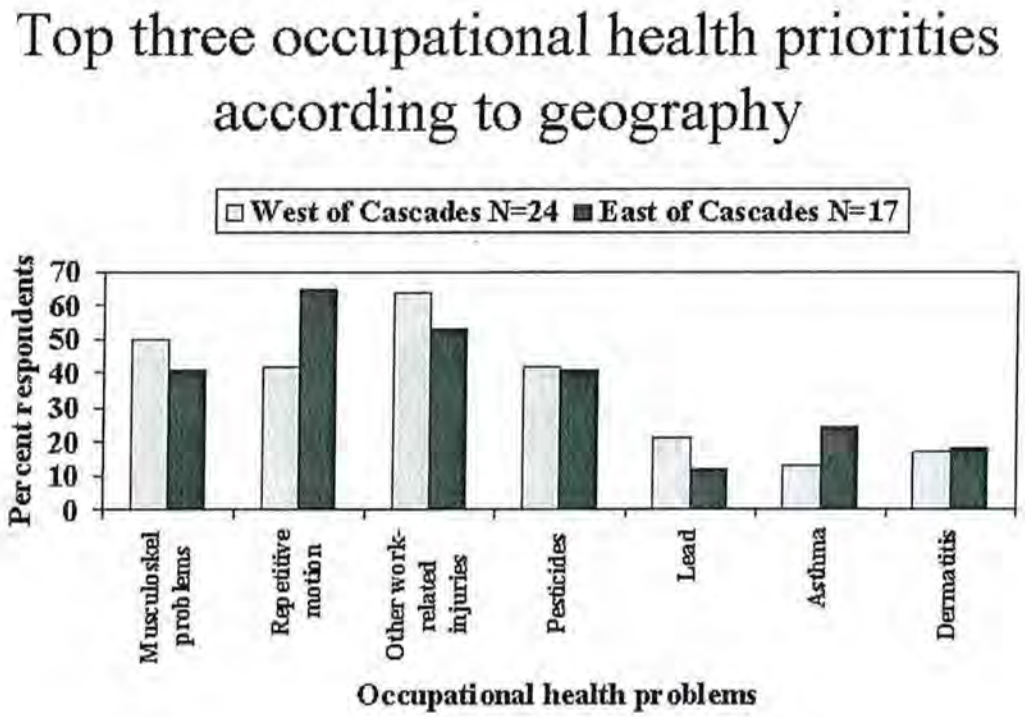
50% of respondents said that they get calls from public about occupational health.

75% of the respondents provided a top occupation-associated health problem in their area.

Top Priority Area	Number (%) N=50	
Work related injuries, including musculoskeletal problems, sprains, and repetitive motion injuries	23	(46%)
Occupational pesticides	6	(12%)
Asbestos	4	(8%)

Geographic differences in occupational health priorities

Once again there were geographic differences in the respondents' perceptions regarding the top priorities occupational health problems for their jurisdictions.



A chart of local health departments'/districts' top priority for occupational health echoed the chart of the top three occupational health priorities as listed above. Injuries, including musculoskeletal problems and sprains, repetitive motion injuries, and other work-related injuries were all the most common priorities.

How can Oregon Public Health help counties with occupational health problems? Here are some examples and comments from respondents:

1. Provide education and help with dissemination of information.

Facilitate work with other relevant agencies (especially OSHA), but keep us in the loop.

Repetitive motion is very common among Hispanics working in nurseries. How much does DHS/HS do to educate industry about this and ways to decrease the incidence, use of prevention, etc? Education to both employers and employees on how to reduce their risk of developing repetitive motion injuries, work related injuries and musculoskeletal strains and sprains.

Keep on providing the latest information to us concerning advances in occupation related illnesses.

Education on how to avoid injuries and work-place safety.

Occupational Health Clinic?

2. Provide technical assistance and training.

Act as referral agency when we don't have answers.

Provide training and engineering advice.

Provide information, consultation, on-site help in some cases. Testing of samples.

Conclusions

This survey was done before September 11 and environmental and occupational health priorities may have changed in the post 9-11 era. However, at the time of this survey, a wide variety of environmental and occupational health issues were reported to be important by participating representatives from local health departments and districts. The majority of survey respondents are asked by the public to answer questions about environmental health regarding a range of topics. Some priorities, such as molds and mildews and pesticide exposure did differ geographically.

Respondents identified several topic areas for which Oregon DHS, Public Health should have programs, but do not. The most common topics were indoor air quality and mold and mildew.

Public Health does not have indoor air quality or mold programs due to lack of federal funding for these issues. DHS does provide resource information regarding indoor air quality issues and mold remediation and health effects in the mold fact sheet and a list of building assessment companies. The National Pesticide Information Center (NPIC) and CROET both have mold

information available to the public as well as the EPA. The federal government is starting to address some of these issues. In June 2002, Congressman John Conyer, Jr. introduced HR 5040: The Untied States Toxic Mold Safety and Protection Act ("The Melina bill"). http://www.house.gov/conyers/Mold_Bill.pdf

The Environmental and Occupational Epidemiology (EOE) section are using these data to target strategies to dialogue with counties and areas that most need services related to these different program areas.

Specific Action Points:

- Asthma and Lead Programs are providing grant money to local health departments.
- The planning for an Environmental Public Health Tracking Network will start in 2003. This partnership will link data on environmental hazards and exposures with public health outcomes information. More information upcoming!
- The toxicology unit is providing mold information packets to counties and to the public.
- EOE started a quarterly electronic newsletter with updates. To subscribe, send an e-mail to OHS.EOE-News@state.or.us.
- The Superfund Health Assessment & Education Program (SHAEP) was started in 2001, which assesses public health impact of exposure to hazardous waste sites and provides community education. The SHAEP partners with Multnomah County Health Department, but provides assessments for sites in many counties.
- Federal level – addressing mold just starting to be addressed at a federal level.

Oregon DHS will continue to search for ways to expand programs to serve unmet local needs.

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If you need this information in an alternate format, please contact Deborah Profant at 503-731-4025.

Appendix A: Gaps in Current Environmental and Occupational Health Services Provided by Oregon DHS

Unmet Need	Number of Respondents
Indoor air quality	5
Mold and mildew	4
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Health effects of air quality	2
Ergonomics and repetitive motion injury	2
Recognition of sex workers as occupation	1
STDs acquired through casual sex on beaches/in housing	1
Fire camps	1
Chemical weapon disposal	1
Emergency response to terrorism	1
Radon	1
Health monitoring around Umatilla Weapon Depot	1
Work-related sun exposure	1
Repetitive motion injury	1
Needle stick injuries	1
Schools	1
Noise	1
Heavy metals in drinking water	1
Surface water/swimming	1
Public exposure to chemicals used in manufacture	1

Appendix B: Three most important environmental health priorities listed by each county.

Topic	Number of Respondents
Asthma	24
Mold/mildew	19
Ground water contamination	14
Indoor air quality	14
Surface water pollution	10
Pesticides	9
Childhood lead	8
Chemical spill emergencies	8
Air pollution	7
Clusters of non-infectious disease	5
Other heavy metals (than lead)	4
CO poisoning	4
Toxic waste sites	4
Adult lead	2
Contamination from industry	2
Latex glove allergies	2
Other	2
Temperature-related problems	1
Not ranked	3
None given	2
Provided more than three top priorities	5

Local Needs Assessment for Environmental and Occupational Health

February 2003

Oregon Department of Human Services
Environmental & Occupational Health
800 NE Oregon Street #827
Portland, OR 97232
(503) 872-4025

Local Needs Assessment for Environmental and Occupational Health

February 2003

BACKGROUND

In 2001, the Environmental and Occupational Epidemiology Section of Oregon's Department of Human Services (DHS) developed a strategic plan and conducted a needs assessment to determine how it could best respond to counties' priorities in environmental and occupational health.

The needs assessment consisted of two components:

- Assessing Oregon's capabilities related to Healthy People 2010 goals; and
- Conducting a survey of local health departments

HEALTHY PEOPLE 2010 GOALS

Healthy People 2010 has five major categories of goals for environmental and occupational health.

1. Outdoor air quality
2. Water quality
3. Toxics and waste
4. Healthy homes & communities
5. Infrastructure and surveillance

Data tables are available that review Oregon's capabilities. In summary, Oregon's gaps in capabilities involve the following goals:

Toxics and Waste	No consistent public health tracking for toxics
Healthy Homes & Communities	No consistent public health tracking
Infrastructure and Surveillance	Most goals tracked and addressed by Oregon data, but not all

The Department of Environmental Quality (DEQ), addresses outdoor air quality, and some pollutants are tracked in parts of the state. Drinking water quality is addressed and tracked by the DHS Drinking Water Program.

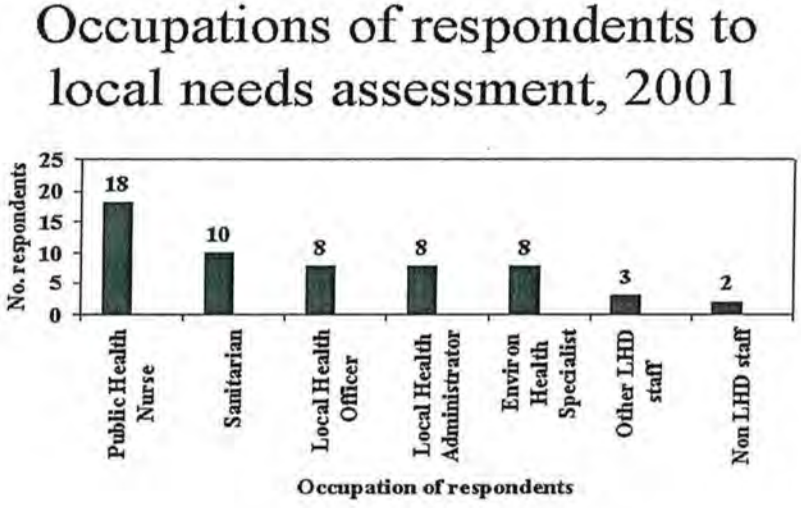
LOCAL NEEDS ASSESSMENT SURVEY

We distributed written questionnaires during the Oregon Epidemiologists' Meeting (OR-EPI) 2001 and during two subsequent mailings in 2001 to local health departments.

We received surveys from 50 (a nice round number) respondents representing 33 (94%) of the 35 health departments or districts in the state. The map below shows the counties that participated in the survey.

Health departments and districts that participated in survey:

People in a variety of different job positions responded to the survey:



Seven people indicated that they work under more than one job description.

Gaps in Services for Environmental Health

50% of respondents said that they need services not currently provided by DHS.

The most common choices of gaps in services included expertise on:

- Indoor air quality (5 respondents)
- Mold and mildew (4 respondents)
- Issues of inadequate housing that impact health (2 respondents)
- Health in jails (2 respondents)
- Health effects of air quality (2 respondents)
- Ergonomics and repetitive motion injury (2 respondents)

All of the other issues were mentioned by only one respondent. A list of these gaps in services is included in *Appendix A.*

Local Priorities for Environmental Health

We asked survey respondents to identify their county's most important environmental health priority. Asthma was the top priority identified, followed closely by mold/mildew and indoor air quality.

Top Priority Area	Number of responses	(%)
Asthma	8	(16%)
Mold/Mildew	7	(14%)
Indoor air quality	6	(12%)

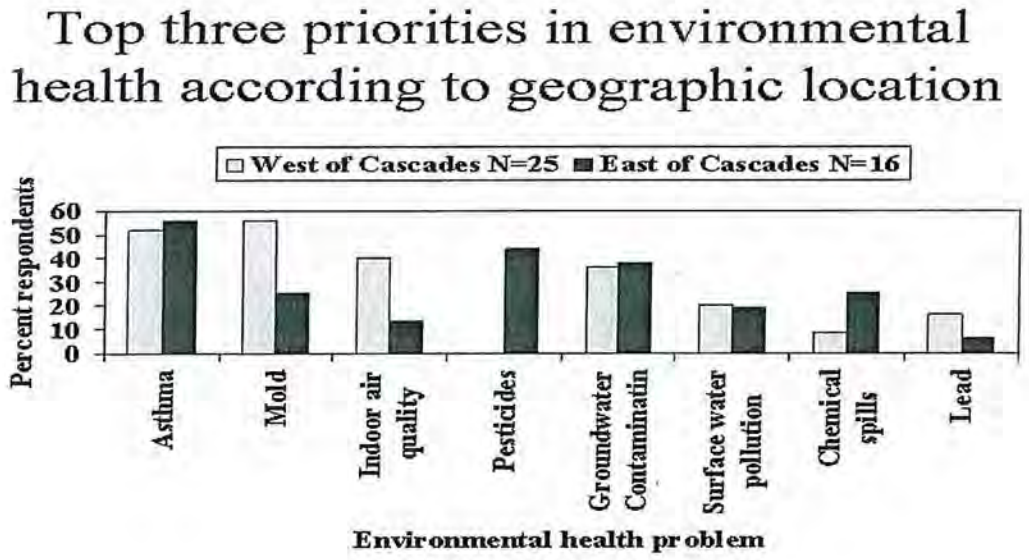
Next we examined each county's three most important environmental health priorities.

Asthma was mentioned by almost half of the respondents as one of their top three environmental health priorities.

See *Appendix B* for other counties' three most important priorities.

Differences in Priorities Between Counties East and West of the Cascades

It's not surprising that the eastern and western counties had somewhat different environmental health priorities. For example, almost one quarter of the western counties said that mold was their top problem, while none of the eastern counties cited mold. Pesticide exposure was one of the top three priorities in eastern Oregon. Similarly, there were some differences geographically with the top three environmental health priorities.



Eighteen respondents represented counties east of the Cascades and 31 respondents represented counties west of the Cascades. Eight respondents did not rank their priorities.

Calls From the Public with Environmental Health Questions

The majority of the respondents reported that they are called upon by the public to answer environmental health questions over the phone. More than 75% of all responding public health nurses, local health officers, and local health department administrators stated that the public asks them environmental health questions.

What are the topics the public asks about? The most common environmental health phone call questions were about mold/mildew (33%), indoor air quality (16%), quality of ground water (14%), asthma (10%), and lead (10%).

How can Oregon Public Health best help local health departments and districts with their environmental health issues?

The comments we received fall into four categories. The following are the categories and examples of the comments.

1. Provide education and help with dissemination of information

   Keep us updated on research of links between environmental factors and disease incidence (eg. specific air pollutants and asthma; pesticide exposure and Parkinson's, etc).

   Keep providing information about agencies that will give public information. Keep providing information about health effects.

   Develop pamphlets and other materials for public distribution. Develop an inventory of resources for consumers.

2. Provide technical assistance and training, including helping to take samples

Act as a referral agency when we don't have answers.

Provide training and engineering advice.

Provide information, consultation, on-site help in some cases. Testing of samples related to indoor air quality and molds/mildews.

Provide notification to local health departments with most current sampling results by zip code (mold/mildew, radon, asthma).

3. Provide moral support to counties

Validate answers provided by counties.

Join LHD staff at community meetings.

Provide more visible support for agencies that are trying to maintain water quality in the Columbia River. DHS/HS has been deafeningly silent on the matter of dredging and stirring up contaminate sediments.

4. Provide financial aid

Dollars - pursue grants. LHD cannot afford programs!

Priorities for Occupational Health

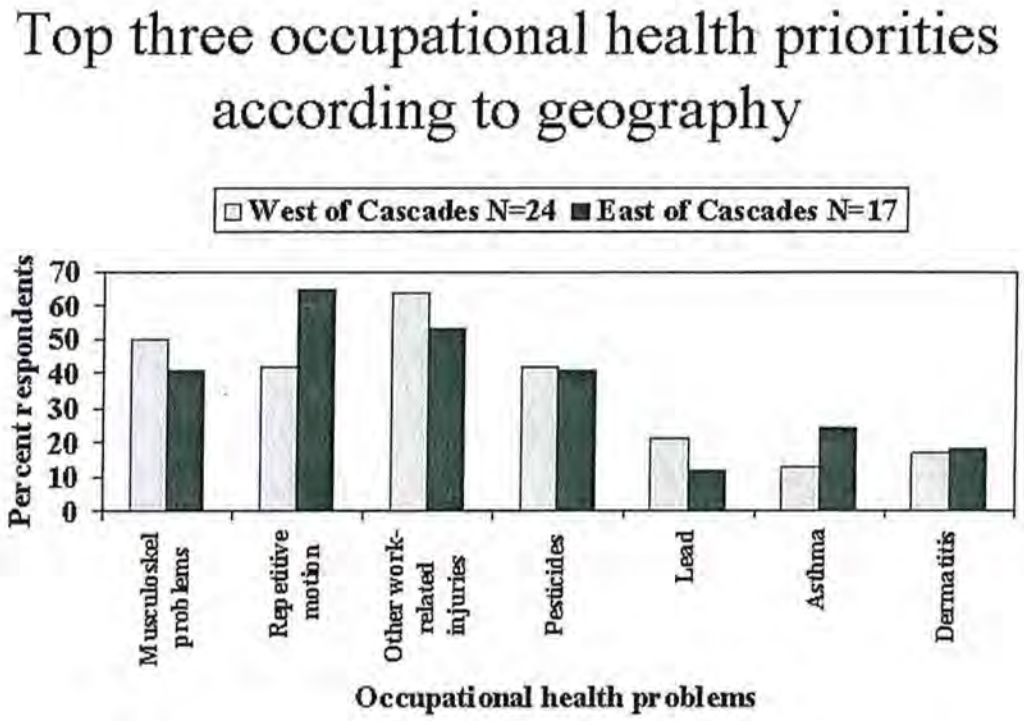
50% of respondents said that they get calls from the public about occupational health.

75% of the respondents provided a top occupation-associated health problem in their area.

Top Priority Area	Number	(%) N=50
Work related injuries, including musculo-skeletal problems, sprains, and repetitive motion injuries	23	(46%)
Occupational pesticides	6	(12%)
Asbestos	4	(8%)

Geographic Differences in Occupational Health Priorities

Once again there were geographic differences in the respondents' perceptions regarding occupational health problems and top priorities for their jurisdictions.



A chart of local health departments'/districts' top priority for occupational health echoed the chart of the top three occupational health priorities as listed above. Injuries, including musculoskeletal problems and sprains, repetitive motion injuries, and other work-related injuries were all the most common priorities.

How can Oregon Public Health help counties with occupational health problems? Here are some examples and comments from respondents:

1. Provide education and help with dissemination of information.

   Facilitate work with other relevant agencies (especially OSHA), but keep us in the loop.

   Repetitive motion is very common among Hispanics working in nurseries. How much does DHS/HS do to educate industry about this and ways to decrease the incidence, use of prevention, etc? Education to both employers and employees on how to reduce their risk of developing repetitive motion injuries, work related injuries and musculoskeletal strains and sprains.

   Keep on providing the latest information to us concerning advances in occupation related illnesses.

   Education on how to avoid injuries and work-place safety.

   Occupational Health Clinic?

2. Provide technical assistance and training.

   Act as referral agency when we don't have answers.

   Provide training and engineering advice.

Provide information, consultation, on-site help in some cases.
Testing of samples.

CONCLUSIONS

This survey was done before September 11 and environmental and occupational health priorities may have changed in the post 9-11 era. At the time of this survey, a wide variety of environmental and occupational health issues were reported to be important. The majority of survey respondents are asked by the public to answer questions about environmental health regarding a range of topics. Some priorities did differ geographically, such as molds, mildews, and pesticide exposure.

Respondents identified several areas for which Oregon DHS/Public Health should have programs, but do not. The most common topics were indoor air quality, mold, and mildew.

Public Health does not have indoor air quality or mold programs due to lack of federal funding for these issues. DHS does provide a fact sheet with resource information regarding indoor air quality issues, mold remediation and health effects, and a list of building assessment companies. The National Pesticide Information Center (NPIC) and CROET both have mold information available to the public as well as the EPA. The federal government is starting to address some of these issues. In June 2002, Congressman John Conyer, Jr. introduced HR 5040: The Untied States Toxic Mold Safety and Protection Act ("The Melina bill").
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The Environmental and Occupational Epidemiology (EOE) section is using these data to target strategies to dialogue with counties and

areas that most need services related to these different program areas.

Specific Action Points:

- Asthma and Lead Programs are providing grant money to local health departments.
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Oregon DHS will continue to search for ways to expand programs to serve unmet local needs.

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Environmental and Occupational Epidemiology (EOE) Electronic Newsletter, Oregon Department of Human Services

February 2002

Why this newsletter?

Last year, the EOE section conducted a state-wide needs assessment and asked local health departments what their priorities were for environmental and occupational health issues. This newsletter has been created to provide our local partners with updates about important state environmental and occupational news items.

The newsletter will come out every quarter and will feature a topic about environmental and/or occupational health and epidemiology in Oregon. This first newsletter features the new 1043 "Superfund" cooperative agreement, recently awarded to Oregon Public Health.

New grant to investigate public health impact of hazardous waste sites

In the fall of 2001, Oregon Public Health was awarded a three-year cooperative agreement, 1043 Superfund award, from the Agency for Toxic Substances and Disease Registry (ATSDR) to provide staff and funds to investigate the public health impact of hazardous waste sites. This grant will pay for a toxicologist, health educator and program coordinator to assess the public health impact of hazardous waste sites across the state. Oregon Department of Human Services will share the health educator with Multnomah County Health Department. In the past, the money from this award was earmarked to investigate waste sites on the National Priority Listing (NPL) or the superfund list. However, the scope of the award has expanded and resources can be used to investigate the health effects of any hazardous waste site in the state.

Sites that we will definitely work with will include the Portland Harbor superfund site and the Taylor Lumber superfund site in Yamhill County. If you become aware of hazardous waste sites in your counties for which citizens' have public health concerns that you want EOE to consider, please call us to discuss the situation. Contact either Michael Heumann, MA, MPH, Manager EOE (Michael.A.Heumann@state.or.us) or Karen Southwick, MD, MPH, Medical epidemiologist, EOE (Karen.L.Southwick@state.or.us).

Updates in other program areas:

Pesticide Program

The **Oregon Poison Center** has a new toll free phone number (1-800-222-1222) that allows callers anywhere in the US to use one phone number. Callers in Oregon will be directed automatically to the Oregon Poison Center.

National Pesticide Information Center

The National Pesticide Telecommunications Network has a new (and better) name, the National Pesticide Information Center, and a new website:

http://www.npic.orst.edu

NPIC provides a free service with information on chemical, health, and environmental questions about pesticides.

The **Pesticide Analytical and Response Center (PARC)** is the government entity that investigates reports of human and animal exposures to pesticides. The PARC program has put together an outreach presentation to educate the public, and staff from health department and other governmental agencies about the services that PARC provides. The presentation is available on the web:

http://www.ohd.hr.state.or.us/eoe/parc/welcome.htm

Oregon Asthma Program Receives CDC Funding

In October, the Oregon Asthma Program received a grant for $700,000/year for five years from the CDC to implement Oregon's state asthma plan, www.oshd.org/asthma/plan/welcome.htm. Major activities funded through this grant include, asthma health care improvement projects, expanding existing asthma surveillance, and funding for community-based demonstration projects to address asthma in vulnerable populations.

Oregon's statewide asthma coalition, the Oregon Asthma Network, sponsors five workgroups to implement the strategies identified in the state asthma plan. The five workgroups are:

1. Public Awareness and Asthma
2. Air Quality and Asthma
3. Schools and Asthma
4. Asthma Data Workgroup
5. Provider Resources and Education

If you are interested in becoming involved in any of the five workgroups, or if you would like more information about the Asthma Network, please contact Karen Burrell, karen.e.burrell@state.or.us, (503) 731-8394.

Occupational Dermatitis

County Health Departments participate in Worker Health & Safety Award

Five county health departments were instrumental in assisting Department of Human Services (DHS) /Environmental and Occupational Epidemiology section (EOE) receive a prestigious national worker health and safety award. On June 27, 2001, NIOSH's National Occupational Research Agenda (NORA) Partnering Award for Worker Health & Safety was presented to the Dept. of Human Services EOE section, Liberty Northwest Insurance Co., Columbia Helicopters Inc., Oregon Restaurant Association, United Food and Commercial Workers Union, Local 555, Enviroderm Pharmaceuticals, Inc., and to the health departments of Clackamas, Coos, Hood River, Jackson, and Marion counties. The NORA award celebrates exemplary teamwork, innovative thinking, and strong science in the interest of worker safety & health. EOE initiated this award winning partnership to mobilize work-related dermatitis research and intervention in the state of Oregon. The project succeeded in reducing the incidence of medical claims for occupational dermatitis in logging, and in the elimination of the use of latex gloves in many restaurants. Additional information about the NORA Partnering Award can be found at the NIOSH website: www.cdc.gov/niosh/oregjob.html

Targeting Workers for Latex Allergy Prevention

Latex Allergy Alerts targeting workers in the Restaurant, Child Care, Retail Grocery, and Agriculture industries are currently available on our website @ www.oshd.org.eoe both in Spanish and English. We are currently working on 6th grade level English and Spanish versions of these 4 alerts. They will be available at our website Spring 2002. The alerts are intended to provide key information regarding the risks of latex allergy associated with latex glove use. The alerts have been used by county environmental services personnel during routine restaurant and child care inspections. They can also serve as a latex allergy education and prevention tool for providers, workers, customers, and business owners & managers.

For more information about EOE's occupational dermatitis program, contact Diane DeBruyckere: Diane.M.Debruyckere@state.or.us

Environmental and Occupational Epidemiology (EOE)
Oregon Department of Human Services
Electronic Newsletter
June 2002

Welcome To The Second Edition Of Our Newsletter!

The Environmental and Occupational Epidemiology (EOE) section created this quarterly newsletter to provide local health department staff and other local partners with updates about important state environmental and occupational topics and events. This issue features an article on EOE's pesticide poisoning prevention program.

Tracking Pesticide Exposures In Oregon

Pesticide-related illness and injury is a reportable condition in Oregon. Prompt reporting can aid the attending provider in identifying appropriate diagnostic tests and treatment. This EOE surveillance program is unique because in addition to health care provider reporting, we also receive reports from other sources, including other state agencies, local health departments and affected individuals. We provide services to workers and other people affected, while maintaining strict confidentiality. Yet this condition is drastically under-reported here, as in the eleven other states conducting active surveillance.

Reporting of pesticide poisoning events enables appropriate public health follow-up for patients and yields data that help us target prevention and intervention efforts. Our pesticide surveillance program staff investigates reported pesticide-related illnesses and injuries in order to help individuals protect themselves in the future. Data are also analyzed to identify patterns in the causes of exposure and to develop and implement population-based interventions. We want to actively collaborate with local health department staff, other state agencies and community partners to increase awareness of potential risks of pesticide exposure, improve knowledge of resources available, share our surveillance findings and work together to pursue prevention strategies.

We participate in the Pesticide Analytical and Response Center (PARC), a multi-agency program that reviews pesticide-related incidents and makes recommendations for action. Information about PARC activities and individual case findings are available in the 1999-2000 PARC Annual Report, available on our website at http://www.ohd.hr.state.or.us/eoe/parc/.

The number of reported incidents has increased over the past three years from 118 to 214. Throughout the years, about half of the reported incidents have been

found to have a definite, probable, or likely correlation between pesticide exposure and symptom onset.

Each year, 10-20% of investigated pesticide incidents had too little information to determine if there was a correlation between the exposure and the reported symptoms. Most reported pesticide exposure cases (60%) occurred in or around homes, similar to what was found in 1997-1998. At all locations, most individuals are reporting that their exposures occurred from indoor air or spray drift.

EOE has produced many materials about pesticide poisoning prevention, in both English and Spanish. Posters, brochures and business cards are available in printed form and on our website, for use by health departments, clinics and other partners in their facilities and to distribute to clients. We can also provide copies of the EPA manual "Recognition and Management of Pesticide Poisonings" and safety materials from other agencies.

For more information, visit our website: http://www.ohd.hr.state.or.us/eoe/parc/. For emergency poison information, contact the Oregon Poison Center at 1-800-222-1222. To report a pesticide-related illness, contact EOE's pesticide program at 503-731-4025. For materials or more information about our pesticide surveillance program, contact Deborah Profant, the program coordinator, (deborah.profant@state.or.us) (503) 731-4025.

Updates On Other EOE Program Areas

Oregon Asthma Program Funds Community-Based Demonstration Projects

Oregon Asthma Program recently funded three community-based organizations to initiate projects that promote outreach and education about asthma among vulnerable adult populations. The Environmental Justice Action Group, Sacred Heart Medical Center Foundation, and Virginia Garcia Memorial Health Center will receive up to $25,000 each under this funding agreement. A panel that included representatives from local health departments, community-based organizations, and the Governor's Racial and Ethnic Task Force on Health reviewed all applications. "Lessons learned" that result from these projects will be disseminated through the Oregon Asthma Network. The Oregon Asthma Program looks forward to issuing additional Requests for Grant Proposals for demonstration projects in schools, health systems, and community-based agencies in Fall 2002.

The Oregon Asthma Network's Public Education and Asthma workgroup will be holding its next meeting on July 2, 2002. This workgroup will continue work on a web-based resource bank of educational resources. If you have ideas about asthma educational materials for specific patient populations, your input is needed. Please join us from 2-4PM at the Portland State Office Building in Room

705C. You may also call in to the meeting by dialing 1-877-214-0402. The participation code is 637116. For more information, contact Justin Waltz (justin.waltz@state.or.us) (503)-731-3354.

Superfund Program: Fully Staffed and Moving Ahead

Last fall Oregon Public Health was awarded a five-year cooperative agreement from the federal Agency for Toxic Substances and Disease Registry (ATSDR) to provide staff and funds to investigate the public health impact of hazardous waste sites across the state.

The entire Superfund team has been hired and is now on board. The program coordinator is Janice Panichello, the health educator is Georgia Richmond, and the toxicologist is Dave Stone. As part of the agreement, Georgia works at Multnomah County two days a week, focusing on Portland Harbor issues.

The team looks forward to addressing citizens' public health concerns in relation to the hazardous waste sites statewide. If you become aware of sites in your counties for which there is concern please contact Janice Panichello (janice.d.panichello@state.or.us) (503) 731-4025.

View-Master Worker Health Assessment

The View-Master hand-held slide projector has been a popular children's toy since the 1950s. For decades, View-Masters were made exclusively at a factory located in Beaverton, Oregon. In March 1998, when the factory was closing, high levels of the de-greasing agent trichloroethylene (TCE) were discovered in the supply well of the View-Master factory. TCE was used to clean manufacturing equipment prior to 1980, and drums of degreaser waste were dumped on-site from the 1950s to the 1970s.

The Oregon Department of Environmental Quality estimates that factory employees may have been exposed to TCE in the drinking water for over 20 years. Published studies have documented an association between TCE exposure and kidney cancer, liver cancer, non-Hodgkin's lymphoma, cervical cancer, Hodgkin's disease, multiple myeloma, leukemia, and a variety of other non-cancerous adverse health and reproductive outcomes.

Using federal funds, EOE is developing a health evaluation of the workers from the plant. EOE's objectives for the first year are to identify and locate former workers, and to develop a survey instrument to gather information about TCE exposure and adverse health effects.

Mattel Inc., one of several corporations that operated the factory, has estimated that more than 25,000 individuals worked at the factory from 1951 to 1998. Mattel developed a database of information on about 13,707 former employees and gave the information to EOE. Because Mattel's database contains only a sample of the worker population, we will use historic tax records to identify the remaining workers.

EOE hired Michele Freeman in March 2002 as the epidemiologist for the project. We are actively collecting names and addresses of former employees who are interested in participating. Please have interested people contact Michele Freeman (Michele.p.freeman@state.or.us) (503) 731-4025.

Adult Lead Exposure

EOE's Adult Blood Lead Epidemiology and Surveillance Program (ABLES) has been active since 1991 when elevated blood lead (EBLL) became a reportable condition for Oregon health care providers and laboratories. Oregon is one of 28 states that participate in the ABLES program, funded by the National Institute for Occupational Safety and Health (NIOSH). ABLES objectives are:

(1) To assess the prevalence of the lead exposure problem in Oregon;
(2) To identify all tested individuals with EBLLs and to determine the nature of their exposures;
(3) To identify childhood and family member cases related to worksite lead take-home exposures;
(4) To ensure that persons with EBLLs receive proper medical management, including follow-up, until their concentration of blood lead is brought down to acceptable levels;
(5) To ensure that adequate environmental follow-up occurs to reduce or eliminate the risk of further lead exposure from identified sources;
(6) To provide technical assistance consultations to physicians, affected individuals and employers;
(7) To develop intervention strategies and educational information to help prevent or reduce adult and family lead exposures; and
(8) To provide referrals for consultation or enforcement.

If you want help for an adult who's elevated BLL might be work-related, or more information about the program, contact Marilyn Scott at (marilyn.j.scott@state.or.us) (503) 731-4025.

Childhood Lead Poisoning Prevention

Recent activities of the Childhood Lead Poisoning Prevention Program have advanced our goal of reducing and preventing lead poisoning in Oregon. Steady progress is being made in enhancing the statewide childhood blood lead surveillance system. As of April 2002, all blood lead test results are reportable to Oregon Health Services by labs and medical providers.

The Childhood Lead Poisoning Prevention Program continues to support blood lead testing for at-risk un/under-insured children. Six mini-grants have been awarded to local health departments and community groups to increase blood lead testing throughout Oregon. The statewide Migrant Head Start Program has purchased three analyzers and expects to test up to 2,000 children this summer and fall. With the increase in blood lead testing, an increase in elevated blood lead cases is expected. Resources and training will be provided to staff members of local health departments on environmental investigations of children with elevated blood lead levels.

A statewide hot line called the LEADLINE is scheduled to be operational this summer. The service will answer questions and provide referral information through out the state via a toll free number. The LEADLINE can also assist non-English speakers.

For more information about the Childhood Lead Poisoning Program, contact Rick Leiker,
rick.d.leiker@state.or.us (503) 731-4025.

Occupational Dermatitis: Latex Safety Materials Available

EOE has produced Latex Allergy Alerts targeting workers in the Restaurant, Child Care, Retail Grocery, and Agriculture industries. Each is available in printed form and on our website, at www.oshd.org.eoe, in both Spanish and English. We hope that these alerts will be helpful to many people, and hope they can be of use to county environmental services personnel during restaurant and child care inspections, to inform workers in those facilities of the risks associated with latex glove use to them and to their clients. We are distributing the Alerts to providers, workers, customers, and business owners & managers, as a latex allergy education and prevention tool.

For copies of or to provide feedback on the Alerts, or for more information about EOE's occupational dermatitis program, contact Catherine Thomsen (Catherine.L.Thomsen@state.or.us) (503) 731-4025.

About The EOE Electronic Newsletter

We want to assure that the EOE newsletter is relevant and of interest to you and your work. We welcome thoughts and comments about this EOE newsletter. Please communicate with us via our new e-mail address: OHS.EOE-News@state.or.us

You can also use this address to subscribe or unsubscribe to this newsletter.

Environmental and Occupational Epidemiology (EOE)
Oregon Department of Human Services—Public Health
Electronic Newsletter
March 2003

Welcome To The Third Edition Of Our Newsletter!

The Environmental and Occupational Epidemiology (EOE) section created this quarterly newsletter to provide local health department staff and other local partners with updates about important state environmental and occupational topics and events. This issue features an article on EOE's Hazardous Substances Emergency Events Surveillance (HSEES) system.

Surveillance of Hazardous Substance Emergency Events in Oregon, 1992-2002

Since 1992, the Oregon Department of Human Services, Health Services (DHS-HS) has collected information to monitor potentially hazardous substances that spill or leak into the environment and to determine the public health impact of hazardous chemical releases. The Hazardous Substances Emergency Events Surveillance System (HSEES) is maintained through a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR), an agency of the U.S. Public Health Service.

In Oregon's HSEES program, we investigate spills and releases and reports the results to ATSDR for inclusion in a national database. In addition to gathering general background information about each event, we attempt to determine what specific substances have been released to the environment, who might have been exposed to these substances, what immediate injuries or health problems have resulted from that exposure, and what efforts were made to evacuate people or to shelter them in homes, workplaces, or businesses in the area near the release.

The Oregon HSEES monitoring program focuses on uncontrolled or illegal releases — or threatened releases — of potentially hazardous substances. The exceptions are leaks or spills involving petroleum products or sewage, which are handled by the Oregon Department of Environmental Quality and other agencies.

Oregon HSEES monitors spills and leaks whenever the amount of material released makes it necessary to take protective or remedial action — that is, when it becomes necessary to clean up, remove or neutralize the spilled or leaked chemicals, or to evacuate people from the area, or shelter them in-place.

Leaks and spills are most often relatively brief events, and human exposure to hazardous materials is also usually brief. If they have an impact on health, these events are most likely to result in *acute* health effects — that is, they are most likely to cause *immediate* illness or injury. The short-term health problems

associated with chemical spills or leaks can vary in *severity* — ranging from headaches to potentially fatal illnesses and injuries.

Our HSEES system obtains information about a hazardous substance emergency from a variety of sources. Incident reports are sent to HSEES by the Oregon Emergency Response System (OERS), the Office of the State Fire Marshal, and the National Response Center, after which we follow-up to find out more about the incident by examining the records of other state agencies, and by talking with personnel involved in environmental protection activities, law enforcement personnel, local fire officials, health care personnel, and persons directly involved in the incident. We also use media reports to supplement information from other sources.

HSEES tracks illnesses and deaths among workers, emergency responders and the general public in connection with spills. The data are used to identify factors that increase health risks and to develop effective prevention strategies.

Our monitoring efforts can provide useful information about the types of substances released during these events, and the most common types of injuries associated with them. For example, emergency spills and releases happen more frequently at fixed facilities (70%) than in transportation. Employees are more frequently adversely affected by spills and releases when compared with responders or the general public. Ammonia is one of the most frequently released chemicals in these events, and respiratory irritation is the most frequently experienced adverse effect. There are more frequent injuries per event in the Professional Services industry category, a category that includes schools, health care and day care facilities. This industry sector includes places where children are present. Children are at greater risk than adults of adverse effects of exposure to hazardous substances.

An increase in the number of clandestine methamphetamine drug labs in the state during the past few years has led to an increase in acute spills and releases of the hazardous materials used and produced in these labs, contamination of numerous sites, and injuries to responders, children at the scene, and employees of agencies or businesses visiting or working near these illegal labs. Our HSEES program staff is working with other branches of DHS and other agencies to reduce exposures and improve treatment of persons exposed to these sites, with a particular focus on children, and ultimately to prevent both the labs and their adverse effects on people and communities.

The information we collect in the HSEES program can help find the most effective ways to handle hazardous substance emergencies — for emergency responders, health care personnel, planners, and others who play a role in protecting the public. Ultimately, this information can help to reduce deaths and injuries for responders, workers, and the general public.

Oregon's HSEES data has the potential to help various agencies in drafting legislation, developing rules and regulations, creating guidelines for responding to hazardous substance emergencies, and developing better procedures for protecting workers. These efforts should help to minimize the health impact of

any hazardous substances that may be released to the environment during future spill incidents.

For more information, data, or reports, please visit our website: http://www.healthoregon.org/hsees/index.cfm. If you have questions or comments about the role of Oregon HSEES in monitoring chemical leaks and spills, please contact Theodora Tsongas, the HSEES Epidemiologist, (theodora.a.tsongas@state.or.us) 503-731-4202.

You Can Help Us Do A Better Job By Reporting Spills And Releases Of Hazardous Materials To:
The Oregon Emergency Response System (OERS), Toll-Free At 1-800-452-0311.

Updates On the EOE Section

Oregon Asthma Program Moves

The Oregon Asthma Program has been moved to the Health Promotion and Chronic Disease Prevention (HPCDP) section. Their new website is: http://www.dhs.state.or.us/publichealth/asthma/index.cfm. Although we won't be including information about that program in this newsletter any longer, we will of course continue to work together on the many common issues between our projects, including our newest: EPHTN (see next update).

Oregon Awarded Funding to Plan Environmental Public Health Tracking Network (EPHTN)

Oregon is one of 10 states awarded funds by CDC to plan and build capacity for tracking environmental health. A new $1.5 million, three-year federal grant will allow us to begin to link environmental exposures with the occurrence of certain diseases. These data exist in a variety of places, but in the past we haven't been able to bring them together in a manner that allows for comprehensive analysis. The ultimate goal is to create a nationwide Environmental Public Health Tracking Network (EPHTN) system to help focus research and other public health protection efforts.

The Oregon Department of Environmental Quality (DEQ) is already a key OR-EPHTN partner because it collects data on air and water contaminants and other environmental hazards that are potential sources of exposure. We want to plan a system that will link their data with health outcome databases. EOE and DEQ will need to work with many other partners on this project. For example, the Oregon Department of Agriculture (ODA) and the Office of the State Fire Marshal can provide information about use and storage and releases of pesticides and other chemicals.

We will be working with many partners throughout the state to prioritize health outcomes and exposures based on concern, capacity and feasibility. Local health

departments will be critical to the success of this project. You can become involved in work to be done and committee that will be formed to address three project objectives:

1. Identify possible sources of data on hazards, exposures and health outcomes;
2. Select and prioritize the measures/indicators to be used in Oregon; and
3. Increase Oregon's public health capacity to identify, evaluate and address environmental health issues.

Stay Tuned for More!
We will keep you up-to-date on the EPHTN through this newsletter and special announcements about how and when workgroups will be forming.

Additional information about the EPHTN system and grants is available on the Web at: www.cdc.gov/nceh/tracking/
For more information about Oregon's plans, contact: Michael Heumann (Michael.A.Heumann@state.or.us) 503-731-4573.

Updates on EOE Programs

Pesticide Poisoning Surveillance Program

Although pesticide-related illness and injury is a reportable condition in Oregon, it is under-reported here, as in the eleven other states conducting surveillance. Prompt reporting can aid the attending provider in identifying appropriate diagnostic tests. Reporting also enables appropriate public health follow-up for patients and yields data that can target prevention and intervention efforts. The Environmental and Occupational Epidemiology (EOE) pesticide surveillance program investigates reported pesticide-related illnesses and injuries in order to identify individual and population-based interventions.

EOE participates in the Pesticide Analytical and Response Center, a multi-agency program that reviews pesticide-related incidents and makes recommendations for action. The PARC program lost funding in at the end of January 2003 due to Oregon's budget shortfall. However, PARC member agencies will continue to share pesticide exposure information and attempt to coordinate any response. We will continue to investigate occupational pesticide illnesses or injuries using funds from the National Institute of Occupational Safety and Health (NIOSH). Investigation of non-occupational pesticide poisoning cases will be very limited.

In partnership with the Center for Research on Occupational and Environmental Toxicology (CROET) and the Oregon Child Development Coalition, we helped produce a pesticide safety video "A Safe Place for Your Children". The video, available in Spanish with English subtitles, highlights how families might be exposed to pesticides at work or home and gives ideas about making homes safer for children. You can contact us for a copy of the video.

For more information about what to do if you or someone you know is exposed to pesticides, visit the PARC website http://www.dhs.state.or.us/publichealth/parc.
For emergency poison information, call the Oregon Poison Center at 1-800-222-1222.
If you want to report a pesticide-related illness, contact our pesticide surveillance program at 503-872-6723.
For chemical, health, or environmental information about pesticides, contact the National Pesticide Information Center at 1-800-858-7378 or http://npic.orst.edu/.
For more information about EOE's pesticide surveillance program, contact Deborah Profant (deborah.profant@state.or.us) 503-872-6723.

Superfund Health INvestigation & Education (SHINE) Program: Fully Staffed and Moving Ahead

Our program evaluates the potential for exposure to environmental contamination to the general public. We assess the risks to human health and recommend measures to prevent or reduce exposure at hazardous waste sites throughout the state. We focus largely on Superfund sites, which are designated by the Environmental Protection Agency (EPA) as the most serious polluted areas that should be prioritized for cleanup.

Our program staff has changed to include a new health educator. Amanda Guay will be involved in conducting site-specific health education activities.

Currently our program is evaluating health risks at 20 priority sites throughout Oregon. Our largest project is the Portland Harbor Superfund site. The Willamette River from the southern tip of Sauvie Island to the Steel Bridge was added to the Superfund list in December of 2000, after decades of industrial use that contributed to the contamination of the river. Important aspects of Portland Harbor that still need to be addressed include fish consumption habits, levels of pollution in the sediment, water and tissue of organisms and educating the public about the risks posed by this site.

A Public Health Assessment by our program of the Taylor Lumber & Treating Superfund site (located one mile west of Sheridan, in Yamhill County) will be available for public comment in March. The soil was contaminated through a series of chemical and oil spills from the former lumber processing plant. We are evaluating the health risk of people that may accidentally ingest the soil, drink private well water that is contaminated by the site, or be exposed to ditch and creek sediments.

At the request of the state Department of Environmental Quality (DEQ), we are assessing health risks at a subdivision in Klamath County, where over 49 tons of fragments of friable asbestos-containing-materials were removed last summer. The asbestos containing materials are remnants of roofing, siding, piping insulation and flooring from the demolition of the Marine Recuperational Barracks that used to occupy the site. Additionally we are evaluating asbestos

contamination at two former vermiculite processing plants in Portland and at a vacant, heavily vandalized former radar station in Harney County.

Our team looks forward to addressing citizens' public health concerns in relation to hazardous waste sites statewide. If you become aware of sites in your counties for which there is concern for public health, please contact Janice Panichello (Janice.d.panichello@state.or.us) or call 503-731-4025 x229.

View-Master Worker Health Assessment

In March 1998, chemical analysis of the View-Master factory (located on Hall Boulevard in Beaverton, Oregon) supply well revealed the presence of the degreasing agent trichloroethylene (TCE) at concentrations as high as 1,670 parts per billion. The Environmental Protection Agency (EPA) has set a maximum contaminant level for TCE (a probable human carcinogen) in drinking water at 5 parts of TCE per billion parts water. We are investigating the feasibility of conducting a health study of the former workers of the View-Master factory, to review existing health outcome data, to identify and locate former workers, and to develop methods for evaluating TCE exposure and adverse health and reproductive effects among the former workers.

Mattel Inc., one of several corporations that operated the factory, has released to EOE staff a list of 13,700 former employees. Under a cooperative agreement with the Agency for Toxic Substances and Disease Registry's (ATSDR's) Division of Health Studies, we conducted a preliminary analysis of the causes of death among former View-Master workers. In January 2003, we released for public comment a health consultation report that describes the findings of the mortality analysis as well as proposed follow-up activities that would include both (1) an environmental exposure assessment to confirm ODEQ's estimate of how long TCE was present in the supply well, and to provide a historical understanding of the concentration of TCE in the well, and (2) an epidemiological study to determine whether former workers have experienced adverse health and reproductive outcomes as a result of TCE exposure.

We held two public meetings on January 28, 2003 to discuss the findings of the health consultation report, to hear the questions and concerns of former View-Master workers, and to announce the formation a citizen advisory group that would work with us to develop a public health action plan. Representatives from the Oregon Drinking Water Program, local health departments, Oregon DEQ, and ATSDR were available to answer questions at the meeting. Materials that were distributed at the meeting, including the health consultation report and FAQ sheets, can be viewed online at http://www.dhs.state.or.us/publichealth/eoe/viewmaster.

We continue to collect names and addresses of former employees who are interested in participating. Please have interested people contact Michele Freeman (Michele.p.freeman@state.or.us) 503-872-5356.

Adult Lead Exposure

Lead poisoning in adults and children has been a targeted health condition in the Oregon since 1991. For adults (age ≥ 18 years), the elevated blood lead level (EBLL) is ≥ 25 micrograms per deciliter (µg/dl). This level remains a reportable condition for all health care providers and laboratories. Under a contract with the National Institute for Occupational Safety and Health (NIOSH), our Oregon-ABLES program is responsible for monitoring adult lead poisoning. This program investigates and works to prevent adult lead poisoning in occupational and non-occupational settings.

From 1996-2000 nearly 16,000 adults received blood lead tests and 2,478 test results were elevated. EBLL results were evaluated, and found to have the following characteristics:

- 90% were in the 25-39 µg/dl range, 8% were 40-49 µg/dl and 2% were 50 µg/dl or greater.
- 95% percent involved men.
- 90% were occupationally related and involved 83 employers.
- 75% of occupational exposures were in manufacturing industries, followed by construction with 14%.
- Occupationally related elevated tests declined by 38% during the 5-year period, primarily due to exposure reductions in the manufacturing sector.
- Home remodeling was the most frequent source of non-occupational exposure.

Also during this period, we undertook several intervention and education and outreach activities to reduce or prevent lead exposure. These included:

- Working closely with a major manufacturer to develop a lead exposure reduction plan that resulted in a 65% decline in elevated blood lead test results.
- Investigations of imported tableware from Asia and Mexico that resulted in the issuing of health advisories, media coverage and development of educational materials.

For more information about our program or report, please contact Rick Leiker (richard.d.leiker@state.or.us) 503-731-4025, ext. 435.
Please visit our web site at www.dhs.state.or.us/publichealth/lead/.
For more information about adult lead poisoning, call the Oregon Poison Center at 800-222-1222 or visit www.cdc.gov/niosh/ables.html .

Childhood Lead Poisoning Prevention
We are pleased to announce that "LeadLine," a free telephone information service for parents and others who have questions about lead hazards in their home is now available to Oregonians across the state. Leadline service is available for English and non-English speakers. Residents of Washington, Clackamas and Multnomah counties can call locally to (503) 988-4000. People who live in all other areas of the state should call the Leadline at (800) 368-5060.

The warning signs of lead poisoning are not always noticeable, so parents need to carefully assess their child's living environment for potential exposure. Lead poisoning is completely preventable if hazards are detected and removed. The major source of lead is lead paint, often found in homes built before 1978. As paint chips, peels and breaks down, lead dust is created and contaminates the environment. Another concern is that an even greater amount of lead dust is created during repairs and remodeling. The Leadline can provide information about these hazards and other sources of lead in the home.

Leadline is staffed by public health professionals who can explain where lead can be found and how it can be controlled. They can tell callers what help may be available in their community in the following areas: home repair and remediation programs; financial assistance/loans for home repair; emergency housing; legal services; water testing availability; and medical clinics that provide blood lead testing for the under/uninsured. The Childhood Lead Poisoning Prevention Program will continue to update the resource list. If you become aware of any new resources in your area, please contact us so that we may provide the most up-to-date information to callers.

For more information about the Childhood Lead Poisoning Program, contact Rick Leiker, (richard.d.leiker@state.or.us) 503-731-4025 ext. 435.

Occupational Dermatitis & Burn Surveillance Funding:
EOE has received continued funding for occupational dermatitis and burn surveillance through two National Institute for Occupational Safety and Health (NIOSH) cooperative agreements. One is a 1-year extension of a "Model Enhanced Occupational Dermatitis Surveillance/Interventions Programs" grant. The other is a Sentinel Event Notification System for Occupational Risk (SENSOR) grant that will fund both occupational dermatitis and burn surveillance, which will continue through September of 2005.

The surveillance programs allow us to: 1) identify and characterize occupational dermatitis and burn cases, 2) determine the impact of unresolved hazards, 3) identify new hazards, 4) identify high risk occupations, industries and populations; and, 5) develop and implement intervention strategies. EOE research analysts and epidemiologists analyze State Workers' Compensation claims, and several private workers' compensation insurance partner claims. We

then share the data findings with insurance company Loss Prevention personnel, NIOSH, and other partners, to develop targeted intervention and prevention strategies. Successful strategies implemented in Oregon are then shared with other states that have similar work-related injury challenges.

We are in the process of negotiating case reporting with the Oregon Burn Center (OBC), located at Legacy Emanuel Hospital & Health Center, Portland. EOE had a hospitalized work-related burn case reporting agreement with the OBC from 1992 -1997. The highest rate of hospitalized burns occurred in the construction industry during the previous surveillance period. A high frequency of non-hospitalized burns in the food service industry was identified in the Workers' Compensation data. Food service thermal burns were related to injuries by hot oil, grease, water and steam. These industries will continue to receive special focus during the current funding cycle.

For more information about Occupational Burn Surveillance contact Diane DeBruyckere (diane.m.debruyckere@state.or.us) 503-731-4025 ext. 439.

Latex Allergy Prevention

One of the special projects of our Occupational Dermatitis Surveillance program is Latex Allergy education and prevention. Latex allergy affects 1 - 6% of the general population, and about 8 -12% of regularly exposed health care workers, according to NIOSH. Many hospitals already addressed the risks of latex exposure to health care workers and patients by adopting latex safe policy. Yet our efforts in Latex Allergy prevention continue. Unfortunately, the use of latex gloves has proliferated in the food service industry and other settings, such as childcare. Latex gloves are not appropriate for use in restaurants or in child care settings. Good old-fashioned hand washing remains the primary means to prevent food-borne illness and the spread of bacteria.

We worked extensively with the DHS-HS Environmental Services & Consultation section to introduce a new Food Code Rule: ***The use of latex gloves in all food service establishments and mobile food units in Oregon will be prohibited as of March 1, 2003.***

EOE & ESC have distributed several alerts regarding Latex Allergy to county environmental services personnel. Recently, we've been contacting restaurant suppliers to provide information on the Food Code Rule change. We want to ensure that restaurant suppliers are aware of the need to have non-latex, non powdered gloves in stock, and that their restaurant customers seeking gloves for food-service work need to be choose non-latex, single use disposable gloves.

Cornstarch powder is sometimes added to gloves in the manufacturing process to make the gloves slippery and easier to don. The glove powder itself poses a variety of health risks, including skin irritation, respiratory irritation, and eye

inflammation. In the health care setting glove powder can cause surgical adhesions. **In the food service setting both latex and all glove powder pose health risks and act as food contaminants.**

Visit our website at - www.dhs.state.or.us/publichealth/dermatitis for further information about Occupational Dermatitis; Latex Allergy; and Latex Allergy alerts for the restaurant, child care, agriculture, grocer, food processing, and nutritional food & products industries; as well as links to related websites.

For more information about Occupational Dermatitis, or Latex Allergy contact Diane DeBruyckere (diane.m.debruyckere@state.or.us) 503-731-4025 x439.

Poison Oak Prevention

Allergic contact dermatitis from exposure to poison oak and poison ivy affects up to 50 million Americans each year, according to the American Academy of Dermatology. In Oregon and elsewhere, occupational exposures to poison oak and poison ivy are common in agricultural, forestry, firefighting, utility and construction trades. As part of our surveillance of Occupational Dermatitis, we studied the effectiveness of using skin protectants, cleansers and education to prevent poison oak. In a collaborative project with a worker's compensation insurance company, a helicopter logging crew and a skin protection products manufacturer, we determined that a program using IvyBlock (a skin protectant containing 5% bentoquantum) with skin cleansing and training was feasible in protecting the loggers from poison oak rash. The report of the study was published in the Journal of Wilderness and Environmental Medicine,13, 206-208 (2002) and may be found at www.http://www.wemjournal.org/wmsonline/?request=get-pdf&file=i1080-6032-013-03-0206.pdf.

We hope to continue with other efforts to prevent poison oak rashes among Oregon workers. For more information about that study, contact: Marilyn Scott (marilyn.j.scott@state.or.us) 503-731-4504.

About The EOE Electronic Newsletter

We want to assure that the EOE newsletter is relevant and of interest to you and your work. We welcome questions, comments and thoughts about this issue or ideas for future newsletters. Please write with us at:
OHS.EOE-News@state.or.us
You can also use this address to subscribe or unsubscribe to this newsletter.

Environmental & Occupational Epidemiology Newsletter
Summer 2003

SHINE Creates Community-Based Portland Harbor Fish Consumption Mini-Grants to Support Culturally Appropriate Health Education Materials and Outreach Activities

The Portland Harbor Superfund site is currently considered the portion of the Willamette River that spans from the southern tip of Sauvie Island to the Fremont Bridge. It was proposed for the National Priorities List in late July 2000 and listed in December 2000. This is the most industrialized segment of the river and also supports heavy marine traffic. Contaminants of concern include PCBs, dioxins, heavy metals, and other hazardous substances.

In January 2002, the Agency for Toxic Substances and Disease Registry (ATSDR) evaluated the public health significance of the in-water contamination of the Portland Harbor. ATSDR concluded that the consumption of contaminated fish is the main way that people can be exposed to the Portland Harbor site contaminants.

The SHINE (Superfund Health Investigation and Education) Program is one of the agencies that are responsible for assessing the risk to people exposed to contaminants in the Portland Harbor Superfund site. Currently, there is not enough information about the anglers from specific ethnic and racial groups that catch and consume fish from the lower Willamette River. However, it is known that different fishing communities prefer various species, fishing locations, and meal preparation techniques. We have developed a grant opportunity in an attempt to focus outreach efforts to these communities. To increase the effectiveness of the message, information about fish consumption needs to be tailored for each ethnic group in their own language using terminology that is appropriate to their culture and based on accurate health messages. The desired outcome from this grant is the development and implementation of culturally appropriate health education materials and outreach activities.

The community based Portland Harbor health education project grants are an opportunity to involve youth, churches, community groups etc., in the prevention and reduction of health effects from consuming fish from the harbor. These small grants will be used by community organizations to engage the communities they serve that catch and consume fish from the harbor in activities that educate about consumption guidelines and safe preparation methods of fish. The application deadline is August 25, 2003. For an application, please call our program at 503-872-5357 or visit our website at www.healthoregon.org/superfund.

Pesticide Poisoning Prevention Program

A crew of construction workers was building homes across the street from an orchard. Four workers noticed an odor, then started coughing, wheezing and developed nausea. A tractor-pulled sprayer was applying a pesticide in the orchard and the spray was drifting onto the building site. Construction work stopped for the day. EOE and the Department of Agriculture investigated, resulting in a warning to the orchard owner regarding the risks of exposing the construction workers and future residents. The workers symptoms' resolved and they returned to work within 1-2 days.

Suspected Pesticide Poisoning – Still a Reportable Condition! It is now season for applying pesticides. While our most alliterative program lost about half of it's funding this year, we still have federal support to respond to occupational pesticide-related injury and illness. Marilyn Scott, our Industrial Hygienist, continues to investigate and provide prevention information to workers who are affected by pesticides, and our whole team works to identify patterns and trends in pesticide exposure and poisoning for larger intervention opportunities. Non-occupational exposure calls are logged and generally referred to the Oregon Poison Center at 1-800-222-1222 for medical information, or the National Pesticide Information Center (NPIC) at 800-858-7378 or http://npic.orst.edu/, for more general information.

We are still working with other state agencies and academic institutions on pesticide incidents. Oregon's Pesticide Analytical and Response Center (PARC) may not be funded, but it still provides us a forum to review pesticide-related incidents and discuss possible actions.

Materials Available! We have some great written, audio and video materials in English and Spanish on pesticide risks and how to protect yourself, useful in occupational and non-occupational settings. If you want copies, know of places where these could be useful, or for more information about our project, please contact Catherine Thomsen (catherine.L.thomsen@state.or.us) (503) 731-4025.

Occupational Dermatitis Surveillance News

Latex Gloves Banned from Oregon Restaurants

A new Food Code Rule went into effect on March 1, 2003. The use of latex gloves in food service establishments and mobile food units is now prohibited. We are planning to do a survey of environmental specialists from 10 counties, who conduct routine restaurant inspections to obtain feedback on changes in glove practices since the new rule went into effect.

Poison Oak Prevention project with Oregon Wildland Fire Fighters

Allergic contact dermatitis from exposure to poison oak and poison ivy affects up to 50 million Americans each year, according to the American Academy of Dermatology [1]

(American Academy of Dermatology, 1999, www.aad.org/pamphlets/PoisonIvy.html. [1]). Urushiol, the resinous oil in poison oak that causes rash, may affect as many as 85% of exposed people. In Oregon, occupational exposure to poison oak is common in agricultural, forestry and construction. Wildland firefighters are at particularly high risk of skin contact with the plant, but may also have contact with urushiol oil in dust or from smoke when poison oak burns. The resulting rash can impair or disable workers, making it difficult or impossible to remain on the fire line or even do other work. Oregon had its worst fire season on record in 2002. Nine major fires burned approximately 745,973 acres (1,166 square miles) and involved over 11,762 firefighters. The majority of acreage burned was in poison oak-infested woodlands in southern Oregon.

EOE and the Oregon Department of Forestry (ODF) are assessing the effectiveness of a skin protectant product to prevent poison oak rash among ODF wildland firefighters during the 2003 fire season. ODF will be recruiting over 250 volunteers from fire districts at the ODF pre-season Fire Training School in July. After reading and signing a project consent form, volunteers will complete an initial poison oak questionnaire, receive training in poison oak recognition and avoidance, and instructions in the use of the skin protectant IvyBlock Lotion®. We are expecting to have a project summary completed by late Fall 2003, after fire season ends.

Protection for Summer Outdoor Workers

During the summer months, many workers are exposed to heat and other potentially dangerous elements. We recommend that occupational and environmental health professionals have the latest information on heat-related injuries and illnesses in order to protect the health and safety of outdoor workers. The Occupational Safety and Health Administration (OSHA) has released information for occupational and environmental health professionals to use when caring for outdoor workers. Helpful hints are included on sunburn, heatstroke, Lyme Disease and the West Nile Virus. To learn more, see http://www.responsetrack.net/lnk/aaohn2/?10ISG018WEB.

For more information about Occupational Dermatitis, Occupational Burns, or Latex Allergy contact Diane DeBruyckere (diane.m.debruyckere@state.or.us) (503 - 731-4025 x439) or visit our website www.dhs.state.or.us/publichealth/dermatitis.

Pediatric Environmental Health Center
1-877-KID-CHEM

The Northwest Pediatric Environmental Health Specialty Unit (PEHSU) provides free telephone consultation on pediatric environmental health risks to health care providers, public health professionals, communities and families. Our experts include

[1] American Academy of Dermatology, 1999, www.aad.org/pamphlets/PoisonIvy.html.

pediatricians, toxicologists, occupational and environmental medicine physicians, and other environmental health specialists affiliated with the University of Washington.

PEHSU professionals can assess health risks from short- and long-term environmental exposures. For example, Dr. Catherine Karr, PEHSU pediatrician, has recently talked with callers about pediatric risks associated with mercury in childhood vaccinations, exposures to silica dust, and consumption of well water contaminated with arsenic. For assistance call 1-877-KID-CHEM (1-877-543-2436).

Our professionals are also available to provide educational assistance on pediatric environmental health risks to health care providers, government agencies and other groups. For example, we can provide lectures at community hospitals for providers evaluating children/families with health concerns related to a nearby EPA Superfund site. For educational assistance, call 206-341-4448.

Providers specifically trained in Pediatrics and/or Environmental Medicine are available on a case-by-case basis to see children and their families with environmental health concerns. Clinic visits are available at the University of Washington Medical Center, Roosevelt in Seattle.

NW PEHSU was created by the University of Washington Occupational and Environmental Medicine Program together with the Washington Poison Center. It is federally funded by the Agency for Toxic Substances and Disease Registry (ATSDR) through the Association of Occupational and Environmental Clinics, and covers Region X: Alaska, Idaho, Oregon and Washington.

Please contact the PEHSU Coordinator, Nancy Beaudet, MS, CIH, if you have general questions about PEHSU or to request a copy of our brochure at 206-341-4448.
This information was provided by one of our community partners. If you have information that you would like to share through the EOE Newsletter, please send it to elizabeth.a.everman@state.or.us.

Childhood Lead Poisoning Prevention Program

Alert to parents: toy necklace contains lead, poses health risk. A Deschutes County child was recently hospitalized with lead poisoning after swallowing a small medallion necklace purchased from a toy-vending machine, according to public health officials in the Deschutes County Health Department and the state Department of Human Services (DHS).

"Fortunately the child has been treated and is recovering," said Michael Heumann, epidemiologist in DHS. "But it's important for parents to know that these small toys are out there, available to their children, and that they pose a serious health hazard."

The child's lead level was more than 10 times the level of concern for children, and laboratory tests showed the medallion necklace contained 388,000 ppm (parts per million) or 39 percent lead, according to Heumann.

Heumann said the medallions pose several risks: Children can potentially swallow one of the small medallions, which presents both a physical hazard and lead exposure hazard; and they can be also exposed to lead by putting the medallion in their mouths or by handling the medallion and then putting their hands in their mouths."

The medallion of concern is round, approximately 7/8 inch in diameter, grey in color, with a symbol on one side. Other similar medallions hang on a black cord and have assorted symbols. They come in plastic capsules from vending machines that offer a mixed toy selection. Photos of the medallions are on the Web at www.healthoregon.org/lead/alerts.cfm.

"We have identified one supplier of these medallions and they have agreed to voluntarily stop all further sales of the product to distributors, but it is possible the necklaces may still be available through other distributors and vendors," Heumann said. "Toy vending machines can be found at restaurants, grocery stores, laundromats and other retail businesses that children visit."

Heumann said DHS has notified the U.S. Consumer Product Safety Commission about the medallions.

Lead can harm anyone who swallows lead-containing products or breathes lead dust, and even small amounts can be harmful. It is especially dangerous to children because it can slow growth and development. Exposure to lead paint dust from older homes is the most common cause of lead poisoning, but lead or materials containing lead may be found in other products, according to Heumann.

Heumann recommends several resources for parents:

- If your child swallows any metal object, immediately call the Oregon Poison Center at (800) 222-1222.

- Check your child's toy jewelry. If you find the child has a toy medallion as described above, discard it in the household trash and thoroughly wash your hands after handling. Or, you may call the statewide toll-free household hazardous waste number at (800) 732-9253 to find the location of a disposal site in your area.

- The Oregon Leadline, (800) 368-5060, is a free telephone information service for parents and others who are concerned about lead hazards in their home and want to know how to make their home lead-safe.

This press release was published August 13, 2003.

SOSC Meeting Preparation Tool
San Diego, October 14 2003

Name of State: **Oregon**
Name of person completing form: Catherine Thomsen & Diane DeBruyckere
Name of Project: Model Occupational Dermatitis Surveillance/Interventions
Date completed: 9/30/2003

I. Overview

A. Briefly describe the specific aims of the project and some major accomplishments/milestones to date.

1. Determine the impact of unresolved dermal hazards, identify new hazards and identify higher risk occupations, industries and populations. We greatly expanded the scope and amount of data collected and analyzed. In collaboration with NIOSH, we addressed a possible new hazard.

2. Develop and implement intervention strategies to address the hazards identified in target industries and occupations. Educational materials have been developed and distributed, a rule change mandates lower exposure, partners use data to focus their prevention efforts.

3. Evaluate and disseminate the findings of the Model Occupational Dermatitis Surveillance/Interventions Program. An independent evaluator is working with our and other programs to develop and implement a systematic evaluation strategy, assessment tools, and to build evaluation expertise.

B. Sentinel and population-based surveillance systems

Surveillance systems developed or enhanced --List, describe, and evaluate specific surveillance systems developed or enhanced under this project.

Name of surveillance system	**D=Developed or E= enhanced**	**1-2 sentence description of successes and barriers/limitations of this system.**
Occupational Dermatitis	E	Expanded data sharing with state agency and private sector insurer. Exploring integrating into single database to use for this and other conditions, but identifying duplicates is difficult. Incongruent coding systems and processes make data analysis and comparisons challenging.

II: Success stories

Write **short** summaries of one or more success stories to show how your project has made an impact.

Expansion of surveillance system data We expanded the state data sharing agreement to include all workers' compensation claims, with no filter for specific conditions, and wrote a new agreement to receive the medical encounter database, which includes extensive cost data. We also entered into an agreement with the state Employment Department to receive data that will allow us to calculate rates of injury/illness in targeted populations, to plan for targeted data analyses and interventions.
Food Code Prohibition of Latex Gloves Oregon Health Services (OHS) passed a new Food Code Rule in August of 2002 that prohibits the use of latex gloves in all food service establishments and mobile food units in Oregon. The rule went into effect on March 1, 2003. Oregon joins Rhode Island and Arizona as the only states that have successfully legislated the use of latex gloves in food service. The rule change was brought about through intensive collaboration between EOE and the section that is responsible for making Food Sanitation rules, and despite the withdrawal of support from an industry association, and in the face of resistance from the Malaysian Rubber Export Council. Evaluation of the impact of the rule change is underway through a survey and, later, analysis of 2003 WC claims data.
Partnerships In addition to our on-going relations with workers' compensation insurance companies, the state WC agency and now the Employment Department, we have strengthened our ties with the state OSHA. Based in part upon our data analysis, the consultation section proposed and invited our participation in a 2-day training on occupational dermatitis. Staff from consultation, enforcement, and even the laboratory attended. We presented and have discussed the possibility of sharing more information and their referring difficult dermatitis issues to our offices. Through a NIOSH project, we began discussions with medical insurers of doing some broad analysis of their claims data, which would identify industries of possible risk for specific conditions.

III: Recommendations to NIOSH

A. Assuming NIOSH has $2,000,000 to give out next year to states for occupational health activities, how would you recommend they divide up the funds?

Type of program	Number of states	$ per state
Core	**9**	**$200,000**
Case based/condition-specific		
Indicators only (as capacity building)	**4***	**$50,000**

Capacity building*		
Other?		

B. Based on your project's experience, indicate what should be **the essential components of a state-based core occupational health surveillance program.**

Components	**Y= Essential N=Not essential**	**Comments**
At least one case-based system	Y	
Having at least one condition reportable by law/rule	N	It is very helpful to have (had) the political will, but health care provider reporting is so low that states without shouldn't be excluded
Completing a data sources assessment	Y	
Doing a comprehensive occupational disease/injury data analysis and dissemination initiative regularly	Y?	Define comprehensive!
Doing the Indicators	Y	
Doing a strategic plan	Y	A basic plan for prioritizing and pursuing data, conditions, etc.
Having an advisory group	N	Not required, but much to be desired
Doing interventions	Y	
Ensuring that data are used by others for interventions	Y	
Having MOUs with enforcement agencies to make referrals	N	
Other?		

C. Who should decide which conditions should be targeted for case-based/condition-specific surveillance? NIOSH? The states collectively? Each state? Other?

States and NIOSH should decide together, among conditions meeting certain criteria, such as: a) NIOSH priority; b) multiple states pursuing condition; c) NIOSH technical assistance available; d) established (historical) data and/or assured data availability; and e) potential for intervention.

2003 Oregon Restaurant Latex Glove Use Survey

All questions are to be answered by Local County Health Department Environmental Services Staff who have conducted routine restaurant inspections prior to and after March 1, 2003 (when the new Food Code Rule prohibiting the use of latex gloves by food service/ food prep workers went into effect).

Date of Survey 1st Attempt: _____ **2nd:** _____ **3rd:** _____

Restaurant Inspector's Name _____

County _____

Initials of Phone Surveyor_____

[Statement to be read verbatim by the phone interviewer:]

"The Oregon Department of Human Services, Health Services, is conducting a phone survey of select county restaurant inspectors about latex glove use in restaurants before and after they were prohibited in the new March 2003 Food Code. You should have received a letter about participating in this survey. . I first want to make sure that you are the appropriate person to answer the survey questions. Does your job include inspecting restaurants?

_____ Yes _____ No

If NO,
Can you please refer me to someone on staff who inspects restaurants, and would be able to respond to this survey?

Name_____

Telephone #_____

I would like to ask some straightforward questions about your observations and experiences with latex gloves in restaurants. The survey shouldn't take longer than 10 minutes. Do you have time to talk to me now?"

[If No,] When would be a convenient time to call you back? _____

[If Yes,] Here's the first question:

1. Approximately how many restaurants did you inspect in the 3-month period ***before March 1, 2003 (that would be December 1, 2002 – February 2003)***?
   _____#

2. **During the 3 months before March 1, 2003**, approximately how many of the restaurants that you inspected used latex gloves for food preparation and service?
   _____# (if don't know, enter DK)

3. Do you think that educational efforts (such as Latex Allergy Restaurant Alerts, Latex Allergy information) - **prior to March 1, 2003** increased restaurant personnel awareness of Latex Allergy risk?

3__Greatly Increased 2__ Moderately Increased 1__Slightly Increased

4__No Change 5__Don't Know

4. Approximately how many restaurants have you inspected since ***March 1, 2003*** *?*

_____#

5. **Since March 1, 2003**, approximately how many of the restaurants you inspected used latex gloves for food preparation and service?

_____# (if don't know, enter DK)

6. Since the Food Code Rule prohibiting the use of latex gloves was adopted on March 1st, do you think that latex allergy awareness has increased among restaurant personnel?

3__**Greatly Increased** 2__**Moderately Increased** 1__ **Slightly Increased**

4__**No Change** 5__**Don't Know**

7. Have you observed any restaurants that have replaced latex gloves with another type of glove **since March 1, 2003**?

1____Yes 2____ No

If yes, approximately how many of the restaurants replaced latex with another kind of glove?

_____ # (if don't know, enter DK)

8. In your opinion, how many restaurants would have switched to non-latex gloves on a voluntary basis, without the Food Code Rule change?

1____All/Most 2____ Some 3____None 4____Don't Know

9a. Have you received, or heard any comments from restaurant personnel about the March 1st Food Code Rule prohibiting latex gloves?

1____Yes 2____ No

[If Yes,] Can you please provide examples of some "typical" comments you've heard about the Food Code Rule prohibiting latex gloves,

1. O M U

2. O M U

3. O M U

Interviewer ask: Can you tell me which of these comments are from owners or managers?

9b. Have your received any comments from restaurant workers about the latex glove prohibition, or changes in the types of gloves used?

[If Yes,] Can you please provide examples of some "typical" comments you've heard from workers about the Food Code Rule prohibiting latex gloves,

1.

2.

"Thank you for your participation in this survey. Your confidential feedback will be helpful to our Latex Allergy Prevention Program!"
"Good bye".

Surveyor Comments (optional):

Oregon Restaurant Latex Glove Use
County Health Department Restaurant Inspector Survey

Purpose: to identify the impacts of the Oregon Health Services rule change prohibiting the use of latex gloves for food preparation and service.

Population: Ten county health departments were selected for the survey. The Environmental and Occupational Epidemiology selected the counties in consultation with the Environmental Services section of the Health Services Branch of the Oregon Department of Human Services. The designated Environmental Health staff member from each of the selected counties was contacted by telephone. An appropriate person to respond to survey was contact on the first attempt for 40% of the counties or two attempts for 40%. It took three or more attempts to contact an appropriate person to interview in the remaining two counties (20%). For six counties the name provided by DHS was for individuals who conducted restaurant inspections. One individual was no longer working for the county. For the four counties where the original name provided was not an appropriate individual to respond to the survey an appropriate person was identified and interviewed.

Instrument: The survey form contains nine questions including two multipart questions. Three questions pertain to restaurant inspection and educational activities before March 1, 2003 with the remaining questions pertaining to inspections and observations after the ban on latex gloves went into effect on March 1, 2003.

Findings:
1. The number of inspections for the three months prior to March 1, 2003 (December 1, 2002 through February 28, 2003)

Mean=66 Range=20-150 Unknown = 3

2. The number of restaurants inspected during the three months prior to March 1, 2003 (December 1, 2002 through February 28, 2003) that used latex gloves for food preparation and service

Mean = 4.75 Range = 0-10 Unknown = 2

(When this was evaluated as a percent of inspections the number of respondents increased)

Mean = 14.2 Range = 0-80% Unknown = 0

3. Respondents thought that educational efforts prior to March 1, 2003 increased restaurant personnel awareness of latex allergy risk.

Greatly = 20% Moderately = 20% Slightly = 50%

Don't Know = 10%

4. Restaurants inspected since March 1 2003
Mean = 118 Range = 2-250 Unknown = 1

5. Approximated number of inspected restaurants that used latex gloves for food preparation and service:
Mean = 3 Range = 0-13 Unknown = 0
Five respondents (50%) indicated that none of the restaurants inspected since March 1, 2003 used latex gloves.

When this was evaluated as a percentage of restaurants inspected, the results are:
Mean = 1.9% Range = 0-7.7% Unknown = 0

6. Respondents indicated that they thought that awareness about latex allergy since latex gloves were prohibited on March 1, 2003 was:

Greatly Increased = 10% Moderately Increased = 50% Slightly Increased = 30%
No change = 10%

7. Ninety percent of respondents indicated that they had observed restaurants that had replaced latex gloves with non-latex gloves since March 1, 2003. (Note that glove use is not required. The one respondent with a negative response on this questions indicated that all restaurants had changed over to non-latex before March 1, 2003.)

The second part of this question posed some problems for respondents. Responses were translated into a percentage of those restaurants that used gloves.

Mean = 72.8% Range = 10-100%

8. Respondents opinions of how many restaurants would have switched to non-latex gloves on a voluntary basis without the Food Code Rule change:

All/most = 20% Some = 60% None = 20%

9a. Seven respondents had received or heard comments from restaurant personnel about the March 1st Food Code Rule prohibiting latex gloves. The following comments were from owners or managers.

Asked for background information on latex allergy. Some were not aware of the rule change until inspection, so had questions about changes and compliance.
What do we do now?
What is the right kind of glove to use now?

Where do you get other types of gloves?
Latex is more durable and easier to use.
Managers wanted to show proudly that they are using non-latex gloves
Managers expressed awareness of rule change.

9b. The following are the types of comments received from line workers.

Comments about being glad the rule change was made. They like the additional protection from allergy. Some mentioned having allergies. (Two respondents mentioned
These types of comments)

Complaints about the non-latex gloves (mentioned by five respondents)
Vinyl gloves are too big, don't stretch or fit like latex.
Can't feel things well.
How come they had to change? The plastic gloves feel slimy.
Latex is more durable and easier to use. Why did we need to change?
(Respondents indicated that once the reason was explained and the workers were aware of the allergy problem they were more receptive to the change.)

Survey respondents made additional comments about the rule change or latex allergies:

"Temporary restaurants are slower to come into compliance. The temporary booths operate only once a year and are more likely to be using up old stocks of gloves, or are unaware of the rule change. The inspector indicated that the mailing from the state was very effective for education. The inspections staff has broader questions about whether latex glove ban will extend to all of health care, day care. :Will restaurants be required to list other allergens? Is this something that is being considered for the future?"

"The rule change has been generally accepted. Some restaurants had staff who had developed allergies, so they had switched before the rule change. This inspector feels that this will protect 98% of food workers from latex exposure after a year or so of the rule being in place."

"One respondent expressed concern that many restaurants don't use gloves, unless workers get a cut, but the gloves and finger cots in the first aid kits tend to be latex (cots 100% are latex, gloves about 90%). Part of the issues may be communication since the licensee gets information but the kitchen manager makes most of the day-to-day decisions. We need more outreach to suppliers so they respond appropriately when food service buyers come in and ask for gloves they are not steered towards latex. Temporary restaurants are less aware. Need to make sure United Grocers, Restaurant Supply, Medical and

Safety Supplies, and 1st Aid Suppliers are made aware." (my note - also look at mail order suppliers - look at restaurant trade journal advertisers)

"This county has a high level of interest. Most of their outreach started four years ago. There were big concerns about liability if clients became ill, less concern about workers. Workers in food handler classes indicate that they are happy that risk is being controlled for workers."

"All of the education was done a long time before the rule change, and behavior change occurred before the rule change went into effect."

Summary: Overall, based upon this qualitative assessment the rule change has been effective, with few restaurants using latex gloves for food preparation and service after the March 1, 2003 rule change. Anecdotally, there is a great deal of variation from county to county as to how many restaurants use gloves for food preparation and service. Outreach to temporary restaurants, and to glove suppliers used by the restaurant industry might help reduce latex glove use further. This outreach should include mail order suppliers that advertise in restaurant trade journals.

Appendix B

Educational Materials

Latex Allergy Web Sites

1. National Institute for Occupational Safety and Health (NIOSH)
   http://www.cdc.gov/niosh
Information on Latex Allergy may be accessed through the NIOSH Home Page by clicking on "Safety and Health Topics", then "Latex".

2. American Latex Allergy Association
   www.latexallergyresources.org

3. Latex Allergy Links
   http:// latexallergylinks.tripod.com
Latex Allergy Links is a comprehensive listing of latex allergy-related sites on the Internet. This educational networking site includes articles and practical information about latex allergy, a message board, and chat room.

4. Oregon Department of Human Services, Health Services
Environmental & Occupational Epidemiology
   www.healthoregon.org/dermatitis

5. **www.familyvillage.wisc.edu/lib_latx.htm**

6. Selecting the right glove
   http:// www. immune.com/rubber/nr3.html

7. Addresses the adverse health effects of glove powder
   www.deadlydust.com

The Oregon Department of Human Services, Health Services, Environmental & Occupational Epidemiology section neither endorses, nor is responsible for the information or opinions presented at these websites.

updated 9/2003

Department of Human Services, Oregon Health Division
Environmental and Occupational Epidemiology
Contact: Diane DeBruyckere
Ph: 503.731.4025

Latex Allergy Prevention Project
Evaluation of Restaurant and Child Care Centers Latex Allergy Alerts
(One Page Alerts 6/28/2000)

Restaurant Alerts Evaluation

Check appropriate answers and fill in the blanks

1. How were the **Restaurant Alerts** disseminated?

_____ Routine inspection visits
_____ Mailings
Other (*describe*)_____

2. Approximately how many **restaurants** in your county received the Alerts?_____

3. Please answer the following questions on how the **Restaurant Alerts** were received.

a) Was the alert understandable? _____Yes _____No
Comments:_____
_____

b) Did the alert contain a sufficient amount of information?_____Yes_____No
Comments:_____
_____

c) Did the alerts have any effect on changing glove policy?_____Yes_____No
If **Yes**, approx. number of restaurants that have changed policy due to your intervention with the Restaurant Alerts _____

4. Do you think that Alerts of this type would be of value to all counties in Oregon?
____Yes____No

Suggestions about what could be added, deleted, or changed about the Restaurant Alerts:

_____
_____
_____
_____

Over>>>>>>>>>>>>>>>>>>>>>>>>

Child Care Alerts Evaluation

Check appropriate answers and fill in the blanks

1. How were the **Child Care Alerts** disseminated?

____ Routine inspection visits

____ Mailings

Other (*describe*)_____

2. Approximately how many **child care centers** in your county received the Alerts?_____

3. Please answer the following questions on how the **Child Care Alerts** were received.

a) Was the alert understandable? _____Yes _____No

Comments:_____

_____

b) Did the alert contain a sufficient amount of information?_____Yes_____No

Comments:_____

_____

c) Did the alerts have any effect on changing glove policy?_____Yes_____No

If **Yes**, approx. number of child care centers that have changed policy due to your intervention with the Child Care Alerts _____

4. Do you think that Alerts of this type would be of value to all counties in Oregon?

____Yes____No

Suggestions about what could be added, deleted, or changed about the Child Care Alerts:

_____

_____

_____

Other Comments:_____

_____

_____

_____

Please provide us with the following information:

Health Department_____

Name_____**Ph**_____

e-mail_____

Return evaluations to: **Oregon Health Division**
Attn: Diane DeBruyckere
800 NE Oregon St. Ste. 772
Portland, OR 97232

Thank you for your assistance!

NURSERY & FARMWORKER ALERT
Latex Gloves Can Cause Dangerous Allergic Reactions

Some people who work with latex gloves may have serious allergic reactions. Some problems that latex gloves can cause are:

- Red, itchy skin rash
- Hives
- Itchy, watery eyes
- Runny nose
- Sinus problems
- Breathing problems (asthma)
- Life-threatening reactions

How can you get an allergic reaction from latex gloves?

- If you wear or touch latex gloves
- If you touch something that someone else has touched with latex gloves
- If you breathe latex particles that are in the air

Who can get allergic problems from latex?

- Workers who wear latex gloves a lot
- People who have allergies, hay fever, asthma or skin problems
- Customers in places where workers handle plants with latex gloves

How can we prevent latex allergy problems?

The National Institute for Occupational Safety and Health (NIOSH) says that latex gloves can cause serious allergic reactions. Employers and workers should follow these directions:

- Do not use latex gloves in crop, ornamental plant, or nursery production areas.
- Employers should provide workers with non-latex gloves such as vinyl, knit fabric, or synthetic latex, depending on the tasks performed.

For further information, or if you have a disability and need this in an alternate format contact:

Department of Human Services
Environmental & Occupational Epidemiology
Ph: 503.731.4025
website:healthoregon.org/dermatitis
Published 1/2002

OREGON HEALTH DIVISION

CHILD CARE WORKERS ALERT
Latex Gloves Can Cause Dangerous Allergic Reactions

Some people who work with latex gloves may have serious allergic reactions. Some problems that latex gloves can cause are:

- Red, itchy skin rash
- Hives
- Itchy, watery eyes
- Runny nose
- Sinus problems
- Breathing problems (asthma)
- Life-threatening reactions

How can you get an allergic reaction from latex gloves?

- If you wear or touch latex gloves
- If you touch something that someone else has touched with latex gloves
- If you breathe latex particles that are in the air

Who can get allergic problems from latex?

- Workers who wear latex gloves a lot
- People who have allergies, hay fever, asthma or skin problems
- Babies and children who are allergic and have been close to or touched by latex gloves

How can we prevent latex allergy problems?

The National Institute for Occupational Safety and Health (NIOSH) says latex gloves can cause serious allergic reactions. Employers and workers should follow these directions:

- Do not use latex gloves in child-care centers.
- Employers should provide workers with vinyl, polyvinyl chloride or other non-latex gloves.
- Remember that even when wearing gloves, it is important to wash your hands often to stop the spread of disease between workers and children.

It makes good business sense to protect workers and the children they care for from allergic reactions that are easy to prevent.

For further information, or if you have a disability and need this in an alternate format contact:

Oregon Department of Human Services
Environmental & Occupational Epidemiology
Ph: 503.731.4025
website:www.healthoregon.org/dermatitis
Published 1/2002

OREGON HEALTH DIVISION

GROCERY WORKERS ALERT
Latex Gloves Can Cause Dangerous Allergic Reactions

Some people who work with latex gloves may have serious allergic reactions. Some problems that latex gloves can cause are:

- Red, itchy skin rash
- Hives
- Itchy, watery eyes
- Runny nose
- Sinus problems
- Breathing problems (asthma)
- Life-threatening reactions

How can you get an allergic reaction from latex gloves?

- If you wear or touch latex gloves
- If you touch or eat food that someone else has touched with latex gloves
- If you breathe latex particles that are in the air

Who can get allergic problems from latex?

- Workers who wear latex gloves a lot
- People who have allergies, hay fever, asthma or skin problems
- Customers who eat or touch food that was handled by someone wearing latex gloves

How can we prevent latex allergy problems?

The National Institute for Occupational Safety and Health (NIOSH) says latex can cause serious allergic reactions. Employers and workers should follow these directions:

- Latex gloves or latex finger cots should not be used in any food-service area.
- Employers should provide workers with vinyl, polyvinyl chloride or other non-latex gloves to use on the job.
- Think of latex as a food contaminant.
- Remember that even when wearing gloves, it is important to wash your hands often to stop the spread of disease from workers to customers through any food handled.

It makes good business sense to protect workers and customers from allergic reactions that are easy to prevent.

For further information, or if you have a disability and need this in an alternate format contact:

Oregon Department of Human Services
Environmental & Occupational Epidemiology
Ph: 503.731.4025
website:www.healthoregon.org/dermatitis
Published 1/2002

RESTAURANT WORKERS ALERT
Latex Gloves Can Cause Dangerous Allergic Reactions

Some people who work with latex gloves may have serious allergic reactions. Some problems that latex gloves can cause are:

- Red, itchy skin rash
- Hives
- Itchy, watery eyes
- Runny nose
- Sinus problems
- Breathing problems (asthma)
- Life-threatening reactions

How can you get an allergic reaction from latex gloves?

- If you wear or touch latex gloves
- If you touch or eat food that someone else has touched with latex gloves
- If you breathe latex particles that are in the air

Who can get allergic problems from latex?

- Workers who wear latex gloves a lot
- People who have allergies, hay fever, asthma or skin problems
- Customers who eat or touch food that was handled by someone wearing latex gloves

How can we prevent latex allergy problems?

The National Institute for Occupational Safety and Health (NIOSH) says that latex gloves can cause serious allergic reactions. Employers and workers should follow these directions:

- Latex gloves or latex finger cots should not be used in any food preparation or food service area.
- Employers should provide workers with vinyl, polyvinyl chloride or other non-latex gloves to use on the job.
- Think of latex as a food contaminant.
- Remember that even when wearing gloves, it is important to wash your hands often to stop the spread of disease from workers to customers through any food handled.

It makes good business sense to protect workers and customers from allergic reactions that are easy to prevent.

For further information, or if you have a disability and need this in an alternate format contact:

Oregon Department of Human Services
Environmental & Occupational Epidemiology
Ph: 503.731.4025
website:www.healthoregon.org/dermatitis
Published 1/2002

OREGON HEALTH DIVISION

SCHOOL HEALTH WORKERS ALERT
Latex Gloves Can Cause Dangerous Allergic Reactions

Some children exposed to latex gloves, and some people who work with latex gloves, may have serious allergic reactions.

Latex gloves can cause:

- Red, itchy skin rash
- Hives
- Itchy, watery eyes
- Runny nose
- Sinus problems
- Breathing problems (asthma)
- Life-threatening reactions

How can you get an allergic reaction from latex gloves?

- If you wear or touch latex gloves, or latex finger cots
- If you touch something that has been touched with latex gloves
- If you breathe latex particles in the air

Who can get allergic problems from latex gloves and other latex items?

- Workers who wear latex gloves a lot
- Children and adults who already have allergies, hay fever, asthma or skin problems
- Babies and children who have allergies or are more sensitive, and have been close to or touched by latex gloves

How can you prevent Latex Allergy problems?

The National Institute for Occupational Safety and Health (NIOSH) says latex gloves can cause serious allergic reactions. Protect school health workers, food service workers and school children from allergic reactions that are easy to prevent.

School Districts should follow these directions:

- Do not use latex gloves in school settings.
- Employers should provide workers with vinyl, polyvinyl chloride or other non-latex gloves.
- Remember, even when wearing gloves, wash your hands often to stop the spread of disease.
- Be aware that there are other latex items besides gloves that may be problematic for sensitive people (e.g. rubber bands, erasers, band aids, catheters, etc.).

For further information, or if you have a disability and need this in an alternate format contact:

Oregon Department of Human Services
Environmental & Occupational Epidemiology
Ph: 503.731.4025
website: www.healthoregon.org/dermatitis

Published 8/2003

DHS
oregon department of human services

Latex Allergy Alert
Nutritional Foods & Products Industry

Latex Gloves Can Cause Serious Allergic Reactions

Many employers in the nutritional foods & products industry require their workers to wear gloves when handling & packaging products. The National Institute for Occupational Safety and Health (NIOSH) advises that exposures to latex may result in allergic reactions. ***Single use natural rubber latex gloves are NOT recommended for use by workers in the nutritional foods & products industry.***

Why latex gloves can cause serious allergic reactions

Latex gloves can cause a variety of allergic reactions, including an irritant skin rash; hives; nose, eye, or sinus symptoms; and asthma. Workers are exposed to this risk of allergic reaction when they wear latex gloves or inhale airborne latex particles. Exposure to latex can cause a life threatening reaction in highly sensitive individuals. Even small amounts of latex allergens can cause severe allergic reactions. Individuals who wear latex gloves often, or who have allergies, hay fever, asthma or skin problems have a higher risk of developing latex allergy. Latex sensitive individuals are also at risk when they consume foods, vitamins, herbs, etc. handled by workers wearing latex gloves. Therefore, latex should be regarded as an indirect food & food product contaminant.

How to protect workers and consumers from latex exposure

Eliminate latex gloves from the workplace. Adopt health and safety policy that prohibits the use of latex gloves by workers. NIOSH recommends that employers provide workers with non-latex gloves for use in industries where there is little risk of contact with infectious materials. Vinyl, nitrile, and other synthetic gloves are cost effective, and are appropriate for use in this industry.

It makes good business sense to protect both workers and consumers from an allergic reaction that is so easily preventable.

For further information, or if you have a disability and need this in an alternate format contact:

Department of Human Services
Environmental and Occupational Epidemiology
Ph: 503.731.4025
website:www.healthoregon.org/dermatitis
Published 8/01

DHS
oregon department of human services

Latex Allergy Alert
Food Processing Industry

Latex Gloves Can Cause Serious Allergic Reactions

Many employers in the food processing industry require their workers to wear gloves when handling & packaging food products. The National Institute for Occupational Safety and Health (NIOSH) advises that exposures to latex may result in allergic reactions. ***Single use natural rubber latex gloves are NOT recommended for use by workers in the food processing industry.***

Why latex gloves can cause serious allergic reactions

Latex gloves can cause a variety of allergic reactions, including an irritant skin rash; hives; nose, eye, or sinus symptoms; and asthma. Workers are exposed to this risk of allergic reaction when they wear latex gloves or inhale airborne latex particles. Exposure to latex can cause a life threatening reaction in highly sensitive individuals. Even small amounts of latex allergens can cause severe allergic reactions. Individuals who wear latex gloves often, or who have allergies, hay fever, asthma or skin problems have a higher risk of developing latex allergy. Latex sensitive individuals are also at risk when they consume foods handled by workers wearing latex gloves. Therefore, latex should be regarded as an indirect food & food product contaminant.

How to protect workers and consumers from latex exposure

Eliminate latex gloves from the workplace. Adopt health and safety policy that prohibits the use of latex gloves by workers. NIOSH recommends that employers provide workers with non-latex gloves for use in industries where there is little risk of contact with infectious materials. Vinyl, nitrile, and other synthetic gloves are cost effective, and are appropriate for use in the food processing industry.

It makes good business sense to protect both workers and consumers from an allergic reaction that is so easily preventable.

For further information, or if you have a disability and need this in an alternate format contact:

Oregon Department of Human Services
Environmental and Occupational Epidemiology
Ph: 503.731.4025
website:www.healthoregon.org/dermatitis
Published 9/02

DHS
oregon department of human services

ALERTA PARA LOS TRABAJADORES DE LOS CAMPOS, LAS GRANJAS Y LOS VIVEROS

Los guantes de latex pueden producir reacciones alérgicas peligrosas

Algunas personas que usan guantes de latex pueden desarrollar serias reacciones alérgicas. Los guantes de latex pueden provocar:

- Enrojecimiento y picazón de la piel (salpullido)
- Urticaria
- Picazón en los ojos, ojos llorosos
- Mucha mucosidad en la nariz
- Problemas en los senos faciales (alrededor de los ojos, la frente y las mejillas)
- Problemas para respirar (asma)
- Reacciones que pueden causar la muerte

¿Cómo puedo desarrollar reacciones alérgicas de guantes de latex?

- Si usa o toca guantes o "dedos" de latex
- Si toca algo que otra persona tocó con guantes de latex
- Si respira partículas de latex que están en el aire

El latex, ¿a quién le puede provocar alergia?

- A los trabajadores que usan mucho guantes de latex
- A las personas que tienen alergias, "fiebre del heno", asma o problemas de piel
- A los clientes que están en los lugares donde los trabajadores tocan las plantas con guantes de latex

¿Cómo se pueden evitar estos problemas de alergia al latex?

El Instituto Nacional de Seguridad y Salud en el Trabajo (NIOSH) advierte que los guantes de latex provocan serias reacciones alérgicas. Tanto los trabajadores como los patrones deben seguir estos pasos:

- No usar guantes de latex en áreas de cosechas, de plantas ornamentales o de viveros.
- El patrón debe darle a los trabajadores guantes que no sean de latex: que estos sean vinílicos, tejidos o de latex sintético, dependiendo del trabajo que hagan.

Para más información o si necesita este documento en otro formato (Braile, audio, etc), póngase en contacto con el:

Departamento de Servicios Humanos de Oregon
Epidemiología del Medio Ambiente y del Trabajo
Teléfono: 503.731.4025
Sitio en la Web: www.healthoregon.org/eoe/espanol.cfm
Publicado en Enero de 2002

DHS
oregon department of human services

ALERTA PARA LOS TRABAJADORES DE LAS GUARDERIAS DE NINOS

Los guantes de latex pueden producir reacciones alérgicas peligrosas

Algunas personas que usan guantes de latex pueden desarrollar serias reacciones alérgicas. Los guantes de latex pueden provocar:

- Enrojecimiento y picazón de la piel (salpullido)
- Urticaria
- Picazón en los ojos, ojos llorosos
- Mucha mucosidad en la nariz
- Problemas en los senos faciales (alrededor de los ojos, la frente y las mejillas)
- Problemas para respirar (asma)
- Reacciones que pueden causar la muerte

¿Cómo puede Ud. desarrollar reacciones alérgicas de guantes de latex?

- Si usa o toca guantes o "dedos" de latex
- Si toca algo que otra persona tocó con guantes de latex
- Si respira partículas de latex que están en el aire

El latex, ¿a quién le puede provocar alergia?

- A los trabajadores que usan mucho guantes de latex
- A las personas que tienen alergias, "fiebre del heno", asma o problemas de piel
- A los bebés y niños que tienen alergias o que son más sensibles al latex, o que están cerca o en contanto con guantes de latex

¿Cómo se pueden evitar estos problemas de alergia al latex?

El Instituto Nacional de Seguridad y Salud en el Trabajo (NIOSH) advierte que los guantes de latex provocan serias reacciones alérgicas. Tanto los trabajadores como los patrones deben seguir estos pasos:

- No usar guantes de latex en las guarderías de niños.
- El patrón debe darle a los trabajadores guantes que no sean de latex: que estos sean vinílicos, tejidos, de algodón u otro material.
- Recordar que aunque se usen guantes, el lavado frecuente de las manos es la mejor manera de parar el contagio de enfermedades.

¡Es más económico prevenir que curar! Proteja a los que cuidan a los niños y a los niños de las reacciones alérgicas, ya que la prevención es tan simple.

Para más información o si necesita este documento en otro formato (Braile, audio, etc), póngase en contacto con el:

Departamento de Servicios Humanos de Oregon
Epidemiología del Medio Ambiente y del Trabajo
Teléfono: 503.731.4025
Sitio en la Web: www. healthoregon.org/eoe/espanol.cfm
Publicado en Enero de 2002

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ALERTA PARA LOS TRABAJADORES DE LOS SUPERMERCADOS

Los guantes de latex pueden producir reacciones alérgicas peligrosas

Algunas personas que usan guantes de latex pueden desarrollar serias reacciones alérgicas. Los guantes de latex pueden provocar:

- Enrojecimiento y picazón de la piel (salpullido)
- Urticaria
- Picazón en los ojos, ojos llorosos
- Mucha mucosidad en la nariz
- Problemas en los senos faciales (alrededor de los ojos, la frente y las mejillas)
- Problemas para respirar (asma)
- Reacciones que pueden causar la muerte

¿Cómo puede Ud. desarrollar reacciones alérgicas de guantes de latex?

- Si usa o toca guantes o "dedos" de latex
- Si toca algo que otra persona tocó con guantes de latex
- Si respira partículas de latex que están en el aire

El latex, ¿a quién le puede provocar alergia?

- A los trabajadores que usan mucho guantes de latex
- A las personas que tienen alergias, "fiebre del heno", asma o problemas de piel
- A los clientes que tocan o comen alimentos tocados por alguien que usa guantes de latex

¿Cómo se pueden evitar estos problemas de alergia al latex?

El Instituto Nacional de Seguridad y Salud en el Trabajo (NIOSH) advierte que los guantes de latex provocan serias reacciones alérgicas. Tanto los trabajadores como los patrones deben seguir estos pasos:

- No usar guantes o "dedos" de latex en las áreas donde están los alimentos (cocinas, áreas de procesamiento de alimentos y áreas de consumo).
- El patrón debe darle a los trabajadores guantes que no sean de latex: que estos sean vinílicos, tejidos, de algodón u otro material.
- Recordar que aunque se usen guantes, el lavado frecuente de las manos es la mejor manera de parar el contagio de enfermedades.

¡Es más económico prevenir que curar! Proteja a los trabajadores y a los clientes de las reacciones alérgicas, ya que la prevención es tan simple.

Para más información o si necesita este documento en otro formato (Braile, audio, etc), póngase en contacto con el:

Departamento de Servicios Humanos de Oregon
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Sitio en la Web: www.healthoregon.org/eoe/espanol.cfm
Publicado en Enero de 2002

DHS
oregon department of human services

ALERTA PARA LOS TRABAJADORES DE LOS RESTAURANTES

Los guantes de latex pueden producir reacciones alérgicas peligrosas

Algunas personas que usan guantes de latex pueden desarrollar serias reacciones alérgicas. Los guantes de latex pueden provocar:

- Enrojecimiento y picazón de la piel (salpullido)
- Urticaria
- Picazón en los ojos, ojos llorosos
- Mucha mucosidad en la nariz
- Problemas en los senos faciales (alrededor de los ojos, la frente y las mejillas)
- Problemas para respirar (asma)
- Reacciones que pueden causar la muerte

¿Cómo puede Ud. desarrollar reacciones alérgicas de guantes de latex?

- Si usa o toca guantes o "dedos" de latex
- Si toca algo que otra persona tocó con guantes de latex
- Si respira partículas de latex que están en el aire

El latex, ¿a quién le puede provocar alergia?

- A los trabajadores que usan mucho guantes de latex
- A las personas que tienen alergias, "fiebre del heno", asma o problemas de piel
- A los clientes que tocan o comen alimentos tocados por alguien que usa guantes de latex

¿Cómo se pueden evitar estos problemas de alergia al latex?

El Instituto Nacional de Seguridad y Salud en el Trabajo (NIOSH) advierte que los guantes de latex provocan serias reacciones alérgicas. Tanto los trabajadores como los patrones deben seguir estos pasos:

- No usar guantes o "dedos" de latex en las áreas donde están los alimentos (cocinas, áreas de procesamiento de alimentos y áreas de consumo)
- El patrón debe darle a los trabajadores guantes que no sean de latex: vinílicos, tejidos o de algodón u otro material que no sea latex
- Recordar que aunque se usen guantes, el lavado frecuente de las manos es la mejor manera de parar el contagio de enfermedades

¡Es más económico prevenir que curar! Proteja a los trabajadores y a los clientes de las reacciones alérgicas, ya que la prevención es tan simple.

Para más información o si necesita este documento en otro formato (Braile, audio, etc), póngase en contacto con el:

Departamento de Servicios Humanos de Oregon
Epidemiología del Medio Ambiente y del Trabajo
Teléfono: 503.731.4025
Sitio en la Web: www.healthoregon.org/eoe/espanol.cfm
Publicado en Enero de 2002

DHS
oregon department of human services

West Nile Virus

Tips for Proper Protection when using Mosquito Repellents containing DEET

West Nile Virus is an illness spread by mosquito bites. Preventing mosquito bites can prevent getting West Nile Virus. Insect repellent products containing DEET (N, N-diethyl-m-toluamide) can reduce the risk of mosquito bites, but must be used with caution. Products containing DEET have been occasionally associated with health problems among people who have used it. The reported problems include: skin reactions such as rash, swelling and itching; eye irritation (burning, itchy and watery eyes); and less often, slurred speech, confusion and seizures.
Below are recommended precautions to take when using mosquito repellents containing DEET for adults and children.

Recommendations for use by adults:

- Products with 10-35 percent DEET will provide adequate protection under most conditions. Be sure to read the product label and use according to the label directions.
- Use DEET sparingly and apply only on exposed skin.
- Do not apply to skin under clothing, or to skin that is damaged by sunburn, cuts, or other conditions such as psoriasis.
- Wash treated skin and clothing after returning indoors.

Recommendations for use with children:

- Repellents used on children 2-12 years of age should contain no more than 10 percent DEET, according to the American Academy of Pediatrics.
- Do not apply DEET directly to children. Apply to your own hands and then put it on the child. Avoid applying on the child's lips, hands and eyes.
- Do not allow children to apply DEET themselves.
- Wash treated skin and clothing after returning indoors.
- Store all repellents out of the reach of children.
- If you believe you or a child is having a reaction to a repellent containing DEET, wash the treated area immediately and contact your health care provider or the Poison Center (1-800-222-1222).

Other Important Preventive Measures:
The use of DEET is only one way to reduce your risk of mosquito bites. Other important precautions include:
• Wear long pants and long-sleeved shirts during peak mosquito activity periods, such as dawn and dusk.
• Use mosquito netting over infant carriers, carriages and playpens when outdoors.
• Use window and door screens, and keep them in good condition.
• Eliminate items on your property in which standing water can collect and serve as a breeding ground for mosquitoes. Such items can include old tires, empty flowerpots and cans.

Where to go for more information about West Nile Virus and prevention
Oregon Health Services fact sheet:
www.ohd.hr.state.or.us/acd/wnile/facts.htm

National Pesticide Information Center (NPIC) 1-800-858-7378 or
www.npic.orst.edu/

Centers for Disease Control and Prevention (CDC)
www.cdc.gov/ncidod/dvbid/westnile/index.htm

The Oregon Department of Human Services, Environmental and Occupational Epidemiology Section developed this information for the Pesticide Analytical and Response Center (PARC). This information was derived from materials provided by the Mississippi State Department of Health, the National Pesticide Information Center, and the Centers for Disease Control and Prevention.

Appendix C

Data Dissemination Efforts

Appendix C: Latex Glove Alerts

Six different versions were tailored to the needs of each industry. Four of the Alerts were also printed in Spanish Restaurant, Child Care, Grocer's, Agriculture. Following is a list of the organizations the Alerts were distributed to, and the approximate number of printed Alerts distributed.

1. Restaurant Latex Allergy Alert
   OHS/Environmental Services & Consultation
   Local County Health Departments
   TriCounty Sanitarians & Certifiers Group
   Oregon Restaurant Association
   La Clinica del Carino, Migrant Health Clinic
   National Latex Allergy Network
   OR-Eco Building Network
   UFCW Local 555 membership of approx. 20,000
   OR-Epi annual conferences
   Oregon Environmental Health Association OEHA annual conferences
   OHS/EOE website

Quantity: >36,000 via website copying, newsletters, list serves, networking, etc.

2. Child Care Latex Allergy Alert
   OHS/Environmental Services & Consultation
   Local County Health Departments
   TriCounty Sanitarians & Certifiers Group
   National Latex Allergy Network
   OR-Epi annual conferences
   Oregon Environmental Health Association OEHA annual conferences
   Annual Oregon Child Care Conference
   La Clinica del Carino, Migrant Health Clinic
   Migrant Head Start
   Head Start Region X
   OHS/EOE website

Quantity: >2,000

3. Grocers' Latex Allergy Alert
   Dept. of Agriculture – field inspectors
   National Latex Allergy Network
   OR-Eco Building Network
   OHS/EOE website

Quantity: >400

4. Agriculture Latex Allergy Alert
   Dept. of Agriculture – field inspectors
   La Clinica del Carino, Migrant Health Clinic

National Latex Allergy Network
OR-Eco Building Network
OHS/EOE website

Quantity: >300

5. Nutritional Foods & Products Industry Latex Allergy Alert:
   National Nutritional Food Association NNFA
   National Latex Allergy Network
   OHS/EOE website

Quantity: ~300

6. Food Processing Industry Latex Allergy Alert:
   NW Food Sanitation Conference
   Technical Products, Tualatin, OR
   Dept. of Agriculture
   OHS/EOE website

Quantity: ~500

COMMUNICATIONS RESULTING FROM PRESS RELEASE ON LATEX GLOVE USE PROHIBITION IN FOOD CODE RULE

The press release resulted in newspaper media attention. The EOE Manager was interviewed by journalists from the Oregonian and the Salem Statesman Journal. The articles focused on the public health rationale for the rule change, the kinds of alternative gloves that are available, and the role of hand-washing in food safety. A press clipping service identified that the story appeared in additional newspapers in Multnomah, Deschutes, Hood River, Baker, and Union counties in Oregon.

- An article about the Oregon prohibition on latex gloves in foodservice appeared in the August 30, National Restaurant Association newsletter, *In the News*. The article included common latex questions and answers.
- NLAN national and Pacific NW region were notified and picked up the press release for their website (current link is http:// latexallergylinks.tripod.com)
- Latex Allergy website and Glove resource lists were updated and shared with NLAN.
- EOE staff was contacted by a lobbyist for the glove manufacturers who supply the health care industry. The lobbyist questioned why he wasn't directly notified of the rule change. The public hearing process was explained to the lobbyist.
- A question from a physician was forwarded to EOE staff from the National Latex Allergy Network (NLAN) regional representative. The physician is editor in chief of the Journal of Long-Term Effects of Medical Implants, author of "Medicine's Deadly Dust, A Surgeon's Wake-up Call to Society"; and had testified before the Oregon Legislature in 1999 regarding banning powder from surgical and examination gloves. The physician was wondering if the Oregon ban on latex gloves in food service includes powdered non-latex gloves. The question was answered, and he was directed to our websites for further information on the specific food code rule.
- We were contacted by the Quality Assurance manager of Buffets, Inc. who asked if the rule applies to multiuse latex gloves worn by dishwashers and/or janitorial staff. We were pleased to learn that this franchise already has switched to non-latex gloves. This question prompted a discussion between ESC & EOE staff to ensure that we're giving a unified message on the latex glove issue when we receive inquiries from the public. The decision was that the rule applies to all latex gloves, all restaurant staff, all uses.
- A trainer/communications person from American Health Products Corp. – Food Service Division, Scottsdale, AZ, requested information about the new Food Code Rule.
- We were contacted by a regional sales representative who sells FoodHandler gloves to a multitude of distributors, including one of the largest restaurant suppliers – Sysco. Sysco sells FoodHandler gloves under their own label. The sales representative scheduled several promotional sessions at Sysco on 9/13 and requested information on the new Food Rule change and Latex Allergy. There were 3 one hour promotional sessions, with approximately 40 sales people in each session. EOE staff also directed the sales representative to the ESC and EOE websites, NIOSH and NLAN websites, and sent CDC/NIOSH Latex Allergy

alerts to hand out at the sessions. We plan to contact other restaurant suppliers in the future.

- Latex Glove Use in the Food Processing Industry: We were contacted by sales representative from Technical Products, Tualatin, OR, who sells latex gloves and is latex sensitive. The sales representative wanted to know if the latex prohibition applies to food processing companies. Although the answer is no, we encouraged her to promote the use of non-latex with her customers. She said that she was already doing so, and was interested in further information dissemination regarding latex allergy prevention within the industry. She wanted to know if we had an informational handout or communiqué that she could use with her customers. We sent her (electronically) a Latex Alert for the Food Processing industry that we customized for her use; a communiqué developed for manufacturers, distributors and suppliers; and the Restaurant Latex Alert.
- The Oregon Restaurant Association was supplied with electronic copy of communiqués that can be used in their organization's media to reach restaurant owners, managers and workers, as well as restaurant suppliers. The ORA included information on the Food Code Rule change in their electronic newsletter *Blue Plate Special,* Vol.4, Issue 12, August 5, 2002, as well as posted information on their website in the Laws & Regulations/FoodCode section. These can be accessed at the ORA website: www.ora.org
- A Forest Service employee called EOE staff to find out if the Food Rule applies to mobile food units. The employee had a bad reaction after consuming food from a mobile food unit while working at a US Forest Service site (fire fighting assignment). Staff informed her that the Food Rule does cover mobile units, and that we're encouraging restaurant owners and managers to switch now to non-latex gloves. The individual was referred to our website for additional latex allergy resources, links, and information to print and hand out. She said that she would give the communiqué (for restaurant owners, managers and workers) to mobile units at work sites.
- Website links were created between the Food Code Rule information on the ESC web page and the EOE/Dermatitis website, where Latex Allergy information is located. Refer to

http://www.healthoregon.org/dermatitis

Wilderness and Environmental Medicine, 13; 206–208 (2002)

BRIEF REPORT

The Feasibility of Using Skin Protectant Products and Education to Prevent Poison Oak

Marilyn J. Scott, CSP, ARM; Michael A. Heumann, MPH; Diane M. DeBruyckere, RN; Thomas W. Brundage, MA; Melvin A. Kohn, MD, MPH

From the Department of Human Services, Oregon Health Division, Environmental and Occupational Epidemiology, Portland, OR.

Introduction

Poison oak and poison ivy are common in the Pacific Northwest. Poison oak often grows in dense clusters of bushes, with vines up to 30 feet that can twine around tree trunks or other plants, making it difficult for field and woodland workers to avoid contact.[1,2] The oil (urushiol) found in the leaves, roots, stalks, and berries of these plants causes an allergic reaction, with catechols as the active allergens.[1–6] Exposure to the oil can occur by direct skin contact with the plants, by contact with or inhalation of soot or smoke particles from burning plants, by contact with aerosolized urushiol released during chain sawing, or by contamination or penetration of clothing, boots, work gloves, and tools.[2,3] Among agricultural workers, exposure commonly occurs during brush cutting, land clearing, or burning activities. Among forestry workers, exposure commonly occurs during timber cruising and marking, tree felling, climbing and bucking, yarding and loading, tree replanting, and firefighting.[3,7,8]

Exposure to poison oak or poison ivy is the most common cause of allergic contact dermatitis resulting in accepted Oregon workers' compensation claims. The Oregon Health Division's analysis of Oregon workers' compensation claims data showed that 106 (13%) of 800 accepted claims for dermatitis were caused by poison oak or poison ivy from October 1, 1992, to September 30, 1999. Of these 106 claims, 28 (26%) were submitted by agricultural and forestry workers. The pattern of occupational dermatitis from poison oak/ivy that we observed in Oregon is similar to that observed by the US Department of Agriculture Department of Forestry in California and Washington for forestry workers and firefighters where these plants also exist.[2,6–8]

Because of the impact of allergic contact dermatitis on workers' compensation claims in Oregon, we worked with a private insurer and a logging company to develop an intervention to evaluate the effectiveness of using a skin protectant, a skin cleanser, and an educational program on the occurrence of poison oak in forest workers.

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Methods

Through a review of Oregon claims information submitted to a private workers' compensation insurance carrier from January 1997 to August 1998, we identified a logging firm with the highest frequency of contact dermatitis claims resulting from poison oak or poison ivy. This firm was selected for the project because it was the employer with the most disabling and nondisabling claims (7) for poison oak during this 16-month period. With the permission of the insurer, the logging firm was approached by the Oregon Health Division about participating in this project. The firm employs approximately 500 loggers and helicopter personnel throughout the United States during peak season. A small crew of 17 workers (13 timber fallers, 3 cutting supervisors, and 1 hook tender) working in northern California woodland sites containing heavy amounts of poison oak was invited to participate.

The skin protectant (IvyBlock Lotion, EnviroDerm Pharmaceuticals, Louisville, KY) used in this project was selected because it is approved by the Food and Drug Administration for preventing allergic reactions to urushiol.[9] In addition, the manufacturer donated the skin protectant and skin cleanser and provided an onsite trainer to instruct workers in plant recognition, plant avoidance, protective clothing usage, appropriate skin-cleansing procedures, and appropriate use of the skin protectant. The skin protectant, containing 5% bentoquatam (quaternium-18 bentonite), has been shown effective at preventing allergic contact dermatitis from poison oak.[9,10] It was to be applied every 4 hours while at work and after each skin cleansing. Workers were supplied

with towelettes containing isopropyl and cetyl alcohol and were instructed to cleanse their skin before application of the skin protectant, before meals, and at the end of each workday.

At the beginning of the project, workers were asked to fill out a brief baseline questionnaire describing their past experience with dermatitis from poison oak. The logging company instructed workers to self-report any new episodes of rashes during the project period and to fill out a second brief questionnaire each time they developed a new rash. All questionnaires and reports of new rashes were reviewed by the firm's safety coordinator and the Oregon Health Division.

The project period was from June 22 to October 31, 1999.

Results

At the beginning of the project, all 17 loggers completed the initial baseline questionnaire, and 16 of 17 reported having had a rash from poison oak in the past. Of these 16, 3 (19%) reported being severely affected, 8 (50%) reported being moderately affected, and 5 (33%) reported being mildly affected, as illustrated in the Table. The number of episodes of rashes from poison oak among workers ranged from 3 to 100.

During the project period, 2 mild poison oak rashes were reported on workers with a prior history of rashes. Both of these rashes were on a wrist and were self-treated; there was no lost work time. Although both men affected by the rash reported using the protectant at least as frequently as recommended by the manufacturer, both men also reported inconsistent use of the skin-cleansing towelettes.

The logging firm reported that the skin products were easy to use and that they had not received any complaints from the loggers about the products. The firm also reported that no workers' compensation claims had been filed for dermatitis during the study period among this crew of workers.

Partway through the project, the logging company purchased the skin protection system and distributed it to all its work crews. A statistical comparison of the number of pretreatment claims (1998 logging season) and claims incurred during the project (1999 logging season) due to poison oak–induced dermatitis identified a significant difference at $P < .005$. The results indicate a clear difference in the number of poison oak–induced dermatitis claims among employees of this logging firm.

Self-reported severity reaction for workers: prior history of poison oak rash and experience of rash during the project

Severity	*Workers with history of reactions (%)*	*Worker reactions during project (%)*
Severely affected	3 (19)	0 (0)
Moderately affected	8 (50)	0 (0)
Mild reaction	5 (31)	2 (12)
No reaction	1 (0)	15 (88)
Total	17 (100)	17 (100)

Discussion

This pilot prevention project suggests that a program of skin protectant containing 5% bentoquatam, skin cleansing, and training is feasible to protect loggers from contact dermatitis due to poison oak. Because there was no comparison group working in the same environment but not using protectants, it is not possible to quantify the amount of protection conferred by this program. However, the high frequency of dermatitis among participants prior to this project suggests that loggers are a high-risk group for poison oak dermatitis. The small number and mild nature of rashes reported during this study period suggest that this program may be effective at preventing dermatitis. The logging firm itself was so encouraged by this project that they began supplying the products to their crews nationwide before the end of the project. The firm has not had any workers' compensation claims for poison oak during the 2 logging seasons after the project ended in October 1999.

Use of the skin protectant in combination with the skin cleanser, and the educational program that reinforced their appropriate use, contributed to the project's success. However, this project could not identify which of these components was most important. That the 2 workers who did develop rashes reported inconsistent use of the cleansing towelettes suggests that the cleansing step may be important in rash prevention. However, the mild nature of those rashes suggests that the other components of the program may have had an important preventive effect. This intervention program should be replicated in a larger population with a comparison group.

This project also demonstrated the utility of collaborative partnerships between industry and a public health agency in identifying risks and developing interventions to reduce the incidence and severity of occupational injuries and illnesses.

Acknowledgments

Support for this project was provided by grant U60/CC008161-07/08 from the National Institute for Occu-

Oregon Restaurant Latex Glove Use
County Health Department Restaurant Inspector Survey

Purpose: to identify the impacts of the Oregon Health Services rule change prohibiting the use of latex gloves for food preparation and service.

Population: Ten county health departments were selected for the survey. The Environmental and Occupational Epidemiology selected the counties in consultation with the Environmental Services section of the Health Services Branch of the Oregon Department of Human Services. The designated Environmental Health staff member from each of the selected counties was contacted by telephone. An appropriate person to respond to survey was contact on the first attempt for 40% of the counties or two attempts for 40%. It took three or more attempts to contact an appropriate person to interview in the remaining two counties (20%). For six counties the name provided by DHS was for individuals who conducted restaurant inspections. One individual was no longer working for the county. For the four counties where the original name provided was not an appropriate individual to respond to the survey an appropriate person was identified and interviewed.

Instrument: The survey form contains nine questions including two multipart questions. Three questions pertain to restaurant inspection and educational activities before March 1, 2003 with the remaining questions pertaining to inspections and observations after the ban on latex gloves went into effect on March 1, 2003.

Findings:
1. The number of inspections for the three months prior to March 1, 2003 (December 1, 2002 through February 28, 2003)

Mean=66 Range=20-150 Unknown = 3

2. The number of restaurants inspected during the three months prior to March 1, 2003 (December 1, 2002 through February 28, 2003) that used latex gloves for food preparation and service

Mean = 4.75 Range = 0-10 Unknown = 2

(When this was evaluated as a percent of inspections the number of respondents increased)

Mean = 14.2 Range = 0-80% Unknown = 0

3. Respondents thought that educational efforts prior to March 1, 2003 increased restaurant personnel awareness of latex allergy risk.

Greatly = 20% Moderately = 20% Slightly = 50%

Don't Know = 10%

4. Restaurants inspected since March 1 2003
Mean = 118 Range = 2-250 Unknown = 1

5. Approximated number of inspected restaurants that used latex gloves for food preparation and service:
Mean = 3 Range = 0-13 Unknown = 0
Five respondents (50%) indicated that none of the restaurants inspected since March 1, 2003 used latex gloves.

When this was evaluated as a percentage of restaurants inspected, the results are:
Mean = 1.9% Range = 0-7.7% Unknown = 0

6. Respondents indicated that they thought that awareness about latex allergy since latex gloves were prohibited on March 1, 2003 was:

Greatly Increased = 10% Moderately Increased = 50% Slightly Increased = 30%
No change = 10%

7. Ninety percent of respondents indicated that they had observed restaurants that had replaced latex gloves with non-latex gloves since March 1, 2003. (Note that glove use is not required. The one respondent with a negative response on this questions indicated that all restaurants had changed over to non-latex before March 1, 2003.)

The second part of this question posed some problems for respondents. Responses were translated into a percentage of those restaurants that used gloves.

Mean = 72.8% Range = 10-100%

8. Respondents opinions of how many restaurants would have switched to non-latex gloves on a voluntary basis without the Food Code Rule change:

All/most = 20% Some = 60% None = 20%

9a. Seven respondents had received or heard comments from restaurant personnel about the March 1st Food Code Rule prohibiting latex gloves. The following comments were from owners or managers.

Asked for background information on latex allergy. Some were not aware of the rule change until inspection, so had questions about changes and compliance.
What do we do now?
What is the right kind of glove to use now?

Where do you get other types of gloves?
Latex is more durable and easier to use.
Managers wanted to show proudly that they are using non-latex gloves
Managers expressed awareness of rule change.

9b. The following are the types of comments received from line workers.

Comments about being glad the rule change was made. They like the additional protection from allergy. Some mentioned having allergies. (Two respondents mentioned
These types of comments)

Complaints about the non-latex gloves (mentioned by five respondents)
Vinyl gloves are too big, don't stretch or fit like latex.
Can't feel things well.
How come they had to change? The plastic gloves feel slimy.
Latex is more durable and easier to use. Why did we need to change?
(Respondents indicated that once the reason was explained and the workers were aware of the allergy problem they were more receptive to the change.)

Survey respondents made additional comments about the rule change or latex allergies:

"Temporary restaurants are slower to come into compliance. The temporary booths operate only once a year and are more likely to be using up old stocks of gloves, or are unaware of the rule change. The inspector indicated that the mailing from the state was very effective for education. The inspections staff has broader questions about whether latex glove ban will extend to all of health care, day care. :Will restaurants be required to list other allergens? Is this something that is being considered for the future?"

"The rule change has been generally accepted. Some restaurants had staff who had developed allergies, so they had switched before the rule change. This inspector feels that this will protect 98% of food workers from latex exposure after a year or so of the rule being in place."

"One respondent expressed concern that many restaurants don't use gloves, unless workers get a cut, but the gloves and finger cots in the first aid kits tend to be latex (cots 100% are latex, gloves about 90%). Part of the issues may be communication since the licensee gets information but the kitchen manager makes most of the day-to-day decisions. We need more outreach to suppliers so they respond appropriately when food service buyers come in and ask for gloves they are not steered towards latex. Temporary restaurants are less aware. Need to make sure United Grocers, Restaurant Supply, Medical and

Safety Supplies, and 1st Aid Suppliers are made aware." (my note - also look at mail order suppliers - look at restaurant trade journal advertisers)

"This county has a high level of interest. Most of their outreach started four years ago. There were big concerns about liability if clients became ill, less concern about workers. Workers in food handler classes indicate that they are happy that risk is being controlled for workers."

"All of the education was done a long time before the rule change, and behavior change occurred before the rule change went into effect."

Summary: Overall, based upon this qualitative assessment the rule change has been effective, with few restaurants using latex gloves for food preparation and service after the March 1, 2003 rule change. Anecdotally, there is a great deal of variation from county to county as to how many restaurants use gloves for food preparation and service. Outreach to temporary restaurants, and to glove suppliers used by the restaurant industry might help reduce latex glove use further. This outreach should include mail order suppliers that advertise in restaurant trade journals.

OSAOHN News

Oregon State Association of Occupational Health Nurses

Volume 3, Issue 3 February 2003

AAOHN Course at GOSH!

For more information go to www.osaohn.org or http://www.cbs.state.or.us/external/osha/educate/conferences/confer.htm

From the President

I hope the New Year is going well for all you and that you have remembered to renew your AAOHN/OSAOHN dues for 2003.
These are just some of the services supported by your dues:

- The OSAOHN website
- A quarterly newsletter
- Regular distribution of OH&S information to members via email
- 4 all-day CE meetings in Portland, Salem and Eugene
- Representation and CE offerings at the GOSH conference 2003.
- Support of members who wish to run for national office at AAOHN
- A $250.00 scholarship award for OH education
- A worksite grant award (up to $1500.00) for OH worksite programs and efforts – sponsored by CROET
- Membership in ONA
- Leadership training for board members at COL

In addition our governmental affairs committee is working hard to keep you informed of issues that affect OHNs and RNs in Oregon. We were able to distribute information about OSAOHN to many legislators in Salem this month – we want them to know that we are the #1 resource in Oregon for information on occupational health issues. We will also continue our partnership with the Oregonian to provide support for the annual healthcare career fair. Thank you to all of you who make the above achievements possible through your dues and volunteer efforts.
Unfortunately, with the current economic situation in Oregon, I know some of you are facing the threat of being laid off or are unemployed. **Please remember** that as an organization our primary mission is to support each other as OHNs. So even if you cannot afford to renew your membership this year, OSAOHN is still here to support you during these stressful times. Remember all

Continued on page 2.

In this Issue:

Editor's Corner

As we put this issue together, it is amazing that terrorism and the budget are here too. They both certainly are a part of our lives.

Do you need more info regarding smallpox vaccination? ANA has a number of fact sheets available at their website. I found that latex allergy is a risk factor for smallpox. Also the CDC website at www.bt.cdc.gov/agent/smallpox/vaccination/facts.asp has good data.

Judy Fech has asked for your help. She is looking for samples of customer service feedback forms that are being used after employee calls, visits, etc. Judy is a loss prevention specialist at Wells Fargo. Reach her at 503-886-3770 or fax 503-886-3257.

Do others of you have requests that we could use our networking abilities to assist? Send us your requests; we could have an opportunity to share at a meeting.

Mitzi Williams
Newsletter Editor

Shared joy is double joy and sorrow shared is half-sorrow
Unknown

Governmental Affairs Update

Are You Ready to Respond to Bioterrorism?

Bioterrorism response on the Government's Agenda.

- Should you take the smallpox vaccination?
- Are you prepared to respond to an attack at your work site or in your community?

Oregon Department of Human Services at www.ohd.hr.state.or.us has a link for Bioterrorism Preparedness and Response. It provides current and up-to-date information for first responders and healthcare providers.

The state legislature is in session. They are focused on the current cash shortage and balancing the budget. The Oregon Nurses Association (ONA) is working with the Senate to restore cuts in programs serving the medically needy, mentally ill, and those in long-term care. Other items on their agenda include: Allowing Nurse Practitioners to function as preferred providers under the workers comp system. Legislation addressing the nursing shortage, and expanding Nurse Practitioners' scope of practice to include dispensing medication.

The Environmental & Occupational Epidemiology, Oregon Department of Human Services, reports they have not received any case reports to date on skin rashes related to Dextron III since we implemented the OSAOHN network (see Government Affairs Update, OSAOHN Newsletter November 2002). NIOSH is currently strategizing to obtain proprietary ingredient information from the manufacturer of Dextron III, under the guise of Hazardous Communication. You can report suspected cases of dermatitis related to Dextron III exposure to Diane DeBruyckere BSRN at diane.m.debruyckere@state.or.us.

See You At GOSH 2003

OSAOHN again has a presence at the Oregon State Governor's Occupational Safety & Health Conference (GOSH).

Shelley Jones, PhD, RN, COHN-S is teaching an all day pre-conference workshop, **Environmental Health Issues in Occupational Health and Safety.** This is a core curriculum class of AAOHN and participants will receive a certificate from AAOHN.

OSAOHN members Lynda Enos, MS, CPE, RN, COHN-S, Mary Davidson, Louann Beck, MSN, RN and Shelley Jones are all presenters at regular conference sessions. Sessions this year cover medical topics, medical surveillance and safety issues and management. Some of the sessions are Environmental H&S Issues in the Semiconductor Industry, Occupation & Environmental Medicine in the 21st Century: The New Frontier in Genetics, Legal Aspects of Documentation, Aging Workplace Issues, Project Management and Privacy: The New Frontier. There seems to be something for everyone.

Shelley is also presenting the 2003 OHN Update and Certification class in conjunction with GOSH; it runs March 6, 7 & 8. The 3 days provide 23 hours of continuing education (CE). For more information regarding the update class, call Shelley at (503) 494-3804 or email her at jonessh@ohsu.edu.

Wednesday evening of GOSH, OSAOHN is having a Networking Reception. It is in the VIP Room of the Oregon Convention Center from 5-7 pm. Light refreshments and soft drinks will be served. It will be a chance to network and share ideas with other occupational health and safety professionals.

If you still have not registered for GOSH, call (503) 378-3272 or email: oregon.GOSH2003@state.or.us

From the President continued.

OH&S professionals are welcome to attend our meetings or to contact us with questions or concerns.

On a lighter note it will soon be time to nominate members for 3 board positions in our association. If you are a member and are committed to your profession, we'd love to see you get involved and bring new ideas and experience to our board.

Board positions entail attending our meetings and an all-day meeting in the summer. It's a wonderful way to learn what the organization does, do some committee work and network closely with a group of your peers.

The office of Secretary is also open for nominations. If you are interested, Launa Rae Mathews, our Nomination Committee Chair at Launa.r.mathews@intel.com or you can contact any of us on the Board.

Lastly, we are holding our April meeting in Eugene this year. We hope that OSAOHN members and potential members from the southern area of the state will attend this event. Please pass the word around to any colleagues that may be interested in attended this meeting. Go to www.osaohn.org for more information.

Lynda Enos
President

State Budget 101

As health care professionals, citizens and taxpayers, we all have an interest in the current budget challenges facing public services. But it is very hard to follow the discussions, arguments and diatribes without a basic understanding of state financing. It is complex. But here are some basic concepts to help you be an informed participant.

State government revenue falls into three broad categories.

- General Fund. It is made up mostly of personal and corporate income taxes and lottery earnings.
- Federal Funds. Your federal tax dollars sent back to Oregon from Washington DC. This money is sent for specific purposes. It has many restrictions on its use. Examples are Federal Highway funds and Medicare funds.
- Other Funds. Taxes and fees paid in Oregon for specific services or privileges. Examples are vehicle registration fees, hunting or fishing licenses and tuition. This type of charge has increased in frequency as the public has insisted individual taxpayers should not pay for what they do not use.

General Fund is Dependent on the Economy.
Because the General Fund relies on income taxes, it has been greatly affected by the state's economic downturn. Federal and "Other" revenues are earmarked for specific purposes. Even if available, excess from these funds may not be spent on General Fund program needs. And reduced General Fund has the effect of decreasing Federal Funds. The amount of federal funds states receive is, in part, based on a state match. That means the state first puts up some cash. The Feds will match it at a specific ratio. In some programs the Federal match is as high as 0.90 cents on every state dollar. Most of Oregon's money comes from the General Fund. So Oregon looses federal fund match when it cuts the General Fund for these programs.

Where Is the General Fund Spent?
Most of the General Fund is spent on education, human services and public safety. That is why, with the reduced General Fund, these are the programs hardest hit.

Here's the breakdown from the Governor's proposed budget for 2003-05.

- 59% for Education
- 20% Human Resources
- 12% Public Safety
- 2% Natural Resources
- 1% Economic Development
- 6% General Government Programs

The breakdown for education looks like this:

- 44% state school funding (K-12)
- 7% higher ed (Oregon University System)
- 4% community colleges
- 4% other education programs

The state sends some money to OHSU. It comes from the last category of "other education programs." Higher Ed and community colleges are, of course, sources of nursing and occupational health training and education.

This is, of course, a very basic look at a complex, interdependent and dynamic system. Frankly, it leaves most people dazed. It may also seem that you can't possible have an impact or affect it. That isn't true. It is a system that is responsive to voter demand. You make that demand through whom you elect to public office and how you vote on initiatives and ballot measures. Your elected officials want to hear from you. Learn more and tell them what you think.

Want to learn more. Go to the 2003-05 Proposed Budget at http://www.bam.das.state.or.us/pub/GBB0305/

Who did you elect? Go to the Legislature's home page at http://www.leg.state.or.us/index.html

U\wood/ Newsletters. State Budget 101. 1-14-03

Awards and Recognition

Shelley Jones, PhD, RN

Shelley Jones recently received the honor of being appointed a fellowship by AAOHN. Shelley will be a resource and a mentor for occupational health nurses nationwide and especially those nurses who are new to occupational health nursing.

Additional Board Meeting

There ill be an additional OSAOHN board meeting on February 21, 2003 at the Sweetbriar Inn Tualatin from 1-5pm in the Garden Room to finalize our chapter activities for the remainder of the OSAOHN fiscal year. All members are welcome.

OSAOHN Membership News

Linda Meuleveld and Pat Bishop from OSAOHN ran for The AAOHN Board of Directors for 2003. Even though we were not elected, being involved in the process is a wonderful experience. Running for office takes considerable time and energy. Campaigning is a concerted effort by several people who have full time jobs and busy lives. Not to mention that a position on the AAOHN Board is a real commitment of time and dedication.

We want to thank all of you who supported us by voting, and to encourage you to think about running for the OSAOHN Board of Directors or the AAOHN Board.

Article by OSAOHN Member Featured in Nurse Week

Have you taken time to look through Nurse Week, the oversized magazine that is delivered to your home? The Jan 31 & Feb 3 issues have CE articles titled *Terrorist Danger.* This is a 2-part series by OSAOHN board member Deborah Fell-Carlson, RN, COHN-S. The article contains a lot of information we hope we never need.

COME TO ATLANTA FOR AOHC 2003

AOHC is only 3 months away. Have you registered? AOHC provides occupational and environmental health nurses immeasurable opportunities to advance their knowledge and skills in the profession. A full week of activities, as well as, opportunities to see and taste Atlanta is available. To view the complete Advance Program go to www.aaohn.org. You may also register online at *www.aaohn.org.*

Employment Opportunities

INTEL CORPORATION

Occupational Health Nurse

Intel Corporation has an open position for a Registered Nurse with experience in an occupational health setting (OHN) to staff compressed workweek shifts in Oregon. The job responsibilities include: providing employee health care for work-related and non-occupational health concerns, participating as a team member in emergency response, collaborating with the team in the management of return-to-work evaluations and transitional work, and managing all components of the medical monitoring program. The position requires effective communication skills, verbal and written, and a solid ability to use a team approach to problem solving.

Current Oregon RN licensure is required. A Bachelor degree in nursing, graduate degree and COHN-S certification are preferred. Previous occupational health experience is preferred or at a minimum, 3 years experience in critical-care, medical-surgical, or emergency room nursing is required. Basic computer skills and proficiency with Microsoft Office software products are a plus.

Compressed night shift from 6:00pm to 6:00am
Permanent Position - Full Time
Shift 6 - Wednesday, Thursday, Friday and every other Saturday

Compressed day shift from 6:00 a.m. to 6:00 p.m.
Permanent Position - Full Time
Shift 7 - Thursday, Friday, Saturday, and every other Wednesday

Please provide your résumé via postal mail, e-mail or fax to:
Launa Rae Mathews, RN, MS, COHN-S
Intel Corporation, MS: RA3-260
5200 NE Elam Young Parkway
Hillsboro, Oregon 97124
E-mail: launa.r.mathews@intel.com
Fax: 503-613-0758
Phone: 971-214-7624

Posted Nov 2002

.....and a few memories from the OSAOHN Xmas Party 2002

Don't Miss

Weds, March 5, *OSAOHN Networking Reception at the GOSH Conference*

VIP Room, Oregon Convention Center, 5:00-7:00pm. All nurses, occupational health and safety professionals and students welcome (members and non-members).

Meet other occupational health and safety professionals and share ideas and information.

Call for Presentations

2003 Northwest Occupational Health Conference

The 2003 Northwest Occupational Health Conference will be held on October 15 - 17 at the Seattle Airport Hilton in Seattle, Washington. Mark your calendars for a great conference and a chance to enjoy the Seattle.

Call for Papers

The Northwest Occupational Health Conference has a national reputation as a dynamic, high quality, multi-disciplinary conference - one of, if not THE, oldest in the country. The quality of this conference is, in large part, due to the great volunteer time spent to put on the conference and the interesting, timely papers presented. Members of the Pacific Northwest Section - AIHA, the Columbia River Association of Occupational Health Nurses, the Washington State Association of Occupational Health Nurses, and the Northwest Association of Occupational and Environmental Medicine have generously shared with colleagues the results of their case studies, field investigation, research efforts, and program evaluations at this conference.

The Program Planning Committee is now calling for papers for NOHC 2003; Conference sessions include; industrial hygiene and safety, laboratory analysis, occupational and environmental medicine and nursing. Let us know what new things you are doing and submit an abstract of your idea for a presentation. Presentations should be 30-40 minutes in length and may be on topics relevant to the occupational health professions. Please submit the Presentation Abstract form by **April 30, 2003** to NOHC Program Chair, c/o PNS-AIHA, PO Box 15176, Seattle, WA 98115-0176.

For more information, please email administrator@pnsaiha.org. Hope to see you there!

Thank You

Our membership celebrated the holidays the evening of Dec. 5 with a dinner at Shenanigans. It was extremely festive looking across the river at Portland's twinkling lights. Members surrounded the tree with toys brought - for Toys for Tots. **Our thanks and best wishes again to CROET and Linda McCauley for sponsoring the evening.** Regretfully, Linda was unable to attend.

On February 10, 2003, we held our annual joint meeting with the Columbia Willamette chapter of the American Society of Safety Engineers in Tualatin.

Our thanks to: Speaker Dr. Dana Mirkin from Willamette Falls Occupational Health Clinic for presenting 'Shiftwork, Stress & Safety ' and of course to CWASSE for co-hosting the meeting.

NEEDED: OUTSOURCING EXPERIENCES

An AAOHN work group is developing a new tool for the nurse who is confronting the issue of outsourcing of health services. The vision for the tool includes guidelines for preparing an on-site versus outsourced service cost prospectus, information for the on-site nurse managing outsourced services, and an overview of how to become an outsource alternative. We are looking for individual members who have experienced and/or are currently managing outsourced services to assist us in validating the content of the tool. We'd love to welcome you as a member of the work group, or simply "hear your story" of the problems and successes you've encountered. Please send your information to Marcia Noble at marcia@aaohn.org, or call me at 770-455-7757, extension 122.

Welcome to New Members:
Yvonne Benson from
Hermiston, UP Railroad.

Coming Events

To view the full meeting schedule for 2002-2003 please visit our website at http://www.osaohn.org/.

DATE	TOPICS	LOCATION
Feb. 21, 2003 Lunch (1-5pm)	**OSAOHN Board Meeting**	Sweetbrier Inn Tualatin, OR
March 3-6, 2003	**2003 Oregon Governor's Conference on Occup. Safety & Health**	Convention Center Portland, OR
March 6-8, 2003	**2003 OHN Update & Certification Review Course Presented by OSAOHN and Shelley Jones**	Convention Center & Portland Conference Cntr.
April 11, 2003 8:30am-3:00pm	**Strategic Planning for the OHN, Outcome Analysis: Demonstrating Cost Effectiveness & The Occupational Health Dept. Annual Report: A Powerful Message**	TBA Eugene, OR
June 13, 2003 All Day meeting	**Annual Business Mtg. & Installation of Officers Domestic violence comes to the Workplace-Louann Beck Preventing & Managing Workplace Violence-Dr. Harley Stock**	Willamette Falls Conference Center Oregon City, OR
Other Occupational Health & Safety Conferences/Events		
March 10, 2003 5:30-7:00pm	**NAOEM Spring Dinner Meeting An Expert's View of the Knee – Dr. Ron Bowmen**	Portland Brewing, Portland, OR. RSVP: mailto:jamesharrismd@yahoo.com

OSAOHN News

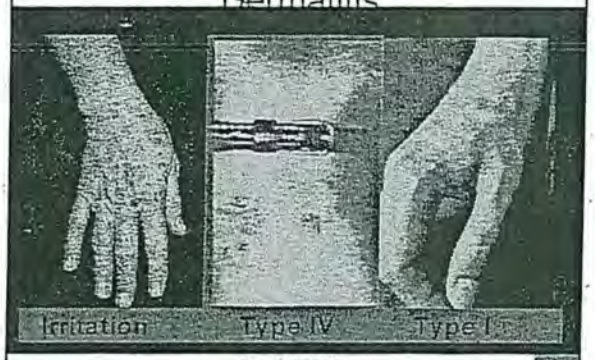
Attachment 3

Life After the 2001 NORA Partnering Award:

Continuing and New Collaborations in Oregon

Debra Corbin, Liberty Northwest Insurance Co.
Catherine Thomsen, Oregon DHS-Health Services

Dermatitis



Oregon DHS-HS 2003

From Data to Prevention

Oregon DHS-HS 2003

Latex Gloves in Restaurants

Oregon DHS-HS 2003

Partners for Prevention – Latex Education

- Local Health Departments
- Oregon Restaurant Association
- Liberty NW Insurance
- Oregon Health Services

Oregon DHS-HS 2003

Poison Oak and Heli-loggers

Oregon DHS-HS 2003

Pilot Poison Oak Rash Prevention Project

- EnviroDerm Pharmaceutical
- Columbia Helicopter
- Oregon Health Services
- Liberty NW Insurance

Oregon DHS-HS 2003

After the 2001 NORA Partnering Award . . .

Data

Analysis

Prioritizing

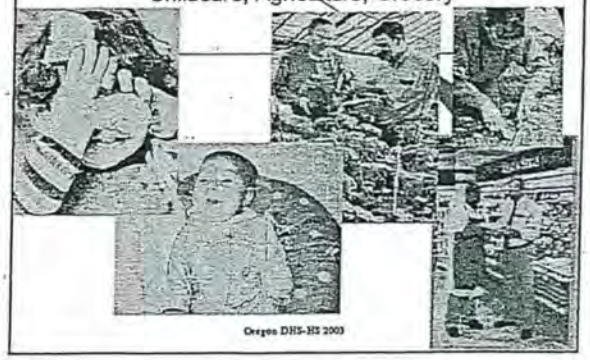
Partnering

Action

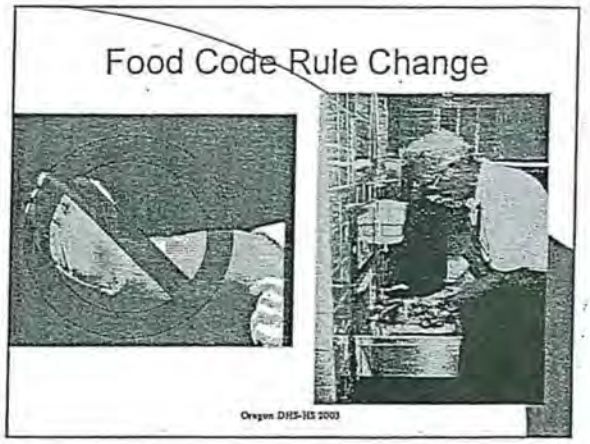
Oregon DHS-HS 2003

Latex Risk Education

Childcare, Agriculture, Grocery



Oregon DHS-HS 2003


Food Code Rule Change
Oregon DHS-HS 2003


hting Oregon Wildfires


Janitors & Housekeepers
Oregon DHS-HS 2003

Attachment 4

Restricting Latex Glove Use in Food Service Establishments in Oregon:

A Public Health Response

Michael A. Heumann, MPH MA
Oregon Department of Human Services
Environmental and Occupational Epidemiology
800 NE Oregon St., # 827
Portland, OR 97232-2162

DHS

Outline of testimony

- What did we do?
- How did Oregon become aware if the problem?
- Why did we act?
- The role of our partners in developing a response

DHS

What did we do?

- **Oregon Administrative Rules**

OAR 333-150-0000
1999 FDA Food Code
Section 3-304.15
Glove, Use Limitation.

(E) Effective March 1, 2003, the use of latex gloves in food service establishments is prohibited.

DHS

How did Oregon become aware of the problem?

- Tracking occupational illness & injury in Oregon since 1992
- Workers' compensation claims
- Occupational skin conditions
- Latex allergy in health care industry

DHS

Responding to Latex Allergy in Health Care

- Research the science around latex allergy
- Education about hazards & alternatives
- Encourage latex-safe environments
- Partners
  - hospitals & other employers
  - employees
  - workers' compensation insurers
  - NIOSH

DHS

Latex glove use in the food service industry

- 1998 first case reports identified latex glove dermatitis among food workers in W.C. data
  - Text of accident description:
    - "Allergic reaction to wearing latex gloves"
    - "Received severe rash on both hands due to latex gloves"
  - Text of injury description:
    - "Respiratory disorders lungs"
    - "Dermatitis on hands"

DHS

Latex glove use in the food service industry

DHS

Latex glove use in the food service industry

- 12 cases among workers in 1st two years
- Reports of allergic reactions among restaurant customers with prior history of latex sensitivity
  - Range of symptoms
    - Anaphylaxis
    - throat tightness
    - difficulty breathing

DHS

Latex glove use in the food service industry – DHS response

- Confirm cases with WC Insurer
- Confirm use of latex gloves in restaurants
- Confirm cases among customers
- Identify partners with clear self interest
  - Oregon Restaurant Association (ORA)
  - United Food & Commercial Workers Union (UFCW)
  - Local Health Departments
  - Liberty Northwest Insurance

DHS

Latex glove use in the food service industry -- DHS response

- Liberty Northwest & ORA
  - Meeting & agreement to collaborate
  - Immediate changes among large restaurants and corporate chains
  - Articles in ORA newsletter
  - Goal of voluntary change (similar to health care industry)
- UFCW
  - Meeting & agreement to collaborate
  - Article in union newsletter

DHS

Latex glove use in the food service industry -- DHS response

- Local Health Departments
  - Training about hazards and alternatives
  - Developed Latex Alert for restaurants
  - 5 Counties collaborated in a pilot intervention
    - gather information
    - provide education
    - distribute Latex Alert in English & Spanish

DHS

Why did we act?

- Positive response among restaurants and suppliers contacted
- Potential liability from customer incidents was the greatest motivator to change
- Contact from attorneys looking for cases

DHS

Why did we act?

- Latex allergy cases continued to be reported
- Sought a way to address latex glove use in food services statewide
  - Simply way to prevent cases
  - Protect customers, employees, employers & suppliers

DHS

Why did we act?

- DHS planned to adopt 1999 FDA Food Code
  - Opportunity to act
  - Oregon rules require hand washing, not glove use
- Rhode Island & Arizona had latex glove bans
  - Complex language
- Proposed simple language
  - **"The use of latex gloves in food service establishments is prohibited."**
  - Implementation date negotiated with ORA

DHS

Why did we act?

- Food Code rule adopted in August 2002
  - Major media coverage to announce the ban
  - Advised restaurants & suppliers of change
    - Letters
    - Articles
    - Local Health Dept. inspectors provided advice
  - Encouraged to adopt prior to implementation date
  - Many questions, general support

DHS

The role of our partners in developing a response

- Important to cultivate wide support among affected parties
  - Identify who has a stake & what is their interest
  - Provide appropriate education about the issue
  - Involve them in the decision-making process as much as possible

DHS

Conclusions

- Oregon's actions
  - Based on tracking to identify patterns and problems
  - Understand the science underlying the issue
  - Apply science to policy in collaboration with key stakeholders
    - First attempted voluntary change
    - Adopted formal rule change only when needed

DHS

Conclusions

- Natural rubber latex has an important place
  - Protection against exposure to blood borne pathogens => in health care
  - Low protein/powder free gloves safest option for people who are not already latex sensitive
- Many alternative glove materials exist
  - Glove selection should be specific to use

DHS

Conclusions

- Powdered natural rubber latex gloves are being promoted in many other settings
  - Child care, janitorial, house keeping, agriculture, food processing & nutritional supplements industries
- Latex allergies are real and preventable

DHS

Attachment 5

Environmental and Occupational Epidemiology EOE), Oregon Health Services
Enhanced Dermatitis Surveillance Program Evaluations and Evaluator Roles

SOSC Evaluation Report Process:

Approach: Evaluator-Assisted Review of Activities:

1. We collaboratively created a structured plan based on SOSC report instructions; tasks and roles were delineated.
2. The evaluator reviewed previous reports and activities and suggested ways of communicating surveillance and intervention approaches (e.g., dual strategy for elimination of latex allergy from the restaurant industry).
3. Suggestions also were made for making certain point more explicit, and therefore more useful to others seeking to understand the public health impact of the program.
4. There is an emphasis on evaluation of benefit to occupational health and on the potential usefulness of the models.

Quantitative and Qualitative Evaluation of Occupational Dermatitis Program Partnership

The purpose of the survey of partners in the Occupational Dermatitis Surveillance Program was to evaluate the strengths of and challenges to the collaboration or partnership with a private insurance company. The findings reflect the functioning of the collaboration and the partnership and not the overall program. The information obtained from the survey is being used to strengthen the partnership and optimize the collaborative program.

Features of the Evaluation:

1. Attributes of acceptability and timeliness for both partners were examined. Interventions based on surveillance findings and impact on organization were also evaluated in the survey.
2. Qualitative aspects of survey ensured complexity of relationships and collaboration were captured.
3. Advantages of using independent evaluator to conduct the survey:
   a. Confidentiality facilitates open and honest responses - themes derived from narrative responses identify issues without identifying individuals.
   b. Surveillance program staff are considered partners and are survey respondents, ensuring a comprehensive picture of the partnership.
4. Narrative themes provide basis for understanding without implying fault - gives basis for strengthening the partnership.
5. Themes are reported back to all partners for discussion.

The open-ended questions on the survey asked about:

a. Benefits receiving and expectations not met from the partnership.
b. Changes desired in working relationships, providing agreed upon data, the data summaries received, intervention strategies, loss prevention support, or claims reduction support.
c. Any other comments the respondent would like to provide.

Themes were derived from the pooled narrative responses, protecting confidentiality of respondents:

a. Collaboration
b. Clarity and Structure

c. Existing and New Interventions
d. Resources Needed

Based upon this experience, the Oregon Environmental Public Health Tracking Network program evaluation plan will, from the outset, work with various teams, collaborations, and partnerships so that the groups themselves can set evaluation objectives and standards. This may also help groups keep on task and focus on outcomes.

Environmental and Occupational Epidemiology Section Evaluation Strategy:

1. An EOE evaluation strategy is being developed by EOE staff in collaboration with the evaluator in a participative process that adapts evaluation practices to local EOE needs.
2. The strategy includes a range of evaluation processes, from self-evaluation activities conducted primarily by EOE staff, to evaluator-facilitated evaluations where collaboration or consultation is important, and to evaluator-conducted evaluations where independence between evaluation and program is important.
3. The strategy incorporates a range of evaluation approaches, including formative, process, outcome, quantitative and qualitative evaluations.
4. EOE staff skills in "evaluation" concepts and practices are enhanced.
5. A set of general evaluation tools is being developed that can be tailored to each use, but that will retain a common core.
6. The working relationship between program and evaluation may serve as a model for other surveillance and public health programs.
7. Evaluation training has been provided for EOE staff on purposes and types of evaluations, strengths and weaknesses of various evaluation methods, etc.

The EOE evaluation strategy is intended to include specific evaluation approaches and tools for:

1. Assessing relationships with work with partners, stakeholders, and customers
2. Defining the implicit and explicit goals of surveillance and intervention programs.
3. Evaluating surveillance programs according to CDC guidelines.
4. Taking a systems approach to program development and evaluation.
5. Using evaluation questions in developing proposals and programs.
6. Writing evaluation plans, flow charts, work plans, and Continuous Quality Management tools.

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