



Department of Pesticide Regulation



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MEMORANDUM

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HSM-05013

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SUBJECT: INVESTIGATION OF DECREASE IN DOCTOR'S FIRST REPORT OF
OCCUPATIONAL ILLNESS OR INJURY RETRIEVALS FROM THE
DEPARTMENT OF INDUSTRIAL RELATIONS

Background: The Department of Pesticide Regulation (DPR) maintains the Pesticide Illness Surveillance Program (PISP) to monitor human health effects of pesticide exposure. State law requires doctors to report any patients that they "know or [have] reasonable cause to believe" suffer from "pesticide poisoning or any disease or condition caused by a pesticide" (Health and Safety Code Section 105200). DPR collects, investigates, and records these reports, and supplements them by negotiating cooperation with other agencies that receive reports of relevant events. The most important source of such reports has been the Department of Industrial Relations (DIR), which provides access to doctor's first reports of occupational illness or injury (DFROII).

In 1987, policy decisions at DIR eliminated support for forwarding to DPR copies of DFROIIIs that concerned pesticide exposure, although DIR staff continued to separate the (approximately) 95% that concerned traumatic injuries from all others. Since then, DPR scientists have manually reviewed non-trauma-related DFROIIIs to identify those that suggest pesticide involvement. This resulted in an immediate increase in the number of DFROIIIs that DPR investigated, primarily as a result of improved recognition of cases involving antimicrobial pesticides. From 1988 through 1992, DPR retrieved more than 2000 DFROIIIs each year (Table 1). Retrievals began to drop in 1991, and fell dramatically in 1993. Since then, the number DFROIIIs retrieved has continued to decline. By the year 2000, DPR located DFROIIIs for only 606 cases.

The drop in case identification affected all parts of the state, all classes of pesticides, and both agricultural and other exposure situations, although DPR scientists did not change their criteria for selecting DFROIIIs to investigate. Department of Health Services programs experienced no decrease in the numbers of cases of occupational asthma and carpal tunnel syndrome, which are also identified by review of DFROIIIs.



Table 1: DFR Volume and Importance

Year	Total DFROIs	Not Previously Identified ^a
1983	1806	1514
1984	1762	1488
1985	1881	1453
1986	1242	791
1987	2083	1681
1988	2627	2276
1989	2409	2113
1990	2517	2201
1991	2344	2086
1992	2205	1947
1993	1692	1497
1994	1618	1422
1995	1729	1405
1996	1739	1359
1997	1374	1030
1998	1160	991
1999	835	671
2000	606	396

^a A Doctor's First Report of Occupational Illness or Injury (DFROII) was the only document received for these cases, or was received earlier than any other document.

We hypothesized that the decrease in pesticide cases identified by DFROIs may reflect changes in insurer procedures. During the period of decline in DFROII retrieval, insurers accommodated a legislative mandate to convert from postal to electronic transmission of employers' reports (a standard form related to the DFROII and similar in appearance). Regulations still require insurers to forward physical copies of DFROIs, but we were concerned that transmission from some insurers may have been compromised by changes in procedures for related reports.

Methods: To investigate this possibility, we initiated project PISP0204. In this project, we reviewed all of the DFROIs selected for investigation during 1990, 1995, and 2000, and collected the names of the insurers responsible for forwarding them. We are indebted to Ms. Christine O'Malley for crucial and exceptionally capable assistance with document review.

All DFROIs retrieved in the selected years were reviewed. Data were entered using Microsoft Access. As each document was reviewed, we entered the name and address of the insurer listed on the DFROI directly into a computer. We also collected the employer name (which had been recorded when the cases were initially received) to confirm that data were entered for the correct case. The on-screen form provided an area for comments, to collect information on difficulties encountered.

Results: We reviewed a total of 4,852 case reports, and located the original DFROI documents for all but four of them. Of the 4,848 DFROIs reviewed, the entry for insurer was blank, illegible, or irrelevant on 523. The 4,325 interpretable DFROIs included 471 that indicated self insurance, either by listing the employer's name as the insurer or by entering "self insured" or "bill employer" in place of the insurer's name. The remaining 3,854 cases identified 244 distinct entities as insurers. A few of these may have been incorrectly categorized, notably the 21 cases that listed "workers comp" as the insurer.

The California State Compensation Insurance Fund was the most common insurer in all three years (Table 2). It was identified in 22% to 30% of the case reports investigated. The number that did not identify their source ranged from 9% to 14%. Eight to 12% of the documents referenced self-insured employers. No other single source accounted for more than 7% of the cases in any year. The total number of insurers represented decreased in later years, but by a smaller percentage than the drop in case identification.

Table 2: Summary of Insurers Identified on DFROIs collected by PISP in 1990, 1995, and 2000

Insurer	1990		1995		2000		Total	
	DFROIs	Percentage	DFROIs	Percentage	DFROIs	Percentage	DFROIs	Percentage
State Compensation Insurance Fund	678	26.9	387	22.4	182	30	1247	25.7
Other Insurers	1346	53.5	972	56.2	289	47.7	2607	53.7
Self-insured employers	208	8.3	211	12.2	52	8.6	471	9.7
Unknown insurers	285	11.3	159	9.2	83	13.7	527	10.9
Total	2517	100	1729	100	606	100	4852	100

To clarify patterns of insurer representation, we excluded cases that listed the California State Compensation Insurance Fund, self-insurers, and cases without insurer identification. Although the insurers represented varied from year to year, the 11 most frequently identified overall each submitted cases in all three years. Additional patterns also remained consistent: In each year, over half the insurers identified were listed on only one or two cases. The year's three or four most commonly listed insurers provided one-quarter of the cases. Half of the cases came via the year's top 10 or 11 insurers.

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Conclusion: These results do not support the hypothesis that DFROII retrieval declined because insurers stopped forwarding DFROII's. Nothing in the results suggested insurer failure to forward reports as required.