

Factors Related to Compensation of Mesothelioma in British Columbia

Introduction

- Mesothelioma is a rare cancer of the mesothelium which is almost always caused by occupational exposure to asbestos.
- Although it is well recognized as an occupational cancer (attributable risk > 80%), workers' compensation rates for mesothelioma are low in Canada (<50% of cases).
- Few cases are rejected, suggesting that the low compensation rates are due to cases not seeking compensation.
- Information on the characteristics of those who do not seek compensation will help guide policy development to ensure those who are eligible apply for workers' compensation benefits.

Objectives

- Determine the compensation rate of mesothelioma in British Columbia (BC).
- Examine trends in mesothelioma cases and compensation in BC.
- Identify factors associated with a worker submitting a compensation claim for mesothelioma in BC.

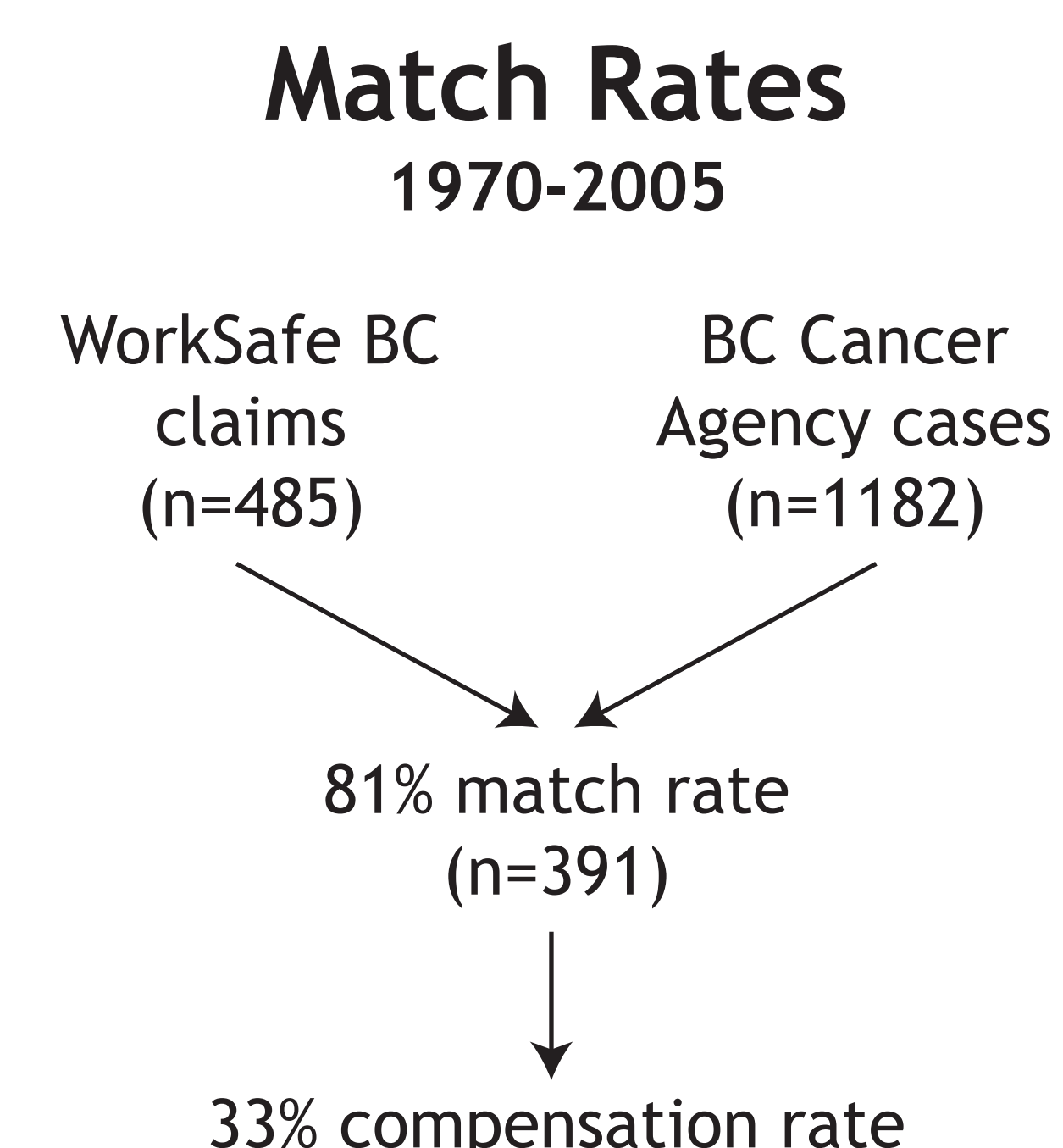
Methods

Data Sources

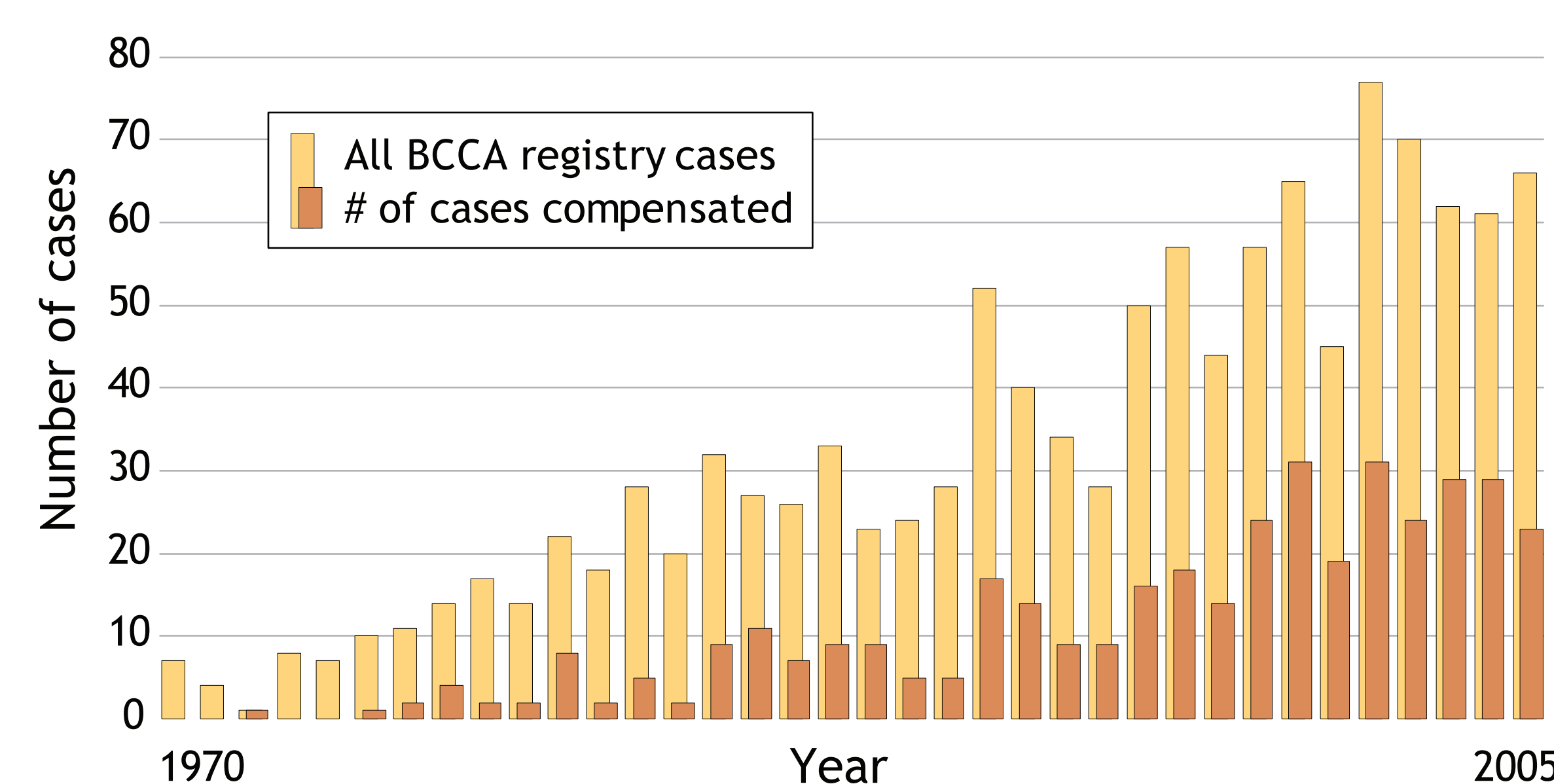
- All WorkSafeBC (provincial workers' compensation authority) mesothelioma claims and all BC Cancer Agency (BCCA) Tumor Registry mesothelioma cases from 1970 to 2005 were extracted and merged at the individual level.

Analysis

- Compensated and non-compensated BCCA cases were compared by simple descriptive statistics.
- Compensated cases are those who received workers' compensation in BC.
- Non-compensated cases may or may not be eligible for compensation, and may include a small number of rejected and possibly out-of-province claims.



Mesothelioma Cases, 1970-2005



Geographic Variation in Compensation Rates 1970-2005, by health service delivery area



Mesothelioma Case Characteristics by Compensation Status 1970-2005, with odds ratio of not having a claim

	Non-compensated subjects (n=791)	Compensated subjects (n=391)	Odds ratio (95% CI) Adjusted for year of diagnosis and geographic area
Female	170 (93%)	12 (7%)	8.1 (4.2-15.4)
Age at diagnosis: n (%)			
<45	47 (80%)	12 (20%)	2.2 (0.9-5.2)
45-54	81 (65%)	43 (35%)	1.8 (1.0-2.9)
55-65	152 (54%)	127 (46%)	1
65-74	248 (66%)	128 (34%)	1.9 (1.3-2.7)
75+	263 (76%)	81 (24%)	4.1 (2.7-6.0)
Cancer site: n (%)			
Pleura	638 (63%)	369 (37%)	1
Lung	41 (82%)	9 (18%)	2.3 (0.9-5.2)
Peritoneum	68 (91%)	7 (9%)	5.4 (2.3-13.2)
Other	44 (88%)	6 (12%)	5.5 (2.2-13.8)

Key Messages

- Both mesothelioma cases and compensation rates for mesothelioma are increasing over time. However, compensation rates are much lower than anticipated for cases believed to be work-related cancers.
- Several key factors have been identified that may significantly influence awareness by clinicians and workers of the work-relatedness of mesothelioma and of workers' compensation benefits, including gender, age at diagnosis, geography, and cancer site.
- Regulatory and planning committees need to develop policies or effective notification systems to ensure that all newly diagnosed mesothelioma cases receive proper evaluation for compensation benefits.

- A logistic regression model was formulated to determine the odds of not submitting a claim by demographic (age, gender), clinical (cancer site), geographic and temporal (year of diagnosis) characteristics.
- Standard errors were calculated to account for model specification.

Discussion

- The compensation rate over the study period was 33%.
- The compensation rate may have been influenced by misclassification of WorkSafeBC claims if claimants were diagnosed in a different province. If all WorkSafeBC claimants were matched to BCCA cases the compensation rate would have reached 41%.
- Future work will include the number of claims rejected or denied during the study period to investigate the assumption that non-compensated cases are unaware they are eligible for benefits.
- Women were 8 times more likely to have an uncompensated mesothelioma case. Second-hand exposure to asbestos via family members in the home may explain this finding.
- Mesothelioma of the lung, peritoneum, and other sites were compensated 2.3, 5.4, and 5.5 times less than mesothelioma of the pleura. This may be due to the familiarity of causes for pleura cancer.
- Compensation rates vary by region of the province and suggest that public knowledge in large industrial settings with known exposure may influence awareness of compensation claim benefits.
- In 2005 the BCCA and WorkSafeBC implemented a strategy to increase awareness of workers' compensation benefits for mesothelioma by sending a letter to diagnosing physicians of all new BCCA mesothelioma cases. Phase II of this study will evaluate the effect of the physician intervention letter on the claim rate and on time to claim.

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