Occupational Disease Surveillance Data Sources, 1985

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Abstract: Health department epidemiologists in 50 states, New York City, and the District of Columbia were surveyed in 1985 about seven potential data sources for occupational disease surveillance. Reported sources of occupational disease data were: automated workers' compensation claims (63 per cent of the 52 respondents); provider reports (62 per cent); death certificates with occupation or industry (60 per cent); cancer registries with occupational histories (35 per cent); birth certificates with parent's occupation (27 per cent); non-cancer disease registries (13 per cent); and hospital or insurance records (8 per cent). (*Am J Public Health* 1987; 77:1006–1008.)

Introduction

Accurate surveillance of occupational disease is necessary to develop programs that prevent these work-related conditions. Recognizing that state health departments have an important role in this area,[1] the National Institute for Occupational Safety and Health (NIOSH) has initiated two programs: surveillance cooperative agreements between NIOSH and states (SCANS), begun in 1981, and cooperative agreements for rebuilding surveillance capacity within state health departments, begun in 1984.

Under one of the latter cooperative agreements, the Iowa Department of Public Health (IDPH) conducted a survey of health department epidemiologists to characterize occupational disease surveillance activities by states. This report describes the results of that survey.

Methods

The IDPH mailed a questionnaire in May 1985 to the health department chief epidemiologist in 50 states, New York City, and the District of Columbia. Questions focused on seven potential sources of occupational health information: 1) case reports, 2) death certificates, 3) birth certificates, 4) cancer registries, 5) non-cancer disease registries, 6) hospital or insurance billing information, and 7) workers' compensation claims. Specific questions were asked about reporting six occupational sentinel health events: lead poisoning, silicosis, asbestosis, mesothelioma, coal workers' pneumoconiosis, and byssinosis.[2] These conditions were of special interest because they had been listed in the 1990 Objectives for the Nation[3] as occupational diseases that can and should be prevented and/or had been discussed by NIOSH and the Conference of State and Territorial Epidemiologists as possible candidates for national surveillance.

No attempt was made to verify responses or to complete questions left blank except for telephone calls to correct obvious inconsistencies.

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Results

Responses were obtained from all 52 departments by April 1986.

Case Reports

Thirty-two departments (62 per cent) indicated that they had either voluntary or mandatory reporting programs for occupational illnesses. Penalties existed for provider failure to report in 16 departments. The extent of enforcement of these penalties was not asked. Groups required or asked to report included private physicians (25 departments), hospitals (19), laboratories (17), and others (nursing home administrators, labor unions, and employers) (13). Case reports were sent to more than one agency in six states. The agencies most likely to receive reports were the state health department (25 respondents), labor department (7), and other agencies (county health departments or worker compensation boards) (4).

With regard to the six sentinel health events, lead poisoning was the condition most frequently listed as reportable (28 departments) (Table 1). Sixteen departments listed all six sentinel health events as reportable. Five states—Arkansas, Colorado, New Jersey, New York State, and Utah—had criteria for evaluating case reports. Variations existed between states in these criteria (in Colorado, blood lead levels required for reporting were >25 ug/100 ml; in New Jersey, ≥ 25 ug/100 ml; and in New York, ≥ 40 ug/100 ml).

Eighteen departments indicated that they sometimes or frequently sought additional details about the case beyond those given in the initial case report—e.g., they reviewed medical records, obtained a complete occupational history, and/or evaluated the worksite environment. Ten departments reported using case reports for intervention activities, such as worker education, employer consultation, or engineering controls. Seven departments had published summaries of case reports. No department had evaluated its surveillance program to see if all cases were being reported.

Other Data Sources

Thirty-one departments (60 per cent) coded some occupation or industry information on death certificates (Table 2). Ten departments had published reports using this information. Nine states—Alabama, Kentucky, Maryland, New

TABLE 1—Reporting Requirements for Six Sentinel Health Events (occupational), in 50 States, New York City, and the District of Columbia, 1985

Sentinel Health Events	Reporting Requirements	
	n	%
Lead poisoning	28	54
Silicosis	23	44
Asbestosis	22	42
Mesothelioma	21	40
Coal workers' pneumoconiosis	19	37
Byssinosis	17	33
All six	16	31

n = number of respondents
% = per cent of the 52 total

TABLE 2—Other Data Sources for Occupational Disease Surveillance, in 50 States, New York City, and the District of Columbia, 1985

Respondent	Occupation or Industry Coded on Death Certificates	Parents' Occupation Collected on Birth Certificates	Occupation Collected on Cases in Cancer Registry	Non-cancer Occupational Disease Registry	Machine Readable Workers' Compensation Claims
Alabama	X				
Alaska					X
Arizona					X
Arkansas	X	X			
California		X			X
Colorado	X			X	X
Connecticut					
Delaware			X		X
Florida					X
Georgia	X		X		X
Hawaii	X			X	X
Idaho	X		X1		
Illinois	X		X1		
Indiana	X		X		X
Iowa	X		X1		X
Kansas	X		X1		X
Kentucky	X				X
Louisiana			X1		X
Maine	X	X	X		X
Maryland				X	X
Massachusetts	X	X	X		
Michigan					
Minnesota	X1				X
Mississippi					X
Missouri	X	X	X		X
Montana					X
Nebraska	X				
Nevada	X			X	X
New Hampshire	X	X			
New Jersey			X1	X	
New Mexico	X		X1		X
New York State	X	X	X	X	X
North Carolina	X			X	X
North Dakota	X				X
Ohio	X				X
Oklahoma					
Oregon	X				
Pennsylvania	X		X		
Rhode Island	X				
South Carolina	X	X			X
South Dakota					
Tennessee					
Texas		X			
Utah	X	X			X
Vermont					
Virginia			X		X
Washington	X	X	X		X
West Virginia					X
Wisconsin	X	X	X1		X
Wyoming					
New York City		X			X
District Columbia	X	X			X
TOTAL (n = 52)	31	14	18	7	33

Key: X = yes 1 = some

Jersey, Oregon, South Carolina, Utah, Vermont, and Virginia—maintained Part II death certificate data pertaining to work-related injuries in machine readable form and also maintain a central file of medical examiner autopsy reports.

Fourteen departments (27 per cent) collected data on the parents' occupation on birth certificates. Four had published reports using this information.

Thirty-two departments maintained a central cancer registry. Occupational histories are collected for *every* case in 11 of these, and on *some* cases in an additional seven. Five registries had published reports using this information.

Seven states—Colorado, Hawaii, Maryland, New Jersey, Nevada, New York, and North Carolina—maintained registries for occupational diseases other than cancer. Three of these maintained registries for more than one condition. Overall, conditions covered by the registries included: silicosis, asbestosis, exposures to heavy metals, toxic substances, carbon monoxide, pesticides, radiation, and congenital malformations.

Machine readable workers' compensation claims were reported by 33 departments, and the state labor department analyzed these data in 24 of these, independent of any

analysis that might be done as part of the Supplementary Data System (SDS) of the Bureau of Labor Statistics (BLS). In addition, eight state health departments also reported analyzing these data.

Four departments used private insurance information as a source of occupational surveillance information (e.g., hospital uniform billing reports and hospital discharge data systems). To help make hospital records more useful, the State of Wisconsin enacted legislation to standardize the occupational information collected in hospital medical records.

Discussion

There is scant information with which to compare the results of this survey. A 1981 survey[4] of state and local vital registration offices found 18 states coding industry and/or occupation on some death certificates; in the current survey, 31 respondents reported that this was being done.

Although limited resources have thus far prevented development of a comprehensive approach to surveillance using state-based information, a linking of existing data sources is attractive. The creation of a national occupational disease surveillance system will ultimately depend upon the collection by and periodic transmission of such data from the states to federal agencies. The data sources common to most states—workers' compensation, death certificates, and provider reports—might lend themselves to the beginning of such a national system.[5]

ACKNOWLEDGMENTS

Support for this study was provided in part by a cooperative agreement (#U60/CCU700797-01) between the Iowa State Health Department, the National Institute for Occupational Safety and Health, and the Center for Environmental Health of the US Department of Health and Human Services.

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11th National Conference of Correctional Health Care: Call for Papers

The National Commission on Correctional Health Care (NCCHC) has issued a call for papers for its 11th National Conference, to be held at the Palmer House and Towers in Chicago, Illinois on November 5–7, 1987. The conference is co-sponsored by the American Correctional Health Services Association, an organization of professionals concerned with health care and medical services in corrections.

The conference theme—"The Second Decade: Professionalism and Specialization"—will explore increased professionalism among correctional health care providers, improved quality assurance programs, second generation standards, and the specialization of correctional health care.

The NCCHC is a not-for-profit organization dedicated to improving health care in the nation's jails, prisons, and juvenile confinement facilities. Its main program is the accreditation of facilities which meet NCCHC standards. The Commision's Board of Directors is composed of representatives from 28 professional associations, including the American Public Health Association.

Abstracts not exceeding 200 words should be submitted to the National Commission on Correctional Health Care, 2000 North Racine, Suite 3500, Chicago, IL 60614. For further information, contact Jodie Manes at the NCCHC address or call (312) 528-0818.