Pulmonary function testing is an assessment of the integrated mechanical function of the lung, chest wall, and respiratory muscles by measuring volumes and capacities. They are helpful in diagnosing and assessing certain pulmonary conditions. Our Lady of the Lake Pediatric Pulmonary Function Testing Lab has experienced and skillful personnel in performing and interpreting pediatric pulmonary function tests. Our lab can perform different types of pulmonary tests up to 21 years of age.

**SPIROMETRY** is an office test used to assess lung function. Spirometry is the most common lung function test done. This test focuses on the exhaled breath to be able to diagnose and manage obstructive lung diseases and identify other ventilatory issues.

**Indications:**
- Diagnosis and severity assessment of asthma in patients older than 5 years of age
- Follow-up of asthma control
- Evaluation of chronic cough
- Evaluation of shortness of breath and other chronic respiratory complaints
- Determination of response to bronchodilators
- Evaluation of baseline lung function in a patient with exercise-induced bronchoconstriction

**COMPLETE PULMONARY FUNCTION TESTING** allows measurement of the different lung volumes. Some degree of coordination is required for which this test is better performed by older children and teenagers. This test is typically done using the body box or plethysmography. The diffusion capacity of the lung can also be measured with this test.

**Indications:**
- Restrictive lung disease
- Obstructive lung disease
- Shortness of breath
- Unexplained hypoxemia
- Follow the course of disease and response to therapy
- Monitor changes in lung function with certain therapies, such as chemotherapy or radiotherapy
FRACTIONAL EXHALED NITRIC OXIDE (FENO) can be used to assess allergic airway inflammation, adherence to inhaled corticosteroid therapy in patients with asthma, and assist in the management of severe asthma. It involved blowing into a machine for a period. It requires certain coordination which is typically accomplished by older children and teenagers.

6-MINUTE WALK TEST can be done for evaluation of activity impairment and functional disability. It involves walking for 6 minutes while measuring oxygen saturations, heart rate and respiratory rate.

CARDIOPULMONARY EXERCISE TESTING can be useful in the evaluation of dyspnea, identify a cardiac or respiratory cause for exercise limitations, quantify functional disability, or to identify the presence of exercise-induced bronchoscostriction. Patients exercise on a treadmill or cycle ergometer under the supervision of a respiratory therapist and physician.

Indications:

- Exercise intolerance
- Unexplained dyspnea
- Shortness of breath
- Exercise-induced wheezing
- Pre-operative evaluation
- Chest wall or pectus deformities
- Assess response to treatment
- Exercise prescription

*** For more information about our services or referrals, please contact our office. ***