

HUMAN RESOURCE STRATEGIES FOR EMPLOYERS

Safe and Healthy

A Guide to Managing an Aging Workforce



This book is for employers, managers and supervisors who are interested in learning more about health and safety issues in the workplace as they apply to older workers.

It will help you:

- become aware that the lost-time claim rates of older workers is lower than the provincial average of all workers in Alberta
- consider simple changes in the work environment to keep aging workers safe, healthy and productive
- learn how to reduce the shortage of skilled workers by keeping mature workers employed
- understand how a safe and healthy work environment benefits workers of all ages
- connect with further resources and obtain additional information.

This publication is available on-line through the Alberta Learning Information Service (ALIS) website—Alberta’s leading on-line source for career, learning and employment information. To access this and additional publications, visit www.alis.gov.ab.ca/careershop

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This information was accurate, to the best of our knowledge, at the time of printing. Labour market information and educational programs are subject to change, and you are encouraged to confirm with additional sources of information when making career, education and employment decisions.

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Safe and Healthy

A Guide to Managing an Aging Workforce

About this publication

Using best practices from various sources, *Safe and Healthy* outlines how employers, managers and supervisors can adapt workplaces, tools and procedures to deal with age-related changes. It can also help employers overcome common misperceptions about older workers' capabilities. While this publication specifically addresses health and safety issues for older workers, most of the health and safety information provided applies to workers of any age.

Besides helping employers, managers and supervisors to develop and use policies and programs to improve workplace health and safety, this publication can also assist all workers to better understand and adapt to physical and psychological changes as they age.

This publication is not intended to be a first aid or safety manual or to offer detailed hazard assessment or materials-handling guidelines. Specific information on identifying and dealing with hazards is available from Alberta Human Resources and Employment (AHRE) Workplace Health and Safety and the department's Work Safe Alberta program, as well as the Workers' Compensation Board of Alberta and safety organizations and suppliers.

Relevant publications and bulletins also are available through AHRE's Workplace Health and Safety website at www.gov.ab.ca/hre/whs (click on Publications & Videos).

Thanks for helping us

This book was made possible through assistance and input from a number of individuals and organizations, notably:

- Alberta Council on Aging
- Alberta Construction Safety Association
- Alberta Hotel Safety Association
- Alberta Human Rights and Citizenship Commission
- Calgary Marriott Hotel
- Canadian Federation of Independent Business
- City of Calgary
- Comstock Canada Ltd.
- EPCOR
- Ergonomic Solutions Inc.
- EWI Works
- Gemport Jewellers
- Home Depot Canada
- Kerby Centre
- Manufacturers' Health & Safety Association
- Retail Alberta
- Seniors Association of Greater Edmonton (SAGE)



Introduction

1

Any change you make for one person helps the whole population. Changes made for the older population can be the driver, but they will benefit everyone in the workplace.

*—Ergonomics consultant
advising a large urban
Alberta municipality*

We all share the fact that we're getting older. But how we age differs from one person to the next.

While two people may share the same birth date, one may function better physically or mentally. We describe these two people as having the same *chronological* age but different *functional* ages.

Just as it is difficult to define "age," it is not easy to define "older workers." The World Health Organization uses 45 as the dividing line between "younger" and "older" workers, and this publication describes "older workers" as those 45 and over.

Older workers, whether they are 45, 60 or 70, can be victims of outdated attitudes, stereotyping, unfair policies and prejudices. This can negatively affect older workers by:

- prematurely forcing them out of the workplace
- denying them promotions
- excluding them from learning and training opportunities.

Beliefs, whether right or wrong, about the health, safety and effectiveness of older workers may influence whether they are hired or let go. A common misperception is that older workers are "over the hill" and cannot work safely and effectively.

Not only can these mistaken beliefs harm older workers, they also negatively affect employers and businesses, particularly since older workers are a valuable human resource in today's labour market.

Our bodies do alter as we age. However, once these changes are better understood and small adjustments are made to offset their effects, workplaces can become safer, healthier and more productive for all employees, not just older workers.



Riding the Population Wave

The working population profile

On average, Alberta's and Canada's populations are aging.

The percentage of Canada's population who can be described as middle-aged or older has increased significantly over the past decade. The trend will likely continue. This is due to a number of factors. Many births occurred during the period 1946 to 1964 (post Second World War), creating a baby boom. These baby boomers are now middle-aged. And, with people generally now living longer, the number of people in the older age categories is increasing.

The tendency for families to have fewer children than in the past also supports the trend of an aging population, as young people comprise a smaller percentage of our population.

In 2001, approximately 22 per cent of Alberta's population was between the ages of 45 and 64.

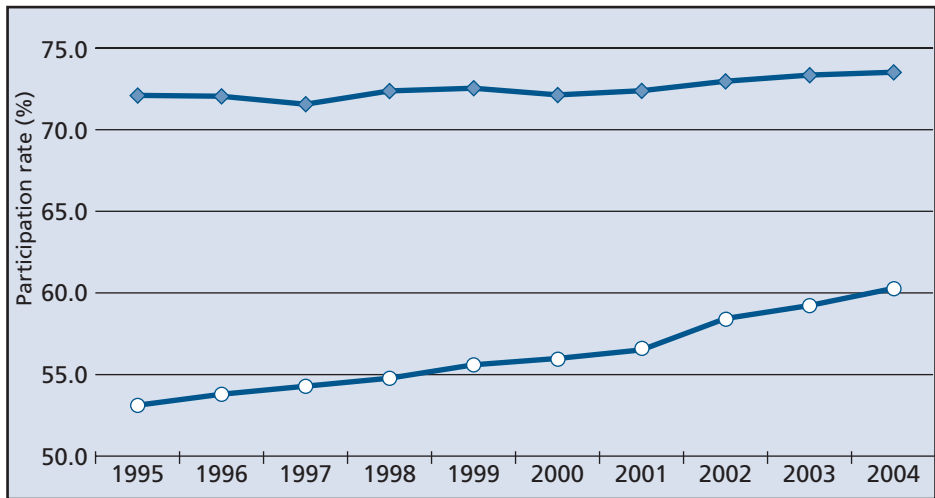
See *Appendix C: Population and Labour Force Data* for the current and projected population (by age group) for Canada and Alberta.

The participation rate

The participation rate in labour force statistics refers to the part of the general population that is working or looking for work. Alberta had the highest older worker participation rate in the nation in 2004. The following graph shows that the Alberta participation rate of workers aged 45 and over has increased steadily since 1994. During the same period, the participation rate of those aged 15 and over has remained relatively the same.



Participation Rate for Population Over Age 45 vs. Participation Rate for Population Over Age 15, Alberta: 1995–2004

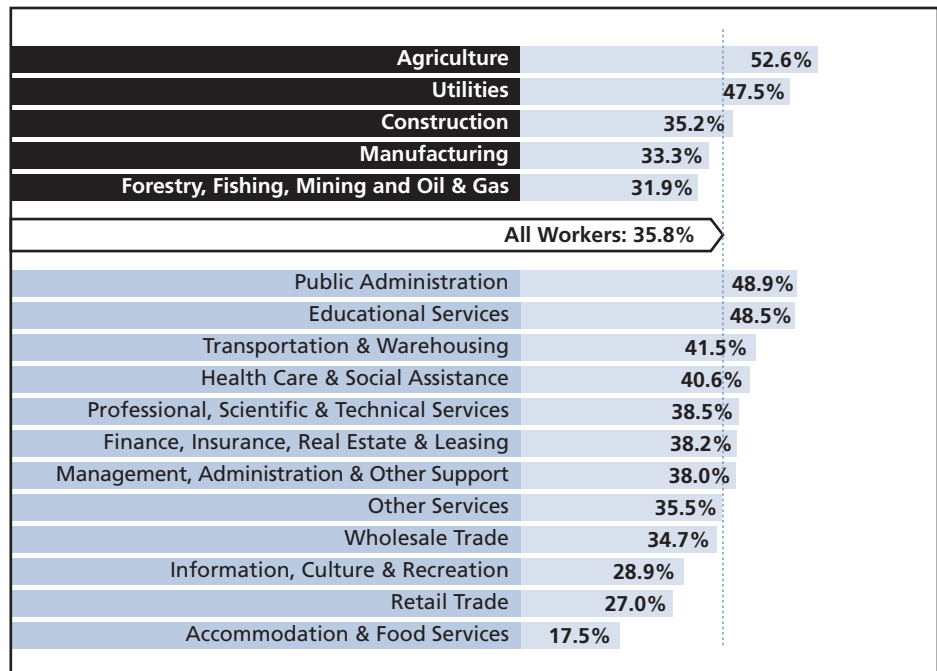


Source: Statistics Canada, Labour Force Historical Review ◆ 15 years and over ○ 45 years and over

The result of this shift is a greater number of older workers in the workforce.

Where are those older workers employed right now? As the following graph shows, the percentage of Alberta workers 45 and over varies by industry, with the highest percentage working in the agriculture, public administration and education sectors.

Older Workers' Share of Total Employment by Industry, 2004



Source: Alberta Profile, Older Workers in the Labour Force, 2005. Available at www.gov.ab.ca/hre/lmi/pdf/OlderWorkers_Profile1.pdf

■ Goods-producing Industries
 ■ Service-producing Industries

Now hiring — A sign of the times

For Canada and Alberta, an aging population and an increased number of older workers leaving the workforce could mean there are fewer workers available to do the work required in the near future.

This aging trend creates both challenges and opportunities for Alberta employers. Over time, a shortage of workers could reduce our economic output, lower our standard of living and lessen our competitiveness.

Staffing shortages are likely to intensify. This is especially true in retail and service sectors, but also in government, health care, manufacturing and resources industries. On the other hand, recruiting and retaining older workers can help employers address labour shortages now and in the future and gain the benefits of older workers' decades of experience.

This means employers, managers and supervisors need strategies that retain older workers and encourage them to work beyond the traditional retirement age. It may also mean bringing back those who have left the workforce.

These strategies may require financial incentives as well as finding ways to accommodate workers through:

- adaptable workplace policies that meet demands for options such as flex-time, part-time, job sharing, temporary work, “bridge” work (between careers and retirement), contract work, job pooling, phased-in retirement (gradual reduction in hours)
- motivational incentives
- education and training strategies.

Workers of any age are more likely to be attracted to employment and remain working if they feel their work environment is safe and healthy.

What work means to older workers

For individual workers, decisions about staying in or returning to the workforce depend on many considerations, including:

- individual economic needs (for example, inadequate pension income)
- job satisfaction and the sense of productivity and creativity offered by work
- the need for social contact and stimulation
- maintenance of self-esteem and self-confidence.

Issues in attracting older workers and keeping them employed

Employer concerns and motivation	Older worker motivators	Possible responses
<ul style="list-style-type: none"> • Keep those now working employed • Bringing back older workers who have left the workforce • Convince those working to stay (beyond traditional retirement age) 	<ul style="list-style-type: none"> • Individual economic needs • Job satisfaction and productivity • Need for social contact and stimulation 	<ul style="list-style-type: none"> • Flexibility in the workplace • Motivation and non-monetary incentives • Education and health and safety training strategies for older workers • Procedures that ensure older workers' health and safety

So far, attracting or retaining older workers has not been an issue. But like many organizations, in the next few years, we're looking at a demographic dip. Having policies and procedures in place and trying out some pilot projects will help. It will be largely up to the organization to convince older workers to stay or return to work.

— Human resources advisor with a large Alberta municipality

Facing Age-Old Misperceptions

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Dealing with myths and realities

Some of the social, economic, safety and medical myths about older workers are based on a perception that older workers are frail, unreliable and incapable of working effectively and safely. It is time to set aside these stereotypes and negative attitudes. The following chart presents and responds to some of these myths.

Myths and realities about older workers	
Myth	Reality
Older workers are more likely to have work-related injuries.	Not true. In fact, older workers suffer fewer job-related injuries.
Older people are all alike.	Differences within age groups are often greater than those between age groups.
Older adults are unable or unwilling to learn new things or skills.	Age does not determine curiosity or the willingness to learn. Older workers may sometimes take slightly longer to learn certain tasks and may respond better to training methods more suited to their needs.
Older adults avoid new approaches or new technologies.	Many people, regardless of age, enjoy new technology. Older workers are likely to respond well to innovation if it: <ul style="list-style-type: none"> • relates to what they already know • allows for self-paced learning • provides opportunities for practise and support. <p>See the section <i>Delivering the message — Designing training for older workers</i> in the chapter on <i>Creating a Safe and Healthy Working Environment</i>.</p>
Older workers have failing memories.	Long-term memory continues to increase with age.
It is not worthwhile investing in training older workers because they are likely to leave or are “just coasting to retirement.”	Older workers tend to be loyal and less likely to change jobs frequently. This is particularly the case if older workers know their efforts are appreciated and they are not faced with a mandatory retirement age. U.S. Bureau of Labor studies show that workers aged 45 to 54 stayed in their current position twice as long as workers aged 25 to 34.

Myths and realities about older workers (continued)

Myth (continued)	Reality
	<p>One Canadian survey showed that 21.4 per cent of workers 45 and over planned to never retire or retire after 65.</p> <p>A more recent survey by Ipsos Reid in December 2005, conducted for the Bank of Montreal, found that 58 per cent of the (Canadian) pre-retirees surveyed planned on working for an employer in some capacity following traditional retirement.</p> <p>In a knowledge economy, the payback period on investment in training is becoming shorter for all workers. That means that spending on training older workers is very likely to be recovered before these workers retire.</p>
Older workers are less productive.	<p>Productivity is individual and varies more within an age group than between age groups. No significant impact on productivity due to aging is likely until workers are well into their 70s.</p> <p>Older workers may be less productive doing heavy physical work. However, most jobs do not require maximum physical exertion. Older workers generally make up for any decline in physical or mental ability through experience and forethought. If strength and agility are a factor, older workers can usually find ways to compensate by “working smarter.”</p> <p>Older workers are often well trained and have a track record of responsibility and dedication.</p>
Older workers relate poorly to customers.	Older workers can often be more effective than younger workers when experience or people skills are needed, as when dealing with customers or building a client base.
Older workers are inflexible.	Older workers may be more cautious, a trait that can improve accuracy and safety.
Older adults have impaired mental or intellectual capacity.	<p>Studies show intellectual abilities stay intact into the 70s and beyond. Short-term memory may start declining well before age 45, but measurable, in-depth knowledge continues to increase as we age.</p> <p>Age tends to enhance the ability to perform activities depending on judgment, decision-making and general knowledge.</p>
Most older adults have poor health.	Three-quarters of Canadians aged 65 to 74 and two-thirds of those over 75 rate their health as good or very good. These figures are even higher for workers aged 45 to 64.



Myths and realities about older workers (continued)

Myth

Older workers are more likely to suffer from illness and are more often absent or late for work than younger workers.

Reality

Most studies show older workers have lower absenteeism and tend to be more punctual than younger workers. Usually, older workers with health conditions requiring extensive sick leave have left the workforce on their own accord. Any significant increase in hospital stays or sick leave are not likely to show up until people are over 80.

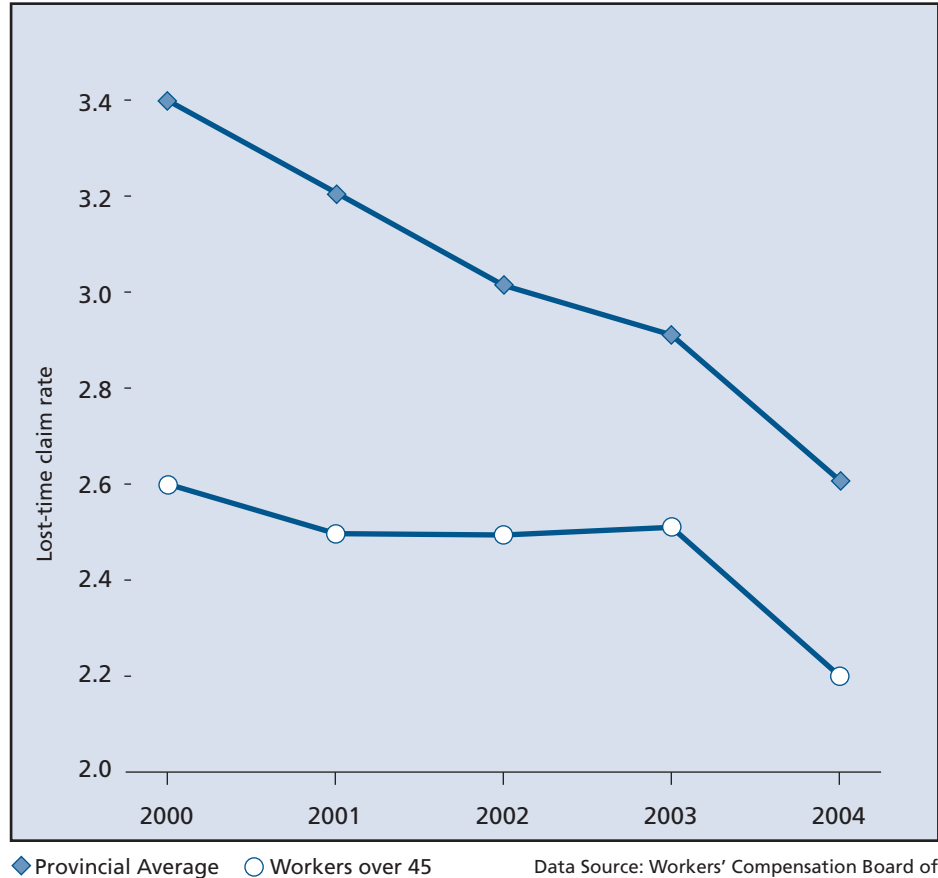
Older workers have less education.

While this may have been true at one time, it is less a factor now when many well-educated baby boomers fill the ranks of older workers.

It is a common but incorrect belief that older workers suffer more injuries than younger workers.

The following graph compares Alberta lost-time claim rates for older workers (45+) and the general workforce. The lost-time claim rate provides an indicator of the risk of a disabling injury or disease to a worker during a period of one year. Year after year, the percentage of older workers who submitted WCB claims for time away from work was lower than the workforce as a whole.

Lost-time Claim Rate of Older Workers (45+) vs. Provincial Average, Alberta: 2000–2004



Differing ages, differing expectations

Those who grew up around the same time often share certain preferences and expectations. These common values, shaped by living through similar times and events, may differ from generation to generation.

Sometimes workers are described according to which of the following four generations they belong to:

- pre-boomers or mature/silent generation, born before 1946
- baby boomers, born during the years of 1946 to 1964
- generation Xers, born during the years of 1964 to 1981
- generation Yers, born since 1981.

The following workplace characteristics have sometimes been linked to these four generations:

Pre-boomer/mature/silent generation	Baby boomers
<ul style="list-style-type: none"> • long tenure with organizations • respect hierarchies and authority figures • like structure and rules • demonstrate strong work ethic • pay attention to the quality of work • less mobility between jobs. 	<ul style="list-style-type: none"> • sceptical of authority figures • results-driven and ambitious • have long-term aspirations with organizations • retain what they learn • idealistic and competitive • people-focused • generally optimistic.
Generation X	Generation Y
<ul style="list-style-type: none"> • comfortable with diversity • value freedom and informality • have short-term loyalty • work well in networks and teams • embrace technology • seek life-work balance • learn quickly • generally skeptical. 	<ul style="list-style-type: none"> • comfortable with diversity • value informality • have short-term loyalty • learn quickly • embrace technology • need supervision.

Adapted from Generational Differences Survey Report (August 2004) by M.E. Burke. Alexandria, VA: Society for Human Resource Management. Used with permission.

Those born in the same year or belonging to the same generation are not all alike. However, some of these shared characteristics may explain how workers from the same generation approach work and communicate with co-workers and supervisors. Generational differences can show up in workers’:

- attitudes about and expectations of work
- methods of communication
- attitudes toward authority
- approaches to learning.

Such different approaches and attitudes may sometimes influence how workers view or react to workplace health and safety advice. For example, older workers with a strong work ethic and commitment to their workplace and employer may consider it a good thing to “tough it out” and turn up for work even if they are tired or sick. However, a worker with the flu could infect co-workers and a tired worker could risk their own and others’ safety. Employers and supervisors should be sensitive to, and ready to respond to, such potential generational differences in attitude.

In the retail sector, we recognize that older workers may be with us longer; they may not have to be retrained and are good role models for younger workers. Older workers also have a better track record in terms of safety.

— Business association official

The benefits of age

Not only are the negative myths and stereotypes about older workers generally untrue, the reality is that hiring and retaining older workers offers many advantages. Here are some of the positive qualities that human resource professionals say many older workers bring to the job:

- a strong work ethic
- reliability
- a proven performance record
- knowledge and skills
- a sense of responsibility and duty to the job
- loyalty and commitment to the organization
- less likelihood of switching jobs
- an ability to manage their time
- tactfulness
- conscientiousness
- a co-operative and team-oriented attitude
- self-confidence
- motivation
- productivity and efficiency
- an ability to work with different people
- access to many community contacts (especially important in sales and marketing)
- realistic understanding of their abilities and shortcomings
- a willingness to work flexible schedules (may be willing to take vacations during off-seasons, such as winter, and work during traditional vacation periods, such as summer)
- life and work experience
- lower absenteeism
- wisdom
- ability to be retrained
- cost-effectiveness
- an ability to serve as role models and mentors.

For more information on the benefits of hiring older workers, see *A Guide for Midlife Career Moves*, produced by Alberta Human Resources and Employment. For a free copy or to download on-line, go to www.alis.gov.ab.ca/careershop

Dealing Effectively With Age

Aging is not a disease; it is a biological process of change that starts at birth. The aging process means that people may not have the same strength or physical abilities at 50 or 60 that they had at 25 or 30. But in the case of most jobs, with minor adaptations or adjustments, workers can perform the work very well into their 70s and sometimes beyond. In some types of work, performance may continue to improve into the 60s and 70s.

The fitness factor — Not a matter of age

Most jobs do not require workers to perform at top physical or mental capacity. Compare this to a car with a speedometer that can register speeds of up to 220 kilometres an hour. Rarely would that car be driven at more than 120 kilometres an hour. It is the same with our bodies.

Age does not determine fitness. Studies show that with regular physical exercise, physical capacity can remain relatively unchanged between ages 45 to 65. It also means that 45-year-old workers who do not exercise can be less fit than co-workers aged 65 or older who do look after their health.

Changing with age

Although exercise, a proper diet and good lifestyle choices (such as not smoking) can slow down the aging process, they cannot reverse it.

Sometimes the physical, mental and motor skill (movement of arms, hands and legs) changes related to aging can affect older workers' performance. This does not mean older workers cannot do their job effectively and safely. However, ensuring that the work is done in a healthy and safe way may require some adjustments to equipment and working environments. These changes and adjustments will benefit workers of all ages.

The following table lists some physical and mental changes that occur gradually as people age. When and at what rate these changes occur varies from person to person. The table includes information about how these changes can affect workplace performance and health and safety if changes and adjustments are not made. The table also includes actions that workers, employers and supervisors can take to improve the health and safety of all employees, not just those 45 or older. More detailed suggestions are provided in the chapter *Creating a Safe and Healthy Working Environment*.



Aging is not a disease; it is a biological process of change that starts at birth.

Ensuring the work is done in healthy and safe way may require some adjustments to equipment and working conditions.



Responding to physical changes			
Musculoskeletal system (muscles, bones, joints, ligaments and tendons)			
How organs and systems change with age	How age-related changes impact work	What employers need to do	What workers need to do
Muscles			
<p>Muscle strength gradually declines, reaching an annual average three percent decline after age 70. On average, those 51 to 55 have about 80 per cent of the strength they had in their early 30s.</p> <p>Muscles lose elasticity.</p> <p>Muscles take longer to respond.</p>	<p>Less muscle strength and endurance may affect the ability to do physical work over extended periods, particularly for heavy or intense activities.</p> <p>Though maximum strength declines with age, the level of strength available necessary for most work does not change greatly.</p> <p>Grip strength decreases.</p> <p>Range of motion decreases. Some work may become difficult due to pain.</p>	<p>Provide mechanical devices and power tools for lifting and moving.</p> <p>Minimize lifting by:</p> <ul style="list-style-type: none"> • storing at lower levels • packing in smaller quantities or containers. <p>Provide supportive, adjustable seating and workstations.</p> <p>Minimize work requiring fixed (static) muscle positions.</p> <p>Provide grip-friendly tools, gripping gloves and easy-to-turn and twist valves and container lids.</p> <p>Provide power tools.</p> <p>Provide long-handled tools to reduce bending.</p> <p>Provide guidelines and training for:</p> <ul style="list-style-type: none"> • lifting • sitting, standing • bending • stretching. 	<p>Use the equipment provided for lifting and moving loads.</p> <p>Maintain proper posture.</p> <p>Reduce or eliminate upper-body twisting.</p> <p>Wear proper footwear.</p> <p>Change position frequently.</p> <p>Stretch before, during and after work.</p> <p>Move joints through their complete range of motion.</p> <p>Minimize squatting, bending, kneeling and stooping.</p>

Musculoskeletal system continued			
How organs and systems change with age	How age-related changes impact work	What employers need to do	What workers need to do
Bones			
<p>Bones lose calcium, making them more porous. This can lead to osteoporosis.</p> <p>Cartilage (padding between bones) deteriorates and can lead to bone damage at the joint.</p>	<p>More porous, less dense bones are more likely to break as a result of workplace slips or falls.</p> <p>Work injuries may result from short-term overexertion or repeated, long-term stress on muscles, joints and bones.</p>	<p>Minimize slips, trips and falls by reducing climbing and not working at height.</p> <p>Arrange for proper equipment and tools storage.</p> <p>Supply safe ladders and steps.</p> <p>Ensure proper lighting.</p> <p>Construct and mark steps, floors and surfaces properly.</p> <p>Install fall-protection barriers.</p> <p>Rotate work assignments to avoid repetitive strain.</p> <p>Limit above-shoulder and above-head work.</p> <p>Eliminate or isolate vibration.</p> <p>Offer exercise or stretch breaks.</p>	<p>Use ladders properly and be cautious on steps.</p> <p>Add weight-bearing activities (walking, running) to a regular exercise routine.</p> <p>Eat a healthy diet, including foods containing calcium.</p>
Cardiovascular and respiratory systems			
<p>The heart, lungs and the circulatory system's ability to carry oxygen-filled blood decreases.</p> <p>Between age 30 and 65, functional breathing capacity is reduced by 40 per cent.</p>	<p>Capacity for extended physical labour is reduced. Changes do not usually affect normal work.</p> <p>Lessened blood flow to outer parts of the body reduces heat loss from skin surface in hot conditions.</p> <p>Insufficient warm clothing can lead to frostbite and hypothermia.</p>	<p>Provide mechanical devices to minimize lifting.</p> <p>Avoid work in extreme heat or cold, if possible.</p> <p>Adjust work in high or low temperatures.</p>	<p>Avoid over-fatigue.</p> <p>Dress properly for hot and cold conditions.</p> <p>Use appropriate personal protective equipment (including masks and respirators).</p>
(continued)			





Cardiovascular and respiratory systems continued			
How organs and systems change with age	How age-related changes impact work	What employers need to do	What workers need to do
<p>Blood vessels lose flexibility. Arteries thicken, which can lead to hardening of the arteries, increasing the risk of high blood pressure and strokes.</p> <p>With more constricted blood vessels, blood flow to outer parts of the body decreases. It also lessens the body's ability to carry heat to the skin.</p> <p>The heart takes longer to return to resting level following an increase in the heart rate.</p>		<p>Provide air conditioning, heating and adequate ventilation.</p> <p>Assign and schedule work to avoid fatigue.</p>	<p>Maintain a healthy lifestyle by:</p> <ul style="list-style-type: none"> • controlling weight • not smoking • avoiding substance abuse • eating properly • exercising.
Hearing			
<p>The ability to hear and distinguish one kind of sound from another, especially high-pitched sounds, decreases with age.</p> <p>More difficulty locating the source of sounds.</p>	<p>Hearing loss may reduce the ability to hear alarms and other work-related signals, as well as verbal instructions.</p>	<p>Reduce general workplace noise.</p> <p>Use back-up warning systems, lights and vibration systems (vibrating pagers) along with sounds.</p> <p>Reduce long-term and repeated exposure to noise.</p> <p>Shield and insulate noisy equipment.</p> <p>Provide hearing protection.</p> <p>Speak clearly.</p>	<p>Use personal protective equipment to preserve hearing.</p> <p>Have hearing tested.</p> <p>Use hearing aids if prescribed.</p>

Vision			
How organs and systems change with age	How age-related changes impact work	What employers need to do	What workers need to do
<p>The flexibility of the lens of the eye changes, often resulting in long-sightedness, which is noticeable around age 40.</p> <p>The eye's ability to see light gradually diminishes. The amount of light reaching the back of the eye can decline by up to 75 per cent between ages 20 and 50.</p> <p>The macula, a light-sensitive point at the back of the eye, works less effectively. Such deterioration affects about one-third of Canadians aged 55 to 74.</p> <p>Sharpness of vision for stationary objects does not decline significantly before age 60. The ability to see moving targets, sideways and in-and-out motions can begin to decline at a much younger age.</p> <p>Many of the changes can be dealt with by using corrective lenses.</p>	<p>Visual changes may affect the ability to read printed material, dials and screens within arm's length.</p> <p>Ability to do detailed tasks may be affected.</p> <p>Ability to adapt to changing lighting conditions may be reduced.</p> <p>Eye movement, including the ability to follow visual targets, may be affected.</p> <p>Increased sensitivity to glare.</p> <p>Diminished ability to notice a difference between blue and black.</p>	<p>Where practical, improve workplace lighting, making it individually adjustable and suited to the task.</p> <p>Reduce glare by using several light sources rather than one large source.</p> <p>Provide indirect lighting.</p> <p>Avoid sharp contrasts in light levels.</p> <p>Reduce sunlight glare with shades and awnings.</p> <p>Ensure written material and displays have sufficient contrast and are readable. Some colour combinations are difficult to read when used together. Black letters on a white background is good, while white letters on a black background can be difficult to read.</p> <p>Provide personal protective equipment for eyes.</p> <p>Provide or encourage regular eye examinations.</p>	<p>Have vision tested regularly and get reading glasses if required.</p> <p>Use personal protective equipment for eyes.</p>
Skin			
<p>The skin stretches less easily.</p> <p>Secretion of oil and sweat declines.</p>	<p>Decreased tolerance to heat and cold.</p>	<p>Control or limit work in extreme heat or cold.</p>	<p>Use skin protection, lotions and protective clothing.</p>



Mental and motor processes			
How organs and systems change with age	How age-related changes impact work	What employers need to do	What workers need to do
Mental processes			
<p>While mental processes are at their height when people are in their 30s and 40s, these abilities decline only very slightly in the 50s and 60s. A decline may not be noticeable until people are 70 or older.</p> <p>The amount of change varies greatly from one person to the next.</p>	<p>It may take slightly longer to process information.</p> <p>In most situations, changes do not affect work performance.</p>	<p>Reduce multi-tasking.</p> <p>Increase time between steps of a task.</p> <p>Increase available decision-making time.</p> <p>Reinforce tasks and skills (including emergency response) through repetition, drills and refresher courses.</p>	<p>Exercise to increase flow of blood, which encourages growth, and prevents or reduces death of brain cells.</p> <p>Follow a healthy diet.</p> <p>Minimize stress at and outside work.</p> <p>Get enough sleep.</p> <p>Be aware of the possible side effects of medications.</p> <p>Challenge the brain through hobbies, reading and other mentally stimulating activities.</p>
Sensory and motor processes			
<p>The sensory system carries messages to the brain and the motor control system carries messages from the brain to parts of the body performing an activity.</p> <p>A decrease in the size and flexibility of muscles and a reduction in central and outer nerve fibres occur with age.</p>	<p>Lengthened reaction and response time may slow decision-making in some cases.</p> <p>Except where extremely quick responses are required, these changes do not affect the ability to perform most work.</p>	<p>Reduce multi-tasking.</p> <p>Provide opportunities to practise and reinforce tasks.</p>	<p>Practise and reinforce tasks.</p>

We're not all the same—

Other health and safety considerations

As discussed, when and how fast physical and mental changes related to aging occur varies greatly from one person to the next. However, as they grow older, everyone is affected by these conditions in some way.

Over time, repetitive tasks can lead to a variety of difficulties, including vision problems and headaches or back, muscle or joint pain. Again, these conditions are not confined to older workers.

While some hearing loss occurs naturally with age, hearing loss may also be caused by continued exposure to noise or a one-time traumatic event.

Certain medical conditions, such as damage to the bone at the knee joint, may show up in older workers from either long-term exposure to certain workplace movements involving bending or twisting the knee or to recreational activities.

Thinking smarter—Mind over matter

The ability to learn and use complicated and quick combinations of mental and motor skills, such as those needed to handle a joystick or other machine controls, decreases with age. In fact, it is believed that some rapid-reaction skills start to decline as early as age 30.

In most cases, perception, memory and learning skills remain constant well past the traditional retirement age of 65. There is even evidence that some mental abilities, such as use of language and planning, improve with age. The ability to work well in groups and other people skills are abilities that tend to get better with age. With experience can come an improved understanding of tasks and work efficiency. This often means older workers learn to “work smarter.”

It is important that employers encourage workers to remain mentally active. This can be done through hobbies, reading, solving puzzles and other mind-challenging activities. Mental and physical fitness are closely linked. Physical exercise stimulates blood flow, which keeps brain cells growing and prevents them from dying. As with physical fitness, mental fitness often comes down to a matter of using it or losing it. This is true at any age.



If you manage the business better from a safety perspective, everyone benefits. It doesn't matter how old they are.

—Alberta-based safety co-ordinator with a national retailer

The body clock

Adequate sleep and rest from work is important for all workers. If anything, regular sleep patterns become even more important with age.

Some studies have shown that those over 40 have greater difficulty adapting to shift work. This can mean work performance, and with it the workplace safety of older workers, could suffer as a result of changes to the regular circadian (daily body clock) patterns.

This does not mean older workers cannot or should not do shift work. However, the impact of sleep patterns should be considered when assigning and scheduling shift work. (See the section *A matter of timing—Older workers and shift work*.)

Handling stress

Workers of any age can experience emotional or psychological stress in the workplace.

While there are many potential sources of workplace stress, some causes of stress might be more specific to older workers. For example:

- feeling threatened by younger workers or supervisors
- coping with negative attitudes about aging
- concerns about retirement plans.

Individuals react to and cope with stressful situations in different ways. No matter what the source, stress can reduce workers' effectiveness and ability to concentrate on work. Symptoms of stress, such as the following, can affect health and safety:

- a rise in blood pressure or pulse
- rapid breathing
- upset stomach
- headaches
- muscle tension (including tightened abdominal muscles).

Managers and supervisors should know the signs of workplace stress and look for ways to help workers control and manage it. Managing conflict on the job is one way to lessen workplace stress. *Let's Talk: A guide to resolving workplace conflict*, another Alberta Human Resources and Employment publication, contains useful information on dealing with workplace conflict. To order or download your free copy, go to www.alis.gov.ab.ca/careershop.

For more information about maintaining a healthy life-work balance, check out *Better Balance, Better Business: Options for work-life issues*, produced by Alberta Human Resources and Employment. Go to www.alis.gov.ab.ca/careershop to order or download your free copy.

Summing up work performance and age

Depending on the nature of the work, job performance may improve, remain constant or decline with age. But, in almost all cases, training, changes and adaptation within the work environment can improve safety and performance and offset effects of physical and mental changes related to aging.

Workplace Health and Safety

Understanding the rules

Under Alberta's *Occupational Health and Safety Act, Regulation and Code*, employers, including those who employ one or more workers or who are self-employed, must:

- ensure the health and safety of their workers
- ensure that equipment is appropriate, adequate and kept in safe working order
- ensure workers have the training, qualifications and experience needed to do their jobs safely
- ensure that workers are familiar with job-related procedures
- ensure that workers perform duties as required by occupational health and safety legislation
- inform workers of hazards on the job site
- monitor workers to ensure they wear and properly use personal protective equipment when needed
- properly label, handle and store hazardous chemicals.

In turn, workers are responsible for:

- taking reasonable care to ensure their own and others' health and safety
- carrying out dangerous work only if competent to do so
- performing duties specified in the occupational health and safety legislation.

Alberta's *Occupational Health and Safety Act, Regulation and Code* apply to most workers in most industries. Some industries and employees, such as agricultural workers, are exempt from the requirements of the *Act*.

Asking the right questions

Here are some questions to consider when checking for workplace hazards that affect workers of any age:

- Are the procedures safe?
- Are workers using equipment and materials correctly?
- How suitable is the equipment used for the task? Is it easily accessible?
- How might people be hurt directly by equipment, machinery and tools?
- How might people be hurt indirectly through noise, fumes or radiation?
- How might people be hurt by using chemicals or other materials such as paints, solvents, fuels, toner, oils, plastics, acids, pesticides, gases, biological samples or waste material?



Alberta Human Resources and Employment partnered with the Canadian Federation of Independent Business to develop a Health and Safety Tool Kit for Small Business, which helps employers understand workplace health and safety requirements. To download the tool kit, go to www.gov.ab.ca/hre/whs and click on Small Business.

Identifying hazards

The Alberta *Occupational Health and Safety Act, Regulation and Code* require employers to identify and assess workplace hazards. A hazard is any situation, condition or thing that may be dangerous to a worker's safety and health. Part 2 of the *Code* deals with assessing and identifying workplace hazards.

Not every workplace hazard is listed in the *Occupational Health and Safety Act, Regulation and Code*. Employers are still responsible for identifying and dealing with hazards in their workplace. All workplaces must be assessed and appropriate action taken if a hazard is identified. Hazards not only exist in obvious locations such as construction sites and manufacturing facilities, but can also be present in offices and retail shops.

Hazards are not limited to what can be seen, touched or heard. A worker's psychological state can affect workplace health and safety. For instance, workplace hazards could be present if someone is working while tired, under too much stress or while dealing with workplace conflict. In such situations, workers may be a hazard to themselves and others.

For a more detailed list of hazards, see *Appendix B: Hazards—Types and Examples*.

Immediate and long-term health effects

While a fall or electrical shock may immediately kill someone, in other cases, it may take years before the health effects of some workplace hazards result in pain, illness or death. For example, the effects of working in a noisy workplace without adequate controls or personal hearing protection may not be obvious to workers at the time. Years later the result may be hearing loss.

Younger workers who do not safeguard their hearing, both on the job and away from the job, can incur premature and unnecessary hearing loss. The time to start preventing chronic effects is now—and with all workers—not when the results show up years or decades later.

The same might be said of the gradual effects of repeated overexertion of muscles and joints, which could eventually lead to continuing pain or restricted movement.

Eliminating and controlling hazards

Identifying workplace hazards is not enough. Employers, with the assistance of workers, must try to eliminate workplace hazards. This is the first and best option. If hazards cannot be eliminated employers must take steps to protect workers through the use of engineering, administrative controls and personal protective equipment, or a combination of these methods.

Hazard controls	
Type of control	Actions to take
<p>Engineering controls (Preferred method.)</p>	<p>Eliminate the hazard completely (e.g. remove trip hazards on the floor or dispose of unwanted chemicals.)</p> <p>Make modifications or replace the item or substance with something safer if it is not practical to eliminate the hazard completely (e.g. use smaller packages to reduce the weight of items that have to be moved by hand or use a less toxic chemical).</p> <p>Isolate the hazard (e.g. use soundproof barriers to reduce noise levels, use an enclosed and ventilated spray booth for spray painting, use remote-control systems to operate machinery, use trolleys or hoists to move heavy loads or place protective railings or guards around moving parts of machinery).</p>
<p>Administrative controls (Consider them after engineering controls.)</p>	<p>Examples include:</p> <ul style="list-style-type: none"> • using safe work procedures • changing the location of a work station • allowing frequent breaks • limiting exposure times by using job rotation.
<p>Personal protective equipment (PPE) (This is the least desirable option. Consider them after engineering and administrative controls.)</p>	<p>Protective equipment includes such things as gloves, hard hats, safety glasses, earplugs, fall harnesses, protective clothing, respirators and steel-toed boots.</p> <p>Ensure that:</p> <ul style="list-style-type: none"> • the right type of protective equipment is used for the job • equipment fits properly and is comfortable under working conditions • workers are trained in the need for the equipment, its use and maintenance • the equipment is stored in a clean and fully operational condition.
<p>Combination</p>	<p>Use some or all of engineering, administrative and PPE options.</p>



Safe and unsafe at any age

Workplace hazards affect the health and safety of workers of all ages. Although age doesn't make a difference to a worker's health and safety requirements, certain hazards, if not dealt with, may present added dangers to older workers. For example, poor or inadequate lighting may pose a particular safety issue for older workers. However, improving lighting will also help ensure the health and safety of all workers.

Sudden-onset injuries are likely to occur to workers of any age when they:

- do not recognize a hazard
- do not have their eyes or mind on the task
- are in the line of fire when something goes wrong
- are participating in an activity that may cause them to lose their balance, grip or traction
- are rushing, frustrated or careless
- are unable to react quickly enough to avoid injury, possibly because they are in poor physical condition.



Creating a Safe and Healthy Working Environment

As discussed in the previous chapter, under Alberta's *Occupational Health and Safety (OHS) Act, Regulation and Code* employers have a legal responsibility to provide a safe and healthy workplace for all workers. Workers are required to co-operate with such efforts.

Ensuring the health and safety of older workers may sometimes require minor changes at the job site and in work routines. These measures will also make the workplace safer and healthier for all employees. Often the necessary changes and adjustments involve fairly minor expenses for an employer.

One human resources manager with a major Canadian financial institution estimates that it costs an average of \$500 to make a change needed to let someone work more effectively. If that outlay means a worker can stay on the job and remain productive, it is a good investment.

Since it costs from 70 to 200 per cent of someone's yearly salary to hire, train and "settle in" a new worker, it usually pays employers to keep the talent they already have.

This chapter outlines some of the actions employers and supervisors should consider as a way of improving health and safety in their workplace.

Getting it right—Safety and rights in the workplace

The *Alberta Human Rights, Citizenship and Multiculturalism Act* makes it illegal for anyone 18 and over to be refused work unless there is a legitimate reason for doing so. There are exceptions in the *Act* for those who are under 18. An employer must be able to demonstrate that those refused work lack certain mental or physical capabilities needed to do the job or that the absence of these capabilities endangers public safety.

If an employer is concerned about workers' physical or mental abilities and decides to test those applying for work, the employer must give all applicants the same tests, regardless of age.

There is no legislated mandatory retirement age in Alberta.

Duty to accommodate

Under Alberta's human rights legislation, employers have a duty to accommodate. This means making certain workplace adjustments to accommodate special needs workers might have. The duty to accommodate is often used to allow workplace adjustments for workers with disabilities but could extend to meeting specific needs of older workers.

The Alberta Human Rights and Citizenship Commission's *Duty to Accommodate* bulletin says: "The Supreme Court of Canada has ruled that employers, unions and service providers have a legal duty to take reasonable steps to accommodate individual needs to the point of undue hardship. To substantiate a claim of undue hardship, an employer or service provider must show that they would experience more than a

Steps taken to help older workers will also make the workplace safer and healthier for all employees.



minor inconvenience. In many cases, accommodation measures are simple and affordable and do not create undue hardship.”

For more information on the duty to accommodate, go to the Alberta Human Rights and Citizenship Commission website at www.albertahumanrights.ab.ca and click Info Sheets & Bulletins.

Refusing unsafe work

Workers are protected from being fired for refusing to work in unhealthy or unsafe working conditions that violate the Alberta *Occupational Health and Safety Code*. To find out more, see the Alberta Human Resources and Employment publication *A Guide to Rights and Responsibilities in Alberta Workplaces*. Go to www.alis.gov.ab.ca/careershop to download or order your free copy. Questions may also be directed to the Alberta Workplace Health and Safety Contact Centre (for contact information, see the *Resources and Contacts* section of this publication).

Assessing and discussing health and safety

When managers and supervisors in a workplace adopt supportive attitudes toward older workers, their abilities and their health and safety, it has a positive impact on everyone’s attitude toward aging.

Supervisors should communicate directly and honestly with workers about health and safety concerns and should be aware of what options the employer can offer in connection with worker health and safety. For instance, if the worker is sick or has health concerns, the supervisor should know whether the employer can offer time off work, part-time work, workplace aids or assistance or changes in assignments.

In discussions between a supervisor and a worker, use straightforward but open questions that encourage the worker to add more information when answering.

Keeping it confidential

Supervisors should make it clear that any information the worker shares about their health and safety will be kept confidential and will only be used to support the worker’s needs or to modify his or her work situation.

Asking the right questions

If health and safety concerns arise, a supervisor might ask questions such as the following:

- Are you clear what your responsibilities are?
- Do you have the training and equipment you need to do the job?
- Are there any health or personal issues that are preventing you from doing your job to the required levels or standards?
- Are you receiving the support you need?

Meeting commitments

If special support is needed, the supervisor should indicate what could be provided. Avoid making commitments that cannot be met. Keep the process reasonable, reliable and relevant:

- If commitments cannot be met, explain why.
- If there is a delay, tell the worker the reason for the delay. Make a commitment to get back to the worker with answers by a specified time.
- If workplace modifications or adjustments to work routines and schedules are needed, reach agreement with the affected worker on:
 - what can be communicated
 - how it should be communicated—by supervisors, the affected worker or someone else
 - who is to receive the communication.

Responding to questions from other employees

Explain that workplace accommodation and modifications are not a special favour to the affected worker but a way of keeping a valued employee on the job.

If others ask about the pay a worker may be receiving while working under a modified schedule or routine, the supervisor is under no obligation to provide an explanation. Explain that the worker involved is being compensated in accordance with the employer's pay structure.

For more information about developing open-ended questions, read *Let's Talk: A guide to resolving workplace conflicts*, produced by Alberta Human Resources and Employment.

Go to www.alis.gov.ab.ca/careershop to download or order your free copy.

Designing the workplace to fit the work

There are many ways to design and rearrange workplaces, work procedures and equipment to improve:

- efficiency, including performance and productivity
- health and safety
- comfort and ease in doing the job.

When these conditions are met, it often indicates that the equipment or work procedures are well designed ergonomically. Good ergonomics involves fitting the job to the worker. It also means matching the product or equipment to the worker's job requirements.



We have made alterations to workstations and fabrication benches. By simply modifying the table or bench legs so that they telescope, the worker can adjust the working height of the bench to suit their needs. This results in reduced back strain and pain. The cost of modifying a fabrications bench is approximately \$200.

—Safety director of a construction company

Standing up on the job

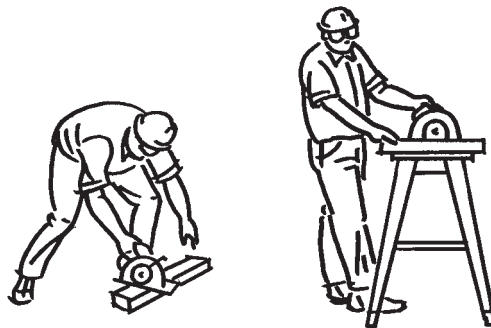
It is well known that standing for a long time can be tiring. Standing in one place puts pressure on blood vessels. To reduce the amount of work done while standing in one position, employers should consider:

- arranging, when possible, for the work to be done in a sitting position
- providing opportunities to change posture or the position of work
- adjusting work surfaces, if work cannot be done in sitting position.

When muscles are in use they either do:

- **Dynamic work** involves muscles changing in length. (An example is lifting up or putting down a box or bucket.)
- **Static work** requires keeping muscles in one position. (An example is holding a box without moving it.)

Maintaining an unmoving position for a long time not only uses energy, it can also be very tiring. In fact, repeated and prolonged static work can be harder on the body than dynamic work.



The illustration on the right shows a better way of standing and working.

Sitting properly for health and comfort

Sitting on the job is generally good if the chair is well designed and adjustable.

However, the benefits of sitting can be reduced by poor sitting posture. Prolonged sitting can lead to weakened abdominal muscles, can cause problems with digestion and breathing and may lead to damage of spinal discs. Although such conditions may show up in older workers, people of any age can suffer problems after years of poor posture.

Employers can help reduce sitting strain by:

- supplying workers with adjustable seating suited for the job
- providing information and training on sitting properly
- permitting opportunities to switch positions, to walk about and stretch.

Workers can prevent strain by practising proper posture when sitting, by changing or rotating tasks or by taking breaks to reduce time spent in the same position.

Keeping things within reach

Reaching forward to grasp or move things puts possibly damaging physical stress on the upper body. Such action can result in less accurate or unsafe job performance and, if done repeatedly, can lead to back and shoulder injuries and pain.

As a first step toward reducing the need for workers to reach too far, employers should consider providing adjustable work surfaces that can accommodate different body sizes and different tasks.

If a tool, control or container is used regularly by a worker, the horizontal distance from the worker to the object should be no greater than from the hand to the elbow (a distance of 35 to 45 cm). Things that need to be grasped or touched less frequently can be within shoulder-to-hand distance (55 to 65 cm).

Employers should also make adjustments to reduce or eliminate tasks requiring workers to raise their hands above the head or their elbows above shoulder level for long periods. Employers should consider adjustments such as:

- raising workers up on a platform or ladder
- bringing the work closer to the worker
- providing arm supports.

Providing a lift

Lifting and handling can lead to significant numbers of sudden-onset and chronic injuries in workers of all ages. To minimize such injuries, an employer's first priority should be to try and eliminate lifting. If lifting cannot be eliminated, legislation requires that employers consider ways to replace human-powered lifting with automated or mechanized lifting, such as hoists, trolleys and other devices.



Even a simple mechanical device can prevent injuries.

If manual lifting is still required, employers can redesign the process to reduce stress on the body by:

- reducing the weight of the load being lifted, including by repackaging
- decreasing the need to twist the trunk by relocating where loads are taken from and where they are moved (see the section titled *Keeping things within reach*)
- placing loads as close to the body as possible
- removing or lowering barriers when moving boxes and bins.

The Workers' Compensation Board of Alberta, in co-operation with Alberta Human Resources and Employment and industry associations, sponsors the Backpain: Don't Take it Lying down program. For more information, go to www.wcb.ab.ca and click Back@it.

We introduced hydraulic lift tables at our tool rental centres. The tables, which lift objects to trunk height, help employees get heavy or odd-shaped tools into customers' cars without lifting and twisting. While the tables were introduced as a preventive measure for all employees, older workers certainly benefit from the tables, particularly since older workers can take longer to recover from back injuries.

— Environmental health and safety manager of a national building supply and hardware chain

Getting a grip—Handing workers the right tools

Properly fitting tools and controls make it easier for everyone to work safely and effectively. It is not uncommon for tools to have handles that are too small. Having the right grip or handle becomes even more important as we age, as grip strength gradually decreases. Using tools and controls with user-friendly grips that offer added mechanical advantage can usually offset reduced grip strength.

When supplying tools and installing controls, employers should:

- provide lighter weight tools when possible
- install levers, which are easier to control and grasp than knobs (especially smooth knobs on doors, taps and valves)
- use controls or levers that turn inward (the hand is most powerful turning inward toward the palm rather than outward)
- consider replacing hand-powered tools with mechanically powered tools
- supply rubberized or other types of gloves to improve grip and leverage.



Workers can operate the tool on the right more easily and more safely because of its bent design and improved grip.

Properly designed controls not only make it easier and more convenient for workers to use, they also help ensure devices or equipment are not placed in an unsafe “open,” “close,” “start” or “stop” position. Employers can help ensure this by installing push buttons and toggle switches that are big enough to be easily pushed or moved.

Shedding the right light—The eyes have it

Encourage workers to self-report noticeable changes in eyesight and make it clear that changes in vision will not lead to reprimands or job loss.

Certain vision changes can be accommodated by wearing proper corrective lenses. Some changes, such as reduced vision to the side, cannot be corrected with lenses. However, if employers are aware of how vision changes, they can adjust workplace lighting and conditions to help all workers see well.

As noted earlier, light reaching the retina at the back of the eye declines by as much as 75 per cent from age 20 to 50. Although improved lighting helps all workers, it is especially helpful for older workers who sometimes face too much light and at other times find there is not enough light in the workplace.

Avoiding contrasts in light

The ability to adjust and respond quickly to changes in lighting decreases with age. Employers can deal with this by avoiding or limiting contrasts in lighting, such as ensuring that the level of lighting in the work environment is similar to the light level on the computer screen. Employers can also pay particular attention to maintaining consistent lighting on steps, walkways, entryways, high-traffic areas and parking lots.

Reducing glare

Reaction to glare increases with age. To reduce glare:

- Use several smaller light sources rather than a few large light sources.
- Provide low or non-glare computer screens.
- Install blinds or awnings to reduce glare from sunlight.

Making controls clear

Sharpness of vision, particularly for seeing moving objects, decreases with age.

Employers can help workers see more sharply by:

- ensuring controls, including on screens, are well lit and have clear contrast
- reducing clutter on screens, monitors and controls to improve visibility
- maintaining good lighting around moving equipment, such as saws.

Positioning lighting properly

Individual task lighting can allow workers to adjust lighting to meet their own job requirements. Rather than more lighting, often all that is needed is a better location for the light. As a result, lighting improvements need not mean increased energy costs or require the purchase of new fixtures.

Printed material and graphics

When preparing written material for workers, employers should use the style of letters (fonts) and letter sizes (at least 12 point) that are easily read. Reading something written in all capital letters is more difficult than reading a familiar mix of capital and lowercase letters.

Reading text with certain colours and colour combinations is easier (e.g. black and yellow on warning signs). Dark letters on a white background is generally easier to read than words on a coloured background. Other combinations, such as blue on green and blue on black, can be particularly difficult to read. Material printed on glossy or laminated paper is often harder to read, especially for older eyes. Employers can reinforce the message of written material with graphics and illustrations.

Place important signs at eye level where they are easier to read for someone with bifocals.

Sound management—Hearing and older workers

Workers may be affected by gradual, age-related hearing loss, particularly the ability to hear high-pitched sounds. Hearing loss also may be caused by long-term exposure to harmful sounds or by a sudden traumatic event, such as an explosion.

Besides potentially damaging hearing, unwanted workplace noise becomes an immediate safety concern by making it harder for workers to hear safety signals.

To eliminate unwanted noise, employers should:

- install sound-absorbing material
- shield machine noise
- minimize air-conditioning noise
- provide ear protection, where appropriate.

An accepted norm in ergonomics is that the computer monitor height should be set so that a person's field of vision falls within the top one-third of the viewing area of the screen. We've been in offices where everyone's monitor is set to that standard, but issues around individuals with progressive or bifocal lenses were not taken into account.

—Manager, ergonomics consulting firm

Employers should encourage self-reporting of hearing problems and ensure that audiometric testing (testing a worker's hearing to measure whether it is normal or there is some degree of hearing loss) is done where required by law.

Employers should also be aware of hearing changes related to aging if the workplace uses sound clues for work functions, such as warnings on moving equipment or alarms and computer signals. This does not mean sound clues cannot be used. However, employers should consider how high-pitched the sounds are, as well as their location.

A matter of timing—Older workers and shift work

Fatigue can be a safety hazard for all workers.

Unlike workers under age 18, there are no specific legal limits on the time of day when older workers can work. However, legal requirements regarding breaks and rest periods under the Alberta *Employment Standards Code* apply to all workers. The Alberta Human Resources and Employment publication *A Guide to Rights and Responsibilities in Alberta Workplaces* provides more information about breaks and rest periods. Go to www.alis.gov.ab.ca/careershop to download or order your free copy.

The body clock section of this publication discusses how important it is for all workers, and particularly for older workers, to obtain adequate rest and, where possible, not to disrupt sleep patterns. Research done in several countries shows that older workers sometimes have trouble adapting to shift work.

Employers can respond to these needs by:

- offering workers flex-time and shorter hours
- minimizing night shift work
- using shift rotations that are the least disruptive to sleep (forward shift rotations, consisting of morning shifts, followed by evening and night shifts and then days off, are preferable)
- limiting shift lengths, particularly night shifts, to eight hours.

Just as there are no legal restrictions on when older workers can work, there are no rules preventing older workers from working alone (as there are for workers under 18). However, when workers of any age are working alone, it is important that employers provide regular two-way personal or electronic communication between the lone worker and another co-worker, supervisor or designated contact. Assurance that they will be safe when working alone may be an important incentive for older workers when considering a job or specific assignment.

Keeping fit for life and work

The possibility of sudden-onset injuries and lasting health problems increases if workers are overweight or unfit. For example, lack of flexibility or strength can cause injuries to the lower back. Physical exercise also stimulates blood flow to the brain and preserves and regenerates brain cells. This enhances mental health.

Physical work alone is unlikely to maintain a worker's health and fitness. It's important for those involved in physical work to also exercise regularly.

While exercise generally occurs on a worker's own time and initiative, employers can encourage such activity by:

- offering in-house exercise facilities
- providing incentives to take part in fitness programs and classes
- supporting quit-smoking programs.

Communication through the ages

Traditionally, supervisors tended to be older than those they supervised. This is changing, particularly where workers opt to stay on the job longer, perhaps taking on different roles and reduced responsibilities.

A younger supervisor has not walked in the shoes of an older worker who may be a generation older. Younger supervisors may not fully appreciate some changes associated with aging.

In dealing with older workers, it is important that supervisors:

- be aware of different generational values and attitudes
- avoid adopting a child-to-parent attitude toward an older worker
- avoid "going easy" on older workers on performance and safety issues.

Supervisors can maintain positive working relationships with older workers by:

- recognizing that they and others may have faulty ideas about aging
- gaining an understanding of the physical and mental changes related to aging
- recognizing that each individual is different
- representing the views of the organization rather than expressing their own attitudes or those of their generation.

Supervisor self-check list

By asking themselves questions such as the following, supervisors can ensure they are being fair and objective to **everyone** in the workplace:

- Is the system for rating workers consistent? (not harder or softer on any group or individual)
- Are expectations clearly communicated to workers?
- Is everyone being given opportunities for retraining, development and guidance?
- Are workers' needs understood?
- Is a positive attitude being demonstrated toward and about all workers?
- Are all workers' positive contributions and strengths being recognized?
- Is positive feedback being encouraged?
- Is the workplace friendly toward older workers?

We don't have a special program designed just for our older workers. In our house-keeping department, the group spends about five minutes every morning doing aerobics and stretches to get them warmed up for the day. We also offer flexible work schedules if the associates need to attend appointments or rest after long days of cleaning rooms.

*—Health and safety manager
with a major Alberta hotel*



Delivering the message—

Designing training for older workers

While older workers may sometimes take slightly longer to learn, once they have mastered a routine or task, it sticks. Because of this, older workers tend to make fewer mistakes.

Older workers may be unfamiliar with or have been away from formal classroom education and testing for many years. To help older workers learn more effectively:

- Explain why they are learning.
- Provide supportive and friendly learning environments.
- Use small groups, case studies and role play.
- Use step-by-step or self-paced learning.
- Build on the familiar by making a connection with past learning and experience.
- Avoid giving too much information at one time.
- Consider instruction by peer workers of same age.
- Speak clearly and exclude unnecessary noise.
- Accommodate older eyes. (See section *Shedding the right light—The eyes have it.*)

Raising awareness about older workers

Here are some other ways in which employers, including managers and supervisors, can raise awareness about the value of older workers:

- Make sure senior management in the organization buys in.
- Arrange wellness days to inform workers about the value of exercise, diet, lifestyle choices and work-life balance.
- Have supervisors attend courses on aging and the workforce.
- Share knowledge about the stages of aging with all employees.
- Make other employees aware of the value of hiring and retaining older workers.
- Have older workers mentor younger employees.
- Get involved in the Alberta Council on Aging Senior Friendly seminars.
- Become familiar with older worker issues through publications (such as *50Plus* magazine), websites (such as Canada's Association for the Fifty-Plus) and other resources.
- Talk to other employers with successful records in health and safety and experience hiring and retaining older workers.
- Have an expert on aging talk to employees.
- Encourage employee feedback on aging issues by surveying employees and listening to concerns or suggestions.

Appendix A: Key Terms

The following are definitions of some key terms used in this publication.

Administrative controls. Methods such as warning signs, proper work procedures and training to protect workers from workplace hazards.

Chronic. Continuing. May refer to lasting pain or injury caused by repeated or long-term exposure to unhealthy or unsafe workplace conditions.

Duty to accommodate. Employers have a duty to give all Albertans equal opportunity in the workplace by protecting human rights related to race, religious belief, colour, gender, physical disability, age ancestry, place or origin, marital status, source of income, family status and sexual orientation.

Dynamic work. Workplace activity involving continual movement of muscles, such as when lifting up or putting down an object.

Employer. Anyone who employs one or more workers or is self-employed.

Engineering controls. Methods used to eliminate a hazard or to isolate workers from workplace hazard.

Ergonomics. The process of fitting the job to worker and matching the product or equipment to the worker.

Fall protection. Devices and systems, including harnesses and barriers, to prevent falling.

Hazard. Any situation, condition or thing that may be dangerous to a worker's health and safety.

Participation rate. A number that describes the part of the general population in specific age groups that is working or looking for work.

Personal protective equipment (PPE). Devices such as safety glasses, protective clothing or hearing or breathing equipment worn by workers to protect them from workplace hazards.

Static work. Any workplace activity requiring muscles to be kept in one position, such as holding a box for an extended period of time.

Sudden-onset injury. A situation where a worker is harmed as a result of a sudden, short incident, such as a fall.



Appendix B: Hazards—Types and Examples

The following list does not include all potential hazards. Employers are responsible for ensuring workplace hazards are identified and appropriate actions are taken.

Examples of hazards	Where to find more in Alberta's <i>Occupational Health and Safety Code</i>
Physical hazards	
Inadequate lighting	Part 12
Excess noise (e.g. from portable hand-held tools or engines)	Part 16
Electricity (e.g. poor wiring, frayed cords)	Parts 17, 22
Fire or explosions	Parts 10, 11
Pressurized systems (e.g. piping, vessels, boilers)	Parts 10, 12
Working at heights (e.g. elevated platforms, roofs)	Parts 8, 9, 23, 38
Slipping and tripping (e.g. wet or poorly maintained floors, stray cords)	Part 12
Repetitive motions	Part 14
Lifting and handling loads (e.g. moving large numbers or heavy items by hand instead of using mechanical devices)	
Vehicles (e.g. forklifts trucks, pavers)	Parts 12, 19, 23
Workplace violence	Part 27
Being exposed to ionizing radiation	Part 20
Moving machinery parts	Parts 22, 25
Chemical hazards	
Fumes (e.g. from welding)	Part 4
Gases, mists & vapours	Part 4
Dusts (e.g. from grinding, asbestos removal, sandblasting)	Part 4
Chemicals (e.g. battery acids, solvents, cleaners)	Part 4
Biological hazards	
Sewage	Part 4 [Sec. 16(2); 21; 23; 27]
Blood and body fluids	Part 35 (Health Care and Industries with Biological Hazards)
Moulds	Part 4 [Sec. 16(2); 21; 23; 27] Part 35 (Health Care and Industries with Biological Hazards)
Viruses, fungi, bacteria	Part 4 [Sec. 16(2); 21; 23; 27] Part 35 (Health Care and Industries with Biological Hazards)

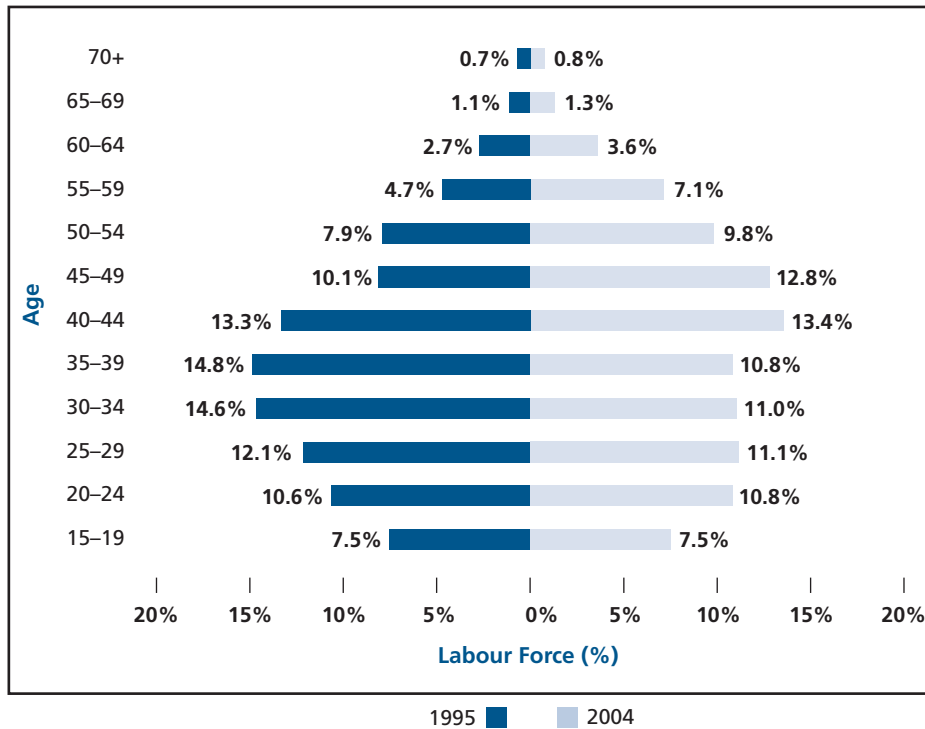
Appendix C: Population and Labour Force Data

The following graphs show current and projected Alberta labour force and population statistics.

Alberta's population is slightly younger than the national population.

Alberta's strong economy is already creating a shortage of workers in several sectors, and this shortage could increase considerably if the majority of baby boomers retire between ages 60 and 65, as expected. Employers will be faced with the challenge of recruiting new staff or encouraging and supporting aging workers to continue working.

**Percentage of Labour Force by Age, Alberta
1995 & 2004**



Data Source: Statistics Canada, Labour Force Historical Review

The right side of the graph displaying 2004 statistics shows the significant increase in the percentage of working people 45 and over. Many of these people will likely retire over the next 10 to 15 years. The concern is there may not be enough younger workers to replace them.

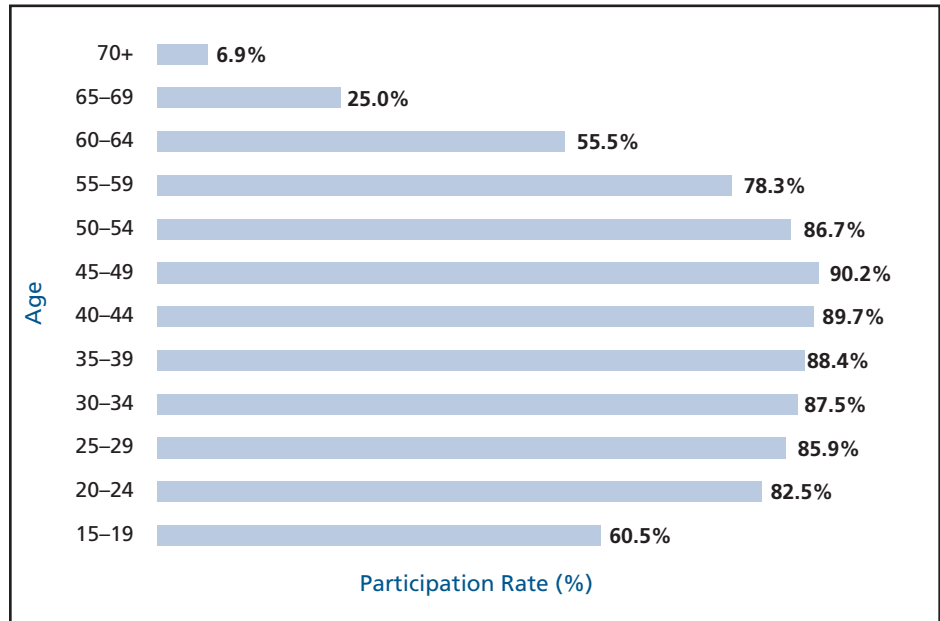


The aging population trend is also reflected in the makeup of Canada's working population. For example, in 1991, the year the eldest baby boomers turned 45, workers between 45 and 64 accounted for 29 per cent of Canada's working age population. In 2011, this age group is expected to make up 41 per cent of the working age population.

Alberta's workforce participation rate can vary considerably by age.

As the next graph shows, more than 90 per cent of Albertans aged 45 to 49 worked or were looking for work in 2004. However, only 25 per cent of those 65 to 69 and 6.9 per cent of those over 70 were in the workforce. While it is not surprising that small percentages of those over 60 were looking for work, it does suggest the difficulty employers might have in convincing people over 60 to continue working.

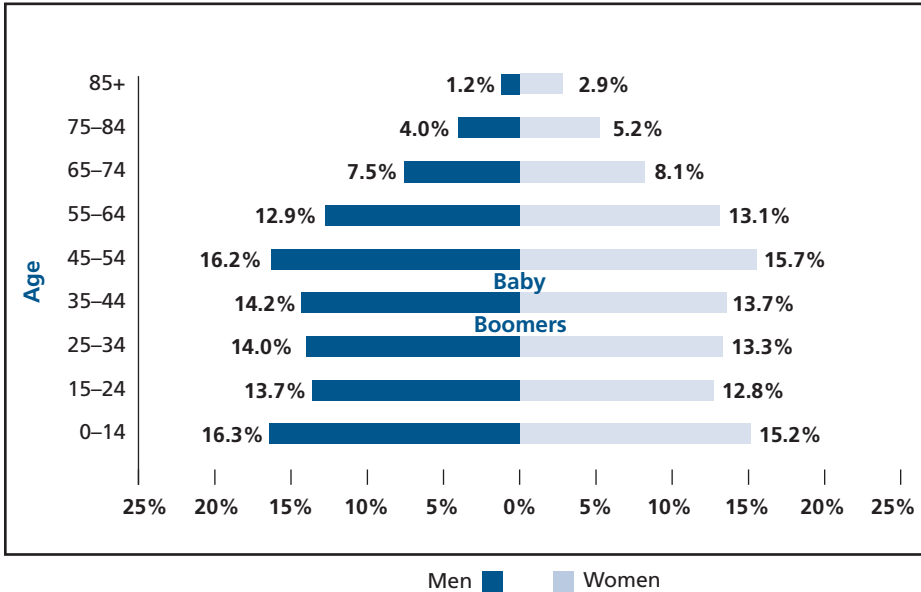
Participation Rate by Age, Alberta
2004



Data Source: Statistics Canada, Labour Force Historical Review

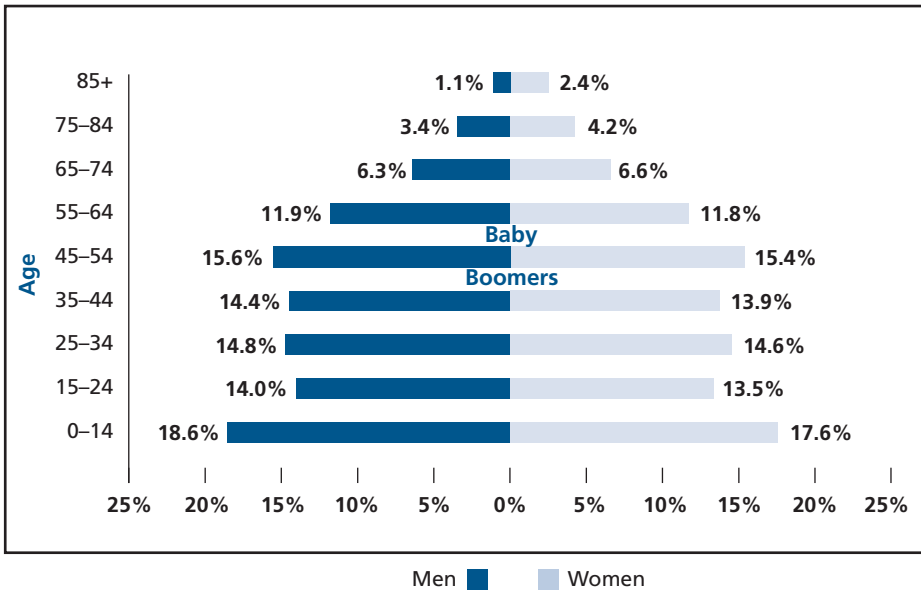
As is shown in the two following charts, both Alberta and Canada are expected to have significantly high percentages of their population in the 45+ age groups in just five years.

Canada's Projected Population by Age and Gender 2011

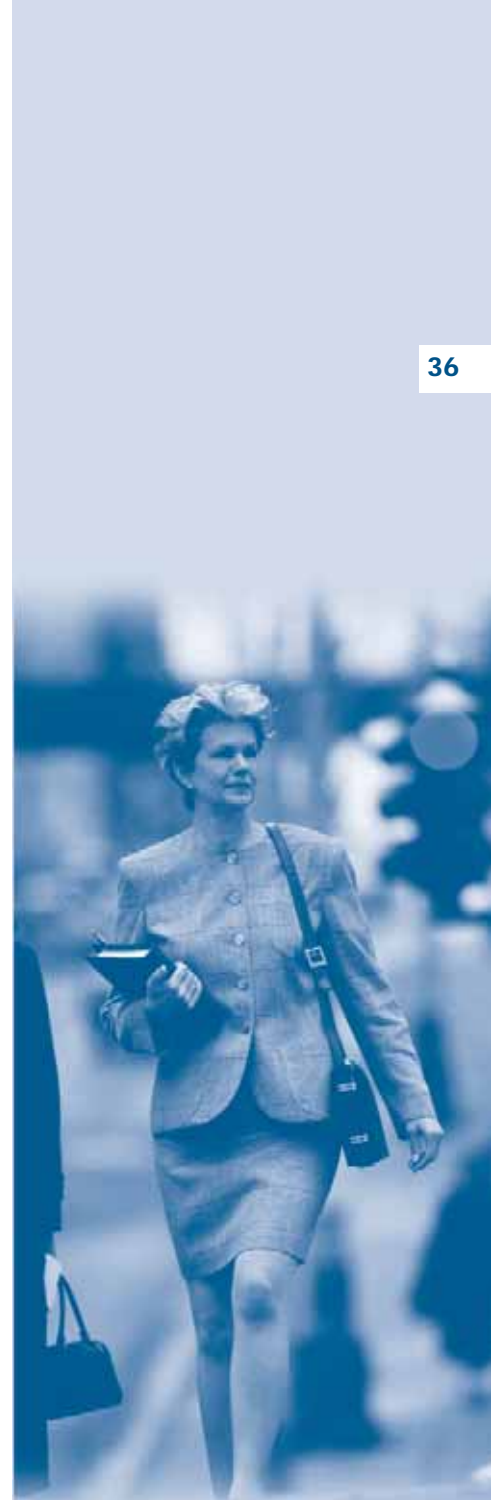


Data Source: Statistics Canada, Projected population by age group and sex according to a medium growth scenario. Available at www40.statcan.ca/l01/cst01/demo23b.htm

Alberta's Projected Population by Age and Gender 2011



Data Source: Statistics Canada, Population projections by age, gender and components of population growth. High growth scenarios: West, 2004.



Resources and Contacts

Alberta Human Resources and Employment

This government department has a website, call centres, a provincewide network of service centres and a variety of publications to help you make informed business and employment decisions. Publications can be downloaded or printed copies ordered on-line through the Alberta Learning Information Service (ALIS) website at www.alis.gov.ab.ca/careershop. Copies are also available through the Alberta Career Information Hotline ((780) 422-4266 in Edmonton or 1-800-661-3753 toll-free elsewhere in Alberta) or at any Alberta Human Resources and Employment service centre.



Deaf and hard of hearing callers with TDD units can call the Alberta Career Information Hotline at (780) 422-5283 in Edmonton or 1-800-232-7215 for message relay service.

The following materials are available free of charge to Alberta/NWT employers and employees:

A Guide for Midlife Career Moves. A publication written for people preparing to change careers, it includes material outlining the positive characteristics of older workers.

Alberta Careers Update. This book looks at the global and provincial trends affecting Alberta's economy and society. These trends have an impact on occupations in the province and can affect your business planning decisions.

Better Balance, Better Business: Options for work-life issues presents the business case for employers to be concerned about this issue and offers useful suggestions on how to adapt an organization's policies and procedures to the needs of its employees.

Diversity: A strategy to meet your need for skilled workers. How do you, as a business owner, fill shortages of skilled workers? Consider recruiting and training a diversified workforce. This book offers a sound business case and advice for hiring Aboriginal workers, immigrants, older workers, persons with disabilities, visible minorities and youth.

Employment Series for Persons with Disabilities: Tips for employers. More and more employers are hiring persons with disabilities. This book provides employers with a practical business approach, answers to typical concerns and questions, and resources.

Finders & Keepers: Recruitment and retention strategies. In an environment where employers in several business sectors are already facing a shortage of qualified employees, it is increasingly important for employers to thoughtfully approach the issues of employee recruitment and retention. This helpful publication offers guidance and information.

Labour Market Information for Your Business: A practical guide. This book demonstrates how businesses and organizations can benefit from labour market information. It presents the business case for achieving greater productivity by using labour market information; discusses how to find, analyze and use LMI; and offers reliable sources of current labour market information.

Let's Talk: A guide to resolving workplace conflicts offers practical techniques for employers and workers to settle disputes internally.

Skills by Design: Strategies for employee development is a toolbox for employers looking to sharpen the skills and knowledge of their workforce.

Alberta Learning Information Service (ALIS) website

ALIS is Alberta's on-line source for career and learning information, including print and on-line career and workplace related resources and tip sheets. Visit www.alis.gov.ab.ca for more information or to view on-line.

Workplace Health and Safety Contact Centre

Call Workplace Health and Safety for information about:

- the *Occupational Health and Safety Act, Regulation and Code*
- unsafe work practices and workplaces
- workplace hazards, including chemical contaminants, noise, asbestos, machinery, and fall protection
- publications and resources to assist your health and safety planning.

There is 24-hour access for reporting serious incidents and workplace fatalities.

Toll-free: 1-866-415-8690 in Alberta

Edmonton: (780) 415-8690



Deaf and hard of hearing callers with TDD/TTY units call (780) 427-9999 in Edmonton or 1-800-232-7215 toll-free in other Alberta locations.

E-mail: whs@gov.ab.ca

Website: www.worksafely.org

Employment Standards Contact Centre

Call Employment Standards for information about the rights and responsibilities of employers and employees relating to:

- employer records
- minimum wage
- hours of work and overtime
- general holidays and pay
- vacations and pay
- maternity and parental leave
- termination of employment
- adolescent and young person employment.

Recorded information and a faxback service for Employment Standards fact sheets are available 24 hours.

Toll-free: 310-0000 and enter (780) 427-3731 in Alberta

Edmonton: (780) 427-3731



Deaf and hard of hearing callers with TDD/TTY units call (780) 427-9999 in Edmonton or 1-800-232-7215 toll-free in other Alberta locations.

E-mail: employmentstandards@gov.ab.ca

Website: www.gov.ab.ca/hre/employmentstandards



Labour Market Information website

The Labour Market Information website is a useful source of statistics, labour market outlooks and publications including *Understanding Alberta's Labour Force: Looking to the Future*. Another related survey found on the site is *Alberta's Ageing Labour Force and Skills Shortages*.

Website: www.gov.ab.ca/hre/lmi

Other provincial government resources

Service Alberta

Contact Service Alberta for general inquiries on Alberta Government programs and services. Visit the Service Alberta website at www.gov.ab.ca or call 310-0000 toll-free anywhere in Alberta. Outside of Alberta call long distance at (780) 427-2711. Phone lines are open from 8 a.m. to 6 p.m. (Monday to Friday) and voice mail is available after hours.



Deaf or hard of hearing callers with TTY equipment call (780) 427-9999 in Edmonton or 1-800-232-7215 toll-free in other Alberta locations.

Safe and Healthy sources

Alberta Council on Aging

www.acaging.ca

Alberta Human Rights and Citizenship
Commission

www.albertahumanrights.ab.ca

Alberta Workplace Health and Safety

www.gov.ab.ca/hre/whs

Click on Publications & Videos

BMO Financial Group

Retirement Your Way

<http://www.bmonb.com/retirementyourway>

Click on Resources for links

CARP (Canada's Association for
the Fifty-Plus)

www.carp.ca

ExperienceWorks

Ideas, tools and resources to assist
in workforce planning with a focus
on older workers, including an
*Experienced Worker Resource Kit
for Employers*

www.experienceworks.ca

Kerby Centre for the 60 Plus, Calgary

www.kerbycentre.com

Seniors Association of Greater
Edmonton (SAGE)

www.srsr-seniors.com

Statistics Canada

www.statcan.ca

Workers' Compensation Board Alberta

www.wcb.ab.ca



Feedback

We'd like to hear from you . . .

Safe and Healthy:

A guide to managing an aging workforce March 2006

What specific information in this publication did you find useful?
How did it help you?

How could we improve this publication? What was not useful?

Do you have any suggestions for other information or other publications that would be of value to you?

To receive a catalogue of our other publications and posters, please fill in this form.

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Organization: _____

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_____ Postal Code _____

Phone _____ Fax _____

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Edmonton, AB T5J 3E4
Fax: (780) 422-5319