Dystonia Medical Research Foundation Canada





Contents

ABOUT DYSTONIA	
WHAT IS DYSTONIA?	2
WHAT ARE THE FORMS OF DYSTONIA?	2
WHAT ARE THE SYMPTOMS OF DYSTONIA?	2
WHAT ARE THE BIGGEST CHALLENGES FOR DYSTONIA PATIENTS?	3
WHAT ARE THE DIFFERENT TYPES OF DYSTONIA?	3
WHAT ARE THE TREATMENTS FOR DYSTONIA?	4
ABOUT THE DYSTONIA MEDICAL RESEARCH FOUNDATION CANADA	5
INVESTING IN RESEARCH INTO BETTER TREATMENTS AND A CURE FOR DYSTO	NIA: 5
EDUCATION AND AWARENESS:	6
SUPPORT THE NEEDS AND WELL-BEING OF AFFECTED INDIVIDUALS AND FAM	ILIES: 7
FOR PLACEMENT IN COMMUNITY PAPERS (permission required)	8
Story of an individual with dystonia	ε
PROMOTIONAL BLURB	11
FOR DYSTONIA MEDICAL RESEARCH FOUNDATION LOCAL SUPPORT GROUP	11
30 Second Radio Spot	12
IMAGES and LOGOS	13
DMRF Canada	13
Dystonia Strong	13
Dystonia Moves Me	14
THE MANY FACES OF DYSTONIA	15

1



ABOUT DYSTONIA

WHAT IS DYSTONIA?

- Dystonia is a neurological movement disorder that is characterised by involuntary muscle contractions, which force parts of the body into abnormal as well as painful movements or positions.
- It is a condition that knows no age, ethnic or racial boundaries it can affect young children to older adults of all races and ethnicities.
- We estimate that 50,000 people in Canada have dystonia. Dystonia is the third most common movement disorder following essential tremor and Parkinson's disease.
- Patients with dystonia may experience uncontrollable twisting, repetitive movements or abnormal postures and positions. These can affect any part of the body, including the arms, legs, trunk, face and vocal cords.

WHAT ARE THE FORMS OF DYSTONIA?

- There are many different forms of dystonia. And dozens of diseases and conditions also include dystonia as a major symptom.
- Dystonia can impact one body part (for example the face, neck, hands or feet), or it may be generalized throughout multiple muscle groups.
- Dystonia may be genetic or result from other health conditions such as stroke, physical trauma, other diseases, or as a side effect of certain medications.

WHAT ARE THE SYMPTOMS OF DYSTONIA?

- Those with dystonia will experience muscle contractions, muscle twisting and uncontrollable, involuntary spasms that can be very painful.
- Symptoms of dystonia are usually chronic but may also appear only during "attacks" or episodes.
- It is more than a movement disorder. Besides the movements and postures of dystonia, individuals may experience additional symptoms such as anxiety, depression, persistent pain, and impaired sleep.



WHAT ARE THE BIGGEST CHALLENGES FOR DYSTONIA PATIENTS?

The Dystonia Medical Research Foundation Canada conducted a survey to answer this very question (<u>see Real Patients, Real Answers, published in 2017</u>). We analysed the results and found there are several challenges including:

- The time it takes for a patient to receive a proper diagnosis, due to low awareness in general and even within the medical community. In many cases it takes years for someone who is suffering from dystonia to be properly diagnosed. In fact, a recent survey conducted in 2019 indicated that for 63% of dystonia patients, it took more than one year to receive a proper diagnosis. Of those patients, 45% took over four years to receive a diagnosis and 16% took over ten years.
- In addition, individuals who have dystonia continue to report difficulty in finding
 physicians trained in movement disorders, particularly in more remote communities.
 In many cases they may have to wait months, or even years before an appointment to
 get treated.

In one survey, we specifically asked the question, what is the biggest challenge you experience with your dystonia? The answers were very similar: depression, social anxiety, dealing with pain, having to give up their old life and having to quit work because of their dystonia.

WHAT ARE THE DIFFERENT TYPES OF DYSTONIA?

There are many types of dystonia. Some types of dystonia can be referred to in more than one way. Physicians have developed a system to classify dystonia to help guide the treatment process:

- **Isolated or Primary:** Dystonia is the only neurological symptom a person appears to have.
- **Acquired or Secondary:** Dystonia that appears to have a specific cause such as drug reaction, brain injury, or as a symptom of another neurological or metabolic disorder.
- **Focal:** Dystonia that affects a single body part, for example, the neck.
- **Segmental:** Dystonia that affects two or more connected body parts, for example the face, neck, and arm.
- Generalized: Dystonia that affects the torso and at least two other body areas, frequently the limbs.
- **Paroxysmal Dyskinesias:** Dystonia may occur in episodes, often with additional movement symptoms.
- Functional: Dystonia may occur as part of a functional neurological disorder.



WHAT ARE THE TREATMENTS FOR DYSTONIA?

- There is no cure for dystonia, but treatments are available. Treatment for dystonia must be customized to the individual person. The purpose of treatment is to lessen the symptoms of muscle spasms, pain, and involuntary movements/postures.
- Treatments available include: drug therapy, botulinum toxin injections, surgery and complementary therapies.
- Botulinum Neurotoxin Therapy can be a very good therapy for focal dystonia, but it is masking the symptoms rather than curing the dystonia. Patients would have to continue to go into see a specialist for injections.
- In most cases, the type of doctor who is typically trained to diagnose and treat dystonia is a movement disorder neurologist. The most important step in treating dystonia is working with a doctor who is trained to treat dystonia.

4

For more information about the Dystonia Medical Research Foundation Canada, please visit: www.dystoniacanada.org

PO BOX 1009 STN TORONTO DOM TORONTO ON M5K 1P2 PHONE (416) 488-6974 TOLL FREE (800) 361-8061 EMAIL info@dystoniacanada.org



ABOUT THE DYSTONIA MEDICAL RESEARCH FOUNDATION CANADA

- The Dystonia Medical Research Foundation Canada is the only organization that is dedicated to supporting approximately 50,000 patients in Canada that are suffering from dystonia.
- The mission of the Dystonia Medical Research Foundation (DMRF) Canada is threefold:
 - o To advance research for more treatments and ultimately a cure for dystonia;
 - To promote awareness and education;
 - o To support the needs and well-being of affected individuals and families.

OUR WORK

INVESTING IN RESEARCH INTO BETTER TREATMENTS AND A CURE FOR DYSTONIA:

The Dystonia Medical Research Foundation Canada works in partnership with the Dystonia Medical Research Foundation based in the United States to ensure funding of the best and most relevant dystonia medical research worldwide, as well as with other like-minded organizations based in Canada.

As a member of Neurological Health Charities Canada (NHCC), we help lead advocacy efforts for policies to improve lives of those affected by brain conditions. Additionally, we collaborate with Canadian Brain Research Strategy (CBRS) to prevent and treat brain conditions by advocating for a national strategy to strengthen brain research.

In 2023, we participated in the 2nd Annual Canadian Movement Disorders Meeting hosted by Parkinson Canada and the Canadian Movement Disorders Society. The event brought together researchers, movement disorder specialists, neurologists, resident physicians, and scientists, serving a platform to showcase advancements in the field of movement disorders.

We continue to invest in important research to help patients today; as well as the future by supporting the next generation of treaters and researchers:

- In 2023, we launched our first multicenter research study with researchers collaborating from France, and Ontario and British Columbia in Canada. If successfully completed, this project will provide a dynamic system for unbiased diagnosis and clinical evaluation of dystonia.
- In 2022, we initiated a partnership research grant with Canadian organization Rare Diseases: Models & Mechanisms Network (RDMM) to investigate disease pathogenesis



by understanding the genetic contributors to this disorder and/or to inform therapeutic strategies.

- We awarded a two-year (2023-2025) Clinical and Research fellowship, supported by Merz Therapeutics, to <u>Dr. Talyta Grippe</u> at the Toronto Western Hospital Movement Disorders Centre, whose research is focused on electrophysiological assessment of movement disorders.
- In partnership with the Banting Research Foundation, we support the Discovery Award for innovative health and biomedical research projects by outstanding new investigators at universities and research institutes in Canada.
- We fund the best worldwide research through the DMRF in the United States. Since 1976 this collaboration has funded over 400 grants awarding \$35 million in research funding.

EDUCATION AND AWARENESS:

DMRF Canada works with volunteers, medical professionals (neurologists, movement disorder clinics), and the media to raise awareness of dystonia in a variety of ways.

- In June 2024, we hosted the largest nationwide fundraiser for dystonia, Freedom To
 Move: Run, Walk, and Wheel for Dystonia, both virtually and in-person. Over 110
 participants from across Canada registered, and together we raised \$50,000 for dystonia
 research and support programs. We partnered with Hydrocephalus Canada to co-host
 the in-person event, aiming to maximize our impact and administrative efficiencies, and
 unite the voices of our neurological communities for a better future.
- In September 2023, we successfully celebrated Dystonia Awareness Month, connecting
 with over 30,000 people online and reaching people from France, Australia, Belgium,
 India, China, the United Kingdom, Switzerland, the United States, and more! We
 engaged Canadian businesses and lit up 11 major landmarks to show solidarity with the
 dystonia community.
- In 2023, we published 2 newsletters, 5 e-newsletters, and have supported the community through our digital and print resources that have been accessed over 165,000 times.



SUPPORT THE NEEDS AND WELL-BEING OF AFFECTED INDIVIDUALS AND FAMILIES:

- We have approximately 50 Group Leaders and Area Contacts representing over 30 areas across the country. These groups provide support, guidance, and options to individuals and their families affected by dystonia.
- Since March 2020, we have offered specialized virtual programs and support group meetings both online and in-person, allowing patients to connect with others across Canada. Recognizing the varying challenges and needs of each dystonia type, we began offering specific dystonia type meetings in 2021.
- In 2023, we launched the Community Support and Education Program. This initiative leverages DMRF Canada's extensive network of support groups to offer half-day inperson regional educational events, local in-person support group meetings, and a National Virtual Patient Education and Support Session. These initiatives provide opportunities for dystonia patients and their loved ones to learn, connect, and unite with one another.
- Since 2016, we have annually awarded deserving students with dystonia the Jackson Mooney Patient Grant to help them in pursuing their career goals.

If you or someone you know is struggling with dystonia – or if you are looking for more information, contact the Dystonia Medical Research Foundation Canada at: www.dystoniacanada.org or 1-800-361-8061.



FOR PLACEMENT IN COMMUNITY PAPERS (permission required)

Story of an individual with dystonia

My Life with Dystonia: Thomas Wade, Canadian country music artist and Juno nominee.

50,000 patients in Canada suffer from dystonia, a neurological movement disorder that affects the nervous system. Abnormal signalling from the brain causes muscles to tighten and twist involuntarily. There are several forms of dystonia, and dystonia may be a symptom of many diseases and conditions.

Thomas Wade was already the successful lead vocalist of an award-winning country-music band, an accomplished songwriter, and emerging solo artist when he was diagnosed with Oromandibular Dystonia, a neurological disorder that affects speech. Thomas noticed troubling symptoms affecting his vocal cords when his band, Thomas Wade and Wayward, was achieving domestic success on the Canadian charts. Their path towards national recognition was fully realized when Thomas Wade and Wayward secured three Juno nominations and seven Canadian Country Music Association awards from 1997 through to '99.

Thomas' success on the national charts was a big leap from his small-town roots in Burford, Ontario. He came from a musical family and was surrounded by diverse musical influences in his childhood. At age four he learned how to play guitar, at the age of six he began performing in front of live audiences and at the age of seven he penned the first of many songs, sitting on his back porch.

He moved towards bigger goals with his family band, Silver Wings, a popular dance band in the Brant County area. By the time he had graduated from Fanshawe College with a degree in music production, he was lead singer of Thomas Wade and Wayward and on tour. He sought more challenges and expanded his skills in music.

Thomas and his band looked towards the international market when nation-wide fame became a reality. At this point, however, his vocal cords had started to fail him, but he didn't know why. Despite acquiring a vast skill set in music, his voice was the critical element in helping him to launch his successful career in music.

For years, Thomas struggled with vocal difficulties. At first, his ability to sing seemed to slip away gradually, then completely for reasons vocal coaches and doctors couldn't explain. He was forced to struggle through shows, hoping for some kind of a solution. But eventually he



had to give up as he was unable to sing at all. It was devastating to lose not only the career he had

built over a lifetime, but integral part of his identity. Then, over the next two years he slowly lost control of his tongue and his jaws severely affecting his speech.

By the time Thomas received an official diagnosis that could help him understand what was affecting his voice, he could no longer speak. Along with an official diagnosis, doctors let him know that Oromandibular Dystonia is incurable.

When confronted with the possibility that he might never speak or sing again, Thomas made a crucial decision in his life: to learn as much he could about the brain. He was determined to defeat his dystonia rather than let it rule him. Thomas learned about neuroplasticity, a ground- breaking technique that enables the brain to reorganize itself. He explored hypnosis, and even formulated his own exercises, using the principles of neuroplasticity to recover his speech and voice. By 2011, five years after his official diagnosis, he was able to sing and speak again.

In the years between when he noticed difficulties with his voice and an official diagnosis, Thomas turned his attention towards writing and producing, focusing on what could be done with the gifts he still had rather than direct his efforts towards what was out of his control. During these years, he wrote for other artists, developing a successful writing career. Once he had gained the use of voice again, he decided that he wanted to approach music with a new sense of discovery and appreciation rather than chase the next upward trajectory in his career.

Instead, Thomas felt drawn to recapture the love of music that had inspired him to become a singer in the first place, creating an album of music that echoed the sounds that had called him to a life in music - in essence, Thomas says, he decided to "follow the love". The result was a classic album and a triumphant return with the album, "Blue Country Soul".

Through hard work, determination, and tremendous effort, Thomas has continued to pursue music with a different vision of where he'd like to take his writing and singing. From where he now stands in music and in life, he hopes to share his story with others with his first book, a chronicle of his journey through dystonia, called "Singing in my sleep".

The Dystonia Medical Research Foundation (DMRF) Canada is the only organization that is dedicated to supporting the dystonia community in Canada. If you or someone you know is struggling with dystonia, you're not alone. Please visit www.dystoniacanada.org to find out about resources, research, and support.





"Dystonia in even one finger can end a musician's career. How many musicians have simply disappeared because of Dystonia. More than you know. I was one of them." - Thomas Wade.

More Photos of Thomas Available upon Request.

10



PROMOTIONAL BLURB

FOR DYSTONIA MEDICAL RESEARCH FOUNDATION LOCAL SUPPORT GROUP

Dystonia is a neurological movement disorder characterized by involuntary muscle contractions, which force certain parts of the body into abnormal, sometimes painful movements or postures.

Dystonia can affect any part of the body including the arms and legs, trunk, neck, eyelids, face or vocal cords.

It is the third most common movement disorder after Parkinson's disease and Tremor, affecting

more than 300,000 people in North America.

Dystonia does not discriminate – affecting all races and ethnic groups.

IF YOU HAVE DYSTONIA YOU ARE NOT ALONE

Join Us!

The (name of) Dystonia Support Group Is Here to Help

You Email: @ or Call

(include local name)



30 Second Radio Spot

Dystonia is a neurological movement disorder impacting over 50,000 people in Canada.

The Dystonia Medical Research Foundation was created over 40 years ago to fund better treatments, and ultimately a cure, and to provide education and support to dystonia patients and their families across Canada.

If you think you have dystonia or you're looking to support, visit dystoniacanada dot org to learn about the treatments and supports available to you.



IMAGES and LOGOS

DMRF Canada



serving all dystonia-affected persons désservant toutes personnes atteintes de dystonie

Dystonia Strong





14

serving all dystonia-affected persons désservant toutes personnes atteintes de dystonie

Dystonia Moves Me

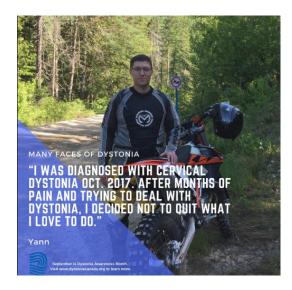






serving all dystonia-affected persons désservant toutes personnes atteintes de dystonie

THE MANY FACES OF DYSTONIA









15



serving all dystonia-affected persons désservant toutes personnes atteintes de dystonie



