

Dying for a living: the global struggle against occupational cancer



- 12.1 million new cases estimated in 2007 (5.4 million in developed countries, 6.7 million in developing countries)
 - Lung cancer is the leading site (excluding non-melanoma skin cancer), followed by breast cancer
- 7.6 million cancer deaths estimated in 2007 (2.9 million in developed countries, 4.7 million in developing countries)
 - Lung, followed by stomach and colo-rectal cancer
 - Source: American Cancer Society. "Global Cancer Facts & Figures - 2007" available at www.cancer.org

Cancer on the increase

- ◆ In 1930s, 1 in 10 Canadians could expect to develop cancer over their lifetime
- ◆ In 1970, the number had increased to 1 in 5
- ◆ Today, 1 in 2.7 women and 1 in 2.4 men can expect to develop cancer over their lifetime

— Canadian Cancer Society Annual Statistics 2002 (figures age-standardized to adjust for aging population)

The WHO “Global Burden of Disease”

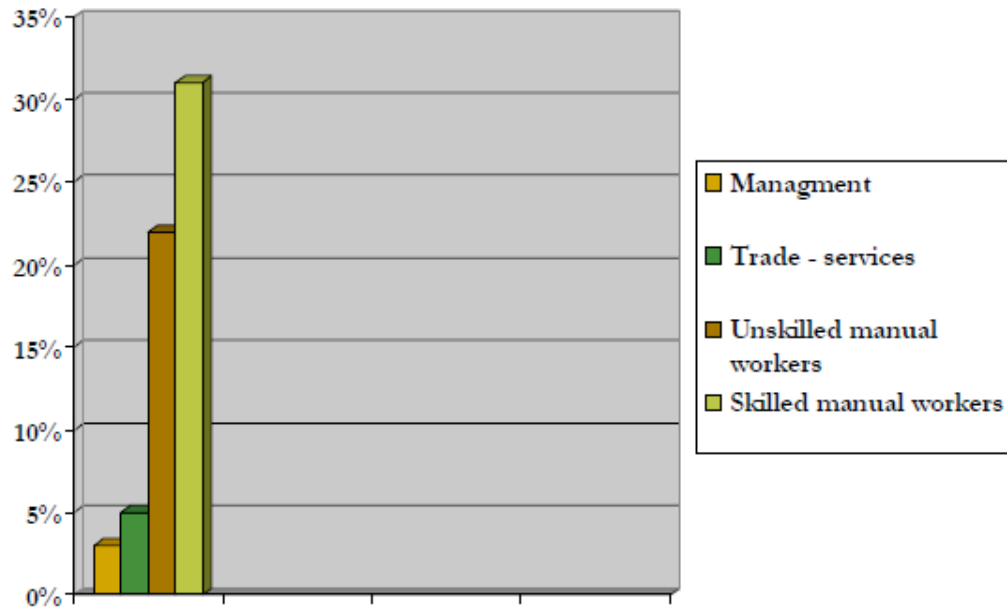
20-30% of the male & 5-20% of the female working-age population :

- ◆ exposed during their working lives to lung carcinogens
- ◆ including asbestos, arsenic, beryllium, cadmium,
- ◆ chromium, diesel exhaust, nickel and silica.

“ occupational exposures account for about 10.3% of cancer of the lung, trachea, and bronchus.”

Workers bear the burden of these cancers

An unequal burden of disease



Les expositions aux produits cancérigènes, DARES, juillet 2005

Over 400 IARC Carcinogens and thousands untested



World Health Organization

Table 1. Occupational causes of cancer

Cancer	Population attributable risk (%)	Examples of principal carcinogenic occupational exposures
Lung cancer	6.3 - 13.0* 24**	Asbestos; silica; nickel; indoor radon; diesel fumes; environmental tobacco smoke (ETS) at the workplace; production and refining of arsenic, beryllium, cadmium, aluminium and chromium; mining of uranium; copper smelting; iron and steel founding; vineyard workers; roofers; asphalt workers; painters



WHO Occupational Cancers

Bladder cancer	7-19* 10.3**
Mesothelioma	85-90*, 71.3**
Leukaemia	0.8-2.8*, 10.9**
Laryngeal cancer	1.5-20.0*
Skin cancer	1.5-6.0*
Sinonasal and nasopharyngeal cancer	33-46*
Kidney cancer	0.0-2.3 *
Liver cancer	0.4-1.1 (only vinylchloride)*

Workplace cancer affects workers in all regions of the world

Health of the working population in Europe

- 400 million workers in 53 MS (15% of the 2.6 billion of workers in the world)
 - 300,000 deaths due to work-related diseases
 - 600 billion USD (4% of the GDP of Europe) loss
- Burden of Disease (Disability-Adjusted Life Years)
 - injuries (40% of work-related loss), noise (22%), **carcinogens (18%)**, airborne dusts (17%), ergonomic hazards (3%)



Australian Unions start “zero cancer campaign”

Australian workers potentially exposed to carcinogens

- ▶ 20% of the workforce
- ▶ 1.5 million workers

Numbers - males

Cancer	Attributable fraction	Predicted number of cases
Bronchus and lung	29%	1,530
Prostate	6%	630
Mesothelioma	90%	352
Bladder	14%	304
Colon	6%	265
Leukaemia	18%	264
NHL	13%	252
Melanoma	4%	192
Stomach	10%	131
Pancreas	13%	122

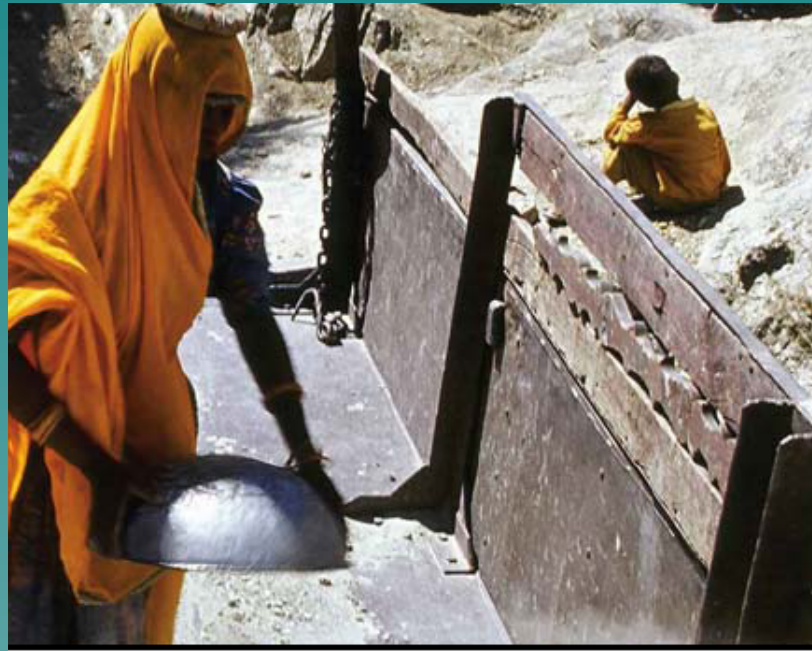
INDIA'S ASBESTOS TIME BOMB



Indian worker unloads Canadian asbestos



Asbestos in South Asia



Asbestos in Africa



Asbestos Epidemic

- ◆ Projected 10,000 asbestos deaths annually In India
- ◆ Canada exports 175,000 tonnes per year
- ◆ India and South Asia largest markets



**100,000 workers die
each year from
asbestos disease**

**We must demand a ban on
all production and export
of Canadian Asbestos**

A stylized silhouette of a mountain range is located in the bottom right corner of the slide. The mountains are rendered in a light teal color, matching the background, and are positioned against a darker teal gradient.

Canada sinks worker right to know



Canada's Asbestos Producing Partners

- ◆ Russia: 1.1 million tonnes
- ◆ China : 350,000 tonnes
- ◆ Kazakhstan: 241,000 tonnes

Canada exports 95% of its production

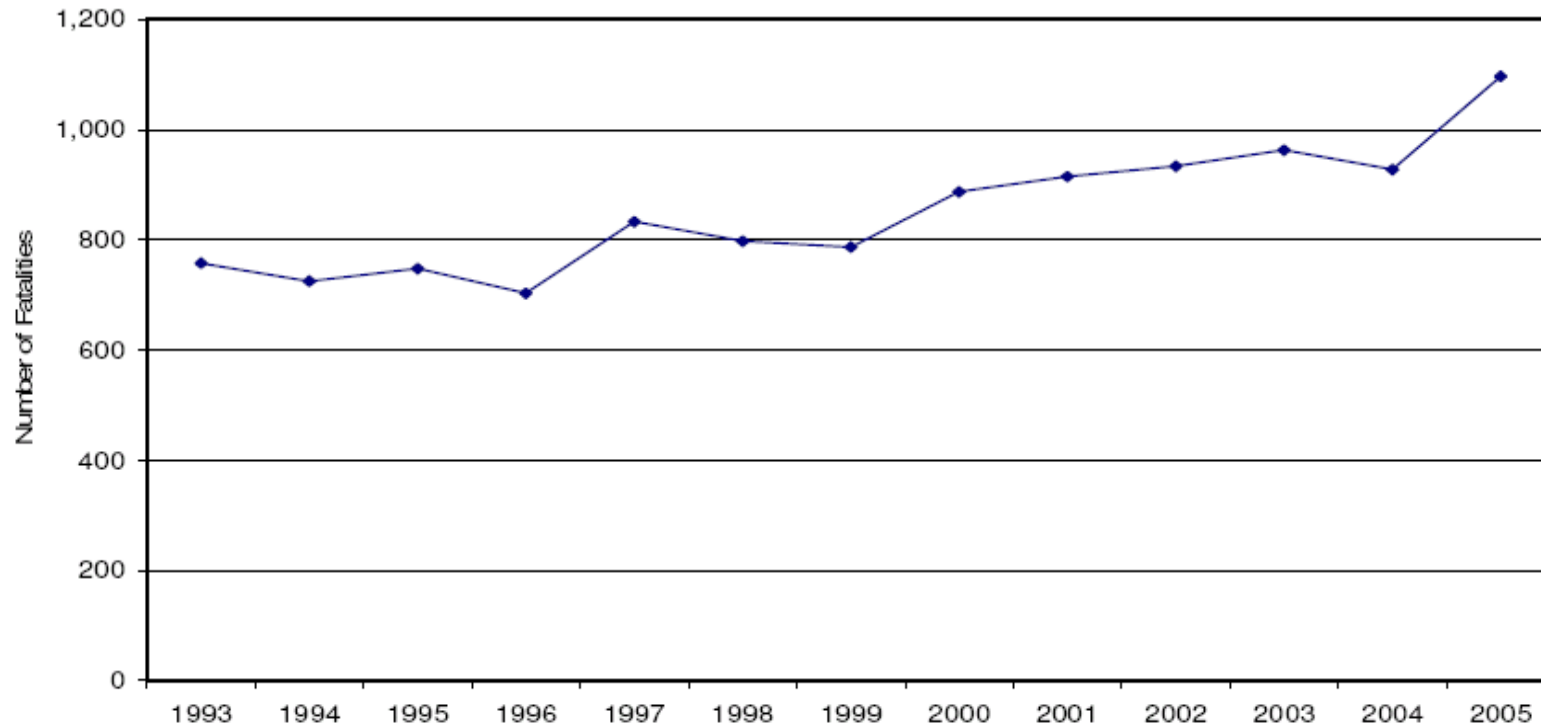
It has rejected the WHO call to end the
“epidemic of asbestos related
disease”

Dying for a living: cancer and occupational disease in Canada



Dying for a living: cancer and occupational disease in Canada

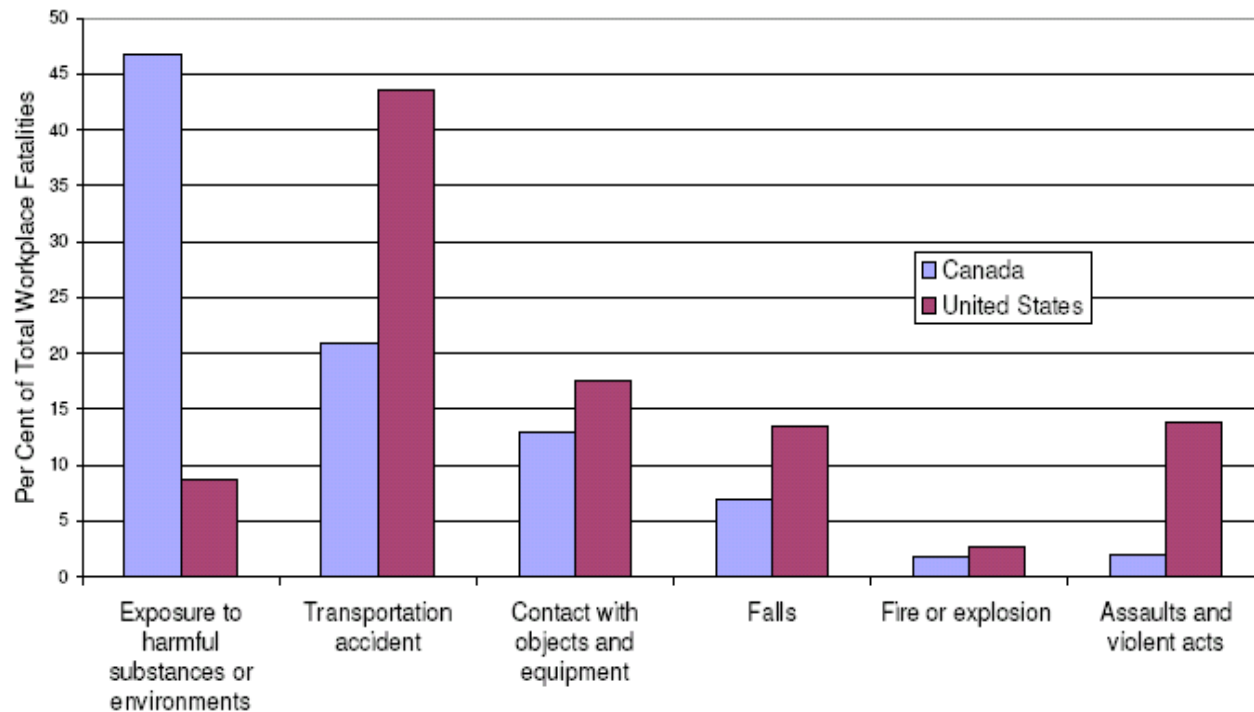
Chart 1: Number of Workplace Fatalities, Canada, 1993-2005



Source: AWCBC National Work Injury and Disease Statistics, 2006.

Exposures cause half of all workplace fatalities

Chart 26: Distribution of Workplace Fatalities, by Event (Major Groups), Canada and the United States, 2005



Source: BLS, Table A-5; AWCBC National Work Injury and Disease Statistics Accepted Claims by Claim Type, Year, Event (Division), 1996-2005

The environmental burden of disease in Canada:

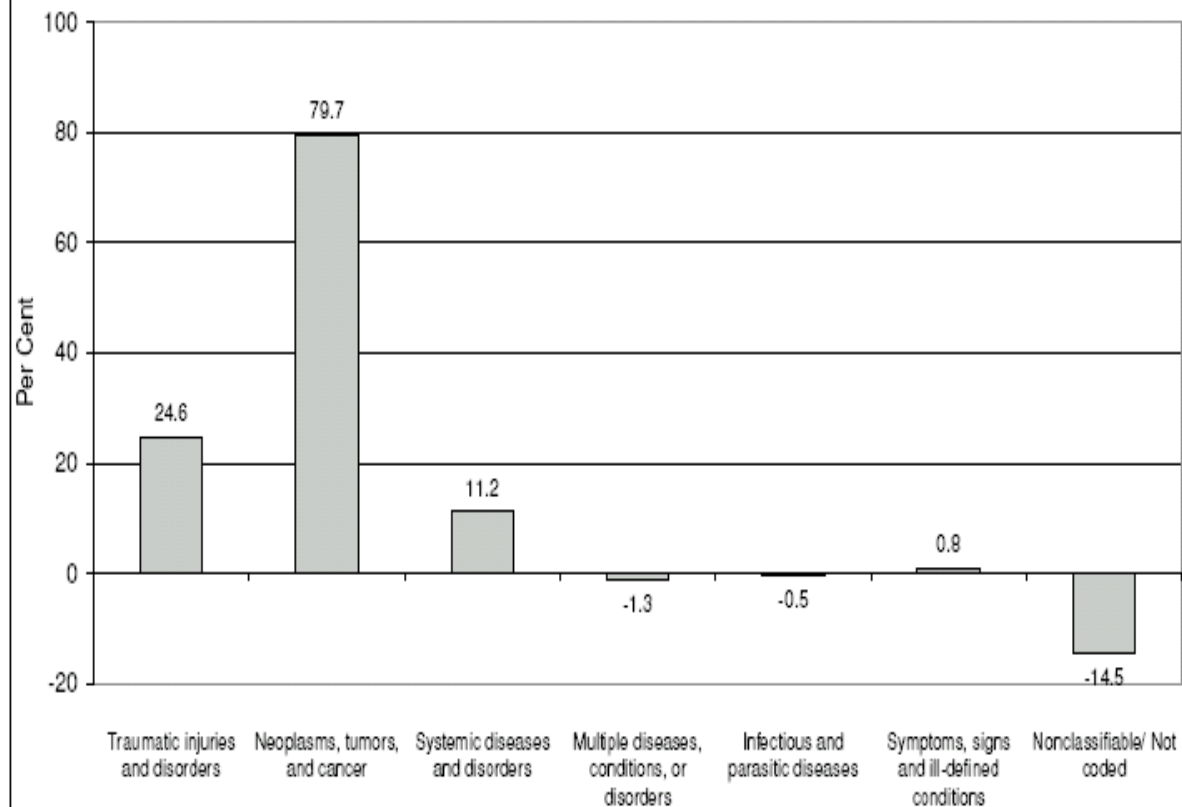
Table 9

A summary of the environmental burden of disease in Canada

Disease	Deaths	Hospitalizations	Days in hospital
COPD	977–2932	25,646–76,938	170,611–511,832
Asthma	75–153	8060–16,430	28,448–57,989
Cardiovascular disease	5456–10,911	33,541–67,083	291,419–582,838
Cancer	3416–10,248	10,775–32,324	103,948–311,845
Congenital affliction	72–360	312–1558	1982–9910
Totals	9996–24,604	78,334–194,333	596,408–1,474,414

80% off increase in worker fatalities due to cancers

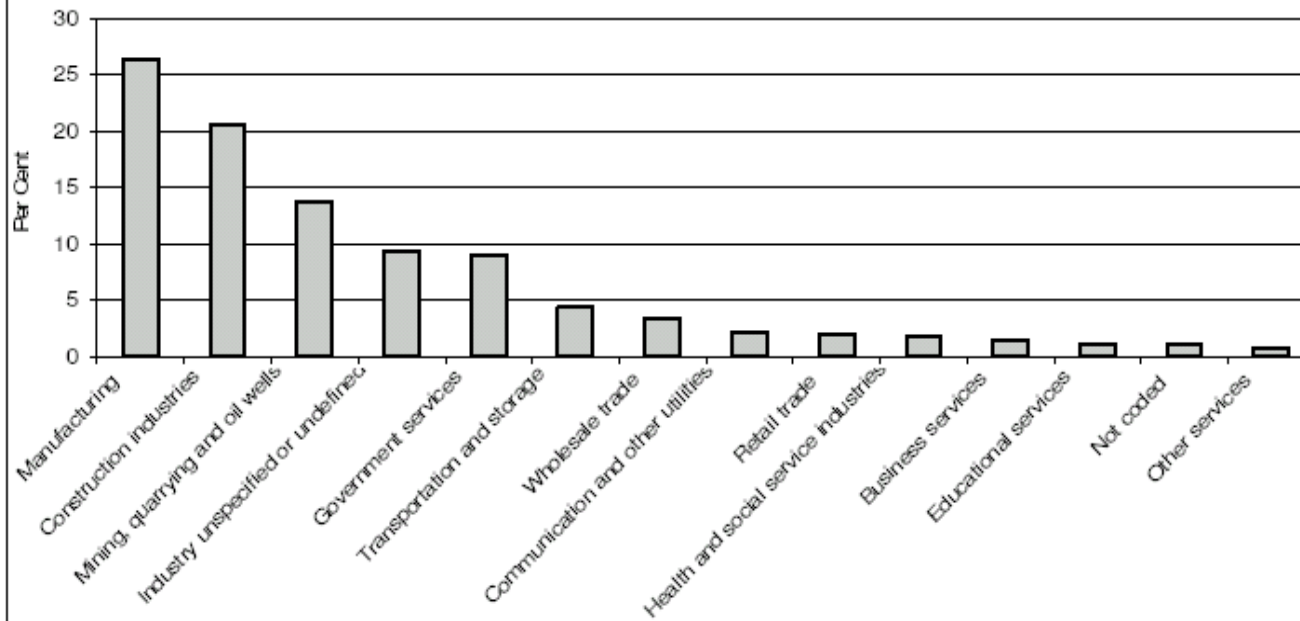
Chart 17: Contribution to Absolute Change in Workplace Fatalities, by Nature of Injury (Major Groups), 1996-2005



Source: AWCBC NWISP Accepted Claims by Claim Type, Year, Province, Nature of Injury (Division), 1996-2005

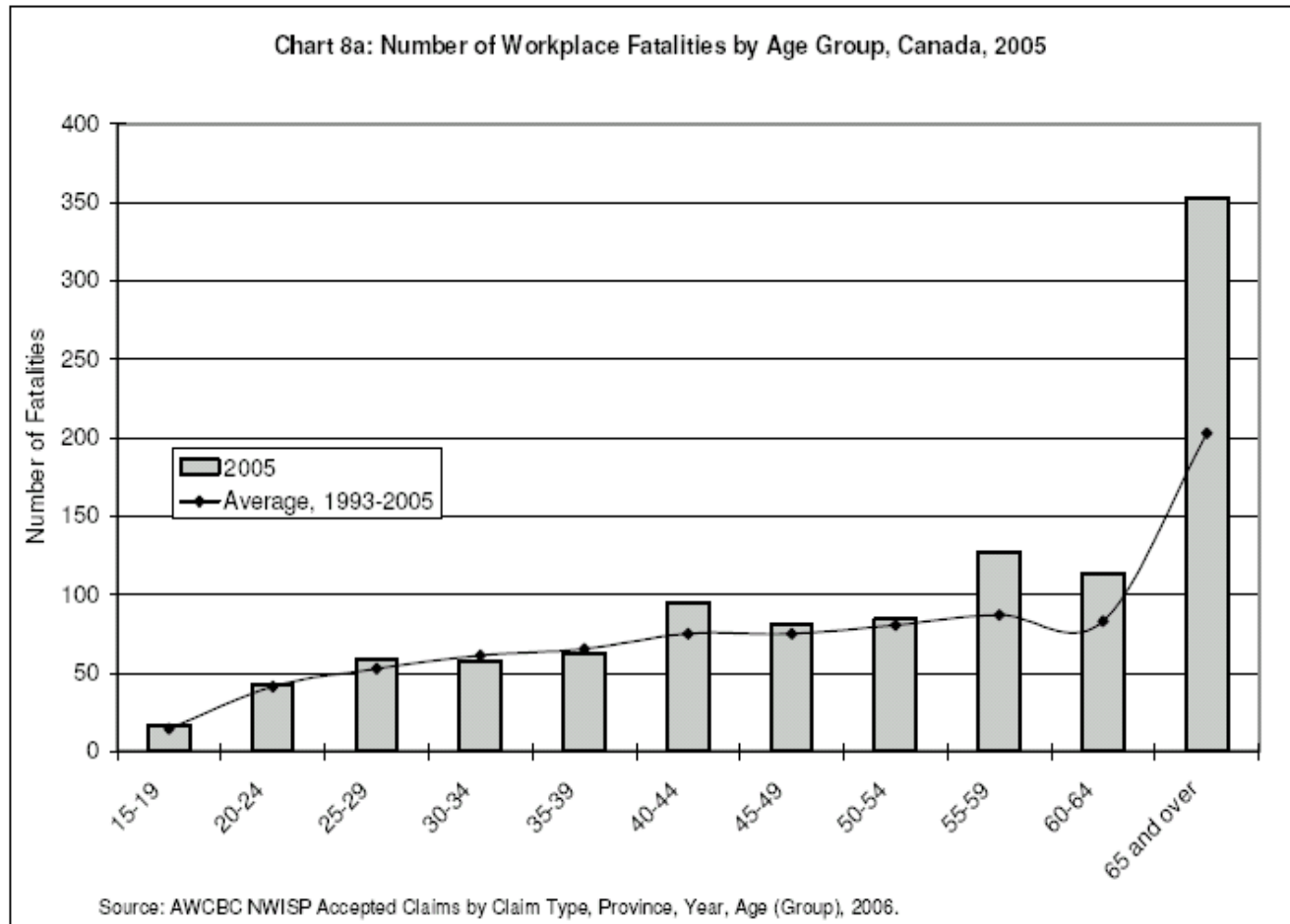
Many CUPE Sectors Affected

Chart 20: Distribution of Fatalities Due to Disease, by Industry, Canada, 2005



Source: AWCBC National Work Injury and Disease Statistics, Accepted Claims by Claim Type, Year, Industry (Division), Nature of Injury (Division), 1996-2005
Note: Logging and forestry; Accommodation, food and beverage services; Agriculture and related services; Fishing and trapping; Finance and insurance each accounted for less than one per cent of fatalities due to disease.

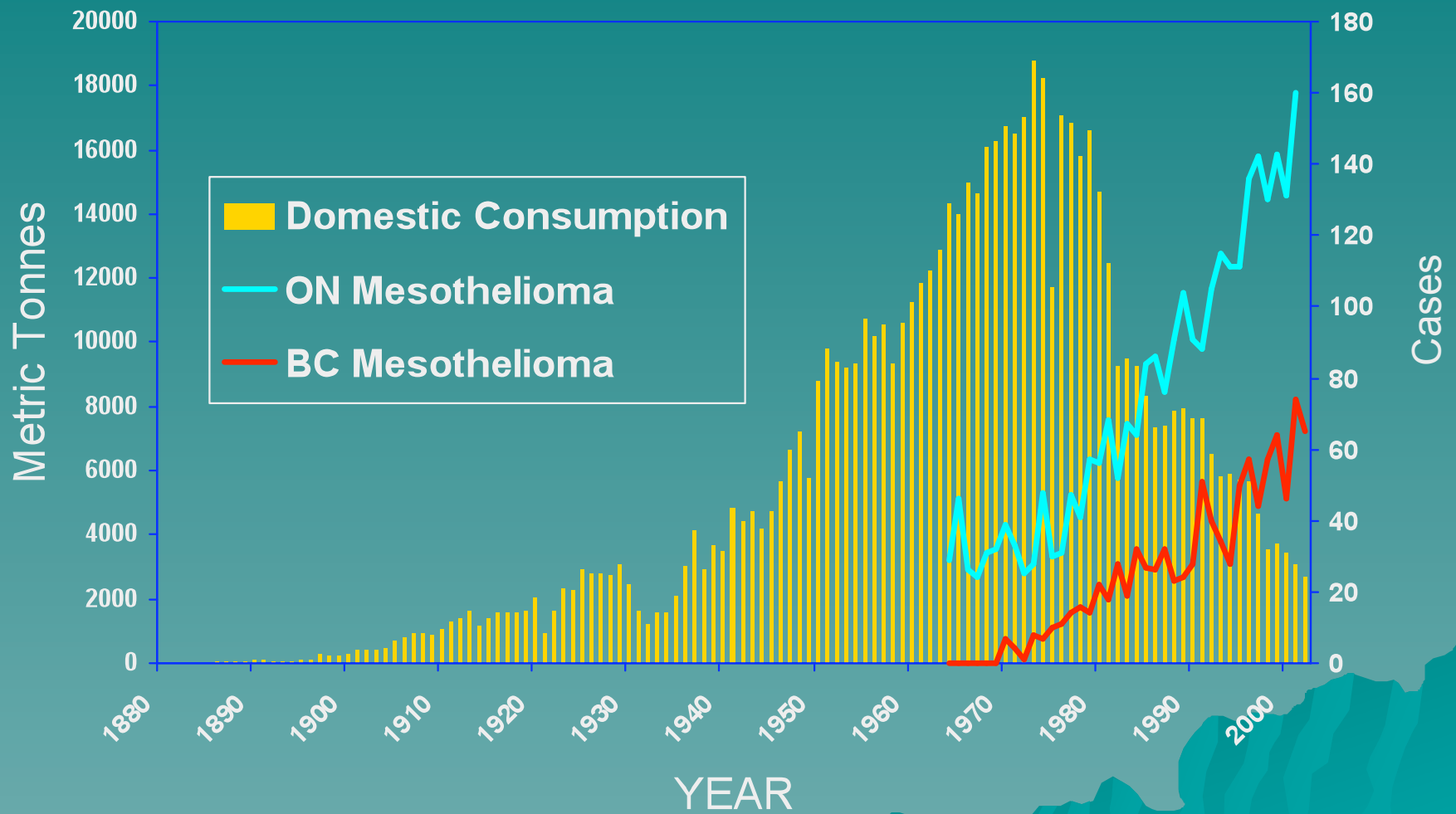
60% of workers dying from these cancers are over 65



Worker Protection not a focus

- ◆ UV sunlight responsible for **1 per cent** of cancers
- ◆ Smoking accounts for **29 per cent** of cancers
- ◆ Occupational-environmental carcinogens responsible for 20 % of some cancers and 90% of asbestos related cancers
- ◆ But government prevention programs focus mainly on the first two causes

Asbestos Use in Canada and New Cases of Mesothelioma in Ontario and British Columbia

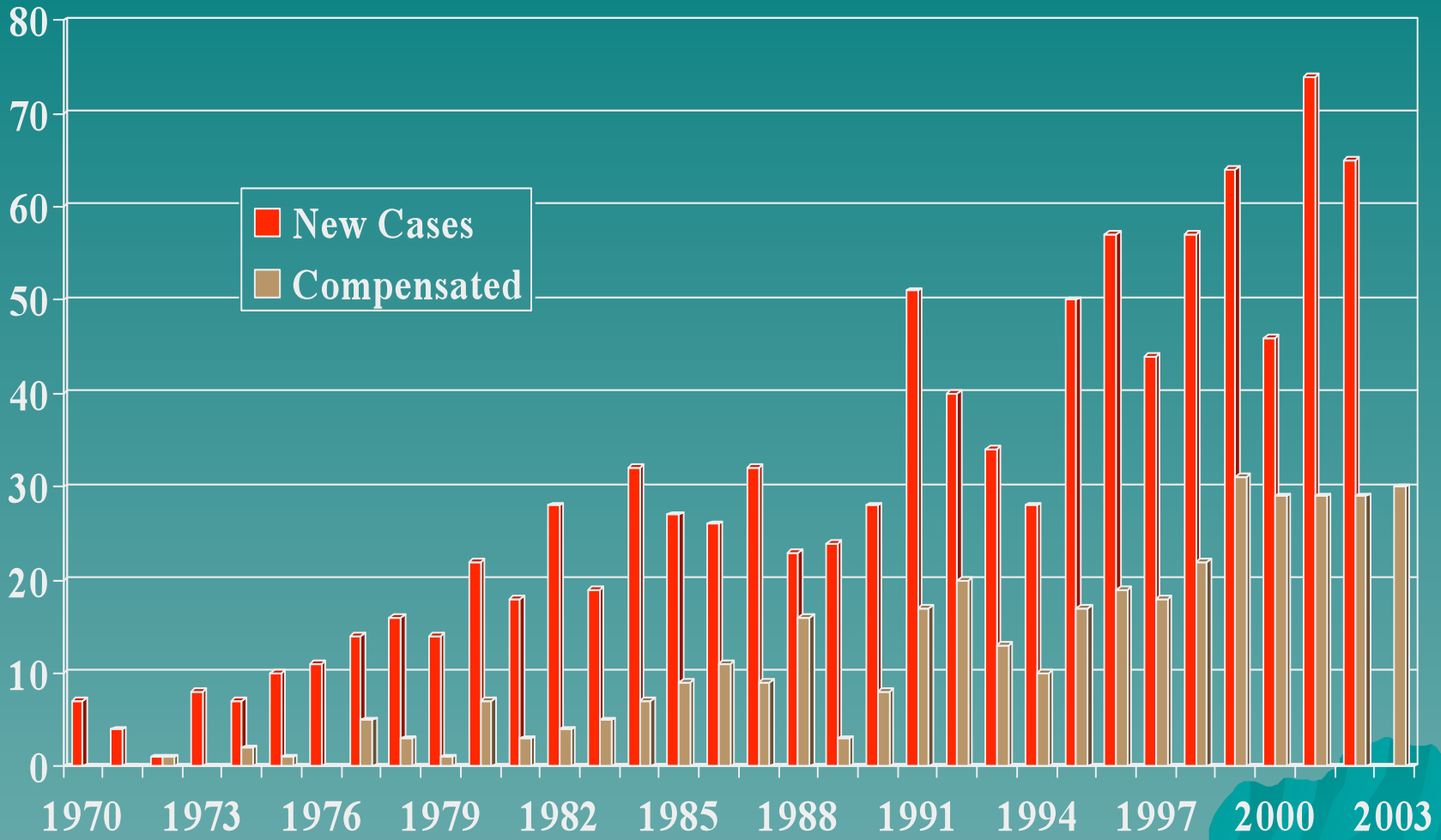


Fibre Exposures over TLV Quebec IRSST 2001-2005

Autres industries de la machinerie et de l'équipement	97%
Travaux de maçonnerie	75%
Industrie des produits en amiante	71%
Industrie des roues et des freins	46%

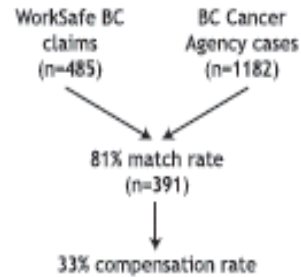
46% of samples in asbestos products industries were over 200% higher than legal exposure limits

Compensated versus Total Mesothelioma Cases, BC

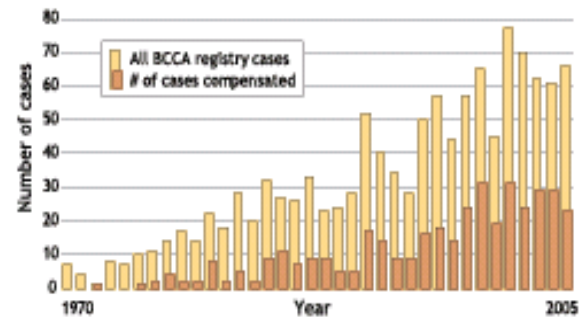


Factors Related to Compensation of Mesothelioma in British Columbia

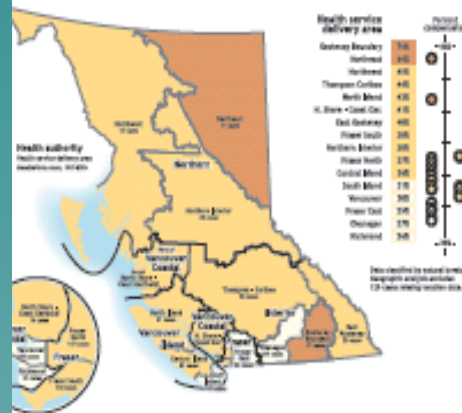
Match Rates 1970-2005



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=171)	Compensated subjects (n=391)	Odds ratio (95% CI) Adjusted for year of diagnosis and geographic area
Female	170 (93%)	12 (3%)	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)

EACH YEAR

Canada exports 120,000 tonnes of asbestos to India and other countries in South Asia.

EACH YEAR

100,000 people worldwide die from asbestos-caused disease.

Are you outraged?

CANADIAN ASBESTOS ONE KILLER EXPORT

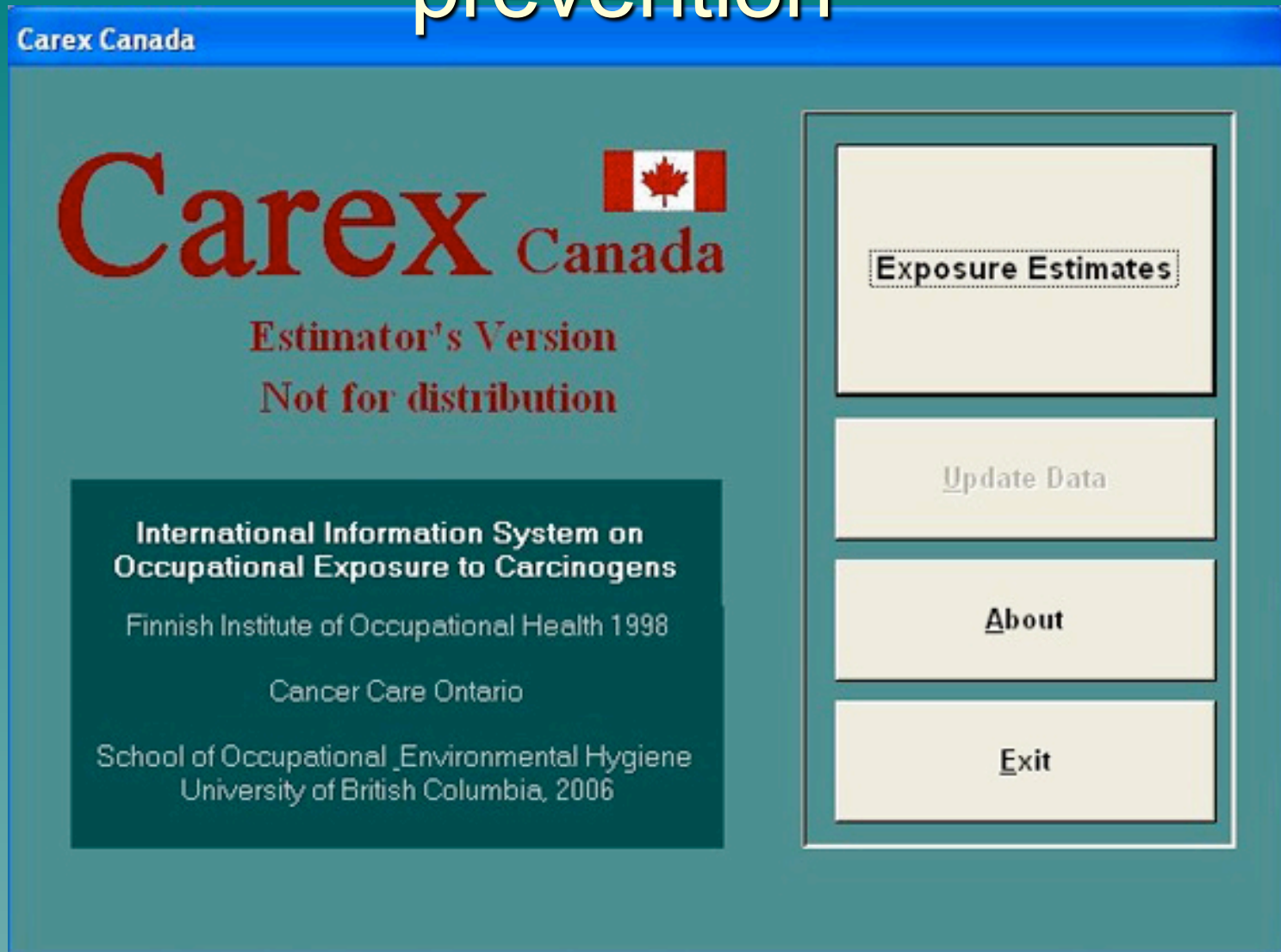
BAN ASBESTOS CANADA is a coalition of unions and health and social activism organizations committed to banning the export of asbestos and securing just compensation and transition for Canadian workers. We work in solidarity with the international ban asbestos movement.

Learn more at www.bacanada.org.

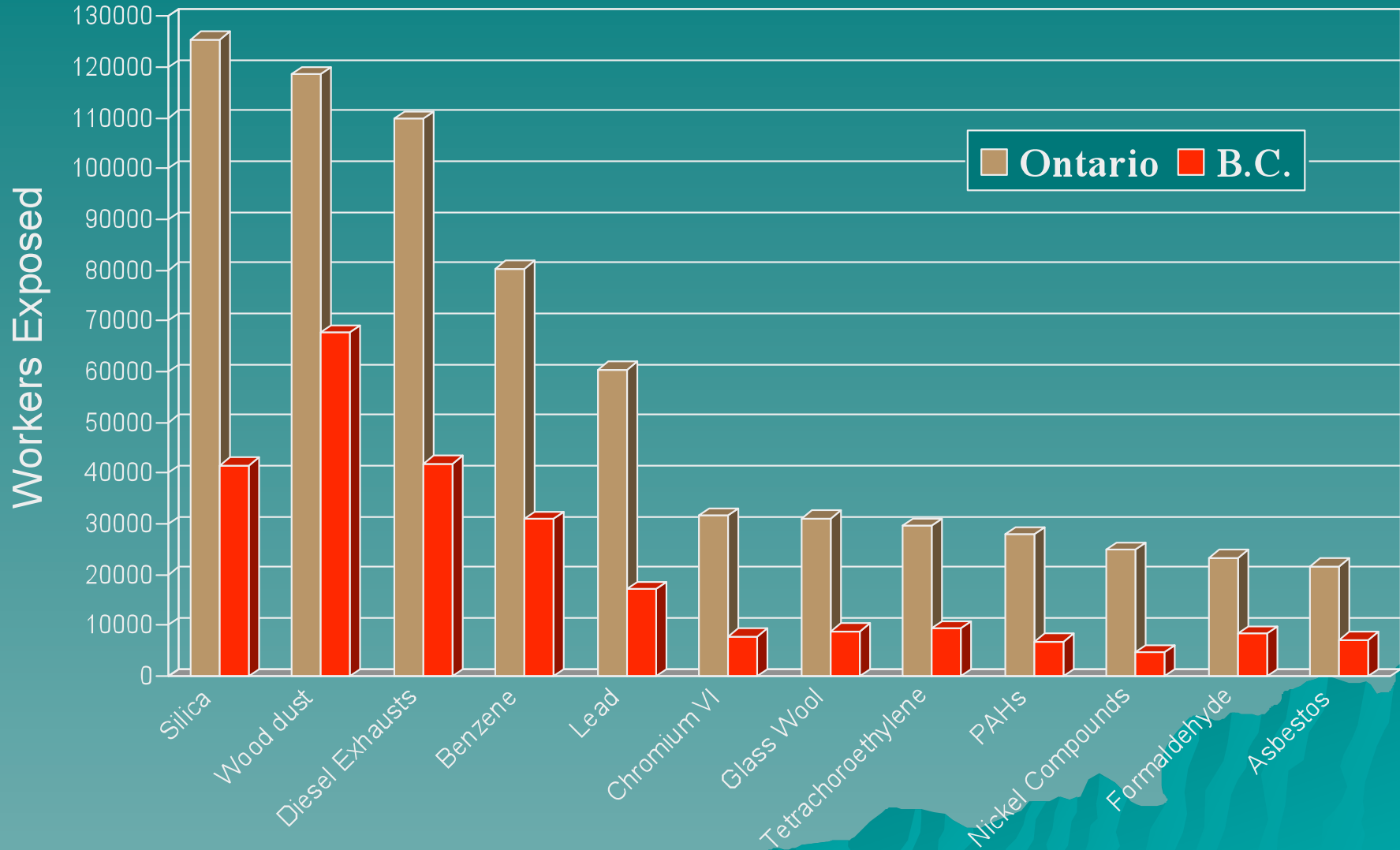


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Worker exposure data and cancer prevention

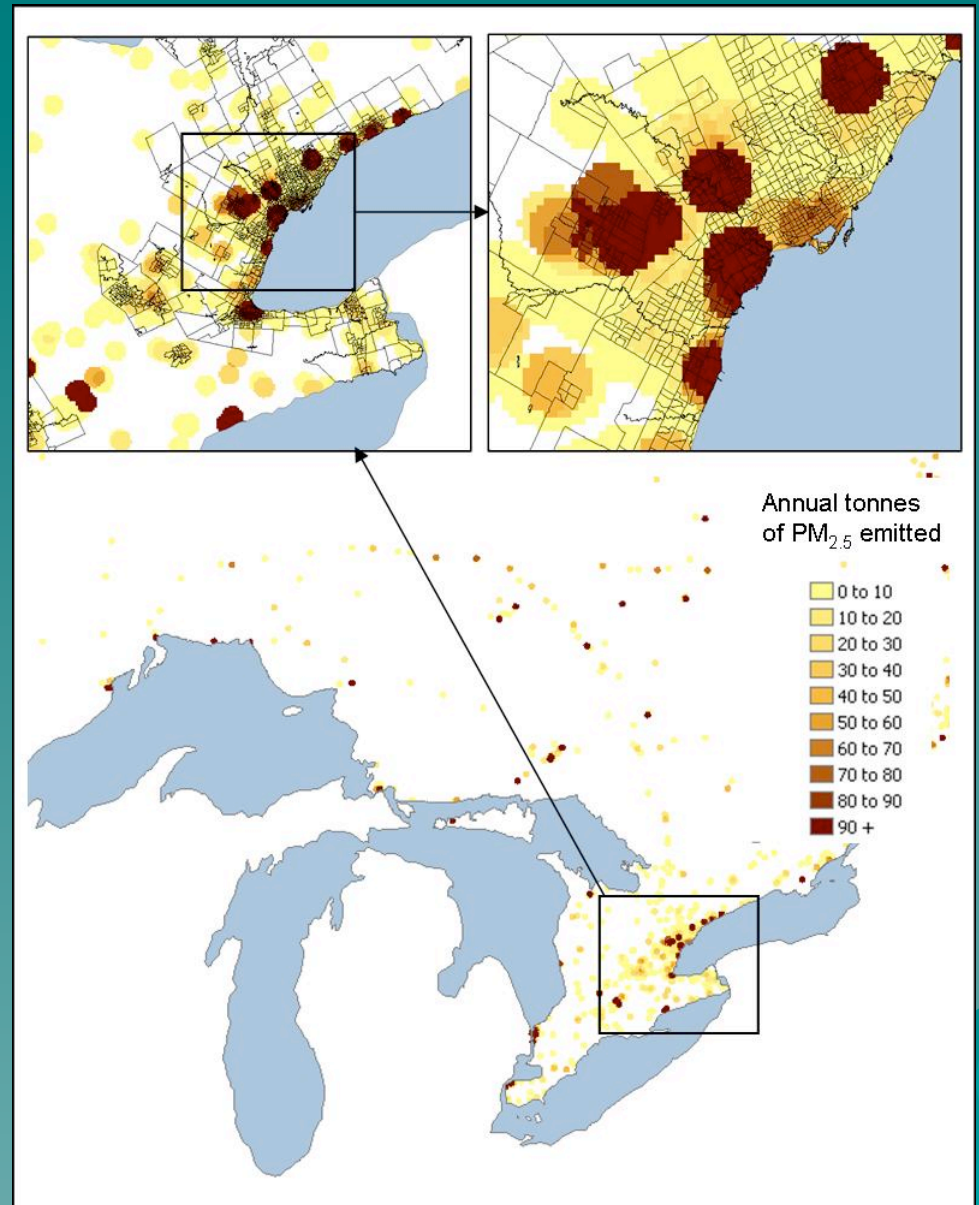


CAREX Preliminary Estimates of Exposure to Workplace Carcinogens in Ontario & BC: 2001



Airborne Carcinogens

- ◆ Fine resolution concentration estimates in urban areas
- ◆ Different spatial methods may be used to predict concentrations in rural areas
 - Spatial interpolation
 - Land use regression based models
 - Satellite data



We need local, national and international strategies

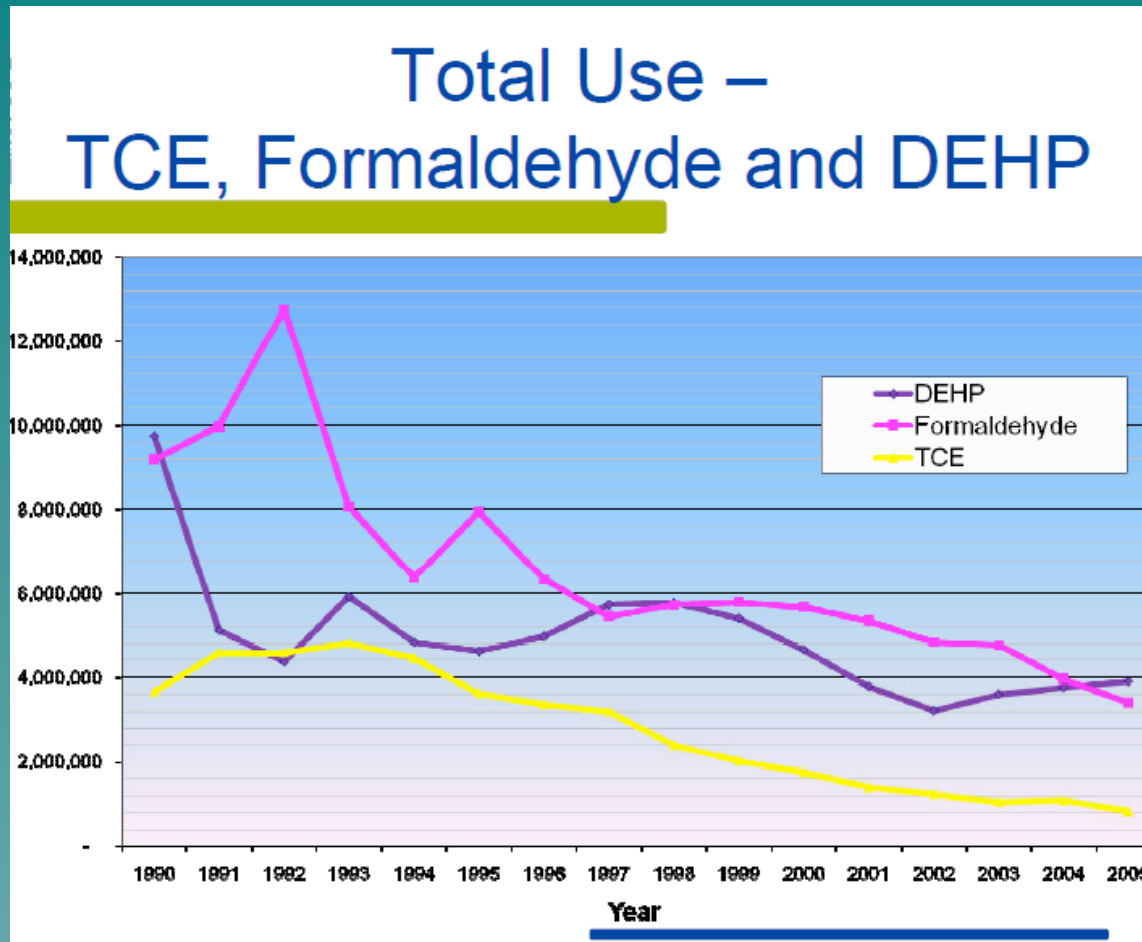


Toxics Use Reduction Institute

Toxics Use Reduction:

What it is and How it Works

TUR Carcinogen use reductions dramatic



Prevention Strategies:EU Reach?

REACH and carcinogens

- Registration:
 - CMR > 1t/y
 - Chemical safety report >10 t/y

- Authorisation:
 - CMRs of class 1 or 2 – risk « adequately controlled »
 - Health Vs socio-economic benefits
- « substitution principle » : mandatory in the directive, not in REACH

Registry can reduce exposures— will require compulsory reporting!

**Exposure decreased in 73% of
departments notified in 1996**



- discontinuation of exposing work
- effective pers prot equipment
- enclosure of emission source
- substitution for carcinogen
- substantial reduction of use
- other change

WHO Calls for

- ◆ **Step 1** : regulatory and enforced control of carcinogens
 - Substitute carcinogens
- ◆ **Step 2** : Reduce exposure to carcinogens
 - Organize health surveillance

Occupational and Environmental Cancer Prevention: Moving Forward

Obstacles:

- Low political priority
- Weak labour and environmentalist presence

Opportunities:

- ❖ New strategies and International worker led campaigns
- ❖ Public support, political pressure
- ❖ Occupational & environmental link
- ❖ Emerging Legislation on TUR, RTK

So even if...

- ◆ More workers are dying from occupational diseases than ever before.....

We know that

- ◆ **Workplace cancers and disease are all preventable....**

And....

- ◆ By building our solidarity and mobilizing our communities



- ◆ WE WILL WIN THIS STRUGGLE FOR OURSELVES AND OUR FAMILIES!

