GUIDELINES AT A GLANCE

For important fitness benefits, adults with multiple sclerosis who have mild or moderate disability need at least:

- 30 minutes of aerobic activity, 2 times per week, AND
- Strength-training exercises for major muscle groups, 2 times per week

WHO CAN BENEFIT?

If you are between the ages of 18 and 64 and have mild to moderate disability resulting from relapsing or progressive forms of MS, these guidelines are for you.

Here’s what to aim for:

How hard?

- Aerobic activities should be moderate in intensity; you should be able to talk – but not sing!
- Aim to do 2 sets of strength exercises for each major muscle group, with 10-15 repetitions per set.
- Strength-training activities should be difficult enough that you can barely finish the second set.
- Major muscle groups include arms, legs, chest, back, buttocks and core (abdominals).

How much rest?

- It’s fine to do aerobic and strengthening activities on the same day.
- Avoid strength-training the same muscle group (such as legs or abdominals) two days in a row – your body needs a break in between sessions.

“Physical activity has always provided me with time to think about the day ahead because the motions are repetitive, whether it be running, swimming or rolling. It gives me a feeling of well-being.”

-- Samantha, relapsing-remitting MS, diagnosed in 1989
“Physical activity has had a huge impact on my overall energy levels. The weight training has helped a lot with everyday activities -- such as transfers, getting out of bed, and reaching for hard-to-get objects. The gym is also a great place to meet and talk to people.”

-- Shawn, primary-progressive MS diagnosed in 2006

“The importance of exercise and regular physical activity CANNOT be understated. It can mean the difference between function and dysfunction, ability and disability, wellness and illness, improvement and decline.”

-- Dr. Tania R. Bruno, Specialist Physician in Physical Medicine and Rehabilitation

“There is no scientific evidence that following the guidelines will result in relapse of multiple sclerosis symptoms or worsen fatigue or health related quality of life.”

-- Dr. Amy Latimer, Physical activity and disability researcher

BENEFITS OF PHYSICAL ACTIVITY

In the past, people with MS were told they shouldn’t be physically active.

FACT: Now we know that being active has powerful benefits. Research shows that following the guidelines should improve aerobic fitness and strength. Meeting the guidelines may also reduce fatigue, improve mobility and enhance your health related to quality of life.
ACTIVITY EXAMPLES

MS affects everyone differently. Try to find a mix of moderate-intensity activities that suit your abilities and lifestyle. Some examples are provided below.

If you walk independently or with a mobility aid, give these activities a try:

**Aerobic**
- Walk or bike
- Dance
- Swim or join an aqua fitness class
- Play a team sport or an active game with your family or friends

**Strength training**
- Lift weights (free weights or machines)
- Use resistance bands
- Use your body weight. Do adapted push-ups, sit-ups, squats

If you use a manual or power wheelchair, give these activities a try:

**Aerobic**
- Cycle with a hand cycle or on a stationary bike
- Wheel
- Swim or join an aqua fitness class
- Play a sport or an active video game
- Dance

**Strength training**
- Lift weights (free weights or machines)
- Use resistance bands

“When I first started on the modified elliptical trainer, I could only do 15 minutes without a break, even at lower resistance levels. Now I do 45 minutes.”

-- Ali, relapsing-remitting MS, diagnosed in 2000

FOR ADDED BENEFIT

Tai Chi, yoga, pilates and stretching are great activities to do in addition to the physical activities you do the meet guidelines. They can build flexibility, balance, and body awareness.
Important tips to avoid injury

- Progress at your own pace. You are aiming for a little muscle soreness and fatigue, not intense pain or exhaustion.
- Ask a health professional such as a doctor, physiotherapist, or qualified exercise professional for activity suggestions.

Avoid over-heating by:

- Be active indoors on hot, humid days.
- Drink lots of cool water.
- Keep a spray bottle of water nearby, to cool yourself down regularly.
- Consider doing pool-based activities.
- Monitor how you are feeling. Find a spot to cool off if you are getting too warm.

BE ACTIVE ... SAFELY

The challenges of MS are real. Becoming and staying active can be challenging too. Here are some ways to overcome possible barriers.

I experience MS-related fatigue

- Start slowly. Physical activity can be tiring at first, but it will energize you in the long run.
- Rest afterward. The idea is to work your muscles until they are a little fatigued. Then let your body rest and get strong again.
- Believe you can do it. Studies show that those with a positive attitude do find ways to exercise.

I have chronic pain

- There’s a way! Exercises and equipment can be adapted to fit your needs.
- Try different activities; find what works for you on that day.

I have little access to a fitness centre

- Make physical activity part of daily life.
- Use physical activity to get from place to place.
- Try a exercise video at home.
- Walk or wheel around your neighbourhood.

I need more support or information

- Get a physical activity buddy.
- Join an adapted sports team in your community.
- Find a local walking club.
- Connect with others on Facebook and Twitter to discuss physical activity.
- Use resources: MS Society of Canada.
Why have goals?

Studies show that people who set challenging but achievable goals are more likely to be active.

How to set exercise goals

1) Establish what you can do now. Example: Ride a stationary bike for 10 minutes, once a week.
2) Set a goal for this week. Example: Ride a stationary bike for 10 minutes, with a little resistance, twice a week.
3) Set a goal for this month: Example: Add 5 minutes to my stationary bike ride each week.
4) Check in at the end of each week to see how you are doing. Did you reach your goal? Adjust your goal so it is challenging but doable.

Create a goal setting sheet. Write down:

1) What can you do right now?
2) What your goal is for this week?
3) What your goal is for this month?

Be flexible

Life is unpredictable. You may need to modify your goals to accommodate symptoms or unexpected events.

Keepin’ it real

Tips to achieve optimistic, realistic goals:

Be steady: You don’t always have to improve; maintaining your level of physical fitness can be a goal.
Share your goals: Tell someone what you are aiming for, and find a buddy to exercise with.
Be aware of your body: Note how you’re feeling and do a little if you can’t do a lot.
Take note of your success: Track your progress on your calendar or using an app on your smartphone.

“TRY. There is so much emphasis on what a person cannot do; focus on what you can do. Keeping a journal or log of how much activity you are getting is a great way to track your progress and to help commit to any goals you may have set.”

-- Ravin Persad, Kinesiologist and CSEP Certified Exercise Physiologist
Making an Action Plan

Include in your plan **What** activity you are going to do, **Where** you’ll do physical activity, when you’ll do it, for **HOW Long**, and the **Intensity Level** you are aiming for. The Canadian Physical Activity Guidelines recommend activities performed at a moderate intensity.

Sample Action Plan

This is an action plan that meets the guidelines.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Where:</th>
<th>When:</th>
<th>How long:</th>
<th>Intensity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary bike, then sit-ups, push-ups and squats</td>
<td>Community Centre</td>
<td>11 am</td>
<td>30 min. bike and 20 min. strength</td>
<td>Moderate</td>
</tr>
<tr>
<td>Resistance Band</td>
<td>Home</td>
<td>8 am</td>
<td>10 min. legs, 10 min. arms</td>
<td>Moderate</td>
</tr>
<tr>
<td>Swim</td>
<td>Community Pool</td>
<td>5:30 pm</td>
<td>30 min.</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Back-up Plan

Things may get in the way of your physical activity plan. Be flexible and adjust the plan. There’s always a way! Think about the unexpected events that might pop up in your life. Have a back up plan now for the days life throws you a curve.

<table>
<thead>
<tr>
<th>Unexpected event</th>
<th>Back-Up plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue/symptoms</td>
<td>Change workout from Saturday to Sunday</td>
</tr>
<tr>
<td>Bad weather</td>
<td>Use treadmill instead of walking outdoors</td>
</tr>
<tr>
<td>Working late</td>
<td>Do 10 min. instead of 20 min.</td>
</tr>
</tbody>
</table>

How to make your plan "sticky"

Need help actually sticking to your action plan? Here are three ways to make sure you keep going:

1) Use action cues. Cues are triggers for a planned behaviour. For instance, if you are planning to do strength training later while watching TV, place the resistance band beside the TV, so it’s right there.

2) Focus on the first stage of getting ready. If you’ve set your alarm clock and planned a morning activity, but you’re losing motivation because of all that’s involved, just focus on dressing appropriately and getting out the door ... the rest will fall into place!

3) Make physical activity plans with others. They will help keep you on track.