the drainage system to a wall suction adapter and adjust suction on the drainage system as ordered (usually −10 to −20 cm H_2O). There should be gentle, continuous bubbling in the suction control chamber. Place occlusive dressing over the chest tube insertion site per hospital policy. Note the date, time, and your initials on the dressing. If gauze is used, use presplit gauze; "homemade" split gauze may leave loose threads in the wound. Ensure that the drainage system is positioned below the patient's chest and secured to the floor or bed. Keep the drainage tubing free of dependent loops. Obtain a chest radiograph to confirm placement of the chest tube. Ensure that daily chest radiographs are scheduled to monitor placement of the chest tube as well as resolution of the pneumothorax or effusion.

Disposable chest drainage systems typically consist of three chambers next to one another in one drainage unit (Fig. 20-28). The fluid collection chamber collects drainage from the patient's pleural or pericardial space. The water seal chamber is directly connected to the fluid collection chamber and acts as a one-way valve, protecting patients from air returning to the pleural or pericardial space. The suction chamber may be a dry suction or calibrated water chamber. It is connected to external vacuum suction set to the amount of suction ordered and controls the amount of suction that patients experience.