

mobilization of the marginated leukocyte pool are induced by glucocorticoids. Release of epinephrine, as with vigorous exercise, excitement, or stress, will demarginate neutrophils in the spleen and lungs and double the neutrophil count in minutes. Cigarette smoking can elevate neutrophil counts above the normal range. Leukocytosis with cell counts of 10,000–25,000/ μ L occurs in response to infection and other forms of acute inflammation and results from both release of the marginated pool and mobilization of marrow reserves.

Persistent neutrophilia with cell counts of $\geq 30,000$ –50,000/ μ L is called a *leukemoid reaction*, a term often used to distinguish this degree of neutrophilia from leukemia. In a leukemoid reaction, the circulating neutrophils are usually mature and not clonally derived.

TABLE 64-2 Causes of Neutrophilia