



Volume 10, No. 3

Summer 1999

Highlights from the 1998 Annual Reports on Occupational Diseases in Michigan

Five annual reports were released this Spring: Occupational Noise-Induced Hearing Loss; Silicosis; Work-Related Asthma; Occupational Diseases; and Elevated Blood Lead Levels Among Adults. This is the first year a report on blood lead has been written. This last report is based on new laboratory reporting regulations for blood lead that went into effect 10-11-97. This edition of the Project SENSOR Newsletter contains a summary and selected tables from the reports. If you would like a copy of any of these reports, please visit our web site at: http:// www.chm.msu.edu/oem/index.htm. Instructions on how to access the reports can be found at the web site. If you prefer, you may call us at 1-800-446-7805 to request a printed copy of any of the reports.

SILICOSIS IN MICHIGAN

The age-adjusted death rate for silicosis in the Muskegon area is in the top 10% of mortality rates for silicosis in the United States.

Silicosis: Age-Adjusted Death Rates by Health Service Area; U.S. Residents 15 Years of Age and Older, 1982-1993

(See figure on page 6 of this document)

WORK-RELATED ASTHMA IN MICHIGAN

The likelihood of having persistence of asthma symptoms or needing to take asthma medications increases with increasing duration of exposure before symptoms began and with duration of exposure after initial onset of symptoms. Prompt removal of a patient from exposure after objective documentation of the relationship between work and asthma with pulmonary function tests increases the likelihood that a patient's asthma will improve and the need for medication will decrease over time.

Persistence of Symptoms and Asthma Medication Use Among 860 Cases of Work-Related Asthma No Longer Exposed to Causal Agent, Michigan 1988-1998

	Symptoms		Asthma Medicine	
	Yes	No	Yes	No
Average Exposure				
Before Symptoms (years)	4.4	2.6	4.6	3.1
	(p=.006)		(p=.003)	
Average Exposure				
After Onset of	3.7	2.6	3.9	2.7
Symptoms (years)	(p=.146)		(p=.007)	

OCCUPATIONAL NOISE-INDUCED HEARING LOSS IN MICHIGAN

The table below shows the decade when the interviewed patients with fixed hearing loss were most recently exposed to noise by industry. The percentage of individuals at companies with no hearing tests decreased over time and within the industry types that have been required by OSHA since 1972 to provide such hearing tests. Construction and agriculture had the highest percentage of workers with no regular hearing tests; these industries are not required by MIOSHA or OSHA to provide regular hearing tests.

Decade Last Worked and Status of Regular Hearing Testing at Most Recent Company where Patients with a Fixed Loss were Exposed to Noise, by Industry: Michigan 1992-1998

Decade Last Exposed to Noise and % No Regular Hearing Testing

<u>Industry</u>	<u>1940s</u>	<u>1950s</u>	<u>1960s</u>	<u>1970s</u>	<u>1980s</u>	<u>1990s</u>
Agriculture	100	100	50	100	80	89
Construction		100	100	67	89	89
Manufacturing	80	81	96	74	46	33
Transportation			50	63	64	37
Service			100		89	62
Public Admin.		100	100	60	36	64

OCCUPATIONAL DISEASES IN MICHIGAN

The total number of occpuational disease reports since 1994 has remained approximately 20,000 per year. However, the number and proportion of reports received from private practitioners has increased. Since only approximately 2% of physicians in private practice submit at least one report a year, we assume there are many additional unrecognized and unreported cases of occupational diseases occurring.

Project SENSOR continues to conduct outreach to Michigan physicians and health care providers in an effort to increase awareness about the state's reporting law, and to update health professionals about the types of occupational diseases occurring in Michigan. Continued vigilance among Michigan's health professionals is needed in order to help ensure that Michigan workers do not get sick from their jobs.

Occupational Disease Reports by Reporting Source: Non-Company Health Professionals and Company Medical Departments 1991-1998

Non-Company			Compar	Company		
Year	#	<u>%</u>	#	<u>%</u>		
1991	1,421	16	7,734	84		
1992	1,327	12	9,927	88		
1993	1,424	10	13,537	90		
1994	1,812	9	17,384	91		
1995	2,202	13	14,711	87		
1996	2,067	10	18,187	90		
1997	3,128	16	16,250	84		
1998	5,221	25	15,533	75		

ELEVATED LEAD LEVELS AMONG ADULTS IN MICHIGAN

In the first year of laboratory reporting 6,934 reports of elevated lead levels were received on 6.373 adults. Nine hundred nineteen adults (14.4%) had evidence of increased lead absorption (blood lead level >= 10ug/dL; 303 of 919 >= 25 ug/dL; and 31 of 303 >= 50 ug/dL). The predominant source of exposure was occupational in origin, occurring among workers casting brass/bronze parts, or among abrasive blasters removing paint from outdoor metal structures, or among workers repairing car radiators. The two figures below show the counties with the highest incidence rates of elevated lead levels, for men and women separately. Overall, the average annual incidence rate of lead levels greater than or equal to 10 ug/dL among women was 2 per 100,000 women; for men, the average annual incidence was 24 per 100,000.

Ongoing surveillance of lead poisioning in Michigan is seeking to identify workers with elevated lead levels in order to reduce exposures to lead in the workplace. (See figures on pages 7 & 8 of this document)

Advisory Board

Michael Facktor, M.D. President, Michigan Allergy and Asthma Society Thomas G. Robins, M.D., M.P.H. University of Michigan School of Public Health Division of Occupational Medicine Thomas A. Abraham, M.D. President, Michigan Thoracic Society Raymond Demers, M.D., M.P.H. Henry Ford Hospital Michael Harbut, M.D., M.P.H. Center for Occupational and Environmental Medicine AFL-CIO, Medical Advisor John J. Bernick, M.D., Ph.D. Representative, Michigan Occupational Medical Association Howard Teitelbaum, D.O., Ph.D., M.P.H. Michigan State University, College of Osteopathic Medicine

The Project SENSOR News is published quarterly by Michigan State University-College of Human Medicine with funding from the Michigan Department of Consumer and Industry Services and is available at no cost. Suggestions and comments are welcome.

> (517)353-1955 MSU-CHM 117 West Fee Hall East Lansing, MI 48824-1316

Project SENSOR Staff

At the Michigan Department

of Consumer and Industry Services Douglas J. Kalinowski, C.I.H., Deputy Director Bureau of Safety and Regulations Project SENSOR, Co-Director Bill Deliefde, M.P.H. Regional Supervisor Project SENSOR-MDCIS Liaison Debbie Wood Division Chief Secretary

At Michigan State University - College of Human Medicine

Kenneth D. Rosenman, M.D. Professor of Medicine Project SENSOR, Co-Director Mary Jo Reilly, M.S. Project SENSOR Coordinator Amy Allemier Project SENSOR NIHL Coordinator Project SENSOR Office Staff: Ruth VanderWaals Tracy Murphy Patient Interviewers: Amy Krizek Heather Klauss Stephanie Escamilla Michigan Law Requires the Reporting of Known or Suspected Occupational Diseases

Reporting can be done by:

*FAX (517) 432-3606 *Telephone 1-800-446-7805 *E-Mail Rosenman@pilot.msu.edu *Mail Michigan Department of Consumer and Industry Services Division of Occupational Health P.O. Box 30649 Lansing, MI 48909-8149

Reporting forms can be obtained by calling (517) 322-5208 or 1-800-446-7805.

*Project S E.N.S.O.R. News

Michigan State University College of Human Medicine 117 West Fee Hall East Lansing, MI 48824-1316 Phone (517) 353-1955

Address service requested.

In this issue: Highlights from the 1998 Annual Reports on Occupational Diseases in Michigan

 $*P_{S}$

Remember to report all cases of occupational disease!

Printed on recycled paper.

Non Profit Org. U. S. Postage Paid E. Lansing, MI Permit No. 21







Annual Incidence of Blood Lead Levels (BLLs) ≥10 ug/dL Among Men in Michigan by County of Residence: 1998*



*Rate per 100,000 men age 16+; denominator is the 1990 US. Census population data.

Annual Incidence of Blood Lead Levels (BLLs) ≥10 ug/dL Among Women in Michigan by County of Residence: 1998*



*Rate per 100,000 women age 16+; denominator is the 1990 US. Census population data.