Kaiser Permanente Medical Group: Medical Legal Aspects of Mesothelioma

Presented by Steven Kazan,
Managing Partner
Kazan, McClain, Lyons, Greenwood
& Harley, PLC

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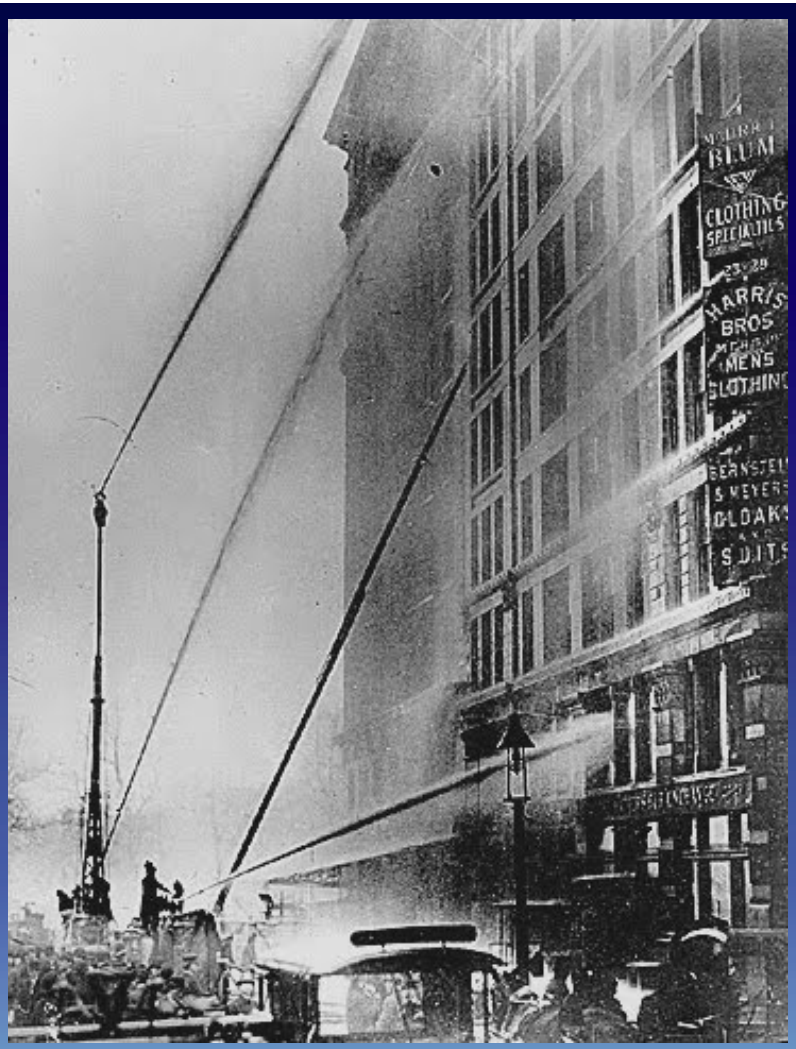

Triangle Factory Fire
March 25, 1911

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Asbestos History 101

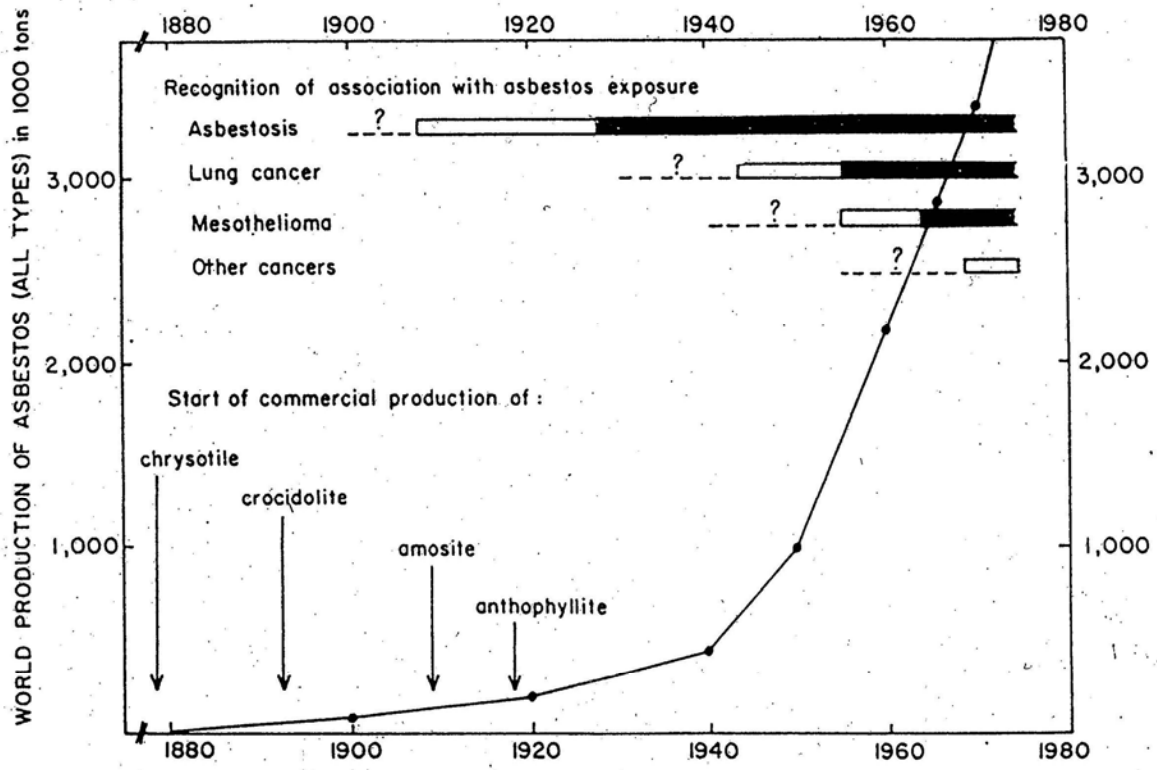
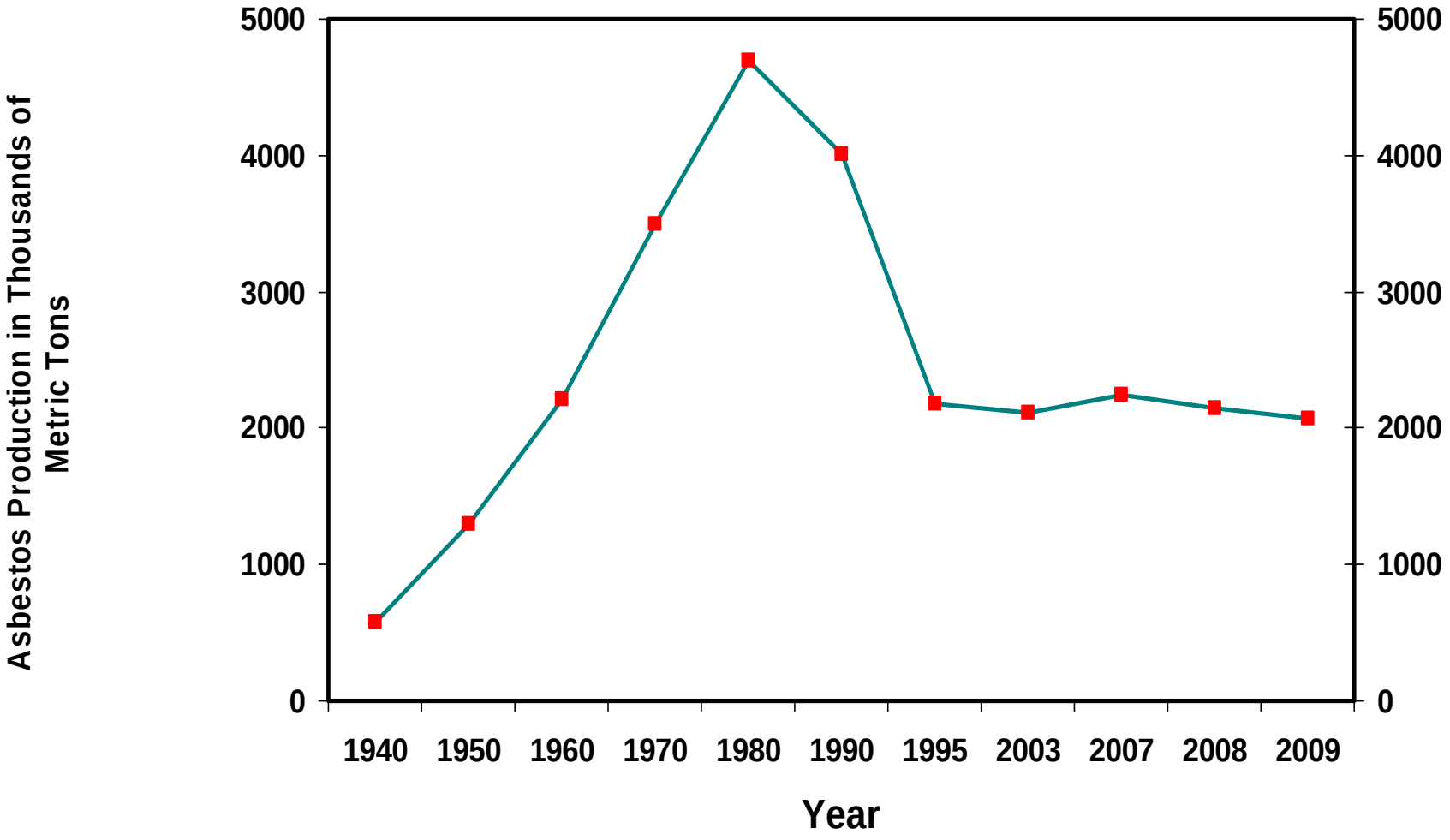


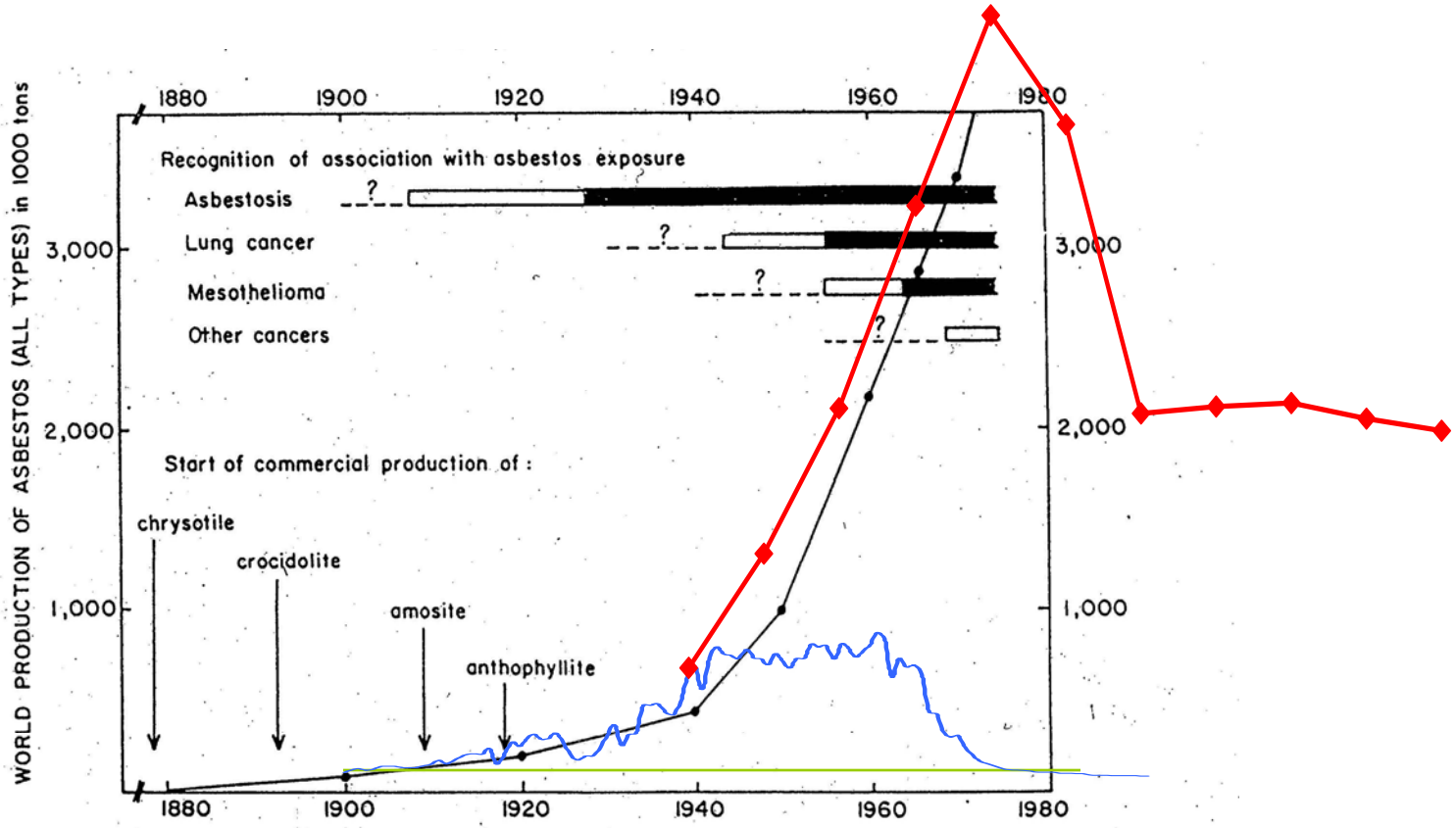
Figure 28–9. Production of Asbestos and Disease

Diagrammatic representation of the production of asbestos and the recognition of associated biologic effects. Symbols: ? = suspected; ❑ = probable; ■ = established. (From Becklake, Margaret "Asbestos Related Diseases of the Lung and Other Organs." American Review of Respiratory Disease 114: (1976) p.189).

Worldwide Asbestos Production from 1940 through 2003



Reference – USGS Minerals Yearbook chapters on asbestos



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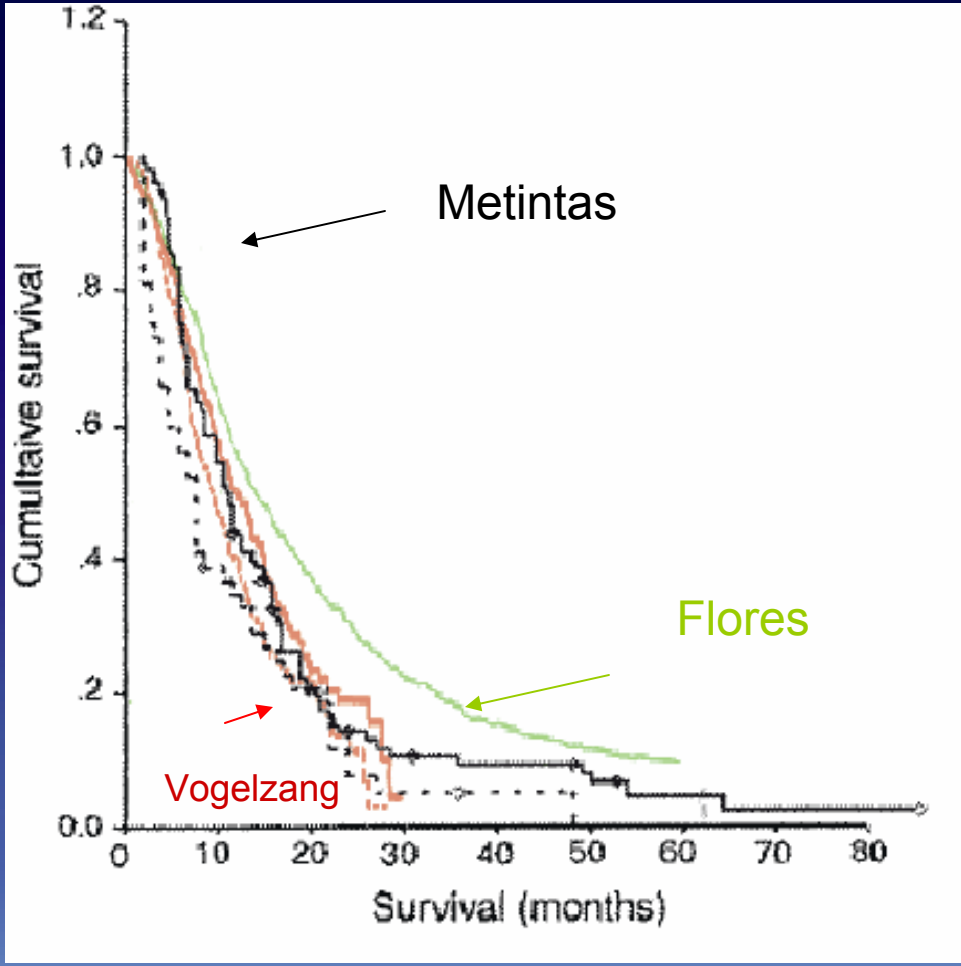
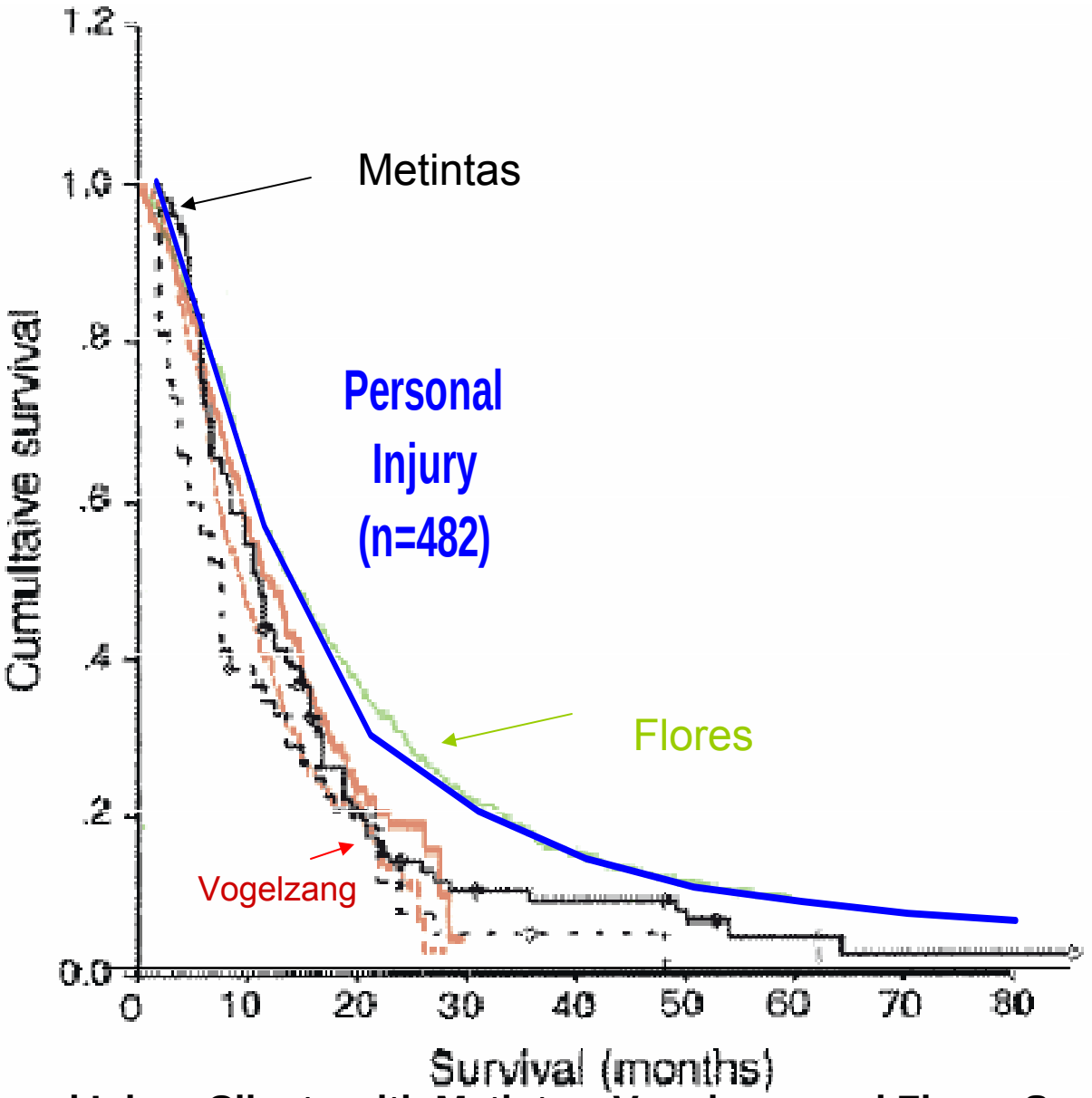


Comparison of Metintas, Vogelzang, Flores Survival Graphs

Flores, Raja M., MD. "Extrapleural pneumonectomy versus pleurectomy/decortication in the surgical management of malignant pleural mesothelioma: Results in 663 patients." *The Journal of Thoracic and Cardiovascular Surgery.* 2008;135: 626.e1.

Metintas, Muzaffer. "A retrospective analysis of malignant pleural mesothelioma patients treated either with chemotherapy or best supportive care between 1990 and 2005 A single institution experience." *Lung Cancer* 2007;55: 379-387.

Vogelzang, Nicholas J. "A Phase III Study in Combination with Cisplatin alone in Patients with Malignant Pleural Mesothelioma." *J Clin Oncol.* 2003; 21 (14): 2636-44.



Comparison of Personal Injury Clients with Metintas, Vogelzang and Flores Survival Graphs

The Mesothelioma Diagnosis Imposes Legal and Ethical Obligations on Physicians

I. The Cause of Mesothelioma is Asbestos

Abstract title:
A case-control study of malignant Mesothelioma in subjects with no known Exposure to asbestos

Discussion and Conclusions
Very few people have never been exposed to asbestos and careful elucidation of occupational and environmental histories usually uncovers exposures sufficient to cause MM. It seems likely that most cases of MM in people with no known exposure to asbestos occur, at a very low rate, among the huge numbers of people who have had small amounts of asbestos exposure.

Number: 83

Abstract title:
A case-control study of malignant mesothelioma in subjects with no known exposure to asbestos

Nicholas de Klerk, Soe Tun, Alison Reid, Helman Alfonso, Nola Olsen, Jan Sleith, Robin Mina, A William Musk
Contact: nickdk@ichr.uwa.edu.au
University of Western Australia

Keywords:
aetiology, non-asbestos related mesothelioma, occupation, environment

Abstract content:

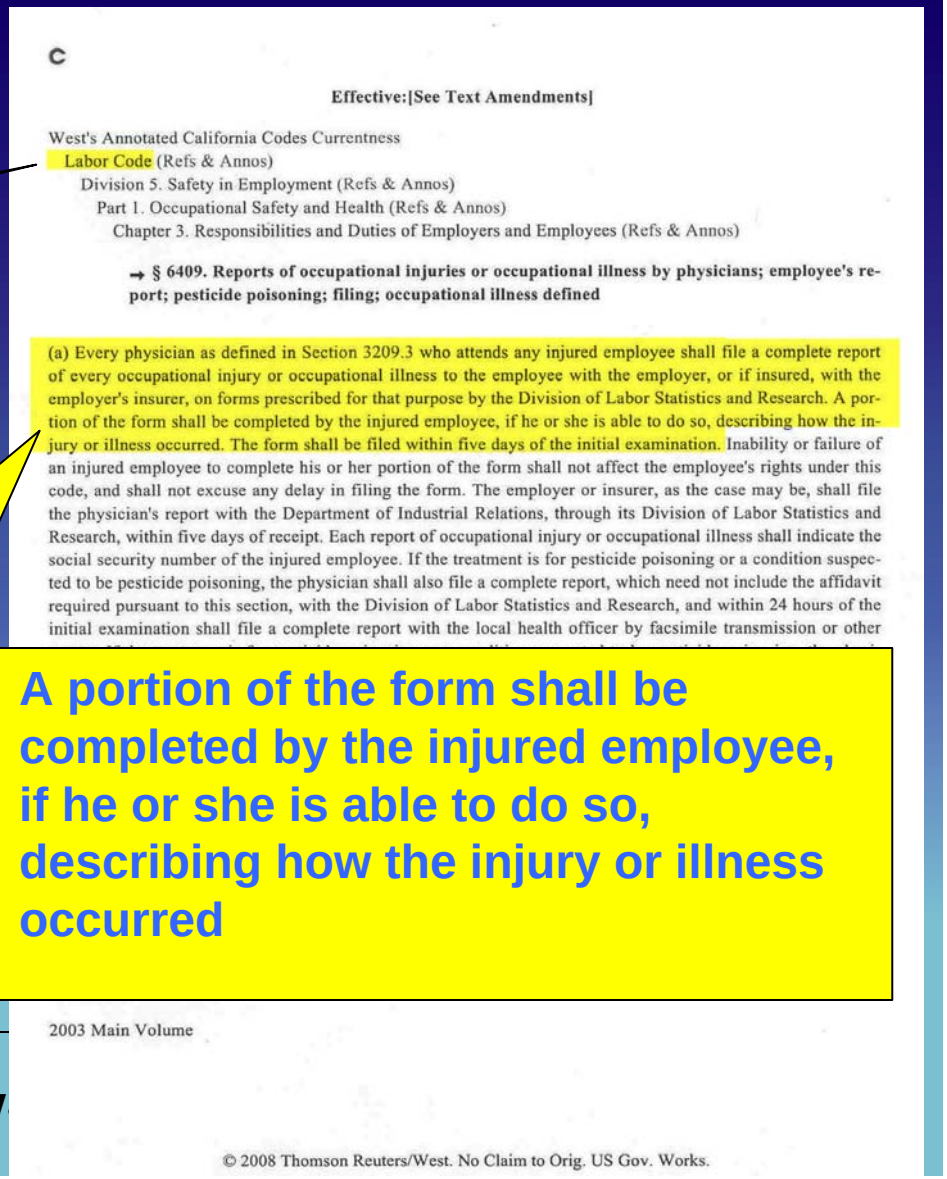
Background
Malignant mesothelioma (MM) is a rare and usually fatal cancer, generally caused by asbestos. However, in many series, up to a third of cases appear to have had no asbestos exposure.
Aims
To identify sources whereby people have been unknowingly exposed to asbestos and to identify other materials which may be lead to MM.
Methods
A matched case-control study design was used. Cases were selected from the Western Australian Mesothelioma Register with occupational and environmental histories but with no known exposure to asbestos. Two sets of 2 controls per case were selected from patients hospitalised for conditions unrelated to asbestos: (a) specific cancers (mainly breast and lymphomas), and (b) general medical conditions (mainly accidents and orthopaedic), matched for age, sex, postcode, and year. Occupational and environmental histories were obtained by questionnaire and coded by an expert industrial hygienist as to nature, likelihood, quantity and duration of exposure to 57 substances. Data were analysed using conditional logistic regression.
Results
Eligible cases without asbestos exposure were far fewer than anticipated. After 9 years there were 39 MM cases, 71 cancer and 76 medical controls recruited. Risk of MM was elevated, but not significantly so, after any exposure (probable or definite) to asbestos, silica, pesticides, welding fumes, other fumes, toxic metals, and other substances. There were also increasing risks (again not significant) with increasing quantity and duration of exposure to asbestos, wood dust, silica, pesticides, other fumes, synthetic mineral fibres, and toxic metals.
Discussion and Conclusions
Very few people have never been exposed to asbestos and careful elucidation of occupational and environmental histories usually uncovers exposures sufficient to cause MM. It seems likely that most cases of MM in people with no known exposure to asbestos occur, at a very low rate, among the huge numbers of people who have had small amounts of asbestos exposure.

II. The Mesothelioma Diagnosis Imposes Legal and Ethical Obligations on Physicians

A. The California Labor Code **§6409** - Duty to Submit Report

Labor Code

(a) Every physician as defined in Section 3209.3 who attends any injured employee shall file a complete report of every occupational injury or occupational illness to the employee with the employer, or if insured, with the employer's insurer, on forms prescribed for that purpose by the Division of Labor Statistics and Research. A portion of the form shall be completed by the injured employee, if he or she is able to do so, describing how the injury or illness occurred. The form shall be filed within five days of the initial examination.



C

Effective:[See Text Amendments]

West's Annotated California Codes Currentness
Labor Code (Refs & Annos)
Division 5. Safety in Employment (Refs & Annos)
Part 1. Occupational Safety and Health (Refs & Annos)
Chapter 3. Responsibilities and Duties of Employers and Employees (Refs & Annos)

→ § 6409. Reports of occupational injuries or occupational illness by physicians; employee's report; pesticide poisoning; filing; occupational illness defined

(a) Every physician as defined in Section 3209.3 who attends any injured employee shall file a complete report of every occupational injury or occupational illness to the employee with the employer, or if insured, with the employer's insurer, on forms prescribed for that purpose by the Division of Labor Statistics and Research. A portion of the form shall be completed by the injured employee, if he or she is able to do so, describing how the injury or illness occurred. The form shall be filed within five days of the initial examination. Inability or failure of an injured employee to complete his or her portion of the form shall not affect the employee's rights under this code, and shall not excuse any delay in filing the form. The employer or insurer, as the case may be, shall file the physician's report with the Department of Industrial Relations, through its Division of Labor Statistics and Research, within five days of receipt. Each report of occupational injury or occupational illness shall indicate the social security number of the injured employee. If the treatment is for pesticide poisoning or a condition suspected to be pesticide poisoning, the physician shall also file a complete report, which need not include the affidavit required pursuant to this section, with the Division of Labor Statistics and Research, and within 24 hours of the initial examination shall file a complete report with the local health officer by facsimile transmission or other

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2003 Main Volume

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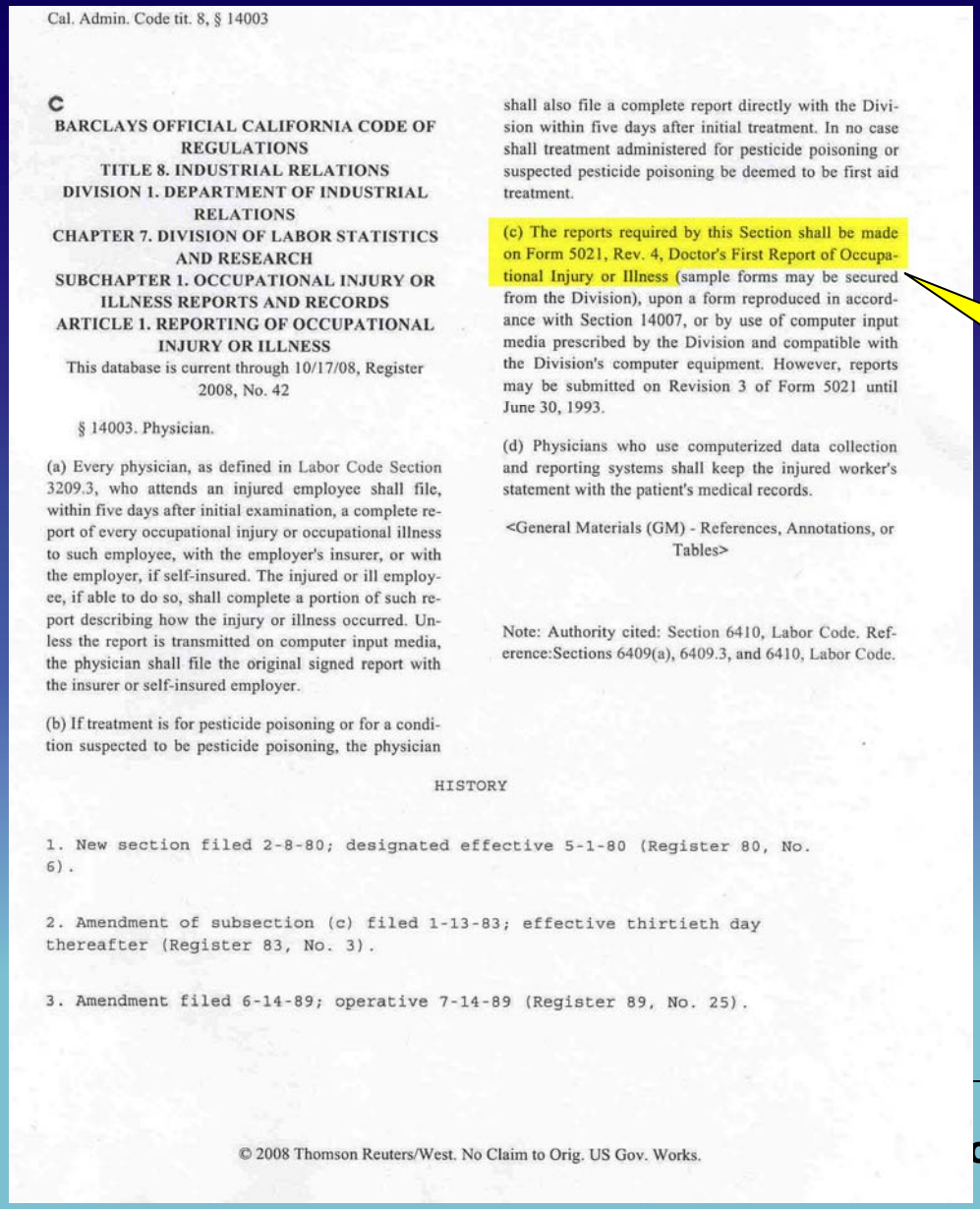


Cal. Admin. Code tit. 8, § 14003

C

BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS
TITLE 8. INDUSTRIAL RELATIONS
DIVISION 1. DEPARTMENT OF INDUSTRIAL RELATIONS
CHAPTER 7. DIVISION OF LABOR STATISTICS AND RESEARCH
SUBCHAPTER 1. OCCUPATIONAL INJURY OR ILLNESS REPORTS AND RECORDS
ARTICLE 1. REPORTING OF OCCUPATIONAL INJURY OR ILLNESS

This database is current through 10/17/08, Register 2008, No. 42

§ 14003. Physician.

(a) Every physician, as defined in Labor Code Section 3209.3, who attends an injured employee shall file, within five days after initial examination, a complete report of every occupational injury or occupational illness to such employee, with the employer's insurer, or with the employer, if self-insured. The injured or ill employee, if able to do so, shall complete a portion of such report describing how the injury or illness occurred. Unless the report is transmitted on computer input media, the physician shall file the original signed report with the insurer or self-insured employer.

(b) If treatment is for pesticide poisoning or for a condition suspected to be pesticide poisoning, the physician shall also file a complete report directly with the Division within five days after initial treatment. In no case shall treatment administered for pesticide poisoning or suspected pesticide poisoning be deemed to be first aid treatment.

(c) The reports required by this Section shall be made on Form 5021, Rev. 4, Doctor's First Report of Occupational Injury or Illness (sample forms may be secured from the Division), upon a form reproduced in accordance with Section 14007, or by use of computer input media prescribed by the Division and compatible with the Division's computer equipment. However, reports may be submitted on Revision 3 of Form 5021 until June 30, 1993.

(d) Physicians who use computerized data collection and reporting systems shall keep the injured worker's statement with the patient's medical records.

<General Materials (GM) - References, Annotations, or Tables>

Note: Authority cited: Section 6410, Labor Code. Reference:Sections 6409(a), 6409.3, and 6410, Labor Code.

HISTORY

1. New section filed 2-8-80; designated effective 5-1-80 (Register 80, No. 6).

2. Amendment of subsection (c) filed 1-13-83; effective thirtieth day thereafter (Register 83, No. 3).

3. Amendment filed 6-14-89; operative 7-14-89 (Register 89, No. 25).

Cal Admin Code title 8, **§14003**

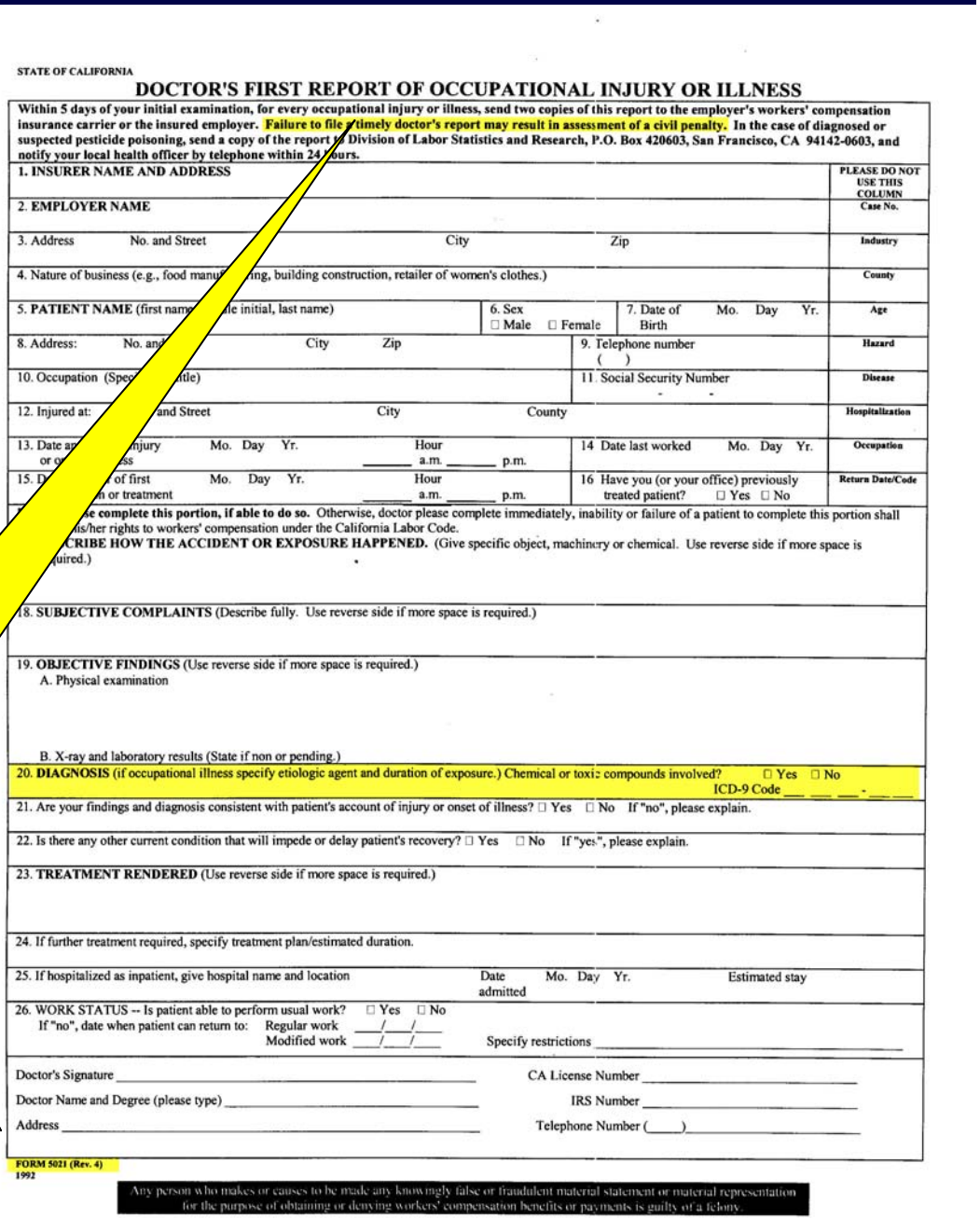
(c) The reports required by this Section shall be made on Form 5021, Rev. 4, Doctor's First Report of Occupational Injury or Illness.

om/July2011

Doctor's First Report of Occupational Injury or Illness

FORM 5021 (Rev. 4)

Failure to file a timely doctor's report may result in assessment of a civil penalty.



STATE OF CALIFORNIA

DOCTOR'S FIRST REPORT OF OCCUPATIONAL INJURY OR ILLNESS

Within 5 days of your initial examination, for every occupational injury or illness, send two copies of this report to the employer's workers' compensation insurance carrier or the insured employer. Failure to file a timely doctor's report may result in assessment of a civil penalty. In the case of diagnosed or suspected pesticide poisoning, send a copy of the report to Division of Labor Statistics and Research, P.O. Box 420603, San Francisco, CA 94142-0603, and notify your local health officer by telephone within 24 hours.

1. **INSURER NAME AND ADDRESS** — PLEASE DO NOT USE THIS COLUMN
2. **EMPLOYER NAME** — Case No.
3. Address No. and Street City Zip — Industry
4. Nature of business (e.g., food manu ing, building construction, retailer of women's clothes.) — County
5. **PATIENT NAME** (first nam le initial, last name) | 6. Sex ☐ Male ☐ Female | 7. Date of Birth Mo. Day Yr. — Age
8. Address: No. and City Zip | 9. Telephone number ( ) — Hazard
10. Occupation (Spec tle) | 11. Social Security Number - - — Disease
12. Injured at: and Street City County — Hospitalization
13. Date an injury or o ss Mo. Day Yr. Hour ____ a.m. ____ p.m. | 14 Date last worked Mo. Day Yr. — Occupation
15. D of first n or treatment Mo. Day Yr. Hour ____ a.m. ____ p.m. | 16 Have you (or your office) previously treated patient? ☐ Yes ☐ No — Return Date/Code

e complete this portion, if able to do so. Otherwise, doctor please complete immediately, inability or failure of a patient to complete this portion shall is/her rights to workers' compensation under the California Labor Code.

CRIBE HOW THE ACCIDENT OR EXPOSURE HAPPENED. (Give specific object, machinery or chemical. Use reverse side if more space is uired.)

18. **SUBJECTIVE COMPLAINTS** (Describe fully. Use reverse side if more space is required.)

19. **OBJECTIVE FINDINGS** (Use reverse side if more space is required.)
A. Physical examination

B. X-ray and laboratory results (State if non or pending.)

20. **DIAGNOSIS** (if occupational illness specify etiologic agent and duration of exposure.) Chemical or toxic compounds involved? ☐ Yes ☐ No ICD-9 Code ___ ___ ___ - ___ ___

21. Are your findings and diagnosis consistent with patient's account of injury or onset of illness? ☐ Yes ☐ No If "no", please explain.

22. Is there any other current condition that will impede or delay patient's recovery? ☐ Yes ☐ No If "yes", please explain.

23. **TREATMENT RENDERED** (Use reverse side if more space is required.)

24. If further treatment required, specify treatment plan/estimated duration.

25. If hospitalized as inpatient, give hospital name and location Date admitted Mo. Day Yr. Estimated stay

26. WORK STATUS -- Is patient able to perform usual work? ☐ Yes ☐ No
If "no", date when patient can return to: Regular work ___/___/___
Modified work ___/___/___ Specify restrictions _____

Doctor's Signature _____ CA License Number _____

Doctor Name and Degree (please type) _____ IRS Number _____

Address _____ Telephone Number (___) _____

FORM 5021 (Rev. 4)
1992

Any person who makes or causes to be made any knowingly false or fraudulent material statement or material representation for the purpose of obtaining or denying workers' compensation benefits or payments is guilty of a felony.

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ICD-9 Code _ _ _ _ _ _

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2. **EMPLOYER NAME** — Case No.
3. Address No. and Street City Zip — Industry
4. Nature of business (e.g., food manufacturing, building construction, retailer of women's clothes.) — County
5. **PATIENT NAME** (first name, middle initial, last name) — 6. Sex □ Male □ Female — 7. Date of Birth Mo. Day Yr. — Age
8. Address: No. and Street City Zip — 9. Telephone number ( ) — Hazard
10. Occupation (Specific job title) — 11. Social Security Number — Disease
12. Injured at: No. and Street City County — Hospitalization
13. Date and hour of injury or onset of illness Mo. Day Yr. Hour _____ a.m. _____ p.m. — 14 Date last worked Mo. Day Yr. — Occupation
15. Date and hour of first examination or treatment Mo. Day Yr. Hour _____ a.m. _____ p.m. — 16 Have you (or your office) previously treated patient? □ Yes □ No — Return Date/Code

Patient please complete this portion, if able to do so. Otherwise, doctor please complete immediately, inability or failure of a patient to complete this portion shall not affect his/her rights to workers' compensation under the California Labor Code.

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21. Are your findings and diagnosis consistent with patient's account of injury or onset of illness? □ Yes □ No If "no", please explain.

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Doctor's Signature _____ CA License Number _____

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Address _____ Telephone Number (____)_____

FORM 5021 (Rev. 4) 1992

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Ethical Obligation to Advise Patients of Their Legal Rights

American Thoracic Society Documents

Diagnosis and Initial Management of Nonmalignant Diseases Related to Asbestos

THIS OFFICIAL STATEMENT OF THE AMERICAN THORACIC SOCIETY WAS ADOPTED BY THE ATS BOARD OF DIRECTORS ON DECEMBER 12, 2003

CONTENTS

Asbestos is a general term for a heterogeneous group of hydrated magnesium silicate minerals that have in common a tendency to separate into fibers (1). These fibers, inhaled and displaced by various means to lung tissue, can cause a spectrum of diseases including cancer and disorders related to inflammation and fibrosis. Asbestos has been the largest single cause of occupational cancer in the United States and a significant cause of disease and disability from nonmalignant disease. To this demonstrable burden of asbestos-related disease is added the burden of public concern and fear regarding risk after minimal exposure.

This statement presents guidance for the diagnosis of nonmalignant asbestos-related disease. Nonmalignant asbestos-related disease refers to the following conditions: asbestosis, pleural thickening or asbestos-related pleural fibrosis (plaques or diffuse fibrosis), "benign" (nonmalignant) pleural effusion, and airflow obstruction. This document is intended to assist the clinician in making a diagnosis that will be the basis for individual management of the patient. It therefore provides overarching criteria for the diagnosis, specific guidelines for satisfying these criteria, and descriptions of the clinical implications of the diagnosis, including the basic management plan that should be triggered by the diagnosis. It is understood that disease may be present at a subclinical level and may not be sufficiently advanced to be apparent on histology, imaging, or functional studies.

One of the most important implications of the diagnosis of nonmalignant asbestos-related disease is that there is a close correlation between the presence of nonmalignant disease and the risk of malignancy, which may arise from exposure levels required to produce nonmalignant disease or mechanisms shared with premalignant processes that lead to cancer. The major malignancies associated with asbestos are cancer of the lung (with a complex relationship to cigarette smoking) and mesothelioma (pleural or peritoneal), with excess risk also reported for other sites. There is a strong statistical association between asbestos-related disease and malignancy, but the majority of patients with nonmalignant asbestos-related disease do not develop cancer. On the other hand, the risk of cancer may be elevated in a person exposed to asbestos without obvious signs of nonmalignant asbestos-related disease. However, a diagnosis of nonmalignant asbestos-related disease does imply a lifelong elevated risk for asbestos-related cancer.

DIAGNOSTIC CRITERIA AND GUIDELINES FOR DOCUMENTING THEM

People with past exposure to asbestos consult physicians for many relevant reasons: to be screened for asbestos-related disease, for evaluation of specific symptoms that may relate to past asbestos exposure (known or unsuspected), for treatment and advice, and for evaluation of impairment. In 1986, the American Thoracic Society convened a group of experts to review the literature and to present an authoritative consensus view of the current state of knowledge with respect to diagnosis of nonmalignant disease related to asbestos (2). In 2001, a new group was convened to review and to update the 1986 criteria. This statement constitutes that committee's report, completed in 2004.

The criteria formulated in this statement are intended for the diagnosis of nonmalignant asbestos-related disease in an individual in a clinical setting for the purpose of managing that person's current condition and future health. These general criteria are slightly modified from those presented in 1986 (Table 1) (2):

- Evidence of structural pathology consistent with asbestos-related disease as documented by imaging or histology
- Evidence of causation by asbestos as documented by the occupational and environmental history, markers of exposure (usually pleural plaques), recovery of asbestos bodies, or other means
- Exclusion of alternative plausible causes for the findings

The rest of this statement is largely devoted to presenting clinical guidelines required to document that each of these criteria is met. Demonstration of functional impairment is not required for the diagnosis of a nonmalignant asbestos-related disease, but where present should be documented as part of the complete evaluation. Evaluation of impairment has been exten-

Members of the Ad Hoc Statement Committee have disclosed any direct commercial associations (financial relationships or legal obligations) related to the preparation of this statement. This information is kept on file at the ATS headquarters.

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DOI: 10.1164/rccm.200310-1436ST
Internet address: www.atsjournals.org

Ethical Obligation to Advise Patients of Their Legal Rights

Actions Required after Diagnosis

The diagnosis of asbestosis, in particular, imposes a duty to inform the patient that he or she has a disease that is work-related, to report the disease, and to inform the patient that he or she may have legal or adjudication options for compensation.

American Thoracic Society Documents 711

the interaction between smoking and asbestos exposure in enhancing the risk of lung cancer. Such persons who smoke may be more motivated to consider cessation when the connection between asbestos and the risk of respiratory impairment and of malignancy is brought up at this time (151). The risk conferred by other occupational and environmental carcinogens should also be emphasized at this time.

The question of monitoring for asbestos-related disease is complicated by requirements for occupational surveillance, especially for those with minimal exposure. The Occupational Safety and Health Administration asbestos standard requires employers to monitor their asbestos-exposed workers during employment but makes no provision beyond the period of employment, despite the latency, and private insurance may or may not allow the expense thereafter (8).

Persons with a history of exposure to asbestos but no manifest disease, and for whom the time since initial exposure is 10 years or more, may reasonably be monitored with chest films and pulmonary function studies every 3 to 5 years to identify the onset of asbestos-related disease.

Persons with a history of exposure to asbestos are also at risk for asbestos-related malignancies. Periodic health surveillance for lung cancer or mesothelioma is not recommended. Screening for lung cancer using periodic (annual) chest films, low-dose computed tomography, or sputum cytology has not been shown to be effective in preventing mortality or improving quality of life in populations of smokers without known adverse occupational exposures (152, 153). New technologies (e.g., low-dose spiral CT scanning) are being evaluated for use in high-risk groups (153). The risk of extrathoracic malignancies may also be increased in asbestos-exposed workers. Studies suggest that there may be an elevation in the risk of colon cancer (149, 150), although this remains controversial (154). Because colon cancer is often treatable and screening for colorectal cancer is recommended by the American Cancer Society for persons more than 50 years of age (155), it is reasonable on the basis of current evidence to screen for this condition. The risk of cancer of the larynx (156) and possibly gastrointestinal cancers other than colon, including pancreas, stomach, and esophagus (154), may also be increased with asbestos exposure, but the presence and magnitude of an association with asbestos remain controversial for extrathoracic cancers (154). Routine screening for these cancers is in any case not practical at present.

No prophylactic medication or treatment is currently available to prevent the development or progression of asbestosis or other asbestos-related diseases, once exposure has occurred.

Actions Required after Diagnosis

The diagnosis of asbestosis, in particular, imposes a duty to inform the patient that he or she has a disease that is work-related, to report the disease, and to inform the patient that he or she may have legal or adjudication options for compensation. The role of the physician in this compensation process includes performing an objective evaluation of impairment consistent with the rules of the specific compensation system. Guidelines developed by the American Thoracic Society (3) may be of use and are incorporated into the *AMA Guides to the Evaluation of Permanent Impairment* (157). As in the management of any lung disorder, the physician should also manage the clinical manifestations of the disease and counsel the patient to protect remaining lung function.

The patient with evidence of asbestosis should be considered to be at risk of progressive lung disease, whatever the level of impairment on first encounter. It seems logical that removal from further exposure to asbestos or other significant occupational and environmental exposures may avoid more rapid progression of lung disease, although specific evidence for this is lacking. However, if such exposures are minimal and are well within occupational guidelines, care must be taken not to deprive the patient of a livelihood for no clinical benefit.

Immunization against pneumococcal pneumonia and annual influenza vaccine should be administered unless contraindicated for other reasons. Effective management of concurrent chronic obstructive pulmonary disease or asthma, if present, may reduce morbidity from mixed disease.

Severe asbestosis is rare in the United States and other countries with generally effective occupational health regulation. Cor pulmonale, secondary polycythemia, and respiratory insufficiency and failure are all treated in the conventional manner in patients with asbestosis.

In the spring of 2000, the Association of Occupational and Environmental Clinics adopted a resolution recommending necessary standards for screening programs (158). This action was taken in response to the proliferation of screening programs undertaken to identify cases for possible legal actions in which counseling and education may be lacking (159), but the recommendations also apply to those conducted for patient care and protection. Their recommendations were consistent with those given above and also emphasized timely physician disclosure of results to the patient, appropriate medical follow-up, and patient education. The National Institute of Occupational Safety and Health has outlined elements of an adequate screening program, with special reference to screening for asbestos-related disorders in currently employed mineworkers, in a white paper produced in 2002 that has received little attention (160). The National Institute for Occupational Safety and Health recommended that such programs should be under the direction of a "qualified physician or other qualified health care provider" knowledgeable in the field and competent to administer it, and documented with written reports to workers and employers (the latter provision that would not necessarily be applicable to workers who had separated from the employer). However, the National Institute for Occupational Safety and Health did not address the issue of counseling in that document or clinical interventions to reduce future risk.

CONCLUSIONS

The diagnosis of nonmalignant asbestos-related disease rests, as it did in 1986, on the essential criteria described: a compatible structural lesion, evidence of exposure, and exclusion of other plausible conditions, with an additional requirement for impairment assessment if the other three criteria suggest asbestos-related disease (2). Each criterion may be satisfied by one of a number of findings or tests. The 2004 criteria are open to future testing modalities if and when they are validated. For example, HRCT has greatly increased the sensitivity of detection and has become a standard method of imaging. Evidence for exposure still rests on the occupational history, the demonstration of asbestos fibers or bodies, or pleural plaques. Impairment evaluation is largely unchanged from 1986 and remains an essential part of the clinical assessment. Potentially confounding conditions, such as idiopathic pulmonary fibrosis, are better understood and many, such as tuberculosis, are less common than in the past so that the clinical picture is less often confusing.

These criteria and the guidelines that support them are compatible with the Helsinki criteria, developed by an expert group in 1997, which represents substantial consensus worldwide (147). The guidelines supporting these criteria will undoubtedly change again in future, but the present guidelines should provide a reliable basis for clinical diagnosis for some years to come.

The Statutory Obligation to Notify the Coroner

Effective: January 01, 2009

West's Annotated California Codes Currentness
Government Code (Refs & Annos)
Title 3. Government of Counties (Refs & Annos)
Division 2. Officers (Refs & Annos)
Part 3. Other Officers (Refs & Annos)
Chapter 10. Coroner (Refs & Annos)
Article 2. Inquests (Refs & Annos)

➞§ 27491. Classification of deaths requiring inquiry; determination of cause; signature on death certificate; exhumation; notice to coroner of cause of death

It shall be the duty of the **coroner** to inquire into and determine the circumstances, manner, and cause of all violent, sudden, or unusual deaths; unattended deaths; deaths where the deceased has not been attended by either a **physician** or a registered nurse, who is a member of a hospice care interdisciplinary team, as defined by subdivision (e) of Section 1746 of the Health and Safety Code in the 20 days before death; deaths related to or following known or suspected self-induced or criminal abortion; known or suspected homicide, suicide, or accidental poisoning; deaths known or suspected as resulting in whole or in part from or related to accident or injury either old or recent; deaths due to drowning, fire, hanging, gunshot, stabbing, cutting, exposure, starvation, acute alcoholism, drug addiction, strangulation, aspiration, or where the suspected **cause** of **death** is sudden infant death syndrome; death in whole or in part occasioned by criminal means; deaths associated with a known or alleged rape or crime against nature; deaths in prison or while under sentence; deaths known or suspected as due to contagious disease and constituting a public hazard; deaths from occupational diseases or occupational hazards; deaths of patients in state mental hospitals serving the mentally disabled and operated by the State Department of Mental Health; deaths of patients in state hospitals serving the developmentally disabled and operated by the State Department of Developmental Services; deaths under such circumstances as to afford a reasonable ground to suspect that the death was caused by the criminal act of another; and any deaths reported by **physicians** or other persons having knowledge of death for inquiry by **coroner.** Inquiry pursuant to this section does not include those investigative functions usually performed by other law enforcement agencies.

In any case in which the coroner conducts an inquiry pursuant to this section, the coroner or a deputy shall personally sign the certificate of death. If the death occurred in a state hospital, the coroner shall forward a copy of his or her report to the state agency responsible for the state hospital.

The **coroner** shall have discretion to determine the extent of inquiry to be made into any death occurring under natural circumstances and falling within the provisions of this section, and if inquiry determines that the **physician** of record has sufficient knowledge to reasonably state the **cause** of a **death** occurring under natural circumstances, the **coroner** may authorize that **physician** to sign the certificate of death.

For the purpose of inquiry, the coroner shall have the right to exhume the body of a deceased person when necessary to discharge the responsibilities set forth in this section.

Any funeral director, physician, or other person who has charge of a deceased person's body, when death occurred as a result of any of the causes or circumstances described in this section, shall immediately notify the coroner. Any person who does not notify the coroner as required by this section is guilty of a misdemeanor.

§ 27491. Classification of deaths requiring inquiry; determination of cause; signature on death certificate; exhumation; notice to coroner of cause of death

It shall be the duty of the coroner to inquire into and determine the circumstances, manner and cause of all… deaths from occupational diseases or occupational hazards.

Any… physician…shall immediately notify the coroner… Any person who does not notify the coroner as required by this section is guilty of a misdemeanor.

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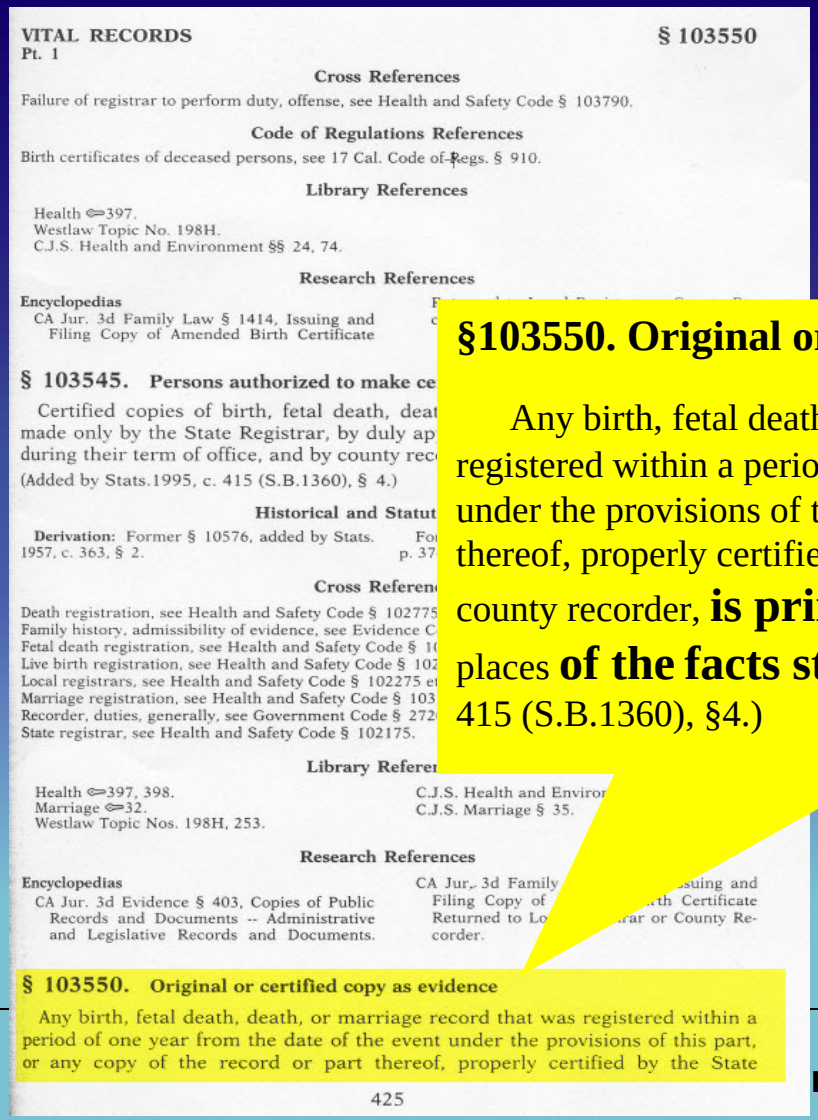
California Health & Safety Code §103550



VITAL RECORDS
Pt. 1

§ 103550

Cross References

Failure of registrar to perform duty, offense, see Health and Safety Code § 103790.

Code of Regulations References

Birth certificates of deceased persons, see 17 Cal. Code of Regs. § 910.

Library References

Health ⇐397.
Westlaw Topic No. 198H.
C.J.S. Health and Environment §§ 24, 74.

Research References

Encyclopedias

CA Jur. 3d Family Law § 1414, Issuing and Filing Copy of Amended Birth Certificate

§ 103545. Persons authorized to make ce

Certified copies of birth, fetal death, deat
made only by the State Registrar, by duly ap
during their term of office, and by county rec
(Added by Stats.1995, c. 415 (S.B.1360), § 4.)

Historical and Statut

Derivation: Former § 10576, added by Stats. 1957, c. 363, § 2. Fo p. 37

Cross Referen

Death registration, see Health and Safety Code § 102775
Family history, admissibility of evidence, see Evidence C
Fetal death registration, see Health and Safety Code § 1
Live birth registration, see Health and Safety Code § 102
Local registrars, see Health and Safety Code § 102275 et
Marriage registration, see Health and Safety Code § 103
Recorder, duties, generally, see Government Code § 272
State registrar, see Health and Safety Code § 102175.

Library Referer

Health ⇐397, 398.
Marriage ⇐32.
Westlaw Topic Nos. 198H, 253.

C.J.S. Health and Enviror
C.J.S. Marriage § 35.

Research References

Encyclopedias

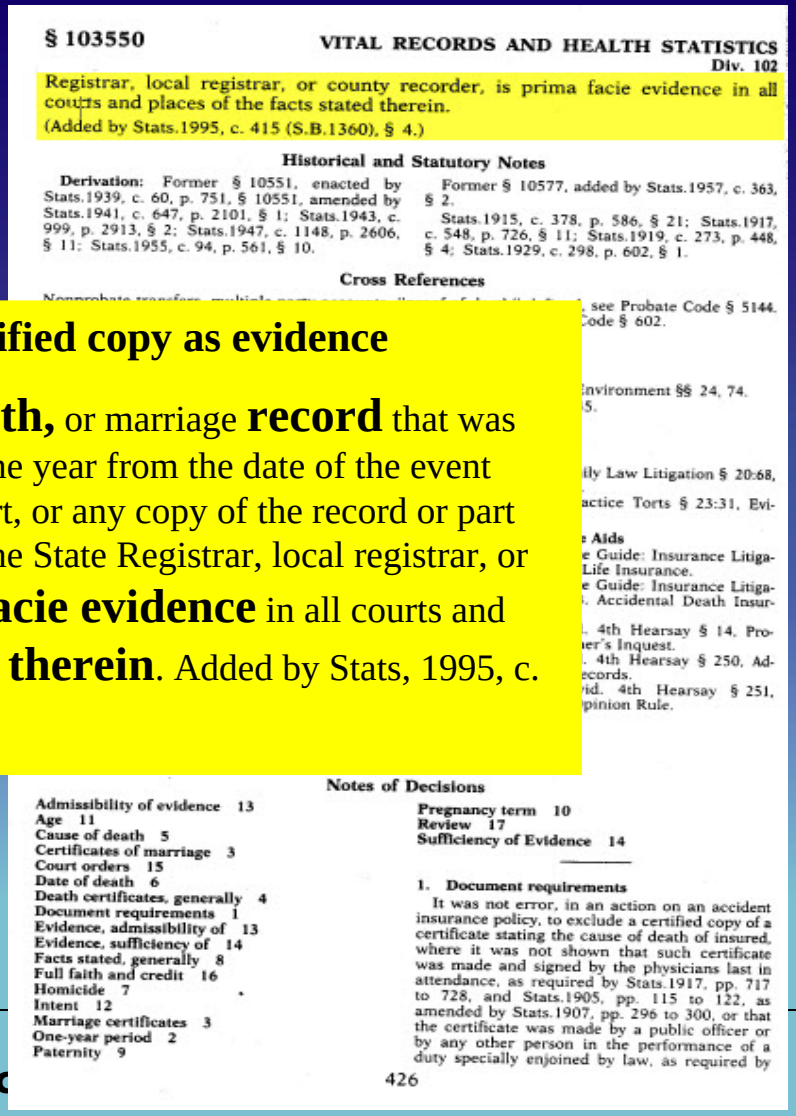
CA Jur. 3d Evidence § 403, Copies of Public Records and Documents -- Administrative and Legislative Records and Documents.

CA Jur. 3d Family ssuing and Filing Copy of rth Certificate Returned to Lo rar or County Recorder.

§ 103550. Original or certified copy as evidence

Any birth, fetal death, death, or marriage record that was registered within a period of one year from the date of the event under the provisions of this part, or any copy of the record or part thereof, properly certified by the State

425



§ 103550 VITAL RECORDS AND HEALTH STATISTICS
Div. 102

Registrar, local registrar, or county recorder, is prima facie evidence in all courts and places of the facts stated therein.
(Added by Stats.1995, c. 415 (S.B.1360), § 4.)

Historical and Statutory Notes

Derivation: Former § 10551, enacted by Stats.1939, c. 60, p. 751, § 10551, amended by Stats.1941, c. 647, p. 2101, § 1; Stats.1943, c. 999, p. 2913, § 2; Stats.1947, c. 1148, p. 2606, § 11; Stats.1955, c. 94, p. 561, § 10.

Former § 10577, added by Stats.1957, c. 363, § 2.

Stats.1915, c. 378, p. 586, § 21; Stats.1917, c. 548, p. 726, § 11; Stats.1919, c. 273, p. 448, § 4; Stats.1929, c. 298, p. 602, § 1.

Cross References

see Probate Code § 5144.
Code § 602.

Environment §§ 24, 74.
5.

ily Law Litigation § 20:68,

actice Torts § 23:31, Evi-

Aids

e Guide: Insurance Litiga-
Life Insurance.
e Guide: Insurance Litiga-
. Accidental Death Insur-

4th Hearsay § 14, Pro-
ner's Inquest.
4th Hearsay § 250, Ad-
ecords.
id. 4th Hearsay § 251,
pinion Rule.

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1. Document requirements

It was not error, in an action on an accident insurance policy, to exclude a certified copy of a certificate stating the cause of death of insured, where it was not shown that such certificate was made and signed by the physicians last in attendance, as required by Stats.1917, pp. 717 to 728, and Stats.1905, pp. 115 to 122, as amended by Stats.1907, pp. 296 to 300, or that the certificate was made by a public officer or by any other person in the performance of a duty specially enjoined by law, as required by

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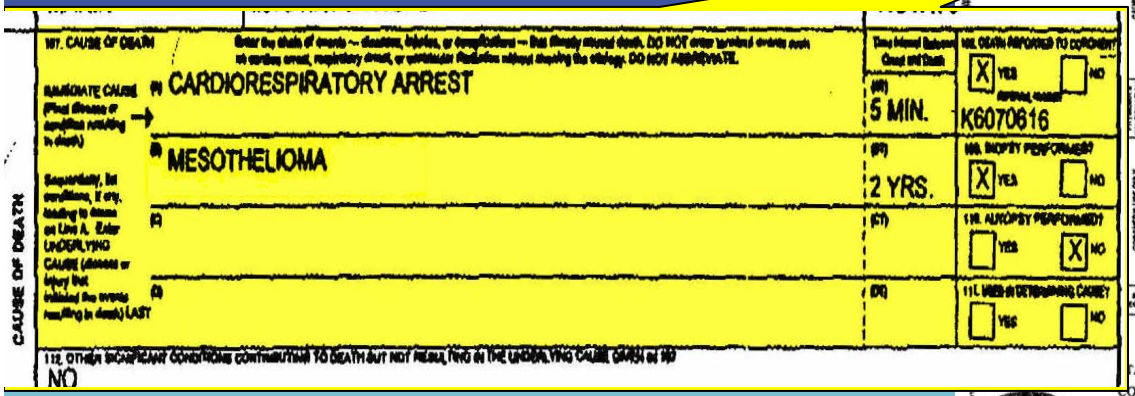
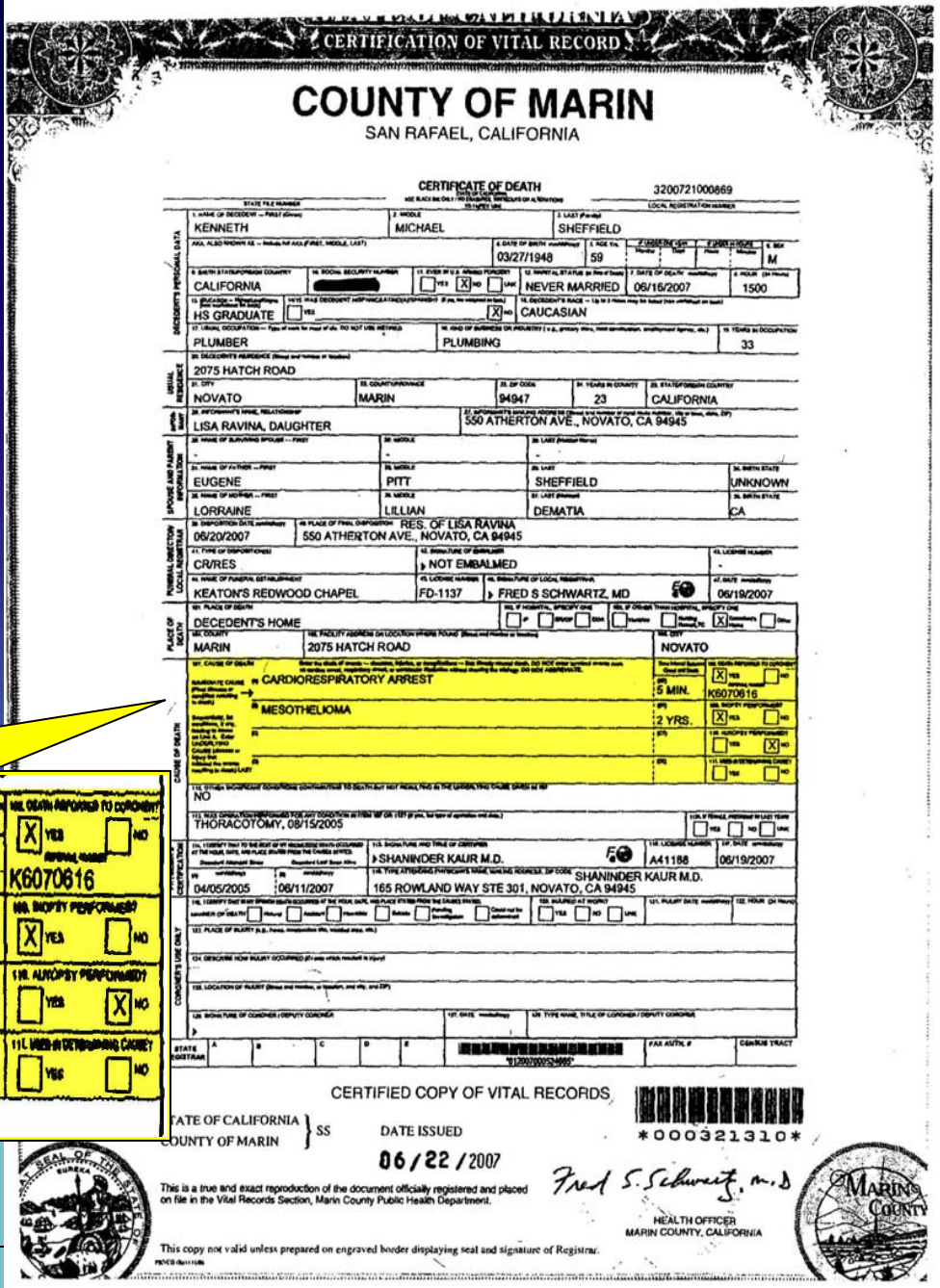
§103550. Original or certified copy as evidence

Any birth, fetal death, **death,** or marriage **record** that was registered within a period of one year from the date of the event under the provisions of this part, or any copy of the record or part thereof, properly certified by the State Registrar, local registrar, or county recorder, **is prima facie evidence** in all courts and places **of the facts stated therein**. Added by Stats, 1995, c. 415 (S.B.1360), §4.)

Certificate of Vital Records





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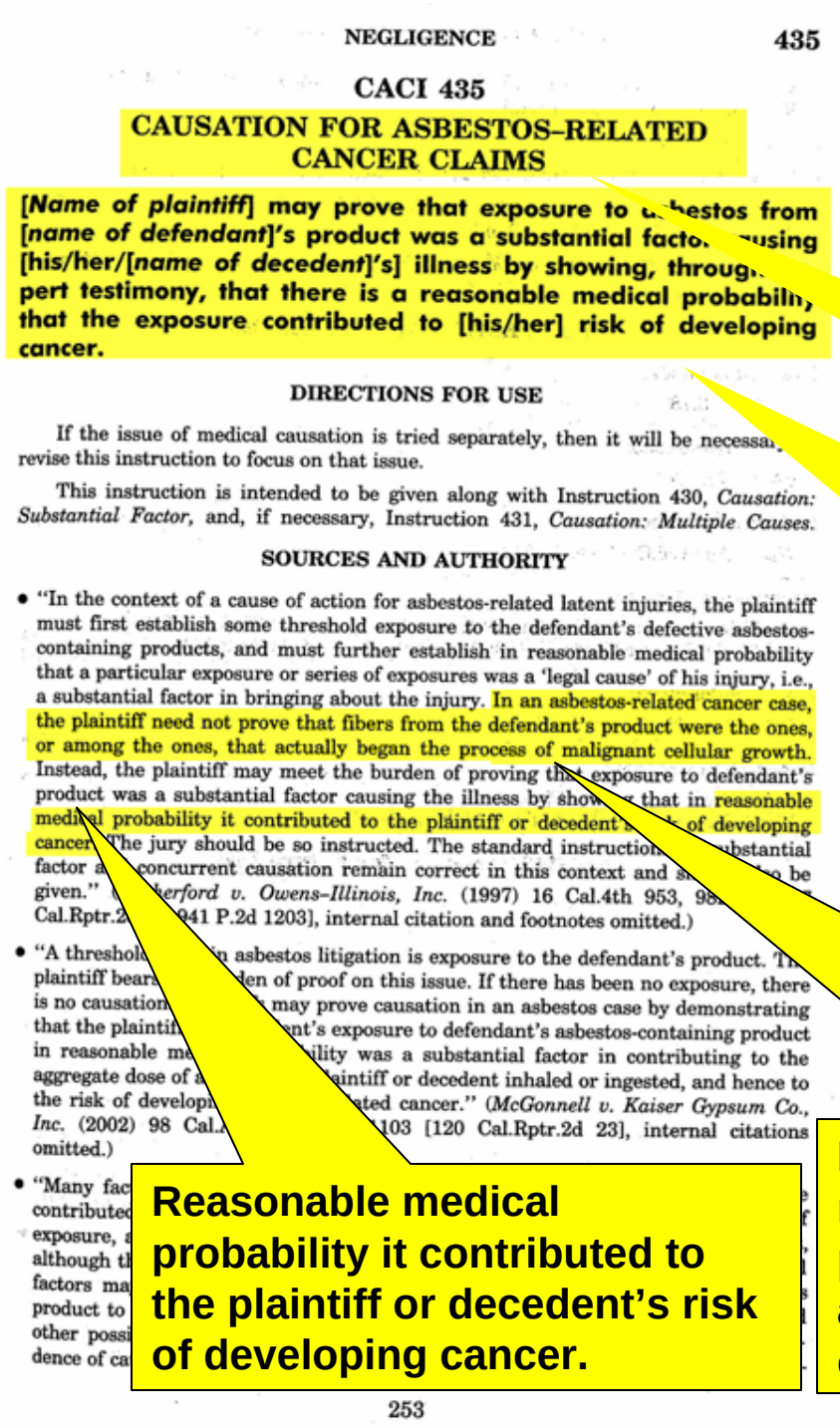

NEGLIGENCE 435

CACI 435

CAUSATION FOR ASBESTOS–RELATED CANCER CLAIMS

[*Name of plaintiff*] may prove that exposure to asbestos from [*name of defendant*]'s product was a substantial factor causing [his/her/[*name of decedent*]'s] illness by showing, through expert testimony, that there is a reasonable medical probability that the exposure contributed to [his/her] risk of developing cancer.

DIRECTIONS FOR USE

If the issue of medical causation is tried separately, then it will be necessary to revise this instruction to focus on that issue.

This instruction is intended to be given along with Instruction 430, *Causation: Substantial Factor,* and, if necessary, Instruction 431, *Causation: Multiple Causes.*

SOURCES AND AUTHORITY

- "In the context of a cause of action for asbestos-related latent injuries, the plaintiff must first establish some threshold exposure to the defendant's defective asbestos-containing products, and must further establish in reasonable medical probability that a particular exposure or series of exposures was a 'legal cause' of his injury, i.e., a substantial factor in bringing about the injury. In an asbestos-related cancer case, the plaintiff need not prove that fibers from the defendant's product were the ones, or among the ones, that actually began the process of malignant cellular growth. Instead, the plaintiff may meet the burden of proving that exposure to defendant's product was a substantial factor causing the illness by showing that in reasonable medical probability it contributed to the plaintiff or decedent's risk of developing cancer. The jury should be so instructed. The standard instruction on substantial factor and concurrent causation remain correct in this context and should be given." (*Rutherford v. Owens–Illinois, Inc.* (1997) 16 Cal.4th 953, 98[illegible] Cal.Rptr.2[illegible] 941 P.2d 1203], internal citation and footnotes omitted.)
- "A threshold [illegible] in asbestos litigation is exposure to the defendant's product. The plaintiff bears [illegible]den of proof on this issue. If there has been no exposure, there is no causation [illegible] may prove causation in an asbestos case by demonstrating that the plaintiff[illegible]nt's exposure to defendant's asbestos-containing product in reasonable me[illegible]ility was a substantial factor in contributing to the aggregate dose of a[illegible]laintiff or decedent inhaled or ingested, and hence to the risk of developi[illegible]ted cancer." (*McGonnell v. Kaiser Gypsum Co., Inc.* (2002) 98 Cal.[illegible]103 [120 Cal.Rptr.2d 23], internal citations omitted.)
- "Many fac[illegible] contributed[illegible] exposure, [illegible] although th[illegible] factors ma[illegible] product to [illegible] other possi[illegible] dence of ca[illegible]

253

Cause vs. Risk

Jury Instructions: CACI 435
Causation for Asbestos-Related Claims

CAUSATION FOR ASBESTOS-RELATED CANCER CLAIMS

[*Name of plaintiff*] may prove that exposure to asbestos from [*name of defendant*]'s product was a substantial factor causing [his/her/[*name of decedent*]'s] illness by showing, through expert testimony, that there is a reasonable medical probability that the exposure contributed to [his/her] risk of developing cancer.

Reasonable medical probability it contributed to the plaintiff or decedent's risk of developing cancer.

In an asbestos-related cancer case, the plaintiff need not prove that fibers from the defendant's product were the ones, or among the ones, that actually began the process of malignant cellular growth.

Where Patients Learn About Asbestos Disease

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THE MYTH ABOUT ASBESTOS AND PHARAOHS: HOW WE IN THE NATURAL SCIENCES DO NOT CHECK NON-MEDICAL "FACTS"

CHARLOTTA HILLERDAL, PH.D., INSTITUTE OF ARCHEOLOGY, ABERDEEN, UK
GUNNAR HILLERDAL, M.D., DEPARTMENT OF RESPIRATORY MEDICINE AND ALLERGY, KAROLINSKA UNIVERSITY HOSPITAL, STOCKHOLM, SWEDEN

MUMMIFICATION IN EGYPT

>3000 BC: Burials in desert sand, natural drying

Later: embalmers used NATRON salt to remove moisture and thereby preserved flesh.

Internal organs removed to prevent destruction, kept in special urns

Once dried, mummies were ritualistically anointed with oils and perfumes and then wrapped up in linen

Continued until roman times in fact until Christianity took over

Mummy from greco-roman time

INTRODUCTION

*Many papers presented on asbestos in medical meetings start with the sentence "asbestos was used in old Egypt to preserve mummies"

Google 18 June, 2011: "Asbestos + Pharaoh 243000 hits (0.16 seconds); Asbestos + mummy: 980000 hits (0,22 seconds)

QUESTION:
What is the science behind these statements?

METHODS

*Samples from Internet were studied (however, for reasons of time, not all)

*Archeological literature was searched for any scientific facts

*Egyptologists were questioned

FINDINGS

*Internet: most hits were simple statements without references; if references, there were cross-references to similar statements

*Archeological literature: no article found referring to any asbestos use

*Egyptologists: nobody was aware of asbestos being used for this purpose

CONCLUSIONS

ASBESTOS WAS NEVER USED FOR MUMMIFICATION

DESPITE THIS, ALMOST A MILLION HITS ON THE NET!

INTERNET MUST BE USED WITH CAUTION!

WE MUST CHECK ALSO NON-MEDICAL "FACTS" CAREFULLY BEFORE WE USE THEM IN OUIR PRESENTATIONS!

RAMESES II

SCIENTIFIC FACTS ABOUT ASBESTOS HISTORY

"used in Finland and northern Sweden 4000-1000 BC

"Persian empire: used when burning bodies to seperate wood ashes from human ashes

"Greco-Roman world: used for cloth mainly for fire-proofness

" Also used as wicks for oil lamps especially in temples

Karolinska Universitetssjukhuset, Lungkliniken
Gunnar Hillerdal
E-mail: gunnar.hillerdal@karolinska.se

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“New legal trick: Fake hospital sites for finding clients” - CNN

http://money.cnn.com/2010/04/01/news/companies/fake_va_hospitals_websites.fortune/index.htm?section=money_news_companies

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Google The All-Knowing: Googling Mesothelioma July 2011

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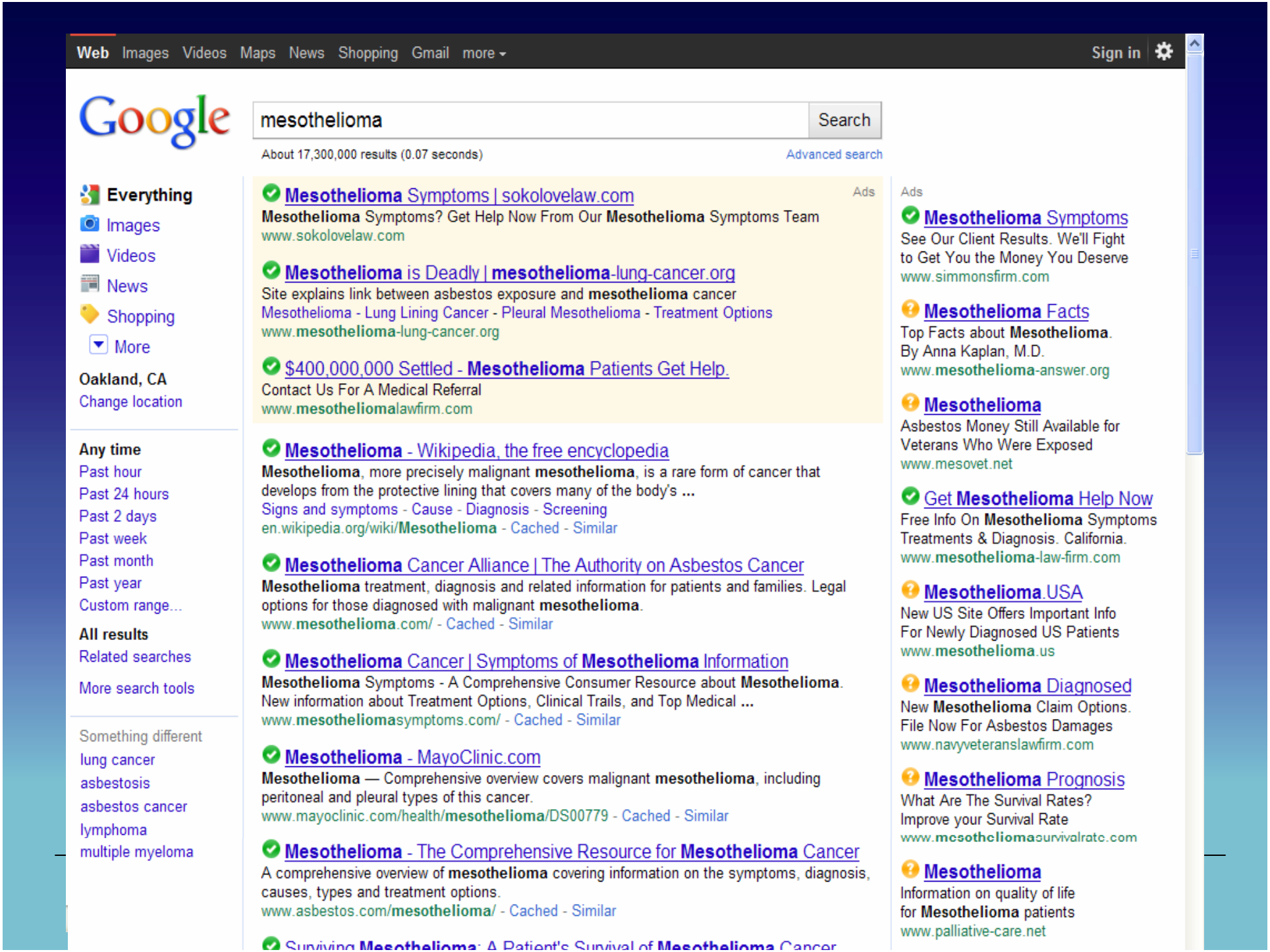
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Everything
Images
Videos
News
Shopping
More
Oakland, CA
Change location
Any time
Past hour
Past 24 hours
Past 2 days
Past week
Past month
Past year
Custom range...
All results
Related searches
More search tools
Something different
lung cancer
asbestosis
asbestos cancer
lymphoma
multiple myeloma
Mesothelioma Symptoms | sokolovelaw.com
Mesothelioma Symptoms? Get Help Now From Our Mesothelioma Symptoms Team
www.sokolovelaw.com
Mesothelioma is Deadly | mesothelioma-lung-cancer.org
Site explains link between asbestos exposure and mesothelioma cancer
Mesothelioma - Lung Lining Cancer - Pleural Mesothelioma - Treatment Options
www.mesothelioma-lung-cancer.org
$400,000,000 Settled - Mesothelioma Patients Get Help.
Contact Us For A Medical Referral
www.mesotheliomalawfirm.com
Mesothelioma - Wikipedia, the free encyclopedia
Mesothelioma, more precisely malignant mesothelioma, is a rare form of cancer that develops from the protective lining that covers many of the body's ...
Signs and symptoms - Cause - Diagnosis - Screening
en.wikipedia.org/wiki/Mesothelioma - Cached - Similar
Mesothelioma Cancer Alliance | The Authority on Asbestos Cancer
Mesothelioma treatment, diagnosis and related information for patients and families. Legal options for those diagnosed with malignant mesothelioma.
www.mesothelioma.com/ - Cached - Similar
Mesothelioma Cancer | Symptoms of Mesothelioma Information
Mesothelioma Symptoms - A Comprehensive Consumer Resource about Mesothelioma. New information about Treatment Options, Clinical Trails, and Top Medical ...
www.mesotheliomasymptoms.com/ - Cached - Similar
Mesothelioma - MayoClinic.com
Mesothelioma — Comprehensive overview covers malignant mesothelioma, including peritoneal and pleural types of this cancer.
www.mayoclinic.com/health/mesothelioma/DS00779 - Cached - Similar
Mesothelioma - The Comprehensive Resource for Mesothelioma Cancer
A comprehensive overview of mesothelioma covering information on the symptoms, diagnosis, causes, types and treatment options.
www.asbestos.com/mesothelioma/ - Cached - Similar
Surviving Mesothelioma: A Patient's Survival of Mesothelioma Cancer
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www.simmonsfirm.com
Mesothelioma Facts
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www.mesothelioma-answer.org
Mesothelioma
Asbestos Money Still Available for Veterans Who Were Exposed
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www.mesothelioma-law-firm.com
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New US Site Offers Important Info For Newly Diagnosed US Patients
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www.mesotheliomasurvivalrate.com
Mesothelioma
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www.palliative-care.net

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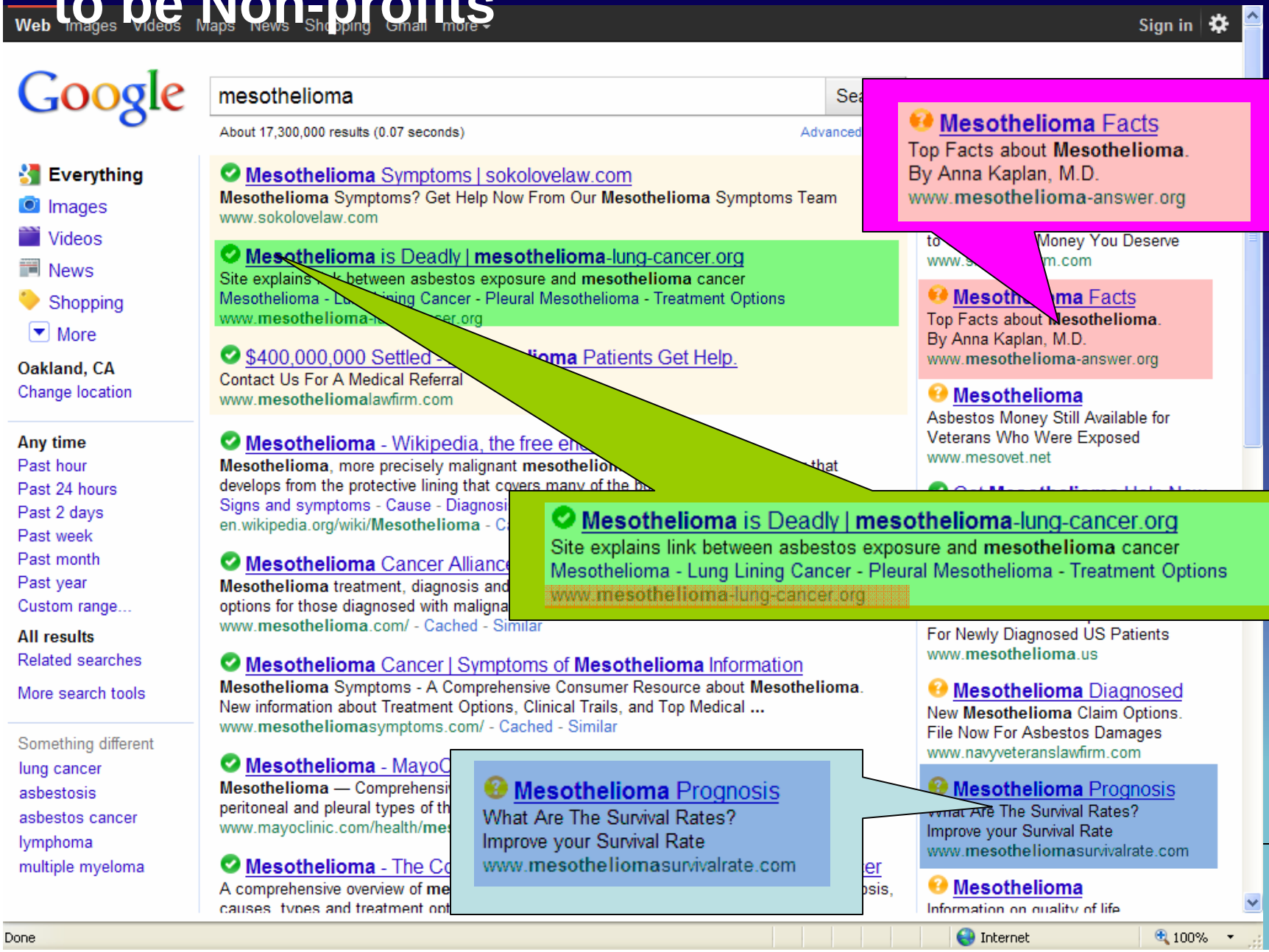

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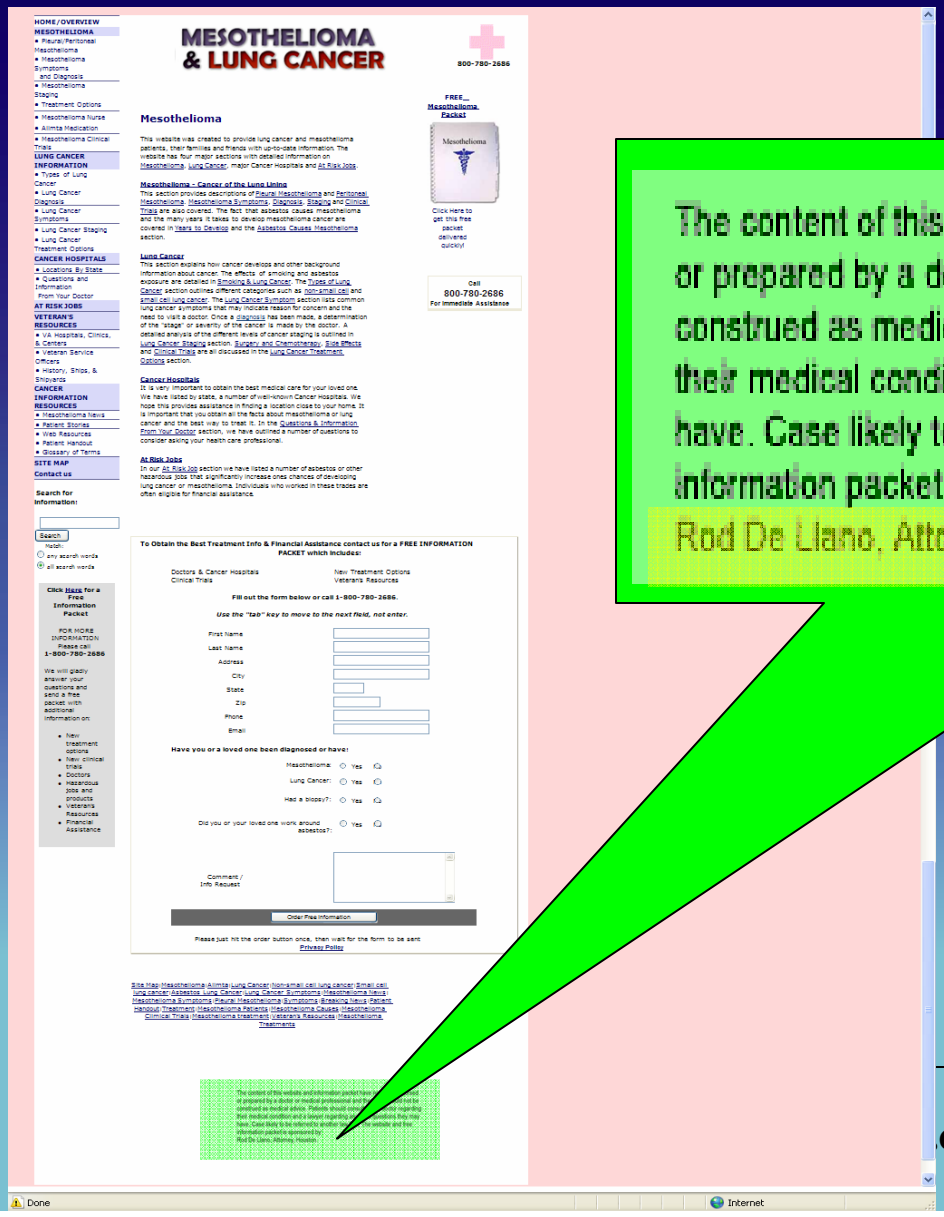

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Staying positive about the treatments you will be undergoing will benefit your survival rate.
Mesothelioma Stats
39% survive 1 year
20% survive 2 years
11% survive 3 years
10% survive 4 years
9% survive 5 years
Mesothelioma Survival Rates
Click here to begin
Internet
100%

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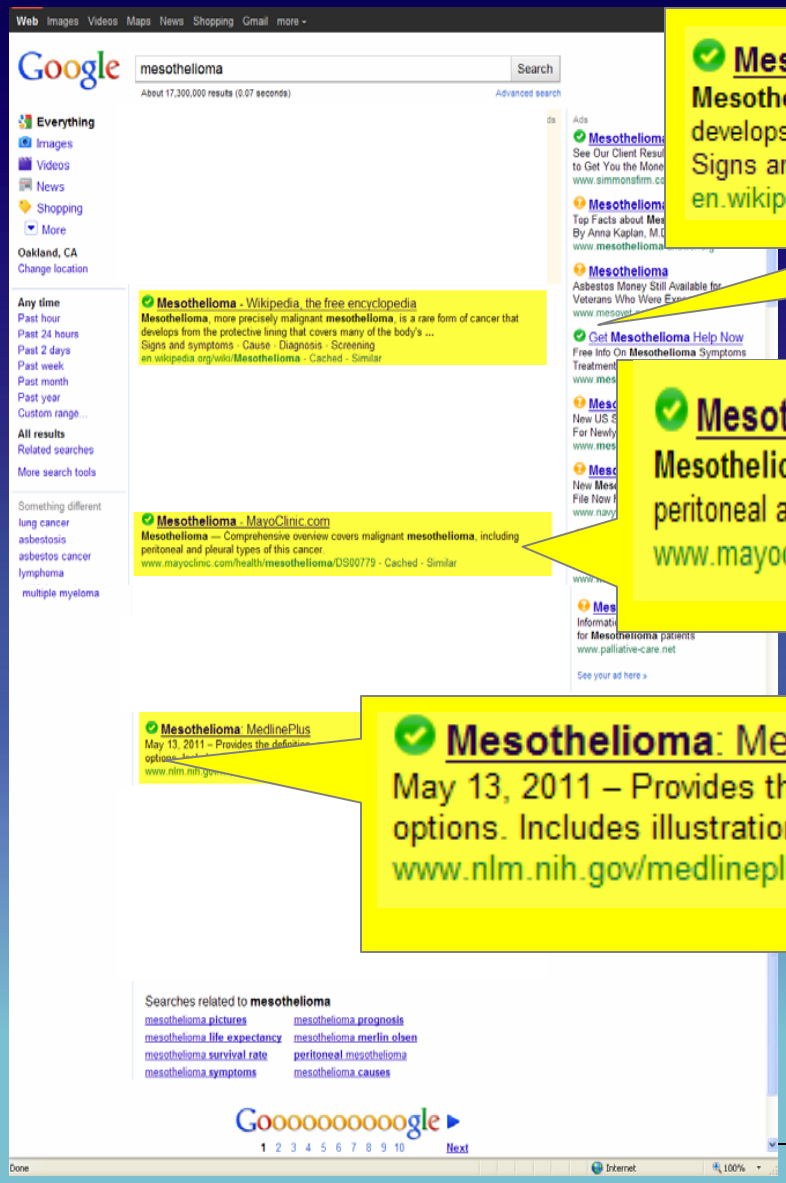
LEGITIMATE NON-PROFITS 2011



Mesothelioma - Wikipedia, the free encyclopedia

Mesothelioma, more precisely malignant **mesothelioma**, is a rare form of cancer that develops from the protective lining that covers many of the body's ...

Signs and symptoms - Cause - Diagnosis - Screening

en.wikipedia.org/wiki/**Mesothelioma** - Cached - Similar

Mesothelioma - MayoClinic.com

Mesothelioma — Comprehensive overview covers malignant **mesothelioma**, including peritoneal and pleural types of this cancer.

www.mayoclinic.com/health/**mesothelioma**/DS00779 - Cached - Similar

Mesothelioma: MedlinePlus

May 13, 2011 – Provides the definition, symptoms, risk factors, complications, and treatment options. Includes illustrations.

www.nlm.nih.gov/medlineplus/**mesothelioma**.html - Cached - Similar

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The Lancet Article

Seminar

Malignant mesothelioma

Bruce W S Robinson, Arthur W Musk, Richard A Lake

Malignant mesothelioma is an aggressive, treatment-resistant tumour, which is increasing in frequency throughout the world. Although the main risk factor is asbestos exposure, a virus, simian virus 40 (SV40), could have a role. Mesothelioma has an unusual molecular pathology with loss of tumour suppressor genes being the predominant pattern of lesions, especially the *P16*^{INK4A}, and *P14*^{ARF}, and *NF2* genes, rather than the more common *p53* and *Rb* tumour suppressor genes. Cytopathology of mesothelioma effusions or fine-needle aspirations are often sufficient to establish a diagnosis, but histopathology is also often required. Patients typically present with breathlessness and chest pain with pleural effusions. Median survival is now 12 months from diagnosis. Palliative chemotherapy is beneficial for mesothelioma patients with high performance status. The role of aggressive surgery remains controversial and growth factor receptor blockade is still unproven. Gene therapy and immunotherapy are used on an experimental basis only. Patterns identified from microarray studies could be useful for diagnosis as well as prognostication.

Lancet 2005; 366: 397–408

Tumour Immunology Group, School of Medicine and Pharmacology, University of Western Australia (Prof B W S Robinson MD, R A Lake PhD), and School of Population Health (A W Musk MBBS), Department of Respiratory Medicine (Prof B W S Robinson, A W Musk), Sir Charles Gairdner Hospital, Nedlands, Western Australia, Australia; and Western

http://www.asbestosresource.com/mesothelioma/
http://www.mesotheliomacenter.org/
http://www.mesothelioma.com/
http://www.mesotheliomareporter.org/
http://www.mesotheliomaadvice.org/

the search. Where possible, primary sources are quoted, but review articles are referenced where pragmatically necessary. References were chosen based on best evidence via clinical or laboratory studies, especially if the work had been corroborated by published work from other centres. Websites were reviewed from a Google search with the single term "mesothelioma" and selected by one or more of the authors.

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The Lancet Article

Lancet 2005; Vol 366: 397-408

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Correspondence to: Prof Bruce W S Robinson, UWA School of Medicine and Pharmacology, Sir Charles Gairdner Hospital, Nedlands, 6009, Western Australia, Australia. bwsrobin@cyllene.uwa.edu.au

Introduction

The fact that asbestos can cause cancer is now widely known in western countries, and the public are increasingly familiar with the word mesothelioma, especially since the deaths of some well known individuals with the disease, such as actor Steve McQueen and scientist and author Stephen Jay Gould.[1]

Why this change in awareness? One reason is that mesothelioma has climbed the league table of male cancers over the past 30 years, and is now roughly as common as cancers of the liver, bone, and bladder, especially in Europe and Australia.[2] Its incidence is expected to continue to increase for the next decade or so. Secondly, almost everyone who lives in industrialised areas of the western world has asbestos fibres in their lungs, and many can remember being exposed to asbestos incidentally (eg, carpenters, plumbers, military personnel, school teachers, and students who handled asbestos samples, mats, or blankets; home renovators; and people in many other situations).[3] Media interest in asbestos has produced in many of these individuals a level of awareness—even anxiety—about mesothelioma that does not exist for most other sporadic cancers of comparable incidence. These issues, combined with the complex medical–legal aspects of the disease, have led to a lot of interest. For example, a simple Google search of the common cancers at the time of writing identified nearly 3 million webpage results for *mesothelioma*, second only to breast cancer and substantially more than the number of results for other well known cancers such as lung cancer, leukaemia, lymphoma, and bowel or colon cancer (panel 1).

In this Seminar, we aim to review mesothelioma, highlighting key clinical features plus some controversies, recent developments, and important questions for future research into this disease.

Panel 1: Useful mesothelioma websites

http://cis.nci.nih.gov/fact/6_36.htm: National Cancer Institute fact sheet
http://www.cancerresearchuk.org/aboutcancer/specificcancers/mesothelioma: Cancer Research UK website
http://www.marf.org/: Mesothelioma Applied Research Foundation
http://www.mirg.org/: Mesothelioma Information Resource Group

The following sites are provided mainly by law firms or pharmaceutical companies, but they do provide useful information for patients and relatives:
http://www.mesoinfo.com/
http://www.mesothelioma-facts.com/
http://www.mesotheliomaweb.org/
http://www.mesolung.com/
http://www.mesothelioma-resources.com/
http://www.mesothelioma.us.com/
http://www.asbestosresource.com/mesothelioma/
http://www.mesotheliomacenter.org/
http://www.mesothelioma.com/
http://www.mesotheliomareporter.org/
http://www.mesotheliomaadvice.org/

Epidemiology

There are few disease processes for w… and determinants of occurrenc… well known as they are f… and peritoneum. In f…, mesothelioma owes its entire

Search strategy and selection criteria

We searched PubMed using the key word "mesothelioma" with the relevant topics—eg, "pathogenesis", "tumour suppressor genes", "peritoneal", "oncogenes", "angiogenesis", "SV40", "cytopathology", "palliation", and so on. Fields were limited to publications in English and restricted to the past 15 years. We also reviewed citations from papers from the search. Where possible, primary sources are quoted, but review articles are referenced where pragmatically necessary. References were chosen based on best evidence via clinical or laboratory studies, especially if the work had been corroborated by published work from other centres. Websites were reviewed from a Google search with the single term "mesothelioma" and selected by one or more of the authors.

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http://www.mesolung.com/
http://www.mesothelioma-resources.com/
http://www.mesothelioma.us.com/
http://www.asbestosresource.com/mesothelioma/
http://www.mesotheliomacenter.org/
http://www.mesothelioma.com/
http://www.mesotheliomareporter.org/
http://www.mesotheliomaadvice.org/

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Thank you for your attention!

Copies of these slides are available at:
www.kazanlaw.com/July2011

Questions?

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