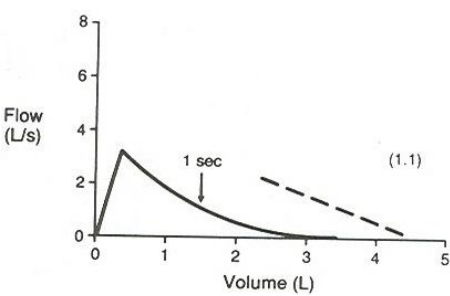
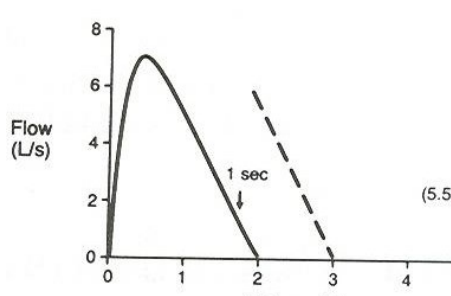


Obstructive vs. Restrictive Lung Disease		
	Obstructive	Restrictive
Definition	The airways are narrowed, usually causing an increase in the time it takes to empty the lungs	Either a loss of lung tissue, a decrease in the lungs' ability to expand, or a decrease in the lungs' ability to transfer oxygen to the blood
FVC	Decreased	Decreased
FEV1	Decreased	Decreased
FEV1/FVC	Decreased	Normal or increased
TLC	Normal	Decreased
Differential Diagnosis	Asthma, bronchiectasis, bronchiolitis obliterans, cystic fibrosis, alpha 1 antitrypsin deficiency	Chest wall: ankylosing spondylitis, kyphosis, obesity, scoliosis Drugs: amiodarone, methotrexate, nitrofurantoin Interstitial lung disease: pneumonia, hypersensitivity pneumonitis, idiopathic pulmonary fibrosis, sarcoidosis, exposures (asbestos, beryllium) Neuromuscular disorders: Guillain-Barre syndrome, muscular dystrophy, myasthenia gravis
Extent of Defect	% of predicted FEV1: Normal >80%, Mild 60-80%, Moderate 40-60%, <40%	% of predicted TLC: Normal >80%, Mild 70-80%, Moderate 60-70%, Severe <60%
Pattern		

Bronchoprovocation Testing	
<ul style="list-style-type: none"> • Response to bronchodilator: significant if FEV1 improved by >12-15% • Cold air challenge: 12-15% decrease in FEV1 is indicative of airway responsiveness • Exercise challenge: 12-15% decrease in FEV1 is indicative of airway responsiveness 	