

Diagnosis and Management of Work Related Injuries and Illnesses

Vincent Spilchuk, MD, FRCPC

October 1, 2021

Faculty/Presenter Disclosure

- **Faculty:** Vincent Spilchuk
- **Relationships with financial sponsors:**
 - **Grants/Research Support:** None
 - **Speakers Bureau/Honoraria:** None
 - **Consulting Fees:** Occupational medicine consultant at Trillium Health Partners and Public Health Ontario
 - **Patents:** None
 - **Other:** None

Disclosure of Financial Support

- This program has received financial support from the WSIB in the form of an educational grant.
- **Potential for conflict(s) of interest:**
 - None.

Mitigating Potential Bias

- The information presented in this program is based on recent information that is explicitly “evidence-based”.
- This Program and its material is peer reviewed and all the recommendations involving clinical medicine are based on evidence that is accepted within the profession; and all scientific research referred to, reported, or used in this CME/CPD activity in support or justification of patient care recommendations conforms to the generally accepted standards

Learning Objectives

By the end of this session, participants will be able to:

1. Define occupational illness and occupational injury
2. Evaluate a patient for a suspected occupational or environmental illness/injury
3. Outline a return to work plan

Introduction

Why is assessment of occupational illness or disease important?

Zoom poll

Question: Approximately what proportion of adult-onset asthma is due to occupation?

1. 1%
2. 5%
3. 15%
4. 30%

Introduction

Why is assessment of occupational illness or disease important?

Zoom poll

Question: Approximately what proportion of adult-onset asthma is due to occupation?

Answer:

1. 1%
2. 5%
- 3. 15%**
4. 30%

Introduction

Why is assessment of occupational illness or disease important?

- 10-25% of adult onset asthma is occupational
- Up to 8% of all cancer is occupational
 - >90% of mesothelioma
 - 43% sinonasal/nasopharyngeal
 - 19% bladder
 - 13% lung
- The most common cause of hand eczema is from occupational irritants

Introduction

- There is likely significant underreporting of occupational injury/illness/disease/death in Canada

Work-related injuries, illnesses and death are alarmingly underreported

April 26, 2013 [Statistics and Trends](#)



[Go to News Index](#) ▶



To make the case for prevention many will cite compensation statistics as they observe the Day of Mourning on April 28. However, it is important to remember these statistics represent only a fraction of the actual number of workers hurt on the job in any given year. Thousands of injuries, illnesses and deaths go unreported by employers, supervisors or workers even though reporting is mandated by law.

According to a U.S. government report entitled *Hidden Tragedy: Underreporting of Workplace Injuries and Illnesses*, as much as 69 per cent of occupational injuries and illnesses are not reported or recorded.

Here in Canada, a survey of union members by University of Windsor labour studies director, Alan Hall, found 34 per cent of injuries alone went unreported. Looking specifically on the type of injuries that weren't reported the survey showed 27 per cent of all workers surveyed suffered a "major back injury"—with almost one-third of these not reported. Other Canadian researchers have observed upwards of 50 per cent of workplace injuries unaccounted for.

Background: Terminology

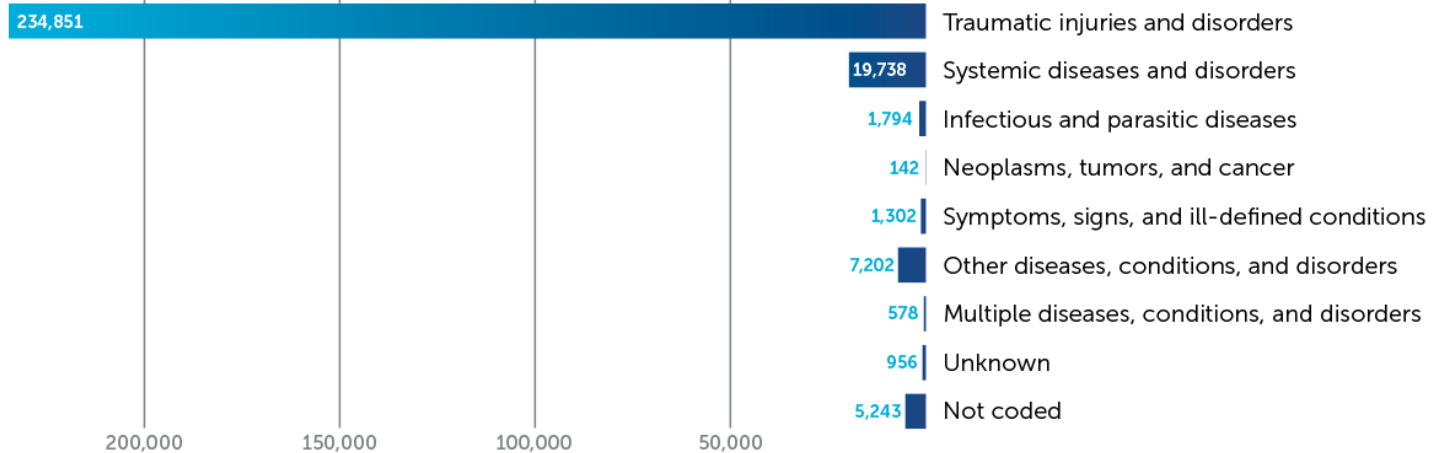
- Injury: Traumatic event causing acute tissue damage/disruption that, with a typical course, will heal/resolve (e.g. sprain, strain, fracture, laceration, contusion)
- Disease/Illness: Acute or chronic medical condition arising from an exposure that may/may not resolve (e.g. asthma, dermatitis, PTSD, cancer, HIV)

Injury versus Disease

2019 Lost Time Claims in Canada

CANADA TOTAL: 271,806

BY NATURE OF INJURY OR DISEASE



Need more
information?



MORE

Each category above can be broken down into further detail. If interested,
[Request Customized Lost Time Injury, Disease and Fatality Data.](#)

Association of Workers' Compensation Boards of Canada (AWCBC). Statistics; National Work Injury/Disease Statistics Program (NWISP). [Internet]. AWCBC. Accessed July 16, 2021. Available from: <https://awcbc.org/en/statistics/>.

Approach to assessment of occupational injury and disease/illness

A comprehensive medical assessment should include:

1. Past medical history, medications, allergies, social history (relevant to the issue at hand)
2. History of presenting illness
3. Occupational history – job title, tasks, hours, exposures, hazard controls, Personal Protective Equipment (PPE), Safety Data Sheets (SDS)
4. Environmental history – home, cohabitants, neighborhood, hobbies, habits
5. Physical exam, investigations, as per the complaint

Approach to assessment of occupational injury and disease/illness

A comprehensive medical assessment should include:

1. Past medical history, medications, allergies, social history
2. History of presenting illness
3. Occupational history – job title, tasks, hours, exposures, hazard controls, PPE, SDS
4. Environmental history – home, cohabitants, neighborhood, hobbies, habits
5. Physical exam, investigations, as per the complaint

Approach to assessment of occupational injury and disease/illness

A comprehensive medical assessment should include:

Occupational history – Exposures, which are potentially hazardous

Hazard framework:

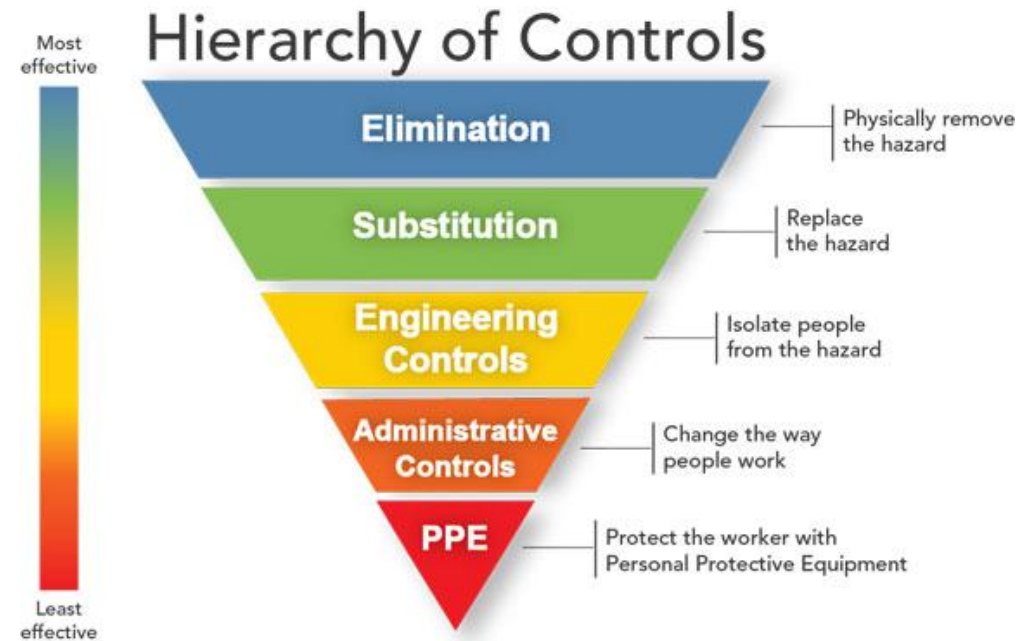
1. Physical
2. Chemical
3. Biological
4. Psychological
5. Ergonomic

Approach to assessment of occupational injury and disease/illness

A comprehensive medical assessment should include:

Occupational history –

Hazards controls framework:



Approach to assessment of occupational injury and disease/illness



Occupational &
Environmental Medicine

Diagnosis/attribution of an occupational illness or injury should include:

- A clear exposure that preceded the illness/injury
- A plausible temporal relationship between exposure and outcome
- The exposure is known to cause the outcome in question
- Other causes have been ruled out or deemed less likely

Approach to assessment of occupational injury and disease/illness



Occupational &
Environmental Medicine

Supportive features:

- Co-workers with similar outcome
- Improvement with cessation of exposure
- Prior symptoms with similar exposures
- No other apparent cause

Why is it important to rule out other (non-occupational) causes?

- Because for many, if not most common occupational exposures that cause illness, cessation of exposure is the main intervention.
- If a diagnosis is erroneously assumed to be occupational, other (reversible, treatable) causes could be missed.

Approach to Management of Occupational Illness or Disease

...It depends!

Basic/broad approach:

- Tertiary prevention:
 - Treatment of the illness/injury
 - Assess if there is a risk for ongoing or re-exposure, and if so, define limitations and/or restrictions
 - WSIB claim
- Secondary prevention:
 - Ongoing monitoring/follow up after return to work to ensure no further exacerbation
- Primary prevention:
 - Reduce or eliminate the hazard

Tertiary prevention

1. Treatment/referral as appropriate
2. Return to work (RTW):
 - As early as possible, if possible
 - Define limitations and/or restrictions
 - Limitations (functional limitations that arise from impairments imposed by the medical condition / injury) e.g. what someone is not capable of doing even if they wanted to
 - Restrictions (medically contraindicated)
3. WSIB claim – Form 6 (patient) & 8 (health care provider)

Tertiary prevention – Return to Work (RTW)



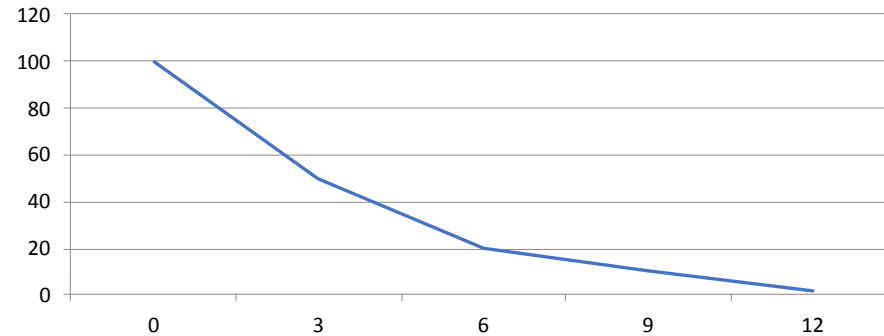
Occupational &
Environmental Medicine

Return to work – why is it important?

- Health risks of worklessness
- Economic burden
- Societal burden
- Psychosocial implications
- Therapeutic potential of work

Tertiary prevention - RTW

% Chance of RTW



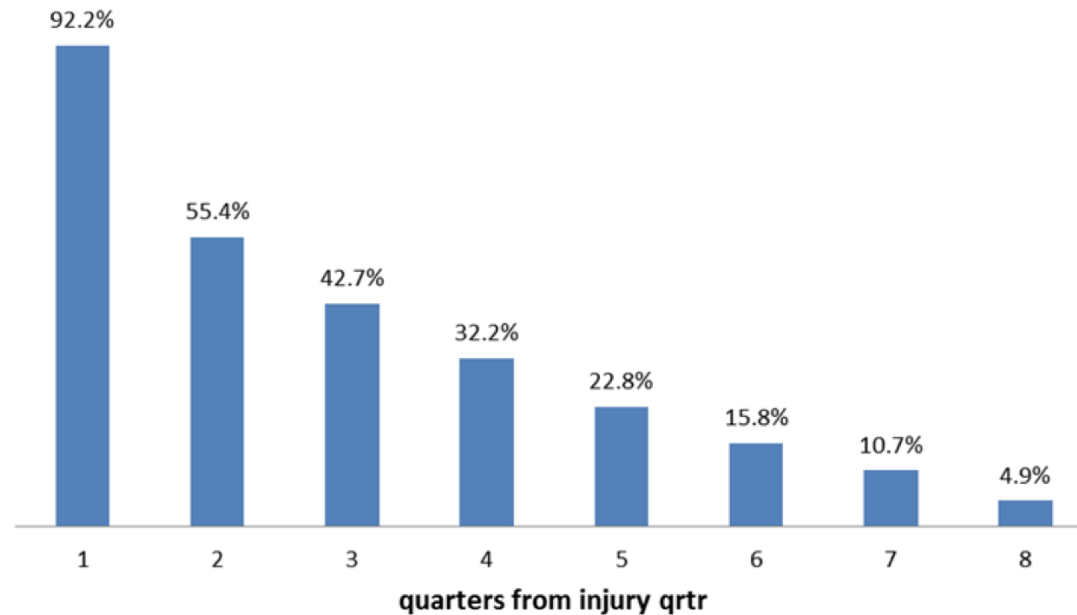
Time = Months

3 Months – 50% chance RTW
12 months – 2% chance RTW

IAIABC Disability Management and Return to Work Committee. Return to work: a foundational approach to return to function. International Association of Industrial Accident Boards and Commissions. April 19, 2016. Available from: https://www.wcbsask.com/wp-content/uploads/2013/10/Return-to-Work_Foundational-Approach-to-Return-to-Function_Final.pdf.

Tertiary prevention - RTW

Figure 1. Probability of returning to work in 8 quarter period if not returned in prior quarter



Source: *Washington State Department of Labor and Industries*

Tertiary prevention - RTW

Question 1: Could the disease/illness affect ability to work?

- Be mindful of “Safety Sensitive Work” (SSW; work where any brief incapacitation could result in loss of life or damage, e.g. commercial driving, pilots, law enforcement, health care, etc.)
- The Canadian Medical Association Driver’s Guide can be helpful!

Question 2: Could work worsen/exacerbate the disease/illness?

- Limitations and restrictions come into play here

Question 3: When can they RTW?

- Early is best, with modified duties and/or hours as needed to support recovery

Question 4: Are there compensation issues?

- Can be dealt with in tandem with RTW

Tertiary prevention - RTW

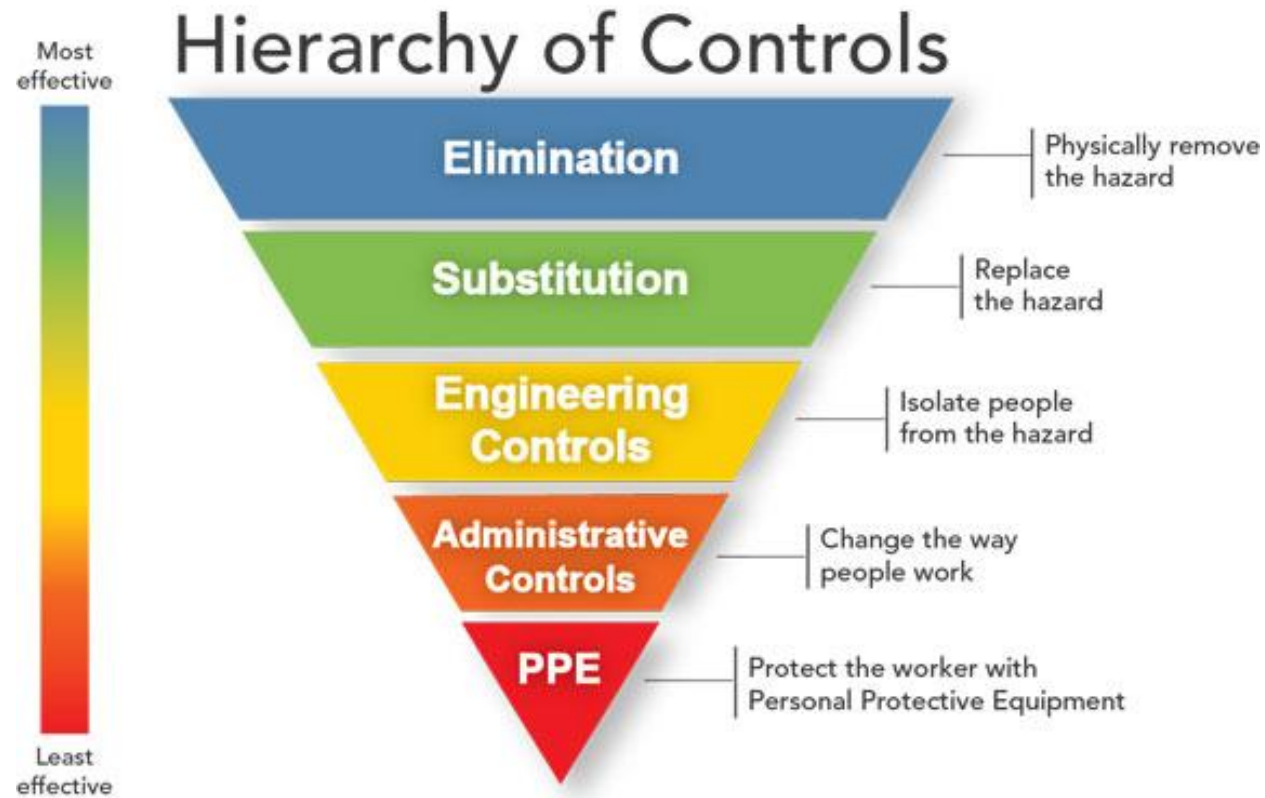
RTW “Prescription”

1. Identify the nature of the diagnosis, restrictions and/or limitations, and anticipated durations
 - Specify if temporary, permanent, or unclear, with follow-up schedule to guide
 - With the possible exception of SSW, do not specify what jobs they can or can't do – stay in your lane
 - May consider graduated RTW if physical/cognitive capacity an issue
 - May be dynamic e.g. periodic RA or IBD flares
2. Where available, use evidence-based guidelines (MD Guidelines) to anticipate prognosis and full RTW
 - Normative based, but can provide context/predict timelines
3. Ensure privacy (no medical details without patient consent)
 - Letters to employers need only specify that a medical diagnosis is present that will impact the worker's ability to do a, b, c, for x duration
4. Enlist team members – Patient, family, physician(s), employer/supervisors, HR, Return to work specialist, possibly others

Secondary prevention

- Ongoing monitoring/follow up after return to work to ensure no further exacerbation/worsening

Primary prevention



<https://www.cdc.gov/niosh/topics/hierarchy/default.html>

Questions/Discussion



Occupational &
Environmental Medicine

Thanks!



Occupational &
Environmental Medicine