# Depression & Work Function:

## BRIDGING THE GAP BETWEEN MENTAL HEALTH CARE & THE WORKPLACE

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*"This analysis of depression and work function is an important contribution to our understanding of one of the most important dimensions of public health. That is, the links between the onset, recovery and management of depressive disorders and the effective functioning of bread-winners throughout the economy.*

*I am pleased to endorse the conclusions arrived at by the study team and recommend this analysis for any and all who seek an informative consideration of a topic important to employers and to society as a whole."*

**Bill Wilkerson**
**Chair, Global Business and Economic Roundtable on Addiction and Mental Health**

BC Business and Economic Roundtable on Mental Health

*This collaborative paper developed on Depression in the Workplace is an excellent survey of the scientific literature, and is as well, a comprehensive description of depression in the workplace.*

*The BC Business and Economic Roundtable on Mental Health is pleased to endorse and applaud this paper as it will become an invaluable tool to business. It will guide business in formulating governance guidelines, in developing policies, training, and intervention. This paper will greatly assist us in the managing of depression in the workplace in a timely and accurate manner.*

**Lloyd Craig,**
**Chair, BC Business and Economic Roundtable on Mental Health**

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# Executive Summary

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**Depression is a common and recurrent disorder that causes significant occupational disability.** In any given year, at least 4% of Canadians suffer from major depression and three times that number experience minor depression. Twice as many women as men are affected by this disorder. Depression is associated with significant levels of social, physical, and occupational impairment.

**There are both pharmacological and psychological treatments for depression.** The Canadian Clinical Guidelines for the Treatment of Depressive Disorders identify selective serotonin reuptake inhibitors as first line drug therapy and cognitive behavioural therapy or interpersonal therapy as first line psychotherapy for depression. These treatments can be used effectively either alone or in combination, depending on the stage and severity of the disorder. In either case, early intervention and treating to full remission will generally improve the employee's clinical and occupational outcomes.

**But many depressed employees do not receive appropriate treatment.** Only half of those affected seek medical care. Like other mental health conditions, the management of depression has been impeded by persistent ignorance and stigma in both the community and workplace. Those who do seek care are often treated for physical complaints that commonly accompany depression, leaving the underlying problem unresolved. When the diagnosis of depression is made, usual clinical care may not achieve the level of best practices outlined in the guidelines.

**With usual medical treatment, many depressed employees will be left with persistent symptoms and some degree of residual impairment or disability.** Approximately 50-60% of depressed employees who have received usual medical treatment continue to suffer significant impairment of work function. Improving work function in these employees will likely require some form of disability management.

**Healthcare practitioners are often uninformed about workplace issues.** Lack of communication and coordination between healthcare providers and the workplace has resulted in a serious gap in the management of depression. Bridging this gap between the healthcare system and the workplace is crucial if progress is to be made in more effectively managing depression in the workplace.

# Executive Summary

**Valuable lessons have been learned from managing other chronic diseases and common workplace disorders.** Comprehensive strategies that create a customized continuum of prevention, health promotion, early identification and intervention, and evidence-based disease and disability management have been shown to be most effective. Integrating and coordinating a spectrum of services that address both individual and organizational factors requires the collaborative effort of employers, employees, and healthcare providers.

**Prevention and health promotion strategies are based on a risk management approach.** High-risk groups and workplaces are targeted for systematic individual and organizational risk reduction and control. Stress has been identified as an important modifiable risk factor for depression, so efforts to increase awareness, improve resilience, and decrease toxic exposures are all important elements. Enhancing individual knowledge and coping skills, improving job design and work practices, and creating a supportive work environment that values and respects workers and encourages work-life balance are all components of a healthy workplace that will reduce the risk of depression.

**Early detection and intervention has been shown to reduce the severity, duration, complexity, and cost of depressive illnesses.** Informed workers who recognize depressive symptoms can either choose self-care or seek help from healthcare professionals at work or in the community. Less knowledgeable workers may be detected by astute supervisors, occupational health staff, or disability case managers as a result of declining work performance or absenteeism, by Employee Assistance Program professionals assisting with interpersonal or behavioural problems, or by health professionals consulted for associated physical complaints. The likelihood of detection in any of these circumstances is increased by awareness and skills training and the availability and use of effective screening and diagnostic tools. The benefits of screening and early detection are closely linked to the availability of evidence-based treatment and rehabilitation.

**Effective management of depression is dependent upon access to a range of treatment options.** At present, antidepressant drug therapy is most readily available and by default has become the mainstay of treatment. Psychotherapeutic options are either not readily available, or are not accessible for financial, geographic, or technological reasons. For example, neither the Medical Services Plan nor most extended health

benefits provide coverage for an adequate course of cognitive behavioural therapy (CBT). Not all mental health practitioners have the knowledge and skills necessary to provide CBT, and those who do are often not available in rural areas. There is clearly a need to address this therapeutic inequity, and it seems that there is considerable potential to do so if a cooperative effort is mounted by employers, insurers, and the healthcare system.

**Despite best efforts to reduce risk and to detect and treat symptoms and disease at an early stage, it is inevitable that some employees will become disabled by depression.** When that happens, it is important to intervene quickly to reduce the severity and duration of disability, to restore function, and to return employees to meaningful work. Integrated disability management (IDM) is one strategy that has been successfully employed to bridge healthcare and workplace efforts to manage musculoskeletal injuries. It has the same potential to manage depression in the workplace. IDM does more than simply coordinate healthcare and workplace initiatives, it also uses best practices to assess and accommodate disabled workers and employs a step-wise approach to deploy resources at an earlier stage when there is greater expectation of successful return to work and improved return on investment.

**Efforts to manage depression in the workplace should be fully integrated with other corporate health strategies.** Embedding depression within a broader healthy workplace context will reduce duplication and fragmentation of effort and provide a systematic framework for designing, executing, evaluating, and continuously improving organizational and individual health.

# About the Depression in the Workplace Collaborative

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The Depression in the Workplace Collaborative (DWC) was formed in the fall of 2003 for the purpose of advancing the knowledge about best practices for managing depression in the workplace. The stage was set for this initiative by the release of the B.C. Provincial Depression Strategy document, the activities of the Global Business and Economic Roundtable on Mental Health and Addiction, and by two timely conferences that drew attention to the emerging clinical and occupational challenges posed by depression.

The Collaborative coalesced around a common concern that a gap existed between the usual treatment goals established by health practitioners and their patients, and the expectations regarding work function that are critical to the relationship between employer and employee. The membership of the DWC was influenced by a shared belief that a collaborative, multidisciplinary approach was necessary to fully comprehend and effectively address the many facets of this complex disorder in an ever-changing, and often uncertain environment. This belief also extended to our research design that included an extensive review of diverse scientific, professional and business literature, augmented by a series of focus groups that created an opportunity for substantial input from most of the key stakeholders who are affected by depression in the workplace.

The Depression in the Workplace Collaborative set out to create a foundation document that would serve as a source of current and practical information and a helpful guide to best practices for those who are attempting to manage depression in the workplace. We hope that this report will serve as a basis for ongoing enquiry and focused research, meaningful dialogue among the multiple stakeholders, and improved integration and co-ordination of clinical and occupational practices. We also hope that it will provide support for more strategic healthy workplace initiatives that will enhance both individual and organizational health and performance.

# About the Depression in the Workplace Collaborative

The activities of the DWC have been generously supported by Healthcare Benefit Trust, The Great-West Life Assurance Company, and the Mental Health Evaluation and Community Consultation Unit at the University of British Columbia. The following members of the Collaborative have given freely of their time and expertise and all have contributed useful insights to this document:

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# About the Depression in the Workplace Collaborative

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The members of the DWC would like to extend our sincere gratitude to all of the organizations, associations and individuals who co-ordinated, hosted or participated in the series of focus groups whose contributions added substance and reality to this report. We are particularly grateful to those individuals who have suffered from depression and were willing to share their insights about the impact of the disorder on their work life. We would also like to express our appreciation to those organizations that shared assessment tools, educational material and other information for inclusion in our Annotated Resource list. Finally, we would like to acknowledge Shereen Hassan, Shawnda Lanting, Simone Leung and Aili Mahm, our team of Research Assistants who so diligently assisted with the gathering, organizing and collating of the diverse sources of information reviewed during the course of this project.

# Introduction

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There has been a great deal of public and corporate concern in recent years about the impact of depression in the workplace. Alarm has been expressed regarding the social and financial costs associated with depression, whether in the form of reduced worker productivity, benefits payments, employee retention, absenteeism, or disability.[1,2] Although determining the exact costs of depression in the workplace is difficult, there is little question that depression is a major source of productivity loss and personal suffering for employed Canadians.[3] Depression is the fastest rising source of disability and is the leading source for adults of 'disabled days lived', due to its early onset and frequently chronic or recurrent nature: "It has been estimated (by the World Health Organization) that by the year 2020, depression will be the second most common cause of disability in the developed world."[4] The global public health burden of depression is second only to heart disease.[5]

**"It has been estimated that by the year 2020, depression will be the second most common cause of disability in the developed world."**

The increasing rank of depression as a cause of worker disability is reflected in a steadily rising proportion of short- and long-term disability claims attributable to the disorder. Such figures represent the tip of the iceberg given the likely greater proportion of depressed individuals who remain in the workplace but with impaired functioning and decrements in productivity. Even if we take a conservative approach to estimating the impact of depression on the workplace, it represents a very significant problem for employers and employees. The case study at **Appendix A** illustrates some of the clinical and occupational challenges experienced with depression in the workplace.

Only in the last decade has the importance of depression for the workplace been fully recognized. There was previously little acknowledgment that the patients being treated for depression by the public healthcare system are the same people suffering the effects of depression in their role as workers. "The worlds of mental health and work have elaborated two cultural traditions, speak different languages, are philosophically distinct."[6] The time is right to make substantial change in the way that healthcare and occupational domains collaborate to manage depression in the workplace.[7,8] This paper will initiate that process.

**"The worlds of mental health and work have elaborated two cultural traditions, speak different languages, are philosophically distinct."**

Despite the attention focused on depression, there has not been a systematic attempt to summarize what we actually know about depression as it impacts the workplace: how common it is, how much functional impairment or disability it causes, and how it is currently managed. This is a necessary step before we can identify strategies to improve the current system and set priorities for new research programs. Although others have drawn attention to the role of workplace depression, none has provided enough analysis to give an accurate picture of the problem or to rationally identify changes likely to pro-

# Introduction

duce benefit. As noted in a recent review of depression treatment research, "little is known about the effects of existing treatments on work disabilities and other dysfunctions that often constitute the primary concerns of depressed patients."[9] Only if we establish a clear understanding of relevant research knowledge will progress be made in managing depression in the workplace. By taking our bearings, we can find out where we are, and then set the best possible course to optimize the management of depression.

This project brought together experts from the public and private sectors to synthesize existing knowledge and practice concerning depression in the workplace. Our objectives were:

- To provide an overview of research evidence concerning depression in the workplace;
- To survey beliefs about workplace depression held by key stakeholders;
- To identify innovative practices that could improve our response to depression in the workplace;
- To propose best practices for the comprehensive management of depression in the workplace, and
- To identify priorities for research and development in this area.

We used three types of information: studies published in the scientific literature; focus groups involving a wide range of participants concerned with depression and work; and descriptions of programs, policies, or guidelines disseminated outside the scientific literature. The focus group process is described in **Appendix B**.

A health information website of the UK National Health Service defines depression as follows:

> *Depression is a mood state that is characterized by significantly lowered mood and a loss of interest or pleasure in activities that are normally enjoyable. Such depressed mood is a common and normal experience in the population. However, a major depressive episode can be distinguished from this "normal" depression by its severity, persistence, duration, and the presence of characteristic symptoms (e.g., sleep disturbances). The most common emotional, behavioural, and physical symptoms of a major depressive episode are: markedly depressed mood; loss of interest or enjoyment; reduced self-esteem and self-confidence; feelings of guilt and worthlessness; bleak and pessimistic views of the future; ideas or acts of self-harm or suicide; disturbed sleep; disturbed appetite; decreased libido; reduced energy leading to fatigue and diminished activity; reduced concentration and attention. The depressed mood is relatively constant from one day to the next, although the mood may vary somewhat during the course of the day.*[10]

The symptoms described above, characteristic of *major depression,*[a] also occur in less severe forms. Several psychiatric disorders (for example, adjustment disorder) include milder forms of these symptoms; these disorders are often classified in research studies as *minor depression*. Furthermore, an employee may not meet criteria for a diagnosable disorder but suffer from certain of these symptoms (for example, disturbed sleep and low mood associated with workplace conflict); such an individual would be described as suffering from *depressive symptomatology*. Employees with these kind of symptoms are sometimes described as "stressed out" or suffering "burnout."

The current trend in depression research is to include the whole spectrum of symptoms and to consider transitions from one level to another as critical to understanding depression onset and recovery.[11,12,13] In our review of current

[a] The diagnosis of disorders such as major depression is made according to standard sets of criteria, either the Diagnostic and Statistical Manual of Mental Disorders (DSM) or the International Classification of Disease (ICD) systems; according to British Columbia legislation, diagnoses of mental disorders can be made for official purposes by physicians or registered psychologists.

# Scope of the project

knowledge, we will be discussing depression in this broadly-defined way, covering the spectrum from depressive symptomatology to major depression. However, we will specify whether a particular research finding or recommendation refers only to major depression or to the entire spectrum of depressive symptoms.

In this project we focused on individuals who are currently employed or absent from work due to depression-related impairment, including those who are involved in work return programs. We did not focus on individuals with serious and persistent mental illness who have either never been employed, have been out of the workforce for many years, or who have been classified as employable only with substantial and lasting support; nor did we focus on those with depression secondary to a physical illness or another psychiatric disorder. The issues of these groups are very important but are beyond the scope of the current project.

# What are the causes of depression?

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Medical and psychological research has not determined the cause or fundamental nature of depression, but there are two primary models of depression that each have some degree of scientific support. One model places the emphasis on biological factors, and its proponents argue that some form of neurochemical brain dysfunction is basic to depression.[14] The other model places the emphasis on psychological factors, and its proponents argue that some form of distorted cognitive processing is basic to depression.[15] We *do not know* whether a neurochemical brain dysfunction or biased cognitive style are essential components of depression.[16,17,18,19]

Given our current uncertainty, the best way to understand depression is to identify the different factors that have been shown as relevant to depression, whether causing it, resulting from it, or maintaining it. These factors are:

**Situations.** Depression is often triggered by difficult life situations that the person finds stressful or even devastating. If attempts to cope with the situation by improving or accepting it are not successful, the person may begin to feel overwhelmed and hopeless.[20] Such situations may occur in specific domains of the individual's home or work life; however, any resulting depression typically pervades all domains of functioning.

**Thinking patterns.** Each of us is affected differently by outside events, depending on how we interpret or make sense of those events. These interpretations determine how events are experienced. Depressed individuals have particular ways of interpreting the world that can trigger or worsen the experience of depression. They tend to see the current situation in an unrealistically pessimistic way, judge themselves in a harsh and unfair manner, and exaggerate the likelihood of negative future outcomes.

**Depressed individuals tend to see the current situation in an unrealistically pessimistic way, judge themselves in a harsh and unfair manner, and exaggerate the likelihood of negative future outcomes.**

**Emotional reactions.** Depression initially involves feelings of discouragement and sadness, often triggered by unsuccessful attempts to cope with difficult life situations. However, as depression develops, these feelings of unhappiness give way to more severe and painful kinds of emotional experience. The depressed individual is overcome by a sense of despair, a pervasive mood of hopeless misery. Some depressed people experience a general sense of emotional numbness, an inability to feel anything – as though the psychological pain had become so intense that the mind simply switched off the emotional response mechanism. Others may become emotionally hypersensitive or irritable, which may result in interpersonal conflict or alienation. Depressed people interpret the world in an unrealistically pessimistic way and judge themselves in a harsh unfair manner, and their emotions are based on this

# What are the causes of depression?

distorted way of interpreting their lives. If their thoughts about the world are unrealistic and negatively biased, then their ensuing emotions will also be unrealistic and negatively biased.

**Physiological patterns.** Depression is often accompanied by a variety of physical symptoms, and neurochemical dysfunction is likely to be an important causal factor. Many depressed individuals experience problems with sleep, energy, or appetite, further compounding the impact of depression. The physiological changes associated with depression make it harder to cope with life problems. Antidepressant or other medications can often be very helpful in restoring sleep and regaining the patient's sense of physical energy. Note that physical diseases such as hypothyroidism and uncontrolled diabetes may cause depressive symptoms.

**Behavioural responses.** Depressed people often reduce their general activity level because they experience a pervasive sense of fatigue, their activities no longer yield rewards, and they lack motivation. The result is that depressed individuals spend much less time doing things they once found to be sources of positive feeling and self-esteem.[22] They are prone to withdraw, becoming isolated from family, friends, and coworkers and thus depriving themselves of sources of social support and understanding.

# How common is depression in the workplace?

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Although there has been a wide range of estimates of the prevalence of depression in the general population, the authors of a recent review of depression concluded that the best estimate for one-year prevalence of major depression is 4% (that is, 4% of the population suffer from major depression at some point in the year).[23] A recent Statistics Canada community health survey reached a similar conclusion:

**Some 4% of people interviewed in the survey reported having experienced symptoms or feelings associated with major depression, compared with 5% with diabetes, 5% with heart disease and 6% with thyroid condition.**

The prevalence of minor depression is harder to estimate, given that it is less likely to come to the attention of health care providers, but it has been estimated to be approximately three times as common as major depression (i.e., we can assume a one-year prevalence of 12%).[25] Note that prevalence rates for depression vary dramatically by gender: women are consistently found to have depression rates as much as twice that for men.[26] It is also worth noting that initial episodes often occur in late adolescence or early adulthood, thus impacting individuals as they are training for, or entering, the workforce.

We have less information about the prevalence of depressive disorders in the working population, but one study found approximately 2-4% of workers suffer from major depression.[27] Other studies point to the upper end of this range[28,29,30] indicating that major depression in the workforce likely occurs at a rate comparable to that in the general population. One study found that rates of major depression vary across occupations (lawyers, teachers and secretaries had relatively high rates), even after taking into account gender balance in each occupation.[31]

Systematic surveys of the U.S. workforce find that 6-7% meet diagnostic criteria for minor or major depression at any given time, and another 2.4%

**FOCUS GROUP THEME**

The consensus was that depression is increasingly common in the workplace, although participants were not clear whether the frequency has increased or whether it has become more acceptable to acknowledge depression as a problem.

"I've noticed a big increase in cases of depression over the last two years"

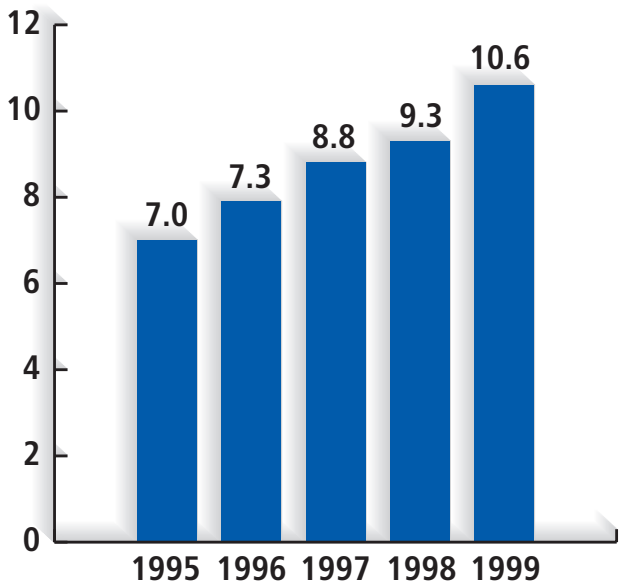
*– Occupational Health Nurse*

# How common is depression in the workplace?

show some depressive symptomatology.[32,33] Other studies used a broader definition of depression and are consistent in finding 13% of workers to report a troublesome level of depression.[34,35] In a community survey, 18% of the working population reported missing work or cutting back on workload because of depressive symptoms.[36]

Work settings where the workforce is predominantly female, such as healthcare, would be expected to show much higher rates of depression. A recent study from the healthcare industry in British Columbia reported that in 1999, 10.6% of workers in the acute care sector had a prescription for antidepressant medication (the authors assumed that those who were prescribed an antidepressant medication were experiencing a depressive disorder).[37] The 5-year trend in the use of antidepressant medication, shown in the following graphic, suggests that depression is a growing problem in the healthcare industry. This trend is particularly alarming because it is commonly believed that only half of those who suffer from depression actually seek professional help and of those who do, not all are treated with antidepressants.

## Annual Percent of B.C. Acute Care Workers on Antidepressants



# What is the typical course of depression?

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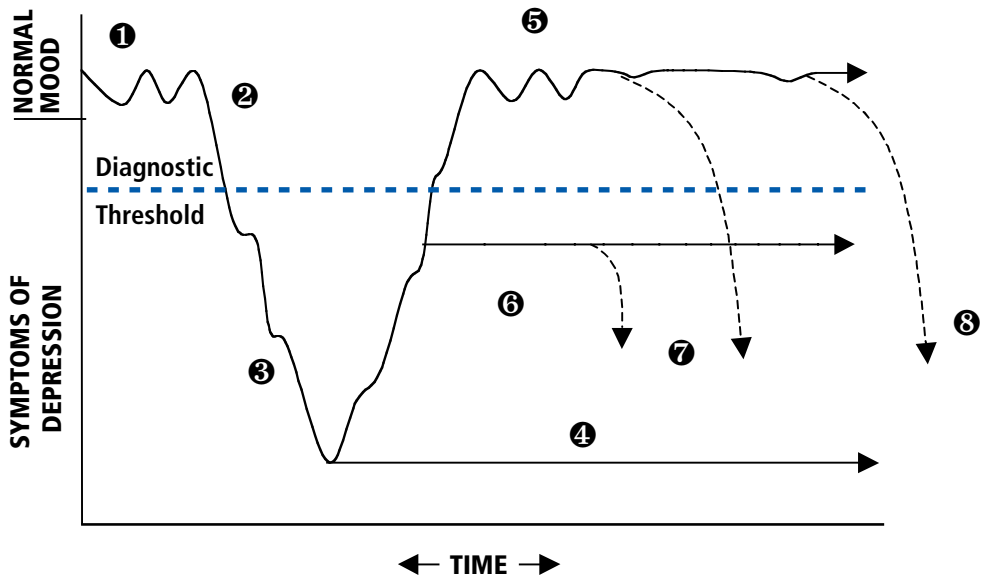
It is important to understand the course of depression and how it changes over time in affected individuals. Although there is considerable variation from case to case, the following diagram shows a typical episode of depression with a range of potential outcomes.[38]




Everyone experiences normal mood variations over time (1). However, some predisposed individuals will develop progressively more distressing symptoms, often in response to cumulative stress or a precipitating event such as job loss or marital separation (2). For many, these depressive symptoms will resolve without treatment, but in others they become progressively more severe until they surpass the diagnostic threshold and require clinical intervention (3). Only half of those experiencing a depressive episode will seek professional help. Of those who do, some do not respond to usual care and their depression follows a chronic course that can persist for years (4). Most who receive appropriate care show significant improvement in four to twelve weeks. Of those who respond to treatment, some have a full remission (5) and others have only a partial recovery with persistent symptoms of depression (6). In either case, it is not uncommon to suffer a relapse (7), although this is far more likely where the response to treatment did not result in full remission. Even after a full recovery, there is still a 50% chance of a recurrence (8), most often within two years.

Describing the typical course of depression is not the same as describing the typical course of *depression-related impairment*; the disability process is influenced by other factors. For example, an individual may remain on the job despite experiencing significant depressive symptoms, or may remain absent from work after most depressive symptoms have resolved.

# How should depression be treated?

There are now well-established guidelines for the appropriate treatment of depression.[41,42,43] These guidelines support the following conclusions:

### 1. Treatment of major depression

Major depression can be effectively treated with antidepressant medication. Most antidepressants have equivalent efficacy[a] but their side effects differ. This disorder can also be effectively treated with a type of short-term psychological treatment known as cognitive behavioural therapy (CBT).[b] CBT has equivalent effectiveness to antidepressant medication in most cases of major depression, although there are severe forms where antidepressant medication must be included in treatment.[44,45] For complicated cases, the combination of antidepressant medication and cognitive behavioural therapy yields additional benefit and significantly improves the clinical outcome.[46,47] Another form of brief psychological treatment that has been found to be effective in treating depression is interpersonal therapy (IPT).[c]

Forms of psychotherapy that involve exploration of childhood experiences (psychodynamic therapy), revisiting past trauma, enhancement of emotional awareness, or unstructured empathic support and reassurance have not been found effective in the treatment of this disorder.

**Depressed employees who seek cognitive behavioural therapy face practical and financial barriers to access**

Despite the effectiveness of CBT in treating depression and research showing that many individuals find psychotherapy to be more acceptable than antidepressant medication,[48] there is limited access to this treatment. Access to CBT in the public health system is restricted to a relatively small number of specialty mental health clinics with lengthy waiting lists. There is greater access to CBT in the private health sector, but many individuals are unaware of this treatment option or are unable to pay for such services. Regrettably, many benefits plans do not cover psychological services or, if they do, benefits are often not adequate to compensate for the recommended 12 to 16 sessions.

[a] Although recent work suggests increased efficacy for the antidepressants amitryptiline and venlafaxine.

[b] CBT is a form of psychotherapy which identifies patterns of thinking and behavior that trigger or maintain depression, then trains the depressed person in cognitive and behavioral strategies that are "antidepressant" in their effect.

[c] IPT is a form of psychotherapy that focuses on aspects of relationships that may contribute to depression. In particular, IPT addresses issues of loss, conflict, significant changes in one's role, and social isolation.

# How should depression be treated?

## 2. Treatment of minor depression

**FOCUS GROUP THEME**

Depression in the workplace is seen as impacting 4 main areas:

Interpersonal relationships [depressed people are seen as irritable, pessimistic and withdrawn]

Productivity [they are seen as less productive due to fatigue, poor decision-making and lack of concentration]

Absenteeism [they are perceived to be more frequently absent]

Safety [concern was expressed about greater risk of incidents or injuries among depressed workers]

"I became depressed, my productivity dropped dramatically and then I became even more depressed due to the drop in productivity"

*– Employee who has experienced depression*

Many episodes of minor depression resolve on their own. Resolution is more likely when the individual engages in appropriate self-care or receives assistance from well-trained providers.[49] Self-management materials provide research-based guidelines for developing problem-solving and coping strategies to overcome depression. These techniques can be used by a high proportion of those with minor depression to achieve substantial improvement.[50,51] Such materials are available from reputable websites or informed providers.[a] Other individuals with minor depression are likely to benefit from professional assistance or therapy with a focus on coaching adaptive techniques for managing mood, altering maladaptive thinking, enhancing relationships, and dealing with stressors.[52] Such assistance is most likely to occur for those individuals who are financially able and willing to procure it or who have adequate employee benefits or employee assistance programs. Interventions at the point of distress, whether they involve self-care or professional intervention, may prevent the onset or mitigate the severity of a major depressive episode.

If initial interventions are not proving beneficial, minor depression may require specialized treatment, such as antidepressant medication or CBT. However, some cases of minor depression are being inappropriately treated with antidepressant medication. A leading expert in depression treatment states: "patients with minor depression and adjustment disorders are frequently treated with antidepressant medications, which represents 'overuse'...since there is little evidence of effectiveness of medication in these populations."[54]

[a] An excellent self-management manual, the Self-Care Depression Program, developed at the University of B.C., can be downloaded from the UK National Electronic Library for Mental Health: http://www.nelmh.net/content_show.asp?c=3&fid=76&fc=001008001

# What is the impact of depression on work function?

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Depression is classified as an affective disorder, meaning a disruption of mood, suggesting that the effects of depression are restricted to emotional functioning. In fact, the impact of depression is much more pervasive, affecting virtually all aspects of the depressed person's life. These aspects include: interpersonal function (withdrawal, avoidance or conflict); physiological function (restlessness and fatigue); behavioural function (reduced problem-solving and activity pacing); and cognitive function (reduced concentration and flexibility).

It is readily apparent why untreated or partially treated depression leads to significant occupational impairment, particularly in knowledge workers, where there are increasing job demands for intellectual and psychosocial rather than physical capacity.

> **"In fact, if a hypothetical illness were "invented" with the intent to adversely affect work performance, many of its characteristics would match those of depression...Whether the key requirement for success in a job is interpersonal skills, cognitive capabilities, manual dexterity, or sheer physical strength, the symptoms of major depression have the potential to negatively affect job performance. In the workplace, few other diseases are so indiscriminate in the types of harm they can impose."[55]**

The authors of a recent study released by the British Health and Safety Executive describe the findings of focus groups with depressed employees. Workers reported that they experienced significant impairment of work performance to the point where they were not able to complete work, and even routine tasks became difficult. Depressed employees described a "vicious cycle" and "downward spiral" of poor morale, decreased job satisfaction, lack of motivation, extremes of emotion and intolerance with others, lack of concentration, confusion and difficulties with decision making, more sickness absences, and higher rates of staff turnover.[56]

**Depressed employees described a "vicious cycle" and "downward spiral" of poor morale, decreased job satisfaction, lack of motivation, extremes of emotion and intolerance with others, lack of concentration, confusion and difficulties with decision making, more sickness absences, and higher rates of staff turnover.**

In addition to poor work performance, depressed employees are also at increased risk for accidents. According to the study, health professionals suffering from depression are a high-risk occupation for safety issues because in addition to placing themselves at risk, they also pose a risk to their patients. Particular risks highlighted by healthcare workers included: impairment in clinical judgement, clinical errors, unsafe behaviour during the handling of materials such as blood, and problems in the administration of drugs and needle injuries.

# What is the impact of depression on work function?

Depression is often described as an invisible disorder: awareness of an employee's depressed state depends on self-report or inference from behaviour rather than physical findings. The hidden nature of depression contributes to misunderstanding and stigma, thus preventing or delaying appropriate identification and management.

# How much work impairment is caused by depression?

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Depression is associated with significant impairment of work ability on self-report measures.[57,58,59] A large-scale population survey found that the presence of major depression is associated with a tenfold increase in the number of days individuals report being absent from the workplace or reducing usual work activities because of emotional or mental health difficulties.[60] Furthermore, in this survey, "there is no overall difference across occupations in the impact of psychiatric disorders on work loss": accountants and managers were as likely to miss work due to depression as those in labouring or clerical positions. Another survey compared the effects of depression and various chronic diseases on work function: "Depression was found to be a major contributor to work-loss and work-cut back days among working-aged Americans, with effects surpassing almost all of the chronic medical conditions that we examined."[61]

**The presence of major depression is associated with a tenfold increase in the number of days individuals report being absent from the workplace or reducing usual work activities because of emotional or mental health difficulties.**

Minor forms of depression are relatively common compared to major depression and are associated with a larger overall burden of impairment. A survey found that "because of its prevalence, individuals with minor depression were associated with 51% more disability days in the community than persons with major depression."[62]

An alternative to relying on self-report of depression impact is to use more objective measures of work function. There is substantial evidence showing increased work absence related to depression.[63,64,65,66] For example, one study compared the number of sickness absence days associated with depression versus other common medical conditions and found that "Depressive illness was associated with a mean of 9.86 annual sick days, significantly more than any of the other conditions."[67] Other studies have found similar associations of depression with increased work absence and decreased job tenure.[68,69]

An Ontario study found that 19% of short-term disability claims in several major corporations were attributed to depression-related disorders (2.5% of employees had at least one short term disability claim related to depression over a two-year period).[70] A notable finding of this study was that "compared with other nervous and mental disorders, depression-related short-term disability generally affected more employees, lasted longer, and had a higher rate of recurrence."

Most research on workplace impact of depression has focused on absence, tenure, and disability. But it is likely that the majority of individuals with depression remain at work, albeit often with reductions in the quality and quantity of work performed. A recent study found that 81% of the cost of

# How much work impairment is caused by depression?

lost productive work time related to depression was a function of reduced performance while at work, rather than absence. Reduced productivity of workers who stay at work despite significant health problems is termed "presenteeism." The *Stanford Presenteeism Scale* has been developed to assess the impact of health problems on productivity in a working population.[72] There is a need for systematic research concerning the proportion of depressed individuals who remain at work and the extent of presenteeism among these employees. This issue is particularly critical for those employees working in safety sensitive positions where lapses in concentration, memory, or decision-making can have dire consequences.

In addition, there is a pressing need for more objective functional capacity evaluation to assess the impact of depression on individuals performing specific jobs. More objective and refined measures of work impairment will not only help clarify the impact of depression in the workplace and allow precise evaluation of new interventions, it will also facilitate support for the depressed person who continues to work and effective return to work for the person who is absent. A promising step in this direction has been taken by the City of Toronto, which revised criteria for the job demands of all their employment categories to explicitly include psychological and cognitive demands.[73]

# What is the cost to employers of depression?

BACK TO TOC

Because depression is very common and is associated with greater duration of disability and rate of relapse than comparable medical conditions, it generates substantial cost to employers.[74,75,76] Depression has been found responsible for "generating over half of all mental health care diagnoses and claims and even more days of disability and 12-month recidivism than chronic physical complaints such as heart disease, diabetes, high blood pressure, and low back pain."[77] A U.S. study compared the cost of depression with that of four other chronic disorders (heart disease, diabetes, hypertension, and back problems) in terms of medical expenses, sick days, and total disability costs. This study found that "employees treated for depression incurred annual per capita health and disability costs of U.S.$5,415, significantly more than the cost for hypertension and comparable to the cost for the three other medical conditions."[78]

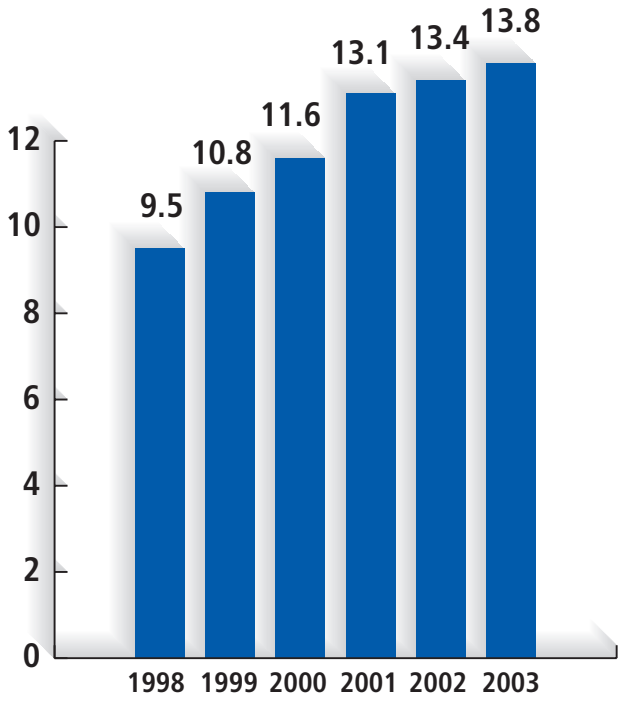
**"Employees treated for depression incurred annual per capita health and disability costs of [U.S.] $5,415, significantly more than the cost for hypertension and comparable to the cost for the three other [chronic] medical conditions."**

The Canadian system of reimbursement for health costs is quite different, with a far smaller proportion of health costs paid by the employer. Nonetheless, the costs associated with higher frequency and longer duration of disability absence, as well as reduced productivity, appear to be quite substantial. A recent Health Canada report concluded that the national economic burden of serious mental disorders (among which depression is the most common), including costs of short-term disability and treatment in the public or private sectors, can realistically be estimated as $14.4 billion annually.[79]

In the healthcare industry in British Columbia, mental disorders, of which 73% are depression, represent the fastest growing segment of long-term disability claims.[80] In 2003, claims for depression accounted for 13.8% of all active long-term disability (LTD) claims, exceeded only marginally by claims for back disorders. In the Community Social Services sector, claims for depression are the largest segment of the active LTD claims, accounting for 27.5% of all active claims as compared to back disorders at 10.2% of active claims. The following graphic shows the steady increase in claims for primary depression over the last six years.

# What is the cost to employers of depression?

## B.C. Healthcare – Percent of Active Long-Term Disability Claims with Depression as the Primary Diagnosis




Depression is responsible for a larger burden of disability, however, because in addition to the primary cases, secondary depression also develops in about 26% of non-psychiatric LTD claims. Combined, primary and secondary depression have an impact on about 35% of all active long-term disability claims. The occurrence of secondary depression is often associated with a decreased likelihood to return to work while on disability. One study found that the greatest predictor of not returning to work was the presence of depression in the worker; 84% who did not return to work were diagnosed with depression as a comorbid condition.[81]

# What are the workplace risk factors for depression?

BACK TO TOC

A number of risk factors increase the likelihood of depression. These include: "having a parent or other close biological relative with a mood disorder; having a severe stressor; having low self-esteem, a sense of low self-efficacy, and a sense of helplessness and hopelessness; being female; and living in poverty."[82] Although it is true that these risk factors will increase the likelihood of depression in the workplace, only some are directly relevant to the work setting and within our control. We can't alter the mood problems of an employee's parents, nor are we going to recommend gender change as a way of reducing depression risk. Furthermore, few employed individuals in Canada (depressed or not) are living in poverty. Depression risk is increased by a sense of low self-efficacy (believing oneself to lack the ability to cope effectively), and there are demonstrably effective interventions to increase an individual's capacity and confidence in coping with stressful events.

**The Canadian National Population Health Survey found that self-reported work stress (limited control over work, high psychological demands, job insecurity, and lack of social support in the workplace) was linked to the occurrence of major depression.**

Another risk factor related to depression is social stigma, which influences the likelihood that depression will be recognized and treated appropriately. Those who perceive a high level of stigma attached to depression are less likely to seek help or comply with treatment recommendations.[83,84,85] Similarly, stigma and lack of knowledge may prevent managers, coworkers, or human resources personnel from recognizing depression and referring depressed workers to appropriate care.[86]

Being *out of work* is a powerful contributor to depression. Large-scale surveys over a number of years show that unemployment and underemployment (e.g., finding only part-time work) are associated with increased risk of depression onset in subsequent years.[87,88]

A number of studies have examined the relationship between features of the workplace and employee depression. It is clear that certain kinds of workplace stress are associated with higher frequency of depressive symptoms in employees.[89,90,91] In particular, there is a relationship between "job strain" (high levels of job demand accompanied by low levels of control over workload)[92] and depressive symptoms.[93,94] Job strain is intensified if workers lack social support, feel socially isolated, or have poor relationships with supervisors and coworkers.[95] Workers also experience job strain when they perceive an imbalance between effort and reward, with a combination of high effort and low reward leading to psychological strain.[96] Similar outcomes result from incongruence between employee and organizational needs, values and goals. It has been theorized that that organizational culture can affect the quality of worklife and health of employees through its influence on management systems, organizational structures, and behaviours.[98]

# What are the workplace risk factors for depression?

The Canadian National Population Health Survey found that self-reported work stress (limited control over work, high psychological demands, job insecurity, and lack of social support in the workplace) was linked to the occurrence of major depression.[99] A study in France followed 12,000 working individuals over an extended time period and found that high levels of psychological demand, a low degree of control over work decisions, and lack of workplace social support predicted the subsequent development of depressive symptoms.[100]

The recently completed Health Canada Work-Life Conflict survey provided a 10-year update on how a diverse sample of citizens are balancing their roles as employees with their roles within their home, family, and community. In general, the study indicated that the majority of workers surveyed reported significant imbalance in their lives related to increased and competing work and family demands. Those individuals with the greatest degree of role overload and work/family interference reported the highest levels of depressed mood.[101]

**FOCUS GROUP THEME**

Changes in the workplace are seen as significant contributors to depression. Examples of these changes are downsizing, employment uncertainty, work-life imbalance, and increases in workload. At times of significant transformation, there is likely to be an increase in employee distress.

"If people can control at least a piece of their life, they can cope… but with all the workplace changes, they feel out of control and overwhelmed"

*– Human Resources Professional*

Workplace stress has been related to depressive symptoms in each of the following occupational groups:

Blue-collar workers. Minimal control over workload, interpersonal conflict in the workplace, and excessive environmental noise are linked to depressive symptoms in factory workers.[102,103,104,105]

White-collar workers. Ambiguity of role expectations, work pressure, lack of control over work, and lack of social support at work predict depressive symptoms in this working population.[106,107,108,109] Job strain has been related to depressive symptoms in teachers.[110,111]

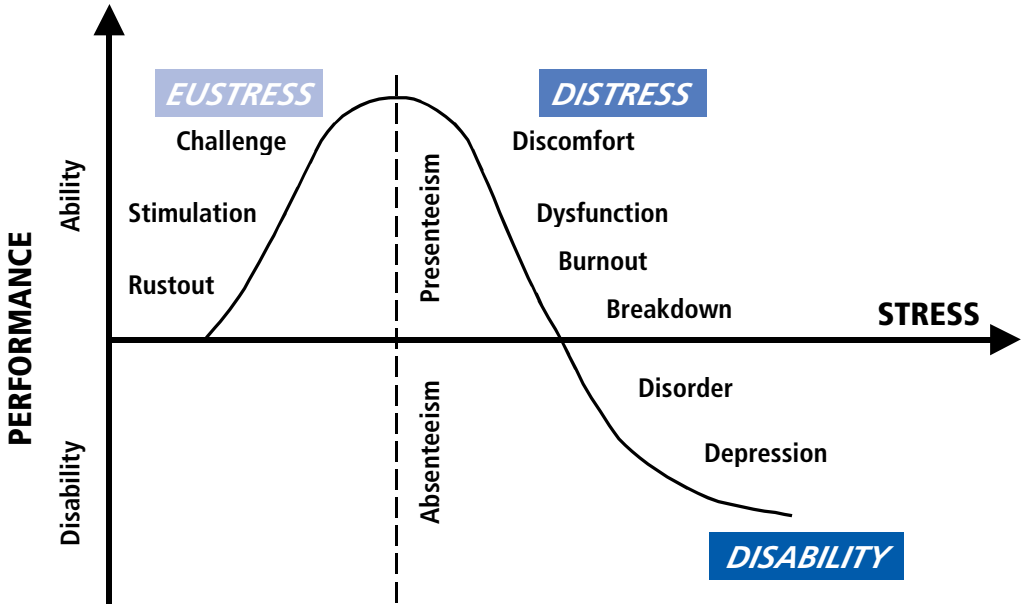
Caring professions. Several studies have demonstrated a relationship between job strain and onset of depressive symptoms in physicians.[112,113,114] Similar findings have been obtained in studies of other healthcare workers, with indicators of job strain like increased levels of job demand, lack of social support in the workplace and lack of control related to depressive symptoms.[115,116,117] A recent Canadian survey revealed that the impact of stress was heightened for healthcare workers because of the demands of rotating shifts and concerns about accidents or injuries.[118]

The connection between work stress and depression is complicated by two factors. First, stressors from work and personal life have a synergistic effect on the likelihood of depression, making it difficult to clearly identify the

source of stress.[119,120] Second, personal traits of workers affect their vulnerability to workplace stressors. For example, noise sensitivity varies among individuals, so that high workplace noise will more likely contribute to depression in certain workers.[121] Similarly, a high degree of "negative affectivity" (the tendency to react in an emotionally negative way) increases a worker's susceptibility to becoming depressed in response to workplace stress.[122,123] Whether an employee experiences depressive symptoms as a result of workplace stress will depend not only on characteristics of the workplace but also on characteristics of the employee that influence how he or she copes with the situation. Furthermore, the individual's capacity to effectively manage stress may depend on perceived support from coworkers and supervisors. A recent survey indicated that employees' attitude toward their workplace had less to do with the corporate policies of senior management than it did with their relationships with immediate colleagues and work teams.[124]

These findings tell us that we need to understand the relationship between workplace stress, depressive symptoms, and job performance. The diagram below gives a model of how these three factors might be interrelated.

## Occupational Implications of Depression



# What are the workplace risk factors for depression?

Individual workers respond differently to stress depending on their past experience, adaptability, coping skills, and level of support from others. In general, however, exposure to stress leads to physiologic arousal that affects human performance. *Eustress* describes the increasing levels of stress that positively challenge the individual and stimulate increased performance. However, prolonged or intense exposures to stress beyond an individual's ability to cope can also lead to a state of *distress*. This negative or toxic effect of stress can be associated with declining performance and progressive deterioration in both mental and physical health. Depression is one of the adverse health outcomes that occur in some susceptible individuals.

Many distressed employees remain in the workplace although they often complain of being "stressed out" or "burnt out" and their work performance and interpersonal relationships suffer. In this phase of *presenteeism*, the impaired employee may voluntarily seek help from a variety of lay or professional sources either at work or in the community. Occupational health and employee assistance program professionals may be consulted by the employee at an early stage. Alternatively, productivity, safety, or interpersonal concerns may trigger a supervisor to initiate a performance management process that results in referral of the employee for professional assistance.

At some point, if the stressful exposure is unabated, the distressed worker will leave the workplace, sometimes for a "mental health day" or two, but often for longer periods of time. Since most employers require substantiation for medically related absenteeism, the employee invariably seeks medical care at this juncture if they have not already done so. In most cases, the patient will receive a medical diagnosis and some form of treatment. Common workplace descriptors such as *burnout* and stress are usually replaced by a medical diagnosis of *adjustment disorder* or *major depression* and a course of medication or psychotherapy is often initiated. If, in the estimation of the attending physician, the illness makes it impossible for the individual to function effectively in the workplace, a variable period of disability ensues.

# What are the workplace risk factors for depression?

BACK TO TOC

The transition from employee to patient often heralds the onset of a disconnection between the workplace and healthcare system. Attending physicians are focused on making a correct diagnosis and providing treatment that cures or stabilizes the condition while maximizing symptom relief. Return to optimal functioning is an expected outcome of that process. Physicians are not necessarily informed or concerned about workplace issues, so return to work is often not a part of their therapeutic plan. Employers, on the other hand, are more interested in the functional ability of their employee and typically believe that early and safe return to work is therapeutic. Although many work cooperatively with physicians to that end, some employers are reluctant to interfere if the medical condition is not determined to be work-related. This is particularly true for mental illnesses such as depression. Unfortunately, the resultant lack of communication and cooperation makes successful accommodation and return to work far less likely. If the initial treatment prescribed is not effective, absence from the workplace can be prolonged or even permanent. For example, the average duration of an active long-term disability claim for depression among healthcare workers in British Columbia is now 46.4 months.

**The average duration of an active long-term disability claim for depression among healthcare workers in British Columbia is now 46.4 months.**

Universal prevention refers to the delivery of an intervention to an entire work group in order to eliminate or control individual and organizational risk factors, and thereby reduce the likelihood that individuals will develop depression. The major advantage of prevention is that there are significant savings in cost and suffering if one prevents the occurrence of a disorder, rather than intervening after it has developed. Prevention typically involves inexpensive actions that can realistically be applied across a large number of people, such as campaigns to educate groups about depression[125] or programs that make self-help materials easily available. One alternative approach to make prevention more cost-effective is to focus efforts on high-risk groups who are especially vulnerable to the development of depression and for whom a focused effort will likely yield significant benefit.[126,127,128] Organizational level prevention also addresses the structure, culture, management systems, and work practices that are known to contribute to psychosocial strain and mental illness in the workforce.

With regard to prevention of depression in the workplace, the most relevant interventions have been carried out under the name of "stress management," involving programs aimed at reducing the impact of job stress by changing factors related to job structure or employee coping.[129,130,131] Given the continuum we have described between milder depressive symptoms and diagnosable depressive disorders, interventions that reduce milder forms of psychological distress may be plausibly seen as preventive for the development of depressive disorders.

Stress management interventions target two kinds of goals:

### 1. Reducing the presence or severity of organizational and workplace stressors

This form of stress intervention seeks to modify employment characteristics such as excessive/unpredictable workload, unclear job expectations, or lack of perceived control, all of which have been linked to depressive symptoms. The research we summarized concerning the relationship between workplace stress and depression strongly suggests that interventions to reduce stress should be effective in the prevention of depression.

One successful prevention study showed that identifying stressful factors for a group of factory workers, then implementing systematic change to reduce these stressors, resulted in a significant reduction in depressive disorders and associated sick leave, compared to a control group who did not receive the intervention.[132] Another study delivered a comprehensive stress management intervention that included job redesign as well as coping train-

ing; this intervention resulted in reduced depressive symptomatology and absenteeism.[133]

These studies are promising, but more research is needed to clearly demonstrate that workplace modification can significantly reduce depression in employees. A recent review of organizational-level stress reduction programs to reduce health problems concluded that organizational interventions will require complex assessment of workplace stress patterns: "because organizational stress interventions will not be a panacea, practitioners need to evaluate and consider the relative impacts of associated costs, benefits, and limitations."[134] A similarly cautious conclusion was reached by a review of organizational-level stress interventions directed specifically at nurses.[135]

### 2. Increasing the ability of workers to cope with stress

This form of stress intervention teaches employees skills to manage existing stresses more effectively. Examples of stress management skills are: structured problem solving to appraise and respond to problems in a more effective way; interpersonal strategies for mobilizing support in the workplace; conflict management to handle disagreements with coworkers; relaxation techniques to reduce maladaptive tension; and communication training to clearly and assertively express one's viewpoint. A number of research studies have examined the impact of stress management training on depressive symptoms in workers, most showing significant improvements. Some notable studies are:

- A group-based stress education program was provided to nearly 400 emergency medical personnel over a three-year period. The stress management program had a number of components including relaxation training, conflict management, and communication training. Substantial reductions in depressive symptomatology were obtained.[136]
- A stress management program (including training in relaxation and cognitive techniques for stress coping) was provided to a group of nursing students. The group who received the program showed significant reductions in depressive symptoms compared to a control group who did not receive the training.[137]
- Stress management training was provided to 1,200 caregivers in residential facilities. The program involved six sessions, with training in skills such as mobilizing social support and conflict resolution. Participants in the training showed significant reductions in depressive symptoms compared to a control group.[138]

**FOCUS GROUP THEME**

Prevention is seen as requiring changes in the workplace:

Enhanced support to employees including access to fitness activities, daycare, performance recognition, and flexible scheduling options.

Programs to improve employees' interpersonal competence, coping skills, and stress resilience.

"What really helps is reasonable work expectations, having a mechanism in place that allows for flexibility"

*– Disability Management Consultant*

Several other studies have shown similar reductions in depressive symptoms due to stress management programs provided through the workplace,[139,140,141,142] with only one failure to show effectiveness of stress management in reducing depressive symptoms.[143]

Overall, the research literature supports the effectiveness of stress management programs that teach stress-coping skills to employees as a means to reduce depressive symptoms. Although these studies do not actually demonstrate reduction of diagnosed depressive disorders, there is some evidence that reducing depressive symptomatology helps to prevent the later onset of depressive disorders.[144] Furthermore, the evidence showing that depression has significant impact on work function, *regardless of whether it reaches the level of diagnosable disorder,* argues for the importance of reducing depressive symptoms.

# Is early identification of workplace depression feasible and beneficial?

BACK TO TOC

The signs and symptoms of depression can potentially be recognized by affected employees, their families and friends, coworkers or supervisors, or by healthcare providers. The recognition can be specific to the disease or can be more generally related to changes in behaviour or functional ability. Education in the community or at the worksite can increase awareness about the condition and increase the likelihood of detection.

Screening is a standard public health strategy to facilitate early identification and management of disorders. In addition to application within primary healthcare, it can also be useful at the community or worksite level. There are a number of criteria that must be met for a particular disorder to be suitable for screening.[145] The disorder in question must be serious, common, detectable, and treatable (preferably at an early stage).

Depression is a common and serious illness for which a number of treatment options are available. However, many cases of depression are not identified and do not receive appropriate treatment.[146,147] Reliable screening tests for depression have been developed for use in the community, doctor's office, or in the workplace.[148] There is a fair amount of research indicating that treatment outcome in depression is improved if treatment is initiated at an early stage,[149,150,151,152] although there have been some discrepant findings.[153] Overall, depression is an excellent candidate for routine screening.

Most research on early identification of depression has focused on screening for depression in the primary care setting (brief questionnaires administered to all patients visiting a family physician, with feedback of results to the physician). Although interpretation of the results of these studies is controversial,[154,155,156] the findings can be summarized as follows:

- Providing feedback to physicians about the results of screening questionnaires has a moderate positive effect on increasing the detection of depression;

- But screening in the physician's office does not significantly improve the treatment or clinical outcome for depression unless it is combined with other interventions designed to improve care, such as improved collaboration between primary care physicians and mental health specialists such as psychiatrists and psychologists.

There have been calls to institute widespread screening for depression among employees in order to facilitate early identification and prompt referral for medical treatment.[157,158] Such a call has particular appeal in a high-risk

# Is early identification of workplace depression feasible and beneficial?

industry such as healthcare where an ageing, predominantly female workforce is subjected to a demanding, constantly changing, and insecure work environment. However, the benefit of screening for depression in the workplace has not yet been evaluated, and given the research findings in primary care, we cannot assume that universal screening of employees will deliver significant benefit. Furthermore, workplace screening programs are accompanied by an ethical and practical responsibility to ensure access to appropriate clinical assessment and treatment for those identified as depressed, an obligation that has traditionally been filled by the public rather than private sector. As with screening in the physician's office, it is essential to combine workplace screening with other interventions designed to improve prevention, treatment, rehabilitation, and case management.

An alternative strategy, one more likely to deliver substantial benefit, is to focus screening on groups in the workplace who are at high risk for depression:

- Depression is twice as prevalent in females as in males, so selective screening may be considered in those worksites with a majority of women.
- Depression is more common in those using employee assistance programs. In a large US corporation, 40% of employees utilizing Employee and Family Assistance services were found to have symptoms of depression,[159] so screening by appropriately trained counsellors or occupational health professionals might well be beneficial. There is evidence that delivering screening and counselling to self-referred employees who feel stressed but have not reached the point of diagnosable depression yields significant benefit in reducing depressive symptomatology.[160,161]
- Depression is commonly associated with chronic medical conditions and it is estimated that 26% of non-psychiatric long-term disability claims are complicated by depression.[162] Untreated depression may delay return to work in some cases, so periodic screening of these individuals could be helpful.
- Declining work performance can be an indicator of distress or depression. Supervisors who have received education in the recognition of signs of depression and who are skilled in timely and supportive performance management can facilitate referral to appropriate organizational or healthcare services.

**FOCUS GROUP THEME**

The workplace should be actively involved in spotting warning signs of depression:

- Improved monitoring of employee performance and productivity;
- Absence management programs; and
- Education about the management of depression for managers and workers.

Employee Assistance Programs should be relevant resources for early intervention before depression onset, but doubt was expressed as to whether EAPs are effective in this regard.

"I had an EAP. It was helpful to a point but I was never diagnosed and they couldn't really help me with my depression."

*– Employee who has experienced depression*

# What is the effect of depression treatment on workplace function?

BACK TO TOC

The crucial issue regarding depression in the workplace is whether standard treatments, designed to reduce depressive symptomatology, are also effective for improving the *work function* of depressed employees.

Research studies have mostly found a positive relationship between improvement in depressive symptomatology and work ability. Employees with substantial improvement of major depression rate themselves as much more able to function effectively in the work environment.[163,164,165] Furthermore, improvement of major depression appears to be associated with greater likelihood of remaining employed and less work absence due to depressive symptoms.[166,167,168,169] A recent Ontario study of short-term disability found that prompt initiation of antidepressant treatment shortened disability absence. Two studies did not find a relationship between improvement in depression and in self-reported work function.[171,172]

One important question is that of "synchrony": does change in work ability occur in tandem with change in depression symptomatology? An early review article suggested that improvement of work ability might occur well after resolution of depressive symptomatology; that is, there might be a delay in the impact of antidepressant treatment on work function.[173] However, subsequent research has not supported this idea. It has been determined that change in work ability is pretty much simultaneous with change in depression symptomatology – as depression resolves, work function is restored.

Most of the improvement in depression symptoms or work function is evident in a few months,[174] with little further improvement, even with two years of follow-up antidepressant treatment.[175,176,177,178]

The side effects of antidepressant medications are also of concern with regard to recovery of work function. A recent study of antidepressant use in the workplace found that some employees experienced the following side effects that interfered with work performance: sleep disturbance; poor concentration and memory loss; fatigue; lack of motivation; and a "numbing down of feelings and responses."[179] Although many of these symptoms are transient, caution should be exercised when antidepressant medications are prescribed for employees who remain in the workplace, particularly those in safety sensitive positions.

A recently published study of usual medical treatment for major depression in primary care provides detailed information concerning the relationship between improvement in depressive symptoms and work

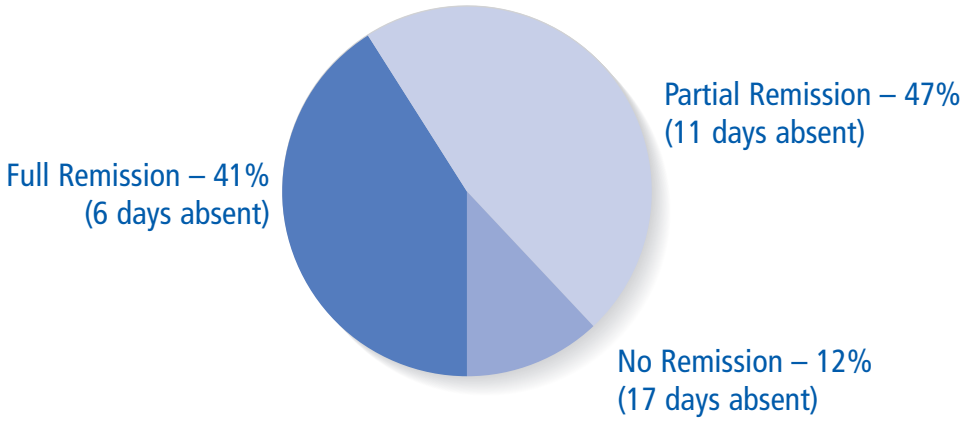
# What is the effect of depression treatment on workplace function?

**Approximately 60% of individuals with major depression who initiate a course of treatment with antidepressant medication continue to show at least moderate impairment of work function one year later.**

function.[180] Patients were assessed twelve months after initiation of antidepressant medication and then tracked for a further 12 months:

- 41% were no longer depressed at the 12-month assessment (Full Remission). This group had approximately 6 days of job absence in the first year following treatment initiation and 4 days in the second year;
- 47% were improved at the 12-month assessment but still had significant depressive symptoms (Partial Remission). This group had approximately 11 days of job absence in the first year following treatment initiation and 10 days in the second year.
- 12% remained persistently depressed at the 12-month assessment (No Remission). This group had approximately 15 days of job absence in the first year following treatment initiation and 15 days in the second year.

**Depression Treatment Outcomes**
**(average days of work absence over both years)**




That is, following initiation of a course of treatment with antidepressants, about 60% of patients continue to experience a level of depression sufficient to cause significant work impairment. Furthermore, one study found that even in those who have fully recovered from major depression according to clinical criteria, some degree of reduced work capacity is evident: "The presence of persistent psychosocial impairments, despite symptomatic improvement and long-term therapy, suggests that this subset of patients

might benefit from specific psychosocial interventions designed to foster more complete rehabilitation."[181]

Interestingly, it appears that CBT has a beneficial effect on work function above and beyond the impact of antidepressant medication.[182,183] Further support for this suggestion comes from a study in which CBT treatment showed a specific advantage over antidepressant medication with regard to reduction of disability and work absence, even though the treatments were equivalent in reducing depressive symptomatology.[184] One researcher suggested that "[CBT] psychotherapy has a direct effect on psychosocial functioning through therapeutic work on issues that have relevance to psychosocial functioning, such as the building of social skills."[185]

In the last few years, experts in depression treatment have acknowledged that many depressed individuals continue to show significant impairment in occupational function despite standard antidepressant treatment. As a result, there has been a new emphasis in the medical literature on "treating patients to full remission of symptoms."[186,187] Recommended strategies to obtain full remission have included long-term antidepressant treatment, substituting a new antidepressant, or adding other types of psychiatric medications. At first glance, this approach looks like it could fully restore work function by entirely resolving depressive symptomatology. However, the impact of adding other psychiatric medications has not been determined.[188] Furthermore, these other drugs may have disruptive side effects, such as sedation, which can introduce new barriers to recovery of work function.[189,190]

Here is a summary of what we have learned about depression treatment and its effects on work function:

- Employees suffering from minor forms of depression are generally best treated with problem-solving interventions, self-management tools, or supportive counselling with a focus on preserving social and occupational role functioning.

- Prompt treatment of employees with major depression will result in reduced depressive symptomatology in most, but full remission of symptoms in less than half. Effective treatments in most cases of depression are antidepressant medication or CBT.

**FOCUS GROUP THEME**

A frequent observation was that the public health care system does not have adequate knowledge and resources to respond promptly and appropriately to the needs of depressed workers, particularly in small communities (provided services are "too little, too late"). A number of participants observed the health-care system is ill-equipped to adequately manage depression-related disability.

"General practitioners are often not engaged in the outcome of mental disability cases, they have a defeatist attitude at the beginning"

*– Occupational Health Physician*

# What is the effect of depression treatment on workplace function?

- Improvement in work function from depression treatment is likely to occur simultaneously with reduction in depressive symptomatology. Most of this change will be seen in the first month or two. CBT may have a specific benefit for recovery of work function.

- A significant gap exists in the effectiveness of standard antidepressant medication treatment with respect to recovery of work function. Approximately 60% of individuals with major depression who have received an adequate course of antidepressant medication continue to show at least moderate impairment of work function. This gap in outcome with regard to work function can be termed a *recovery gap*.

# How should depression-related impairment be managed?

BACK TO TOC

As we saw in previous sections, usual treatment with antidepressant medication leaves a significant recovery gap with regard to restoration of work function. Many of those who receive usual depression treatment continue to show reduced ability in the workplace. This often results in presenteeism, but may also lead to disability.

Considerable knowledge has been gained over the last 20 years regarding effective strategies for overcoming impairment and disability caused by various health conditions. It has been found that helping employees recover work function requires dealing with issues common to all forms of disability. For example, extended disability absence has a demoralizing effect, such that the likelihood of workers returning to former employment after an absence from work decreases rapidly the longer they have been away.[191]

Whether work impairment is caused by depression or back injury, an approach has been developed to promote recovery of work function. Integrated disability management has been applied with considerable success to rehabilitation and return to work of employees who have suffered musculoskeletal injury.[192,193] Disability management programs grew out of the realization that the solution to occupational disability lies in the workplace rather than in the healthcare system. Employers could reduce disability-related costs and productivity losses by actively implementing rehabilitation and return-to-work processes. An example of the disability management process applied to an employee with depression is outlined in the case study at Appendix A.

Although there are numerous disability management models, they typically share three main goals: reducing the number and severity of impairing disorders; minimizing the impact of disorders on work ability; and decreasing lost time as a result of disorders. Optimal strategies for achieving these goals have been identified by The Canadian Centre on Disability Studies, which conducted a literature review to identify best practices in disability management.[194] Critical best practices include:

- Coordinating interventions with the workplace, rather than exclusively relying on external healthcare systems to resolve disability problems;
- Preventing potentially disabling injuries or illnesses;
- Early identification and intervention;
- Early return to work with innovative accommodation techniques;
- Coordination between supervisors, senior management, labour representatives, health practitioners, and insurance providers.

**FOCUS GROUP THEME**

The decision as to whether a depressed individual should be absent from work due to depression is made by the individual and the physician. There was some concern with lack of consistent criteria for this decision and limited physician familiarity with specific job duties.

"Usually the employee decides how long to be away from work and the GP okays it. Often the recommended time off is unspecified and there is considerable variability between physicians."

*– Occupational health physician*

# How should depression-related impairment be managed?

The following rationale for the introduction of disability management strategies to the rehabilitation of physical disorders is equally applicable to the rehabilitation of depression:

> *Disability management interventions were, in part, developed as an alternative to the shortcomings of the traditional, individual or clinical model of vocational rehabilitation... in the traditional model, rehabilitation services are considered reactive because they are often applied long after the onset of disability with little attention paid to prevention or early intervention. Services are usually provided by third parties in settings that are external to the work environment, e.g. clinics, hospitals, or facilities. Employers and employees play a passive role in rehabilitation and return to work activities and relinquish control of these activities to outside providers.*[195]

**Loisel's integrated disability management program has been shown in controlled research to significantly decrease the length of work absence, increase quality of life for participating workers in the program and to be cost-effective**

The work rehabilitation model developed in Québec by Patrick Loisel and his associates is an example of disability management applied to workers with back pain.[196] This model involves several staged interventions:

1. An early identification and assessment component for those employees who continue to be off work more than four weeks due to injury, in order to identify and address factors that may lead to disability.
2. Workers who continue to be absent after 6 to 8 weeks receive a more intensive evaluation by an occupational physician and ergonomist. After 8 weeks a medical specialist is consulted and if no severe condition is identified, the employee is reassured and asked to attend a 4-week self-management training program ("Back School") to facilitate activation and coping.
3. If return to work has not occurred after 12 weeks, workers are referred to a multidisciplinary rehabilitation program including fitness development and work conditioning with a cognitive-behavioural approach.

This integrated disability management program has been shown in controlled research to significantly decrease the length of work absence, increase quality of life for participating workers in the program, and to be cost-effective for employers and disability insurance providers.[197]

Despite the considerable success enjoyed by disability management programs in fostering recovery of employees with physical illnesses or injuries, the relevance of disability management to disability caused by mental health disorders has been recognized only recently. We believe that the staged and

comprehensive model used by practitioners and researchers such as Loisel could be readily adapted for the work rehabilitation of depressed workers.

Management of depression in the workplace must begin with the workplace rather than the healthcare system. With regard to depression management, neglecting the workplace may result in:

- Failure to control or eliminate risk factors, such as conflict with co-workers or supervisors or lack of perceived control over workload, which may initiate or compound depression as well as increase the likelihood of depression relapse.

- Delivery of treatments that ignore the depressed person's relationship to the workplace and thus worsen the disability state. This can include recommendations of "stress leave" without concurrent provision of strategies to maintain or build resilience and coping skills. This can readily result in demoralization, inactivity, and loss of engagement with coworkers.

- Poor communication between healthcare providers, disability managers, and the workplace, resulting in limited understanding of the depressed worker's status and delayed or inadequate consideration of appropriate return-to-work strategies.

There have been a small number of successful programs developed to manage depression in the workplace. The impact of an integrated disability management program on depression-related disability in a large U.S. bank has been evaluated.[198] Components of this disability management program were: managerial training to reduce stigma and improve early recognition of depression; enhancement of the EAP, staffed by clinical psychologists and social workers, to include case management of disability cases; structured screening for depression; and redesign of benefits to increase available treatment options for depression. Following implementation of this program, substantial reductions were seen in treatment costs for depressive disorders.

Another study focused on a large corporation, which contracted with a managed behavioural healthcare organization to implement a disability management program for employees suffering psychiatric disorders ("depression was by far the most prevalent mental health condition").[199] A critical feature of this program was ensuring that depressed employees had access to evidence-based treatment specifically focused on *resolution of problems related to the workplace*. To ensure such access, mental health providers (mostly clinical psychologists) were given specialized training to "practice with worklife as a central focus of treatment" and case managers

**Management of depression in the workplace must begin with the workplace rather than the healthcare system.**

### FOCUS GROUP THEME

A number of strategies were identified that facilitate early return to work for depressed employees.

- Flexibility: graduated return, workload modification, task reassignment
- Supportive work environment: sympathetic and well-informed supervisor and coworkers
- Communication: clear expectations for return to work among participants in the work return, ongoing contact with a depressed employee during work absence

"With early return to work, there are more successful cases and fewer cases of individuals just being medicalized"

*– Insurance Company Consultant*

# How should depression-related impairment be managed?

were appointed to oversee treatment, ensuring that "an explicit treatment focus was the identification and resolution of problems that prevented the patient from working." In addition, those employees taking disability leave related to depression were promptly assessed in order to determine specific impairments and problems needing to be addressed in treatment. Compared to a control group of employees not covered by this contract, a 23% reduction in psychiatric disability days was achieved (approximately $3000 per disability case).

# Conclusions

BACK TO TOC

Our review of current knowledge regarding depression in the workplace leads to four broad conclusions. Each of these conclusions reflects a basic principle that emerges from the knowledge base in this area.

**I.** Depression is a common and serious problem that continues to be shrouded in stigma and ignorance and all too often goes unrecognized or inadequately treated. Although there is compelling evidence of the personal and business losses associated with this condition, our focus groups clearly suggest that the workplace response is generally uninformed, disorganized, and often ineffectual. A comprehensive, integrated, and coordinated strategy for managing depression in the workplace is urgently required.

**II.** A chasm has opened between the public healthcare system and the workplace. They have different cultures, communicate poorly, and do not coordinate their priorities for treatment and management of mental health problems. Yet the patients who present to the healthcare system with depression are the employees who demonstrate functional deficits in the workplace. Bridging this chasm through enhanced communication and coordination will substantially benefit the depressed employee's personal health and the nation's corporate health.

**III.** Depression cannot be treated only as a problem for the individual worker suffering from the condition. It also constitutes a fundamental issue for the employer and coworkers. Depression in the workplace has a significant effect on the productivity and profitability of corporations. Risk factors for depression are found at both the individual and organizational levels and, therefore, successful intervention requires action at both levels. We conclude that a continuum of risk reduction and health promotion, early detection and intervention, and effective disease and disability management will be most effective in managing this complex condition. Research studies concerning the costs associated with depression and programs to improve organizational management of this disorder indicate that a powerful business case can be made for comprehensive intervention.

# Conclusions

**IV.** It is essential to identify approaches that can establish a bridge between the workplace and healthcare system in responding to depression. Integrated disability management (IDM) is a workplace- and employee-centred process that has proven very effective for managing physical illness and injury. A core element of IDM is an effective communication network between the employer, employee, and healthcare providers. The concept also emphasizes the importance of restoring function and early and safe return to work as critical components of the therapeutic plan. Along with rehabilitation, IDM incorporates the elements of risk reduction, early identification, evidence-based treatment, and relapse prevention into a coordinated corporate health continuum.

The following recommended actions, which exemplify best practices for managing depression in the workplace, flow out of these four principles.

The recommendations that follow are based on the diverse sources of information gathered during this project. This report includes a combination of research evidence and stakeholder consensus that we have synthesized into practical recommendations.

Our recommendations are sub-divided into five categories: prevention; early identification and intervention; disease and disability management; education; and research priorities. The mental health needs of any given organization will be met by a unique combination of these elements that, when integrated and coordinated, will form a customized and comprehensive strategy for managing depression in their workplace. Given the complexity of implementing change in the workplace or in the relationship between workplace and healthcare, it may be best to consider these recommended practices as a menu of possible actions. The ultimate selection and priority assigned to the various elements is dependent upon the size and complexity of the operation, the availability of resources, and level of risk present in the organization. In short, we are recommending a common framework, but a unique and customized approach for each organization. Readers should also consult the Annotated Resource List at **Appendix C** for further information and examples of various program elements.

## PREVENTION

Preventing the occurrence of depressive symptoms or the onset of minor or major depression is best accomplished by a combination of risk management and mental health promotion. Since both individual and organizational risk factors contribute to depression, it is important to consider both in developing an intervention strategy. In addition to reducing or eliminating risk, it is also possible to assist individuals to cope more effectively with those risks. Optimizing the physical, mental, and social health of individual workers makes them more resilient and adaptable to changing work conditions.

### REDUCE DEPRESSION RISK AT THE ORGANIZATIONAL LEVEL

We found strong evidence for a relationship between workplace stress and onset of depressive symptomatology, and some evidence for the effectiveness of carefully targeted organizational interventions to reduce stress and depression risk. We found that a supportive culture, and especially support from supervisors and coworkers, are important contributors to employee mental health. We reviewed a number of psychosocial theories that explain the origin of occupational stress in terms of imbalances between demand and control, effort and reward, personal and environmental values and goals, and

# Recommendations

work and life roles. Stressful factors likely to increase depression risk include lack of control over fluctuating workload, lack of perceived support from coworkers or supervisors, and unresolved interpersonal conflict in the workplace. This evidence has influenced the development of "healthy workplace" and "employer of choice" strategies, and forms the basis for an organizational level intervention for reducing the risk of depression in the workplace.

The following key strategies are recommended to planners who want to reduce psychosocial stressors and depression risk in their organization:

- **Provide supportive leadership, management, and supervision.**
  Senior management commitment and active involvement is critical to communicate organizational values, provide broad direction and expectations, create an enabling environment, assign priorities and accountabilities, and allocate the necessary resources for improving organizational and individual health. Managers are the key to operationalizing corporate strategy. By adopting a participative and quality management approach, they can empower and engage workers in the identification and remediation of unhealthy work conditions. Supportive supervision links health and performance at the work group and individual employee level. Skilful application of performance management techniques permits cost-effective prevention and can reduce depression risk.

- **Apply evidence-based planning.**
  Employee satisfaction and health-risk behaviour surveys provide a subjective, aggregate assessment of employee and organizational health. These data can be linked with health program audit results, short-term and long-term disability data, and information on extended health and EAP utilization to create an organizational health profile. Compiling and analyzing these data permit planners to determine the current health status of the workforce and work environment, to identify priorities for intervention, and to establish a baseline for evaluating the impact of healthy workplace initiatives on depression risk.

- **Implement people-centred human resource policies and practices.**
  Many psychosocial stressors stem from basic human issues related to fairness, belonging, and reasonable satisfaction of needs. Human resource policies that support equity, fair pay, recognition, learning and career development, teamwork, work-life balance, effective two-way communication, and access to health information and evidence-based healthcare are an essential component of a healthy workplace and can help to reduce depression risk.

As noted previously, there is no single form of organizational change that will serve as a panacea for reducing the risk factors associated with depression. Employee satisfaction surveys augmented with focus groups and interviews can often provide insights into the unique characteristics and needs of organizations or occupational groups. Although the preceding list of organizational interventions is far from exhaustive, it is easy to appreciate that taking action across such a broad front will require the sustained commitment and collaboration of executives, managers, human resource and occupational health professionals, and employees. Conventional, fragmented approaches will not be successful at the organizational level.

The approach we have recommended is likely to be most effective when implemented in the context of a comprehensive "Healthy Workplace" strategy. Such an initiative requires an integrated and coordinated effort to reduce health risk in the workplace, not only depression risk. Several advisory bodies have developed sophisticated management systems to assist organizations to improve their corporate health (See Annotated Resource List, e.g., 21, 31, 36).

## REDUCE DEPRESSION RISK AT THE INDIVIDUAL LEVEL

The research literature provides strong support for the effectiveness of worksite programs to increase stress-coping skills in reducing depression risk. A term that is often used to describe this kind of coping training is "resilience training." It is designed to teach skills for dealing with work stressors so that employees have greater resilience when faced with changing patterns of workplace stress.

Resilience training can be provided by workshops delivered by external providers or by employee assistance programs (assuming that confidentiality concerns are dealt with and EAP staff have specific education in delivering this training). Most valuable for increasing resilience are the following kinds of training:

- **Social skills:** resolution of interpersonal conflicts and enhanced communication, particularly concerning assertiveness;
- **Problem-solving:** systematic appraisal of workplace problems, identification of relevant responses, and implementation of action plans;
- **Time management:** effective balancing and prioritizing of workplace demands and information flow in relation to available time;
- **Goal setting:** establishment of useful, realistic, and well-paced goals. Related to this is maintenance of work-life balance and self-care activities;
- **Mood management:** acquisition of techniques relevant to maintaining emotional balance and limiting anxiety/tension.

# Recommendations

## PROMOTE MENTAL HEALTH

In keeping with the World Health Organization definition of health, a state of mental health is not merely the absence of distress but rather, the presence of a positive psychological state known as *eustress*. A psychologically healthy workplace is one that promotes eustress by actively supporting the emotional needs of employees and controlling known sources of distress. This process begins with careful selection and job matching to ensure that new employees fit well with the organizational culture and have the necessary knowledge and skills to meet job demands. Orientation and ongoing training and development programs help familiarize the new employees with the organizational culture and enhance job performance. A participative management style and supportive supervisor and coworkers help to empower and engage the employee. Progressive human resource policies and work practices promote reasonable work hours, healthy and safe behaviour, and work-life balance. At the organizational level, it is line managers, supervisors, and human resource professionals who play key roles in the promotion of mental health in the workplace.

In addition to favourable environmental conditions, it is important that employees take an active role in maintaining their own health. Routine exercise, good nutrition and weight control, adequate sleep, sufficient leisure time, stress management, and avoidance of illicit drugs and excessive alcohol are all beneficial to both mental and physical health.

## EARLY IDENTIFICATION AND INTERVENTION

Our research indicates that early detection, when combined with effective treatment, can positively influence the course of depression in the workplace. At the early identification stage, we are interested in detecting employees who are experiencing high levels of distress, depressive symptoms or early onset of minor or major depression. Appropriate and timely interventions should result in decreased severity and duration of depressive episodes and reduced likelihood of relapse after treatment.

### FOCUS PERFORMANCE MANAGEMENT ON DEPRESSION

Early identification of depressive symptoms helps prevent the onset of major depressive episodes. Performance management is a human resource strategy with the potential to identify functional deterioration related to depressive symptoms before the onset of a major depressive episode.

Declining work performance may take the form of failure to meet expected objectives, poor quality of work, accidents and unsafe behaviour, interpersonal problems, or excessive absence. Supervisors who have undertaken mental health awareness training will be better informed and have increased sensitivity to mental health issues when assessing work performance. It is not that supervisors would detect mental disorders, but rather that they could identify changes in work performance or interpersonal behaviour that might herald the emergence of mental health problems. During a performance interview, the employee could be asked about observed changes, and if a health problem is suspected or declared, the employee can be informed of existing benefits (EAP, extended health benefits), supportive programs (stress management, self-care guides), and options for seeking professional assistance.

If continued monitoring of work performance reveals an ongoing problem, the supervisor should seek assistance from services such as occupational health or disability management professionals. In this manner, an administrative response that is guided by work performance can be augmented by a complementary medical response. Creating an efficient interface between the workplace and healthcare system is the key to successful clinical and functional management of depression. A skilful supervisor who is vigilant, supportive, and informed is pivotal to this process.

### IMPLEMENT DEPRESSION SCREENING FOR HIGH-RISK CASES

Brief and reliable depression screening tests have been developed that are suitable for application by occupational health staff, employee assistance counsellors, disability case managers, or vocational rehabilitation consultants. Depression screening is valuable only if it is part of a comprehensive program that facilitates access to appropriate services.

Given the limited benefit of depression screening in primary medical care settings, it would not likely be cost-effective to implement universal screening for depression (i.e., for all employees). The most appropriate intervention is one that targets screening efforts at employees in high-risk categories. Examples are:

- Employees who attribute declining work performance to high stress levels or who complain of being burnt out;
- Employees showing a high level of unexpected work absence;
- Employees attending the employee assistance program;
- Employees on long-term disability leave related to chronic non-psychiatric disorders.

It is critical that workplace screening programs respect employee confidentiality. In the past, research on depression screening was conducted in healthcare settings where formal protection of individual patient privacy and medical confidentiality is well established. However, screening in the workplace requires far more attention to this important issue so as to respect employees' rights and to foster their trust and participation. Examples of screening protocols are available in the Annotated Resource List (e.g., 2, 29).

### IMPLEMENT PERIODIC HEALTH MONITORING FOR HIGH-RISK OCCUPATIONAL GROUPS

Health surveillance is a well-established practice for monitoring the health of occupational groups who are at high risk for toxic exposures in the workplace. Those in safety-sensitive positions (where failing health could put the employee, coworkers, or the public at risk) are also commonly subjected to health surveillance. Surveillance techniques can include pre-placement and periodic physical examinations, written and laboratory screening tests, and health risk appraisals. Early detection of physical, mental, or biochemical abnormalities leads to referral for appropriate investigation and treatment.

Traditionally, toxic exposures mostly referred to physical or biological agents where surveillance is mandated by compensation board regulations. Toxic psychosocial conditions are not typically considered in such regulations

and usually there is little or no mandated surveillance. This has resulted in exclusion of some occupational groups that are known to experience significant psychosocial strain in the course of their duties. Mental health screening is more common in safety-sensitive occupations such as airline pilots or other transportation jobs. For those occupations, federal regulations often specify screening for substance abuse and impaired mental status as a means of guaranteeing public safety. Law enforcement officers usually undergo mental health surveillance to ensure that they are safe to handle weapons and will respond appropriately in adversarial situations.

Certain high-risk occupational groups should be surveyed periodically to assess stress levels, or given brief screening tests to detect depression at an early stage. Employees with positive screening results would be referred to competent mental health practitioners for confirmation and appropriate counselling or treatment. Analysis of aggregate data might reveal common workplace stressors that could be eliminated or modified to improve the health of all employees in the occupational group.

### DISTRIBUTE DEPRESSION SELF-CARE MATERIAL

Distribution of self-care material represents a very low-cost intervention with the potential to provide effective intervention to employees suffering from depressive symptoms or mild disorder, as well as the potential to avert the onset of major depression in some cases. It is worth remembering that more employees will suffer mild depression than major depression, that mild depression is nonetheless associated with significant impairment of work function, and that research supports self-care intervention more than it does pharmacological treatment for these cases. A range of depression self-care manuals are available, for example, the Self-Care Depression Program developed at U.B.C. (Annotated Resource List: 33). In addition to making self-care manuals available through health resource centres, employee health nurses, and employee assistance programs, a greater impact would likely be achieved by providing specific training to relevant staff in how to support employees in the application of self-care strategies.

## PROVIDE EVIDENCE-BASED EMPLOYEE ASSISTANCE FOR MILD DEPRESSION

Employee assistance programs are valuable workplace resources that may not be realizing their full potential to identify and ameliorate depression and enhance disability management. Employees attending EAPs tend to be at high risk for depression and are often symptomatic. This represents an opportunity for early intervention by providers with knowledge of the particular workplace. However, most Canadian EAPs are restricted in their capacity and mandate and are unable to provide an adequate course of care, nor can they participate in the return-to-work process for depressed workers. Nor are the practitioners typically trained or credentialed to detect and treat depressive disorders. This is a lost opportunity.

If EAPs were explicitly mandated to detect and refer employees with depressive illness, they could facilitate access to adequate care. This would require familiarity with local resources and training in the use of effective screening tools. If their role were expanded further to detect and treat mild depression, EAP professionals would be in a position to reduce the possibility of progression into major depression and disability. This would require provision of an adequate course of intervention as well as additional training in both screening techniques and evidence-based interventions. Finally, if the role were expanded further to include involvement in work return, EAPs would be in a position to support the returning employee and prevent relapse and return to disability. This would require corresponding education in disability management principles.

This is not to suggest that EAPs are a viable alternative to specialist mental health care. Although a small proportion of EAP counsellors have received sufficient academic preparation and clinical supervision in the practice of CBT and may have adequate familiarity with effective medications, most have not (Annotated Resource List: 12, 13). It is feasible, however, to provide additional education to EAP providers to act as an effective coach for employees using self-care programs and to augment primary medical care, if necessary. This would include facilitation of goal setting, lifestyle balance, problem solving, and improved social skills. There do exist training programs developed for community settings that could be adapted for such purposes (Annotated Resource List: 10, 33). It is recommended that employers give consideration to revision of the scope, training, and role of EAP programs when reviewing or extending contracts. It is also suggested that standards for EAP providers be expanded to include demonstration of competency in recognition and care of depressed clients.

### PROVIDE EARLY CASE MANAGEMENT TO PREVENT DISABILITY ONSET

Disability prevention activities should be introduced early in the course of a depressive episode to reduce the occurrence, severity, and duration of depressive disorders. The cornerstone of this activity is a case management process that facilitates accurate diagnosis and access to evidence-based treatment by qualified practitioners. Case management activities can be initiated in response to self-referral by distressed employees, referral from a supervisor as a result of deterioration in work performance or absenteeism, or referral from EAP or occupational health professionals of employees detected by screening or medical assessment.

The case manager acts as an interface or portal for effective two-way communication between the workplace and the mental healthcare system. The ability to communicate effectively with the attending physician or mental health practitioner permits the case manager to monitor clinical progress and ensure that early return to work is an element of the therapeutic plan. The case manager can also advise the attending physician about employer sponsored mental health benefits such as EAP, in-house or contracted mental health services, or extended health benefits. A close link must also be established with the supervisor and occupational health staff to consider job modification that will accommodate the needs of the employee during a transitional return to work.

# Recommendations

## DISEASE AND DISABILITY MANAGEMENT

Once a depressive disorder is diagnosed, it is important to manage the disease effectively by instituting evidence-based treatment. Our research has identified a number of barriers that must be overcome to ensure access to high-quality therapy for depression. Clinical practice variation and employee non-compliance are other issues that reduce the effect of therapy. The following recommendations are intended to facilitate access, enhance quality, and improve compliance with treatment for depression:

### IMPROVE THE QUALITY OF MENTAL HEALTH CARE AVAILABLE TO WORKERS.

**Evidence-based practice guidelines** have been developed in both Canada and the U.S. (see Annotated Resource List: 12, 23). These guidelines identify best practices in the clinical management of depression. The intent of clinical practice guidelines is to reduce practice variation and improve outcomes for depression. Disability case managers, rehabilitation consultants, and occupational health and EAP professionals should be familiar with these guidelines in order to interact more efficiently with treating physicians.

**Preferred provider arrangements** are often used to standardize clinical practices, improve quality of care, and control costs. In the U.S. managed care system, mental health care is often delivered by preferred providers. These organizations have met with mixed reviews because although they appear to improve access and quality of mental health care for employees, they are often not well integrated with other health care services. For larger employers, the potential may exist to embed mental health services within the workplace as an element of an employee/family assistance program or a disability management system. This model is known as shared care. It expedites referral, assessment and consultation, and should improve the quality of care for depression.

**Occupational health workshops** can familiarize mental health practitioners with the occupational implications of depression, which are usually not emphasized in academic curricula for healthcare providers. First, given that the majority of mental health care is delivered in the primary care physician's office, we recommend that specific training modules be developed for primary care physicians regarding the assessment and management of work-related issues in depression. Note that the Workers' Compensation Board of British Columbia hosts a series of seminars for primary care physicians to familiarize them with

their role in managing common work-related illnesses and injuries. These seminars discuss the advantages of early return to work, outline effective communication strategies that preserve clinical confidentiality but provide useful functional information, and describe the process for matching job demands with employee functional capacity for the purpose of accommodation and transitional return to work. We recommend a similar process to familiarize primary care physicians with work-related issues in depression management. Second, we recommend that training modules be developed for mental health care providers on how to resolve workplace difficulties, enhance occupational function, and communicate effectively with workplace representatives. McCulloch and his colleagues described a successful managed psychiatric disability program where training for mental health providers specifically focused on resolution of problems related to the workplace.[199] From the disability management perspective, the resources now invested in psychotherapy or counselling for depression, much of which may not be evidence-based or work-relevant, would be better invested in providing effective and work-relevant treatments.

## IMPROVE ACCESS TO EVIDENCE-BASED THERAPY FOR DEPRESSION

**Extended health benefits design** plays a critical role in ensuring access to evidence-based therapy. In most cases, availability of appropriate antidepressant drug therapy has not been a problem, although increasing utilization rates and associated escalating costs are prompting employers to review benefits design. However, functional restoration, reduced presenteeism and absenteeism, and reduced costs associated with excessive healthcare utilization make a strong business case for continued employer investment in appropriate drug therapy.

The weakness of current benefit design is related to the lack of adequate funding for psychotherapy, and specifically for cognitive behavioural therapy (CBT) that has been shown to be effective as an alternative to, or in conjunction with drug therapy in the management of depression. This is in glaring contrast to benefits coverage for physical injury, where drug therapy is commonly augmented by generous access to physiotherapy, chiropractic, massage therapy and acupuncture. It is recommended that this disparity be corrected by the inclusion of CBT in extended health benefits, but that access be restricted to qualified mental health practitioners who provide services in accordance with current clinical practice guidelines.

# Recommendations

**An efficient and appropriate mental health referral network** should link the workplace with clinical resources in the community. Occupational health and EAP professionals, rehabilitation consultants, and disability case managers should all be familiar with local private and public mental health practitioners and programs. For example, standardized group and individual cognitive behavioural therapy is available throughout British Columbia from a network of mental health providers trained using a standardized, evidence-based protocol (see Annotated Resource List: 10). It will require a multidisciplinary educational approach to bridge not only the gap between the workplace and the clinical community, but also the gaps between the professional silos of the treatment providers.

## IMPROVE EMPLOYEE COMPLIANCE WITH RECOMMENDED MENTAL HEALTH CARE

**Empowerment of affected employees** begins with accurate information. Non-compliance is a complex issue that is often related to a combination of stigma, misinformation, financial barriers, poor communication, side-effects of medication, and symptoms of the illness itself. Most of these problems can be anticipated and their effects mitigated by timely information and suitable counselling. "Informed consumers" can then participate more actively in their own recovery and can help construct a more meaningful therapeutic plan. Compliance can also be facilitated in the workplace by an integrated performance management and case management process that continually monitors progress and securely links the employee, employer, and practitioner. Useful information is available from several sources in the Annotated Resource List (e.g., 19, 26, 32).

Depression is associated with significant social and occupational impairment and disability. Disability management for depression is intended to mitigate disability, restore function, facilitate early, safe and sustainable return to work, prevent relapse, and reduce the threat of suicide. Although there is little evidence related to disability management for mental disorders, a number of principles and techniques that have proven successful for physical illness and injury may be equally effective for depression.

## IMPLEMENT ACTIVE MANAGEMENT OF DEPRESSION-RELATED DISABILITY

As with other disorders causing work impairment, it is important to actively manage additional disability associated with depression. Clinical treatment of depression symptoms and distress does not adequately address the complex issues arising when workers are disabled from performing their job duties.

Critical components in the effective management of depression-related disability are as follows:

- **Case management** coordinates the disabled employee's needs with workplace requirements and fosters communication between health-care providers and workplace representatives. Provision of these coordination and communication functions will likely result in significantly improved disposition of depressed employees with regard to faster return to work and less return to disability.

- **Psychological job analysis** is a systematic description of the cognitive, behavioural, and interpersonal requirements of the essential functions of a specific job. It outlines the mental capacity required by an employee to safely and accurately perform the job. The psychological job analysis is useful for initial job matching and for developing on-site transitional work and modified duty options for accommodating disabled workers who are attempting to return to work.

- **Psychological functional capacity assessment** assists the health practitioner in formulating a return to work plan for the depressed employee. An employee undergoes a battery of tests and tasks designed to measure an individual's objective and subjective functional ability to meet the essential mental requirements identified by the psychological job analysis for their specific job.

- **Task/job modification** refers to temporary restrictions or accommodations that help an employee return-to-work sooner or increase the likelihood of a sustained re-entry. Permanent restrictions or accommodation are recommended when the worker is deemed to be at maximal medical improvement, cannot meet the full job demands but can fulfill the essential job demands.

■ **Vocational rehabilitation** is appropriate if the employee is deemed to be at maximal medical improvement yet cannot meet the essential requirements of the current job.

■ **Independent medical examinations** (IMEs) are appropriate for complex, contentious or possibly safety-sensitive cases and are intended to assess occupational function and facilitate return to work. A psychiatrist, psychologist or occupational physician skilled in disability evaluation should perform IMEs for depression-related disability.

The decision about depression and fitness to work should ideally be based on whether the person is sufficiently impaired by depressive symptoms to be disabled in his or her occupational role. Disability evaluation is usually done by family doctors and occasionally by psychiatrists or psychologists. The evaluation is typically done to determine qualification for disability compensation. Health practitioners are rarely trained in disability evaluation, particularly with regard to mental health issues, so the quality of assessment for depression-related disability is highly variable. Furthermore, health practitioners are often uninformed as to the psychological and social demands of the job in question. Guidelines and resources exist to assist physicians in medical disability evaluations of employees with depression (Annotated Resource List: 11, 18). It is particularly important that decisions concerning safety-sensitive positions be made by a health practitioner with appropriate knowledge and skills.

## INSTITUTE AN EARLY RETURN-TO-WORK PROCESS FOR DEPRESSION DISABILITY

Many depressed employees are not detected until they are disabled by a major depressive episode. As with those recognized earlier, it is very important that family physicians or mental health professionals consider return to work in their therapeutic plan. Skilful communication by the case manager is vital to establishing a successful therapeutic alliance with health professionals. Some organizations create preferred provider arrangements to ensure access to mental health professionals who are informed and cooperative with early return to work initiatives.

## IMPLEMENT RELAPSE PREVENTION STRATEGIES

Depression has a high rate of relapse, and depression-related disability is associated with a higher rate of recurrence than are other chronic medical disorders. Therefore, it is clearly insufficient to focus exclusively on strategies to enhance resolution of the depressive episode and foster early return to work; we must also identify ways to reduce the likelihood of recurrent depression with associated disability. From the perspective of disability management, we can distinguish between activities directed at return to work (RTW) and those directed at prevention of *return to disability* (RTD).

Here are two strategies that would help prevent relapse and RTD of depressed employees. They may require collaboration with unions, insurers, and healthcare providers:

- Revise employer policies, employment agreements, disability provisions, and benefits programs to allow for appropriate ongoing supports for the depressed worker who has successfully returned to work. For example, a disability insurance program that provides reimbursement for psychotherapy costs incurred as part of return to work should allow a limited number of maintenance sessions to help stabilize the situation and prevent relapse.

- Provide internal workplace supports to sustain and consolidate recovery of the depressed worker. This may include the involvement of informed occupational health or EAP personnel, provision of organizational or individual stress resilience or "hardiness" programs or access to self-care guides.

## EVALUATE AND CONTINUOUSLY IMPROVE THE DEPRESSION MANAGEMENT PROGRAM

It is said that "what gets measured gets done." In order for a comprehensive depression management strategy to be successful, it must be well planned and efficiently executed. Measurement allows us to determine where we started and where we are now, what our priorities should be, how we are progressing, and what we have left to do. Metrics should include individual, collective, organizational, and economic variables. A "balanced scorecard" of performance measures includes a combination of leading, intermediate, and trailing indicators that correspond to our broad categories of prevention, early identification, and disability management respectively. For example, leading indicators might track the results of risk assessments, healthy workplace

audit scores, or the percentage of the workforce who participated in stress management training or who received depression awareness training. Intermediate indicators might include EAP utilization rates, the number of performance interviews conducted, sick leave rates, costs of antidepressant drugs or psychotherapy, or results of employee and customer satisfaction surveys. Trailing indicators could include the incidence, duration, and costs of LTD claims for depression, return-to-work rates, employee turnover rates. Leading and intermediate indicators will usually change more quickly than trailing indicators, so a combination of the former is required to document early and short-term gains that are often vital to ongoing support of the program.

To be effective, specific objectives, timeframes, and accountabilities must be fixed to these performance measures. These measures can be operationalized at the unit, team, and individual levels and then linked to rewards or consequences.

## EDUCATION

A strong education and training component is a cornerstone of any comprehensive effort to manage depression in the workplace. Improving mental health literacy will help dispel ignorance and stigma and create the sense of urgency and optimism that is necessary to successfully manage depression.

### DELIVER EDUCATION AND TRAINING TO OPTIMIZE THE PREVENTION AND MANAGEMENT OF DEPRESSION

Mental health education and training should be integrated into existing occupational health and safety initiatives in order to take advantage of the many common elements. Incorporating these mental and psychosocial dimensions is a critical step in developing a more effective corporate health education strategy.

The segments of our literature review and stakeholder focus groups that pertained to education identified a need to:

- Increase general knowledge (that is, reduce ignorance and stigma) and improve awareness of the occupational implications of depression and other mental health conditions;
- Promote appropriate individual and organizational health practices;
- Identify and provide evidence-based treatment for mental disorders at an early stage;
- Effectively manage mental health impairment and disability by creating an efficient interface between the workplace and external health providers.
- Customize the mental health education and training package to reflect the size, complexity, level of risk, and available resources of the organization.

As with other health concerns, there are numerous stakeholders who require occupational mental health education and training. Although some of the content is of interest to a number of stakeholders, the level of sophistication will vary from general awareness to technical expertise depending on their assigned roles and responsibilities. In some instances, there are significant limitations in knowledge and practice that can only be overcome by further research and development.

The following matrix attempts to link the various stakeholders with relevant educational content. A brief description is provided for each educational component. The reader should also consult the Annotated Resources List for further information and examples of education and training material (e.g., 2, 7, 15).

## Education and Training Matrix for Managing Depression

| Stakeholders / Educational Content | Employees | Managers and Supervisors | HR Advisors DM Coordinators | Case Managers | Occupational Health and Safety | Union Representatives | Physicians/Mental Heath Providers | Employee Assistance Providers | Rehabilitation Professionals |
|---|---|---|---|---|---|---|---|---|---|
| MENTAL HEALTH AWARENESS | + | + | + | + | + | + | + | + | + |
| HEALTHY WORKPLACE CRITERIA | + | + | + | + | + | + | | | |
| PERFORMANCE MANAGEMENT | + | + | + | + | + | + | | | |
| DEPRESSION SCREENING TECHNIQUES | | | | + | + | | + | + | + |
| DIAGNOSTIC CRITERIA FOR DEPRESSION | | | | + | + | | + | + | + |
| PSYCHOLOGICAL JOB ANALYSIS | | + | + | + | + | + | + | + | + |
| PSYCHOLOGICAL FUNCTIONAL CAPACITY EVALUATION | | + | + | + | + | + | + | + | + |
| CLINICAL PRACTICE GUIDELINES | | | | + | + | | + | + | + |
| DISABILITY MANAGEMENT | + | + | + | + | + | + | + | + | + |

- **Mental health awareness:** intended to familiarize employees and managers with the typical symptoms and behavioural changes seen with depression and to alert them to treatment options available at work and in the community. Advanced knowledge of specific diagnostic criteria, screening techniques, evidence-based treatment strategies, and assessment of impairment and disability is required by clinical and occupational health practitioners, case managers, and disability and rehabilitation professionals.

- **Healthy workplace criteria:** identifies the guiding principles, critical elements, and systematic processes for a collaborative approach to developing a comprehensive and integrated strategy for reducing health risk (mental, physical, and social), facilitating early identification and effective treatment of illness and injury, and efficient management of disability.

- **Performance management:** A skill applied by supervisors and managers to establish performance expectations and agreements with employees. Unexplained changes in work performance or interpersonal behaviour can alert supervisors to emerging problems. A timely performance interview and offer of assistance can facilitate early identification and referral for management of stress or depression.

- **Depression screening techniques:** Occupational and clinical health practitioners, EAP, and rehabilitation professionals all need to be aware of the value and techniques for screening high-risk groups that they each interact with. Knowledge is required of local resources for referral, confirmation, and evidence-based treatment if screening programs are to be worthwhile.

- **Diagnostic criteria for depression:** Case managers, occupational and clinical health practitioners, and EAP and rehabilitation professionals must be conversant with the diagnosis of depression in order to ensure that employees receive optimal care and timely access to benefits.

- **Psychological job analysis/Functional capacity evaluation:** All staff and health professionals involved in the disability management process must be familiar with the process of assessing and matching job demands and employee capability in order to develop a safe return-to-work plan.

# Recommendations

- **Clinical practice guidelines:** Case managers, occupational and clinical health practitioners, and EAP and rehabilitation professionals must be conversant with the treatment of depression in order to ensure that employees receive optimal care and timely access to benefits. Case managers must also be able to distinguish between clinical and functional outcomes and encourage practitioners to develop a return-to-work strategy as an element of their therapeutic plan.

- **Disability management:** Building awareness and support for a joint employee-employer effort to mitigate the impact of disability and return affected employees to work. Occupational health staff, case managers, rehabilitation and disability management professionals require advanced knowledge in the areas of mental job demand analysis, assessment of functional mental capacity, communication with health professionals, and design and implementation of transitional work arrangements.

## RESEARCH AND DEVELOPMENT PRIORITIES

This review raises many questions, so there is a need for further research across the identified domains. In keeping with one of the principle conclusions reached, it is apparent that such investigation requires collaboration among all concerned stakeholders. Similarly, while conceptual and theoretical speculation about the relationship between mental health and employment may be helpful, the pressing need is for applied research that will result in meaningful benefit for the depressed worker and his or her workplace.

### DETERMINE THE EFFECTIVENESS OF STANDARD MENTAL HEALTH CARE IN RESTORING WORK FUNCTION

The Canadian mental health system does not usually consider the occupational implications of depression, and practitioners seldom interact with the workplace and do not routinely identify return-to-work as an element of the therapeutic plan for their patients. The impact of existing mental health care for depression on recovery of work function has not been well established. While it appears that symptom remission is accompanied by functional recovery for most workers, the research in this area is sparse and based on indirect measures.

### EVALUATE TRAINING MODULES FOR PROVIDERS OF MENTAL HEALTH CARE

Primary-care physicians would benefit from specific training in assessment and management of occupational issues, while mental health specialists would benefit from specific training in how to target resolution of workplace difficulties, enhance occupational function, and communicate with workplace representatives. Training modules should be developed for each of these practitioner groups, taking into account best practices in healthcare education and maximizing the acceptability and efficiency of the modules. Evaluation could focus on the perceived relevance of this training to clinical practice and the uptake of new skills by practitioners.

### EVALUATE INTEGRATED DISABILITY MANAGEMENT PROGRAMS

Given the lack of models for depression disability management, best practice examples may be developed from successful physical disability management. This will require carefully evaluated pilot programs. It would be appropriate to conduct controlled trials in which integrated disability management programs are compared to usual-care of depression-related disability. Outcomes of interest might include the following: improvement in depressive symptoms; improvement in occupational function; length of disability absence; sustainability of

return to work; and indicators of cost-effectiveness. It is important to demonstrate the return on investment and establish a sound business case if disability management programs are to be widely adopted by Canadian employers. The evidence we have reviewed strongly indicates that a powerful business case can be made for improving management of depression-related disability.

## DEVELOP AND HARMONIZE DATA SETS

There is a need for improved data collection and analysis to determine the financial, productivity and human capital costs of depression in the workplace. Interpretation of this data will provide information to assist decision-makers with program development and communication of priorities to stakeholders.Information needs to be applicable to the depressed individual who remains at work as well as those off work due to depression-related disability. This might include:

- Integration and analysis of relevant existing databases incorporating information on absenteeism, short- and long-term disability duration and costs, drug and extended health benefit costs, healthcare utilization, and employee turnover. It is imperative that such integration would respect ethical and confidentiality guidelines and analyses would only be carried out at the aggregate level.

- Development and evaluation of occupational measures of interpersonal, emotional, cognitive, and behavioural functioning of depressed individuals in the workplace. There is a paucity of useful indicators of the functional impact of depression. Current measures rely on self-report or proxy indicators of workplace functioning, such as absenteeism. There is a need to develop and evaluate valid and reliable occupational measures of interpersonal, emotional, cognitive, and behavioural functioning of depressed individuals in the workplace. These will elucidate the presence and impact of workplace depression as well as serving to guide and evaluate return to work planning.

## DEVELOP A SOUND BUSINESS CASE

Although the social and human capital cost of depression in the workplace may appear to be compelling enough reason for intervention, meaningful action will be determined by the development of credible business cases demonstrating an acceptable return on investment for those employers willing to commit resources to this issue. These need to be developed to fit the unique Canadian context, though templates may be developed from other countries and jurisdictions (Annotated Resource List: e.g., 15, 20, 24).

## COMPREHENSIVE STRATEGY OVERVIEW

We have outlined some of the main elements of a comprehensive strategy for managing depression in the workplace. The illustration below provides a representation of that strategy. Although the specific needs of each organization will ultimately determine the optimum mix of elements, in every case there should be a combination of initiatives that cover the continuum from prevention to disability management. The most cost-effective strategies are those that proactively reduce the level of individual and organizational risk and thereby prevent the onset of symptoms and illness. Unfortunately, these proactive initiatives are often forgotten or overshadowed by a common tendency to focus exclusively on a reactive claims and disability management process. A balanced, integrated and coordinated approach is strongly recommended.

### Integrated Workplace Depression Management

| Prevention | Early Intervention | Disease/Disability Management |
|---|---|---|
| • Health risk management - employee/organization<br>• Evidence-based program development/benefit design<br>• Mental health promotion - Resiliency training - Stress management<br>• Supportive HR policies - Conflict resolution - Work-life balance - Recognition/reward<br>• Supportive leadership and management/ supervision<br>• Education and training<br>• Healthy workplace strategy | • Performance management<br>• Medical surveillance<br>• EAP depression screening, assessment, referral<br>• Self care program<br>• Acute and chronic stress management<br>• Early RTW program: Case management, practice guidelines, modified work<br>• Employee satisfaction/ perception surveys<br>• Enhanced access to Mental Health Professionals - Preferred provider network, shared-care or stepped-care | • Disability management: Case management, practice guidelines, psychological job analysis, psychological capacity assessment, Independent Medical Examinations<br>• Task/job modification<br>• Vocational rehabilitation<br>• Preferred provider network or shared-care to increase access to Mental Health Professionals<br>• Relapse prevention<br>• LTD depression screening<br>• Program evaluation. Data harmonization & economic analysis<br>• Research |

## Case Study

Donna is a 42-year-old Registered Nurse. She has worked in a large acute care hospital for the last fifteen years, primarily on a medical ward. She loves being a nurse and takes a great deal of pride in her work. She is a valued member of her team and often covers for the charge nurse when she is away. It is not unusual for Donna to pick up overtime shifts. Recently, her unit was assigned to a new manager as a result of hospital reorganization. Donna is recently separated and has been involved in a difficult divorce and custody dispute over her two children. As well, her mother was diagnosed with breast Cancer and moved in with Donna for care and support.

Gradually, Donna started feeling overwhelmed by her responsibilities, both at work and at home. She was constantly tired, and often felt irritable and moody. She found she easily forgot things and often could not stay focused on a task. She mentioned this to her family doctor during a routine visit. After a brief interview, her doctor diagnosed her as suffering from depression. She was prescribed an antidepressant and it was suggested that she take a few weeks off work to rest.

Donna took four weeks off work. She also met with a counsellor though her organization's external EAP program. She attended the allotted six sessions of counselling. She appreciated the support but found this wasn't helping to improve her symptoms or functioning. Although she was not feeling much better she did return to work, in part because of financial concerns, but also because she felt she was letting her coworkers down.

Donna worked for two weeks and then stopped due to continued fatigue, poor concentration and memory as well as unpredictable bouts of tearfulness and feelings of anxiety. Donna's doctor increased her medication and suggested she take an additional 3-4 months off work. She used up her remaining sick time and applied for EI benefits. However, after this time she Donna was still not able to return to work. She applied for and was accepted on to Long Term Disability and was referred to a rehabilitation consultant for vocational rehabilitation services.

When Donna met with her rehabilitation consultant, she was continuing to experience low energy, poor sleep, decreased memory and concentration and low mood. She also had significant self-doubt, guilt and anxiety about not being at work. Donna's primary care was still being provided by her family physician and consisted exclusively of medication. No further psychotherapy, lifestyle or self-care management strategies had been initiated. Any contact with her employer or coworkers had ceased and she was becoming increasingly

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isolated and inactive. She had begun to gain weight and was experiencing physical complaints, such as headaches. She was not taking her medication on a regular basis because of concern about possible side effects

After speaking with Donna, the following rehabilitation plan was developed:

- The consultant would speak to her family doctor about her current treatment plan, her response to date and other possible options. If appropriate, her doctor would refer her to a psychiatrist or outpatient mental health clinic for further consultation and recommendations.

- She was given information about community home care for support for her mother. She was also provided with resource materials including local support groups, some proven web sites and self-care materials.

- She was referred to an exercise therapist, sponsored through the rehabilitation consultant, to begin to become more physically active and to add some structure and routine to her week.

- She was referred to a registered psychologist who would provide cognitive behaviour therapy to improve her coping skills, mood management and problem solving. A particular focus was placed on gradual activation, including social involvement, and on planning for issues that could arise at work.

- Finally, the rehabilitation consultant spoke with Donna's employer who indicated they were willing to support her in a supernumerary graduated return to work program when she was ready.

After four months of proper medication management, psychotherapy sessions and an exercise program, she was feeling much better. Her mood, concentration and stamina had improved, she had lost weight and she had reconnected with some colleagues from work. Donna, her doctor and her rehabilitation consultant communicated and agreed that she was ready to return to work. It was recommended that there be some restrictions including no night shifts, charge responsibilities or overtime for six months.

A return to work meeting was held with Donna's manager and union representative to discuss reintegration to the workplace. A six-week supernumerary graduated program was arranged. Alternate wards were discussed, but Donna felt that returning to her own unit would be the most supportive and looked forward to her return to work.

At the end of the Return To Work program Donna was working full-time and feeling well. Her employer indicated there were no concerns about her performance. All restrictions were lifted after three months, but Donna was much more selective about picking up overtime or charge responsibilities. She enrolled in a company supported exercise facility and participated in a community program for single parents. She continued on her medications with the understanding that she would be reassessed and the medication would be gradually discontinued in the absence of renewed symptoms. In conjunction with her psychotherapist and physician, she developed some strategies to deal with future stressors or changes in functioning. Overall, she felt much more confidant about her ability to balance work and home responsibilities.

## Focus Group Process

In order to gain a greater appreciation of the perceptions of the nature, severity, impact and management of depression in the workplace we conducted a series of focus groups with concerned stakeholders. This included sessions with occupational physicians, employee assistance providers (internal and external to organizations), disability consultants (internal and external to organizations), insurance company consultants, human resources personnel, occupational health nurses, senior human resources management (health), occupational health and safety personnel (health), external rehabilitation service providers, and consumers who had experienced depression. We believe that this provided a diverse and representative perspective of concerned parties however recognize that the process could have been expanded. In particular, the perspective of groups such as union personnel, family physicians, senior management, specialty mental health providers and 'front line' managers or supervisors may have been of benefit. Inclusion of these additional participants was not possible within the context of the current project but may be considered in future exploration.

Focus groups were conducted independently with the above groups, with one exception, (senior human resources personnel and occupational health and safety directors). Several mechanisms were used to select participants in the focus groups: existing professional or administrative meetings, existing support groups, solicitation through professional newsletters and personal contacts. All participants were voluntary and did not receive any compensation. Although representation was sought from throughout the province, all sessions were held in Vancouver and were thus reflective of the experiences of medium to large organizations within a well-serviced urban setting. It is reasonable to believe that the experiences of small businesses and/or small communities would be similar but with less access to public and private services. Finally, given that the current project arose with a particular concern about depression in health care and community service organizations, participants from this sector were overrepresented. Given the demographic and occupational diversity of health and community service workers, it is realistic to expect that experiences and practices from this employee group may be generalized to other sectors.

Participants in the focus groups met for one to two hours for a facilitated session. A standard set of questions was used to guide the discussion with all groups. Additional comments were gathered via a contact email.

## Annotated Resources

The following is a descriptive inventory of resource materials found during the course of this project that may be of value for professionals or consumers with an interest in depression and the workplace. This is intended as a representative, rather than comprehensive, list of resources. Preference was given to those resources that were available on-line at no cost. Although some of the materials are intended for clinicians or researchers, most were selected for their relevance to individuals and families, employers and other professional or labour groups concerned with depression. The reader is encouraged to use these resources as a comparative guide to facilitate the search for additional quality information. Finally, it must be acknowledged that this list will of necessity become dated. It would be greatly appreciated if readers would contact the authors with information about other valuable resources that we may have missed in our review, or to alert us to new resources that have been developed more recently and should be added to our list.

### 1. A screening program for depression

| | |
|---|---|
| **What** | U.S. Preventive Services Task Force recommendation and rationale for screening for depression |
| **Date** | October 27, 2002 |
| **Source** | American College of Occupational and Environmental Medicine (ACOEM) |
| **Access** | http://www.acoem.org/guidelines/pdf/Depression-10-02.pdf |
| **Comments** | Evidence-based recommendation from influential US body on the clinical effectiveness and efficiency of screening for depression in primary care and workplace health settings. Rather than endorsing a specific screening instrument, notes that two simple queries re current mood and loss of enjoyment may be effective. Note that appropriate assessment and treatment are still required for those individuals identified. |

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## 2. BC Partners for Mental Health and Addictions Information

| | |
|---|---|
| **What** | Electronic/hardcopy mental health toolkit |
| **Date** | 2003 |
| **Source** | BC Partners, BC Ministry of Health Services |
| **Access** | http://mentalhealthaddictions.bc.ca/content/main.php |
| **Comments** | Website and informational materials on a range of mental health issues including signs and symptoms, available local services, early recognition and relapse prevention strategies, and sources and evaluative strategies for mental health information. Created by partnership of mental health and addictions agencies as part of government initiative to enhance mental health literacy and improve self-management. Limited focus on the workplace but good information on stress, depression and effective individual and community intervention strategies. |

## 3. Best Advice on Stress Risk Management in the Workplace

| | |
|---|---|
| **What** | Electronic/hardcopy publication regarding stress and mental health |
| **Date** | 2000 |
| **Source** | Health Canada |
| **Access** | http://www.hc-sc.gc.ca/hppb/ahi/workplace/pdf/stress_risk_management_1.pdf |
| **Comments** | Referenced overview of prominent theoretical models, impact, strategies and legal obligations with respect to stress and mental health. Primary goal is to raise awareness and inspire action with respect the impact of stress on health and safety. Not specific to depression but accessible and useful for corporate presentations or business case. |

### 4. Beyond Blue: The national depression initiative

| | |
|---|---|
| **What** | National Australian initiative to raise awareness, promote and disseminate research, and enhance care for depression |
| **Date** | 2000 |
| **Source** | Beyond Blue: the national depression initiative |
| **Access** | http://www.beyondblue.org.au/site/index.asp |
| **Comments** | Comprehensive program designed to provide information on depression for consumers, practitioners and the general public. Includes an awareness package, *"It's our problem? Depression in the workplace"*, consisting of a facilitated program to train managers, workers and colleagues about depression and its impact. Initial trials of the program indicated positive change in employee attitudes and favourable reception of the program. |

### 5. Boston University Centre for Psychiatric Rehabilitation

| | |
|---|---|
| **What** | U.S. university-affiliated research, training, and service program |
| **Date** | 1979 |
| **Source** | Boston University, The Center for Psychiatric Rehabilitation |
| **Access** | http://www.bu.edu/cpr |
| **Comments** | Primary focus is on psychiatric rehabilitation for individuals with emerging and/or serious persistent mental illness from an American perspective. Does have valuable links, online journal access and practical information on functional impact of mental illness, including depression. |

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## 6. Business and Health Institute

| | |
|---|---|
| **What** | E-journal and website |
| **Date** | 1996 |
| **Source** | Business and Health Institute |
| **Access** | http://www.businessandhealth.com |
| **Comments** | US site providing web-based articles, information and links pertaining to the development of innovative and healthy workplaces including benefits design, wellness programs, disability management, business case development and economic trend analyses. Broad focus however mental health concerns feature prominently. Free access however supported by advertising. |

## 7. Canadian Centre for Occupational Health and Safety

| | |
|---|---|
| **What** | Government Agency to enhance education, research and policy. |
| **Date** | 1978 |
| **Source** | CCOH&S: Stress |
| **Access** | http://www.ccohs.ca/oshanswers/psychosocial/ |
| **Comments** | Canadian government site for prevention and management of work-related injury and illness prevention and management. Not specific to depression but does have a focus on psychosocial issues including update references, training programs and downloadable materials. |

### 8. Canadian Health Network

| | |
|---|---|
| **What** | Health Information Website |
| **Date** | 1999 |
| **Source** | Canadian Health Network: Health information you can trust |
| **Access** | http://www.canadian-health-network.ca/servlet/ContentServer?cid=1048003175135&pagename=CHN-RCS%2FPage%2FGTPageTemplate&c=Page&lang=En |
| **Comments** | Bilingual, non-profit, collaborative effort sponsored by Health Canada to provide consumers with current, accurate and relevant information on health issues for Canadians. Not specific to stress, depression or disability but does provide relevant information on these topics. Good search engine and extensive links. Includes tools to help assess the timeliness, accuracy and possible bias of other health websites. |

### 9. Centre for Addiction and Mental Health

| | |
|---|---|
| **What** | Publicly funded research and service consortium |
| **Date** | 1998 |
| **Source** | Centre for Addiction and Mental Health |
| **Access** | http://www.camh.net/ |
| **Comments** | Leading Canadian organization providing direct mental health care, research and education. Focus is on services for individuals with broad array of psychiatric disorders, however prominent source of research and policy development. Expanding interest in investigation and consultation on mental health and the workplace. |

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## 10. Changeways Clinic

| | |
|---|---|
| **What** | Private sector provider of Cognitive Behavioural Therapy services and training. |
| **Date** | 2002 |
| **Source** | Changeways Clinic<br>Suite 509<br>2525 Willow Street<br>Vancouver, British Columbia<br>Phone: (604) 871-0490 |
| **Access** | http://www.changeways.com/ |
| **Comments** | Private sector clinic offering cognitive behavioural therapy for individuals experiencing depression, anxiety and related conditions. Offers CBT training programs for professionals based on experience providing workshops throughout BC, Canada and internationally. Useful links, reading materials and practical for consumers considering therapy. |

## 11. City of Toronto: Job Demands Analysis

| | |
|---|---|
| **What** | Occupational Matching protocol |
| **Date** | 2000 |
| **Source** | City of Toronto<br>Human Resources Department |
| **Access** | City of Toronto<br>Occupational Health, Safety and Workers' Compensation<br>Metro Hall, 4th Floor<br>55 John Street<br>Toronto, ON M5V 3C6 |
| **Comments** | Innovative and unique protocol for classification and quantification of the psychological, cognitive and behavioural requirements (as well as physical demands) of a range of occupations. Includes domains such as interpersonal cooperation, attention to detail, multitasking and emotional tolerance. Of value in job design and recruitment but particularly useful for planning successful return to work strategies for individuals with depression and related psychological disabilities. |

### 12. Clinical Guidelines for the Treatment of Depressive Disorders

| | |
|---|---|
| **What** | Practice Guidelines |
| **Date** | 2001 |
| **Source** | Canadian Psychiatric Association &<br>Canadian Network for Mood and Anxiety Treatments |
| **Access** | http://www.cpa-apc.org/Publications/Position_Papers/Position_Papers.asp |
| **Comments** | Consensus guidelines developed on the basis of review and categorization of the existing scientific and clinical literature on depression. Designed to provide evidence based guidance and improve the quality of care for depressed individuals. Includes pharmacological, psychotherapeutic and combination treatments with consideration given to special considerations and populations. |

### 13. Cognitive Behaviour Therapy: Minimum Training Standards

| | |
|---|---|
| **What** | Professional standards and guidelines |
| **Date** | 1999 |
| **Source** | European Association for Behavioural and Cognitive Therapies |
| **Access** | http://www.eabct.com/training.htm |
| **Comments** | Consensus position statement by consortium of European organizations to establish minimum criteria for professional preparation, supervision and experience to practice cognitive and behavioural therapies. Intended to guide diverse providers, employers and educators in determination of consistent expectations and training. Not specific to depression or adopted in Canada however does serve to enhance practice quality and consistency. |

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## 14. Copernicus Project

| | |
|---|---|
| **What** | Awareness training program |
| **Date** | 2003 |
| **Source** | Centre for Wellness (Canadian Mental Health Association – Calgary region) |
| **Access** | http://www.cmha.calgary.ab.ca/workplacewellness/ |
| **Comments** | Provides on-site, workplace training and awareness to improve understanding, enhance coping, develop organizational strategies and build partnerships with respect to mental health issues, particularly depression and stress. New initiative, planned evaluation and expansion. |

## 15. D/ART: Depression, Awareness, Recognition and Treatment Program

| | |
|---|---|
| **What** | Campaign and toolkit |
| **Date** | 1989 |
| **Source** | Washington Business Group on Health |
| **Access** | http://www.wbgh.com/programs/mentalhealth/ |
| **Comments** | Dated but innovative and comprehensive, multimedia program initiated by business consortium in the US in conjunction with the National Institute of Mental Health. Consists of pamphlets, presentation materials, training guides and videos to raise awareness, develop business cases, improve EAP and provider training and reduce stigma with respect to impact of depression in the workplace. Subsequent supplement includes *Depression: Corporate experiences and innovations* (1991) documenting various successful organizational initiatives. Despite reports that program was well received and useful it was discontinued in 1999. Some materials still available, although primarily applicable to the United States and mostly of historical interest. |

### 16. Depression in the Workplace

| | |
|---|---|
| **What** | Brochure |
| **Date** | 1993 |
| **Source** | Canadian Mental Health Association (National) |
| **Access** | http://www.cmha.ca/english/info_centre/mh_pamphlets/mh_pamphlet_24.htm |
| **Comments** | Overview of prevalence, signs and impact of depression in the workplace and recommended access options. Rather dated and limited information on prevention, rehabilitation or relapse prevention. CMHA has national and regional offices that are good sources of information, policy and services on all aspects of mental health and illness. A useful general CMHA resource guide is: *Working well: An employers guide to hiring and retaining people with mental illness* (2002) |

### 17. Depression in the Workplace

| | |
|---|---|
| **What** | Brochure, public information |
| **Date** | 1999 |
| **Source** | The Royal College of Psychiatrists (UK) |
| **Access** | http://www.rcpsych.ac.uk/info/help/depwp/ |
| **Comments** | Information for public and employers on nature, impact and treatment of depression at work. Good section on relationship between work conditions and depression. Follow up for the workplace to the national Defeat Depression campaign in Britain. |

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## 18. Disability Duration Guide

| | |
|---|---|
| **What** | The Medical Disability Advisor, IV edition (book, on line resource) |
| **Date** | 2003 |
| **Source** | Dr. Presley Reed, The Reed Group (US $325.00) |
| **Access** | http://www.rgl.net/products_guidelines.html |
| **Comments** | Industry standard for determination of expected duration, course, complications and treatment trajectories for a range of injuries and illnesses. Not specific to depression and mental health, but does include common psychiatric conditions. Useful for facilitating case management, communication, intervention strategies and return to work planning. |

## 19. Effects of Depression in the Workplace

| | |
|---|---|
| **What** | Web-based brochure |
| **Date** | 1999 |
| **Source** | National Institute of Mental Health |
| **Access** | http://www.nimh.nih.gov/publicat/workplace.cfm |
| **Comments** | Informational material particularly for human resources and management personnel with respect to the prevalence and signs of depression at work. Also includes suggested strategies to facilitate prevention and return to work. Multiple links to NIMH materials. Useful but primarily relevant to the US context. |

## 20. Global Business and Economics Roundtable on Addiction and Mental Health

| | |
|---|---|
| **What** | Advocacy body |
| **Date** | 1998 |
| **Source** | Global Business and Economic Roundtable |
| **Access** | http://www.mentalhealthroundtable.ca/ |
| **Comments** | Prominent Canadian collaboration between researchers, business and educators with a focus on raising awareness of the economic and financial impact of mental health issues, primarily mood disorders and addictions on business. Good background material, business case data and Canadian links but limited focus on practical, functional and rehabilitation issues. |

### 21. Institute of Work and Health

| | |
|---|---|
| **What** | Workplace disability research institute |
| **Date** | 1994 |
| **Source** | Institute of Work and Health website |
| **Access** | http://www.rgl.net/products_guidelines.html |
| **Comments** | Non-profit national centre for research development and prevention on workplace disability prevention, research and best practice management. Focus is primarily on physical disabilities however is an excellent and credible source of links, population health factors and intervention strategies including increasing emphasis on workplace stress. |

### 22. LiNK: Signs and Symptoms of depression at work

| | |
|---|---|
| **What** | Toolkit and promotional materials |
| **Date** | 2002 |
| **Source** | Eden Communication Group |
| **Access** | http://www.edencomgroup.com/LinkProgram/ |
| **Comments** | Pharmaceutical company (Pfizer) sponsored education program intended to raise awareness and improve access. Includes multimedia tools (video, brochures, posters) as well as implementation and evaluation guide for use with a diverse audience. Strong emphasis on the role of EAPs. Good disease awareness and informational guide, less focus on healthcare access, workplace functioning and psychosocial rehabilitation issues. US based with primary pharmacological focus. |

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## 23. Mental Health Evaluation and Community Consultation Unit (Mheccu)

| | |
|---|---|
| **What** | Publicly funded research, education and service mental health consortium |
| **Date** | 1999 |
| **Source** | Mental Health Evaluation and Community Consultation Unit |
| **Access** | http://www.mheccu.ubc.ca/ |
| **Comments** | University based service providing outreach services, evaluative research, and local and telehealth training to government. Developed British Columbia's provincial Depression Strategy (2002), which included specific recommendations for addressing depression in the workplace, as well as the Self-care Depression Guide. Excellent source of national and provincial information on best practices and policy. |

## 24. Mental health and Work: Impact, issues and good practice

| | |
|---|---|
| **What** | Survey and practice report(s) |
| **Date** | 2001 |
| **Source** | International Labour Organization/World Health Organization |
| **Access** | http://www.who.int/mental_health/media/en/73.pdf |
| **Comments** | Summary of ILO/WHO commissioned series of reports on mental health and workplace issues from Finland, Germany, Poland, United Kingdom and the United States. Broad focus but very extensive coverage of innovative and promising policies and practices. Major international policy document. |

### 26. Mental Health Works

| | |
|---|---|
| **What** | Information kit |
| **Date** | 2003 |
| **Source** | Canadian Mental Health Association: Ontario Division |
| **Access** | http://www.mentalhealthworks.ca/ |
| **Comments** | Recent initiative from Ontario CMHA, major public sector mental health advocacy body. Consists of informational material, bulletins and information for employers and employees with respect to prevalence, work return issues and Canadian legal requirements. |

### 27. Mindout for mental health

| | |
|---|---|
| **What** | Awareness and advocacy program |
| **Date** | 2001 |
| **Source** | National Association for Mental Health, United Kingdom |
| **Access** | http://www.mindout.net/ |
| **Comments** | Commissioned by the British Department of Health, non-profit program provides a diverse array of information and tools to increase awareness and reduce stigma associated with mental health problems. Broad mental health focus but recent initiative is "Working minds", an employer's informational toolkit providing background materials, organizational examples and specific suggestions for change in policy and practice. |

# Appendix C

## 28. Mood Disorders Association of B.C.

| | |
|---|---|
| **What** | Advocacy and Information |
| **Date** | 1999 |
| **Source** | Mood Disorders Association |
| **Access** | http://www.mdabc.ca |
| **Comments** | Non-profit, local consumer association providing advocacy, support and information for persons with mood disorders and their families/caregivers. Dedicated to raising public awareness and providing information on local services. Linked with similar national and international groups. |

## 29. National Depression Screening Day

| | |
|---|---|
| **What** | Depression screening process |
| **Date** | 1991 |
| **Source** | Screening for Mental Health |
| **Access** | http://www.mentalhealthscreening.org/depression.htm |
| **Comments** | Systematic, multi-centre program to raise public awareness, enhance detection and improve care for depression. Hosted by a non-profit organization with private and public sector sponsorship. Consists of educational, promotional and planning materials. US based but readily adapted to regional needs and resources. |

## 30. National Institute of Disability Management (NIDMAR)

| | |
|---|---|
| **What** | Informational/educational program |
| **Date** | 1994 |
| **Source** | National Institute of Disability Management |
| **Access** | http://www.nidmar.ca/about/about_institute/institute_info.asp |
| **Comments** | Locally based organization providing training, education and workplace-based reintegration programs for disabled workers. Assists with evaluation, certification and policy development. Primary focus is on physical rather than mental health issues, however this is an area of increasing attention. |

### 31. National Quality Institute

| | |
|---|---|
| **What** | Organizational Development organization |
| **Date** | 1992 |
| **Source** | Suite 307 – 22725 Lake Shore Blvd.<br>Toronto, Ontario, M8V 3Y3<br>Phone: 1-800-263-9648 |
| **Access** | http://www.nqi.ca/ |
| **Comments** | Canadian, not-for-profit initiative providing focus and direction for organizations to achieve excellence with a particular emphasis on establishing criteria and ensuring recognition for quality. Source and sponsor of the healthy workplace award. |

### 32. PsychDirect

| | |
|---|---|
| **What** | Informational/educational program |
| **Date** | 2002 |
| **Source** | Department of Psychiatry and Behavioural Neurosciences<br>McMaster University |
| **Access** | http://www.psychdirect.com/index.htm |
| **Comments** | University supported program providing evidence-based education and information for public and professional audiences with the aim of increasing, encouraging early intervention and reducing stigma. Includes useful screening measures and links. |

# Appendix C

## 33. Self-Care depression program: Patient Guide

| | |
|---|---|
| **What** | Information/education program for consumers |
| **Date** | 2002 |
| **Source** | Mental Health Evaluation & Community Consultation Unit |
| **Access** | http://www.mheccu.ubc.ca/publications/scdp/patientguide.pdf |
| **Comments** | Downloadable program for consumers providing a step-by-step guide to changing patterns that trigger depression, based on evidence-based cognitive behavioural principles. Complementary to other depression treatments, increasing their effectiveness. Although a fundamental component of the program involves enhancing functioning, it is not specific to rehabilitation or return to work. |

## 34. SOLVE: Addressing psychosocial problems at work

| | |
|---|---|
| **What** | Educational program |
| **Date** | 2002 |
| **Source** | SafeWork |
| **Access** | http://www-ilo-mirror.cornell.edu/public/english/protection/safework/whpwb/solve/intro.htm |
| **Comments** | International Labour Organization program designed to assist with awareness and policy development in the private and public sector workplace. Consists of multimedia, multilingual training programs for managers, policy makers and employees. Focus has been on primary and secondary prevention for the areas of stress, substance abuse, violence, HIV/AIDS and tobacco. Multiple successful trials through international network of universities to facilitate curriculum development and evaluation. |

### 35. Work-life balance in Canadian workplaces

| | |
|---|---|
| **What** | Information and Advocacy |
| **Date** | 2002 |
| **Source** | Human Resources Development Canada |
| **Access** | http://labour-travail.hrdc-drhc.gc.ca/worklife/ |
| **Comments** | Government departmental website dedicated to provide information, program development and policy guides with respect to work-life balance. Intended for employees, employers and policy makers. Includes links to research reports, labour agreements and references. Not specific to depression or disability. |

### 36. Workplace Health and Public Safety Programme

| | |
|---|---|
| **What** | Informational/educational Resource |
| **Date** | 1965 |
| **Source** | Health Canada<br>Healthy Environment and Consumer Safety Programme |
| **Access** | http://www.hc-sc.gc.ca/hecs-sesc/whpsp/index.htm |
| **Comments** | Canadian government site providing private and public sector employers with information, tools and research to maintain and improve the health of workers in small and large businesses. Not specific to mental health or depression but does include excellent workplace health strategy guides, e.g. establishing wellness program, absenteeism, needs assessment, juggling home and work and influencing employee health. |

## Glossary

**best practice:** The best known way of doing things - it is not static but, rather, changes in response to new situations or with the advent of new knowledge that is based on scientific evidence and/or expert consensus.

**case management:** A centralized function which provides support and intervention to injured and ill individuals through planned coordination of care and rehabilitation to optimise recovery and prepare for work return. Case Management involves facilitating the communication and participation of the multi-disciplinary team of stakeholders involved with an individual's recovery and work return. These activities include early identification of cases, assessment, goal setting, initiation of a rehabilitation plan, relapse prevention and follow up evaluation.

**continuum of care:** A range of services and care settings that an individual might require at different stages of his/her disorder. A person undergoing a major depressive episode might need hospitalization, medication, psychotherapy, EAP services, self care, rehabilitation services and relapse prevention.

**disability:** Any limitation of physical, mental, or social activity of an individual as compared with other individuals of similar age, sex, and occupation. Frequently refers to limitation of a person's usual or major activities, most commonly vocational. There are varying types (functional, vocational, learning), degrees (partial, total), and durations (temporary, permanent) of disability. Public programs often provide benefits for specific disabilities, such as total and permanent.

**disability management:** The proactive employer-centred process of coordinating the activities of labour, management, insurance carriers, health care providers, and vocational rehabilitation professionals for the purpose of minimizing the impact of injury, disability, or disease on a worker's capacity to successfully perform his or her job.

**employee assistance program (EAP):** A program established to help workers overcome psychosocial or behavioural problems that impact their psychosocial well-being and thus impact their performance at work. EAPs may be internal or external to the organization. There are a range of service delivery models however the majority have a limited number of sessions and use an 'assess and refer' approach.

# Appendix D

**functional capacity assessment (FCA):** A battery of tasks designed to measure an individual's objective and subjective functional ability and tolerance to do physical work, usually to assist with rehabilitation and return to work planning. This has only been recently been adapted to psychosocial disabilities.

**health promotion:** Any combination of health education and related organizational, political, and economic interventions designed to facilitate behavioural and environmental adaptations that will improve or protect health for a designated target population.

**health surveillance:** Monitoring the health of people to detect signs or symptoms of work related ill-health so that steps can be taken to eliminate, or reduce, the probability of further damage.

**impairment:** Any loss or abnormality of psychological, physiological, or anatomical structure or function.

**independent medical examination:** A supplementary opinion by a qualified specialist to determine the extent of impairment resulting from an injury or illness and to secure recommendations regarding diagnosis, occupational restrictions, appropriateness and additional treatments, prognosis, and rehabilitation. These are typically requested by a concerned party such as an insurance carrier or legal representative.

**indicated prevention:** Prevention initiatives aimed at individuals who have some symptoms of a mental disorder but do not meet diagnostic criteria.

**integrated disability management:** A comprehensive approach to integrating all programs and services (individual and organizational risk reduction, early intervention, disease management and disability prevention, and disability management) to help control employer's disability costs while helping employees who have been disabled return to full functionality and productive work as soon as they can.

**intervention or intervention strategy:** A generic term used in to describe a program or policy designed to have an impact on an illness or disease.

**job analysis:** A process that involves a formal analysis of tasks associated with a specific job or group of jobs that identifies specifically what the worker does. A job analysis often includes: the purpose of performing each job task; the tools, equipment, and processes used in the performance of the job; demands required of the worker performing essential job functions; knowledge, skill, and experience level required to safely and accurately perform the job; and other measurable and descriptive information. The job analysis report serves to facilitate the development of an accurate written job description. This, in turn, may be made available to treating health care providers when determining fitness for work return. It is critical to effective return to work planning. Most job analyses are deficient with respect to the cognitive, emotional and interpersonal aspects of particular occupations.

**occupational health services:** Health services concerned with the physical, mental, and social well-being of an individual in relation to his or her working environment and with the adjustment of individuals to their work. The term applies to more than the safety of the workplace and includes health and job satisfaction

**prevalence:** The number of cases of disease or condition, present at a particular time and in relation to the size of the population from which drawn. It can be a measurement of m at a moment in time, e. g., the number of cases of depression in the country as of the first of the year, or of the likelihood of disorder over the course of a lifetime within a particular group.

**prevention:** A framework for categorizing prevention programs based on the stage of the natural history of disease or injury:

- **Primary prevention –** An intervention implemented before there is evidence of disease or injury. The strategy can reduce or eliminate causative risk factors (risk reduction).
- **Secondary prevention –** An intervention implemented after a disease has begun, but before it is symptomatic (screening and treatment).
- **Tertiary prevention –** An intervention implemented after a disease or injury is established. This strategy can prevent or mitigate sequelae such as secondary illness or disability.

**preventive strategies (clinical, behavioural, environmental):** A framework for categorizing programs based on how the prevention technology is delivered. i.e., provider to patient (clinical), individual responsibility (behavioural), or alteration in an individual's surroundings (environmental).

# Appendix D

**recurrence:** A new depressive episode occurring after a 6-month remission period.

**rehabilitation:** The combined and coordinated use of medical, social, educational, and vocational measures for training or retraining individuals disabled by disorder, disease or injury to the highest possible level of functional ability. Several different types of rehabilitation are distinguished: vocational, social, psychological, medical, and educational.

**relapse:** An exacerbation or recurrence of symptoms that occurs during the same episode of depression; that is, within six months after the individual has achieved remission.

**remission:** A resolution of symptoms or a return to "wellness."

**response:** A significant reduction of depressive symptoms to a level below the diagnostic threshold for major depressive disorder.

**return to work:** Preparing the worksite so as to reintegrate individuals with injuries or illnesses. This involves the planning, implementing and monitoring a safe and timely return to work program through the use of accommodation strategies, implementation initiatives and coordination of key participants to successfully return individuals to productive employment.

**risk or risk factor:** Risk is a term used by epidemiologists to quantify the likelihood that something will occur. A risk factor is something which either increases or decreases an individual's risk of developing a particular condition or disease.

**screening:** The use of quick procedures within a designated population to differentiate apparently well persons who have, or may have, a condition from those who probably do not have the condition. It is used to identify high-risk individuals for more definitive follow-up

**selective prevention:** Prevention initiatives aimed at high-risk groups, who have not yet developed a disorder.

**stress:** A term used as either a *stimulus* or a response. As a stimulus, stress is best regarded as a stressor, meaning a threatening event, perceived by an individual, that challenges or demands a response (e.g., a supervisor berates an employee for making a mistake). As a response, stress refers to distress, or adverse effects following exposure to a stressor (e.g., an employee whose supervisor berates him for a mistake becomes tense and irritable.) Distress may be regarded as the physical, behavioural, emotional, cognitive, or interpersonal consequence of a situation that challenges or threatens personal well-being. Stress is mediated by individual differences and perceptions of events and conditions.

**stress management training:** The application of behavioural and psychological strategies to reduce stress and improve coping skills.

**transitional work:** Any job or combination of tasks and functions that may be performed safely and with remuneration by a worker whose physical and/or mental capacity to perform functional job demands has been compromised.

**universal prevention:** Prevention efforts aimed at the general population or parts of the general population, regardless of whether they have a higher than average risk of developing a disorder. I.e. mass media campaigns to increase mental health literacy.

**vocational rehabilitation evaluation:** An evaluation to identify an individual's vocational aptitudes, interests, skills, abilities, values and psychosocial barriers impeding return to work.

**wellness:** A dynamic state of physical, mental, and social well-being; a way of life which equips the individual to realize the full potential of his or her capabilities and to overcome and compensate for deficits. Wellness has been viewed as the result of four key factors over which an individual has varying degrees of control: human biology, environment, health care organization (system) and lifestyle.

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