

# ACTIVE WITH ASTHMA: THE BASICS

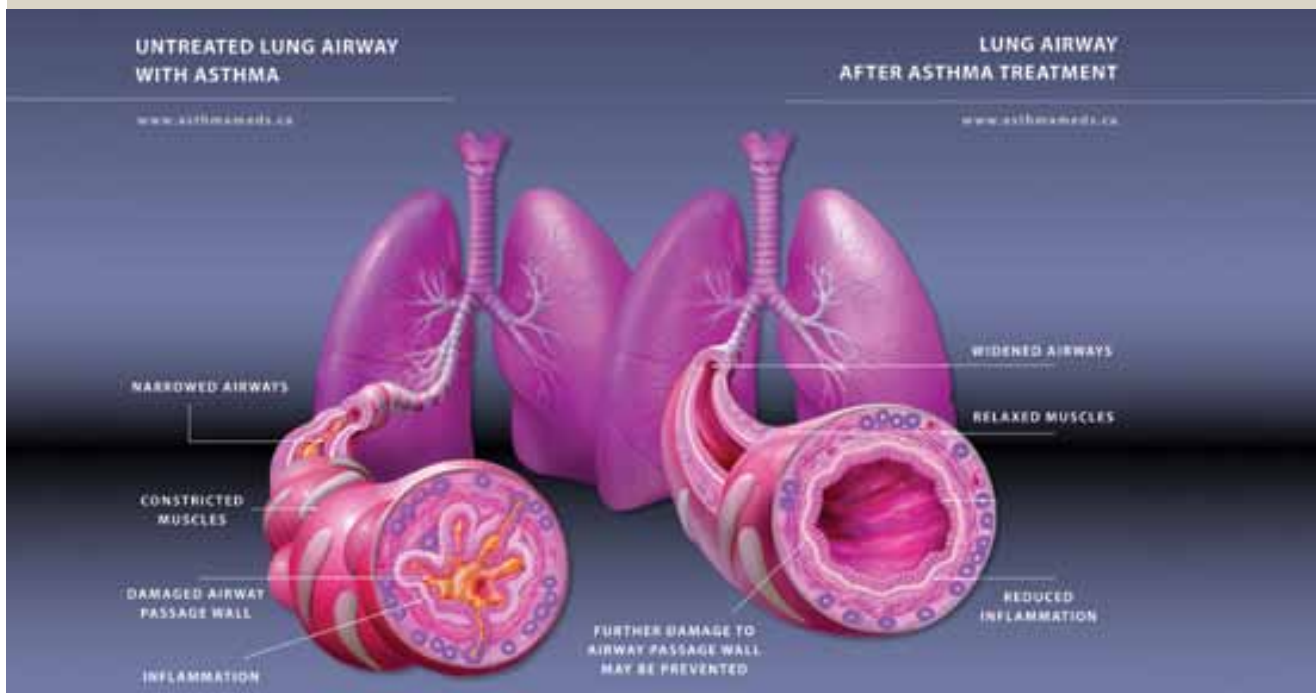
## EXERCISE INDUCED ASTHMA

While it's no secret that engaging in regular physical activity is among the best choices we can make to stay healthy, it can be hard to get started—especially if your asthma symptoms are triggered by exercise. Exercise induced asthma [EIA], also known as *exercise induced bronchoconstriction*, can affect people with and without other symptoms of asthma.

In people with EIA, asthma symptoms (coughing, chest tightness, shortness of breath [dyspnea] and/or wheezing) can begin within 10-15 minutes of starting the physical activity, or within 5-15 minutes following exercise<sup>4</sup>. These symptoms are caused by *inflammation* (when

the airways become swollen or “puffy”), and *constriction* (when the muscles surrounding your airways tighten), which cause your airways to become narrow and make it difficult to breathe.

If you experience asthma symptoms with exercise, it is important to discuss these symptoms with your asthma care team. There are a variety of treatments to help manage exercise induced asthma symptoms that you and your doctor can discuss, most importantly the role of medication. A Certified Asthma/Respiratory Educator can also explain additional strategies to help manage the symptoms of EIA..



## TREATING EIA

### Inhalers

Most often, your doctor will recommend the use of an inhaler 10-15 minutes before activity to decrease asthma symptoms during exercise<sup>4</sup>. It is important to use all inhalers as your doctor has instructed—inhaled corticosteroids used to reduce the inflammation in your lungs should be used daily as your doctor directs, but will not help immediately treat symptoms.

<b>Salbutamol</b> (Ventolin, Apo-Salvent)	Inhalers (typically blue) that contain a rapid acting bronchodilator medication that will decrease constriction in your airways.  These inhalers can alleviate symptoms for 4-6 hours.
<b>Formoterol</b> (Symbicort, Zenhale)	Maintenance inhalers that contain a rapid-onset long-acting bronchodilator* that works for 10-12 hours. These may also be used to prevent exercise induced symptoms.
<b>Salmeterol</b> (Advair)	Rarely, maintenance medications that contain a long-acting bronchodilator may be used to control exercise-induced asthma symptoms. <sup>4</sup>

### Other Medications

Occasionally, doctors may try using medicines like Singular (montelukast) to reduce exercise induced asthma symptoms. This type of medication is in the form of a pill, and is taken once a day. As these medications best protect against EIA 12 hours following administration<sup>6</sup>, they can pose difficulty in adhering to both exercise and medication because both must be planned rigidly for maximal effect.

Your doctor may suggest other types of medication to help manage your EIA—always talk to your doctor before changing any aspects of your treatment.

### Other Basic Strategies

Keeping your asthma well controlled is important in preventing exercise-induced symptoms. Your asthma is controlled when you use your rescue inhaler fewer than 4 times per week, including the use before exercise. If you have other asthma triggers, it is important to keep them in mind when planning physical activity. Your doctor or Certified Asthma/Respiratory Educator may have additional suggestions based on your chosen activity and other asthma triggers.

**If at any time during exercise you experience symptoms, stop and take your rescue inhaler—even if you used it prior to beginning exercise.** Don't resume activity until your symptoms have completely resolved.

## PLANNING AN EXERCISE ROUTINE

The best way to get engaged in physical activity is to be realistic about it. The following diagram (**Chart 1**) may help you find a starting point based on your current level of physical activity and feelings towards exercise, to more successfully transition into modifying your physical activity. If you are not already physically active, reference the Resources section for more information on ensuring you are healthy enough to do so safely<sup>A</sup>.

### Where do I start?

The good news is that health benefits of physical activity start at just ten minutes per day—and the more active you are, the better the results and impact on your health will be. For many people, the biggest question is: what do I do, and how do I get started?

Exercise programs are usually broken down into three main types of activities: Cardiorespiratory, resistance/strength and flexibility (stretching activities, which often include balance training). Each category has its own specific health benefits—(**chart 2**) provides a quick overview of how much of each type of exercise is recommended per week.

### Getting Started

If you're approaching physical activity for the first time, start with what you believe you can successfully work into your schedule.

Avoid becoming overwhelmed by planning less to start and adding more as things work. It's also important to remember that while exercise may increase your asthma symptoms in the short-term, your lungs may respond better to exercise as your fitness improves<sup>4</sup>.

### Enjoyment

Above everything, it is most important to choose activities you enjoy: work with what fits into your life, your interests, and what works best with your asthma. If you're not having fun, it will be a lot more difficult to move forward with your plan to get active!

### Choosing Activities

There are a lot of things to consider when choosing which activities to take part in. Overwhelmingly, people with asthma can participate in any activity they choose. The notable exception has been SCUBA diving, however, this may not be completely off-limits to people with *mild asthma* that is *well controlled*<sup>14</sup>. Your current asthma control and other triggers may play a role in which activities work best for you.

**If you have asthma symptoms during exercise, stop immediately and use your rescue inhaler.** Ensure symptoms are completely gone prior to resuming activity.

## CHART 1 – PLANNING AN EXERCISE ROUTINE

Reference: 9 11.1

I am not interested in engaging in physical activity.

- ▶ Keep reading!
- ▶ When you're ready, you'll know where to find information on how to get started
- ▶ Learn about why engaging in physical activity is a positive health choice

I am seriously considering becoming more physically active.

- ▶ Keep learning about how to engage in physical activity
- ▶ Start making specific plans.
- ▶ Be open to encouragement
- ▶ Share intentions with a trusted person in your life who can help you get started and stick to your plan!

I am ready to learn.

- ▶ I want to start making small changes.
- ▶ Visit your doctor to discuss your intentions and ensure you are healthy enough to move forward
- ▶ Review your asthma treatment plan, medications, and pre-exercise medication if needed.
- ▶ Set small goals; determine how your plan fits into your life.
- ▶ Begin to create change with small steps towards your end goal.
- ▶ Ask for help if you need it: share your goals, work with a partner... be accountable!

I am moving forward.

- ▶ I have a goal and a plan to get there.
- ▶ Track and reward progress. Use visual reminders to keep yourself moving towards your goal
- ▶ Keep your routine interesting. If your goals aren't working or you're bored, make changes.
- ▶ Ask people in your life for support to help reach your goal.
- ▶ If your commitment is important to you, it's important to those who care about you: Tell them how they can help.
- ▶ Can a friend care for your kids while you go for a bike ride? Will your partner make dinner while you go to the gym?

I am engaging in regular physical activity and want to stay on track.

- ▶ Keep it routine, but keep it interesting!
- ▶ Meet new people, try new things, keep it fun!
- ▶ Find an exercise buddy or group, challenge each other, be accountable!
- ▶ Maintain a good thing . . . for life!<sup>10</sup>

### Warm-Up and Cool-Down

Regardless of the activity you choose, including a warm-up in your routine is among the most important things you can do to prevent symptoms of EIA. Include a long, gradual warm-up<sup>15</sup> (10-15 minutes) before you begin and a 5-10 minute cool-down after intense activity.

### Staying hydrated

Not only will dehydration decrease your performance, not having enough water in your body can cause your airways to “dry out” more quickly, increasing asthma symptoms—remember to drink water before, during and after activity.

## CHART 2 – TYPES OF EXERCISE

Chart 2 <sup>4</sup>	Cardiorespiratory (Cardiovascular)		Resistance (Strength)	
	Starting	Progressing	Starting	Progressing
<b>What it is</b>	Activities that increase your heart/breathing rate.		Repetitive actions done to increase muscle strength	
<b>Canadian Guidelines</b> <sup>13 B</sup>	At least 150 minutes per week, 10+ minutes per session. Moderate-to-vigorous intensity.		At least two days per week.	
<b>Frequency</b> (how often)	2-3 days/ week	5-6 days/ week	2 days/week	3 days/week
<b>Intensity</b> (how strenuous)	Light: I can still talk comfortably	Light to moderate: I can't have a conversation or sing	1-2 sets of 8-12 repetitions at comfortable weight.	Increase repetitions or weight 2-3 sets of 8-12 repetitions
<b>Time</b> (how long)	10+ minutes	20-30 minutes  Increase to 150+ minutes/week	Repeat to fatigue.	Repeat to fatigue
<b>Activities</b>	Walking, running, swimming, cycling, aerobics, dancing, skating		Weight machines, free weights (i.e. dumbbells, medicine ball), body weight exercises (i.e. push-ups, plank, climbing)	