FILE NAME: .ℕJl·ʅŜă ó.wYú

DATE: нллт Wdzfȅ мp

DOC#: .wYмтт

DOCUMENT DESCRIPTIONY [ŜűűŜNJ ǿλűK {dzLJLJfŜY ŜyűI·NJè wŜLJƵNJú ƶy
a ŜăƵűKŜfλƵY l· /l·ăŜă λy ! dzăűNJl·fλl·Σ ŦƵNJ [ƵLJNJŜăűλ Øăφ CƵNJŘ

DR. JAMES LEIGH

MD PHD MA MSC (SYD) BLEGS (MACQ)CENG FAFOM FAFPHM

Consultant Occupational Physician

Provider No 184682H

5 Nelson Road

Lindfield NSW 2070

Australia

Tel: 61 2 9416 4577

email: jleigh@ bigpond.com

15 July 2007

Your Ref : MM:MW:016785

Slater Gordon (attn Mr M Magazanik)

PO Box 2557

Perth 6831

WA

Dear Mr Magazanik

RE: Lopresti v Ford

Thank you for your letter of 2 July 2007 requesting a supplementary report in this matter I have already provided a report (10 June 2006) .

Supplementary Report

The Australian Mesothelioma Register collects data on all mesothelioma cases in Australia The register has been in operation since 1/1/1980. Only histologically confirmed cases are accepted. Up to 31/12/1985

pathology panel diagnosis was used and a detailed occupational and environmental history obtained by interview of patient or close relative carried out by trained interviewer (often nurse). From 1986 onwards history is obtained by detailed history in 60% cases and remainder by mail questionnaire with up to four follow up letters.

Notifications prior to 1982 and post 2001 are less reliable due to newness of program (pre 1982) and new privacy legislation(post 2001). The Register data has been reported annually in the Australian Mesothelioma Register annual report series (NOHSC 1989-2004 (the latest report)) and has been the subject of many other publications including Leigh et al Am J Ind Med 41:188-201 (2002) and Leigh and Driscoll Int J Occ Env Health 9:206-217 (2003).

In the cases 1986 –2001 , 78 cases (out of 3956 responding to occupational history questionnaire or providing history) gave a history of asbestos exposure in brake lining repair (73) or manufacture(5) .As part of a defendant discovery of plaintiff process in recent US litigation (New Orleans Civil District Court 03-3367 div 16-D: Jones v Meyer Auto Parts & ors) , the original notification forms, and subsequent information supplied by notifiers were re assessed and compared with the computerized register entry. It was found that in 29 of the brake lining repair or manufacture cases, vehicle mechanic work on automotive vehicles was the only source of asbestos exposure. There were two cases of do it yourself brake lining maintenance with no other exposure. There were further cases in non automotive friction product situations (fixed plant, railways, cranes, military, aeronautical etc)

There were an additional 8 vehicle mechanics where this job was the only source of asbestos exposure in 718 cases with available history in the period 1/1/1980 – 31/12/1985.

There were 8 cases in the period 1/1/2002- 30/6/2003 (out of 488 notified) with asbestos exposure involving brake lining repair or manufacture. In 3 of these this was the only source of asbestos exposure. I am aware of further cases more recently.

Estimates of incidence rates in vehicle mechanics were made using denominator data from the Australian Bureau of Statistics (1997-98). The category vehicle mechanic had 82964 persons (male and female).

This gives an average annual mesothelioma incidence rate for 1986-2001 of 29/ (82694 x 16) in vehicle mechanics of 21.8 per million person-yr. This is over 20 times greater than the commonly accepted "background" mesothelioma rate of 1 per million person-yr .

This rate would be increased by allowing for non response rate for history of about 25% .The rate in brake mechanics only would be higher after allowing for vehicle mechanics not doing any brake lining work.

Alternatively, an approximate lifetime risk for vehicle mechanics exposed in the 1950-1960s where this was the only exposure can be estimated as follows:

Average population for vehicle mechanic = mean of 1933 and 1997-98 =(15326 + 82694)/2 = 49010.

Average annual incidence 1986-2001 = 29/(49010) x 16 = 37 per million person-yr.

Lifetime risk approximately = 70 x 37 per million = 0.26%.

This is approximately 37 times the background lifetime risk of 70 per million (0.007%).

The lifetime risk for vehicle mechanics where there was also other exposure would be approximately
70x 41/(49010)x 16 = 0.36%

Henderson has reviewed the literature on the risks of asbestos exposure in brake mechanic work in the WTO review document. (Henderson 2000 WTO Panel Decision WT/DS135/R p 300-304) .
It is also covered in the NICNAS review (NICNAS Priority Existing Chemical Report 9 1999) and the WHO/ILO /IPCS /EHC review (IPCS EHC 203 1998 Chrysotile Asbestos) and Lemen Am J Ind Med 2004, 45:229-237.
In summary of these reviews , while there have been many anecdotal reports of mesothelioma in brake mechanics dating from the early 1980s, it has proved difficult, due to confounding factors and cohort identification problems, to design a formal epidemiological study to detect an increase in risk in brake mechanics, and the reported studies , of weak case referent design and low statistical power, have all failed to detect an increased risk in vehicle mechanics compared to the average of all other occupations. A recent report of a meta analysis of six case referent studies found an overall mesothelioma relative risk (odds ratio) in vehicle mechanics (compared to not being a vehicle mechanic, ie reference group is average risk over all other occupations) of 0.9 (95%CI 0.66-1.23)(Wong ,Reg Pharm Tox 2001;34:170-177). The Australian Mesothelioma Register data discussed above is probably among the strongest evidence demonstrating an increased risk in brake mechanics . The measure of risk ratio used is risk in vehicle mechanics compared to risk with no asbestos exposure which is a different measure to that analysed in the Wong meta analysis. For comparison with Wong, the comparable cohort based relative figure for Australia would be lifetime risk(%) in vehicle mechanics compared to lifetime risk (%) averaged over all occupations which is 0.36% compared to (0.39 + 0.05)/2 % = 0.36/ 0.22 = 1.64 . If restricted to vehicle mechanic work where this was the only asbestos exposure the corresponding figure would be 29/(49010x16) x 70 x100 % / 0.22% = 0.26%/ 0 22% = 1.2 which is also greater than unity.

The most recent major text on occupational lung disease (Occupational Disorders of the Lung ed Hendrick et al Saunders 2002 p 411) states that "there is no clear evidence that car mechanics have an increased risk of mesothelioma , although a suggestive trend has been reported in recent years" citing Australian work.

However it should be pointed out that inabilty to demonstrate epidemiologically a statistically significant increase in risk in an occupational category of work, relative to all other occupational categories does not negate in any way a causal inference in an individual case where the only asbestos exposure , above general background environment, was incurred in that occupation.

The whole issue of the evidence for brake mechanic asbestos exposure causing mesothelioma is comprehensively dealt with in an Amicus Brief in the Michigan USA Supreme Court (Appeal) in the matter Chapin v Daimler Chrysler & ors (10 April 2007) CCt no. 133178, COA No 257917, LC No. 03-324775-NP signed by over 50 international scientists including myself. (copy attached). An adapted version of this document has also been accepted for publication in Int J Occ Env Med in the near future. The evidence in the Amicus Brief persuaded the Michigan Court of Appeal to dismiss Daimler & ors appeal by a majority of 6-1

Yours faithfully



Dr J Leigh
Director, Centre for Occupational and Environmental Health
Senior Lecturer, School of Public Health ,University of Sydney