DEPARTMENT OF MEDICINE

Cardiopulmonary Exercise Testing (CPET) Lab

The Cardiopulmonary Exercise Testing (CPET) Lab provides comprehensive testing for patients with a variety of heart and lung conditions to determine whether the heart, lungs or skeletal muscles limit exercise capacity.

CALL US FOR MORE INFORMATION

Cardiopulmonary Exercise Testing Laboratory

Phone: **617-724-7825**

Explore This Testing Lab

About the Program

The Mass General Cardiopulmonary Exercise Testing (CPET) Laboratory is a national referral center for evaluating symptoms that arise during physical activity. The CPET laboratory provides a wide variety of evaluations, ranging from resting measurements of metabolic rate to comprehensive exercise studies that rely on direct measurements of heart and lung performance to precisely define which organ system is limiting exercise capacity. The laboratory also serves as a core laboratory for the National Institutes of Health and performs leading edge research related to how to improve exercise capacity across a wide spectrum of patients with heart and lung conditions.

Purpose of Cardiopulmonary Exercise Testing (CPET)

The primary purpose of cardiopulmonary exercise testing (CPET) is to carefully assess how your lungs, heart, blood vessels and muscles perform during an exercise challenge. Measurement of the amount of oxygen your body can use during exercise along with other indices of heart and lung function provides important information about overall health status and prognosis for specific diseases. CPET is used to define how conditions that effect heart, lung, blood vessel or muscle function contribute to exercise intolerance.

How CPET Works

These pulmonary function tests are performed while you exercise:

- Oxygen saturation testing examines whether the oxygen level in the blood drops while you exercise
- Exercise testing on a stationary bicycle gauges lung and heart function during exercise

- **Level 1:** A basic exercise test that assesses overall functional capacity and points to possible causes for shortness of breath. This test can be used for risk determination for an operation and for risk stratification for certain heart and lung diseases
- **Level 2:** Similar to Level 1 but includes a catheter in an artery in the wrist that allows measurement of blood oxygen, carbon dioxide and pH levels. This enables more sophisticated evaluation of the cause of shortness of breath and exercise intolerance
- **Level 3:** Similar to Level 2, but also includes a catheter passed into the main blood vessels in the heart and lung to enable precise measurement of heart pumping function, blood vessel function and skeletal muscle function. This test represents the "gold standard" evaluation to diagnose the cause of exercise intolerance/symptoms and to help guide treatment decisions
- Heart imaging of the heart's pumping function at rest and with exercise can be combined with any level of exercise testing to provide additional information about how well the heart is functioning

Clinical Trials

- The effects of electronic cigarette use on smokers with chronic obstructive pulmonary disease (COPD)
- A New Clinical Trial for ESG Weight-loss Procedure in Patients with Hypertension or Type-2 Diabetes
- Are you a healthy participant interested in research?
- Radiance High Blood Pressure Study
- Seeking Healthy Volunteers for Study Investigating Salt in the Diet and Blood Pressure
- Understanding the link between magnesium and blood pressure

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Two exceptional employees were honored with this year's Ricardo Diaz Memorial Award during the celebration, recognizing the hard work, selflessness and compassion reflective of Diaz's.

PRESS RELEASE • APR | 22 | 2021

Use of e-cigarettes plus tobacco cigarettes linked to higher risk of respiratory symptoms

New research reveals that respiratory symptoms—such as cough and wheeze—are more likely to develop when people use both e-cigarettes and tobacco cigarettes together compared with using either one alone.

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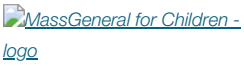

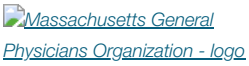

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