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Global Year Against Cancer Pain

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# Epidemiology of Cancer Pain

An estimated 6.6 million people from around the world die from cancer each year. Pain can occur at any point during the course of the illness. Many individuals with cancer will visit their health care professional because of pain, which may be the first sign of malignancy. The interventions used to diagnose cancer, including biopsies and other tests, can be painful. The treatment of cancer can be associated with both acute and chronic pain. Finally, advancing disease can lead to pain. Although pain is a greatly feared symptom associated with all phases of cancer, in most cases it can be adequately managed.

Estimates of the prevalence of cancer pain have varied widely, mainly because of a lack of standardization in definitions of pain and in the measures used to assess it, and because of the heterogeneity of nociceptive and neuropathic pain conditions. Other factors contributing to the wide variation in results include the heterogeneity of cancer diagnoses (breast, lung, etc.) and the types of treatment settings in which the studies were conducted (outpatient, inpatient, or community settings). In general, the prevalence of pain at the time of cancer diagnosis and early in the course of disease is estimated to be approximately 50%, increasing to 75% at advanced stages. A recent meta-analysis found the prevalence of pain in cancer survivors to be 33%. One strategy for evaluating the prevalence of pain in cancer patients is to consider the following categories: pain related to the cancer, to its treatment, or to unrelated causes.

**Pain Related to Cancer**
Tumors can impinge upon adjacent tissues, leading to pain. Although reports vary widely, the range of reported prevalence of pain is highest for the following tumors:

- Head and neck (67–91%)
- Prostate (56–94%)
- Uterine (30–90%)
- Genitourinary (58–90%)
- Breast (40–89%)
- Pancreatic (72–85%)

**Pain Related to Cancer Treatment**
Treatment-related pain may include painful peripheral neuropathy from chemotherapeutic agents such as vincristine, platinum, taxanes, thalidomide, bortezomib, and other agents; radiation-induced neural damage, including radiation-induced brachial plexopathy and postradiation pelvic pain syndrome; and postsurgical pain syndromes from mastectomy, amputation, and thoracotomy. (See the Fact Sheet on Treatment-Related Pain.)

**Pain Unrelated to Cancer or Its Treatment**
People with cancer may develop pain that is not related to cancer, such as peripheral neuropathy from diabetes or pain after surgery for unrelated conditions.

## References


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