**Cancer Unit Study guide:**

* Be able to define:
  + Tumor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Benign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Malignant: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Metastatic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The stages of tumor growth:
  + Mutation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Hyperplasia: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Dysplasia: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + In Situ: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Invasive (malignant): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Cancer can develop at any age and in any organ
* Genes regulate normal cell growth. Cancer develops from the breakdown of normal cell division and growth. Cancer damages the genes.
* Know the difference between:
  + Incidence rate (the number of new cases per year per 100,000 people)
  + Survival rate (the number of patients alive at some point after their initial diagnosis of cancer)
  + Mortality rate (the number of deaths per 100,000 people per year)
* Review all info on Risk factors:
  + UV light from sun (especially fair skin people; the cancer could show up decades later)
  + Cigarette smoke (damages the genes that regulate normal cell/tissue growth)
  + Advancing age (especially older men)
  + Heredity (may be a contributing factor to the development of cancer; this means that the person is more likely to develop cancer than the general population)
* Healthy behavior habits can decrease risk of cancer development
* Cancer develops OVER TIME (likely after multiple exposures to risk factors)
* Cancer is a multistep process. There are two categories of genes that when mutations occur in them play major roles in cancer progression:
  + Proto-oncogenes (promote cancer cell growth in an uncontrolled fashion)
  + Tumor-suppressor genes (in mutated form these do not function properly)
* Carcinogen exposure can lead to the development of cancer (i.e.: Coal and Radium)
* Cancer cells in the lungs robs the lung’s normal cells from obtaining essential nutrients
* Microscopically, the cancer cells have a different appearance and shape than normal cells
* Examples of public health /public policy regarding cancer include:
  + banning cigarette smoking in public places,
  + Health care facilities offering routine mammograms and PAP smear screening
* Sweeping public policy regarding could be viewed as infringement on one’s freedom and rights