

PEAK FLOW METERS

Peak flow meters measure peak expiratory flow rate, one component of lung functioning that is influenced by airway swelling and broncho-constriction. Peak flow meters have become essential for home management of asthma. Campers learn to recognize the early signs of an impending asthma episode and are able to use their Asthma Action Plan more effectively with this information. Peak flow meters come in all shapes and sizes. It is important for campers to learn to use the same type of peak flow meter, whenever possible because variations occur between devices. However, it is acceptable to have a shared peak flow meter for each cabin group and use individual mouthpieces.

Children as young as 5 years old can usually measure peak expiratory flow rate. The effort required to produce the measurement is a short, maximal blast of air similar to that required in the initial effort to blow up a balloon. Peak flow measurements are effort dependant so campers may need to be coached to give their best effort. Instructions for correct peak flow meter techniques should be clear and simple.

Asthma Action Plans are based on the camper's *personal best* peak flow readings. The "zones" are like traffic lights and direct the camper's actions in managing their asthma. Zones are based on personal best or predicted values.

GREEN =	All Clear	(80-100%)
YELLOW =	Caution, trouble coming, step up therapy	(50-80%)
RED =	Warning, danger, trouble, seek help	(< 50%)

Peak flow readings are taken every day while at camp. Bedtime assessment includes peak flow readings and breath sounds. Peak flow measurements should also be taken before and after using PRN reliever medications and when seen in the health services for an asthma visit.