Appendix 1.
The Workers' Family Protection Act
29 U.S.C. 671a
Section 209
of the
Fire Administration Authorization Act of 1992
Public Law 102-522

## PUBLIC LAW 102-522 [H.R. 2042]; October 26, 1992

## FIRE ADMINISTRATION AUTHORIZATION **ACT OF 1992**

For Legislative History of Act, see p. 2910.

n for activities under the Federal Fire Proventies and Car Act of 1974, and for other purposes.

Fire Administration Authorization Act of 1992.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

#### SECTION L SHORT TITLE.

This Act may be cited as the "Fire Administration Authorization." Act of 1992".

## TITLE I—UNITED STATES FIRE ADMINISTRATION

#### SEC. 101 AUTHORIZATION OF APPROPRIATIONS.

Section 17(g)(1) of the Federal Fire Prevention and Control Act of 1974 (15 U.S.C. 2216(g)(1)) is amended—

(1) by striking "and" at the end of subparagraph (B);

(2) by striking the period at the end of subparagraph (C)

and inserting in lieu thereof a semicolon; and
(3) by adding at the end the following new subparagraphs: "(D) \$25,550,000 for the fiscal year ending September 30,

(E) \$26,521,000 for the fiscal year ending September 30, 1993; and

"(F) \$27,529,000 for the fiscal year ending September 30,

### SEC. 102. PRIORITY ACTIVITIES OF THE UNITED STATES FIRE ADMINISTRATION.

(a) PRIORITY ACTIVITIES.—In expending funds appropriated pursuant to the amendments made by section 101 of this Act,

the United States Fire Administration shall give priority to—

(1) reducing the incidence of residential fires, especially in residences of the very old, the very young, or the disabled in urban and rural areas, through the development and dissemination of public education and awareness programs, through arson research and technical assistance programs, and through research and development on new technologies;

(2) working with State Fire Marshals and other State level fire safety offices to identify fire problems that are national in scope:

(3) disseminating information about the activities and programs of the United States Fire Administration to State and local fire services;

(4) enhancing the residential sprinkler programs, including research, demonstration activities, and technical assistance to the public and private sectors:

(5) enhancing research into sprinkler programs in areas or structures with limited or no domestic water supply;

106 STAT. 3410

36 USC 5206.

## SEC. 207. AUDITS, REPORT REQUIREMENTS, AND PETITION OF ATTOR-NEY GENERAL FOR EQUITABLE RELIEF.

- (a) AUDITS.—For purposes of the Act entitled "An Act to provide for audit of accounts of private corporations established under Federal law", approved August 30, 1964 (36 U.S.C. 1101 et seq.), the Foundation shall be treated as a private corporation established under Federal law.
- (b) REPORT.—The Foundation shall, within 4 months after the end of each fiscal year, prepare and submit to the appropriate committees of the Congress a report of the Foundation's proceedings and activities during such year, including a full and complete statement of its receipts, expenditures, and investments.

(c) RELIEF FOR CERTAIN FOUNDATION ACTS OR FAILURES TO

ACT.—If the Foundation—

- (1) engages in, or threatens to engage in, any act, practice, or policy that is inconsistent with the purposes set forth in section 202(b); or
- (2) refuses, fails, or neglects to discharge its obligations under this title, or threatens to do so,

the Attorney General may petition in the United States District Court for the District of Columbia for such equitable relief as may be necessary or appropriate.

36 USC 5207.

#### SEC. 208. DOMUNITY OF THE UNITED STATES.

The United States shall not be liable for any debts, defaults, acts, or omissions of the Foundation nor shall the full faith and credit of the United States extend to any obligation of the Foundation.

Workers Family Protection Act. 29 USC 671a.

#### Workers' Family SEC, 200. WORKERS' FAMILY PROTECTION.

- (a) SHORT TITLE.—This section may be cited as the "Workers' Family Protection Act".
  - (b) FINDINGS AND PURPOSES.—

(1) FINDINGS.—Congress finds that—

- (A) hazardous chemicals and substances that can threaten the health and safety of workers are being transported out of industries on workers' clothing and persons;
- (B) these chemicals and substances have the potential to pose an additional threat to the health and welfare of workers and their families;
- (C) additional information is needed concerning issues related to employee transported contaminant releases; and
- (D) additional regulations may be needed to prevent future releases of this type.

(2) PURPOSE.—It is the purpose of this section to—

- (A) increase understanding and awareness concerning the extent and possible health impacts of the problems and incidents described in paragraph (1);
- (B) prevent or mitigate future incidents of home contamination that could adversely affect the health and safety of workers and their families;
- (C) clarify regulatory authority for preventing and responding to such incidents; and
- (D) assist workers in redressing and responding to such incidents when they occur.
- (c) EVALUATION OF EMPLOYEE TRANSPORTED CONTAMINANT RELEASES—

106 STAT, 3420

(1) STUDY.—

- (A) In GENERAL.—Not later than 18 months after the date of enactment of this Act, the Director of the National Institute for Occupational Safety and Health (hereafter in this section referred to as the "Director"), in cooperation with the Secretary of Labor, the Administrator of the Environmental Protection Agency, the Administrator of the Agency for Tuxic Substances and Disease Registry, and the heads of other Federal Government agencies as determined to be appropriate by the Director, shall conduct a study to evaluate the potential for, the prevalence of, and the issues related to the contamination of workers, homes with hazardous chemicals and substances, including infectious agents, transported from the workplaces of such workers.
- (B) MATTERS TO BE EVALUATED.—In conducting the study and evaluation under subparagraph (A), the Director shall—
  - (i) conduct a review of past incidents of home contamination through the utilization of literature and of records concerning past investigations and enforcement actions undertaken by—

(I) the National Institute for Occupational

Safety and Health;

(II) the Secretary of Labor to enforce the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.);

(III) States to enforce occupational safety and health standards in accordance with section 18

of such Act (29 U.S.C. 667); and

(IV) other government agencies (including the Department of Energy and the Environmental Protection Agency), as the Director may determine to be appropriate;

(ii) evaluate current statutory, regulatory, and voluntary industrial hygiene or other measures used by small, medium and large employers to prevent or remediate home contamination;

(iii) compile a summary of the existing research and case histories conducted on incidents of employee

transported contaminant releases, including-

(I) the effectiveness of workplace housekeeping practices and personal protective equipment in preventing such incidents;

(II) the health effects, if any, of the resulting

exposure on workers and their families;

(III) the effectiveness of normal house cleaning and laundry procedures for removing hazardous materials and agents from workers' homes and personal clothing;

(IV) indoor air quality, as the research concerning such pertains to the fate of chemicals transported from a workplace into the home

environment; and

(V) methods for differentiating exposure health effects and relative risks associated with specific

106 STAT. 3421

Reports.

Establishment.

agents from other sources of exposure inside and outside the home:

(iv) identify the role of Federal and State agencies in responding to incidents of home contamination;

(v) prepare and submit to the Task Force established under paragraph (2) and to the appropriate committees of Congress, a report concerning the results of the matters studied or evaluated under clauses (i) through (iv); and

(vi) study home contamination incidents and issues and worker and family protection policies and practices related to the special circumstances of firefighters and prepare and submit to the appropriate committees of Congress a report concerning the findings with respect

to such study.

(2) DEVELOPMENT OF INVESTIGATIVE STRATEGY.-

(A) TASK FORCE.—Not later than 12 months after the date of enactment of this Act, the Director shall establish a working group, to be known as the "Workers' Family Protection Task Force". The Task Force shall—

(i) be composed of not more than 15 individuals to be appointed by the Director from among individuals who are representative of workers, industry, scientists, industrial hygienists, the National Research Council, and government agencies, except that not more than one such individual shall be from each appropriate government agency and the number of individuals appointed to represent industry and workers shall be equal in number:

(ii) review the report submitted under paragraph

(1XBXv):

(iii) determine, with respect to such report, the additional data needs, if any, and the need for additional evaluation of the scientific issues related to and the feasibility of developing such additional data; and

(iv) if additional data are determined by the Task Force to be needed, develop a recommended investigative strategy for use in obtaining such information.

(B) Investigative Strategy.-

(i) CONTENT.—The investigative strategy developed under subparagraph (A)(iv) shall identify data gaps that can and cannot be filled, assumptions and uncertainties associated with various components of such strategy, a timetable for the implementation of such strategy, and methodologies used to gather any required data.

(ii) PEER REVIEW.—The Director shall publish the proposed investigative strategy under subparagraph (AXiv) for public comment and utilize other methods, including technical conferences or seminars, for the purpose of obtaining comments concerning the pro-

posed strategy.

(iii) FINAL STRATEGY.—After the peer review and sublic comment is conducted under clause (ii), the Director, in consultation with the heads of other government agencies, shall propose a final strategy for investigating issues related to home contamination

106 STAT. 3422

that shall be implemented by the National Institute for Occupational Safety and Health and other Federal agencies for the period of time necessary to enable such agencies to obtain the information identified under subparagraph (A)(iii).

(C) CONSTRUCTION.—Nothing in this section shall be construed as precluding any government agency from investigating issues related to home contamination using existing procedures until such time as a final strategy is developed or from taking actions in addition to those

proposed in the strategy after its completion.
(3) IMPLEMENTATION OF INVESTIGATIVE STRATEGY.—Upon completion of the investigative strategy under subparagraph (BXiii), each Federal agency or department shall fulfill the role assigned to it by the strategy.

(d) REGULATIONS.-

(1) In GENERAL.—Not later than 4 years after the date of enactment of this Act, and periodically thereafter, the Secretary of Labor, based on the information developed under subsection (c) and on other information available to the Secretary, shall-

(A) determine if additional education about, emphasis on, or enforcement of existing regulations or standards is needed and will be sufficient, or if additional regulations or standards are needed with regard to employee trans-

ported releases of hazardous materials; and

(B) prepare and submit to the appropriate committees Reports. of Congress a report concerning the result of such determination.

(2) ADDITIONAL REGULATIONS OR STANDARDS.—If the Secretary of Labor determines that additional regulations or standards are needed under paragraph (1), the Secretary shall promulgate, pursuant to the Secretary's authority under the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.), such regulations or standards as determined to be appropriate not later than 3 years after such determination.

# Appendix 2. Request of Existing Information Relevant to Implementing the Workers' Family Protection Act

FR58:60202 - 60204

and

Notice to Readers, MMWR 42(48):943

#### **GENERAL ACCOUNTING OFFICE**

Federal Accounting Standards Advisory Board; Meeting Cancellation

AGENCY: General Accounting Office.
ACTION: Cancellation of November meeting.

SUMMARY: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), as amended, notice is hereby given of cancellation of the November 18 meeting of the Federal Accounting Standards Advisory Board. Notice of the meeting was previously published in the Federal Register of November 8. It is currently anticipated that the December meeting will be held as scheduled. Due notice of it will be published at a later date in the Federal Register.

FOR FURTHER INFORMATION CONTACT: Ronald S. Young, Staff Director, 750 First Street NE., room 1001, Washington, DC 20002, or call (202) 512-7354.

Authority: Federal Advisory Committee Act. Pub. L. 92–453. Section 10(a)(2), 86 Stat. 770, 774 (1972) (current version at 5 U.S.C. app. section 10(a)(2) (1988)); 41 CFR 101–6.1015 (1990).

Dated: November 9, 1993.

Ronald S. Young,

Executive Director.

[FR Doc. 93-28001 Filed 11-12-93; 8:45 am]

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Scientific Review of Draft Current Intelligence Bulletin on the Carcinogenic Potential of Occupational Exposure to Asphalt Products; Meeting

The National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC) announces the following meeting.

Name: Scientific Review of Draft Current Intelligence Bulletin on the Carcinogenic Potential of Occupational Exposure to Asphalt Products.

Times and Dates: 9 a.m.-5:30 p.m., December 1, 1993; 8 a.m.-12 noun, December 2, 1993.

Place: Robert A. Taft Laboratories. Auditorium, NIOSH, CDC, 4676 Columbia Parkway, Cincinnati, Ohio 45226.

Status: Open to the public, limited only by the specu available.

Purpose: The purpose is to review and discuss the draft of Current Intelligence

Bulletin, "Carcinogenic Potential of Occupational Exposure to Asphalt Products." with a panel of invited participants selected by NIOSH for their expertise and background in this area. The scientific review will provide NIOSH with individual input and opinion from experts outside the Institute prior to finalizing the Current Intelligence Bulletin for publication and transmittal to the Department of Labor. The review will focus on the health effects related to occupational exposures to asphalt products and on data from carcinogenicity studies in animals. Viewpoints and suggestions from industry. labor, academia, other government agencies, and the public are invited.

Contact persons for additional information: General Information may be obtained from Pam Graydon, NIOSH, CDC, 4676 Columbia Parkway, Mailstop C-30, Cincinnati, Ohio 45226, telephone 513/533-8312.

Technical information may be obtained from Crystal Ellison NIOSH, CDC 4676 Columbia Parkway, Mailstop C-31, Cincinnati, Ohio 45226, telephone 513/533-8331.

Dated: November 8, 1993.

Elvin Hilyer,

Associate Director for Policy Coordination, Centers for Disease Control and Prevention (CDC).

IFR Doc. 93-27949 Filed 11-12-93; 8:45 am]

### Control of Chemical Exposures and Ergonoic Risk Factors in Commercial Dry Cleaners; Meeting

The National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC) announces the following meeting.

Name: Control of Chemical Exposures and Ergonomic Risk Factors in Commercial Dry Cleanders.

time and Date: 1 p.m.—5 p.m., December 8, 1993.

Place: Alice Hamilton Laboratory, Conference Room C, NIOSH, CDC, 5555 Ridge Avenue, Cincinnati, Ohio 45213.

Status: Open to the public, limited only by the space available.

Purpose: The purpose of this meeting is to review the protocol for a proposed NIOSH study entitled "Control of Chemical Exposures and Ergonomic Risk Factors in Commercial Dry Cleaners." This study would evaluate perchioroethylene exposures associated with the use of various dry cleaning control technologies. It would also evaluate chemical exposures during the spotting process and ergonomic risk factors during pressing. The goal of this study is to identify technologies elective in reducing these hazards to the dry cleaning worker. Viewpoints and suggestions from industry, labor, academia, other government arencies, and the public are invited.

Contoct Person For Additional Information: Gary S. Earnest, NIOSH, CDC, 4676 Columbia Parkway, Mailstop R-5, Cincinnati, Ohio 45226, telephone 513/841-4370.

Dated: November 8, 1993.

Elvin Hilyer,

Associate Director for Policy Coordination Centers for Disease Control and Prevention (CDC).

[FR Doc. 93-27348 Filed 11-12-93; 8:45 am]

National Institute for Occupational Safety and Health; Request for Existing Information Relevant to Implementing the Workers' Family Protection Act

AGENCY: National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC), Public Health Service (PHS), Department of Health and Human Services (DHHS).

ACTION: Notice of request for existing information.

SUMMARY: NIOSH is requesting existing information on the contamination of workers' homes by hazardous chemicals and substances transported from the workplace on equipment, clothing, or the worker's person. This information would include existing reports of incidents resulting in familial poisonings or illnesses, methods of preventing and remediating such incidents, relevant statutes and regulations to prevent such incidents. and past investigations, enforcement actions, and the role of governmental agencies in preventing and responding to such incidents.

DATES: Information in response to this notice should be submitted by February 14, 1994.

ADDRESSES: Please submit two copies of any information to Diane Manning, Docket Office Manager, Division of Standards Development and Technology Transfer, NIOSH, 4676 Columbia Parkway, C-34, Cincinnati, Ohio 45226. FOR FURTHER INFORMATION CONTACT: Dr. Steven Galson, Division of Standards Development and Technology Transfer, NIOSH, 4676 Columbia Parkway, C-14, Cincinnati, Ohio 45226, telephone 513/533-8302.

SUPPLEMENTARY INFORMATION: The Workers' Family Protection Act (29 U.S.C. 671a), hereafter referred to as "the Act." was enacted on October 26, 1992, as section 209 of Public Law 102–522, the "Fire Administration Authorization Act of 1992." The purpose of the Act is to protect the health of workers and their families from hazardous chemicals and substances, including infectious agents, transported from the workplace to the

home on equipment, clothing, or the worker's person. The specific objectives of the Act are the following:

- (1) To increase understanding and awareness of the extent and impact on health of hazardous chemicals and substances transported from the workplace to the home:
- (2) To prevent or mitigate future incidents of home contamination that could adversely affect the health and safety of workers and their families;
- (3) To clarify regulatory authority for preventing and responding to incidents of home contamination; and
- (4) To assist workers in redressing and responding to incidents.

Under the Act. NIOSH is mandated to conduct a study to evaluate the problem of contamination of workers' homes by hazardous chemicals and substances transported from the workplace. The study is to include review of past incidents of home contamination, actions taken by governmental agencies in response to such incidents, the roles and practices of governmental agencies and NIOSH study, and an analysis of relevant statutes, regulations, and voluntary measures. In addition to requesting existing information on these matters, NIOSH is also requesting existing information on incidents of home contamination and family illness or poisoning in situations where the workplace and home located together, such as farms and certain small businesses. NIOSH is requesting both published reports, including studies, case histories, voluntary guidance, statutes, and regulations, and unpublished reports including accounts from physicians, poison control centers, industry management, labor unions, and other parties. Existing information is specifically requested on the following:

- 1. Measurements of home contamination or incidents of familial poisoning or illness due to contamination of the home by hazardous chemicals or substances transported to the home from the workplace on the equipment (including vehicles), clothing, or a worker's person.
- 2. Any measurements of home contamination or incidents of familial poisoning or illness resulting from hazardous chemicals or substances due to the proximity of the workplace and the home, such as farms or other businesses with attached living quarters.
- 3. Reports of Federal, state or local government actions to either enforce statutes or regulations or provide assistance in incidents of familial poisoning or illness due to hazardous chemicals or substances transported home from the workplace, or due to the

proximate nature of the home and workplace.

- 4. Measures used by employers to prevent or remedy home contamination, including statutory, regulatory, or voluntary industrial hygiene measures. (Please specify the approximate number of workers employed by the business establishment.)
- 5. Effectiveness of industrial hygiene practices in the workplace, such as housekeeping practices and the use of personal protective equipment, in preventing home contimination.
- 6. Effectively state of normal house cleaning and laundry procedures in removing hazardous materials and agents from workers' homes, personal clothing and equipment (including vehicles).
- 7. Information on indoor air quality research that pertains to the fate of chemicals transported from a workplace into the home environment.
- Information on any of the above items that pertains specifically to firefighters.

NIOSH presently has copies of the references listed at the end of this request for existing information.

Information received in response to this notice (except that designated trade secret and protected under Section 15 of the Occupational Safety and Health Act of 1970 [29 U.S.C. 664], or that exempt from disclosure under the Freedom of Information Act (5 U.S.C. 552) or the Privacy Act (5 U.S.C. 552a) will be available for public examination and copying at the above address.

Dated: November 5, 1993.

#### Diane D. Porter,

Acting Director, National Institute for Occupational Safety and Health. Centers for Disease Control and Prevention (CDC).

#### References

- Anderson LS, Warner DL, Parker JE, Bluman N, Page BD [1965]. Parathion poisoning from flannelette sheets. Can Med Assoc J 92:809-813.
- Anderson HA. Lilis R. Daum SM, Fischbein AS, Selikoff IH [1976]. Household-contact asbestos neoplastic risk. Ann New York Acad Sci 271:311-323.
- Arundel SF, Kinnier-Wilson LM [1986].

  Parental occupations and cancer: a
  review of the literature. J Epidemiol
  Commun Health 40:30–46.
- Baker EL, Folland DS, Frank M, Lovejoy G, Houswort J, Landrigan PJ [1977]. Lead poisoning in children of lead workers: home contamination and industrial dust. N Engl J Med 296:260–261.
- Bellin JS [1981]. Don't take your "work" home with you. Occup Health Safety June 1981:39—42.

- Bohne J Jr. Cohen BS [1985]. Aerosol resuspension from fabric: implications for personal monitoring in the beryllium industry. Am Ind Hyg Assoc J 46(2):73-79.
- Cannon SB, Veazey JM Jr, Jackson RS, Burse VW, Hayes C, Straub WE, Landrigan i'J, Liddle JA [1978]. Epidemic of kepone poisoning in chemical workers. Am J Epidemiol 107(6):529-537.
- Chamberlin GW, Jennings WP, Li. en J [1957]. Chronic pulmonary bease associated with beryllium also. Pennsylvania Med J 497-503.
- Champion P [1971]. Two cases of malignant mesothelioma after exposure to asbestos. Am Rev Resp Dis 103(6):821–626.
- Chesner C (1950). Chronic pulmonary granulomatosis in residents of a community near a beryllium plant. Ann. Int Med 32:1029–1048.
- Chiao-Cheng JH, Reagan BM, Bresee RR, Meloan CE, Kadoum AM [1988]. Carbamate insecticide removal in laundering from cotton and polyester fabrics. Arch Environ Contam Toxicol 17:87-94.
- Clifford NJ, Nies AS [1989].

  Organophosphate prisoning from wearing a laundered uniform previously contaminated with parathion. JAMA 262(21):3035–3036.
- Cohen B. Positano R [1986]. Resuspension of dust from work clothing as a source of inhalation exposure. Am Ind Hyg Assoc J 47(S):255–258.
- Dolcourt JL, Finch C, Coleman GD, Klimas AJ, Milar CR [1981]. Hazard of lead exposure in the home from recycled automobile storage batteries. Pediatrics 68(2):225-230.
- Dolcourt JL, Hamrick HJ, O'Tauma LA. Wooten J, Baker EL [1978]. Increased lead burden in children of battery workers: asymptomatic exposure resulting from contaminated clothing. Pediatrics 62:563-566.
- Easley CB, Laughlin JM, Gold RE, Hill RM (1982). Laundry factors influencing methyl parathion removal from contaminated denim fabric. Bull Environ Contam Toxicol 29:461-468.
- Easley CB. Laughlin JM. Gold RE. Tupy D [1983]. Laundering procedures for removal of 2.4-dichlorophynoxyacetic acid ester and amine herbicides from contaminated fabrics. Arch Environ Toxicol Contam 12(1):71-76.
- Eisenbud M, Wanta RC, Dustan C, Steadman LT, Harris WB, Wolf BS [1949]. Non-occupational berylliosis. J Ind Hyg Toxicol 31(5):282-294.
- Eitzman DV, Wolfson SL (1967). Acute parathion poisoning in children. AJDC 114:3997-400.
- Epler GR. FitzGerald MX. Gaensler EA.
  Carrington CB (1980). Asbestos-related
  disease from household exposure.
  Respiration 39:229-240.
- Falk H. Herbert JT, Edmonds L. Heath CW Jr. Thomas LB. Popper H [1981]. Review of four cases of childhood hepatic angiosarcoma—elevated environmental arsenic exposure in one case. Cancer 47:382–391.

- Finley EL. Bellon JM. Graves JB. Koonce KL [1977]. Pesticide contamination of clothing in cotton fields. Louisiana Agricul 20(3):8-9.
- Fulton WB, Matthews JL [1936]. A preliminary report of the dermatological and systemic effects of exposure to bexachloro-naphthalene and chlorodiphenyl, Special Bulletin No. 43 Harrisburg, PA: Bureau of Industrial Standards.
- Ganelin RS. Mail GA. Cueto C fr [1964]. Hazards of equipment contaminated with parathion. Arch Environ Health 8:826-828.
- Garrettson LK [1988]. Childhood lead poisoning in radiator mechanics' children. Vet Human Toxicol 30(2):112.
- Good CK, Pensky N [1943]. Halowax acne ("cable rash"). Arch Dermatol Syphilol 48:251-257.
- Hardy HL [1946]. Delayed chemical pneumonitis in workers exposed to beryllium compounds. J Ind Hyg Toxicol 28:547–556.
- Hardy HL. Rabe EW. Lorch S [1967]. U.S. beryllium case registry (1952–1956). J Occup Med 9:271–276.
- Hild DN, Laughlin JM. Gold RE [1989].

  Laundry parameters as factors in
  lowering methyl parathion residues in
  cotton/polyester fabrics. Arch Environ
  Contam Toxicol 18:908-914.
- Hudson PJ. Vogt RL. Brondum J. Witherell L. Myers G. Paschal DC [1987]. Elemental mercury exposure among children of thermometer plant workers. Pediatrics 79(6):935–938.
- Jensen NE, Sneddon IB, Walker AE (1972). Chloracne: three cases, Proc Royal Soc Med 65(8):687-688.
- Kelly B [1977]. Ailied chemical kept that kepone flowing. Business and Society Review No. 2 Spring 1977:17-22.
- Kim CJ [1989]. Effects of convection-oven and microwave-oven drying on removal of alachlor-residues in a fabric structure. Bull Environ Contam Toxicol 43:904— 909.
- Kim CJ, Stone JF, Coats JR, Kadolph SJ [1986]. Removal of alachlor residues from contaminated clothing fabrics. Bull Environ Contam Toxicol 36:234-241.
- Kim CJ, Stone JF, Sizer CE [1982]. Removal of pesticide residues as affected by laundering variables. Bull Environ Contam Toxicol 29:95–100.
- Krousel T., Garcas N. Rothschild H [1986]. Familial clustering of mesothelioma; a report on three affected persons in one family. Am | Prevent Med 2(4):186-188.
- Laughlin J. Gold RE [1989]. Evaporative dissipation of methyl parathion from laundered protective apparel fabrics. Bull Environ Contam Toxicol 42:566– 573.
- Laughlin J. Gold RE [1989]. Methyl parathion redisposition during laundering of functionally finished protective apparel fabrics. Bull Environ Contam Toxicol 42:591-698.
- Laughlin JM, Easley CB, Gold RE, Tupy DR (1981). Methyl parathion transfer from contaminated fabrics to subsequent laundry and to laundry equipment. Bull Environ Contam Toxicol 29:518-523.

- Li FP, Lokich J, Lapey J, Neptune WB, Wilkins EW Jr (1978). Familial mesothelioma after intense asbestos exposure at home. JAMA 240(5):467.
- Lieben J. Pistawka H [1967]. Mesothelioma and asbestos exposure. Arch Environ Health 14:559–563.
- Lieben J. Williams RR [1969]. Respiratory disease associated with beryllium refining and alloy fabrication. J Occup Med 11:480–485.
- Lillie TH, Hampson RE, Nishioka YA, Hamilton MA [1932]. Effectiveness of detergents and detergent plus bleach for decontaminating pesticide applicator clothing. Bull Environ Contam Toxicol 29:89-94.
- Lowengart RA. Peters JM. Cicioni C. Buckley J. Bernstein L. Preston-Martin S. Rappeport E [1987]. Childhood leukemia and parents' occupational and home exposures. JNCI 79(1):39-46.
- Lundquist M (1980), Surviving the lead standard 19. Protecting workers' families. Battery Man 22(11):27-28.
- Masek V. Jack Z. Kandus J [1972]. Content of 3.4-benzo(a)pyrene in the working clothing and underwear of workers at a pitch coking plant. J Occup Med 14(7):548-551.
- Milar CR, Mushak P [1982]. Lead contaminated house dust: hazard, measurement and decontamination. In: Chisolm JJ Jr, O'Hara DM, eds. Lead absorption in children. Baltimore: Urban and Schwarzenberg, pp 143–152.
- MMWR [1977]. Increased lead absorption in children of lead workers-Vermont. Morbidity and Mortality Weekly Report 1977(26):61–62.
- MMWR [1976]. Lead poisoning-Tennessee. Morbidity and Mortality Weekly Report 25[11]:85.
- Newhouse ML. Thompson H [1965].

  Mesothelioma of pleura and peritoneum following exposure to asbestos in the London area. Brit J Ind Med 22:261–269.
- Peters JM, Preston-Martin S [1984]. Childhood tumors and parental exposures. Teratogen Carcinogen Mutagen 4:137-148.
- Price HA, Welch RL [1972]. Occurrence of polychlorinated biphenyls in humans. Environ Health Perspect 1:73-78.
- Rice C. Fischbein A. Lilis R. Sarkozi L. Kin S. Selikoff I, [1978]. Lead contamination in the homes of employees of secondary lead smelters. Environ Research 15:375— 380.
- Stone JF. Stahr HM [1989]. Pesticide residues in clothing. Case study of a midwestern farmer's coverall contamination. J Environ Health 51(5):273-276.
- Taylor JR, Selhorst JB, Houff SA, Martinez JA [1978]. Chlordecane intoxication in man 1. Clinical observations. Neurology 28:626–630.
- Trost C [1985]. Mercury exposure of workers ignites Vermont controversy. Des Moines, Iowa: Wall Street J 65(240 September 24).
- Versen RA, Bunn WB III [1989]. Evaluating the exposure levels incurred while laundering crystalline silica-containing work clothing. Am Ind Hyg Assoc J 50(4):A241–A242.

- Vianna JJ. Polan Ak (1978). Non-occupational exposure to asbestos and malignant mesothelioms in women. Lancet 1(8073):1061~1063.
- Warren MC, Conrad JP Jr. Bocian JJ. Hayes M [1963]. Clothing borne epidemic: organic phosphate poisoning in children. JAMA 184:266–268.
- Watson WN, Witherell LE, Giguere GC [1978]. Increased lead absorption in children of workers in a lead storage bettery plant. J Occup Med 20:759-761.
- Winegar DA, Levy BS, Andrews JS Jr, Landrigan PJ, Scruton WS, Krause MJ 11977]. Chronic occupational exposure to lead: an evaluation of the health of smelter workers. J Occup Med 19(9):603– 606.
- Wolfe HR, Durham WT, Walker KC [1961]. Health hazards of discarded pesticide containers. Arch Environ Health 3:531– 537.
- Zirschky J, Witherell LE [1986]. Cleanup of mercury contamination of thermometer workers' homes. Am Ind Hyg Assoc J 48:81-84.
- Zirschky J. Witherell L [1987]. Cleanup of mercury contamination of thermometer workers' homes. Am Ind Hyg Assoc J 48(1):81–84.

[FR Doc. 93-27947 Filed 11-12-93; 8:45 am]

## Health Care Financing Administration

Public Information Collection Requirements Submitted to the Office of Management and Budget (OMB) for Clearance

AGENCY: Health Care Financing Administration, HHS.

The Health Care Financing
Administration (HCFA), Department of
Health and Human Services, has
submitted to OMB the following
proposals for the collection of
information in compliance with the
Paperwork Reduction Act (Pub. L. 96—
511).

1. Type of Request: Extension; Title of Information Collection: Establishing Procedures for Transmitting Information Between Medicare Carriers and Medicare Supplemental Insurers; Form No.: HCFA-R-140; Use: These procedures provide for the transfer of claims information from a Medicare carrier to a Medicare supplemental (Medigap) insurer when a beneficiary has assigned his/her right of payment under the Medigap policy to a participating physician or supplier in order to speed payment of Medigap benefits to participating physicians and suppliers. Medigap insurers are required to issue, to beneficiaries, insurance enrollment cards and notification of claims payment determinations. They are also required to report to the Secretary a single mailing address to

#### Figod-Related Mortality - Continued

or swiftly moving flood waters. In this report, 75% (27/36) of the drownings that occurred during the summer and fall floods in Missouri were motor-vehicle-related.

The findings in this report underscore the importance of two strategies for preventing flood-related injuries and death. First, information about flood and post-flood hazards must be disseminated rapidly and widely to groups at increased risk for injury. For example, motorists should be warned not to drive through areas inundated by flash floods, not to enter swiftly moving water, and that only 2 feet of water can carry away most automobiles (7). In addition, recreational activities, such as wading or bicycling, in flooded areas should be discouraged. Second, hydrologic studies and hazard analyses should address potentially flood-prone tributaries. The hazard potential of such areas during flash floods should be identified, and appropriate warning signs should be posted. MDH is continuing surveillance of flood-related mortality to monitor circumstances of death.

#### References

- 1. CDC. Public health consequences of a flood disaster—lowa, 1993. MMWR 1993;42:653-6.
- CDC. Morbidity surveillance following the Midwest flood—Missouri, 1993. MMWR 1993; 42:797–8.
- 3. French JG. Floods, In: Gregg M8, ed. The public health consequences of disasters. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 1989:39–49.
- French JG, Ing R, Von Allmen S, Wood R. Mortality from flash floods: a review of National Weather Service reports, 1969–81. Public Health Rep. 1983;98:584–8.
- Ductos P. Vidonne O, Beuf P. Perray P. Stoebner A. Flash flood disaster—Nîmes, France, 1988, Eur J Epidemiol 1991;7:365–71.
- Winternute GJ, Kraus JF, Teret SP. Wright MA. Death resulting from motor vehicle immersions: the nature of the injuries, personal and environmental contributing factors, and potential interventions. Am J Public Health 1990;80:1068–70.
- National Weather Service/American Red Cross/Federal Emergency Management Agency, Flash floods and floods...the awesome power!: a preparedness guide. Washington, DC: US Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service/American Red Cross, 1992; report no. NOAA/PA 92050, ARC 4493.

## Notice to Readers

## **Workers' Family Protection Act**

On November 15, 1993, CDC's National Institute for Occupational Safety and Health (NIOSH) published in the Federal Register \* a request for existing information relevant to implementing the Workers' Family Protection Act<sup>†</sup>. NIOSH is requesting information on incidents of family poisonings or home contaminations by substances inadvertently carried home by workers on their clothing, equipment, or person and on regulations and methods for dealing with such incidents. Copies of the Federal Register announcement are available from the Docket Office Manager, Division of Standards Development and Technology Transfer (DSDTT), NIOSH; telephone (513) 533-8304. Additional information is available from the Deputy Director, DSDTT, NIOSH; telephone (513) 533-8302.

<sup>\*58</sup> FR 60202-60204.

<sup>&#</sup>x27;29 U.S.C. \$671a.

# Appendix 3. Letters Requesting Information



Centers for Disease Control National Institute for Occupational Safety & Health Robert A. Taft Laboratories 4676 Columbia Parkway Cincinnati OH 45226-1998

January 10, 1994

## Dear Sir/Madam:

The National Institute for Occupational Safety and Health (NIOSH) has recently published a Federal Register (FR) Notice (Enclosure 1) that requests information relevant to implementation of the Workers' Family Protection Act (29 USC 671a). The Act charges NIOSH with conducting a study of hazardous chemicals and substances, including infectious agents, that are carried home by the worker. The FR Notice describes the NIOSH responsibilities under the Act, including the development of a report that will describe the extent of the home contamination problem, the efficacy of actions taken to prevent home contamination, and the role of government agencies in responding to incidences of home contamination.

A previous FR Notice (Enclosure 2) was published on September 22, 1993, by NIOSH that solicits nominations for membership on the Workers' Family Protection Task Force. This task force, which is mandated by the Act, will review the report prepared by NIOSH and determine if additional research data are needed to fully address the problem of home contamination. If additional data are needed, the task force will develop a strategy to obtain this information.

To help prepare this report, please respond to the appropriate questions in Enclosure 1 and provide to NIOSH information (including laws or regulations), reports, or data on the contamination of workers' homes that are relevant to your agency or office. Please send these comments by February 14, 1994 to Ms. Diane Manning (NIOSH Mail Stop C-15). If you have any questions on this request, please call Mr. John Whalen at 513/533-8306.

Sincerely yours,

Richard W. Niemeier, Ph.D.

Director

Division of Standards Development and Technology Transfer

Exclosures

#### Dear Sir/Madam:

The National Institute for Occupational Safety and Health (NIOSH) has recently published a Federal Register (FR) Notice (see enclosed) requesting information relevant to implementation of the Workers' Family Protection Act (29 USC 671a).

The Act charges NIOSH with conducting a study of hazardous chemicals and substances, including infectious agents, that are carried home by the worker. The FR Notice describes the NIOSH responsibilities under the Act, including the development of a report that will describe the extent of the home contamination problem, the efficacy of actions taken to prevent home contamination, and the role of government agencies in responding to incidences of home contamination.

A task force mandated by the Act will review the report prepared by NIOSH and determine if additional research data are needed to fully address the problem of home contamination. If additional data are needed, the task force will develop a strategy to obtain this information.

Since your organization may have access to information on take-home toxins, we would greatly appreciate your assistance in obtaining information for the NIOSH report. The types of information needed are described in the enclosure and include clinical and legal case reports, laws or regulations, and any other relevant data. We would also appreciate your sharing this request with other interested agencies and groups. Information should be sent by February 14, 1994 to Ms. Diane Manning (NIOSH Mail Stop C-34). If you have any questions, please call Mr. John Whalen, at 513/533-8306.

Sincerely yours,

Richard W. Niemeier, Ph.D. Director Division of Standards Development and Technology Transfer



Centers for Disease Control National Institute for Occupational Safety & Health Robert A. Taft Laboratories 4676 Columbia Parkway Cincinnati OH 45226-1998

January 20, 1994

Dear Sir/Madam:

The National Institute for Occupational Safety and Health (NIOSH) has recently published a Federal Register (FR) Notice (see enclosed) requesting information relevant to implementation of the Workers' Family Protection Act (29 USC 671a).

The Act charges NIOSH with conducting a study of hazardous chemicals and substances, including infectious agents, that are carried home by the worker. The FR Notice describes the NIOSH responsibilities under the Act, including the development of a report that will describe the extent of the home contamination problem, the efficacy of actions taken to prevent home contamination, and the role of government agencies in responding to incidences of home contamination.

Since your organization may have access to information on take-home toxins, we would greatly appreciate your assistance in obtaining information for the NIOSH report. The types of information needed are described in the enclosure. I am requesting your assistance especially in regard to relevant state or local laws, any actions that may have been taken, or could be taken by your Agency in cases of home contamination, and methods and procedures used for decontamination and prevention of future incidents. Information should be sent by February 14, 1994 to Ms. Diane Manning (NIOSH Mail Stop C-34). If you have any questions, please call Mr. John Whalen, at 513/533-8306.

Sincerely yours,

Dichard W. Niemeier, Ph.D.

Director

Division of Standards Development

and Technology Transfer

## Appendix 4. Acknowledgements

## **ACKNOWLEDGEMENTS**

The following individuals from the Centers for Disease Control and Prevention (CDC) participated in the study of home contamination and the preparation of this report.

Karen E. Brewer
Secretary (Office Automation)
Information Resources Branch
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Peter A. Briss, M.D.

Medical Epidemiologist
Lead Poisoning Prevention Branch
Division of Environmental Hazards
and Health Effects
National Center for Environmental
Health
Centers for Disease Control and
Prevention
4770 Buford Highway, Mailstop F42
Atlanta, Georgia 30341

Mary Ann Butler, Ph.D.
Toxicologist (Research)
Experimental Toxicology Branch
Division of Biomedical and
Behavioral Science
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Henry S. Chan, M.P.H.
Senior Research Officer
Information Resources Branch
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Sharon L. Cheesman
Program Assistant
Risk Analysis and Document
Development Branch
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Joseph Costello, M.S.
Statistician
Epidemiological Investigation Branch
Division of Respiratory Disease
Studies
National Institute for Occupational
Safety and Health
1095 Willowdale Road
Morgantown, West Virginia 26505

Nancy J. Cox, Ph.D.
Chief, Influenza Branch
Division of Viral and Rickettsial
Diseases
National Center for Infectious Diseases
Centers for Disease Control and
Prevention
1600 Clifton Road, N.E., Mailstop G16
Atlanta, Georgia 30333

Jerome P. Flesch, M.S.
Industrial Hygienist
Risk Analysis and Document
Development Branch
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Lawrence Q. Foster, M.S.L.S.
Head Librarian
Information Resources Branch
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

David L. Hard, Ph.D.
Safety and Occupational
Health Specialist
Analysis and Field Evaluations
Branch
Division of Safety Research
National Institute for Occupational
Safety and Health
1095 Willowdale Road
Morgantown, West Virginia 26505

Denise Hill, B.S.
Writer/Editor
Training and Educational
Systems Branch
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Christopher C. Gjessing, B.A.
Public Health Advisor
Office of the Director
Division of Physical Sciences
and Engineering
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Thomas K. Hodous, M.D.
Acting Chief of Injury Prevention
Analysis and Field Evaluations Branch
Division of Safety Research
National Institute for Occupational
Safety and Health
1095 Willowdale Road
Morgantown, West Virginia 26505

James H. Jones, CIH
Acting Deputy Director
Division of Physical Sciences and
Engineering
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Theodore M. Katz, B.A.
Supervisory Program Analyst
Office of the Director
National Institute for Occupational
Safety and Health
1600 Clifton Road
Atlanta, Georgia 30333

John Kelly, M.S.
Industrial Hygienist
Hazard Evaluations and Technical
Assistance Branch
Division of Surveillance, Hazard
Evaluations, and Field Studies
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Bonita D. Malit, M.D., M.P.H. Medical Officer Education and Information Division National Institute for Occupational Safety and Health 4676 Columbia Parkway Cincinnati, Ohio 45226

Robert W. Mason, Ph.D.
Biologist
Risk Analysis and Document
Development Branch
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Henryka U. Nagy, Ph.D. Chemist Information Resources Branch Education and Information Division National Institute for Occupational Safety and Health 4676 Columbia Parkway Cincinnati, Ohio 45226

Benjamin K. Nelson, Ph.D.
Toxicologist (Research)
Applied Psychology and Ergonomics
Branch
Division of Biomedical and
Behavioral Science Branch
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Diana L. Ordin, M.D., M.P.H.
Deputy for the Associate Director
for Surveillance
Surveillance Branch
Division of Surveillance, Hazard
Evaluations, and Field Studies
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

John E. Parker, M.D.
Acting Chief, Epidemiology
Investigation Branch
Division of Respiratory Disease
Studies
National Institute for Occupational
Safety and Health
1095 Willowdale Road
Morgantown, West Virginia 26505

Patricia A. Sullivan, M.S.
Research Epidemiologist
Epidemiological Investigations
Branch
Division of Respiratory Disease
Studies
National Institute for Occupational
Safety and Health
1095 Willowdale Road
Morgantown, West Virginia 26505-2888

Naomi G. Swanson, Ph.D.
Chief, Motivation and Stress
Research Section
Applied Psychology and Ergonomics
Branch
Division of Biomedical and
Behavioral Science
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Theodore F. Tsai, M.D., M.P.H.
Assistant Director for Medical Sciences
Division of Vector-Borne Infectious
Diseases
National Center for Infectious Diseases
Centers for Disease Control and
Prevention
P.O. Box 2087, Foothills Campus
Fort Collins, Colorado 80522

John J. Whalen, M.S.
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Elizabeth A. Whelan, Ph.D.
Epidemiologist
Industrywide Studies Branch
Division of Surveillance, Hazard
Evaluations, and Field Studies
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

Natalie White
Co-op Student
Office of the Director
National Institute for Occupational
Safety and Health
1600 Clifton Road
Atlanta, Georgia 30333

John N. Zey, B.S.
Industrial Hygienist
Training and Educational Systems
Branch
Education and Information Division
National Institute for Occupational
Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226

## **ACKNOWLEDGEMENTS**

The following individuals from other Federal agencies contributed to the study of home contamination.

Robert W. Aldridge, Esq. General Attorney Office of the Solicitor U.S. Department of Labor 4015 Wilson Boulevard Arlington, Virginia 22203

Charles Auer, B.S.
Director
Chemical Control Division (7405)
Office of Pollution Prevention & Toxics
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Robert J. Biersner, J.D., Ph.D.
Staff Attorney
Associate Solicitor for Occupational
Safety and Health
U.S. Department of Labor
Office of the Solicitor, Room S4004
200 Constitution Avenue, N.W.
Washington, D.C. 20210

Eugenia L. Boyle ORPS Program Manager Department of Energy Washington, D.C. 20585

Ken E. Brockman Chief, Incident Response Branch Division of Operational Assessment Office for Analysis and Evaluation of Operational Data U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Caroline S. Freeman, M.P.H.
Director, Office of Standards Analysis
and Promulgation
Occupational Safety and Health Admin.
200 Constitution Avenue, N.W.
Room N3718
Washington, D.C. 20210

Steven K. Galson, M.D., M.P.H. Chief Medical Officer U.S. Department of Energy 1000 Independence Avenue, S.W. Mailstop EH-1 Washington, D.C. 20585

Barry L. Johnson, Ph.D.
Assistant Administrator
Agency for Toxic Substances and
Disease Registry
1600 Clifton Road, N.E.
Atlanta, Georgia 30333

Wendy E. Kaye, Ph.D.
Chief, Epidemiology and Surveillance
Branch
Division of Health Studies
Agency for Toxic Substances and
Disease Registry
1600 Clifton Road, N.E.
Atlanta, Georgia 30333

Melissa A. McDiarmid, M.D., M.P.H. Director, Office of Occupational Medicine Occupational Safety and Health Administration 200 Constitution Avenue, N.W. Room N3683 Washington, D.C. 20210

Lori E. Saltzman, M.S.
Directorate for Health Sciences
U.S. Consumer Product Safety
Commission
4330 East West Highway
Bethesda, Maryland 20814

Anne Sergeant, M.E.S.
Environmental Scientist
Exposure Assessment Group (8603)
Office of Health and Environmental
Assessment
Office of Research and Development
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Gary Timm, M.S.
Environmental Scientist
Chemical Control Division (7405)
Office of Pollution Prevention & Toxics
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Raji Tripathi
Division of Safety Programs
Office for Analysis and Evaluation
of Operational Data
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Andrea Yang, B.S.
Environmental Protection Specialist
Program Development Branch
Chemical Management Division (7404)
Office of Pollution Prevention & Toxics
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Margie E. Zalesak, C.I.H.
Chief of Health Division
Mine Safety and Health Administration
U.S. Department of Labor
Arlington, Virginia 22203

## Appendix 5. Glossary

acetylcholinesterase - an enzyme that catalyses the hydrolysis of acetylcholine to choline and acetic acid.

angiosarcoma - a malignant tumor that originates from blood vessel elements in muscle and other soft tissue.

allergen - a substance, often a protein, that stimulates cellular responses in the body resulting in allergic symptoms.

allergy - hypersensitivity of the body cells to a specific substance (allergen) that results in various types of allergic reaction.

anthrax - a disease from infection with the bacteria Bacillus anthracis.

arthropod vectors - arthropods (e.g., ticks, fleas, and mosquitoes) may transmit diseases to humans. For example, Lyme disease may be transmitted through a bite from a tick and malaria is transmitted to humans from mosquito bites.

asthma - a disease marked by shortness of breath and trouble breathing due to reversible constriction of the bronchial tubes of the lung. It is often related to allergic conditions.

asthmatogen - a substance which triggers asthma attacks.

asbestosis - a fibrotic disease of the lungs caused by asbestos fibers, which results in reduced lung volumes and difficulty in breathing.

berylliosis - a granulomatous disease of the lung related to inhalation of beryllium.

bronchoalveolar lavage - the washing out of the lung by multiple injections and removals of fluid.

blood lead level - the concentration of lead in the blood determined by laboratory methods.

chlamydia - small organisms that, like viruses, grow within host cells. However, their structure is similar to bacteria. Chlamydia cause a number of human diseases including trachoma (a scarring eye disease) and psittacosis (a pneumonia transmitted from birds to humans).

chloracne - an eruption of the skin resembling acne and resulting from exposure to chlorine or its compounds.

conjunctiva - the mucous membrane covering the anterior (front) surface of the eyeball and lining the lids.

coccidiomycosis - a systemic mycotic disease caused by the fungus Coccidioides immitis.

cyanotic - relating to the dark bluish or purplish coloration of the skin and mucous membranes due to deficient oxygenation of the blood in the lungs or to an abnormally great reduction of the blood in its passage through the capillaries.

droplet nuclei - droplets that contain infectious particles and are made by the evaporation of fluid from the droplets formed during the production of aerosols. Droplet nuclei may remain suspended in the air for long periods of time and are associated with respiratory diseases.

dysphagia - difficulty swallowing.

encephalitis - inflammation of the brain.

encephalopathic - relating to any disease of the brain.

esophageal perforation - a hole in the portion of the digestive tract between the throat and the stomach.

febrile disease - a disease with a fever component.

fibrosis - formation of fibrous tissue, as a reactive or reparative process in the body.

fomites - inanimate objects that may be contaminated with infectious organisms and serve in their transmission.

fungi - molds and yeasts - they have characteristics of both plants and animals and may cause diseases (i.e., mycoses, mycotoxicoses, and allergies).

gynecomastia - excessive development of the breast in a male.

giardiasis - an intestinal infection with the protozoan Giardia lamblia.

hepatomegaly - enlargement of the liver.

imbecile - mentally deficient.

lymphoblastic - relating to a young, immature cell that is destined to mature into a lymphocyte white blood cell.

mental retardation - an intellectual deficit that causes incompetence in the performance of social roles.

metastasis - in cancer, the appearance of neoplasms (tumors) in parts of the body remote from the seat of the primary tumor.

mesothelioma - a tumor derived from the cells of the pleural or peritoneal membranes.

moribund - dying, at the point of death.

mucous membranes - membranes that line the passages and cavities of the body which communicate directly or indirectly with the exterior.

mycoplasma - small organisms that grow within host cells. They are similar to bacteria but their cell walls are less complex. Mycoplasma are often associated with a relatively mild type of pneumonia.

necropsy - autopsy; an examination of the organs of a dead body for the purpose of determining the cause of death or of studying the pathologic changes present.

nephropathy - any disease of the kidney.

paralysis - loss of power of voluntary movement in a muscle through injury or disease of its nerve supply.

parasites - an organism that lives on a different organism without contributing anything to the survival of the host. Human parasites may be classified as protozoa, helminths (worms), mites, and lice.

parenchymal - relating to the specific tissue of a gland or organ, contained in and supported by the connective tissue framework, or stroma.

parturition - the act of giving birth.

pathogen - any virus, microorganism, or other substance causing a disease.

pericardial - surrounding the heart; relating to the membrane surrounding the heart (pericardium).

peritoneal - the membrane lining the abdominal cavity and covering most of the organs contained in the abdominal cavity.

pharyngitis - inflammation of the throat (i.e. the area of the gastrointestinal track between the mouth and the esophagus).

pleura - the membrane surrounding the lungs and lining the walls of the thoracic (chest) cavity.

pleural plaques - a patch or small differentiated area on the pleura.

protozoa - normally found as a microscopic single celled organism. Also, grows in colonies and exhibits some features of lower level animals. Malaria and amebiasis are examples of parasitic diseases in humans caused by protozoa.

Q fever - a febrile disease due to infection with the rickettsiae Coxiella burnetii.

radiographic - pertaining to X-ray imaging.

rhinitis - inflammation of the nasal mucous membrane.

rickettsiae - small microorganisms that, like viruses, grow within host cells and may produce disease. Unlike viruses, these organisms, have a more complicated structure, multiply like bacteria, and are susceptible to antibiotics. Rickettsial diseases are frequently transmitted by bites from ticks or lice.

sarcoidosis - a multiple organ system disease of unknown cause which can involve the lymph nodes, lungs, skin, and eyes.

status epilepticus - a condition in which one major attack of epilepsy (i.e. seizures) succeeds another with little or no intermission.

transbronchial - across a bronchus (the breathing tubes of the lung).

viruses - the smallest organisms that produce disease. They grow within host cells and take over the metabolic functions of the host organism to reproduce themselves.

wrist drop (double wrist drop) - paralysis of the extensors of the wrist and fingers from a lesion of the nerve supply. Double wrist drop would mean both wrists are affected.

zoonotic diseases - a disease in man acquired from animals.

· .			