

Facts about Myelodysplastic Syndromes (MDS)

Myelodysplastic syndromes (MDS) are a set of various conditions that impact the blood and bone marrow and fall under the category of blood cancers. In MDS, the blood cells that form in the bone marrow fail to develop into a healthy shape and size or move from the bone marrow into the bloodstream. This can lead to complications like anemia, infections, and bleeding due to a shortage of functional blood cells.

- Each year, approximately 5,900 new cases of MDS are diagnosed in Canada
- MDS most often occurs in people above the age of 60 and is more common in men¹

An MDS diagnosis can be overwhelming, but having access to specialized care and effective treatments can significantly improve your health. Support from family, friends, and dedicated groups can help you navigate through the ups and downs.

Some Signs & Symptoms of MDS

- Shortness of breath during or after physical activity
- Infection
- Fatigue
- Dizziness
- Pale skin
- Increased risk of bleeding and bruising

What Causes MDS?

- **Primary MDS (de novo MDS):** The cause is unknown, but can generally be linked to exposure to environmental toxins like benzene, pesticides, and exhaust gases
- **Secondary MDS:** This is caused by treatment for other types of cancer, and is usually more severe and challenging to treat

How is MDS Treated?

Your medical team will work with you to establish a treatment plan. Treatment options for MDS can include:

Observation with periodic blood counts:

- To regularly assess the patient's condition and determine treatments, as needed

Supportive care:

- **Antibiotics** to manage infections
- **Blood transfusions** to boost blood counts
- **Growth factors** to regulate the growth, division, and survival of cells
- **Iron chelation therapies** to reduce excess iron from blood transfusions

Targeted therapies:

- **Stem cell transplantation** to replace the patient's bone marrow stem cells with healthy stem cells from a donor
- **Chemotherapy** to eliminate cancer cells
- **Drug therapy** to address or prevent issues stemming from diminished blood counts

¹ Cancer.Net Editorial Board. (2023, May 26). Myelodysplastic syndromes - MDS - risk factors. ASCO - Cancer.Net. <https://www.cancer.net/cancer-types/myelodysplastic-syndromes-mds/risk-factors>

Living with MDS

Learning about and actively managing your disease, as well as seeking support from healthcare experts, family, and friends, can make a big difference in your well-being and quality of life when living with MDS.

Knowledge:

- Engage with healthcare professionals and MDS patient organizations to **understand the disease**, and **educate your social circle** to create a supportive environment

Self-Care:

- **Prioritize a balanced diet** and engage in **mindfulness practices** - such as meditation, yoga, or tai chi - to reduce stress, and consult your healthcare team about **infection prevention**

Social Support:

- **Seek support** from counselling, family and friends, or support groups to cope with the emotional and psychological impacts of MDS

Healthy Lifestyle:

- **Balance physical activity with rest** and **stay updated with recommended vaccinations** as advised by your healthcare provider

Regular Monitoring and Care:

- Adhere to **treatment plans**, keep **detailed records** of treatments and symptoms, including a transfusion diary to track the day, number of units, RBC and platelets of your transfusion, and closely monitor and **report any side effects** to your healthcare team

For more detailed **information about MDS**, check out the [AAMAC Educational Series: Myelodysplastic Syndromes](#) resource.

To learn about support groups and peer-to-peer support programs in Canada for people living with MDS, please **contact** the **Aplastic Anemia & Myelodysplasia Association of Canada (AAMAC)** at info@aamac.ca or 1-888-840-0039, or visit www.aamac.ca.

AAMAC would like to acknowledge the contribution of Dr. Heather Leitch, MD, PhD, FRCPC, Clinical Professor, Department of Medicine, UBC and Director, Hematology/Oncology Research, St. Paul's Hospital, for medically reviewing and editing this factsheet. This publication was made possible thanks to the support of:

The logo for AbbVie, featuring the word 'abbvie' in a lowercase, blue, sans-serif font.