Occupational Disease
MOL Blitz – February to March 2016
Webinar co-hosts

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Housekeeping notes

• Please note the ‘CHAT BOX’ in the top right hand corner of your screen. At any time during the presentation, feel free to type in your questions. Alternatively, you may send an email to philipdirige@workplacesafetynorth.ca. We may answer some questions as we go, but most will be answered after the presentation.

• During the webinar, the phone line is set up so that you’re able to hear us, but we can’t hear you. Please use the chat box for questions or assistance with the webinar.

• This presentation will be available on WSN’s website soon after the webinar. We’ll provide the link after the content of the presentation have been cleared by MOL and WSN.
Agenda

• Introduction and Injury statistics
• Ontario requirements pertaining to occupational disease (Regulation 854, Regulation 833, Regulation 490)
• WSN information and resources
• What Ministry of Labour Mining Health and Safety Inspectors will be looking for during the blitz
• Q&A
The Purpose of the Blitz

• Raise awareness among workers and employers of health and safety issues involving occupational diseases in mines and mining plants.
• Raise awareness of the importance of controlling airborne hazards such as diesel particulate matter (DPM) and silica to health in mines and mining plants.
• Promote healthier workplaces through baseline and routine testing, and control of airborne hazards in mines and mining plants.
• Ensure the workplace parties are complying in general with the OHSA and its regulations.
Ontario Mining Sector

WSIB Allowed Fatal Claims
By Fatal Registration Year: 2005–2014

Year Fatal Registered

Number of WSIB Allowed Claims

Ontario Mining Sector

Allowed Fatal Occupational Disease Claims by Age Group

Fatal Registration Year: 2005–2014

<table>
<thead>
<tr>
<th>Age When Diagnosed</th>
<th>Number of Claims Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>2</td>
</tr>
<tr>
<td>35-44</td>
<td>10</td>
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<tr>
<td>45-54</td>
<td>32</td>
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<tr>
<td>55-64</td>
<td>43</td>
</tr>
<tr>
<td>65-74</td>
<td>49</td>
</tr>
<tr>
<td>75 or older</td>
<td>34</td>
</tr>
</tbody>
</table>

Allowed Fatal Occupational Disease Claims
Registered between 2005–2014

Top 5 Claims

- Lung cancer - 68 (40%)
- Silicosis - 29 (17%)
- Chronic Airways Obstruction - 22 (13%)
- Mesothelioma - 16 (9%)
- Scleroderma - 4 (2%)

Ontario Mining Sector
WSIB Allowed Non-fatal Occupational Disease Claims
Diagnosed between 2005–2014

Ontario Mining Sector

Allowed Non-fatal Occupational Disease Claims
Diagnosed between 2005–2014

Top 5 Claims

• Noise Induced Hearing Loss - 1,395 (63%)
• Hand Arm Vibration Syndrome - 320 (14%)
• Symptoms involving respiratory system - 56 (3%)
• Contact Dermatitis - 46 (2%)
• Symptoms involving head and neck - 39 (2%)

Allowed Occupational Disease Claims
Registered between 2005-2014

**Non-fatal claims - 2,212**
- Noise induced hearing loss - 1,395 (63%)
- Hand-arm vibration syndrome - 320 (14%)

**Fatal claims - 170**
- Lung cancer - 68 (40%)
- Silicosis - 29 (17%)
- Chronic Airway Obstruction - 22 (13%)
Occupational/Industrial Hygiene Program

- Anticipation
- Recognition
- Assessment
- Control
- Compliance to Controls and Auditing
- Record-keeping
- Compliance with Regulations
- Inspections
- Medical surveillance
- Communication
- Training
- Policies and procedures
Occupational/Hygiene Program Categories

Chemical:

- **DUST/FIBRES**: silica, nickel, gypsum, asbestos etc.
  - Example: Silica (or nickel, lead) dust control program

- **FUMES**: diesel, welding, blasting
  - Example: Welding fume control program

- **GASES**: after blast, diesel emissions, strata (CH4, CO, CO2, H2S, SO, SO2, NOX, etc.)
  - Example: Re-entry protocol, diesel emissions control program, etc.

- **MIST, FOGS and VAPOURS**: fuel, solvents

- **SMOKE**: after blast, poorly maintained diesel equipment

- **DPMs**: diesel particulate matters from diesel equipment
  - Example: Diesel emissions control program
Occupational/Hygiene Program Categories

Physical:

• NOISE:
  ▪ Example - Noise abatement program

• RADIATION:
  radon progeny (daughters) in uranium mines and non-uranium mines

• VIBRATION:
  hand-arm vibration syndrome (HAVS), foot-transmitted vibration (FTV), whole body vibration
  ▪ Example - Vibration exposure control program

• MUSCULOSKELETAL DISORDER (MSDs):
  back injuries, sprains and strains, bursitis, tendonitis
  ▪ Ergonomics program

• THERMAL (heat & cold) STRESS
Occupational/Hygiene Program Categories

Biological:

• **INFECTIOUS AGENTS:** viruses, bacteria, fungus
• **BITES, STINGS and TOXINS:** Lyme disease, West Nile
• **ALLERGY and SENSITIZATION:** allergic reaction, breathing from moulds, pollen, insects, etc.)
Pertinent Legislations

Regulation 854

• **Section 12 (3) and (4):** PPEs for the protection of workers and proper fitting of PPEs.
• **Sections 182 and 183:** diesel powered equipment
• **Sections 253 and 254:** mechanical ventilation system and auxiliary mine ventilation in underground mines
• **Sections 257, 258 and 266:** dust control
• **Section 260:** returning to scene of blast
• **Section 286:** air recirculation in underground mines
• **Sections 267, 268 and 269:** survey of hazardous elements and chemical agents, and record keeping
• **Sections 287-293:** radon progeny in non-uranium underground mines

Pertinent Legislations

Occupational Health and Safety Act (OHSA)

• **Section 52 (2) and (3):** employer advised of an occupational illness of a worker or an occupational illness claim of a worker was filed with WSIB.

• **Sections 25, 26, 27 and 28:** duties of all employers, supervisors, and workers

**Regulation 833:** Control of Exposure to Biological or Chemical Agents

**Regulation 490:** Designated Substances

**Regulation 860:** Workplace Hazardous Materials Information System (WHMIS 2015)

**Regulation 381/15:** new noise regulation for industrial establishments, mines and mining plants, and oil and gas - comes into effect on July 1, 2016
Information and Resources

WSN - Workplace Environment Self-Assessment Checklist
http://www.workplacesafetynorth.ca/resources
2015, 70 pp. Free download

WSN - Guideline for Musculoskeletal Disorder (MSD) Prevention PROGRAM
http://www.workplacesafetynorth.ca/resources/t
2015, 6 pp. Free download
Information and Resources

WSN - Auxiliary Mine Ventilation Manual
http://www.workplacesafetynorth.ca/products

WSN - Guideline for Developing a Health and Safety Program Element
http://www.workplacesafetynorth.ca/resources
Information and Resources

• MOL Health and Safety Guidelines:
  - Sampling for Diesel Particulate Matter, required under Section 183.1(5) of Regulation 854. [Link](http://www.labour.gov.on.ca/english/hs/pubs/gl_dparticulate.php)
  - Testing of Undiluted Exhaust required under Section 182.(5) of Regulation 854. [Link](http://www.labour.gov.on.ca/english/hs/pubs/gl_exhaust_testing.php)

• Occupational Safety and Health Administration (OSHA) Industrial Hygiene. [Link](https://www.osha.gov/dte/library/industrial_hygiene/industrial_hygiene.pdf)

Information and Resources

- **WSN - MSD Risk ID & Assessment Tool**

- **SAFE WORK AUSTRALIA - Whole Body Vibration - Fact Sheet**

- **Canadian Centre for Occupational Health and Safety (CCOHS) - Implementing a Chemical Safety Program**

- **CCOHS - WHMIS 2015 Fact Sheets**

- **CCOHS - Musculoskeletal Disorders (MSD) Prevention Manual**

- **CCOHS - Noise Control in Industry: A Basic Guide**

- **CCOHS - Biological Hazards**
  [http://www.ccohs.ca/oshanswers/biol_hazards/](http://www.ccohs.ca/oshanswers/biol_hazards/)
Information and Resources

- CCOHS - Prevention & Control of Hazards [http://www.ccohs.ca/oshanswers/prevention/](http://www.ccohs.ca/oshanswers/prevention/)
Occupational Disease Blitz Mines and Mining Plants

February/March 2016

Workplace Safety North Webinar
January 11th, 2016
Why Is The MOL Doing A Occupational Disease Blitz

• Between 2005 and 2014, 184 workers in the Ontario mining sector died as a result of an occupational disease.

• The Mining Health, Safety, and Prevention Review, completed in 2015, identified occupational disease, particularly those related to airborne hazards, as one of the five key issues that posed the greatest risk to worker health and safety.

• According to WSIB Occupational disease continues to be highest contributor to fatalities and reported illnesses in the workplace.

• To raise the awareness of employers, supervisors and workers about occupational disease so that they better understand the risks associated with exposures to chemical, biological, or physical hazards, and the use proper controls to reduce or eliminate the hazard.
IMPORTANT NOTE RE: Occupational Disease

• For guidance purposes, this presentation references specific sections of Regulation 854 (Mines and Mining Plants) under the Occupational Health and Safety Act (OHSA) to highlight some key focus areas of Ministry of Labour (MOL) inspectors’ activities during this Blitz. It is the employer’s responsibility to be aware of all relevant requirements that are set out under the OHSA and its regulations.

• MOL inspectors may also check for compliance with other requirements under the OHSA and its regulations, such as those in O. Reg. 490/09 (Designated Substances), O. Reg. 833 (Control Of Exposure To Biological Or Chemical Agents), and others related to training, procedures, etc.

• Inspectors will take enforcement action, as appropriate, if they find violations of the OHSA and any of its regulations.
The Occupational Disease Blitz: Mines and Mining Plants

Regulation 854

- Section 12(3)- An employer shall require a worker to wear or use such personal protective equipment, clothing and devices as are necessary to protect the worker from the particular hazard to which the worker may be exposed.

- Section 12(4)- Every worker shall be properly fitted with personal protective clothing or equipment by a competent person or persons.
The Occupational Disease Blitz: Underground

**Regulation 854**

- Sections 183, 183.1 and 183.2 - Deal with ventilation controls and testing in respect of workplaces where diesel powered equipment is operating. (DPM, NO2)

- Sections 253 & 254 - Deal with requirements for mechanical ventilation and auxiliary ventilation systems in underground mines.
The Occupational Disease Blitz: Underground

Regulation 854

• Sections 257, 258, & 266 - Deal with requirements for the availability of water for dust control and the requirement to control dust, as well as to remove dust and other material that is likely to cause a hazard by becoming airborne

• Section 260 - Deals with blasting contaminants

• Section 286 - Deals with requirements for make up air supply (recirculated air)
Blitz focus: Mines and Mining Plants

The Occupational Disease Blitz: Surface Plants and Surface Mines

**Regulation 854**
- Section 266- Requires that dust or other material that is likely to cause a hazard by becoming airborne shall be removed with a minimum of delay

- Sections 267, 268, & 269- Deals with requirements for surveys, assessments, chemical records and records of injury for mining plants

- Section 286- Deals with requirements for make up air supply and recirculated air
Blitz focus: Mines and Mining Plants

The Occupational Disease Blitz: Reporting

• Section 52(2) of the *Occupational Health and Safety Act* (OHSA) requires that if employers are advised by or on behalf of a worker that the worker has an occupational illness or that a claim in respect of an occupational illness has been filed with the Workplace Safety and Insurance Board, by or on behalf of the worker, the employer shall give notice in writing, within four days of being so advised to a director, the committee or health and safety representative and to the trade union, if any, containing such information and particulars as are prescribed.

• Subsection 52(3) provides that subsection (2) applies with all necessary modifications if an employer is advised by or on behalf of a former worker that the worker has or had an occupational illness or that a claim in respect of an occupational illness has been filed with the Workplace Safety and Insurance Board by or on behalf of the worker.

• For mines and mining plants, the content of the notice required under section 52 of the OHSA is set out in subsection 21(2) of Regulation 854.
Blitz focus: Mines and Mining Plants

The Occupational Disease Blitz: Mines and Mining Plants

• Regulation 833- Requires the control of exposure of workers to biological or chemical agents;
  o sets out occupational exposure limits (OELs) and requires that employers reduce risks of these hazards using a hierarchy of controls
• Regulation 490- Sets out requirements for certain designated substances;
  o including employer requirements to prevent workers exposure to these substances and to provide information related to training and control of these hazards
The Occupational Disease Blitz: Mines and Mining Plants

- Regulation 860- Sets out requirements for labels, safety data sheets and worker education on hazardous materials.
  - Worker education includes instruction on safe use, storage, handling and disposal of a hazardous material, and emergency procedure

The Occupational Disease Blitz: Mines and Mining Plants

Additional Duties for Employers, Supervisors and Workers

- Sections 25, 26, 27, 28 of the OHSA set out the general duties of all employers, supervisors, and workers, including those related to provision of information and instruction, use of personal protection equipment (PPE), etc.
What’s New: Noise

• A new Noise Regulation (O. Reg. 381/15) under the Occupational Health and Safety Act (OHSA) has been approved and comes into effect on July 1, 2016.

• This regulation will help protect Ontario's workers from noise-induced hearing loss, a leading cause of occupational disease for Ontario workers.

• O. Reg. 381/15 replaces the noise protection requirements set out in the regulations for Industrial Establishments, Mines and Mining Plants, and Oil and Gas-Offshore and extends the same noise protection requirements to all workplaces under OHSA.

• Examples of new workplaces affected by this regulation include construction projects, health care facilities, schools, farming operations, fire services, police services and amusement parks.

• For more information on the new regulation, please visit the Source Law section of the e-Laws website: https://www.ontario.ca/laws/regulation/r15381
What’s New: WHMIS 2015

• WHMIS is changing to adopt new international standards for classifying hazardous chemicals and providing information on labels and safety data sheets.

• These new international standards are part of the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS) and are being phased in across Canada between February 2015 and December 2018.

• In Ontario, the necessary amendments to the Occupational Health and Safety Act (OHSA) have been made now that Bill 85 has passed and received Royal Assent. The OHSA amendments come into effect on a date to be determined.

• The Ministry is now moving forward with proposed amendments to Regulation 860 (WHMIS).
Disclaimer

This material has been prepared to assist the workplace parties in understanding their obligations under the OHSA and the regulations. It is not intended to replace the OHSA or the regulations and reference should always be made to the official version of the legislation.

While this material may also be available to Ministry of Labour inspectors, they will apply and enforce the OHSA and its regulations based on the facts as they may find them in the workplace. This material does not affect their enforcement discretion in any way.
Questions?

Please use the CHAT BOX in the top right hand corner of your screen or send an e-mail to philipdirige@workplacesafetynorth.ca

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http://www.workplacesafetynorth.ca/resources/mol-blitz-occupational-disease