INFO APPENDIX I

DEFINITIVE PREVALENCE RATES OF MENTAL ILLNESS SUMMARY
(Prepared by the Global Business and Economic Roundtable on Mental Health)

Prevalence defines the estimated number of people in a given population who suffer a form of mental illness over a given span of time. There are several milestones of measurement:

- Spot prevalence rates
- 30-day/six month/ one-year prevalence rates
- Lifetime prevalence rates

Also, note:

1. Prevalence rates are an epidemiological calculation.
2. Rule of thumb: the closer the time horizon, the lower the number.

The layman's difference between prevalence and incidence:

1. Prevalence defines a population.
2. Incidence defines a caseload.

The Roundtable has examined prevalence data for six years and counting. From this, we have done extrapolative analysis and developed our strategic and statistical arguments (the business case) and narrative themes for speeches and reports.

It became necessary to do this to rationalize the statistical variances, inclusions / exclusions of certain disorders from one study to the next and the rank of confusion.

Harvard and the World Bank describe an "unheralded crisis in world mental health" – a crisis characterized by –

1. Concentrations among younger segments of the population and the labour force.
2. Low rates of care and treatment.
3. High rates or incidence of disability in working population due to depression.
4. Compounded effect on duration of disability/risk of death due to heart attack.
5. Current/projected impact on work years lost due to premature death and disability.

These trends:

- Display depression/anxiety high on <u>both</u> the prevalence and incidence plain.
- Constitute an "unheralded world mental health crisis."

For these reasons, the Roundtable targets:

- Depression, anxiety and substance abuse in the workforce and workplace.
- Treatment capacity issues including dual diagnosis.
- Job stress at source.
- Stigma as a barrier to care and treatment.

Summary of Prevalence – (Sources and Findings)

1. United States Surgeon General Report on Mental Health (2000)

1-year prevalence rates:

Any anxiety disorder	16.4% of US population
Any mood disorder (depression incl. bipolar I and II)	11.1% of US population
* Any mental disorder	21.0% of US population

- 16.4% and 11.1% include co-morbidity experience. Therefore, the overall prevalence rate (21%) is not an arithmetical sum of the individual categories above or below and includes the following:

Schizophrenia	1.3%
Non-affective	0.2%
Somatization	0.2%
ASP	2.1%
Anorexia Nervosa	0.1%
Severe cognitive	1.2%

2. World Health Organization Report on Mental Health (2001)

1-year prevalence rates – depression/anxiety/alcohol dependence – by major city:

Bangalore, India	22.4%
Groningen, Netherlands	23.9%
Mainz, Germany	23.6%
Manchester, UK	24.8%
Paris, France	26.3%
Rio de Janeiro, Brazil	35.5%
Santiago, Chile	52.5%
TOTAL PREVALENCE	**24.0%**

WHO:

"(In 2000) about 450 million people were estimated to be suffering from … unipolar depressive disorders, bipolar, schizophrenia, epilepsy, alcohol and selected drug use disorders, Alzheimer's (+other dementias) and anxiety disorders (PTSD, OCD, panic disorder) and primary insomnia."

3. Bulletin 2000 of the World Health Organization

(University of Sao Paulo, Mexican Institute of Psychiatry, University of Michigan, Netherlands Institute of Mental Health and Addiction, Harvard Medical School (Kessler et al); Chedoke-McMaster Hospital (Offord); WHO-Geneva.)

Prevalence rates: Canada	Lifetime	12-month	30-day
Any anxiety	21.3%	12.4%	6.2%
Any mood	10.2%	4.9%	2.6%
Any substance abuse	19.7%	7.9%	3.8%
Any study disorder	37.5%	19.9%	10.4%

US	Lifetime	12-month	30-day
Any anxiety	25.0%	17.0%	10.3%
Any mood	19.4%	10.7%	5.1%
Any substance	28.2%	11.5%	5.7%
Any study disorder	48.6%	29.1%	17.1%

Germany	Lifetime	12-month	30-day
Any anxiety	9.8 %	7.1%	2.7%
Any mood	17.1%	9.6%	3.6%
Any substance	21.5%	13.2%	6.2%
Any study disorder	38.4%	24.4%	10.9%

(Brazil, Mexico, Netherlands and Turkey also studied on a comparative basis)

Average Age of Onset: Anxiety		Mood	Substance abuse
All countries (7)	age 15	age 26	age 21
Canada	age 12	age 23	age 18

- WHO: "Surgeon-General of the US says the world faces a crisis in children's mental health."
- Prevalence rates: US – 21%   Switzerland - 22%   Spain - 21%   *Canada - 15-25%
- Treatment rates   US – one in five   *Canada - one in six
  * Source: The Provincial Centre for Excellence for Child and Youth Mental Health, Ottawa

4. Statistics Canada –Canadian Community Health Survey – Mental Health (2003)

(N.B. StatsCan surveyed for only five conditions omitting dysthymia (form of depression) and generalized anxiety disorder (GAD).

1-year prevalence rates
- Any mood disorder   5.9%
- Any anxiety disorder   5.8%
- Substance dependence   1.6%
- Total "any measured" disorder or substance dependent   11.1% (ex. conditions noted)

"Although mental disorders are present throughout all stages of life, results show differences according to age groups. Teenagers and young adults between 15 and 24 were most likely to report suffering from surveyed mental disorders or two substance dependencies.

- Age 15-24   18%
- Age 25-44   12%
- Age 45-64   8%
- Age 65+   3%

5. Canadian Alliance for Mental Illness and Mental Health (CAMIMH)

One-Year Prevalence Rates
- Anxiety Disorders   12.2%
- Mood Disorders   8.3%
- Schizophrenia   0.3%
- Eating Disorders   2.5%

Suicide
- 12.2% per 100,000 (1995)
- 2% of all deaths
- 24% of all death among 15 to 24 years
- 16% of deaths among 25 to 44 years

Hospitalizations
- 38% of total

6. "Treating Depression Effectively: Applying Clinical Guidelines" (Dr. Sid Kennedy et al)

Six-month prevalence of Major Depressive Disorder (MDD) In Different Countries
- Canada   6.0%
- US   10.3%
- UK   9.9%
- France   9.1%

7. Mental Health and Work: International Labor Organization and WHO

Key facts:

- Harvard: five of ten leading causes of disability are psychiatric disorders
- British Confed. of Industry: 15-30% working life prevalence rates in UK labor force
- The European Union: 20% spot prevalence rate in adult working population of Europe
- International Labor Organization (UN): 40 million Americans have mental illness

8. World Health Organization Report on Mental Health (2001)

Co-Morbidity (Kessler)

- 79% of those with mental illness worldwide have co-morbid physical conditions.
- Physical health problems co-exist with depression; can predict onset and persistence.
- 50% of depression/anxiety sufferers experience both conditions at the same time.
- 60%+ of those (receiving) alcohol and drug treatment have a dual disorder.

9. Harvard School of Public Health (WHO and World Bank)

(The Harvard Burden of Disease study is a milestone and introduced a new international measurement called Disability-Adjusted Life Years (DALYS) to give the international community the means of measuring and comparing the burden of disease experience.)

Depressive disorders = 4th leading cause of DALYS (disability and premature death ('96).

= 1st leading cause of Years Lost through Disability (YLDs) ('96).
= projected to be 2nd leading cause of DALYS by 2020 in all countries.
= projected to be 1st leading cause of DALYS by 2020 in devel'd countries.
= projected to rank just behind/ahead of ischemic heart disease re above.

10. Great-West Life Assurance Company

- Acute psychiatric disorders are leading primary and secondary driver of incidence of LTD. Anti-depressant medications are principal drug prescribed for employees 25-44 years.

11. Extrapolating the Preceding Spectrum of Prevalence Data for Canada:

- Spot prevalence 10% of population
- Year   20+%
- Lifetime   37+%
- Most vulnerable segment of population 15-24 years
- Concentration of depression/anxiety – the labour force (prime working years)
- Depression/anxiety dominant source(s) of prevalence/incidence among all forms of mental illness:
- Average age of onset (anxiety disorders) in Canada: age 12
- Average age of onset (depression) in Canada: age 21
- Average age of onset (substance abuse) in Canada: age 18

This suggests that Canada's prevalence rates are under-estimated. The Health Canada study referenced here concedes that.

INFO APPENDEX II

GLOSSARY OF TERMS

We offer the following glossary to help clarify what frequently used terms used on our website mean and don't mean. This is drawn from various sources including the World Health Organization. We encourage readers to scan this:

MENTAL HEALTH is the successful performance of mental functions leading to productive activities, fulfilling relationships, ability to adapt. It is the springboard for thinking, communicating, learning, emotional growth, resilience and self-esteem.

MENTAL ILLNESSES are medical conditions which have physical properties and physical origins and may be characterized by alterations in thinking and mood. These illnesses have links to chronic conditions such as heart disease.

The Roundtable's focus is primarily on those conditions which are most serious, common and concentrated in the labour force.

DEPRESSION AND BIPOLAR DISORDER -- A person with depression feels "very low." Symptoms may include: feelings of sadness or hopelessness, changes in eating patterns, disturbed sleep, constant tiredness, an inability to have fun, and thoughts of death or suicide.

A person with bipolar has periods of depression and periods of feeling unusually "high" or elated. The highs get out of hand, and the manic person can behave in a reckless manner, sometimes to the point of financial ruin or getting in trouble with the law.

ANXIETY DISORDERS include generalized anxiety, post-traumatic stress disorder (PTSD), phobias (fear of objects, animals or situations) and panic disorder (a condition where the person has repeated intense episodes of intense, sudden fear and physical symptoms such as difficulty breathing). Another anxiety disorder is obsessive-compulsive disorder, in which a person is unable to control the repetition of unwanted thoughts or actions. *Combined, these conditions affect 22-25 per cent of the population.

SUBSTANCE ABUSE -- For purposes of *Employers Getting Started*, substance abuse should be taken to mean excessive consumption of legal or illegal substances which impair a person's capacity to meet the family and job responsibilities. The term also includes addictions and addictive behaviours. Substance abuse is commonly associated with mental distress and mental disorders and addictions are a diagnosable disease in its own right.

CO-MORBIDITY means two different medical conditions co-occurring simultaneously. In the case of depression and heart disease, for example, the risks and effects of both conditions are magnified by the presence of the other.

MENTAL HEALTH PROBLEMS are conditions which may not reach the threshold of an illness which meets the criteria for a specific medical diagnosis but may require medical attention and include:

STRESS: is a non-specific response of the body to any demand made upon it. It is not necessarily negative and some forms alert and motivate us to positive action. On the other hand, too much good stress, or bad stress may be a threat to one's health.

CHRONICS STRESS: harmful physical and emotional response to job requirements that do not match the capabilities, resources or needs of the worker. The most stressful jobs are characterized by a combination of high demand and low reward.

CHRONIC JOB STRESS is not a distinct clinical or medical diagnosis. It can be a health risk. In fact, the term "stress" has multiple meanings and can be used to denote either the nature of the stressor or the individual's reaction to it. In this respect:

BURN-OUT: exhaustion, cynicism, loss of professional or occupational efficacy, creates high levels of employee disengagement and is a pathway to depression.

STIGMA is a cluster of negative attitudes and beliefs motivating the public to fear, reject, avoid and discriminate against people with mental illness.

RECOVERY from mental illness is a process in which people regain the capacity to work and participate fully in their communities. *For some, recovery means the ability to live a fulfilling and productive life despite a disability; for others, it means the reduction or complete remission of symptoms.*

RESILIENCE enables us to rebound from adversity; change, trauma or tragedy – to go on with life with a sense of competence and hope.

LONG-TERM DISABILITY (LTD): programs that partially replace income for long periods of illness or injury (typically until recovery or retirement).

SHORT-TERM DISABILITY (STD): programs that replace all or part of an employee's income during disability up to a maximum period that is seldom longer than one year.

PRESENTEEISM is not about malingering, faking it; the phenomenon refers to productivity losses (Harvard Business Review) stemming from real productivity problems. *The assumption behind presenteeism (Harvard Business Review) is that employees need to work, do not take their responsibilities lightly and "hang in there."*

INFO APPENDIX III

EMPLOYEE FACT SHEETS

These fact sheets are basic information and can be downloaded for distribution in your workplace.

Employee Fact Sheet (1)

GETTING THE FACTS
A first step toward international standards governing the return to work from mental illness *Eliminating the stigma of mental health problems in the work place*

GETTING THE FACTS *Demographics and facts to help define "target audiences" for early education and intervention*

Number of Canadians experiencing a mental disorder in… 1 day 10 – 15% 1 year 20 – 25% 1 generation 37 – 40%	• Fewer than 20% of those who need treatment actually get it • 70% of those people are in the labour force • Individuals in their prime working years and valued employees with 10 to 15 years of service are uniquely vulnerable • Bipolar disorder can be categorized as a "physical condition" according to a U.S. court • Depression is linked to diabetes, hypertension, asthma, heart disease or stroke • On average, an episode of serious depression can take an employee off the job for an estimated 40 days. Which is longer than cardiac disease.

Effective treatments of depression – better accessed – can change this picture. Researchers at the Centre for Addiction and Mental Health find that 75% of those who get the treatment they need, do successfully return to work.

Depression and Heart Disease

- 20% of people who suffer heart attacks exhibit signs of clinical depression at the time
- Depression can dispose individuals with damaged hearts to arrhythmia
- Depression quadrupled the risk of cardiac death among patients admitted to the Montreal Heart Institute for unstable angina
- The U.S. National Centre for Health Statistics reports "there is evidence to suggest that depression may cause stroke or other cardiovascular events."
- Cardiac patients suffering depression experience "decreased heart rate variability," which means the heart of a depressed person never sleeps
- Depression may increase blood clotting which can impair the supply of blood and oxygen to the heart, a cause of heart attack

Employee Fact Sheet (2)

RECOGNIZING DEPRESSION & ANXIETY

RECOGNIZING DEPRESSION & ANXIETY *Depression and anxiety have major physiological implications affecting perspective, sleep and concentration; handling time pressures, feedback, multi-tasking and change.*

Individual Effects:	*Signs of Group Stress:*
• Slumping performance at work • Poor timekeeping • Increased consumption of alcohol, tobacco or caffeine • Frequent headaches or backaches • Withdrawal from social contact • Poor judgment/indecisiveness • Constant tiredness or low energy • Unusual displays of emotion, e.g. Frequent irritability or tearfulness	• Disputes and disaffection • Increased staff turnover • Increased grievances and complaints

10 distinct faces of problem job stress among middle managers
1. Growing **irritability and impatience**, "no end in sight reactions to even routine requests for information.
2. **Inability to stay focused**, finishing other people's sentences to "save time," wincing at new ideas (who needs another new idea), being unable to sit still, looking distracted and far away.
3. **Staying out of sight,** keeping the world at bay, being testy about casual interruptions such as a phone ringing, not looking up when talking to others.
4. Treating the concerns of others about workload and deadlines with contempt **and sarcasm.**
5. **Displaying frustration** with one's own boss in the presence of others and leaving angry voicemails after regular business hours.
6. **Stretching the workday** at both ends, **calling in sick** a lot, **persistently late** for meetings.
7. **"Working at home"** to avoid the negative energy of the office.
8. **Limiting eye contact with others** except to "react," finding it painful to smile openly, your cheeks have a heavy, a fuzzy feeling behind your eyes
9. **Finding small talk hateful**. **Tuning out** what others say. **Missing deadlines**, **losing faith** in yourself and others, resenting and even alienating customers.
10. Eventually, **physical symptoms** of pain and burning, breathing troubles, back problems. Burnout may migrate to a diagnosable and dangerous medical condition.

INFO APPENDIX IV

ROUNDTABLE SUMMARY OF THE COSTS OF MENTAL DISORDERS

Canada spends $142 billion per year on healthcare, $43 billion per year in private care, nearly half of that in prescription drugs, the fastest growing cost in healthcare.

In this context, the Roundtable's estimates of the costs of mental disorders in Canadian workplaces – and on industrial production in this country – stem from a report compiled for the Roundtable by a scientific advisory committee led by Dr. Martin Shain.

The report was tabled at a special roundtable hosted by the TD Bank Financial Group on November 14, 2002. Committee members are acknowledged below.

Key extracts from this report:

- A conservative estimate of the net impact of depression, anxiety and substance abuse on productivity losses alone is around $11.1B/yr based on 1993 data and (only) on disorders that would qualify under criteria established by the American Psychiatric Association.

- If this estimate were expanded to include sub-clinical syndromes such as burn-out, demoralization, disengagement and excessive substance abuse, the losses could be three times this conservative estimate – or $33B/yr.

- This $33B estimate does not include costs related to health care or social service systems, costs transferred from the workplace to these systems or employer costs originating from medical conditions triggered by factors outside the workplace.

- *These estimates were produced by a committee composed of Ash Bender, MD, Jane Brenneman Gibson, William Gnam, MD, Martin Shain, S.J.D. (chair), Maurice Siu, MD and Helen Suurvali BA., November 14, 2002.*

Health Canada

The Population and Public Health Branch of Health Canada produced a report called "The Economic Burden of Mental Health Problems in Canada" – 2001. This report covered only "depression and distress."

Principal findings:
- Costs of treatment of diagnosed depression and distress $ 6.3B/yr
- Costs of lost productivity due to depression and distress $ 8.1B/yr
- **Total**   **$14.4B/yr**

Within the treatment number:	**$B/yr**
• Medications	.6
• Physicians	.9
• Hospitals	3.9
• Other institutions	.9
• Non-publicly insured mental health services	.3
• **Total**	**6.3**

Within the productivity number:
- Short-term disability costs of   6.0
- Long-term disability costs of   1.7
- Costs of early death   .4
- **Total productivity costs**   **8.1**

The Health Canada study excluded and the Roundtable study included:
- Sub-threshold numbers such as burn-out
- Substance abuse
- Anxiety disorders

The Health Canada report says that:
- "The upshot of all these limitations is that the estimates presented in this paper are quite conservative.

- "We can thus conclude with confidence that the economic burden of mental health problems – both medically-treated and not – is $14.4B annually – <u>at a minimum</u>."

Comparing these reports:
Productivity losses due to clinically-recognizable medical conditions:
- Roundtable estimate - $11.1B/yr (depression, anxiety disorders, substance abuse)
- Health Canada estimate - $ 8.1B/yr (depression, distress)

Treatment costs:
- Roundtable estimate   n/a
- Health Canada estimate $6.3B/yr

Presenteeism costs
- Roundtable estimate $22B/yr   ($11.1+$22B=$33.1B)
- Health Canada   n/a