



Occupational Disease: Incidence and Prevention

Occ tober 2015

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creod

Centre for
Research Expertise
in Occupational Disease

Research that makes a Difference



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Overview

- Brief description of the Ontario Occupational Disease Strategy Framework
- Occupational Disease Incidence and Prevention



Ontario Occupational Disease Strategy Framework

- WSIB Prevention created working group
- Working group produced report
- OHCOW supported the initial development of detailed plans for specific diseases
- OHCOW supported the update of the detailed plans over the past year



THE ONTARIO OCCUPATIONAL DISEASE STRATEGY FRAMEWORK

(October 27, 2010)

Occupational Disease Prevention Committee

Chairs:

Alec Farquhar, Managing Director
Occupational Health Clinics for Ontario Workers

Dr. Loris Molino, Director
Occupational Health and Safety, Vale Inco

Committee members:

Ric Demeulles, General Manager
Workplace Safety North

Renu Kulendran, Director
Occupational Health and Safety Branch, Ministry of Labour

Dr. Linn Holness, Director
*Centre for Research Expertise in Occupational Diseases (CREOD)
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Alice Peter, Director
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Administrative Support:

Sandra Villani, Prevention Collaboration Specialist
System Collaboration, WSIB

Research Assistance:

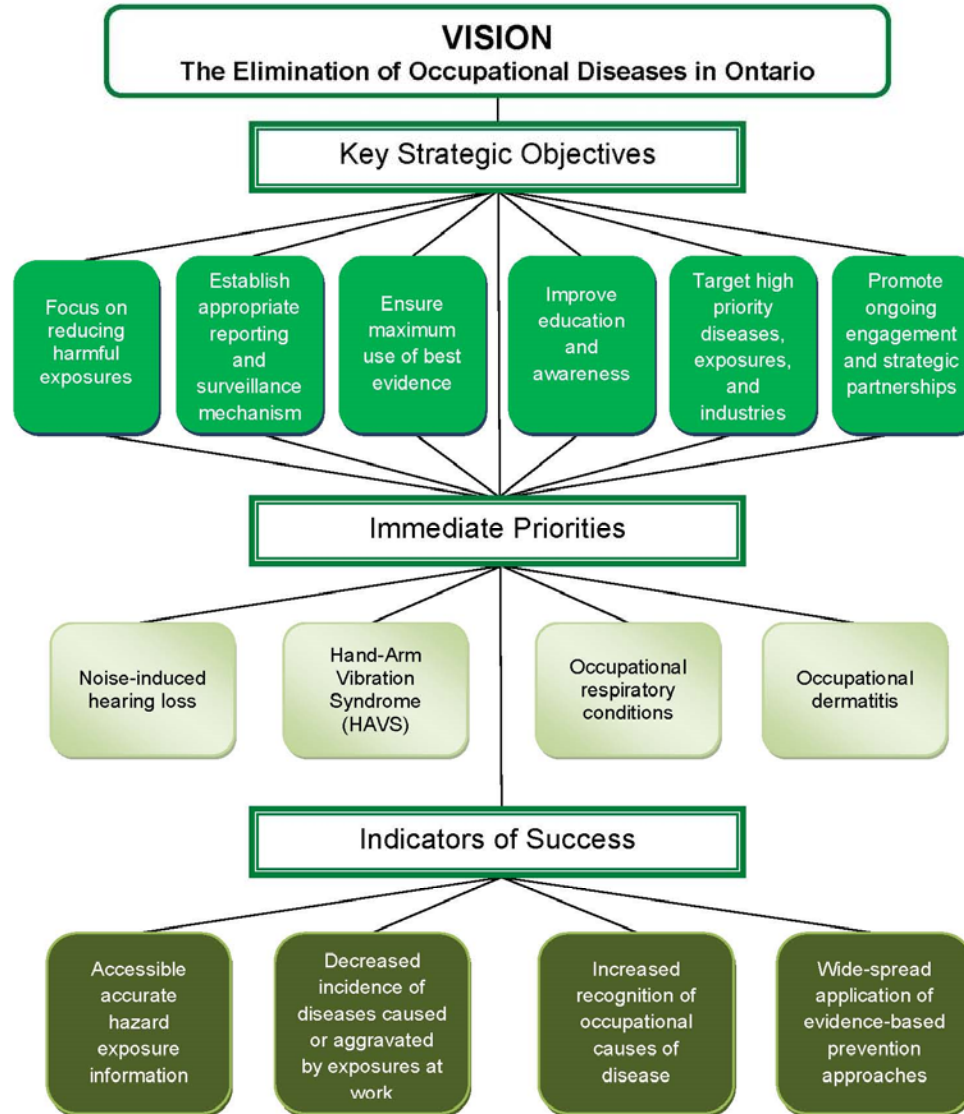
Chamilla Adhietty, Sr Scientist
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The Ontario Occupational Disease Strategy Framework





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Occupational Skin Disease

- What is it OSD
 - Contact dermatitis
 - Skin cancers
 - Additional skin diseases

Contact Dermatitis

- Irritant contact dermatitis
 - 75% of contact dermatitis





Irritant Contact Dermatitis

- Causes
 - Wet work
 - >2 hr glove use or skin in water/fluids
 - Cleansers, detergents
 - Alkalis, acids
 - Oils, greases, cutting fluids
 - Solvents
 - Plants, animals
 - Fibre glass

Contact Dermatitis

- Allergic contact dermatitis
 - 25% of contact dermatitis





Allergic contact dermatitis

- Causes
 - Rubber components
 - Preservatives – biocides, cleaners
 - Metals – chromium
 - Resins
 - Epoxy
 - Acrylates
 - Formaldehyde



OCD – incidence and prevalence

- Under-recognition and under-reporting
- Europe
 - Usually most common OD – 34%
 - 5.7-101 cases per 100,000 workers
- US
 - Bureau of Labor Statistics
 - Occ illness – 17% skin disease, 12% hearing loss, 8.5% respiratory conditions



OCD – incidence and prevalence

- Workplace based studies
- Hairdressing – 35%-45% prevalence
Health care – 20%-25%
 - Student nurses – 23%, 25% and 31% in 1st, 2nd, and 3rd years of training
 - Ontario – 72% of healthcare workers had changes consistent with hand dermatitis, 13% with moderate to severe changes



OCD – incidence and prevalence

- Ontario - WSIB
- 2008-2012 in health care sector
- 400 (LT + NLT) claims
 - Approximately 80 claims per year



OCD – incidence and prevalence

- The numbers disconnect
 - Assumptions
 - Health care literature - prevalence – 25%
 - Health care Ontario – prevalence – 13% mod-sev
 - Assume 50% related to work – 6.5% - 12.5%
 - 150,000 nurses registered with CNO
 - Assume 2/3 are working – 100,000
 - Approx 6,500 to 12,500 cases
 - WSIB stats – approx 80 claims per year



OCD – burden

- Clinical burden – ongoing disease
- Functional burden – decreased hand function
- Quality of life
- Work – job change or loss



OCD – prevention - framework

- **Focus on reducing harmful exposures**
 - Elimination or substitution
 - Powder free non-latex gloves
 - Removal of chromate from cement
 - Elimination of aldehyde disinfectants
 - Technical measures
 - No-touch techniques
 - PPE
 - Potential cause



OCD – prevention - framework

- **Focus on reducing harmful exposures**
 - Administrative
 - Time restriction and task rotation
 - Skin protection/skin care
 - Cleansers, moisturizing creams
 - Education and Training
 - Enforcement



OCD – prevention - framework

- **Focus on reducing harmful exposures**

- *Short term strategies*

- Review NIOSH skin notation
- Review programs in place in other jurisdictions
- Review regulations in place in other jurisdictions
- Collect and review available resources

- *Medium term strategies*

- Deliver educational materials to HSAs
- Deliver educational materials to MoL inspectors

- *Low term strategies*

- If NIOSH skin notations useful, implement in Ont



OCD – prevention - framework

- **Establish appropriate reporting and surveillance mechanisms**
 - Early identification, diagnosis and appropriate management is key factor in improving outcomes



OCD – prevention - framework

- **Establish appropriate reporting and surveillance mechanisms**
 - *Short term strategies*
 - Collect and review available surveillance/screening tools
 - Review experience in other countries
 - Continue SMH patch test database



OCD – prevention - framework

- **Establish appropriate reporting and surveillance mechanisms**
 - *Medium term strategies*
 - Develop a tool to assess exposure to wet work in targeted sectors
 - Based on results of CREOD screening study, consider implementation of screening in high risk sectors
 - Continue SMH patch test database



OCD – prevention - framework

- **Establish appropriate reporting and surveillance mechanisms**
 - *Long term strategies*
 - Convene process to consider use of surveillance and screening
 - Consider expansion of CAREX
 - Continue SMH patch test database – trend information on contact allergens and causative agents



OCD – prevention - framework

- **Ensure maximum use of best evidence**
- Rich literature from Europe related to programs
- Growing evidence from Ontario on prevention



OCD – prevention - framework

- **Ensure maximum use of best evidence**

- *Short term strategies*

- Continue to grow linkages between system partners
- Continue to support research in area
- Develop or refine educational tools for use in specific sectors
- Continue to work with provincial medical schools (Champion Program)
- Work with OHS training programs

- *Medium and long term strategies*

- Work with MoHLTC – occ history in EMR  Research that makes a Difference



OCD – prevention - framework

- **Improve education and awareness**
- Awareness low
- Campaigns in Europe to raise awareness
- Germany, UK, Australia – wet work GL
 - Short term strategies
 - Targeted marketing to sectors at high risk
 - Encourage OHS professional CE
 - Review models in other jurisdictions



OCD – prevention - framework

- **Improve education and awareness**
 - Medium term strategies
 - Review approach to dermal exposure assessment used by MoL
 - Revise legislation to more clearly define dermal exposures
 - Long term strategies
 - Develop “prevention of wet work guideline”



OCD – prevention - framework

- **Target high priority diseases, exposures and industries**
- OCD – common
- Exposure – wet work
- Sectors: services, health, manufacturing, construction



OCD – prevention - framework

- **Target high priority diseases, exposures and industries**
 - *Short term strategies*
 - HSAs focus education campaigns and training programs on targeted high risk industries
 - *Medium and long term strategies*
 - Wet work focus on MoL enforcement blitz in high risk industries



OCD – prevention - framework

- **Promote ongoing engagement and strategic partnerships**
 - *Short term strategies*
 - Working group of key stakeholders
 - *Medium term strategies*
 - WG address legislative initiatives addressing hazard of wet work
 - *Long term strategies*
 - If wet work GL created, WG address educational programs



- Common OD often caused by common exposures
- Strategy developed and is, in part, being implemented
- CREOD – Skin Health Tool Box
- Continue to grow partnerships
 - Strategic level
 - Working level



- creod.on.ca/occupational-skin-disease/skin-health-toolbox/