



UBC CENTRE FOR
HEALTH SERVICES AND
POLICY RESEARCH

Using existing data for occupational health in Canada

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June 2008

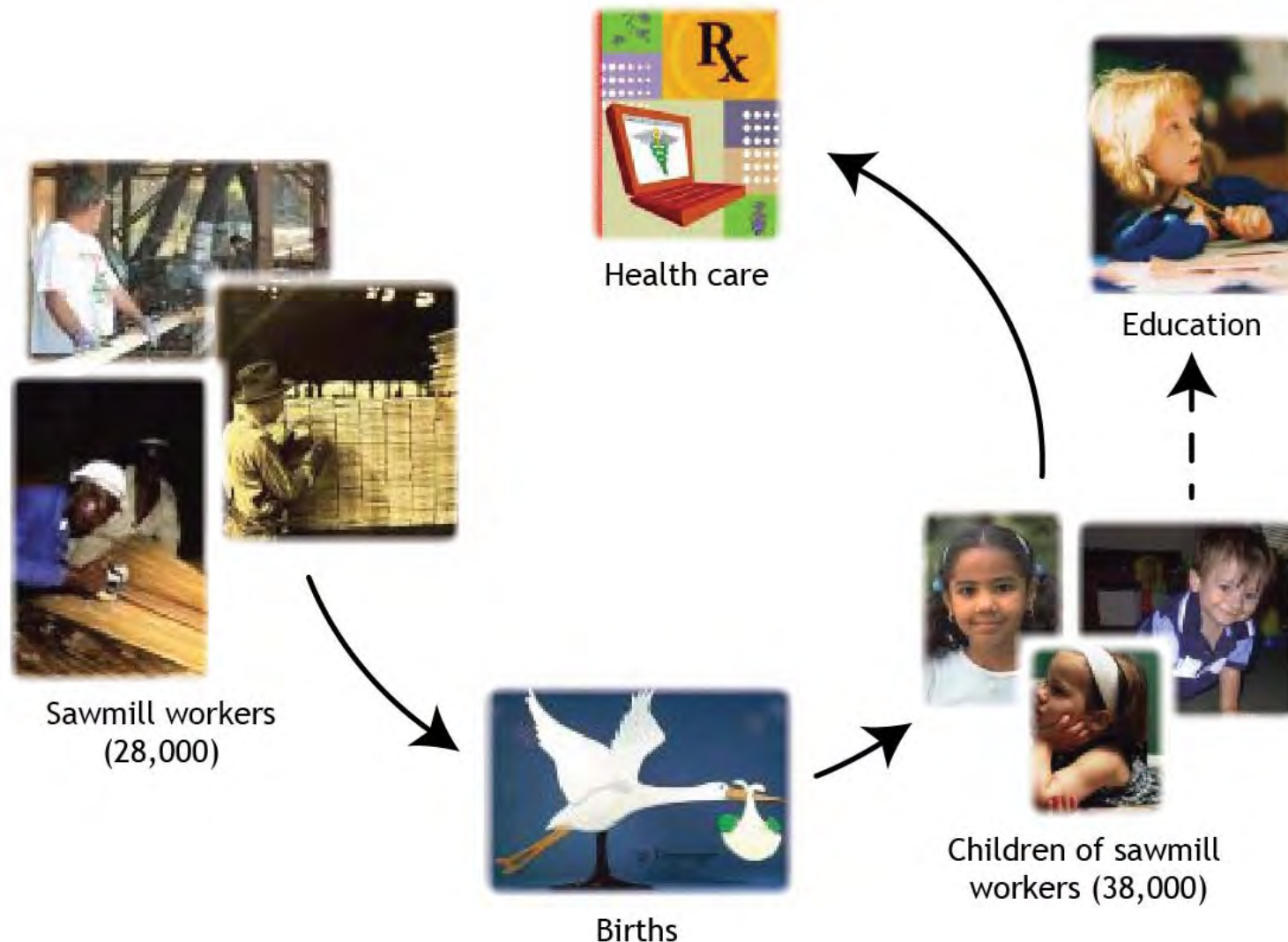


THE UNIVERSITY OF BRITISH COLUMBIA

WORK SAFE BC

WORKING TO MAKE A DIFFERENCE

Long history of linked health data for occupational research **Sawmill Workers Study** *(Hertzman, Demers, Teschke et al)*



University-Workers' Compensation Research Partnership

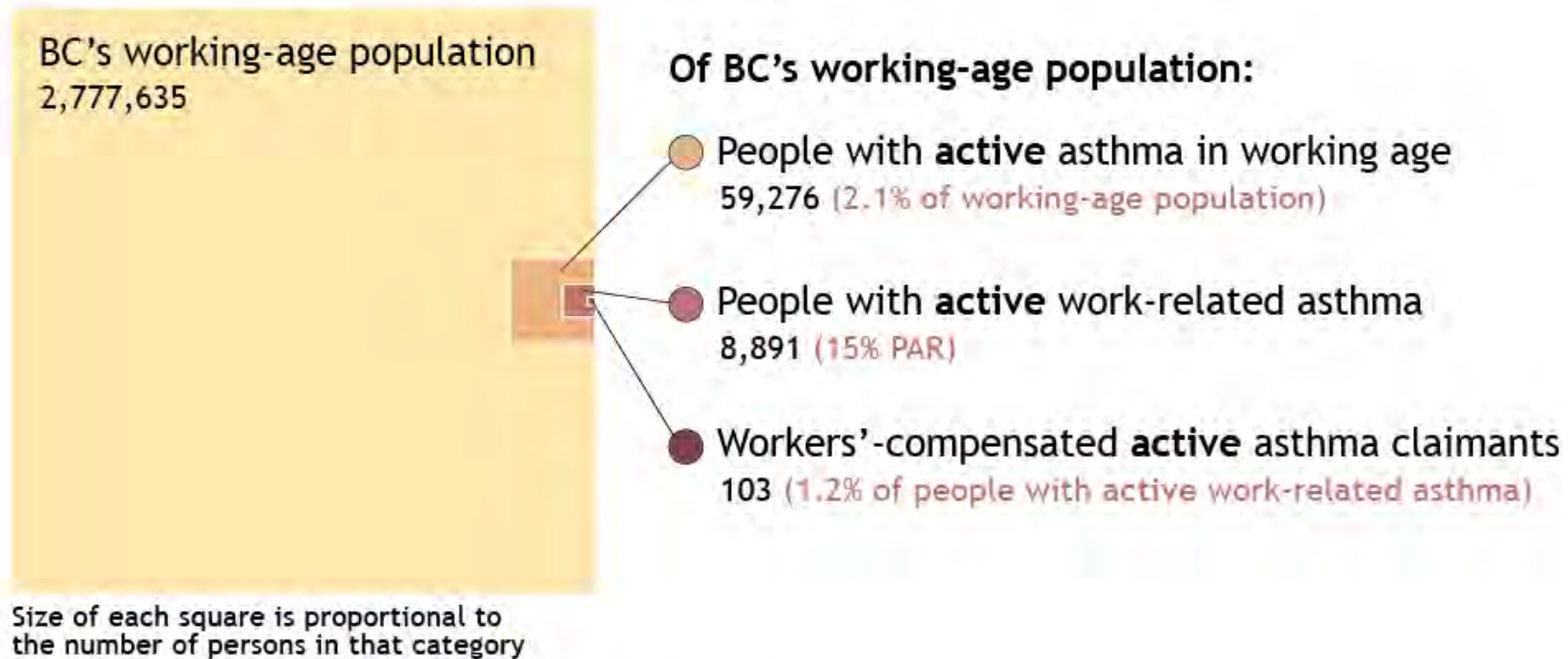
(www.chspr.ubc.ca/research/worksafebc)

- **Occupational Epidemiology and Surveillance**
 - Asthma, mesothelioma, asbestosis, pneumoconioses, sleep disorders, work-related injury trends...
- **Policy and Regulation**
 - Meniscal surgery outcomes by surgical Setting and expedited Status, mesothelioma compensation...
- **Data Development**
 - Who Works Where (Industry of Employment at population-level), Firm-level data

Surveillance - Work-related asthma

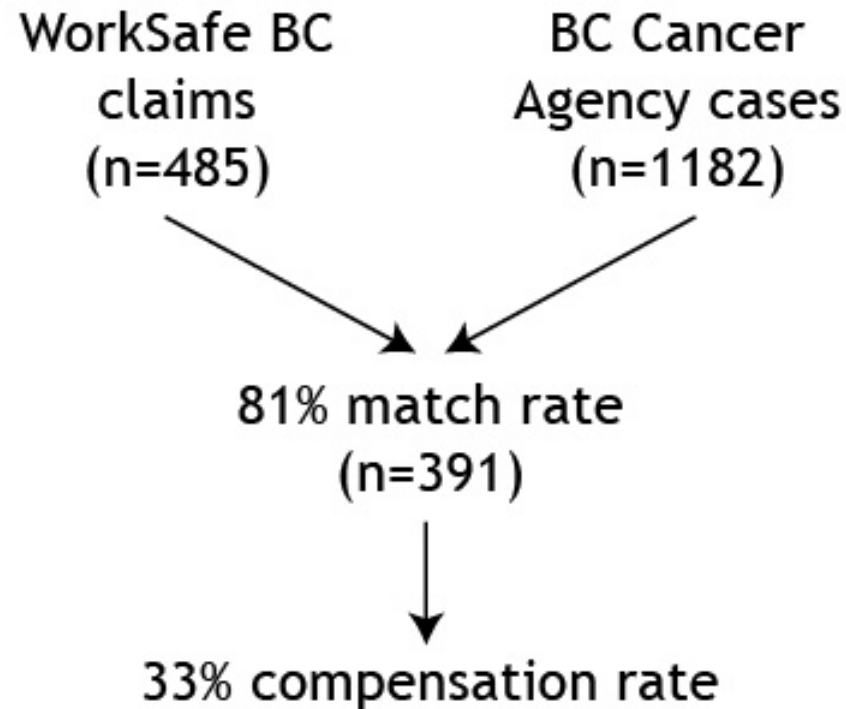
(McLeod, Koeboorn, Tamburic, Bogyo et al)

Comparison of workers'-compensated active asthma claims to individuals with active work-related asthma



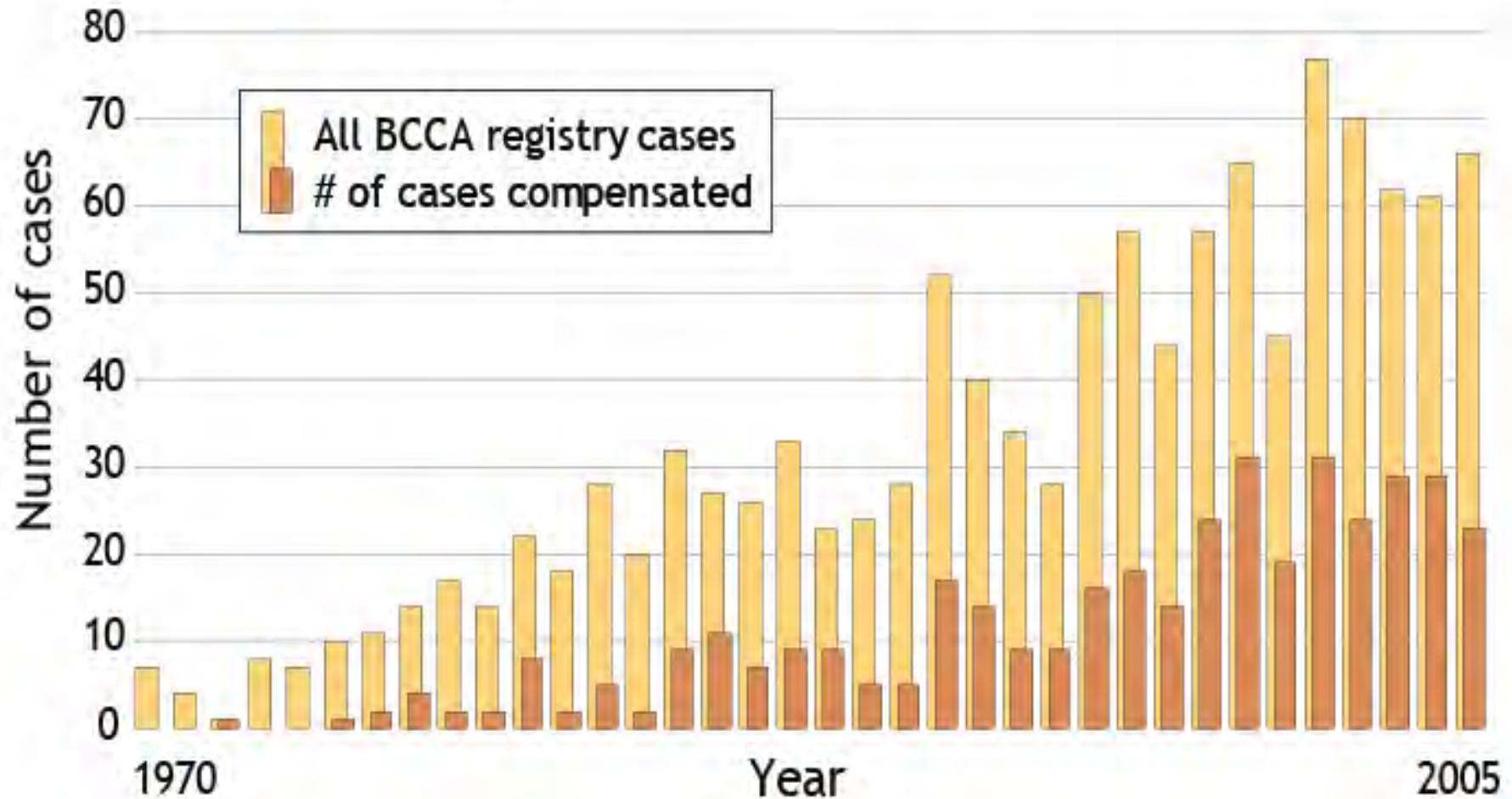
Surveillance, Epidemiology and Compensation - Mesothelioma (Demers, Kirkham et al)

Match Rates 1970-2005



Mesothelioma Cases, 1970-2005

Demers, Kirkham et al



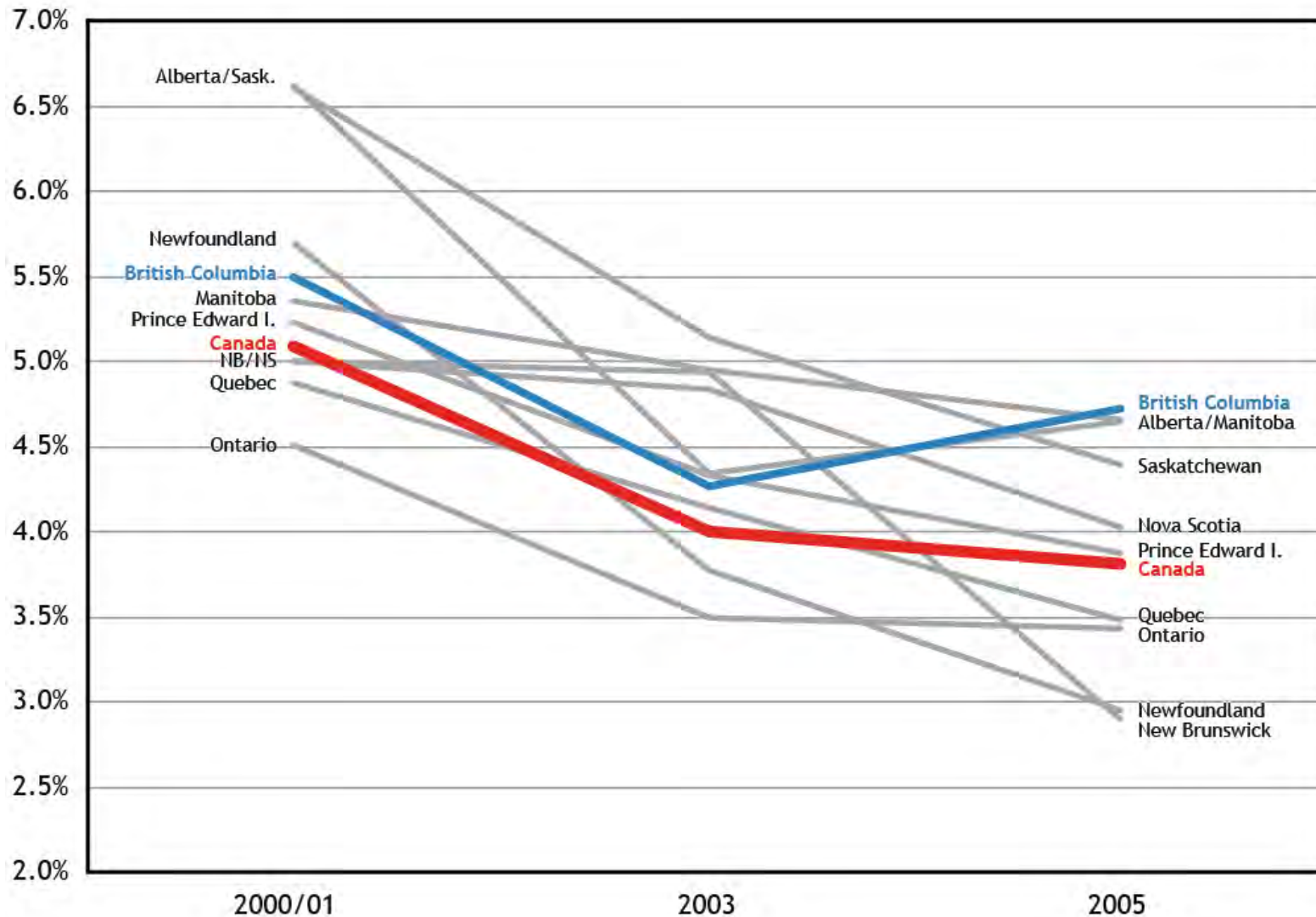
Mesothelioma cases by compensation status, 1970-2005

(Demers, Kirkham et al)

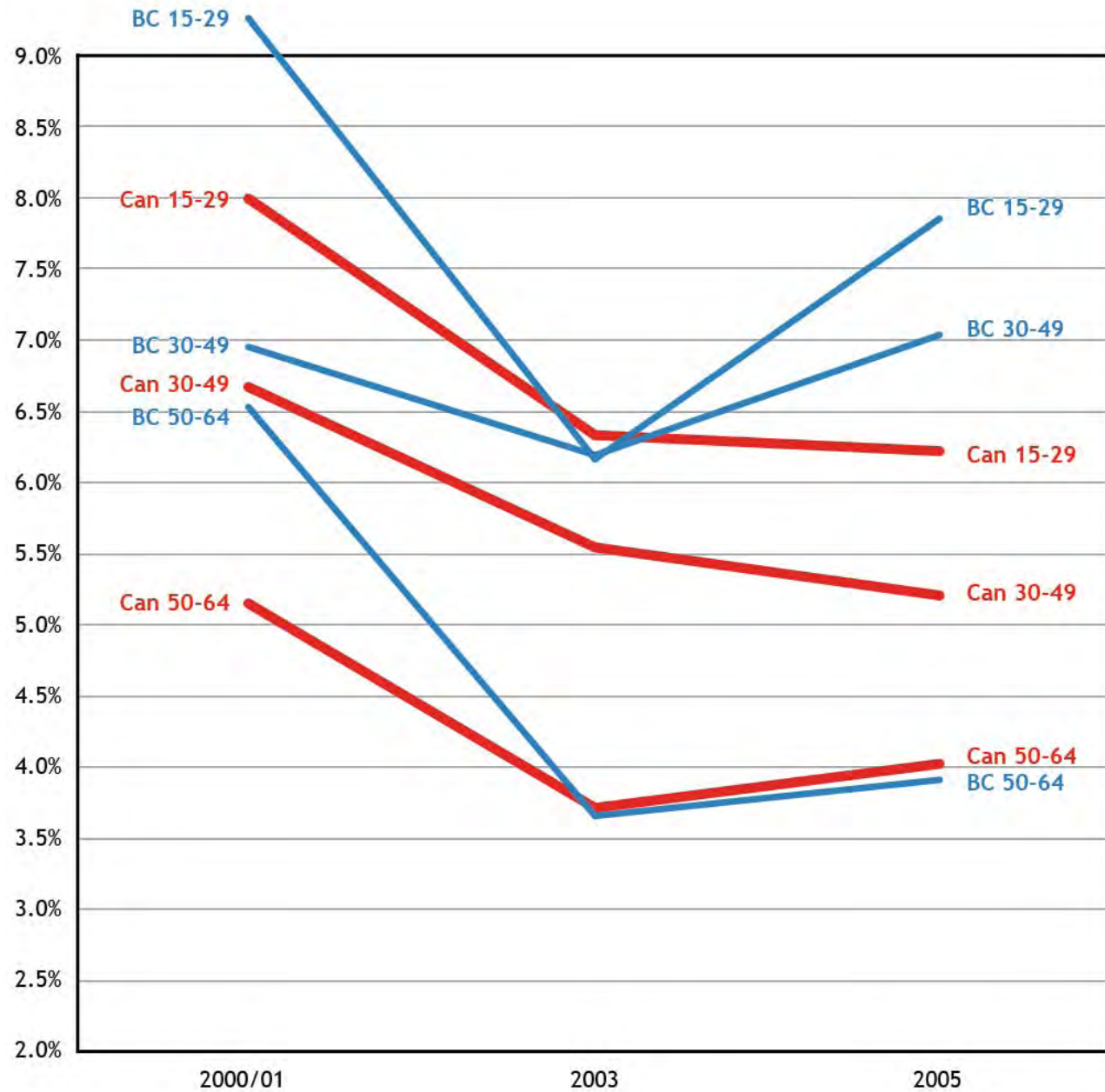
	Non-compensated subjects (n=791)	Compensated subjects (n=391)	Odds ratio of not having a claim
Sex			
Male	62%	38%	1
Female	93%	7%	8.1*
Age at diagnosis			
<45	80%	20%	2.2
45-54	65%	35%	1.8*
55-65	54%	46%	1
65-74	66%	34%	1.9*
75+	76%	24%	4.1*
Cancer site			
Pleura	63%	37%	1
Lung	82%	18%	2.3
Peritoneum	91%	9%	5.4*
Other	88%	12%	5.5*

Surveillance – Work injury trends in Canada, 2001-05

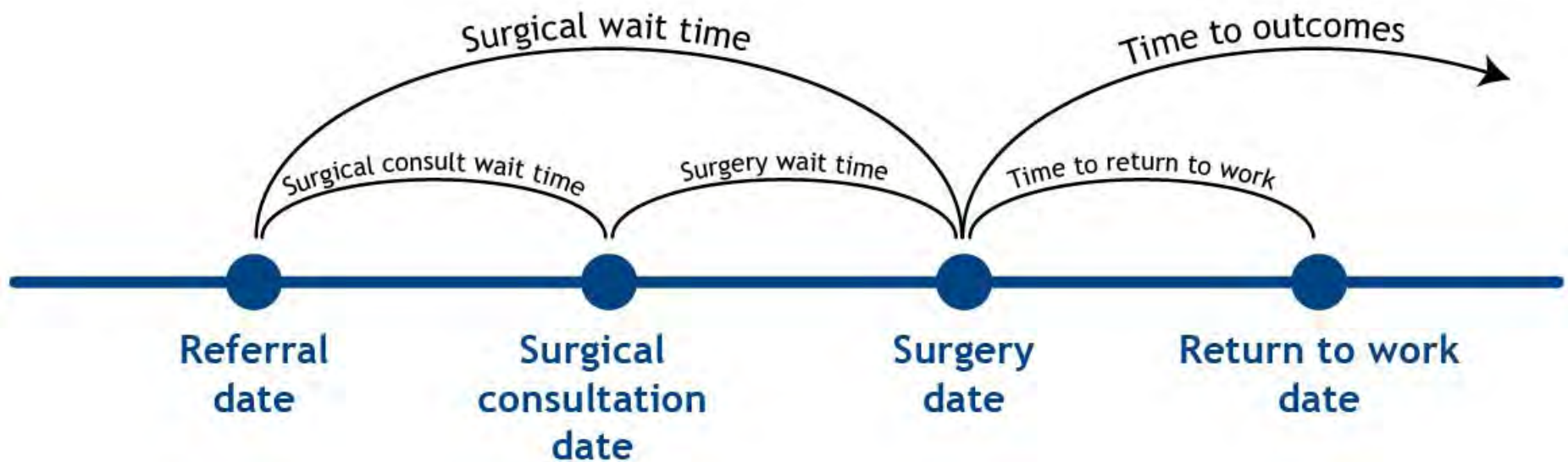
(McLeod, Koeboorn et al)



Males



Compensation Policy – Return to Work by Surgery Setting and Wait Times *(Koeboorn, McLeod et al)*



Median days from surgeon consult to surgery date

	Public hospital	Private clinic
Expedited	22 (13-37)	24 (14-40)
Non-expedited	39 (19-71)	NA

Median days from surgery date to return-to-work date

	Public hospital	Private clinic
Expedited	60 (33-196)	61 (34-133)
Non-expedited	59 (29-224)	NA

Data Development

- Work Works Where? NAICS Industry codes
 - Industry of employment for half of the BC workforce linked to medical services, hospitalizations, vital statistics, pharmaceuticals, workers' compensation
- Firm-level compensation characteristics
 - Claim experience, citations, assessments
- Occupational and environmental carcinogen exposure data/estimates – CAREX Canada



Population Data BC *Hertzman et al*

Health (BC Linked Health Database)	Education (Edudata)	Early Childhood Development (HELP)	Environmental + Occupational (SOEH)
Births / Deaths	BC K-12 Student	EDI	
Medical Visits	FSA		
Hospital Visits	School & District		
Continuing Care	Educator		
Pharmacare			
Mental Health		Children in Care	Exposure
Worker's Comp		Child Protection	Air Quality
BCAS/EMHS	MAVED	NLSCY	Nat' l Dose Registry
Perinatal	University	Childcare Licensing	BC Assessment
Cancer Tx			

Relevance

- Recognition of work-aggravated asthma
 - *informed change in asthma compensation policy*
- Mesothelioma under-recognized as occupational diseases and therefore under-compensated
 - *Intervention to increase awareness*
- Work injury declining overall, but recent increase in economic ‘boom’ areas among high risk sectors, young workers
- Incentive for surgical wait time appears to be working; not clear if it is cost effective. No difference by private vs. public setting
- Strength of population based, workforce data across multiple health related datasets, linkable at the individual level