With the demographic transition non communicable disease like cancer has become a matter of concern for health planners. It would be important to study the life time risk of development of cancer based on the incidence and mortality data. Cumulative incidence rate/ cumulative risk is popular indicators of risk of development of cancer. The present communication attempts to estimate the life time risk of development of cancer of leading sites considering the competing mortality from other causes through the cohort approach. The age specific incidence and mortality data has been utilized from reports of national cancer registry program for the year 1999 and the mortality (general) data has been used from SRS for the urban areas of respective states to which population based cancer registries represent. There are five urban population based registries viz. Bangalore Bhopal Chennai, Mumbai, Delhi and one rural based registry at Barshi. The life time risk (up to 70 years) of development of cancer of any site ranged from 8.6% to 6.5% in urban based registries where as it was 2.7% for rural based registry. For males, the risk of development of stomach cancer was highest for Chennai (1%) followed by Bangalore (0.7%) and for other registries it was of the order of 0.3%. The risk from lung cancer ranged from 0.8% to 1% in all urban registries where as it was 0.1% according to Barshi. The tongue and mouth cancer were at highest risk according to Bhopal registry. In females, cervical cancer was leading malignancy in all the registries (1.9%-2.6%) except for Mumbai and Delhi where breast cancer was leading followed by cervical cancer. The risk of development of cancer of any site ranged from 8.3% to 10.2% for females for all urban based registries where as it was around 5% according to rural registry in Barshi. The approach would help to compute the risk at different ages.