

SENSOR Occupational Lung Disease Bulletin

A project of the Massachusetts Department of Public Health's Occupational Health Surveillance Program,
the Massachusetts Thoracic Society, and the Massachusetts Allergy Society

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Dear Health Care Provider:

This issue of the *Occupational Lung Disease Bulletin* provides an overview of new treatment guide-lines for occupational asthma adopted by the Health Care Services Board of the Massachusetts Department of Industrial Accidents and promulgated by the Department. It is important for health care providers treating workers with occupational asthma to be familiar with these guidelines. They provide a paradigm for diagnosis of work-related disease (vs. injury) as well as information about diagnostic tests allowable for reimbursement. They also guide treatment with attention to both prevention and patient education.

We encourage health care providers to obtain copies of the treatment guidelines and remind you to report all cases of work-related asthma to the surveillance system at the Massachusetts Department of Public Health. We appreciate your efforts.

Sincerely,

Letitia K. Davis ScD
Director
Occupational Health Surveillance Program

REPORT AUGUST, SEPTEMBER AND OCTOBER CASES NOW

By October 31st, report all occupational lung disease cases seen for the first time in August, September and October, 1998. If you have NOT seen any cases, it is not necessary to return the report form.

Treatment Guidelines in Workers' Compensation: Diagnosis and Initial Treatment of Occupational Asthma

by L. Christine Oliver, MD, MPH, MS
Chair, Health Care Services Board

Effective October 1, 1998, the Massachusetts Department of Industrial Accidents promulgated guidelines for the diagnosis and initial treatment of occupational asthma. This is the 28th treatment guideline developed by the Health Care Services Board and adopted by the department. It is the first guideline for occupational disease rather than occupational injury.

The Massachusetts Workers Compensation Reform Act of 1991¹ established the Health Care Services Board to assist the Commissioner of the Department of Industrial Accidents in his/her oversight of health care rendered to injured/ill workers in the Commonwealth. This Board is composed of 6 physicians, a dentist, chiropractor, physical therapist and one representative each of employees, employers, the general public and hospital associations. The Board is responsible for the development of specific treatment guidelines for health care providers treating injured workers in Massachusetts. These guidelines are incorporated into Departmental regulations regarding "the provision of adequate and reasonable health care services."

Guideline No. 28 establishes parameters for the diagnosis and initial stabilization of occupational and occupationally-aggravated asthma. It does not provide parameters for the long term care and management of these conditions. In order to be covered by the Guideline, the ill worker must first have asthma and second have asthma that is work-related. The Guideline defines asthma as 1) airway inflammation, 2) increased airway responsiveness to a variety of stimuli, and 3) airway

¹ Massachusetts General Laws, Chapter 152, as amended by Chapter 398 of the Acts of 1991

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obstruction that is partially or completely reversible, either spontaneously or with treatment.

Occupational asthma is asthma that has its onset in association with workplace exposures. Occupationally-aggravated asthma is asthma that is aggravated by workplace exposure(s).

The Guideline provides an algorithm for the diagnosis of asthma and specific criteria for the further diagnosis of occupational or occupationally-aggravated asthma. These include medical and occupational history, physical examination, and diagnostic tests allowed. Exposure history is to be supplemented, where possible, with Material Safety Data Sheets, which provide identification of ingredients in chemicals used in the workplace, and industrial hygiene monitoring data, which provide information about the presence and levels of exposure to chemicals and other substances in the workplace. Where this is not possible, or is inadequate, worksite evaluation by an appropriate health care provider or industrial hygienist is encouraged.

Diagnostic tests include:

- ◇ spirometry
- ◇ measurements of peak flow (PEF) during days at work and days away from work
- ◇ nonspecific and specific inhalation challenge tests
- ◇ specific skin tests
- ◇ chest X-ray
- ◇ RAST test(s) for workplace antigens

The Guideline places limits on the number of diagnostic tests allowed and describes specific circumstances under which inhalation challenge and skin tests may be performed.

Recommendations for initial treatment include 1) prevention of exposure and 2) medications for treatment of the disease process. When exposure is to a sensitizing agent, the Guidelines advise elimination of all further exposure because of the risk for irreversible airways obstruction, severe bronchospasm, and even death. A list of known sensitizing agents is appended to the treatment guidelines. Allowable alternatives are set forth when the exposure is to a nonsensitizing agent or an irritant. These are, in order of preference, engineering controls to reduce or eliminate exposures, and appropriate use of respiratory protection provided by the employer. A stepwise approach to medications is taken consistent with recent recommendations of the National Heart, Lung & Blood Institute.² An important component of the Guideline is

the section on patient education, which includes attention to signs and symptoms, avoiding asthma triggers, use of peak flow readings to monitor asthma status, medications and emergency care. There is a plan for discharge from the Guidelines once diagnosis and initial stabilization have been achieved.

Guideline No. 28 is a consensus guideline developed by a multidisciplinary subgroup of the Health Care Services Board, distributed to relevant professional societies for review and comment, put out for public comment, and reviewed and approved at several points in the development process by the full Board. It is a *guideline* - meant to guide health care providers in diagnosis and initial care and management of occupational and occupationally-aggravated asthma. Annual review of the guideline by the Board is mandated by law and allows the opportunity for appropriate revision and updating.

For copies of Guideline No. 28 and/or other treatment guidelines promulgated by the Massachusetts Department of Industrial Accidents, please call (617) 727-4900, ext. 438.

Number of Lung Disease Cases Reported to MA SENSOR, March 1992-September 1998

	June/ July 1998	August/ September 1998	Total to Date (3/92-9/98)
Asthma	5	11	621
Silicosis	0	0	10
Asbestosis	0	0	118
Chemical Pneumonitis	0	0	14
Total Number of Lung Disease Reports	5	11	763

The National Institute for Occupational Safety and Health (NIOSH) issued a Hazard Alert, January 1998, warning that exposure to animals or animal products in the workplace can cause asthma and allergies. Single copies of the Alert are free. **NIOSH Alert: Preventing Asthma in Animal Handlers** [DHHS (NIOSH) Publication No. 97-116]. Phone 1-800-35-NIOSH. Fax (513) 533-8573. Email: pubstafa@cdc.gov

² National Heart, Lung and Blood Institute, Expert Panel Report II: Guidelines for the Diagnosis and Management of Asthma. National Asthma Education and Prevention