PRACTICAL TOOLS FOR WORKING ON OCCUPATIONAL CANCER CASES: CASE STUDIES ON LUNG CANCER

Presented by:
CAREX Canada

in partnership with:

The Industrial Accident Victims' Group of Ontario (**IAVGO**) Community Legal Clinic
The Occupational Health Clinics for Ontario Workers Inc. (**OHCOW**)
The Ontario Office of the Worker Adviser (**ON-OWA**)

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We will begin shortly!

- Please mute your lines.
- We will be recording the webinar.
- Q&A will not be recorded, and will be conducted via the chat box after all speakers are finished.
- If you don't see the chat box, click this icon on your screen: 

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GOALS FOR TODAY

Together, we will:

1. Discuss relevant lung cancer case studies within the workers compensation system in Ontario from legal clinic and advocate perspectives
2. Share CAREX Canada resources and expertise on occupational exposures to known and suspected carcinogens
3. Assess future opportunities for support and training on occupational exposures and legal cases

PRACTICAL TOOLS FOR WORKING ON OCCUPATIONAL CANCER CASES: CASE STUDIES ON LUNG CANCER

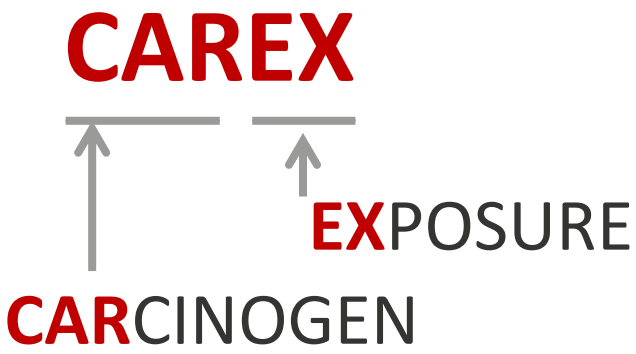
Today's presenters:

- **Cheryl Peters**, PhD: Co-Principal Investigator of CAREX Canada
- **Maryth Yachnin**, J.D.: Staff lawyer at IAVGO
- **Laura Vurma**, LL.B: Legislative Interpretation Specialist at ON-OWA
- **Dave Wilken**, LL.B: Chief Operating Officer at OHCOW
- **Anya Keefe**, MSc: Consultant working with CAREX Canada

OUTLINE (90 minutes total)

- Introduction: Cheryl Peters (10-15 mins)
- Case Study 1: Maryth Yachnin (15 mins)
- Case Study 2: Laura Vurma (15 mins)
- Case Study 3: Dave Wilken (15 mins)
- Summary remarks: Anya Keefe (5-10 mins)
- Q & A (Chat box): 20-30 mins

CAREX CANADA – A BRIEF OVERVIEW



CANADIAN PARTNERSHIP AGAINST CANCER
PARTENARIAT CANADIEN CONTRE LE CANCER

Originally funded as a pilot project by WorkSafeBC in 2003

Fully funded by CPAC in 2008

CAREX CANADA

HOW DOES CAREX CANADA SELECT CARCINOGENS?

- Based on evaluations made by the **International Agency for Research on Cancer (IARC)**

- We focus on 72 substances, ranked by IARC as either **Group 1** *Known*, **Group 2A** *Probable*, **Group 2B** *Possible Carcinogens*
- Substances were selected based on:
  - Potential for occupational and/or environmental exposure in the Canadian setting
  - Feasibility of assessing exposure

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CAREX CANADA – OCCUPATIONAL ESTIMATES

- How many people are potentially exposed at work?
- Where do they work (industry); what do they do (occupation)?
- Where do they live and work in Canada?
- What levels are they exposed to?

WHO IS AT RISK?
EXPOSED AND CANCER SITES (CANADA)

Known or suspected carcinogen	# Exposed	Confirmed	Suspected
Shiftwork with potential circadian disruption	1,900,000		Breast, prostate
Solar radiation	1,476,000	Skin	
Diesel engine exhaust	897,000	Lung	
Silica (crystalline)	382,000	Lung	Others?
Benzene	374,000	Acute non-lymphatic leukemia	ALL, multiple myeloma, NHL
Polycyclic aromatic hydrocarbons (PAHs)	350,000	Lung, skin, bladder	
Wood dust	338,000	Sinonasal, nasopharynx	
Lead	277,000		Lung, stomach
Ethylbenzene	208,000		Lung, kidney
Asbestos	152,000	Lung, mesothelioma, larynx, ovary	Pharynx, colon, rectum, stomach

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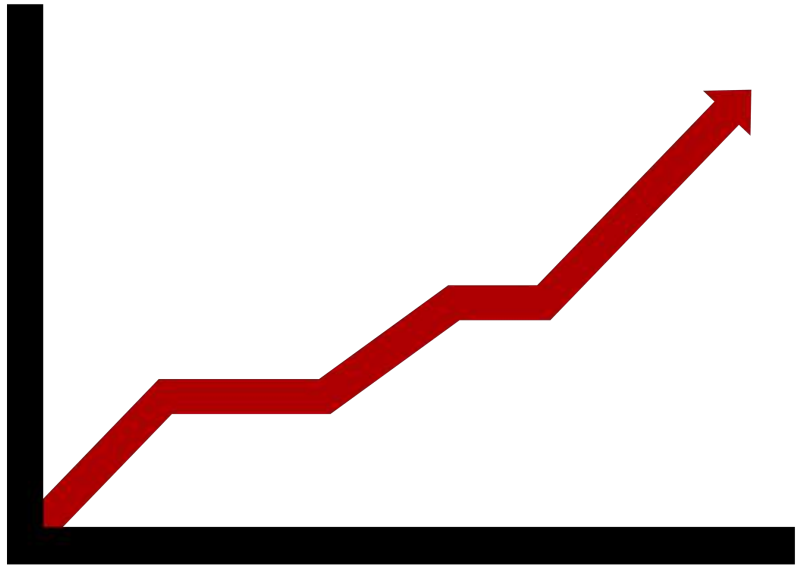
WHY THESE CASES ARE IMPORTANT

- Increasing number of cases
- Future burden – prevention
- Latency – requires assessing past exposures
- Complexity



CANADIAN CANCER SOCIETY STATISTICS

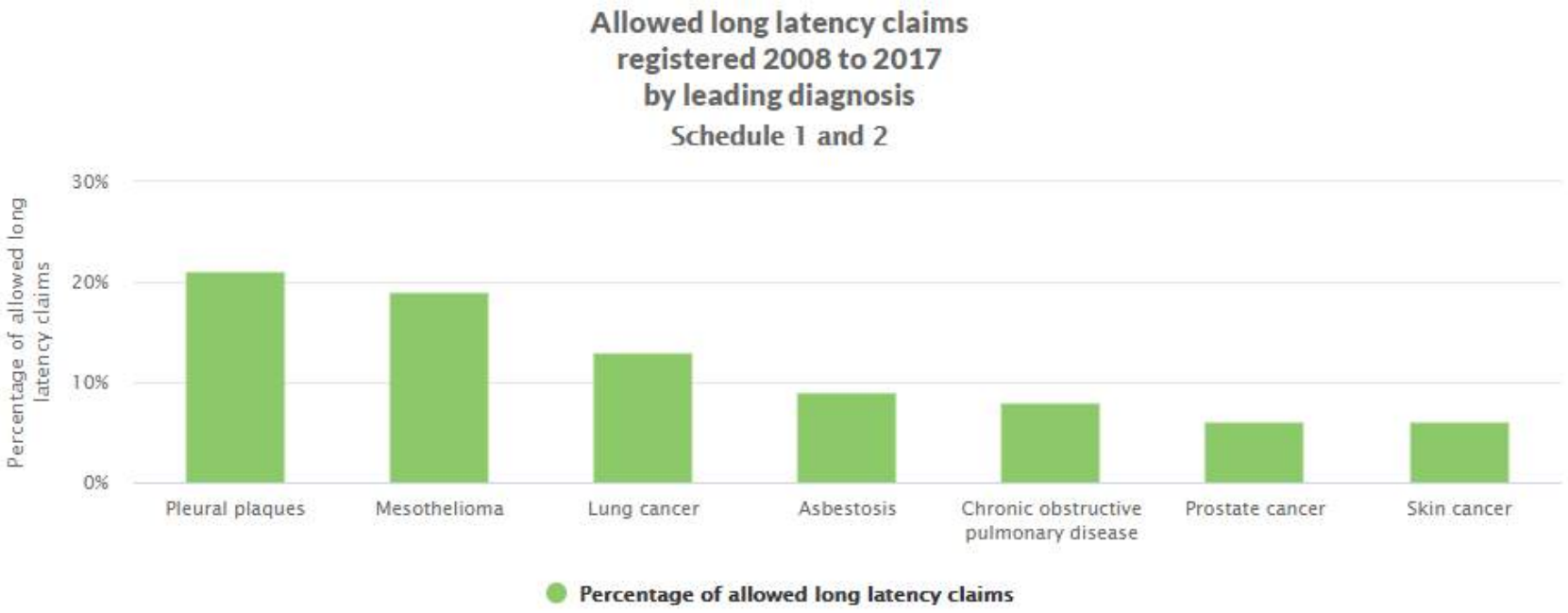
FIGURE 1.1 Lifetime probability of developing cancer, Canada, 2010

Analysis by: Surveillance and Epidemiology Division, CCDP, Public Health Agency of Canada
Data sources: Canadian Cancer Registry, Vital Statistics Death databases at Statistics Canada and Quebec Cancer Registry (2008–2010)

Cancer is the leading cause of death in Canada

CAREX CANADA

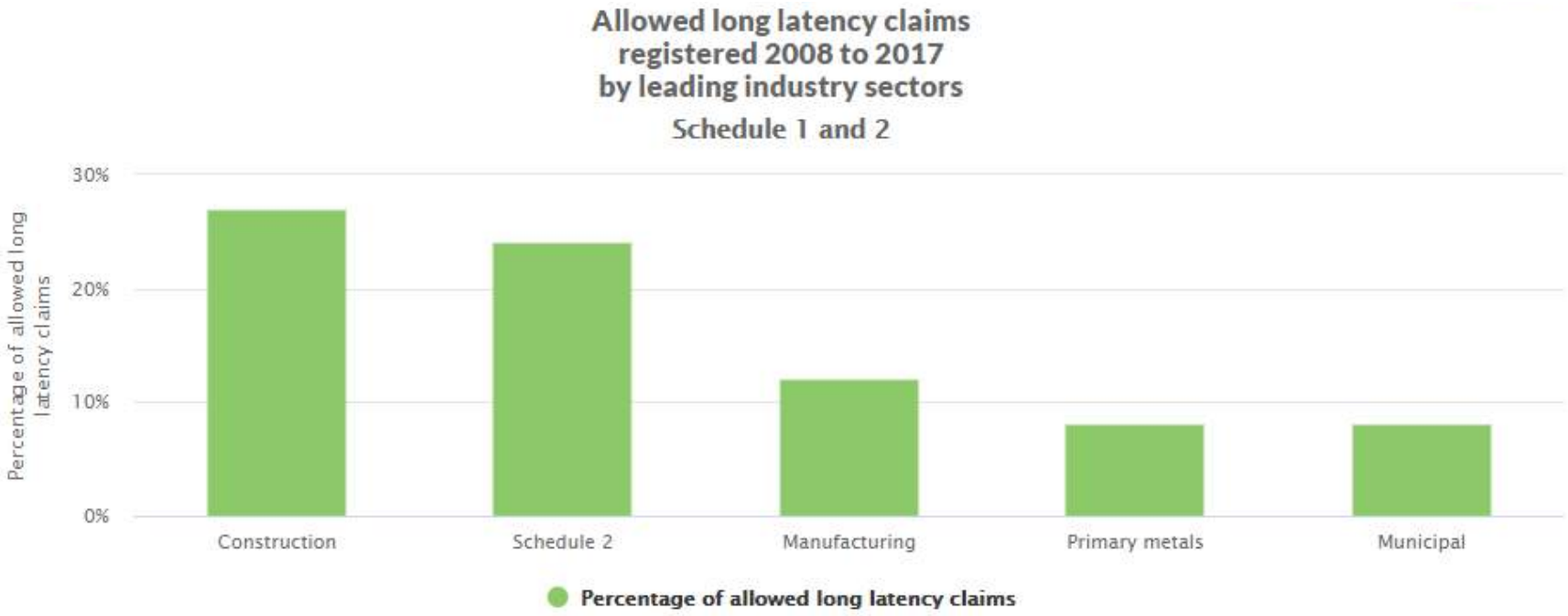
WSIB LONG LATENCY CLAIMS BY DISEASE



http://www.wsibstatistics.ca/S2/Focus%20_%20Occupational%20Disease%20_%20WSIB%20By%20The%20Numbers_P.php

CAREX CANADA

WSIB LONG LATENCY CLAIMS BY SECTOR



http://www.wsibstatistics.ca/S2/Focus%20_%20Occupational%20Disease%20_%20WSIB%20By%20The%20Numbers_P.php

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WHY THESE CASES ARE CHALLENGING

- Time consuming and expensive compared to other cases
- Collecting exposure histories and exposure evidence
- Needing to show causation (difference with legal versus medical; interpreting medical literature for this purpose; engaging medical professionals for opinions)

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WHY THESE CASES ARE CHALLENGING 2

- Determining the precise level of exposure needed to demonstrate work-relatedness
- Addressing confounders – synergistic effects of smoking, lifestyle factors
- Mixture of exposures, assumption that exposures are additive only

CASE STUDY 1:
Firefighter / Lung + liver cancer

Presented by: Maryth Yachnin, J.D.

Staff lawyer at IAVGO

CASE STUDY 1

Legal principles and evidentiary thresholds

Medical / expert evidence

Identify if the worker might have a case

CASE STUDY 1: THE CASE

Decision No. 918 05

- Firefighter
- One of 8 batched appeals by firefighters who developed cancer

CASE STUDY 1: THE CASE

Worker developed cancer in 1989 and died the same year

Age 32

Non-smoker

Primary lung or primary liver cancer (not determined)

Firefighter for 7.5 years before his death

CASE STUDY 1: THE CASE

Accept testimony and documentary evidence that worker as firefighter had exposures that were relevant for cancer

- use of protective equipment inadequate, and other unsafe practices

Accept high exposures at a fire in 1987 that all the workers attended

Rejected “overly speculative” evidence of worker’s widow that he may have been exposed to asbestos in previous car factory work

Susanne Auger's husband Robert died of mesothelioma on March 28, 2000 shortly before his first grand-daughter Skya was born. Here are Susanne and Skya holding a photo of Bob and newborn Skya. Bob was exposed to asbestos at a summer job he worked as a student. Since his death, Susanne has become involved in the campaign to ban Canada's export of asbestos. Toronto, Ontario. January 2003.

CASE STUDY 1: THE LEGAL TEST

Reviewed legal tests for entitlement

Whether the work exposures were

- one significant contributing factor
- on a balance of probabilities (more likely than not)

CASE STUDY 1: THE LEGAL TEST

In occupational disease cases before WSIAT, many cases have held this means

- Unless special factors
- Must be a standard mortality index (SMR) or standard incidence ratio (SIR) of 2.0 or higher in science
- Logic that if incidence is 2X that of the general population, more likely than not a given cancer is work-related
- See e.g. *600 97, 1861/10*

CASE STUDY 1: FRASER HEALTH

Discussed Supreme Court of Canada decision in *British Columbia (Workers' Compensation Appeal Tribunal) v. Fraser Health Authority*, 2016 SCC 25

- Cancer cluster case
- High incidence of cancer + likely exposure = allow based on benefit of the doubt (as likely as not that workplace was one SCF)
- Ordinary common sense and logical inferences
- No need for scientific certainty

CASE STUDY 1: FRASER HEALTH

Agreed with Fraser Health - don't need to meet a scientific standard of proof and causation can be inferred from other evidence **but**	Benefit of the doubt only applies if probative evidence approx. equal in weight
	Absence of evidence is not sufficient
	Cannot rely on speculation as evidence
	Possibility of work-relatedness not sufficient

CASE STUDY 1: THE DECISION

Epidemiology insufficient to establish relationship between general exposures as a firefighter and liver cancer or lung cancer
Latency period too short; rejected two articles submitted as reply evidence
Tribunal medical assessor appears to be only up-to-date detailed medical/ expert opinion on causation
No special reasons to allow despite SMR less than 2.0
Cancer clusters usually consist of the same type of cancer, not the case here
Higher incidence of cancer than the Ontario average (6 vs 2.7), but medical opinion only “conceivable” that exposures might have accelerated tumours

Mary Beth Labbe lost her husband Gilles to work-related lung cancer on September 7, 2001. They had been married for 38 years. "We went everywhere together, always holding hands", she told me. Gilles worked in the mines where he was exposed to radon gas, dust, and diesel fumes. Elliot Lake, Ontario. March 2002.

CASE STUDY 1: TAKEAWAYS

Important takeaways

The legal standard is:

- Not scientific certainty …
- But more than “possibility” …
- So undeveloped science is a major challenge for proving claims

CASE STUDY 1: TAKEAWAYS

Important takeaways	Able to establish exposures because of co-worker and supervisor testimony
	Try to gather exposure evidence from worker urgently
	Expedited hygienist review e.g. @ OHCOW or maybe WSIB
	Affidavits/ videotaped statements/ any other way to record the worker's evidence

CASE STUDY 1: TAKEAWAYS

Important takeaways	Get expert evidence on causation	E.g. OHCOW, treating specialists, hospital occupational health clinics
	Get best evidence you can on exposures	E.g. OHCOW occupational hygiene assessments
	Learn about the science, but be careful about doing your own epidemiology analysis	

CASE STUDY 1: RESOURCES

If you don't know whether there might be a case for work-relatedness, some resources	International Agency for Research on Cancer classifications
	Workplace Safety and Insurance Appeals Tribunal case law
	Occupational Health Clinics for Ontario Workers
	CAREX Canada

Worker or survivor can file WSIB and/or seek legal advice about filing a claim before determining how strong the science and evidence is

George "Bud" Simpson died December 23, 1997, convinced that his throat cancer came from working at Owens Corning/Fibreglas Canada. He made a list of 36 ill former co-workers which began the campaign to uncover the occupational diseases from that plant. Jean, his widow, and Barb, his daughter, are members of Victims of Chemical Valley, the group that erected the Missing Worker Monument. Sarnia, Ontario. January 2003.

Images from IAVGO - Injured Workers: Portraits of Life and Loss

CASE STUDY 2:

Lung Cancer / Asbestos Exposure

Presented by: Laura Vurma, LL.B
Legislative Interpretation Specialist at ON-OWA

Ontario
Office of the Worker Adviser
Bureau des conseillers des travailleurs

OCCUPATIONAL DISEASE PUZZLE

Four parts of each case:

- Diagnosis
- Exposures
- General Causation
  - Link between exposure/condition generally
- Specific Causation
  - Link between worker's exposure and worker's condit

CASE STUDY 2 - OVERVIEW

- Facts
- Diagnosis
- WSIB policy
- WSIAT caselaw
- Co-worker evidence
- WSIAT analysis

CASE STUDY 2 - FACTS

- WSIAT *Decision No. 3274/16*
- Lung cancer diagnosis (age 70)
- 55-pack year smoking history
- Employed in cast iron foundry (1969-1998)
- Asbestos and silica exposure
- Focus on work as moulder (1969-1983)

- WSIB OH Assessment
  - dry cutting asbestos pipes could result in airborne exposure (2 f/cc)
  - task took 15-30 min per shift
  - task shared between crew members
  - Shift average 0.06 to 0.1 f/cc

- WSIB denied claim

CASE STUDY 2 - DIAGNOSIS

- Has medical professional diagnosed?
  - Biopsy results most common
  - May need to argue diagnosis if professionals uncertain (*Decision No. 2990/01*)
  - Challenge of older cases

- Is it primary lung cancer?
  - Type of carcinoma irrelevant (small/large cell)
  - Be careful of:
    - Lung sarcoma (*Decision No. 1557/14*)
    - Secondary primary (*Decision No. 572/13*)

WSIB POLICY - OPM # 16-02-13

Policy requirements:

- Clear & adequate history of at least 10 years exposure to asbestos, and
- Minimum interval of 10 years from first asbestos exposure & appearance of lung cancer (10 years latency)
- Speaks of “lung cancer in asbestos workers”
- If claim doesn’t meet guidelines, then judged on own merit (look at intensity of exposures and other factors)

WSIAT CASELAW - OPM # 16-02-13

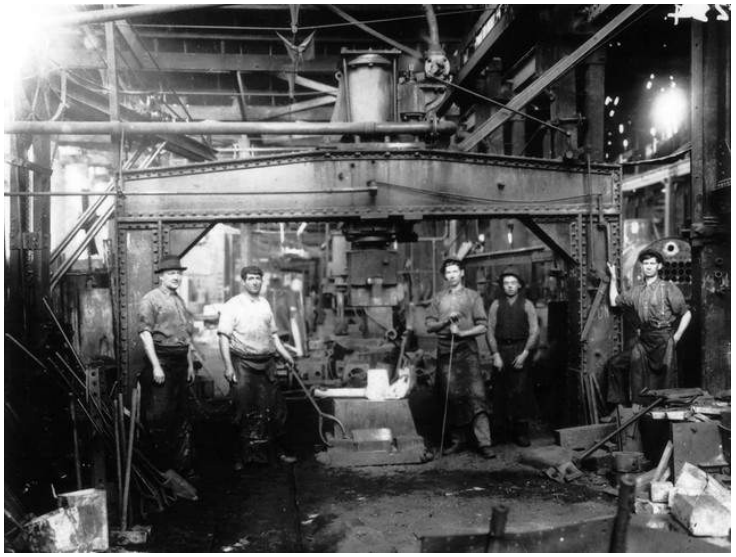
- "Asbestos worker"
  - job duties involve direct use of asbestos or work directly with asbestos products
  - Incidental exposures that do not relate to job duties are not sufficient (i.e. asbestos insulation on pipe in workplace)
  - *Decision Nos. 2013/05, 1045/11, 3274/16*

- "Clear and adequate history"
  - Satisfied if worker is asbestos worker and had 10 years of asbestos exposure
  - *Decision No. 1917/06 and 3274/16*.

CASE STUDY 2 - EXPOSURES

Co-worker testimony invaluable

- 30 workers (10m x 15m room)
- 10-12 workers making moulds
- Each made 10-15 moulds per day
- Each cut 25-50 risers with hand saw each day
- Total of 250-750 risers cut per day
- Asbestos dust on all surfaces
- No masks
- Workers cleaned area with air hoses
- Co-workers diagnosed with asbestosis



CASE STUDY 2 - ANALYSIS

WSIAT *Decision No. 3274/16*:

- Sufficient asbestos exposure to meet WSIB policy
- Disagreed with WSIB OH opinion
- Worker's exposure not based on amount he personally produced
- Must consider exposures around him
- Smoking history reduced to co-contributor because of significant asbestos exposure
- Asbestos made significant contribution to lung cancer

CASE STUDY 2 – KEY POINTS

Cases often decided on facts

- Gather exposure evidence asap
- Co-workers are valuable evidence of frequency /duration of tasks

WSIB OH should be looked at carefully

- Challenge assumptions on facts

Smoking not a disentitling factor

- *See also Decision No. 2286/14*

FYI: UPDATED APPROACH TO WSIB POLICY – OPM # 16-02-13

- WSIB applies different criteria for some cases of historical asbestos exposure

- WSIB favourably considers claims for lung cancer with airborne asbestos exposure employment of
  - 2 years prior to 1975, or
  - Weighted as to comprise 5 years between 1976 and 1983

- Not in policy

- See *Decision No. 2286/14*

CASE STUDY 3: The Horse Race Case
Uranium miner / lung cancer

Dave Wilken, LLB

Chief Operating Officer

OHCOW

Occupational Health Clinics for Ontario Workers Inc.

Centres de santé des travailleurs (ses) de l'Ontario Inc.

WSIAT Decision No. 78/14
2015 ONWSIAT 1050
http://canlii.ca/t/gkfd5

The Facts

- Diagnosed with lung cancer at age 68 (2009)
  - 18 years after end of mining career
  - 29 years after quit smoking
  - Family history of cancer, but not lung cancer
- 18-ish years as a uranium miner
  - (1967-68, 1969-1975, 1978-1986, 1988-1991)
  - Some development work (less ventilation)
  - Other occupational exposures not considered relevant*
- 2.15 - 6.45 pack years of cigarette smoking
  - 2 - 6 cigarettes per day for 23 years
  - Quit in 1980

The Policy – WSIB Adjudication

- WSIB OPM Doc. No. 23-02-03 - "Lung Cancer Among Workers in the Uranium Mining Industry"
- The formula
  - Calculate "radiation index" based on age at diagnosis and working level months (WLMs) of uranium mining
  - "radiation index" = (WLMs 5 to 14 yrs before diagnosis) + ½ (WLMs 15 yrs or more before diagnosis)
  - Source: BEIR IV Report (1988)
    - Biological Effects of Ionizing Radiation (National Academies of Science)
- The upshot
  - RR 2.0 = "more likely than not"
- The problem
  - That's just wrong

Multiple Causes

- The WSIB is not good at this.
  - In this case, radiation index of 35 < 100 (required for ages 65-68). Denied.
- WSIAT is better, but uneven.
  - In this case, the Panel falls into the RR 2.0 trap and more
  - Considers the following known lung carcinogens:
    - Radiation
    - Crystalline silica
    - Arsenic
    - Diesel exhaust
    - Smoking
  - Refers the matter to a Tribunal Medical Assessor (***WSIA***, s. 134)

Tribunal Medical Assessors – s. 134

- Tribunal Chair "may establish a list of health professionals upon whom the tribunal may call for assistance in determining matters of fact in a proceeding" [s. 134(1)].
- "'health professional' means a member of the College of a health profession as defined in the *Regulated Health Professions Act, 1991*; ("professionnel de la santé")" [s. 2(1)].
- No employees of the Board or Tribunal [s. 134(1)], no physicians who have examined, treated, or been consulted about the worker or partners of those professionals [s. 134 (5)]
- Tribunal may order an examination by an assessor, and worker must comply or face possible suspension of proceedings and/or benefits [s. 134 (6) and (8)]

This Assessor

- PhD Occupational Hygienist*
- Calculates Relative Risks for Carcinogenic Exposures:
  - Radiation 1.5 - 2
  - Crystalline silica 1.75 - 2
  - Arsenic 1.5
  - Diesel exhaust 1.5
  - Smoking 1.5 - 2.5
- “It is sometimes assumed that risk for a single disease is increased additively when the worker is exposed to more than one agent that can cause a disease. However, this principle is applied when the biological mechanism is well known and identical for all agents being considered. This is not necessarily the case here, and it cannot be assumed that exposures to these agents additively increase the risk of lung cancer for this particular worker.”

The Panel's Interpretation

- Assumes that there is no additive, greater than additive, or even less than additive interaction between the various exposures
- If there are no common causal pathways, then there is only one cause of the cancer
- Within the one cause scenario, relative risks estimated by the assessor based on epidemiological studies can be translated into probabilities of causal efficacy in an individual
- It is reasonable to use the midpoint of each estimate since the extremes are equally likely

And the race is on…

36 “Using the midpoint or average of the ranges of relative risk estimated by [the Assessor], the following inferences can be made:

Exposure Agent	Mid-point relative risk	Probability of agent causing cancer	Probability of cancer developing in the absence of occupation
Radiation	1.75	43%	57%
Crystilline silca (sic)	**1.88**	47%	53%
Arsenic	1.5 (maximum)	33%	67%
Diesel exhaust	1.41	29%	71%
Smoking	2.0	50%	50%

There can be only one!

"Given these percentages, it follows that it is more probable than not that the worker would have developed lung cancer in the absence of his exposure to each of the occupational agents at issue in this appeal. Of these potential cancer causing agents, the most likely contributor to his lung cancer was the worker's smoking history which placed him at a 50% risk" (para. 37).

Let us count the ways

- Confuses statistical probabilities with the weight of the evidence
  - RR 2.0 is not sufficient to prove causation (poor study design, confounders)
  - RR 2.0 is not necessary to prove causation (susceptible sub-groups)
  - Comparison of studies is a much more complicated enterprise
- Destroys the significant contributing factor test
  - Applies a predominant cause test, contrary to the evidence
- Ignores evidence of significant interactions between smoking and silica, arsenic, radiation and diesel exhaust, mentioned by the Assessor and the BEIR IV report
- Misconstrues how epidemiology works
  - Decision No. 600/97 – SIR of 161 means that if 161 individuals in a group (of say 20,000) with an occupational exposure contract cancer, 100 of those individuals would have contracted it without the occupational exposure. Therefore, it is more likely than not that each of the 161 individuals would have contracted cancer even in the absence of the occupational exposure.
  - Epidemiology is comparative and operates at the level of populations. Direct application to individual cases assumes *perfection* in sampling and controls, that all sub-groups susceptible to particular exposures are known and accounted for, that all causal factors are known and accounted for. If we had that, we would know who the 61 were.
  - Cf. mesothelioma*
- Opposite of a "robust and pragmatic approach" to the evidence (***Snell v. Farrell***, SCC, 1990)
  - Cancer is caused by carcinogens, not by probabilistic reasoning
  - Here, the worker was exposed to four occupational lung carcinogens at levels known to cause lung cancer, but they are determined to have had no effect based on a minor difference in admittedly imprecise estimates of relative risk

In reality

- Smoking shares causal pathways with all of the occupational exposures
  - Smith et al., **Key Characteristics of Carcinogens as a Basis for Organizing Data on Mechanisms of Carcinogenesis**
- Identical mechanisms of carcinogenicity are not necessary for additive or greater than additive interactions between carcinogens
- Best available epidemiological evidence supports significant, greater than additive, interactions between smoking and all four of the occupational carcinogens implicated in this case
- Hindsight is 20-20
  - Representatives have a right not only to make legal submissions on Tribunal Medical Assessor reports, but to submit reply evidence
  - OHCOW may be able to assist by reviewing an Assessor's report and supplying further evidence or reports relevant to assessing the Assessor

Unnamed Paul Demers Project on Best Practices, including Multiple Exposures

- Director of the Occupational Cancer Research Centre (Cancer Care Ontario)
- Wide ranging academic career and involvement with International Agency for Research on Cancer (IARC) and American Conference of Governmental Industrial Hygienists (ACGIH)
- So nice they announced it twice
  - Liberal government: April 2018
  - Progressive Conservative government: January 2019
- Arose due to the GE Peterborough cohort, but will affect many future cases
- Expected completion: December 2019

Demers Mandate

- How can scientific evidence best be used in determining whether a cancer is work related, particularly in cases of multiple exposures?
- Are there any best practices in other jurisdictions that Ontario should consider adopting?
- As scientific evidence evolves around occupational cancer, what criteria should the Ministry of Labour consider in developing legislative policy?

CONCLUDING COMMENTS

Anya Keefe, MSc

Occupational Hygienist and CAREX Associate

Case studies – common threads

Challenges of determining exposure

- happened in the past (latency)
- multiple exposures
- confounding exposures (smoking)

Challenges of determining causation

- medical *vs*. legal test
- epidemiology is an inexact science
- general *vs*. specific causation

  Is there a link between the disease and exposure(s)?

  Is there a link between this worker's disease and his/her exposure(s)?

A tool for creating an occupational history

How MUCH exposure?

Dust visible in the air, equipment coated with dust at the end of the work day

Used air atomization spray gun to paint truck trailers

Small (approx 1 cm) fragments of material fell down onto face and arms while scraping insulation off pipes

HOW was the worker exposed?

Was there exposure by inhalation? Was there ventilation or PPE?

Was there exposure by contact with the skin? Describe exposed area.

Was there exposure through ingestion?

A tool for creating an occupational history

How LONG did the exposures last?

Estimate daily exposures *and* the period over which these typical daily exposures have been repeated.

Benzene exposure by inhalation for 2 hrs/day x 3 days/work per week for 12 years as heavy mechanic.

Was there NON-OCCUPATIONAL EXPOSURE to carcinogens?

Ask about possible non-occupational exposures to carcinogens for the same cancer site. If considerable non-occupational exposure seems likely, go through same questions to document it.

Q&A SESSION

- Please direct your questions to the chat box! This portion of the webinar will not be recorded
- On the line to answer your questions:

  - Cheryl Peters, PhD: Co-Principal Investigator of CAREX Canada
  - Maryth Yachnin, J.D.: Staff lawyer at IAVGO
  - Laura Vurma, LL.B: Legislative Interpretation Specialist at ON-OWA
  - Dave Wilken, LL.B: Chief Operating Officer at OHCOW
  - Anya Keefe, MSc: Consultant working with CAREX Canada

SUMMARY

- Thank you for your participation today
- We greatly appreciate your feedback! You will be sent a link to a survey to let us know how we did
- Stay connected with CAREX Canada:

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ADDITIONAL SLIDES NOT INCLUDED IN WEBINAR

Dave Wilken

SATURDAY STAR

WEATHER HIGH 3 C | SNOW AND RAIN | MAP S6

SATURDAY, DECEMBER 17, 2016

LETHAL LEGACY

PART 1 OF A STAR INVESTIGATION

Ailing retirees of GE plant say they're paying price for toxic past

Generations of workers in Peterborough had seen factory as a symbol of opportunity

SARA MOJTEHEDZADEH
WORK AND WEALTH REPORTER

PETERBOROUGH—Despite working at the plant since he was 16, Ed Condon carried himself with a gentleness factory life didn't afford him — never swearing, smoking or drinking.

Retirement, his family hoped, would finally heal the bone-deep cracks in his hands, stop the nosebleeds he stubbornly brushed off. There would be more twilight drives down River Rd. with his wife, more rambles in the woods with his three grandchildren.

But Ed Condon always believed the chemicals would kill him first.

In the end, his family says, he was right.

Where he once dreamed of more woodland walks, a simple cross now commemorates him.

"He had such amazing integrity and honour. And he was such an honest man," says his daughter Cindy Crossley, who lost her father to an inoperable brain tumour in 2012.

"He was my everything."

Families like the Crossleys say a silent tragedy has ravaged a tight-knit community of Peterborough workers who've filed hundreds of compensation claims for often horri
nal diseases — f
cancer.

The cause, ti
exposure to a
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But decades a
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feels justice has

In 2002, a GE
study obtained
employees wer
likely to die of lu
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SUNDAY STAR

WEATHER HIGH -2 C | FLURRIES | MAP S8

SUNDAY, DECEMBER 18, 2016

LETHAL LEGACY

PART 2 OF A STAR INVESTIGATION

'The system has failed us'

Retirees of Peterborough GE plant frustrated after futile years-long compensation battle for

Roger Fowler wipes away tears while

CAREX CANADA

Many participants

- Affected workers and families
- OHCOW and the then CAW National
- UNIFOR National
- UNIFOR Local 524, GE and UNIFOR Local 1987, Ventra Plastics
- The GE Retirees (including many claimants)
- WSIB
- Occupational & Environmental Health Coalition – Peterborough "The Coalition", including sub-committees
- Office of the Worker Adviser (OWA)
- Researchers – Advisory Group
- And now, Ministry of Labour (MOL)

Occupational Disease Intake Clinic

- Held May, 2004, in Peterborough
  - Workers from 3 different companies attended & registered
- General Electric (GE)
  - Generators, transformers, motors, wire and cable, lighting products for consumer & industrial products
- Registered 659 workers from GE (people, not cases)
- Ventra Plastics
  - Plastic molding for the automotive industry
- Pan Osten
  - Manufacturer of retail store fixtures – from single fixtures to grocery store check-out counters
- First OHCOW involvement – 1995 Risk Mapping

Occupational Disease Intake Clinic

- An event for a group of workers
  - sharing the same employer or workplace or
  - the same workplace exposures,
  - have similar and possibly related health concerns.
- Organized with partners, most often the union
- Relies heavily on volunteers

Occupational Disease Intake Clinic Process

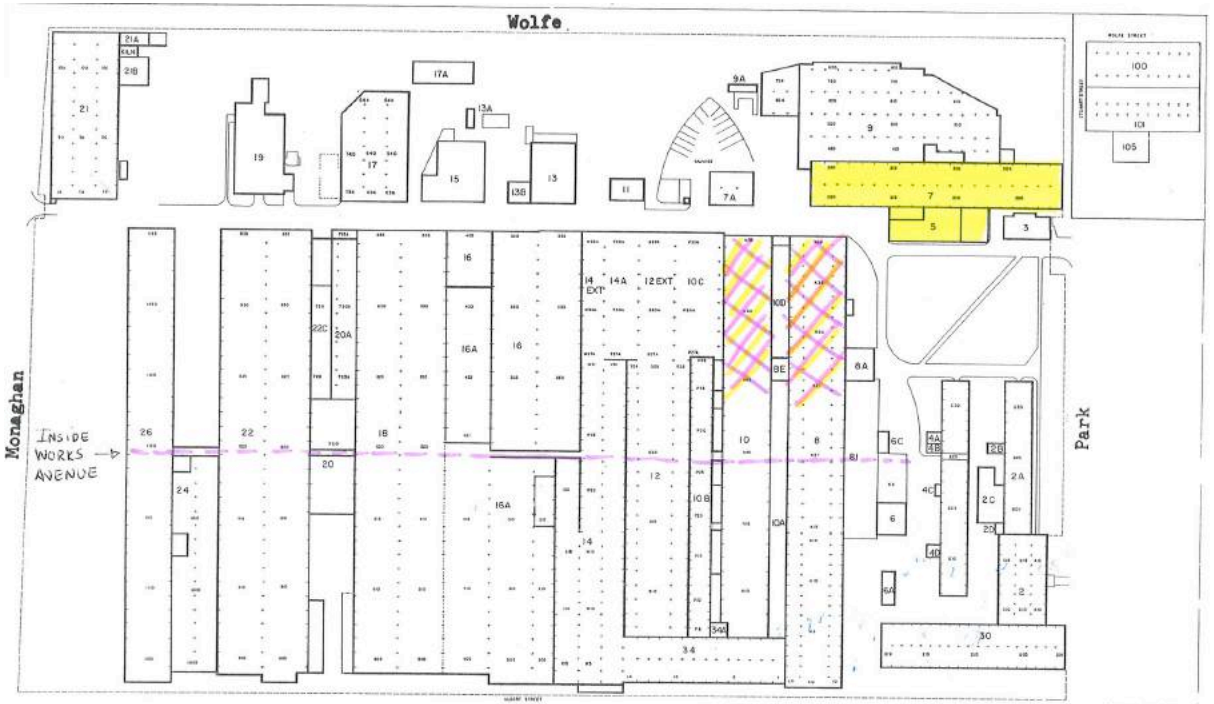
- Registration
- Demographics and Consents
- Surveys/Questionnaires
- History Taking
  - Health history; Work history; Exposure history
  - Where did you work? How long did you work there? What were you exposed to?
- Body Mapping
- Filing a Form 8 (Health Professional's Report)

Body Mapping of Symptoms

General Electric (GE)

- CGE/GE – plant opened in 1891-2
- Eventually covered approximately 38.5 acres
- By end of 1950, payroll was 4,770 workers
- Peak payroll in 1974 – 4,980 workers
- January 17, 2017: announcement of impending layoff of 150 of 520 employees
- August 25, 2017: announcement that production to cease by September 2018, 50 engineering division employees to remain

Occupational Disease Intake Clinic
Peterborough Project: Map of GE Plant



No. 2 MAIN OFFICE
No. 2A CONSTRUCTION SWGR. ENG. & MARKETING
No. 3 RELATIONS
No. 4 CAPACITORS
No. 5 COIL IMPREGNATING
No. 6 GARAGE
No. 6B TRANSPORTATION
No. 6C HOSPITAL
No. 7 ARMATURE
No. 7A SALVAGE
No. 8 MACHINE SHOP
No. 8A PLANT ENG.
No. 81 BAR STOCK STORES
No. 8A PURCHASING, INST. LAB.
No. 9 F.H.P. MOTORS

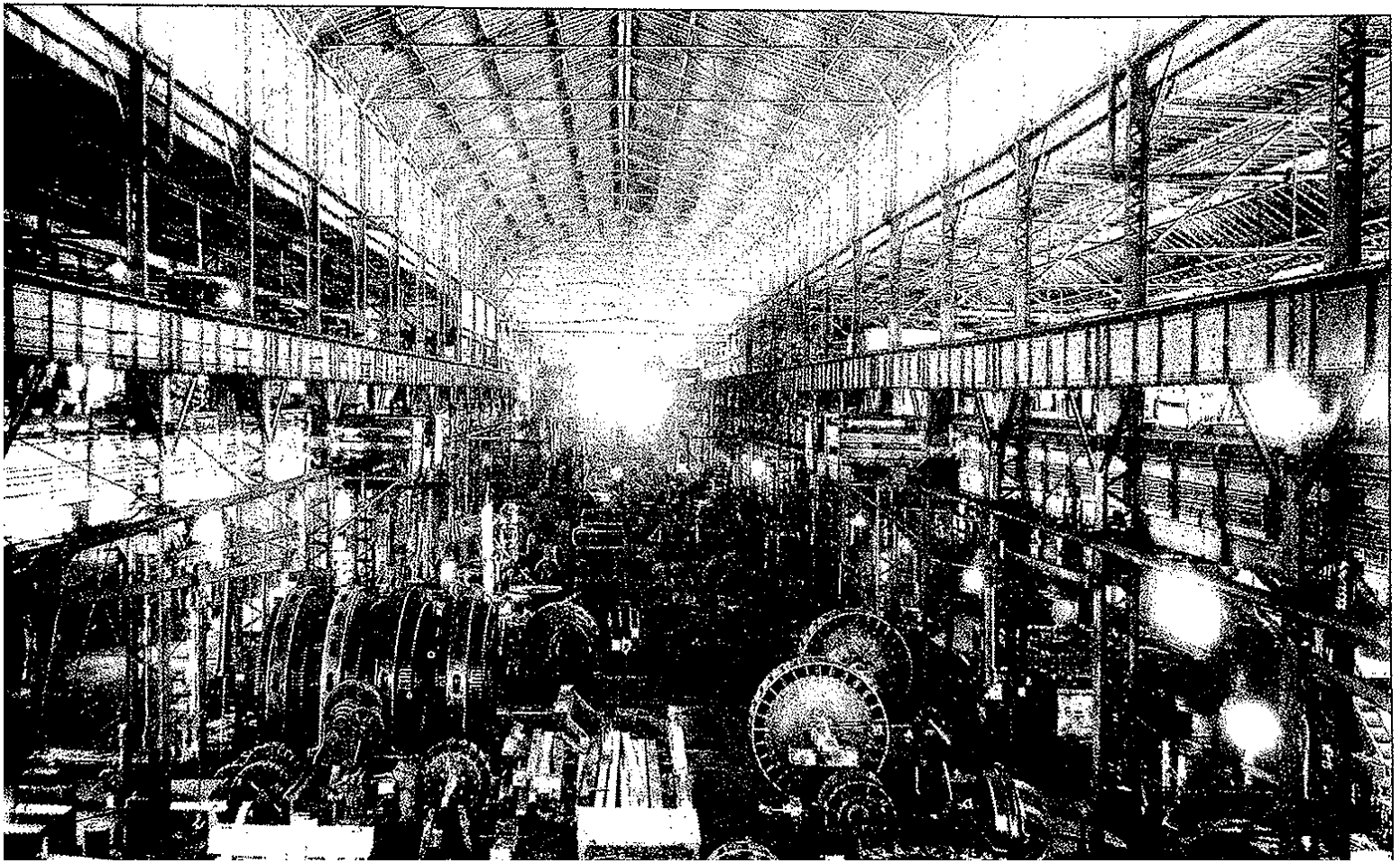
No. 10 GENERATOR ASSEMBLY
No. 10B BABBIT SHOP
No. 11 FIRE HALL
No. 12 PUNCH PRESS
No. 13 STEAM PLANT
No. 13B COMPRESSOR BUILDING
No. 14 STRUCTURAL STEEL
No. 14A -do-
No. 14 2nd, 3rd FLOORS G.P. CONTROL
No. 15 PAINT SHOP
No. 16 SWITCHGEAR
No. 16A TRANSPORTATION EQUIPMENT, TOOL ROOM
No. 17 N.M. MACHINE SHOP
No. 18 INDUCTION MOTORS MAINTENANCE

No. 20 WIRE, CEMA & I.P.C. OFFICE
No. 20A COMPUTERS & SCOPS
No. 21 APD OFFICE, LAB
No. 22 WIRE & CABLE
No. 24 FORMEX
No. 26 WIRE & CABLE
No. 30 APP. SHIPPING, RECEIVING, WAREHOUSE, RECTIFIERS, COMMUNICATIONS, EMPLOYEE STRS., STATIONERY
No. 34 STEEL CUTTING
No. 34 2nd FLOOR G.P. CONTROL
No. 100 APP. ENG. LAB
APP. ENG. PERSONNEL
No. 101 APPARATUS MARKETING, I.P.S. ADV. & SALES PROM.

LEGEND
= ARMATURE DEPT.
= DEPT 8 or 10 shared Armature SPACE
= INSIDE WORKS AVENUE

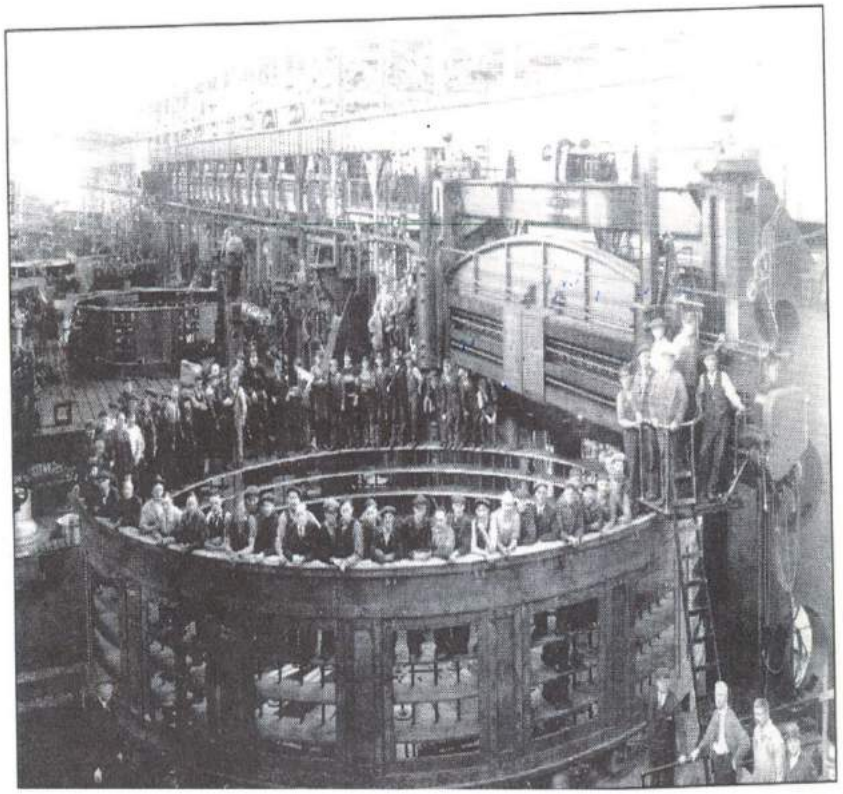
CAREX CANADA

GE: Building 8 Machine Shop



GE: Armature Department

Picture #1 –Armature Department GE stator



The Exposures

- Asbestos
- Trichloroethylene (TCE)
- Benzene
- Toluene
- Silica
- Arsenic
- Lead
- Isocyanates
- Beryllium
- Epoxies
- Formaldehyde
- Vinyl Chloride
- Dusts
- Fumes (eg. welding, asphalt)
- Methyl Ethyl Ketone (MEK)
- Cadmium
- Mineral Oils
- Diesel Exhaust
- Noise

More than 40 confirmed or strongly suspected carcinogens uncovered by the DeMatteo report

The Diagnoses

- Asbestosis & asbestos-related disease
- Chronic Obstructive Pulmonary Disease (COPD)
- Work-related asthma
- Ischemic heart disease
- Cancers:
  - Lung; stomach; brain; kidney; bladder; bowel; colon; prostate; breast; liver; pancreatic; throat; laryngeal; pharyngeal; esophageal; Non-Hodgkin's lymphoma; leukemia; skin
- Noise-induced hearing loss

Compensation Claims

- OHCOW has medically assessed over 500 workers
- OHCOW has filed over 300 comp. claims/Form 8s
- Types of Claims **Allowed** by WSIB
  - Various cancers including lung, kidney, stomach, rectal, colon; laryngeal; gastrointestinal
  - Asbestos-related disease
  - Chronic Obstructive Pulmonary Disease (COPD)
  - Noise-Induced Hearing Loss
- WSIB recently reviewed previously denied claims and received well over 100 new claims

GE Peterborough cancer claims adjudicated 2004-2018

- 139 allowed
  - 82 lung cancers
  - 17 gastrointestinal cancers
  - 40 bladder, kidney, mesothelioma, larynx, leukemia and others
- 107 denied
- 69 withdrawn or abandoned

SUNDAY STAR

WEATHER HIGH -2 C | FLURRIES | MAP S8

SUNDAY, DECEMBER 18, 2016

LETHAL LEGACY

PART 2 OF A STAR INVESTIGATION

'The system has failed us'

Retirees of Peterborough GE plant frustrated after futile years-long compensation battle for

Roger Fowler wipes away tears while

The New Evidence

- The Report of the Advisory Committee on Retrospective Exposure Profiling of the Production Processes at the Canadian General Electric Production Facility in Peterborough, Ontario (AKA the DeMatteo Report)
- Unifor funded and compiled a large database of information including MOL reports from 1944 – 1994; GE JHSC Minutes; GE Correspondence etc.
- Old evidence - Peterborough Health Study, GE Canada, AKA the Hosein Report; critiqued by Dr. Steven Markowitz,
  Editor-in-Chief of the *American Journal of Industrial Medicine*
- OHCOW will be able to use the new evidence to inform our medical and hygiene reports for the GE workers
- OHCOW is funding a similar report regarding Ventra Plastics, expected completion May 2019

Challenges created by multiple exposure cases

- Resources – OHCOW, legal reps, WSIB, WSIAT
- Bureaucratic adjudication vs. multiple exposures/multiple diseases
- Limitations of the science – funding/fit
- Warping of the science – individual employers/individual industries/global capital
- Lay adjudication – robust and pragmatic approach often lacking, implicit bias, credentialism