**Plano Independent School District**

**School Health**

**Peak Flow Meter Administrative Guideline**

**Purpose**

A Peak Flow Meter is a portable, hand-held device used to measure the ability to move air out of the lungs. It is used frequently over a two-week period to determine the student’s peak expiratory flow rate. This rate can be used for comparison when the child has signs of breathing difficulty. Students with asthma (especially moderate or severe asthma) or other respiratory conditions can use peak flow readings to help recognize early changes that may be signs of worsening respiratory status or determine the severity of an asthmatic episode. Altered peak flow readings can sometimes detect airway changes before symptoms appear. Peak Flow Meter readings, along with a student’s IHP, Asthma Action Plan, and doctor’s order can be used as a guide in the use of medication and when to seek emergency care.

**Definitions**

* **Asthma –** chronic disease involving the airways in the lungs. These airways, or bronchial tubes, allow air to come in and out of the lungs.
* **Personal Best Reading-** highest peak flow number over a two to three week period when a student’s asthma is under good control.
* **Traffic Light System** – enteral zones correlated with traffic light colors of green, yellow, and red are used to interpret peak flow rates.
* **Green Zone-** peak flow rate of 80-100% of personal best. “Go” as symptoms are relatively free.
* **Yellow Zone-** peak flow of 50-80% of personal best. “Caution” as asthma is worsening. Airways are narrowing and may require additional treatment. Symptoms can get better or worse depending on actions taken.
* **Red Zone–** peak flow of <50% of personal best. “Danger” as asthma management and treatment program isn’t controlling your symptoms. Severe narrowing may be occurring.
* **Individual Health Plan (IHP)** – plans made for the care of students who have individual health needs while at school.
* **Universal Precautions -** term used in the medical field that encompasses the steps taken in order to prevent the cross-contamination of air and bloodborne pathogens. All body fluids are considered contaminated and precautions should be taken in order to prevent potential transmission.

**Program Coordinator**

Coordinator for District Health

**Responsibilities**

* Coordinates with Plano ISD principals and/or building manager and school nurses in the selection of employees for training.
* Assure quality improvement by revising this administrative guideline as required through the monitoring of training.
* Communicate with medical officer on issues related to quality of care.

**Environment/Settings**

There are no restrictions as to where Peak Flow monitoring can be done. The setting should be clean and appropriate to the student’s need/desire for privacy. Supplies are provided by parents.

**Applicable Documents**

* Administrative Guideline
* Training checklists
* Problem List
* Asthma Action Plan/Individual Health Care Plan

**Medical Control**

The medical advisor of the Peak Flow Meter administrative guideline is the Plano ISD’s medical officer. The medical officer will direct the following:

* Medical direction in the formulating of the administrative guideline
* Review and approve the above
* Evaluation as needed

**Restrictions/Requirements**

* Current Physician orders
* Consent for Contact of Health Care Professional
* Development of IHP by RN
* Parental consent
* Supplies provided by parent

**Staff Training and Preparation**

Peak expiratory flow monitoring can be performed by the school nurse or unlicensed personnel as trained by the RN. School nurses will review the applicable documents. Training for the school nurses will be conducted by the Coordinator for District Health, Special Education Nurse Case Manager and/or the Special Assignment nurses. Training and ongoing verification of training will be documented by the training checklist. Additional questions or concerns beyond Plano ISD training should be directed to the school nurse, family and/or health care provider.

**Training**

* Registered Nurse is the person responsible for the training.
* Unlicensed personnel may be trained by an RN.
* Training is done yearly and as needed throughout the year.
* Administrative guideline, problem list, physician orders and parent request are to be reviewed prior to training and throughout the year for review.
* Individualized Health Plan is completed by the nurse.
* Competency checklist must be signed and dated yearly and periodically throughout the year as needed for verification of skills.
* Information is shared with other employees on a need to know basis.

**Procedural Guideline**

1. Determine need for Peak Flow Meter Reading- Assess student in the following areas
* Respiratory rate
* Respiratory depth
* Respiratory effort
* Pulse
* Restlessness
* Color
* Retractions
* Cough
* Wheezing
* Lung sounds
* Parameters on Individual Health Care Plan/Action Plan
1. Use Universal Precautions. Wash hands before procedure.
2. Assemble equipment: Peak Flow Meter.
3. Explain procedure using explanations the student can understand. Encourage the student to do as much of the procedure as is capable.
4. Position the student in a standing position.
5. Before each use, ensure the sliding marker or indicator arrow is set at “0”.
6. Instruct the student to take a deep breath, filling the lungs completely.
7. Have the student place the mouthpiece of the meter in mouth, closing the lips tightly around the mouthpiece. Make sure the tongue is under the mouthpiece, not in it.
8. In one breath, have the student blow out as hard and fast as possible. Make sure they are blowing out only through their mouth, not their nose. Sometimes, gently holding their nose closed helps the student learn to the proper way.
9. Note the number achieved by the marker on the numbered scale.
10. Repeat steps 6-10 two more times.
11. Clean the peak flow meter according to manufacturer recommendations. Most peak flow meters can be washed in warm, soapy water. Rinse and dry thoroughly before storage.
12. Wash hands.
13. Record the highest number peak flow reading. Compare any peak flow rates with student’s personal best or normal peak flow rate. Follow health care provider’s guidelines for any recommended actions.

**Medical Director Signature:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Physician Signature/Plano ISD Medical Officer