Any patient receiving an agent that targets microtubules (e.g., taxanes, vinca alkaloids, epothilones) is at some risk for encountering peripheral neuropathy. This article provides tools and discussion to aid nurses in managing peripheral neuropathy in their patients through early identification and education. Some patients are at higher risk than others based on their chemotherapeutic regimen, pretreatment history, and comorbidities. When interacting with at-risk patients, nurses should be alert for primarily sensory neuropathy that presents as loss of sensation, numbness, or tingling, beginning at the distal ends of the extremities and moving proximally with a stocking or glove distribution. Clinical assessments for neuropathy generally employ grading scales, questionnaires, quantitative sensory testing, and psychometric assessments; each has benefits and limitations. Patients who experience moderate or severe neuropathy may require a dose reduction or delay until symptoms resolve; these patients may need a lower dose for the next treatment cycle. No known agents have proven to be more effective at reducing the incidence and severity of microtubule-induced peripheral neuropathy than early intervention and patient education. In this respect, nurses can make a substantial difference in the impact of neuropathy on treatment efficacy and patients’ quality of life.