FUNCTIONAL CLASS	LIMITATION	CLINICAL ASSESSMENT
Class 1	None	Ordinary physical activity does not cause undue fatigue, dyspnea, palpitations, or angina.
Class II	Slight	Comfortable at rest. Ordinary physical activity (e.g., carrying heavy packages) may result in fatigue, dyspnea, palpitations, or angina.
Class III	Marked	Comfortable at rest. Less than ordinary physical activity (e.g., getting dressed) leads to symptoms.
Class IV	Severe	Symptoms of heart failure or angina are present at rest and worsened with any activity.

Orthopnea refers to dyspnea that occurs in the recumbent position and is due to redistribution of fluid from the abdomen and lower body into the chest, increased work of breathing due to decreased lung compliance, and, in patients with ascites or hepatomegaly, elevation of the diaphragm. Orthopnea typically occurs in the awake patient within 1–2 min of lying down and may be relieved by raising the head and chest with pillows or an adjustable bed. With more severe HF, patients may end up sleeping in a recliner chair or sitting up, although for some, orthopnea may diminish as symptoms of right HF appear. Orthopnea may be accompanied by nocturnal cough related to pulmonary congestion.

Paroxysmal nocturnal dyspnea (PND) refers to episodes of shortness of breath that awaken a patient suddenly from sleep with feelings of anxiety and suffocation and require sitting upright for relief. In contrast to orthopnea, PND usually occurs after prolonged recumbency, is less predictable in occurrence, and may require 30 min or longer in the upright position for relief. Episodes are often accompanied by coughing and wheezing (so-called cardiac asthma) thought to be due to increased bronchial arterial pressure leading to airway compression and interstitial pulmonary edema causing increased airway resistance. Acute pulmonary edema, due to marked elevation of the pulmonary capillary wedge pressure, is manifested by severe shortness of breath and pink, frothy sputum **(Chap. 305)**. Cheyne-Stokes respiration and central sleep apnea