



# Introduction to Yoga

## A PHA Classroom Video Resource Guide

**Objectives:** The goal of the PHA Classroom Exercise Series is to provide people with pulmonary hypertension (PH) information on improving endurance, muscle strength and quality of life through three broad fitness categories: flexibility, strength and cardio. This video series by the Pulmonary Hypertension Association is designed to give you information you need to work with your doctor and pulmonary rehabilitation program to tailor an exercise routine that is right for you.

Regular exercise can improve exercise capacity, muscle function and quality of life for patients with various types of PH. Yoga is a dynamic activity that can be tailored to benefit anyone who wants to do it. Because yoga places emphasis on both the body and the mind, these benefits can be physical (improvements in strength, flexibility and balance) and mental (increased focus and decreased stress).

The Introduction to Yoga video provides an overview of a yoga practice designed to improve your flexibility, balance, strength and focus. It includes questions people with PH should ask their PH doctors. The yoga principles discussed in the video could be applied to classes at pulmonary rehabilitation, a gym or yoga studio.

Where appropriate, poses are presented with standing and chair options.

The video begins with a five-minute warmup through meditation. It then introduces poses you should hold for five to 12 slow breaths, depending on your comfort. These poses should take 10 to 15 minutes to complete. The routine ends with a five-minute cool-down.

**Always ask your doctor before beginning a yoga routine.** Use this table to ask your doctor whether a yoga routine like the one in the video would help you safely build flexibility, strength and confidence. There might be a pulmonary rehabilitation program near you where you could learn more.

### Before you start

- Turn off your electronics.
- Get centered in the room.
- Place your chair on a non-slick surface.
- Close your eyes and focus on your breathing. Breathe slowly and evenly in and out through your nose. Slightly tuck your chin to make an audible oceanic-type sound as you inhale and exhale.



**Chair Yoga**

**Standing**

**Chair/Modified**

**Doctor Recommendations**

**Warm Up:** Five minutes



Meditation

**Mountain Pose**

(*Tadasana*: tah-DAHS-ah-nah)

Five to 12 slow breaths

Mountain pose is the foundation for many standing poses and improves posture and stability.



Stand with your feet hip-distance apart and toes facing straight ahead. Bring your hands to your sides, palms facing forward and relax your shoulders down. Focus on pressing your feet into the ground while lengthening your spine. *Optional:* Slowly complete 10 calf raises.



Sit tall with your feet hip-distance apart and toes facing straight ahead. Rest your hands gently in your lap or bring them down by your sides, palms facing forward and relax your shoulders down. Focus on pressing your feet into the ground while lengthening your spine. *Optional:* Slowly complete 10 calf raises.

**Dynamic Standing Pose: Crescent Lunge**

(*Anjaneyasana*: AHN-jah-nay-AHS-ah-nah)

Five to 12 slow breaths

Crescent lunge is designed to increase stability and balance by stretching the legs, groin and hip flexors. Crescent lunge also opens the front torso, chest and shoulders.



Stand behind a chair with your right hand on the back of the chair for stability. Keeping both sets of toes pointed forward, step your left leg behind you and bend your right knee. Keep your left heel lifted and press into your left toes. Keep your hips and shoulders facing forward. Keep your right hand on the chair, or bring your hands to your heart to challenge your balance. After five to 12 slow breaths, step your left foot forward again and repeat on the other side.

**Dynamic Standing Pose: Warrior II**

(*Virabhadrasana II*: veer-ah-bah-DRAHS-ah-nah)

Five to 12 slow breaths

Warrior II is designed to strengthen and stretch your legs and ankles. It stretches your groin and opens your chest and shoulders.



Stand behind a chair with your right hand on the back of the chair for stability. Keeping your right toes pointed forward, step your left leg behind you and bend your right knee. Spin your left heel down, so that your left toes point to the left side of the room and your entire foot is grounded on the earth. Face your hips and shoulders toward the left side of the room, and then face your gaze forward toward the chair. Keep your right hand on the chair, bring your hands to your heart or bring your hands out to your sides (toward the front and back of the room). After five to 12 slow breaths, step your left foot forward again and repeat on the other side.

**Balancing Posture: Tree**

(*Vrksasana*: vrik-SHAH-sah-nah)

Five to 12 slow breaths

Tree pose is designed to improve balance and focus while strengthening the ankles and knees.



Stand behind a chair with your right hand on the back of the chair for stability. Keep your right foot pointed forward and bend your left knee toward the right side of the room. From here, bring the sole of your left foot to the inside of your ankle, calf or upper thigh (be careful not to put any pressure on your left knee). Keep your hand on the chair or bring your hands to your heart. Steady your balance by focusing your gaze on a nonmoving object toward the front of the room. After five to 12 slow breaths, place your right foot down and repeat on the other side.

Horizontal lines for doctor recommendations.





## Safe Exercise Tips

- Plan to exercise when you have the most energy.
- Always exercise with a partner and never alone.
- Avoid “heated” or “power vinyasa” type classes if you are new to yoga.
- Look for “gentle,” “restorative” or “chair” yoga classes at gyms or yoga studios online or near you. If you are unable to perform the yoga poses, concentrate on centering and focusing your breathing when others are completing poses.
- Take time to speak with your yoga instructor before beginning, using the suggestions below. A yoga instructor likely will be unfamiliar with PH and might not know which poses are unsafe for you. Remember these recommendations and advocate for yourself! Ask the instructor to provide modifications during the class that would be more appropriate for you.
- Avoid deep forward folds where your head goes below your heart.
- Don’t hold your breath during exercise.
- You shouldn’t feel exhausted, light-headed or dizzy during exercise. You might feel some shortness of breath, but you should always be able to talk and feel in control. If you don’t, slow down and regain control of your breathing. Contact your doctor or call 911 if your shortness of breath doesn’t ease after five minutes of rest.
- Include a warmup and cool-down into your exercise routine. It might take you more time to warm up than people who don’t have PH. Don’t feel discouraged if you need a longer warmup.

**Ask your doctor if the following yoga poses are safe for you:**



Poses where **your arms are above your head** for an extended period of time.



Poses where **your head is below your heart** for an extended period of time.



**Downward Dog**  
(*Adho Mukha Svanasana*: AH-doh MOO-kah Shvah-NAHS-ah-nah).



### **Start small and work up.**

If you feel tired, you have found the limit of what you can do today. You’re stronger than you were yesterday.

## Questions to Ask Your PH Doctor

- Is it safe for me to exercise? If not, why?
  - Is yoga right for me? If not, can you tell me why?
  - Is there a pulmonary or cardiac rehabilitation program where I could safely learn about and try new exercises to increase my flexibility?
  - How many times a week should I exercise to improve flexibility? How long during each session? Can you describe how I will feel and if I will be sore after exercising?
  - Should I plan to exercise around the time I take my PH meds? The video suggests that some people exercise an hour after taking their PH meds. Is this right for me? What about my diuretics?
  - Is it safe for me to drink 8-12 ounces of water when I exercise? If not, what is appropriate for me?
  - Should I monitor my heart rate when I exercise? What should be my maximum heart rate? The video says some people use 70% of their age-adjusted max. Is this appropriate for me?
- $$(220 - \text{Age}) \times 70\% = \text{___ max BPM}$$
- How should I check my heart rate? Do I need a heart rate monitor? How do I check my pulse? Is it safe to check my pulse on my neck? Should I monitor my blood pressure?
  - Should I monitor my oxygen levels when I exercise? Continuously, or just every once in a while? Is there an oxygen saturation level I should always be above? The video said many people use 88%. Is that right for me? What do I do if my oxygen saturation goes below that level?
  - Should I change anything about my supplemental oxygen when I exercise?

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**Disclaimer:** This video and worksheet series has been created for people living with PH interested in learning more about exercise. Included in this series are the opinions of individual PH-treating healthcare professionals and not necessarily those of the Pulmonary Hypertension Association (PHA).

The PHA Classroom Exercise Series does not replace conversations between a patient and his or her PH care team, nor the recommendations that follow these conversations. It is imperative that you have a conversation with your PH team about whether or not exercise is safe and appropriate for you prior to engaging in any exercise activity, including those presented as examples in this series. Your PH team may have recommendations about exercise modifications, exercises to avoid, and any monitoring that would keep you safe. Every person is different, and that is especially true when it comes to people living with PH.

These resources are not designed to be a substitute for medical advice. As with any physical activity, you should talk to

your doctor about whether you are healthy enough to exercise or engage in any activities described in this educational series and the risks of engaging in such activities. PHA makes no warranty or guarantee as to the effectiveness of the methods described within these resources or that the activities are safe for all individuals.

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