

Alzheimer *Society*

S A S K A T C H E W A N

Learn More **Live Well**

Brain Health Guide

Aging Well: Reducing the Risks of Dementia



You can make lifestyle changes to improve your brain health, no matter what your age.

What is Dementia?

Dementia is an overall term for a set of symptoms that is caused by disorders that affect a person's brain.

Symptoms may include memory loss and changes in mood and behaviour, as well as difficulties with thinking or language that are **severe enough to reduce a person's ability to perform everyday tasks.**

Dementia is progressive, meaning that its symptoms gradually get worse over time.

There are multiple different types of dementia. The most commonly known one is Alzheimer's disease, which occurs when a build up of plaques and tangles over time block the normal processes of cells in the brain, causing degeneration of the brain and dementia symptoms. These plaques and tangles are made up of tau and beta protein amyloids.

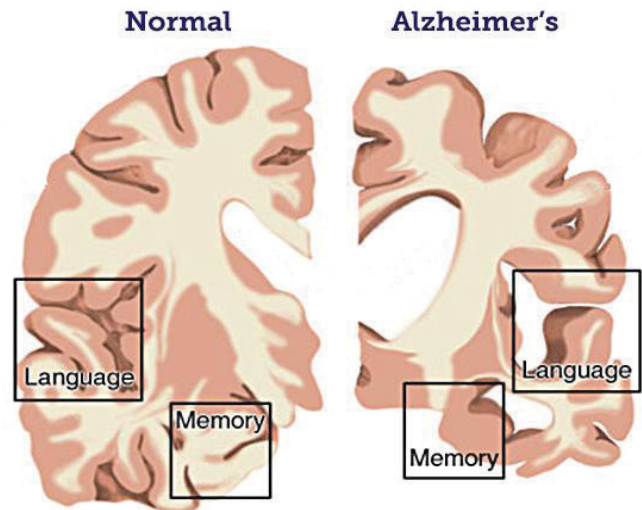
There are some treatable disorders that can cause dementia symptoms. These include drug interactions, treatable infections such as urinary tract infections, and vitamin deficiencies such as a B12 deficiency. It is important to address these issues early with your health care provider so a treatment can be implemented or if a more serious reason for these changes needs to be assessed.

There is currently no cure for dementia. However, there are treatment options and brain healthy lifestyle choices that may slow it down and can lead to an improved quality-of-life.

Types of Dementia Include:

- Alzheimer's disease.
- Vascular dementia.
- Lewy body dementia.
- Frontotemporal dementia, including Pick's disease.
- Others, including Creutzfeldt-Jakob disease.

Brain Cross-Sections



The image depicts a cross-sectional view of the brain, showing how neurodegenerative, progressive conditions like Alzheimer's disease affect the brain.

The left side depicts a healthy brain, while the right side represents a brain that has been affected by Alzheimer's disease.

The changes to the physical structure of the brain are what cause the symptoms that the person experiences.

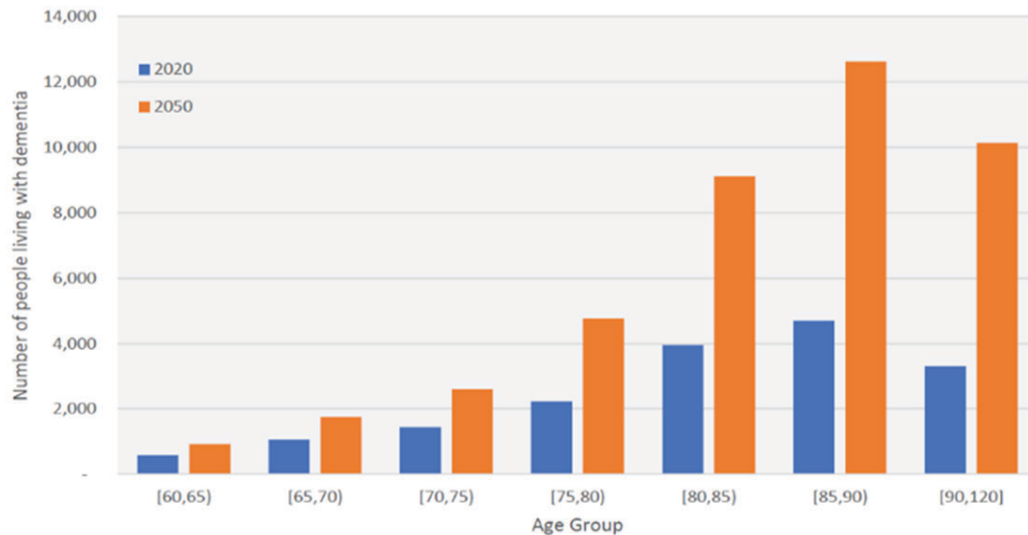
We cannot tell if a person has dementia just by looking at them.

For support with your questions regarding dementia, call our Dementia Helpline at 1-877-949-4141 or, email us helpline@alzheimer.sk.ca. Our Dementia Helpline is available Monday to Friday – 8:30am - 4:30pm.

Prevention Data

40% of dementias can be prevented through our lifestyle actions.

Figure 1. Number of people in Saskatchewan living with dementia by age group, 2020 and 2050.

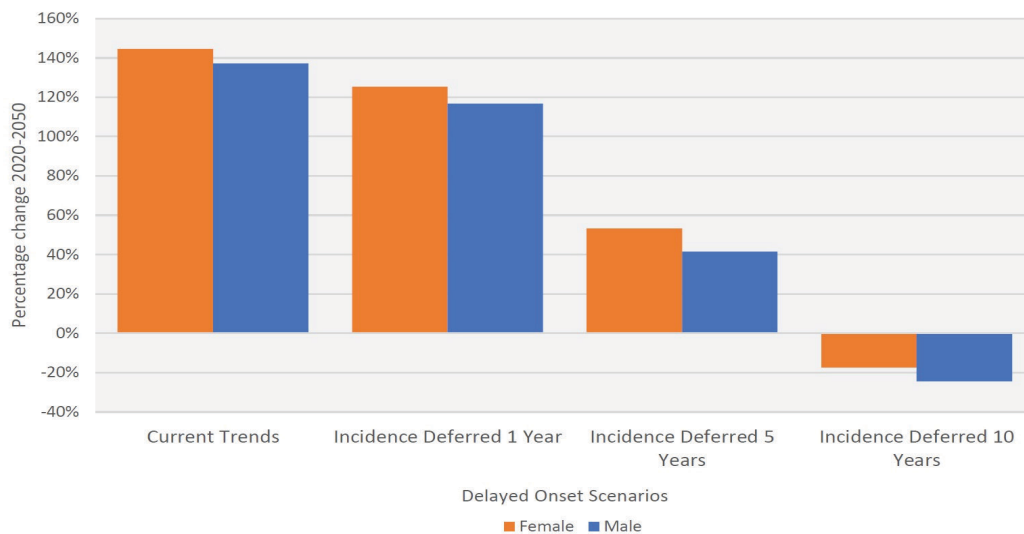


According to the Alzheimer Society of Canada's Landmark Study, there will be a 142% increase in people living with dementia in Saskatchewan over the next 30 years.

There is no specific method, treatment, or substance that is proven to prevent dementia. However, research has shown there are things you can do to reduce the risk and delay the onset of dementia relating to lifestyle choices.

Depicted in the chart below, a 1-year delay in the onset of dementia in individuals would prevent approximately 10,700 new cases of dementia occurring by 2050 in Saskatchewan. For more information on these statistics please visit [The Landmark Study](#) webpage.

Figure 3. Impact of delaying dementia onset on the projected number of people living with dementia in Saskatchewan in 2050.



Risk Factors

Risk factors on their own are not causes of disease-- risk factors represent an increased chance, but not a certainty, that a disease will develop. Having little or no exposure to risk factors does not necessarily protect a person from developing dementia.

Risk factors are aspects of your lifestyle, environment, and genetic background that increase the likelihood of getting a disease. Dementia has both modifiable (things we can change) and non-modifiable (things we cannot change) risk factors.

Non-Modifiable

Non-modifiable risk factors for dementia are factors that may increase your chance of developing dementia. **They cannot be changed.**

Age

Age is the strongest known risk factor for dementia. After 65 a person's risk of developing dementia doubles every 5 years. This means that the older we become, the higher the risk.

Genetics

Only around 5% of all dementias are inherited from parents to children.

Research tells us there are at least 75 genes that are associated with an increased risk of developing Alzheimer's dementia. However, most cases of Alzheimer's disease are sporadic, meaning they do not run in families.

APOE-e4 is the first risk gene identified and remains the gene with strongest impact on risk. Researchers estimate that between 40-65% of people diagnosed with Alzheimer's have the APOE-e4 gene.

Sex at Birth

65% of dementia cases in Canada are women.

Sex at birth is also considered a risk factor for dementia, as research has shown that females are more likely to develop the condition compared to males.

The reasons for this are not yet fully understood and may include differences in longevity, sex hormones, lifestyles, and genetics.

Modifiable

Modifiable risk factors are **lifestyle choices we make every day** that impact our health but are in our own control to change.

Physical activity

Physical activity pumps blood to the brain, which nourishes the cells with nutrients and oxygen. Regular exercise helps to reduce stress and improve your mood. Not getting enough physical activity can lead to health risks that impact our brain health, such as diabetes and high blood pressure.

Dietary choices

An unhealthy diet high in saturated fat, sugar, and salt, can increase the risk of developing many illnesses, including dementia and cardiovascular disease.

Social engagement

Social isolation can increase the risk of hypertension, coronary heart disease, depression, and dementia.

Staying socially active may reduce the risk of dementia. Social interaction may also help slow down the progression of the disease.

Excessive alcohol consumption

The amount of alcohol we consume impacts our health. Individuals who over-indulge and misuse alcohol experience more adverse health effects later in life, which includes liver failure, cancers, and brain damage leading to dementia.

Smoking

The evidence is strong and consistent that smokers are at a higher risk of developing dementia vs. non-smokers or ex-smokers. Smokers who quit can reduce their risk of developing dementia.

Education

Lifelong learning is thought to support the development of a "cognitive reserve". This is the idea that people who actively use their brains throughout their lives may be more protected against brain cell damage caused by dementia.

Depression/mental health

People who experience depression in mid- or later life have a higher risk of developing dementia. Remember that depression is more than just feeling down. Our mental health affects our physical health and not properly managing things like depression, anxiety, and stress can have a serious effect on the health of our brains and bodies.

Traumatic brain injury

People who experience severe or repeated head injuries, such as concussions, are at increased risk of developing dementia.

Falls are the leading cause of traumatic brain injury. Falling is especially dangerous for older adults.

Social Determinants of Health

Social determinants of health are the non-medical, social, and economic factors that influence the risk of dementia across a population.

These include things such as:

- Income and social status
- Employment and working conditions
- Education and literacy
- Early childhood development
- Food insecurity
- Physical environments and housing
- Social supports
- Access to health services
- Gender
- Culture
- Race, racism and racialization
- Disability and ableism

Other Medical Conditions:

Diabetes

People with type 2 diabetes in mid-life (ages 45 to 65) are at an increased risk of developing dementia, particularly Alzheimer's disease and vascular dementia.

High blood pressure

People who have consistently high blood pressure (hypertension) in mid-life (ages 45 to 65) are more likely to develop dementia compared to those with normal blood pressure.

High blood pressure can increase the risk of developing dementia, particularly vascular dementia, because of its effect on the heart, the arteries, and blood circulation.

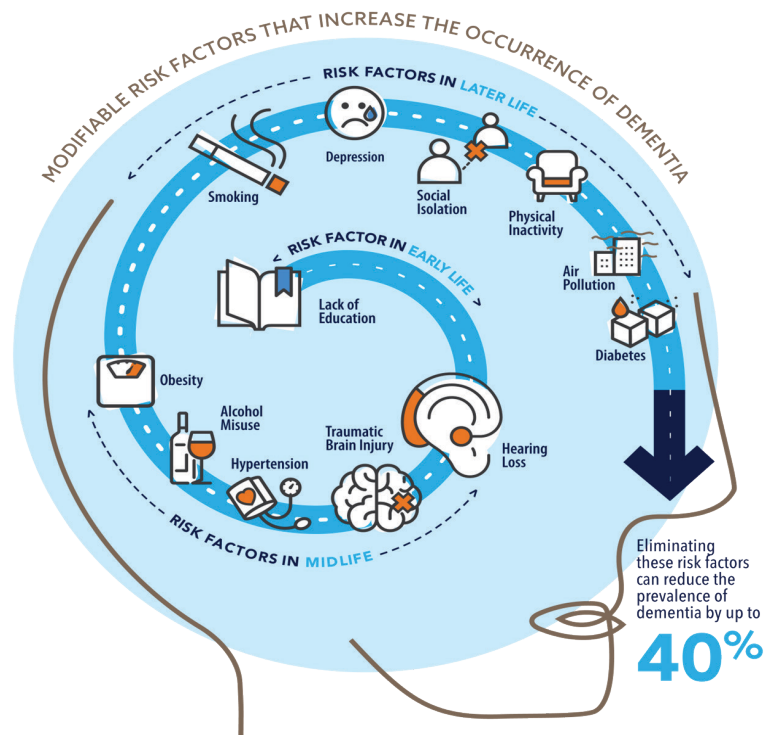
Hearing loss

Mild levels of hearing loss increase the risk of cognitive decline and dementia.

Hearing loss can contribute to atrophy, or shrinkage, in the brain leading to cognitive decline.

People can begin to experience loss of independence, problems with everyday activities, and social isolation due to lack of conversations with others.

Reducing more than one risk factor is key.



ASOS 10 Actions to Reduce Dementia Risk



1. Be physically active each day



2. Eat a balanced and heart healthy diet



3. Stay socially engaged



4. Manage your medical conditions



5. Challenge your thinking and keep learning throughout life



6. Get 6-8 hours of sleep per night



7. Manage stress and mental health



8. Avoid excessive alcohol and smoking



9. Protect and support your hearing



10. Protect your head and limit your risk of head injuries

1. Be physically active each day

Reduce sedentary time and move more each day.

Light activities and balance exercises are important every day.

Focus on physical activity you are able to do and enjoy doing. This is different for everyone.

Benefits of exercise:

- Improved memory and brain function
- Reduced blood pressure
- Improved cardiovascular health
- Increased energy
- Improved muscle strength and mobility
- Decreased stress

Aim for 150 minutes of moderate-to-vigorous physical activity per week (30 minutes/5 times a week)

Recommended activities:

- Walking
- Hiking
- Running
- Going for a bicycle ride
- Swimming
- Yoga
- Tai chi

2. Eat a balanced and heart healthy diet

It is recommended to protect your heart and eat a heart healthy diet—because **what is good for the heart is good for the brain.**

Studies show that eating a healthy diet is associated with better memory, brain functioning, and a lower risk of dementia.

CCNA Brain Health Food Guide Tips for Eating Well:

- Eat a variety of foods, both in health benefits and color. Different colored foods contain different beneficial nutrients.
- Eat until comfortably full, not stuffed.
- Enjoy foods in moderation.
- Include healthy fats, such as olive oil, daily.
- Limit red and processed meats.
- Avoid foods high in added sugar and salt.
- Focus on low fat (skim/1%) dairy products and whole grains, such as oats, brown rice, whole wheat breads, and quinoa.
- Keep hydrated with water or unsweetened drinks.

“Within any kind of diet, you really want to think about what the health promoting foods are that fit under this dietary pattern and how to emphasize the different health promoting nutrients within this.”

- Dr. Allison Cammer , PhD, Registered Dietician

“Social interactions and having supportive relationships can support our health and help us process difficult or stressful situations, reducing that impact of chronic stress.”
-Julie Beitel, Registered Dietician

3. Stay socially engaged

One of the best things we can do for our brain is engage socially with others. Maintain your social network and stay connected with friends and family and focus on doing activities while enjoying social time.

4. Manage your medical conditions

Your overall health is directly linked to your brain health.

Medical conditions such as stroke, type 2 diabetes, hypertension, obesity, and down syndrome are all medical conditions that can increase the risk of developing dementia.

Managing these conditions as best as possible with the help of your medical provider by tracking your blood pressure, cholesterol, blood glucose, and blood sugar numbers.

5. Challenge your thinking and keep learning throughout life

You are never too old to learn and try something new.

The saying “if you don’t use it—you lose it” applies to our cognitive abilities as well as our mobility, so we need to keep our brains active throughout life.

What you can do:

- Challenge your thinking through lifelong learning
- Playing games
- Learning a new language
- Engaging in different cultural activities.

6. Get six to eight hours of sleep per night

The amount of sleep we get impacts our health.

Getting enough sleep is extremely important because sleeping gives the body time to heal, reset, and properly detox-- which are all crucial to support healthy brain functioning.

It is ideal to sleep around **seven** hours each night to help maintain your brain health. If you experience sleep apnea or other sleep issues, talk to your health-care provider for treatment options.

7. Manage stress and mental health

Mental health affects physical health and not properly managing things like depression, anxiety, and stress can have a serious effect on the health of the brain and body. To reduce stress, try to find purpose and meaning in your life. Find a purpose to get out of bed each day by planning activities that you enjoy doing. Feeling purposeful is associated with better brain health and reduced dementia risk.

Please reach out to your healthcare provider for support of guidance.

8. Avoid excessive alcohol and smoking

Avoid excessive alcohol intake. Drinking excessively means more than 14 drinks per week for women and more than 21 drinks per week for men.

Cutting back or quitting smoking is recommended by health professionals for optimal health outcomes, and we recommend working with a healthcare provider if you need support with this.

9. Protect and support your hearing

It is important to maintain your hearing, use hearing aids if you need them, and protect your ears from loud noises. Please talk to your doctor about care options for managing your hearing and consider turning the volume down in your headphones and stereos.

For more information on this please check out our previously recorded [Healthier Brains presentation with Dr. Mick on The Alzheimer Society of Saskatchewan YouTube.](#)

10. Protect your head and limit your risk of head injuries

Try to avoid all types of head injury by steering clear of activities where you might put your brain at risk of harm and be sure to use the necessary protection to protect your head in high risk activities such as bike riding and contact sports. **If you do hurt your head, remember to rest and seek medical attention.**

A Community of Support

Alzheimer Society

SASKATCHEWAN

Learn More Live Well



60% of people with dementia live in their community.

Community of Support

When you choose the Alzheimer Society, you join a community of supporters and experts committed to helping each of us thrive.

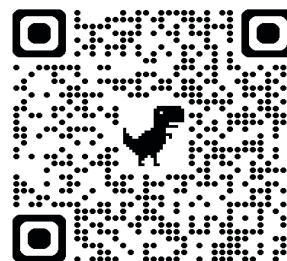
Our role as a Society is creating and fostering a community of support in the management of dementia in the lives of those living with the disease.

The Alzheimer Society of Saskatchewan's programs and services help people with dementia, their care partners, families, and friends by providing information, support, education, and referral to other community services.

Dementia Friendly Communities

Dementia friendly communities are inclusive and accessible for people living with dementia, supporting them to live well, and engaging them meaningfully in everyday life.

A dementia friendly community focuses on stigma reduction so that people living with dementia can participate and contribute meaningfully in their community. Dementia friendly communities promote locally based supports and address barriers experienced by individuals living with dementia and their care partners.



For more information on how you can reduce your risk of dementia, visit our website or contact our Public Awareness Coordinator: Erica Zarazun at ezarazun@alzheimer.sk.ca

www.alzheimer.ca/sk

1-800-263-3367