Hormone ablation therapy is a mainstay in the treatment of breast and prostate cancers. However, aromatase inhibitors (AIs) used in postmenopausal women with breast cancer and androgen-deprivation therapy (ADT) used in men with prostate cancer contribute to substantial bone loss, thereby increasing the risk of osteoporotic fractures. Evidence-based guidelines, therefore, urge oncology practices to screen these patients for bone loss and, if needed, provide treatment to maintain bone health. In addition to lifestyle modification and calcium or vitamin D supplementation, bone protection strategies include treatment with bisphosphonates and denosumab, a monoclonal antibody against RANK ligand. Identification of patients at greater risk for bone loss and fracture and proper interventions can reduce fracture rates. Oncology nurses can play an important role in screening these patients. The purpose of this article is to inform oncology nurses about the effects of cancer treatment on bone health, review current prevention and treatment options for cancer treatment–induced bone loss, and discuss recommendations for identifying high-risk individuals.