

Masters Athlete Cardiovascular Measurement Explanation Sheet

Blood Pressure

The Heart and Stroke Federation of Canada defines systolic blood pressure as "the measure of the pressure force when your heart contracts and pushes out the blood" and diastolic as "the measure of the pressure when your heart relaxes between beats.

Factors that increase your blood pressure include obesity, dietary salt and physical inactivity. If you have high blood pressure, it can be treated with physical activity, weight loss, salt restriction, stress reduction, and medications.

Your reported blood pressure is the lowest of the three readings we recorded. Diagnosis of high blood pressure can not be diagnosed on the basis of one reading. If you have high blood pressure for more than three readings taken at different times or are concerned about your blood pressure, consult with your physician.

Category	Systolic	Diastolic
Low Risk	< 121	< 81
Medium Risk	121-139	80-89
High Risk	> 140	> 90



	European	South Asians, Chinese and Japanese
Men	< 102cm	< 85 - 90 cm
Women	< 88cm	< 80 - 90cm



Waist Circumferences

A systematic review conducted by World Heath Organization (WHO) has found that an increased waist circumference, and hip to waist ratio, is correlated to increased risk of cardiovascular disease, type II diabetes, cancer, hypertension and mortality.

The National Institutes of Health (NIH) note that a "High-Risk Waist Circumference" is dependent on your heritage. Please see table for sex and ethnic specific waist circumference thresholds. You should aim to maintain a waist circumference below the thresholds.

Spirometry



<u>What is spirometry?</u>

Spirometry is a method of assessing <u>lung function</u> by measuring the volume of air that the patient is able to expel from the lungs after a maximal inspiration.

<u>What is it used for?</u>

Spirometry is a reliable method of differentiating between <u>obstructive</u> airways disorders (e.g. COPD, asthma) and <u>restrictive</u> diseases (where the size of the lungs is reduced, e.g. fibrotic lung disease).

<u>What information does it provide?</u> Spirometry gives 3 important measures:

<u>1. Forced Vital Capacity (FVC)</u> - the total volume of air the patient can forcibly exhale in one breath (liters)

<u>2. Forced Expired Volume in 1 second (FEV1)</u> - the volume of air that the patient is able to exhale in the first second of forced expiration (liters per second)

<u>3. FEV1/FVC</u> - the ratio of FEV1 to FVC expressed as a percentage

Values of FEV1 and FVC can be expressed as a percentage of the predicted normal for a person of the same sex, age and height.

<u>Diagnosis Criteria:</u> •<u>COPD</u> can be diagnosed only if FEV1 <80% predicted and FEV1/FVC <0.7 (70%).

•<u>Asthma</u> may show the same abnormalities on spirometry as COPD, however when a bronchodilator/inhaler is used, the FEV1 returns to normal

•<u>Restrictive</u> lung disease may be diagnosed upon if FEV1 and FVC <80% predicted, but FEV1/FVC ratio remains normal (>0.7)

Physical Exam, Resting ECG, Stress Test, Further Evaluations

The results of your physical examination and resting ECG are for study purposes and therefore cannot be provided, unless special authorization is provided. If any of these tests were abnormal, we would have contacted you for further testing, and informed you of the indication. If you were not contacted for a follow-up, all of your tests were considered normal and no further testing was necessary.

If you required a stress test, the results were sent to your physician, if you provided their information on your consent form. Your results can be obtained by contacting them. If your stress test or any further evaluations were abnormal, you would have been contacted by the research team.

If you have any unexplained symptoms such as palpitations during exercise, chest pain during exercise or emotional strain, excessive breathlessness, unusual fatigue, and fainting or near fainting, please report to your family physician and be evaluated accordingly.

