SOLUTIONS FOR IMPROVING MENTAL HEALTH IN THE WORKPLACE

Presented by

Len Hong
President & CEO

Alberta Health and Safety Conference and Trade Fair

October 28th, 2009

CCOHS · CCHST

Canadian Centre for Occupational Health and Safety · Centre canadien d'hygiène et de sécurité au travail

www.ccohs.ca

Improving Mental Health in the Workplace

Ideas and solutions have been researched and collated from a number of global and Canadian research, analysis and publications.

Len Hong, PCEO
HongL@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   **Canadian Centre for Occupational Health and Safety**

Improving Mental Health in the Workplace

The content presented today is drawn from publications such as:

* Organizational Interventions and Mental Health in the Workplace: A Synthesis of International Approaches by Dr Steve Harvey et al
  http://www.irsst.qc.ca/files/documents/PubIRSST/R-480.pdf
* Mental Health Strategy – Mental Health Commission of Canada
  http://www.mentalhealthcommission.ca/English/Pages/Strategy.aspx
* Pity Your Bosses – You Make Them sick
  http://www.healthzone.ca/health/newsfeatures/research/article/712794--pity-your-bosses-you-make-them-sick

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

Improving Mental Health in the Workplace

- Speaking Notes – The Honourable Michael Kirby, Chair, Mental Health Commission of Canada – May 4, 2009, Calgary Chamber of Commerce, http://www.mentalhealthcommission.ca/SiteCollectionDocuments/Key_Documents/Calgary%20Speaking%20%20Notes%20-%20Chamber%20May%204th%20v1%20_2_.pdf

  and,

- A Presentation to the House of Commons Standing Committee on Human Resources, Social Development and the Status of Persons with Disabilities, April 30, 2009

  http://www.mentalhealthcommission.ca/SiteCollectionDocuments/Key_Documents/en/2009/Presentation%20to%20the%20House%20of%20Commons%20April%2030.pdf

- Everybody Hurts in a Social Recession – Globe and Mail, August 26, 2009

  http://www.theglobeandmail.com/news/opinions/everybody-hurts-in-a-social-recession/article1264249/

Len Hong, PCEO
HongI@ccohs.ca
1-800-668-4284   **www.ccohs.ca**

CCOHS   **Canadian Centre for Occupational Health and Safety**

Improving Mental Health in the Workplace

- Depression and Work function: Bridging the Gap Between Mental Health Care and the Workplace

  http://www.comh.ca/publications/resources/dwf/Work_Depression.pdf

- The Daily Essentials of Workplace Mental Health – An Occupational Therapy Guide – Canadian Association of Occupational Therapists

  http://www.caot.ca/pdfs/daily%20essentials.pdf

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

Improving Mental Health in the Workplace

- Management Standards for Work-Related Stress; United Kingdom Health and Safety Executive
  http://www.hse.gov.uk/stress/standards/index.htm

- European Risk Observatory Report – OSH in figures: Stress at Work – facts and figures
  http://osha.europa.eu/en/publications/reports/TE-81-08-478-EN-C_OSH_in_figures_stress_at_work

- OSHAnswers: Canadian Centre for Occupational Health and Safety
  http://www.ccohs.ca/oshanswers/psychosocial/stress.html

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca
CCOHS   Canadian Centre for Occupational Health and Safety

Improving Mental Health in the Workplace

Some of the content of this presentation has been extracted directly from parts of the referenced documents.

You are encouraged to obtain these documents from their internet sites.

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   **Canadian Centre for Occupational Health and Safety**

Scope of this Presentation

1) Some of the Major considerations for Improving Mental Health in the Workplace
2) Evidence for Successful Workplace Mental Health
3) Types of Interventions for Workplace Mental Health
4) Management Standards for Work- Related Stress
5) Conclusions

Len Hong, PCEO
HongI@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

THE CANADIAN CENTRE FOR OCCUPATIONAL HEALTH AND SAFETY - CCOHS

Mandate: CCOHS promotes the total well-being – physical, psychosocial and mental health – of working people

Governance: Tripartite support from a Council of Governors representing Governments, Workers and Employers of Canada

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS **Canadian Centre for Occupational Health and Safety**

THE CANADIAN CENTRE FOR OCCUPATIONAL HEALTH AND SAFETY - CCOHS

Approach to Improving Occupational Health and Safety: Use of best-evidence derived from national and international research and initiatives to assist the promotion and implementation of knowledge and practices that are effective in improving OHS

Location: Hamilton, Ontario as an independent departmental corporation of the Government of Canada

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

WHY MENTAL HEALTH IN THE WORKPLACE MATTERS

Many people face mental health problems during their prime working years:

- Depression will rank second only to heart disease as the leading cause of disability worldwide by the year 2020
- Disability represents anywhere from 4% to 12% of payroll costs in Canada; mental health claims (especially depression) have overtaken cardiovascular disease as the fastest growing category of disability costs in Canada
- In Great Britain, stress-related sickness absences from work cost an estimated £4 Billion annually
- Stress, burnout and physical or mental health issues are the main issues limiting productivity in Canada, Canadian CEOs say

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

WHY MENTAL HEALTH IN THE WORKPLACE MATTERS

The Canadian economy loses billions to mental health problems:

- In 1998, Health Canada conservatively estimated that the economic burden of mental health problems was $14.4billion a year. More recent calculations, which include indirect costs, suggest that upwards of $30billion are lost to the Canadian economy annually due to mental health and addiction problems

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

WHY MENTAL HEALTH IN THE WORKPLACE MATTERS

High stress levels and mental health problems can cause other health conditions

- For example, excessive stress has been linked to infectious disease and cardiovascular problems, higher incidence of back pain, repetitive strain injuries (RSIs), colorectal cancer
- Stress on the job can double the risk of heart attack
- Employees at three major American companies who displayed chronic symptoms of depression were twice as likely to miss work due to health reasons, and seven times as likely to report missed workdays at the time of the follow-up survey

Len Hong, PCEO
HongL@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS **Canadian Centre for Occupational Health and Safety**

WHY MENTAL HEALTH IN THE WORKPLACE MATTERS

Early identification and treatment can be important to successful recovery:

- ▶ When a person experiences a mental health problem and they obtain treatment in the first few months of their illness, early recovery is more likely; early detection and treatment also reduce the likelihood that the mental health problem will become chronic
- ▶ When short-term disability becomes long-term, there is a lesser chance that the person will be able to return to previous levels of proficiency

Stigma and discrimination can discourage people from seeking help:

- In response to societal stigma and negative stereotypes about mental illness, people often conceal symptoms and fail to seek treatment

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   **www.ccohs.ca**

CCOHS   **Canadian Centre for Occupational Health and Safety**

WHY MENTAL HEALTH IN THE WORKPLACE MATTERS

Accommodating mental health problems at work makes good business sense:

- The costs for providing accommodations are fairly low; most cost well under $500

- For those who get access to treatment, the employer could save between $5,000 to $10,000 per employee per year in the cost of prescription drugs, sick leave, and average wage replacement

- Employees who are diagnosed with depression and take appropriate medication will save their employer an average 11 days a year in prevented absenteeism

Len Hong, PCEO
HongI@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS **Canadian Centre for Occupational Health and Safety**

WHY MENTAL HEALTH IN THE WORKPLACE MATTERS

Promoting mental health benefits workers and organizations:

- In the United States, psychiatric hospital admissions of Chrysler employees actually went down 12% one year over another, and their length of stay in mental hospitals dropped 22%, due to that company's efforts to achieve higher rates of earlier detection through better psychiatric health benefit programs and greater success in matching diagnosis and treatment methods

- 57% of graduating business students around the world rate maintaining a balance between work and personal life as their primary career goal and a key to choosing their first employer. Most believe a career and personal goals can be developed in tandem, and say a working schedule that allows them to see family and friends on a predictable basis is key to work-life balance

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS **Canadian Centre for Occupational Health and Safety**

WHY MENTAL HEALTH IN THE WORKPLACE MATTERS

Promoting mental health benefits workers and organizations:
- Husky Injection Molding systems in Bolton, Ontario estimates it has saved $8million in reduced absenteeism, higher productivity, and better use of resources, from a $4million investment in employee well-being and a healthy workplace environment, With programs such as an on-site parent resource centre and extended benefits:
    - ▸ Absenteeism rates in 1999 were 2.25 days per Husky employee per year, compared to the Canadian average of 5.7 days per year
    - ▸ Annual per employee drug costs for Husky's workforce were $153 in 1997, compared to $495 average for similar businesses

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   **Canadian Centre for Occupational Health and Safety**

ALBERTA PICTURE

The recession is placing an incredible strain on the mental health system in Canada that has been neglected for far too long. Alberta and Calgary are not immune

- 700,000 Albertans will develop a mental illness this year. That's one in five. Some experts estimate one in four. Doing the math that is 200,000 Calgarians affected.
- Not just numbers, there are faces behind those statistics
- Look at the impact of the recession:
    o Between October 2008 and March 2009 Alberta has lost 48,000 jobs
    o 15,000 jobs lost in March alone
    o Job losses in Alberta ranked second in Canada after British Columbia in March

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

ALBERTA PICTURE

- In 2002-03 just over 500,000 Albertans were treated by a physician for a mental health related problem; there were more than 2.25 million visits to a physician for the primary purpose of receiving treatment for a mental health problem

- 39% of all general practice physician billings were mental health related

- More than 34,000 Albertans went to a hospital emergency department in 2001-02 because of a mental health problem

- One third of people with a mental illness in Edmonton also have a substance abuse problem; very likely the same statistic in Calgary

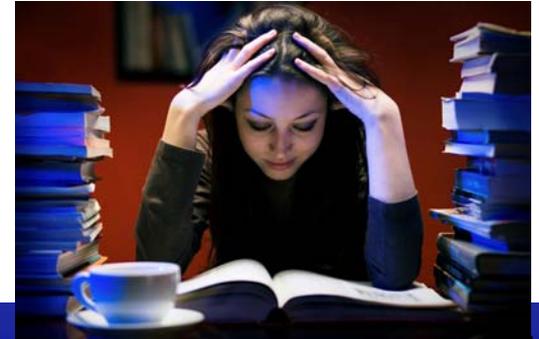Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

EMPLOYMENT AND MENTAL HEALTH

- Viable, steady income contributes to stability and wellness
- If people are unemployed, it can be very difficult to carry on and see a purpose in life, particularly if they are older and their prospects of finding work may not be very good
- 'Adjustment disorder' is difficulty making an adjustment to a new status that one did not choose. This comes up when moving from working to nonworking status. Hazards include:
    - Depression and anxiety
    - Worry and fatigue
    - Increase in substance abuse/gambling
    - Stressed family and interpersonal relationships
    - Boredom
    - Anger and sadness
    - Poor self-esteem and self-image

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

EMPLOYMENT AND MENTAL HEALTH

- 2004 study in the American Journal of Public Health: unemployment is associated with poor mental health as a result of the absence of *non-financial* benefits provided by one's job: social, status, self-esteem, physical and mental activity and use of one's skills

  - Higher impact on men's health than on women's. Explained by presence of family responsibilities. Also, men tend to be less involved in 'nurturing' family roles, which cannot successfully replace their job as an alternative source of meaning in their lives.

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

EVIDENCE FOR SUCCESSFUL WORKPLACE MENTAL HEALTH

Occupational Setting:

- Personal factors
- Social influences
- Environmental influences

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   **Canadian Centre for Occupational Health and Safety**

STRESS TO ILLNESS PHASES

Exposure to *Stressors* may affect a person by their:

Combined effects

Personal response to stressors

Indirect or moderated links

and this may occur in a non-linear manner

Effects may arise immediately, mid-term, or long-term

Stress processes and perception of stress need to be considered in designing interventions

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

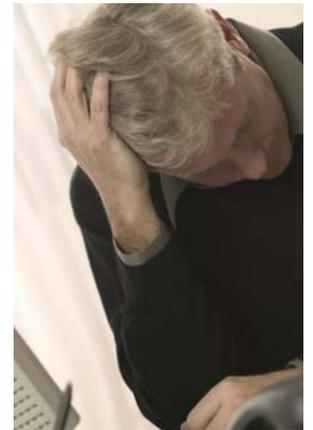**CCOHS**   **Canadian Centre for Occupational Health and Safety**

STRESS TO ILLNESS PHASES

Strain = consequences of stress:
- Behavioral – alcohol/drug abuse
- Psychological – burnout
- Physical – cardiovascular, ulcers
- Work-related – absenteeism, presenteeism

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

MODERATORS OF STRESS

- **Individual's characteristics – coping styles, personality, self-esteem, Type A, B**
- **Social relationships – co-workers, bosses, clients, home-life**
- **Environment – support from others**
  - Culture of the organization, trust, authority, discretion, control
- **These moderators may magnify, reduce or enable strain**

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca
CCOHS **Canadian Centre for Occupational Health and Safety**

MODIFYING VARIABLES (EXAMPLES)

(1)   Individual differences (e.g. personality; ability)

(2)   Organizational factors (e.g. social support; communication; policies)

(3)   Extra-organizational factors (e.g. life stressors; family support)

Stressors
Factors in the work environment that create demands on the individual (e.g. noise, violence, workload, work pace, role incongruence, physical challenges, lack of control, interpersonal tensions)

Stress
Experience and perception of demands from the environment involves evaluations of threat to self, coping capability, and resources available for responding to the demands of the environmental stressor

Strain
Outcomes of stress involved immediate physical (e.g. fatigue, tension) and psychological responses (e.g. anxiety) and longer term effects (i.e. psychological; behavioral; physiological; organizational)

Primary Prevention

Tries to eliminate or reduce sources of stress in the workplace (e.g. job design, org structure, flextime)

Secondary Prevention

Tries to identify and make people aware of stressors and how to deal with them (e.g. wellness program, stress management, time management

Tertiary Prevention

Focus is on recovery from stress and strain (e.g. Employee assistance program, counseling, rehabilitation classes)

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   **www.ccohs.ca**

CCOHS Canadian Centre for Occupational Health and Safety

MENTAL HEALTH – WORK INTERVENTION MODELS

Content Model

- Identify elements to be fixed – job, person, or organizational change
- Develop an intervention to fix the identified element

Process Model

- Focus on the approach or steps to institute interventions for stress such as decision making, change management process – similar to OHS risk assessment and risk management

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   **Canadian Centre for Occupational Health and Safety**

PROCESS FRAMEWORK

Focus on a problem – senior management commitment – strategy – workforce participation

Policy + development + communicate – evaluate, implement – evolve – ongoing assessment – meet the needs of the organization

Δ holistic – not step-by-step – systematic approach

Δ ID of hazard
   Assessment of risks
   Control strategies
   Implement strategies
   Monitor/evaluate
   Feedback/reassess risk
   Review of information + training needs for employees

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

PROCESS FRAMEWORK

OR   Kompier, Cooper & Courts 2000 for Successful Intervention

- Systematic approach to the problems
- Proper diagnosis of the problems
- Theoretical coherent package of intervention measures
- Participation from management and employees
- Sustained commitment from top management

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

PROCESS FRAMEWORK FOR SUCCESSFUL INTERVENTION

- Systematic approach to the problems
- Proper diagnosis of the problems
- Theoretically coherent package of intervention measures
- Participation from management and employees
- Sustained commitment from top management
- Target the problem and all factors in the system (organization) that need to be considered

Len Hong, PCEO
HongL@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

PROCESS FRAMEWORK FOR SUCCESSFUL INTERVENTION

Are psychosocial hazards viewed as "one" of the many different types of "hazards"?

Are psychosocial hazards treated with less importance than other hazards?

<u>**Conclusion**</u> – the use of a Process Framework for occupational Mental Health Interventions is likely to provide more opportunities for success

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

Canadian Centre for Occupational Health and Safety

CCOHS

SOURCES OF JOB STRESS REFERRED TO BY CCOHS
(http://www.ccohs.ca/oshanswers/psychosocial/stress.html)

Adapted from: Murphy, L.R.m (1995 "Occupational Stress Management: current Status and Future Directions. *Trends in Organizational Behavior*, vol. 2. p.1-14

Job Stressors	Examples
Factors unique to the job	• Workload (overload and underload) • Pace/variety/meaningfulness of work • Autonomy (e.g. the ability to make your own decisions about your own job or about specific tasks) • Shiftwork/hours of work • Physical environment (noise, air quality, etc.)
Role in the organization	• Role conflict (conflicting job demands, multiple supervisors/managers) • Role ambiguity (lack of clarity about responsibilities, expectations, etc) • Level of responsibility

SOURCES OF JOB STRESS REFERRED TO BY CCOHS
(http://www.ccohs.ca/oshanswers/psychosocial/stress.html)

Job Stressors	Examples
Career Development	• Under/over-promotion • Job security (fear of redundancy either from economy, or a lack of tasks or work to do) • Career development opportunities • Overall job satisfaction
Relationships at Work	• Supervisors; coworkers; subordinates • Threat of violence, harassment, etc (threats to personal safety)
Organizational structure/climate	• Participation (or non-participation) in decision-making • Management style • Communication patterns

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   Canadian Centre for Occupational Health and Safety

WHAT ARE THE MANAGEMENT STANDARDS

What are the Management Standards for work-related stress?

The Management Standards define the characteristics, or culture, of an organization where the risks from work-related stress are being effectively managed and controlled.

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   **Canadian Centre for Occupational Health and Safety**

WHAT ARE THE MANAGEMENT STANDARDS

The Management Standards cover six key areas of work design that, if not properly managed, are associated with poor health and well-being, lower productivity and increased sickness absence. In other words, the six Management Standards cover the primary sources of stress at work. These are:

1) **Demands** – this includes issues such as workload, work patterns and the work environment
2) **Control** – how much say the person has in the way they do their work
3) **Support** – this includes the encouragement, sponsorship and resources provided by the organization, line management and colleagues
4) **Relationships** – this includes promoting positive working relationships to avoid conflict and dealing with unacceptable behaviour
5) **Role** – whether people understand their role within the organization and whether the organization ensures that they do not have conflicting roles
6) **Change** – how organizational change (large or small) is managed and communicated in the organization

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   **www.ccohs.ca**

CCOHS   **Canadian Centre for Occupational Health and Safety**

WHAT ARE THE MANAGEMENT STANDARDS

The Management Standards represent a set of conditions that, if present, reflect a high level of health, well-being and organizational performance.

The Management Standards:
- Demonstrate good practice through a step-by-step risk assessment approach
- Allow assessment of the current situation using surveys and other techniques
- Promote active discussion and working in partnership with employees to help decide on practical improvements that can be made
- Help simplify risk assessment for work-related stress

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   **Canadian Centre for Occupational Health and Safety**

WHAT TO DO NEXT

Review your organization's policies and procedures

Consider whether your organization's policies and procedures need to be reviewed in light of the findings from your risk assessment

It is often the case that policies and procedures do not adequately reflect the current ways of working, due to the continuous change that organizations experience

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS   **Canadian Centre for Occupational Health and Safety**

WHAT TO DO NEXT

Make the Management Standards part of everyday management

The Management Standards are concerned with the prevention and management of common health problems and the drive towards good jobs to enhance the performance of your organization

Since the process is continuous, it is envisaged that the evaluation and monitoring activities will merge naturally into everyday management

Whether you use the Management Standards approach or an alternative approach to risk assessment, it is important that this is seen as part of the normal day-to-day activities of your line managers, and is integrated into their role as far as possible

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS **Canadian Centre for Occupational Health and Safety**

WHAT TO DO NEXT

Develop Your Managers

Identify and develop the competencies your managers need to manage potential sources of work-related stress. Some recent research commissioned by the UK Health and Safety Executive (HSE) suggests that there is considerable overlap between the management competencies required for preventing and reducing potential sources of stress at work and general management competencies. This research highlighted a number of key competencies for preventing and managing work-related stress.

Link for Management Competencies

http://www.hse.gov.uk/stress/furtheradvice/managementcompetencies.htm

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   **www.ccohs.ca**

CCOHS   **Canadian Centre for Occupational Health and Safety**

STRESS MANAGEMENT COMPETENCY INDICATOR TOOL

The Management competencies for preventing and reducing stress at work framework is designed to enable you to support managers to prevent and reduce stress in their teams – without actually increasing the workload, and therefore the stress, upon the line managers themselves

The Stress management competency indicator tool enables managers to assess whether these stress management behaviours are part of their repertoire or not, and identify any gaps in skills or behaviours. You can use this information to seek targeted help and guidance.

CONCLUSIONS

Prevention Framework for Improving Occupational Mental Health

Anticipation

– Mental health is an organizational, social and personal concern for the workplace and workers

Recognition

– psychosocial stress is an occupational hazard to which overexposure leads to strain, illness and disability, and can be prevented

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   **www.ccohs.ca**

CCOHS **Canadian Centre for Occupational Health and Safety**

CONCLUSIONS

Evaluation

– a systematic approach is recommended for use in integrating psychosocial exposure equally important to systematic management and are all hazards in the workplace

Controls

– employment of a prevention policy whereby mental health is fully embedded in the OHS and Healthy Workplace policy

- All primary and secondary prevention tools are utilized so that tertiary curative approaches are not needed in the future

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   www.ccohs.ca

CCOHS **Canadian Centre for Occupational Health and Safety**

CONCLUSIONS

Improvements

- Continually use best-evidence interventions and resources to advance improvements in organizational, social, and personal mental health.

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   **www.ccohs.ca**

CCOHS **Canadian Centre for Occupational Health and Safety**

THANK YOU

WWW.CCOHS.CA

1 800 668 4284

Len Hong, PCEO
Hongl@ccohs.ca
1-800-668-4284   **www.ccohs.ca**

CCOHS **Canadian Centre for Occupational Health and Safety**