About Arthritis Society Canada
Arthritis Society Canada is dedicated to extinguishing arthritis. We represent the six million Canadians living with arthritis today, and the millions more who are impacted or at risk. Fueled by the trust and support of our donors and volunteers, Arthritis Society Canada is fighting the fire of arthritis with research, advocacy, innovation, information and support. We are Canada’s largest charitable funder of cutting-edge arthritis research. We will not give up our efforts until everyone is free of the scorching pain of arthritis.

Rheumatoid Arthritis
CAUSES·SYMPTOMS·TREATMENTS
The word arthritis means inflammation of the joint ("arthro" meaning joint and "itis" meaning inflammation). Inflammation is a medical term describing pain, stiffness, redness and swelling. Arthritis is a disease that can involve any of the joints in the body, often occurring in the hip, knee, spine or other weight-bearing joints, but can also affect fingers, shoulders, ankles, wrists or elbows and other non-weight-bearing joints.

Symptoms of arthritis include joint pain, swelling, stiffness and fatigue.

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**Meet our Expert**

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Rheumatoid arthritis (RA) is an inflammatory disease that can affect multiple joints in the body. RA is an autoimmune disease where the body’s immune system – which normally functions to protect us against infections – mistakenly attacks the lining of the joints. The cause of this malfunctioning immune system is still unknown and while there is no cure for RA, there are some very effective medications and therapies to control the symptoms and results of the inflammation.

Inflammation in the joints causes pain, stiffness and swelling. If this inflammation continues, it can lead to damage of the joint. The inflammation can affect other organs, such as the nerves, eyes, skin, lungs or heart.

The symptoms of RA vary widely from person to person. In many cases, RA starts in a few joints then spreads to other joints over a few weeks to months. RA can also progress extremely quickly; some people report that one morning they just could not get out of bed.

The earliest symptoms of RA can be non-specific, including feeling unwell or tired, soreness around joints and muscles, low-grade fever, and weight loss/poor appetite. As time goes on, RA can involve more and more joints on both sides of the body, often in a “symmetrical” pattern.

About one out of every 100 adult Canadians has RA. That’s about 300,000 Canadians. Anyone can get RA and at any age. RA affects women two to three times more often than men.

There is no cure for RA. However, people who are diagnosed and treated early can avoid pain and damage to their joints, and lead active and productive lives.
What are Early Signs of Rheumatoid Arthritis?

RA usually starts over a period of weeks to months, with more joints becoming affected over time. You should see your doctor if you experience one or more of the following symptoms for more than six weeks:

- Pain or stiffness in multiple joints
- “Gelling” or stiffness of joints, especially in the morning, that lasts an hour or more
- Warmth or redness of joints
- Reduced ability to move the joints (such as difficulty making a fist, twisting objects, opening objects, climbing stairs)
- Fever, fatigue, weight loss or decreased appetite
- Lumpy growths that form under your skin, most commonly on the elbows, hands or feet

What are the Risk Factors for RA?

The exact causes of RA are unknown, but research has shown several factors may contribute:

- **Family history**: Some people who develop RA have specific genes that are linked to RA. However, having genes linked to RA does not necessarily mean you will develop RA.
- **Sex**: RA affects women two to three times more often than men.
- **Hormones**: Some hormonal changes appear to be linked to RA. Hormone changes during and after pregnancy, during breastfeeding and even oral contraceptive use may be linked to the development of RA or may relieve or trigger RA symptoms.
- **Age**: Anyone can get RA at any age, but the risk does increase with age, commonly developing between 40 and 60 years of age.
- **Environment**: Infection can trigger RA in people who have genetic links to RA. However, it is important to remember that you cannot catch or spread RA.
- **Smoking**: Numerous studies have shown that cigarette smoking is the strongest environmental risk factor for the development of RA and for having a more severe form of RA.

What are the Joints that can be Affected by RA?

Any joint can be affected by RA but the joints most commonly involved include:

- Small joints of the hands and feet
- Wrists
- Elbows
- Shoulders
- Knees
- Ankles
How is RA Diagnosed?

An accurate diagnosis is very important because there are many ways to treat and manage RA. Early diagnosis and treatment can reduce the pain and disability associated with this disease.

There are no perfect tests to determine a diagnosis of RA. If you have signs and symptoms of RA, your doctor will examine your joints and take your medical history. If indicated, he or she may order blood tests that detect inflammation that may help confirm the diagnosis. Your healthcare provider may also order X-rays to look for any signs of joint damage. If your family doctor suspects you have RA, you will be referred to a specialist.

Why is Treatment for RA so Important?

RA causes inflammation of the lining of certain joints. This inflammation leads to swelling, stiffness and increased warmth of the affected joint(s).

It can also affect other parts of the body like the eyes, nerves, skin, heart or lungs. You can think of this inflammation like a fire burning in the joints. If the fire of inflammation is left burning, it can permanently damage the joint. Once a joint is damaged, it cannot be fixed other than through surgery. Just as you would try to put out a fire in your home with a fire extinguisher before it spreads, you want to put out the inflammation of RA as quickly and as safely as possible.

RA is best managed by a specialist doctor, known as a rheumatologist, who is trained in managing inflammation of the joints.

It is important to treat RA as early as possible, as research has confirmed that this improves the long-term outcomes and quality of life of people living with RA.
What Medications Are Used for RA?

The general approach to treating RA is to reduce inflammation and prevent long-term damage to the joints. Pain management is also important. The cornerstone of medication therapy for RA is disease-modifying anti-rheumatic drugs (DMARDs) and medications called biologics.

Disease-Modifying Anti-Rheumatic Drugs (DMARDs)

DMARDs are a class of medications used to treat many different types of inflammatory arthritis, such as RA, and work well for most people. The earlier a DMARD is started, the more effective it can be to suppress inflammation and prevent joint damage. It is important to slow or even stop the progression of joint damage, but keep in mind that DMARDs cannot fix joint damage that has already occurred.

Biologics and Biosimilars

Biologics are a class of medications designed to treat various inflammatory conditions including types of arthritis, such as rheumatoid arthritis. Biologics are drugs using living cells from sources such as animals, bacteria, or yeast. Biologic medications work by modifying the body’s inflammatory response. Like DMARDs, biologics can reduce pain, joint inflammation and damage to bones and cartilage.

Biosimilars are biologics that are produced by manufacturers after the patent on an original biologic expires. Different versions of the same biologic are called biosimilars, because they are very similar (but not identical) to the original biologic. To be authorized by Health Canada, they have to demonstrate similar safety and effectiveness as the original biologic.
Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

Non-steroidal anti-inflammatory drugs (NSAIDs) are a class of medications used to treat the pain and inflammation of arthritis. They do not contain steroids, hence the name “non-steroidal.” It is important to remember that these medications work to control symptoms, but do not prevent disease progression or damage. As a result, these medications are used in conjunction with DMARDs or biologics. They may be taken on an as-needed basis. That being said, some patients may find it helpful to take NSAIDs on a regular basis to control their pain. These medications are not appropriate for everyone so please speak with your doctor or pharmacist before trying them.

For more information visit – arthritis.ca/treatment/medication

Corticosteroids

Cortisol is a hormone produced naturally by the body’s adrenal glands and has many functions. One of cortisol’s important actions is its anti-inflammatory function. Cortisol can be considered the “brake” for the immune system, preventing it from overreacting to infections, injuries and trauma. However, our bodies cannot produce enough cortisol to meet the challenge of inflammatory arthritis. Corticosteroids mimic the anti-inflammatory action of cortisol in our bodies.

However, corticosteroids (commonly referred to as steroids) have many potential long-term side effects. Therefore, they are often used as an interim measure to help control inflammation while waiting for the slower-acting DMARDs to take effect or when someone is experiencing a flare of inflammatory arthritis. Ideally, steroids should be used for the shortest period of time, at the lowest dosage that provides benefit.

For more information on medications, Arthritis Society Canada has a comprehensive online guide that delivers detailed information on medications used to treat arthritis.

For more information visit – arthritis.ca/biologics
Surgery

Surgery is not common, but may be necessary after many years of severe arthritis. Surgery may be needed to relieve pain, straighten out a bent or deformed joint, restore mobility or replace a damaged joint. Sometimes the tendons and ligaments around joints, such as in the hands, may need to be repaired. A surgeon may also be asked to make recommendations on splinting and rehabilitation.

For more information visit – arthritis.ca/surgery

Occupational Therapy

An occupational therapist trained in arthritis management can analyze the activities you do in a day and develop a program to help you protect your joints and minimize fatigue. If necessary, they can help you redesign your home or workplace to make it easier for you to work or simply get around. They can also make or recommend a number of different splints, braces, orthopedic shoes and other aids that can help reduce your pain and increase your mobility and functionality. Their goal is to prepare you to live as fully and comfortably as possible.

Physiotherapy

A physiotherapist can develop an individualized program to help you increase your strength, flexibility, range of motion as well as general mobility and exercise tolerance through a wide variety of therapeutic treatments and strategies. These include exercise programs, physical interventions and relaxation, in addition to advising you on other techniques for reducing pain and increasing your overall quality of life.
Techniques to protect your joints include:

- Pacing by alternating heavy or repeated tasks with lighter tasks. Taking a break reduces the stress on painful joints and conserves energy by allowing weakened muscles to rest.

- Positioning joints carefully promotes proper alignment and decreases stress on the joints. For example, squatting and kneeling may put extra stress on your hips or knees. When lifting or carrying heavy items, keep items at waist height and avoid carrying them up and down stairs.

- Using helpful tools and assistive devices conserves energy and makes daily tasks easier. Raise seat heights to decrease stress on hip and knee joints. Use a “reacher” to pick up items from the ground. Use a cane to decrease stress on hip and knee joints. Enlarge grips on utensils, such as spoons or peelers, to decrease stress on hand joints. Other devices to consider include carts for carrying objects and jar/tap openers.

- Talk to your doctor about seeing an occupational therapist or physiotherapist, who may prescribe splints, braces or orthotics (shoe inserts) to help align and support your joints.
There are different types of exercises you can do to lessen your pain and stiffness:

- **Range of motion:** These exercises, also known as stretching or flexibility exercises, focus on keeping your joints moving and reducing stiffness. To achieve the most benefit, these exercises should be done daily.

- **Strengthening:** Exercises that maintain or increase muscle tone and protect your joints. These exercises include weight training movements done with a set of free weights, your own body weight or weight machines. The frequency of strengthening exercises should be discussed with a doctor or physiotherapist.
• **Aerobic Exercise:** Low-impact aerobic exercise that gets your heart pumping, such as swimming, biking and brisk walking, can help improve your sleep and alleviate stress and depression that is sometimes linked to RA. It can also protect you against heart disease, which is important since RA can increase the risk of this condition.

There are many low-impact exercise options that can benefit people living with arthritis. Consult your healthcare provider to find exercises that are suitable for you and your particular condition.

Examples include:

• **Tai Chi:** An ancient Chinese martial art, Tai Chi is a combination of movements performed in a slow, focused manner. Though it has many variations and styles, Tai Chi is a low-impact exercise and is reminiscent of both yoga and meditation. Tai Chi could improve pain and physical function in some people as well as alleviate depression and contribute to health-related quality of life.

• **Yoga:** Numerous studies have been done on the benefits of yoga on stress and anxiety. The practice of controlled breathing, simple meditation and stretching can improve a person’s state of mind and help them better manage their pain. Regular yoga under the guidance of a certified instructor can also boost one’s general health and increase energy levels.
Healthy Eating

Sometimes RA results in loss of appetite and/or unplanned weight loss, which is why it is important to eat a balanced diet. Healthy eating will give you the energy to complete your daily activities and will also promote a strong immune system, and bone and tissue health.

Three ways to improve your nutrition include:

• **Reduce sugar intake**: Sugar added to foods contributes to excess calories, but has few other nutritional benefits. Sugar refers to white, brown, cane and raw sugar as well as syrup and honey. Although artificial sweeteners contain few calories, it is better to minimize their use and just get used to food being less sweet.

• **Eat more vegetables and fruit**: Vegetables and fruit should make up the largest component of your diet. Try to have at least one vegetable or fruit at every meal and as a snack. Besides being an excellent source of energy, vegetables and fruit boost your fibre intake. Fibre makes you feel full and so helps you control how much you eat.

• **Choose “healthy fats”**: The type and amount of fat you eat is important. You need some fat in your diet, but too much can be bad for your health. Fat is high in calories and some types of fat (saturated and trans fats) may increase your risk of developing heart disease. Polyunsaturated and monounsaturated fats are recommended as the main source of fat in your diet.

Monounsaturated fat is found naturally in olive and canola oil, avocados and nuts like almonds, pistachios and cashews. Polyunsaturated fats, especially omega-3 and omega-6 fatty acids, can be found in cold-water fish (such as char, mackerel, salmon and trout), walnuts, sunflower seeds and flaxseeds. Fats that should be limited include trans fats, which are found in fried and processed foods and saturated fats, which mainly come from animal sources of food, such as red meat, poultry and full-fat dairy products. Choose healthier dairy products instead (such as skim, 1 or 2% milk, low-fat yogurt and low-fat cheese).
Relaxation and Coping Skills

Developing good relaxation and coping skills can help you maintain balance in your life, giving you a greater feeling of control over your arthritis and a more positive outlook. Relaxing the muscles around a sore joint reduces pain. There are many ways to relax. Try deep breathing exercises. Listen to music or relaxation podcasts. Imagine or visualize a pleasant activity, such as lying on a beach.

Massage

Massaging of muscles and other soft tissues, by a professional massage therapist, may lead to a short term decrease in stiffness and pain. Other benefits may include a reduction in stress and anxiety as well as improved sleep patterns.

Meditation

Meditation is a mind-body practice intended to quiet the mind by focusing on your breathing. Some studies have found that meditation, if practiced regularly, can ease pain and anxiety in individuals with RA.

It can also offer people a heightened sense of calmness and control.

Homeopathy

Homeopathy is an alternative medical therapy that uses natural remedies from plants, animals and minerals to stimulate the body’s self-healing abilities. It can be used to relieve symptoms of a condition or illness. Although there is no scientific basis to recommend homeopathy for RA, there is low risk of harm from using these remedies.

Complementary Medicine

People with a chronic disease like RA may decide to try complementary and alternative therapies to help them manage the symptoms of their condition.

Before you try any of these treatments, always inform your healthcare provider of any complementary and alternative therapies you are taking, receiving or would like to try. Your healthcare provider can offer valuable advice about these treatments, especially how they may affect other medications and treatments.

Acupuncture

Acupuncture, an ancient Chinese therapy for alleviating pain and treating various physical and mental health conditions, involves pricking the skin with needles. While studies on the effectiveness of acupuncture for RA symptoms are somewhat mixed, you may wish to try this treatment. It is important to find a certified practitioner.
What now?

There is currently no cure for RA. Early diagnosis and treatment is important to prevent joint damage. There are options to help manage RA including medication, exercise and joint protection strategies.

Ways Arthritis Society Canada Helps

**Website and Information Line**
Visit our website to get information about arthritis and to find resources and events, or call our Information Line.

arthritis.ca | 1-800-321-1433

**flourish Content Hub**
Find health and wellness guidance, self-management tips, inspirational stories, a sense of community and so much more to help people move through life with arthritis and flourish despite it. Visit *flourish*, our online content hub, to help those living with arthritis.

arthritis.ca/flourish

**Self-management Education and Webinars**
Our online modules and webinars help people with arthritis become their own advocate by providing expert insight into how to cope with the effects of arthritis such as chronic pain, anxiety and fatigue.

arthritis.ca/education

**Navigating Arthritis**
Our new navigation guides provide a valuable reference tool on where to find vital healthcare information and services in each province and territory.

arthritis.ca/navigation