

Alberta

Occupational Health and Safety Surveillance

Life and Times in Alberta, Canada

WestON
Annual Meeting
September 11, 2014

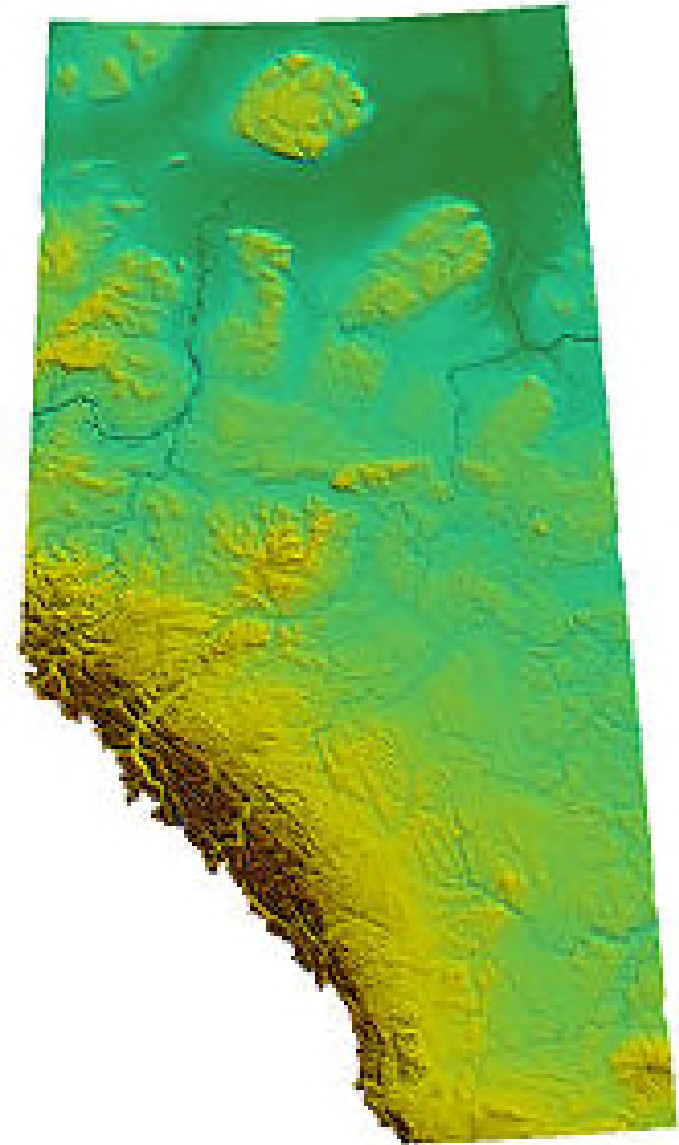
Lewinda Knowles
OHS Surveillance Lead

OHS in Canada: The Province of Alberta's Role



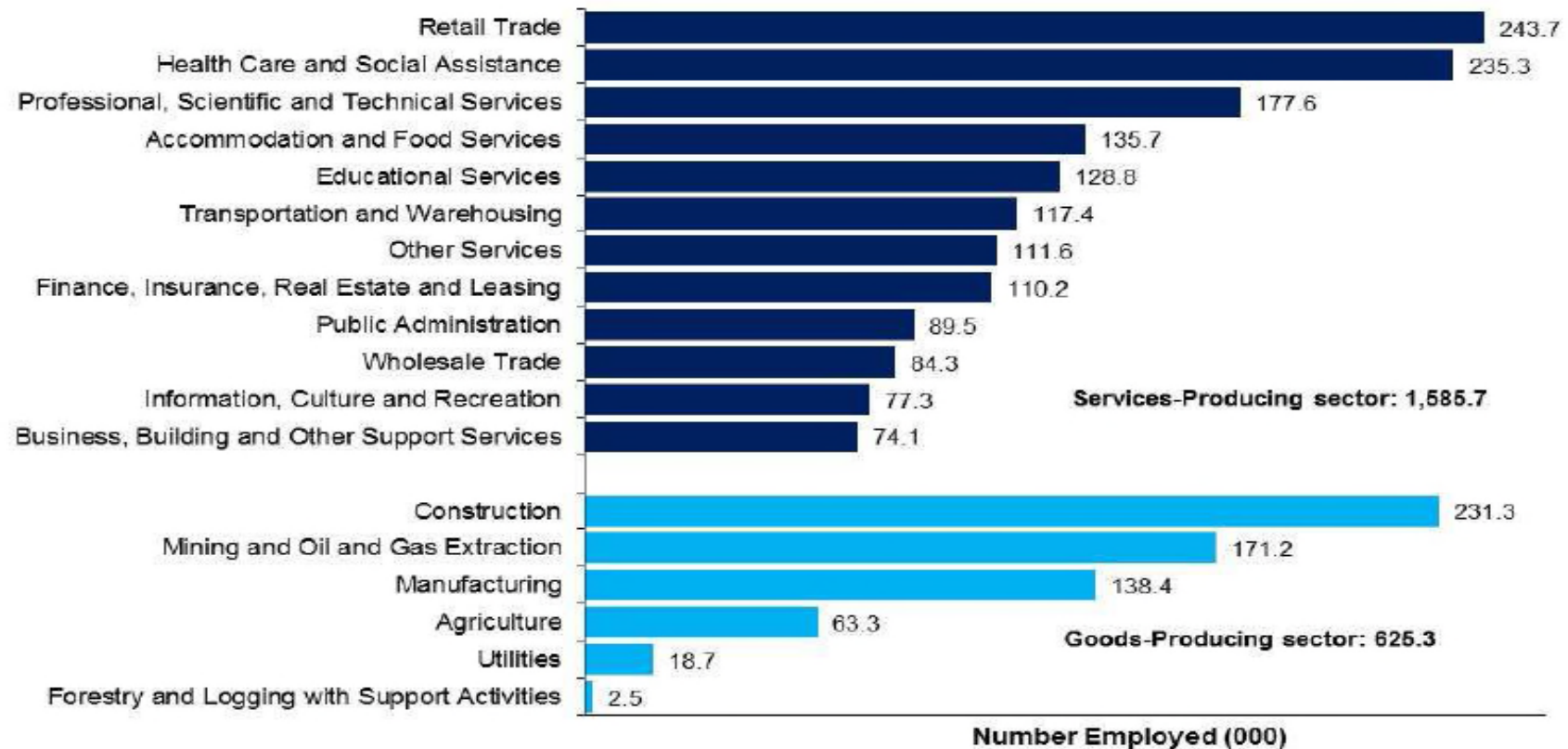
Alberta

- One of the strongest economies in Canada
- 4th largest province in Canada
- Area of 255,000 square miles
 - same size as the state of Texas
 - from the Rocky Mountains to the lush boreal
 - from fertile prairies to desert badlands
- 182,000+ employers
- Employment options are almost endless
 - Labour force = 2.4M people (July 2014)
 - Unemployment rate = 4.7% (July 2014)
 - Work in trades, professional fields and everything in between



Alberta

Employment by Industry, 2013



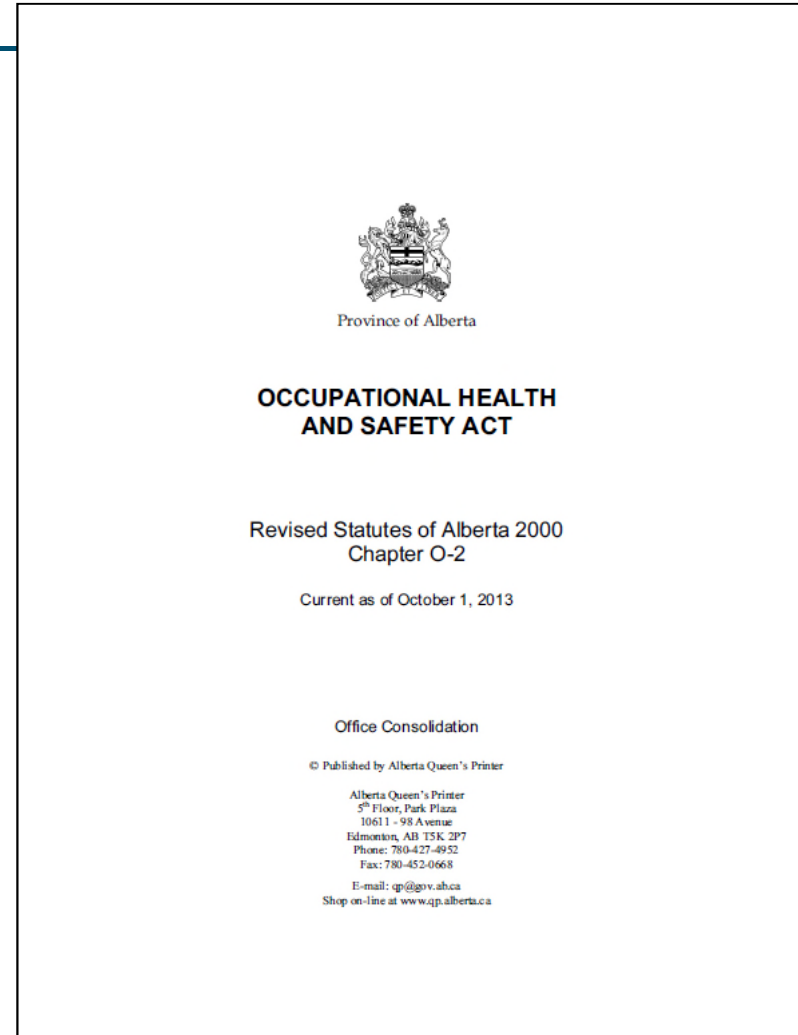
Data Source: Statistics Canada, Labour Force Survey, CANSIM, 2014

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Occupational Health & Safety

- Branch of provincial government
 - Ministry of Jobs, Skills, Training and Labour
- Promote health and safety through partnerships, resources, education and enforcement of the *Occupational Health and Safety Act*
- Focus on prevention of workplace injuries and illnesses

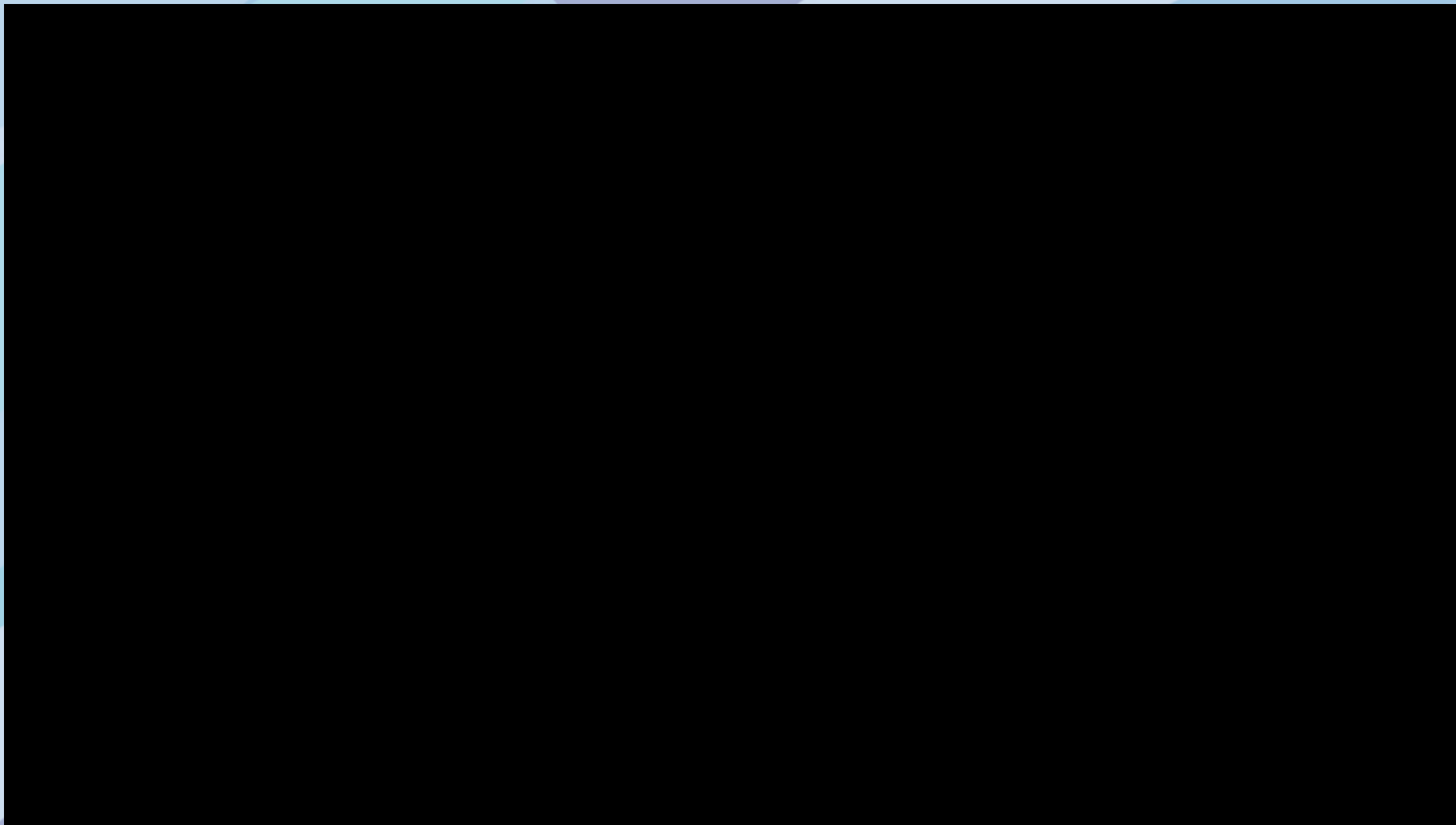


Alberta Worker's Compensation Board (WCB)

- Independent organization
- Insurance program
- Helps injured workers return to work
- Covers approximately 80% of workers in Alberta
 - Excludes: Farming and Ranch, Voluntary/Exempt employers, etc.
- Entirely funded by employer contributions
- Provides claims data to OHS for surveillance and reporting purposes



OHS in Alberta: *Who We Are*



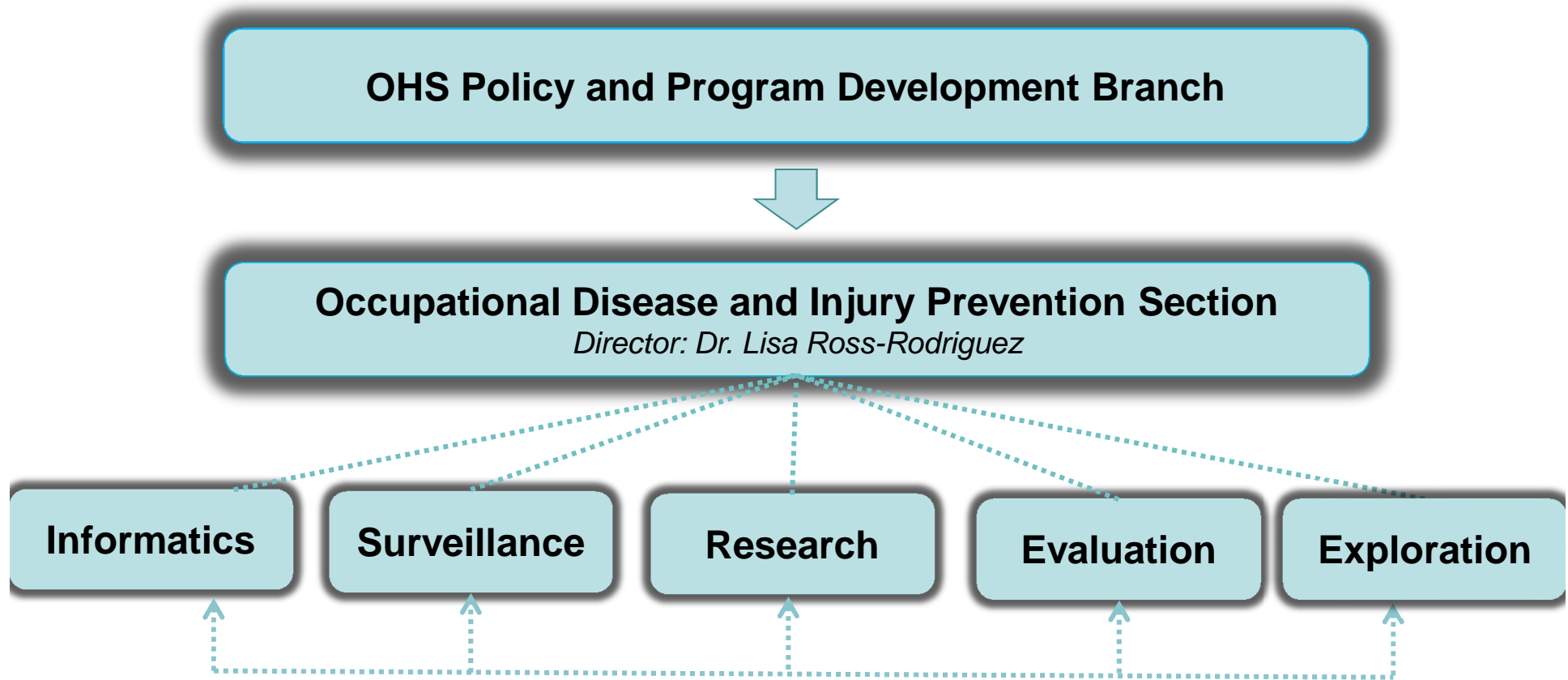
Occupational Health & Safety

- 1. Inspections Program
- 2. Investigations and Mining
- 3. Partnerships in Injury Reduction
- 4. Quality Assurance, Training and Development



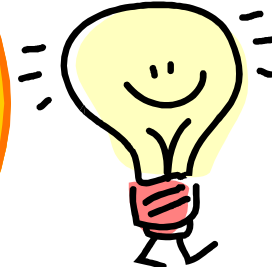
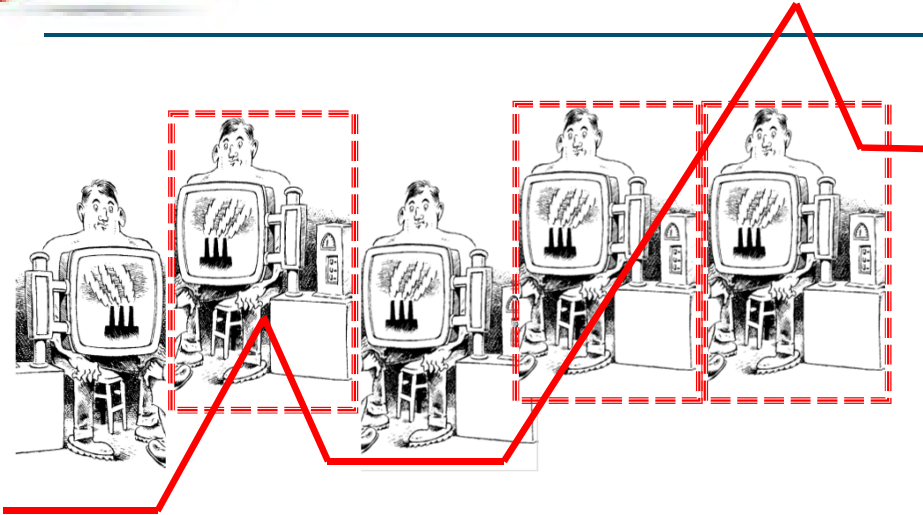
- 1. OHS Policy and Legislation Business Unit
- 2. Innovation and Strategic Priorities Business Unit
- 3. Occupational Disease and Injury Prevention Business Unit

What is the Occupational Disease and Injury Prevention Section?





Work in Progress



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Work-Associated Population Profiles within Emergency Departments (WAPPED)

- Foundational work for further surveillance data considerations
- Purpose is to assess the utility of occupational status information within Emergency Department (ED) Data
- Survey patients waiting in various Alberta hospital EDs, to:
 - Determine the profile of patients who visit Alberta EDs
 - Identify the proportion and characteristics of work-related ED visits
 - Correlate work-related ED visit data with reporting to WCB
- Researchers:
 - Dr. Brian Rowe, Dr. Maria Ospina



Wellness of Workers (WoW)

- Partnered with the International Association of Heat and Frost Insulators and Allied Workers Local 110
 - Investigating relationships between exposures and health outcomes and the impact of *PPE wearing behaviour* on health outcomes
 - Outcomes of interest:
 - heart and lung disease
 - other chronic diseases
- This is a prospective surveillance study
 - Unique sub-population, systematic data collection and strong methodology → expected results will be meaningful
 - ODIP funds the data analysis component
- Researchers:
 - Dr. Lyle Melenka, Dr. Muhammad Naseem and Jennifer Spring



WHAT-ME and WHAT-MEN

Women's Health in Apprenticeship Trades - Metal Workers and Electricians (WHAT-ME)

Worker's Health and Apprenticeship Trades – Metal Workers and Electricians (WHAT-MEN)

- Cohort study to establish whether women in welding trades, or their unborn child, were at risk from exposures to welding fumes and/or metal dust or fumes
 - Follow-up to European findings that indicate maternal exposures *may* reduce fetal growth and paternal exposures *may* increase risk of preterm delivery and small-for-gestational age
 - European study was limited by small # in exposed group²
- Male cohort added to investigate possible effects of working in metalworking and electrical trades in men
- Researchers:
 - Drs. Nicola Cherry & Jeremy Beach (University of Alberta)



Exposure to Nanomaterials

- Little is known regarding the health impacts of nanomaterials; however, there is indication that investigation is warranted
- Develop a sampling and analytical method for occupational hygienists to assess worker's exposure to incidental and engineered nanomaterials (nanoparticles and nanofibres)
- Provide recommendations on the method for measuring exposure to nanomaterials in the workplace
- Researcher:
 - Dr. Bernadette Quémerais
(University of Alberta)



Validating exposure methods to CNTs

- Develop a practical sampling and analytical technique to assess workers' exposure to carbon nanotubes (CNTs)
- Verify if samplers are suitable for the collection and subsequent analysis of these particles
- Test two size specific samplers that are commercially available for the collection of CNTs
- Researcher:
 - Dr. Bernadette Quémerais
(University of Alberta)



OHS Futures - Research Program

- Fund research that will produce information to drive evidence-informed policy decisions for Alberta's workplaces
- Research Priorities
 - Work-related Chemical, Biological and/or Physical Hazards
 - Work-Related Surveillance, Data and Metrics
 - Work-Related Adverse Health Outcomes
 - Work-Related Psychological Hazards and Social Issues
 - Interest Populations and Non-Traditional Stakeholders
 - OHS Innovation and Occupational Disease, Illness and Injury Prevention
- Timeline
 - Applications Due → October 15, 2014
 - Contracts Awarded → December 2014
 - <http://work.alberta.ca/occupational-health-safety/ohs-futures.html>



Exploration? Project Work

- Chemical Elimination, Substitution and Reduction (CESR)
 - Initiative for toxic use reduction in Alberta
 - Tri-Ministry project with:
 - Environmental Sustainability, Research and Development
 - Alberta Health
 - Currently in the scoping phase
 - Mapping current policies to chemical lifecycle profiles
 - To identify gaps and opportunities

- Asbestos Profile
 - Adapted from WHO Asbestos Profile
 - Assists in identifying gaps in information related to policy/legislation, labour, infrastructure, economics and epidemiology

- n-RAHS (Nanomaterial Risk Assessment – Health Surveillance) Pilot Project
 - In collaboration with Alberta Innovates – Technology Futures (AITF)
 - Enhance the current health surveillance system to include early detection of potential health and safety risks related to nanomaterials



Emerging Areas

- Working with WCB Data to improve access to data
- Enhance current business practices
 - Information management
 - Surveillance protocols
 - Info-graphic and dashboards
- Explore registries
 - Workers
 - Exposures
- Actively seeking collaboration opportunities
 - Identification of Work-Related Hospital Visits
 - Access to Vital Statistics Death data
 - Tomorrow Project (cancer cohort)
 - Networking







QUESTIONS?

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