


**FIGURE 2.18** A midsagittal (median) section showing the body cavities and principal contents.

and a **pericardial** (*per"i-kar'de-al*) cavity surrounding the heart (fig. 2.21). The area between the two pleural cavities is known as the **mediastinum** (*me"de-ã-sti'num*).

The abdominopelvic cavity consists of an upper **abdominal cavity** and a lower **pelvic cavity**. The abdominal cavity contains the stomach, small intestine, large intestine, liver, gallbladder, pancreas, spleen, and kidneys. The pelvic cavity is occupied by the terminal portion of the large intestine, the urinary bladder, and certain reproductive organs (uterus, uterine tubes, and ovaries in the female; seminal vesicles and prostate in the male).

A summary of the principal body cavities is presented in figure 2.22.

 Body cavities serve to confine organs and systems that have related functions. The major portion of the nervous system occupies the posterior cavity; the principal organs of the respiratory and circulatory systems are in the thoracic cavity; the primary organs of digestion are in the abdominal cavity; and the reproductive organs are in the pelvic cavity. Not only do these cavities house and support

various body organs, they also effectively compartmentalize them so that infections and diseases cannot spread from one compartment to another. For example, pleurisy of one lung membrane does not usually spread to the other, and an injury to the thoracic cavity will usually result in the collapse of only one lung rather than both.

In addition to the large anterior and posterior cavities, there are several smaller cavities and spaces within the head. The **oral cavity** functions primarily in digestion and secondarily in respiration. It contains the teeth and tongue. The **nasal cavity**, which is part of the respiratory system, has two chambers created by a nasal septum. There are two **orbits**, each of which houses an eyeball and its associated muscles, vessels, and nerves. Likewise, there are two **middle-ear cavities** containing the auditory ossicles (ear bones). The location of the cavities and spaces within the head is shown in figure 2.23.

orbital: L. *orbis*, circle