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HR

Series for Employers

A Guide to Managing an Aging Workforce



Archived



Alberta  Government

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

- 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

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Alberta Labour
Workplace and Career Planning
Telephone: 780-422-1794
Fax: 780-422-5319
Email: info@alis.gov.ab.ca

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A Guide to Managing an Aging Workforce

About this publication

Using best practices from various sources, *a Guide to Managing an Aging Workforce* outlines how employers, managers and supervisors can adapt workplaces, tools and procedures to adjust to 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, much of the health and safety information provided applies to workers of any age.

Besides helping employers, managers and supervisors develop and use policies and programs to improve workplace health and safety, this publication can also help 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 Labour Occupational Health and Safety (OHS) and the department's Work Safe Alberta program, as well as the Workers' Compensation Board of Alberta and safety organizations and suppliers.

Relevant statistics, reports and program information are also available through OHS's Work Safe Alberta site at worksafe.alberta.ca.

Acknowledgments

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- Alberta Construction Safety Association
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- 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)



What is an “Older Worker”?

We are all getting older. But how we age differs from one person to the next.

While two people may share the same birth date, one may be stronger 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.” Workers in their mid- to late 40s begin to experience some degree of “ageism” in terms of their employment opportunities. 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, about the health, safety and effectiveness of an older worker may influence whether that person is 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.

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*



Riding the Population Wave

The working population profile

Alberta's and Canada's populations are aging. The number of Albertans aged 45 and older increased 38.5 per cent between 2004 and 2014. In 2013, 30 per cent of Alberta's population was over age 50. By 2023, that figure is expected to increase to 33 per cent.

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

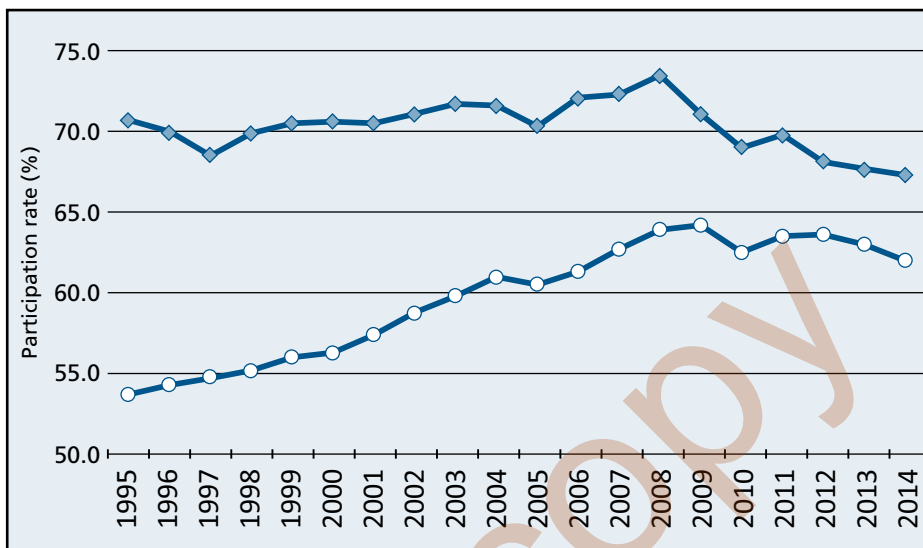
See *Appendix C: Population and Labour Force Data* for the recent and projected population (by age group) for Canada and Alberta.

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. According to Statistics Canada, Alberta has had a consistently higher older worker participation rate than the Canadian average for over 40 years. The graph on the next page shows that the Alberta participation rate of workers aged 45 and over has increased steadily since 1995. During the same period, the participation rate of those aged 15 to 24 has remained relatively steady but began declining in 2008.



Participation Rate for Population Over Age 45 vs. Population Aged 15–24, Alberta: 1995–2014

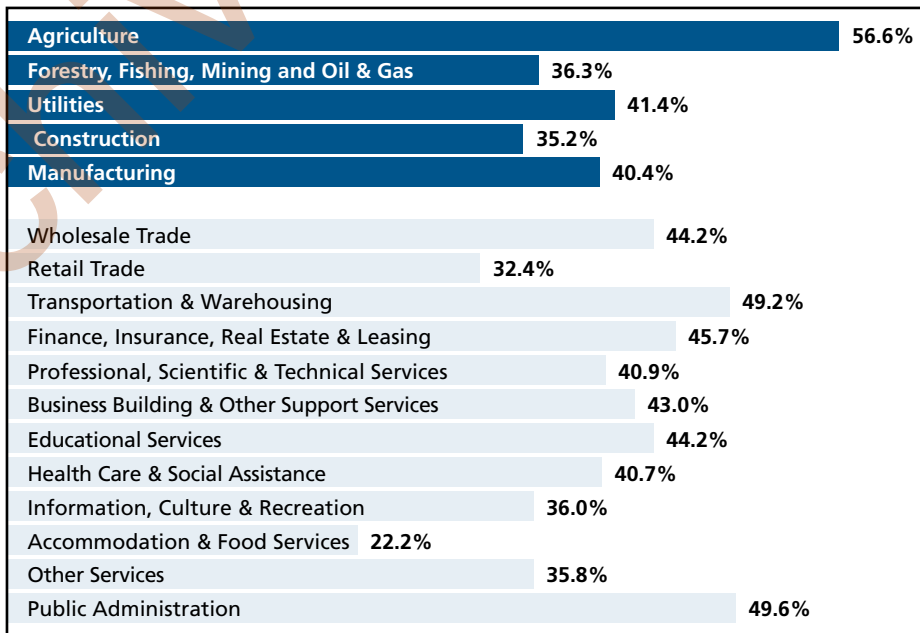


Source: Statistics Canada, CANSIM Data on Labour by Province

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 proportion of Alberta workers 45 and over varies by industry, with the highest percentage working in the agriculture, public administration and transportation sectors.

Older Workers' Share of Total Employment by Industry, 2014



Source: Statistics Canada, Labour Force Survey - 3701

Service-Producing Sector: 39.3%
Goods-Producing Sector: 38.8%

Now hiring — A sign of the times

For Canada and Alberta, an aging population and a decreased number of younger workers entering 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 may 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' experience.

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

These strategies may require financial incentives as well as being an employer of choice by accommodating workers through

- adaptable workplace policies that offer 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 older workers, decisions about staying in or returning to the workforce depend on many considerations. Employers can respond to those workers by addressing what motivates them, as shown below.

Factors in attracting older workers and keeping them employed		
<p>Employer challenges</p> <ul style="list-style-type: none"> • Keep those now working employed • Appeal to older workers who have left the workforce • Encourage those working to stay (beyond traditional retirement age) 	<p>Older worker motivators</p> <ul style="list-style-type: none"> • Individual economic needs • Job satisfaction and productivity • Need for social contact and stimulation • Maintaining confidence and feeling valued 	<p>Possible responses</p> <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

Dealing with myths and realities

Some of the social, economic, safety and medical myths about older workers are based on a belief that older workers are more frail, less reliable and less likely to work 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 approaches 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 practice and support. <p>See the section <i>Designing training for older workers</i> in the chapter <i>Creating a Safe and Healthy Working Environment</i>.</p>
Older workers have failing memories.	In general, 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 being pressured to retire from the workplace. U.S. Bureau of Labor studies show that workers aged 45 to 54 stayed in their current position an average of three times as long as workers aged 25 to 34.

Myths and realities about older workers (continued)

Myth (continued)	Reality
	<p>A 2014 Ipsos Reid poll conducted for Sun Life Financial found that only 27 per cent of Canadians expect to be fully retired by age 66. The poll also noted that 41 per cent of Canadians plan to continue working part time or freelance by choice rather than necessity.</p> <ul style="list-style-type: none"> • 21 per cent plan to begin phasing in retirement between ages 50 and 59. • 43 per cent plan to begin between ages 60 and 65. • 8 per cent plan to begin between ages 66 and 70. • Over 30 per cent plan to never retire.
<p>Older workers are less productive.</p>	<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>
<p>Older workers relate poorly to customers.</p>	<p>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.</p>
<p>Older workers are inflexible.</p>	<p>Older workers may be more cautious, a trait that can improve accuracy and safety.</p>
<p>Older adults have impaired mental or intellectual capacity.</p>	<p>Studies show intellectual abilities are maintained 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>
<p>Most older adults have poor health.</p>	<p>Just 22 per cent of Canadians aged 65 and older rate their health as only fair or poor. This figure drops to less than 13 per cent for workers aged 45 to 64.</p>



A Guide to Managing an Aging Workforce

Many older workers have added to their formal education achievements with practical, work-related experiences that put them on par with most workers in younger age groups.

The number of Albertans aged 45 and older in the labour force having a post-secondary education increased by 53 per cent between 2004 and 2014.

Differing ages, differing expectations

Each generation is at a different stage in its cycle within the workplace, and understanding these groups' backgrounds, preferences and expectations can help attract and motivate workers of different ages.

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 between 1946 and 1964
- generation X, born between 1965 and 1980
- generation Y, born in 1981 or after

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

Pre-boomer, mature/silent generation

- Stay with organizations for the long term
- Respect chains of command and authority figures
- Like structure and rules
- Demonstrate a strong work ethic
- Have less mobility between jobs
- Are loyal and disciplined

Baby boomers

- Are skeptical of authority figures
- Are results driven and ambitious
- Have long-term aspirations with organizations
- Retain what they learn
- Are idealistic and competitive
- Are people-focused
- Are generally optimistic and self-motivated

Generation X

- Want flexible work environments
- Value freedom and advancement
- Are comfortable with switching jobs for opportunities
- Work well in networks and teams
- Are comfortable with technology
- Seek work-life balance
- Learn quickly
- Are generally skeptical of long-term career commitments

Generation Y

- Appreciate diversity and teamwork
- Value informality and the opportunity to give input
- Expect to change jobs often
- Learn quickly and want to be challenged
- Embrace technology
- Expect frequent direction and regular feedback
- Seek recognition of efforts

Generational differences can show up in workers'

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

These 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 tired workers 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)
- a 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
- wisdom
- an ability to be retrained
- cost-effectiveness
- an ability to serve as role models and mentors

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 most jobs, with minor adaptations or adjustments, workers can perform the work well into their 70s and sometimes beyond.

Recognizing that fitness matters more

Most jobs do not require workers to perform at maximum physical or mental capacity. Consider 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 and 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 can 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 older ones. 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.



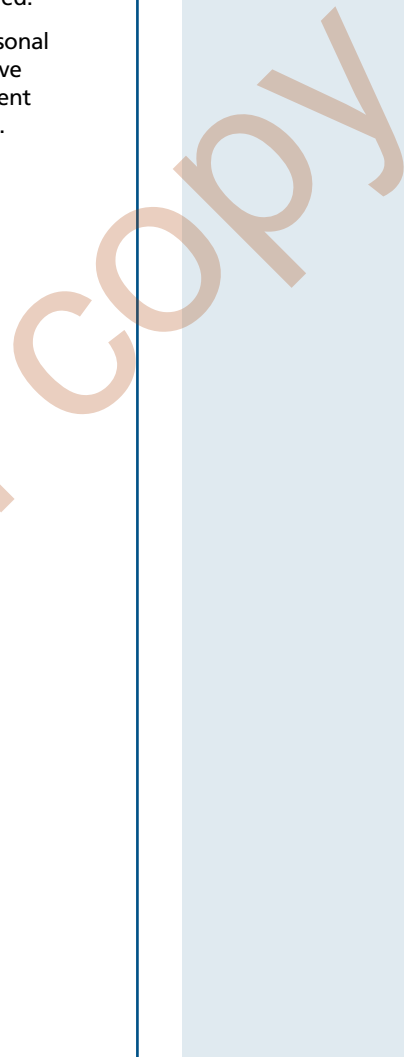
Responding to physical changes			
Musculoskeletal system (muscles, bones, joints, ligaments and tendons)			
How organs and systems change with age	How age-related changes impact work	What employers can do	What workers can do
Muscles			
<p>Muscle strength gradually declines, reaching an annual average 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 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 can do	What workers can 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 circulatory system's ability to deliver oxygen-filled blood decreases.</p> <p>Between ages 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 can do	What workers can do
<p>Blood vessels lose flexibility. Arteries thicken, which can lead them to harden, increasing the risk of high blood pressure and strokes.</p> <p>Constriction of blood vessels decreases blood flow to outer parts of the body. 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>Locating the source of sound becomes more difficult.</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 backup 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 can do	What workers can 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>Sensitivity to glare may increase.</p> <p>The ability to notice a difference between blue and black may decrease.</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 are good, while white letters on a black background can be more 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 corrective or 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>Tolerance to heat and cold may decrease.</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 can do	What workers can 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>

Considering other health and safety conditions

As discussed, when and how fast physical and mental changes related to aging occur varies greatly from one person to the next. However, as people 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 long-term exposure either 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. 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

Understanding the body clock

Adequate sleep and rest from work are 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 that 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 *Supporting older workers on 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. These include

- 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* contains useful information on this topic. To download a copy, go to alis.alberta.ca/publications.

For more information about maintaining a healthy work-life balance, check out *Recruiting Staff or Retaining Your Staff*. Go to alis.alberta.ca/publications to download a 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.

Practising Workplace Health and Safety

Understanding the rules

Under Alberta's *Occupational Health and Safety (OHS) 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 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 Occupational Health and Safety has a wide variety of bulletins and booklets on how to work safely and stay healthy. To access their resources, go to work.alberta.ca/ohs-pubs-healthy and choose a hazard or safety category.

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, while 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 kill someone immediately, 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 these after engineering controls.)</p>	<p>Examples include</p> <ul style="list-style-type: none"> • using safe work procedures • changing the location of a workstation • allowing frequent breaks • limiting exposure times by using job rotation
<p>Personal protective equipment (PPE) (Consider these 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>

This item has been either discontinued or is out of date. It is provided for informational and research purposes.

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Practising safety at any age

Workplace hazards affect the health and safety of workers of all ages. Although age doesn't dictate a worker's health and safety requirements, certain hazards, if not dealt with, may increase dangers for 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.

Research has shown that it costs an average of \$600 to make a change needed to let someone work more effectively. If that 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 for improving health and safety in their workplace.

Getting it right—Safety and rights in the workplace

The *Alberta Human Rights Act* makes it illegal for anyone 18 or over to be refused work without a legitimate reason. There are exceptions to the Act for persons under 18. An employer must be able to demonstrate that a refusal is reasonable and can be justified as a valid occupational requirement. Employers are not, however, expected to employ anyone whose disability notably increases the probability of health or safety hazards to themselves, other staff or the public.

If an employer is concerned about workers' abilities to safely perform required duties and decides to test those hired, the employer must give all new hires the same tests, regardless of age, and the tests must be job related. Applicants cannot be required to take tests before they are hired, but they should be advised of any tests or exams they will be required to take once hired.

There is no legislated mandatory retirement age in Alberta.

Duty to accommodate

The Alberta Human Rights 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 claim undue hardship, employers must show that they would experience substantial interference or disruption of business, or intolerable conditions or costs over and above any gains from the accommodation. In many cases, accommodation measures are simple and affordable and do not create undue hardship.

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

For more information on the duty to accommodate, go to the Alberta Human Rights Commission website at albertahumanrights.ab.ca and see the information sheets and information bulletins under Quick Links.

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 *Your Rights and Responsibilities at Work* available at alis.alberta.ca/publications. Questions may also be directed to the Alberta Occupational 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 who communicate directly and honestly with workers about health and safety concerns should be aware of what options the employer can offer in connection with worker health and safety. For instance, if an employee is sick or has health concerns, knowing whether the employer can offer time off work, part-time work, workplace aids or assistance or changes in assignments is important information for supervisors.

In discussions between a supervisor and staff, 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 employees share about their health and safety will be kept confidential and will only be used to support their needs or to modify their 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?

Consider the following best practices:

If special support is needed, the supervisor can indicate what could be provided. By avoiding making commitments that cannot be met, supervisors can keep the process reasonable, reliable and relevant.

- If commitments cannot be met, explain why.
- If there is a delay, explain the reason for the delay. Agree to get back to the worker with answers within a specified time.
- If workplace modifications or adjustments to work routines and schedules are needed, work 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 supporting a valued employee being productive.

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. Explaining that the worker involved is being compensated in accordance with the employer's pay structure is sufficient.

For more information on issue-based problem solving, read *Let's Talk: A Guide to Resolving Workplace Conflicts*. Go to alis.alberta.ca/publications to download.

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 was approximately \$200.

—Safety director of a construction company

Standing up on the job

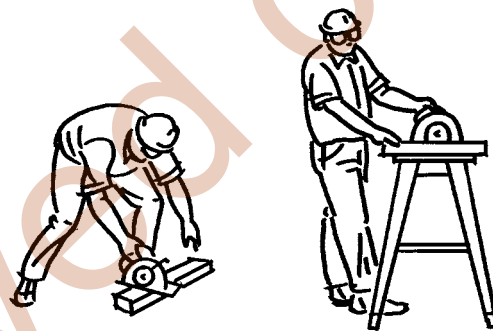
It is well known that standing for a long time can be tiring. Standing in one place puts pressure on blood vessels. To reduce the amount of work done while standing in one position, employers should consider

- 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 a sitting position

When muscles are in use they either do dynamic or static work.

- **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 illustrations above show an improper and 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 to 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 may consider providing adjustable work surfaces that can accommodate different body sizes and different tasks.

A good rule of thumb to use is that 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 can 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 can 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 of objects can lead to significant numbers of sudden-onset and chronic injuries in workers of all ages. To minimize such injuries, try to eliminate lifting. If lifting cannot be eliminated, 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 may be able to 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 *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 partnership with industry associations, sponsors the Backpain: Don't Take It Lying Down public awareness campaign. For more information, go to backactive.ca.

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 counteract reduced grip strength.

When supplying tools and installing controls,

- 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.

Ergonomically 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 by installing push buttons and toggle switches that are big enough to be easily pushed or moved.

Providing 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 of the eye to adjust and respond quickly to changes in lighting decreases with age. Employers can make up for this by avoiding or limiting contrasts in lighting, for example by 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

Your vision's reaction to glare increases with age. To reduce glare, consider

- using several smaller light sources rather than a few large light sources
- providing low or non-glare computer screens
- installing 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, using a style of letter (font) and letter size (at least 12 points) that is easily read greatly increases legibility. 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 written messages with graphics and illustrations.

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

Considering older workers' hearing

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 can look at

- installing sound-absorbing material
- shielding machine noise
- minimizing air-conditioning noise
- providing 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

A Guide to Managing an Aging Workforce

Employers should encourage self-reporting of hearing problems and support audiometric testing (testing a worker's hearing to measure whether it is normal or there is some degree of hearing loss).

Consider the result 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 check the sounds' pitch and location to ensure all workers are able to hear them.

Supporting older workers on 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. *An Employers Guide to Employment Rules* provides more information about breaks and rest periods. Go to alis.alberta.ca/publications to order or download.

The Understanding 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 effective regular two-way personal or electronic communication between the lone worker and another designated contact in case of an emergency. 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

Historically, 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 a worker a generation older. Younger supervisors may not yet fully appreciate some changes associated with aging.

When overseeing 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 grow positive working relationships with older workers by

- recognizing their own and others 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 objective and fair 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*

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. Here are some strategies you can use

- 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 the section *Providing 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's Senior Friendly Program.
- 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. The legal duty employers have to take reasonable steps to accommodate a person's needs, based on federal and provincial human rights laws regarding discrimination related to race, colour or religious belief, gender, physical or mental disability, age, ancestry or place of origin, marital or family status, source of income 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 hazards.

Ergonomics. The process of fitting the job to the 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 portion 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 Occupational Health and Safety Code
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, 40
Fire or explosions	Parts 10, 11, 30, 33, 36 [Sec. 548]
Pressurized systems (e.g. piping, vessels, boilers)	Parts 10, 12, 15
Working at heights (e.g. elevated platforms, roofs)	Parts 6, 8, 9, 23, 39, 41
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 6, 12, 19, 23
Workplace violence	Part 27
Being exposed to ionizing radiation	Part 20
Moving machinery parts	Parts 21, 22, 25
Chemical hazards	
Fumes (e.g. from welding)	Parts 4, 5, 26
Gases, mists and vapours	Parts 4, 5, 26, 36 [Sec. 543]
Dusts (e.g. from grinding, asbestos removal, sandblasting)	Parts 4, 5, 26, 36 [Sec. 537]
Chemicals (e.g. battery acids, solvents, cleaners)	Parts 4, 5, 26, 30
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)

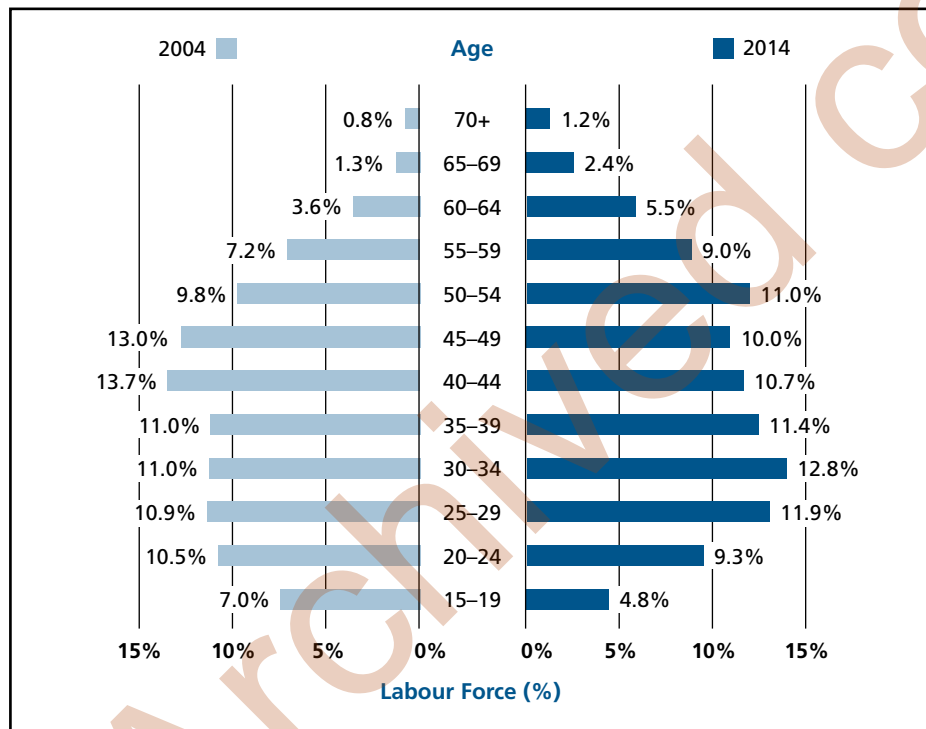
Appendix C: Population and Labour Force Data

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

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

Alberta's economy has a shortage of workers in some sectors, and this shortage will increase considerably as baby boomers retire. Employers face the challenge of recruiting new staff or encouraging and supporting aging workers to continue working.

**Percentage of Labour Force by Age, Alberta
2004 & 2014**



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.



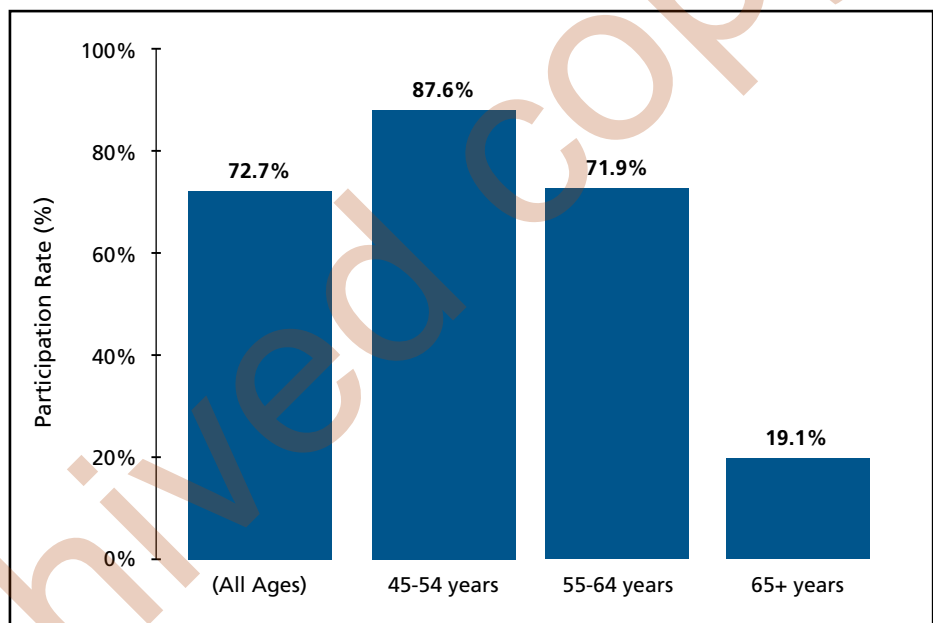
A Guide to Managing an Aging Workforce

The aging population trend is also reflected in the makeup of Alberta's working population. For example, in 2004, workers between 45 and 69 accounted for 34.9 per cent of Alberta's working-age population. In 2014, this age group made up 37.9 per cent of the working-age population.

As the next two graphs show, the participation rate of Albertans aged 65 and older is relatively low (only 19.1 per cent of that age group participated in the workforce in 2014), but that percentage has more than doubled since 2001 in Alberta, and is well above the national average rate for that age group.

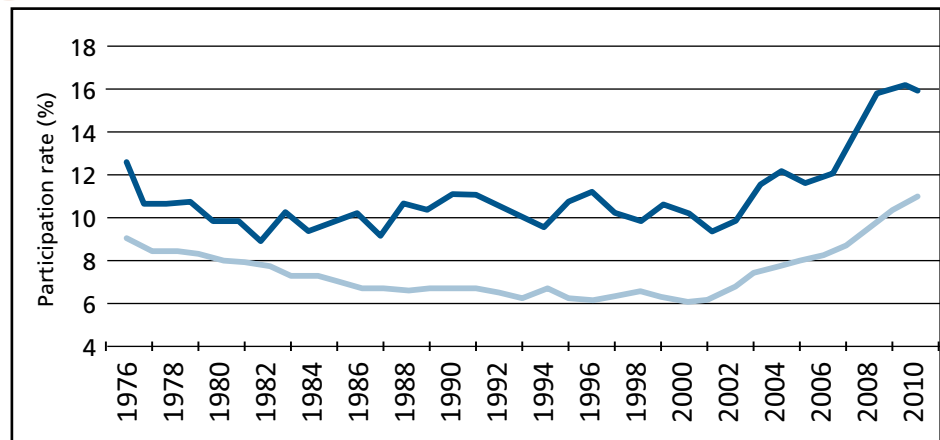
In 2014, the participation rate of Albertans between ages 45 and 54 was 14.9 per cent higher than the provincial rate for all ages.

Participation Rate by Age Group Alberta, 2014



Source: Statistics Canada, Labour Force Survey

Labour Force Participation Rates for Ages 65+



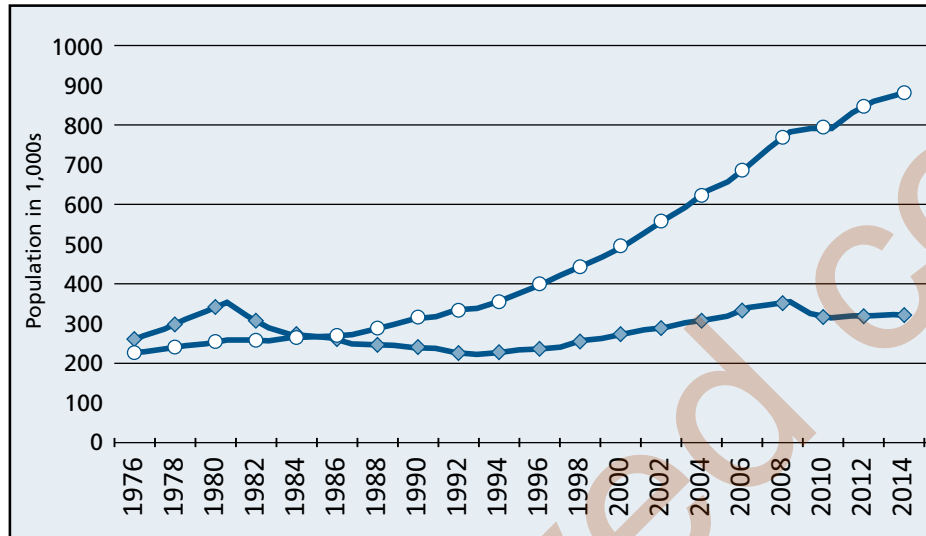
Source: Statistics Canada

— Canada — Alberta

As shown in the following chart, Alberta's employment of older workers has increased significantly since the mid-'80s, while youth employment has not changed much during that time.

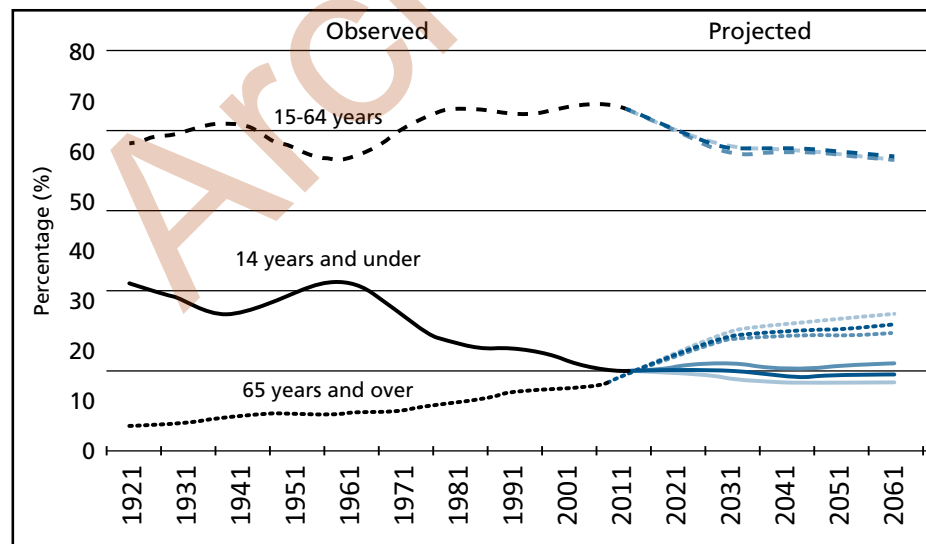
Canada recently passed a milestone: for the first time, the number of seniors (aged 65 and older) exceeds the number of children (14 years and under). As the bottom graph shows, this is projected to remain the case well into the foreseeable future. By 2063, seniors are expected to outnumber children two to one.

Employment Population by Age in Alberta, 1976–2014



Source: Statistics Canada, CANSIM data, Labour Force Survey - 3701

Distribution of the total Canadian population by age group, observed (1921 to 2013) and projected (2014 to 2063) according to the low-growth (L), medium-growth (M1), and high-growth (H) scenarios



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



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Resources and Contacts

Government of Alberta

Resources on occupational health and safety, Alberta's employment standards and other workplace topics for employers can be found at work.alberta.ca.

Information is also available directly from Alberta Works Centres across the province. To locate a centre near you, visit alis.alberta.ca/awc or call the Career Information Hotline at 1-800-661-3753 (toll-free) or 780-422-4266 (in Edmonton)

Mature workers strategy

The Government of Alberta encourages increased labour force participation and choice for mature workers. Visit work.alberta.ca/matureworkers to see reports and information regarding provincial strategies and initiatives to attract and retain mature workers.

Alberta Learning Information Service (ALIS) website

alis.alberta.ca

Here you'll find work search resources, job banks, company and industry research links and more. OCCinfo (alis.alberta.ca/occinfo) provides up to date information on Alberta's occupations. Browse through more than 550 occupational profiles and learn about each occupation's employment outlook as well as wage and salary ranges by region.

Workplace tips

For articles on workplace strategies for employers, visit alis.alberta.ca/tips and search by keyword, topic or audience.

HR Series for Employers publications

For free copies of the human resources publications listed below,

- order or download from alis.alberta.ca/hrseries
- call the Career Information Hotline
- go to an Alberta Works Centre

An Employer's Guide to Employment Rules

Employing a Diverse Workforce: Making It Work

Labour Market Information for Your Business: A Practical Guide

Leaving Your Small Business: Your Plan for a Successful Transition

Recruiting Staff

Retaining Your Staff

Succession Planning: Retaining Skills and Knowledge in Your Workforce

Thinking About Layoffs? What You Need to Know Before Letting People Go

Employment Standards

Employment Standards Contact Centre

To answer your questions about legislation that applies to Alberta employers and employees, contact the Employment Standards Contact Centre at 1-877-427-3731 (toll-free) or 780-427-3731 (in Edmonton) or visit work.alberta.ca/es.

Employment Standards Tool Kit for Employers

The tool kit offers concise explanations of Alberta's Employment Standards Code and Regulation, including real world examples, best practice guidelines, templates, checklists and sample letters. View at work.alberta.ca/es-toolkit or order a hard copy by calling the Employment Standards Contact Centre.

Employment Standards videos

To learn how to comply with Alberta's Employment Standards through video modules, go to work.alberta.ca/esvideos.

Occupational Health and Safety

Questions about legislation or employer supports for managing a safe and healthy workplace can be directed to the Occupational Health and Safety Contact Centre. Call 1-866-415-8690 (toll-free) or 780-415-8690 (in Edmonton) or visit work.alberta.ca/ohs.

Occupational Health and Safety Tool Kit for Small Business

The tool kit includes practical tools to help small businesses comply with occupational health and safety legislation. View or download at work.alberta.ca/SMB001 or order a hard copy by calling the Occupational Health and Safety Contact Centre.



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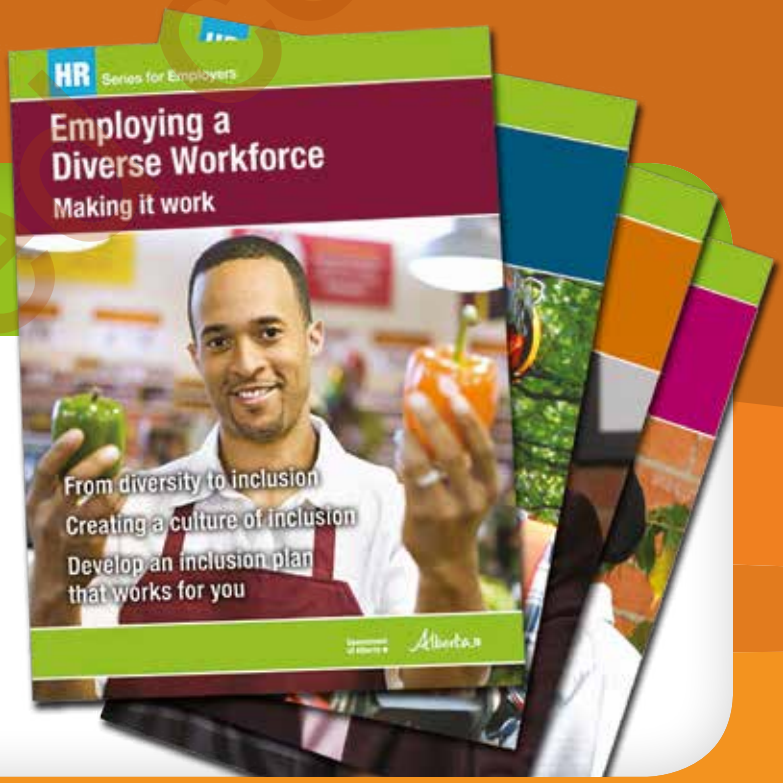
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alis.alberta.ca/publications

A Guide to Managing an Aging Workforce

How can employers adapt their workplaces to attract and retain older workers? Why should they?

This publication addresses the questions that surround a maturing workforce. You'll discover ways to develop and use policies and programs to improve workplace health and safety that will benefit not just older workers, but all staff. ■

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