The five-year relative survival rate for localized breast cancer is 96%. However, it decreases to 77% for regional stages of the disease and to 21% for distant metastases. Seventy-one percent of women with breast cancer survive 10 years, and 57% survive 15 years.

**Survival:**

The one-year survival rate has increased from 32% in 1973 to 41% in 1995, largely due to improvements in surgical techniques. Five-year survival is only 14%. The survival rate for localized cases is 49%, but only 15% of lung cancers are discovered that early.

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**BREAST CANCER**

**Trends:**
The age-adjusted incidence rate for breast cancer among Pennsylvania women has been on the increase between 1987 and 1997 (see chart below). A review of staging data shows more diagnoses at earlier stages in recent years. It is projected that there will be almost 12,000 new cases diagnosed in 2000, compared to 11,410 in 1997. The number of deaths in 2000 due to this disease is estimated to be about 2,180, slightly lower than the 2,252 deaths reported for 1998.

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**LUNG CANCER**

**Trends:**
The chart below shows that the age-adjusted incidence rate for cancer of the trachea, bronchus, lung and pleura among Pennsylvania residents has increased since 1987. Over 76% of these cancers were diagnosed at late (regional and distant) stages of the disease in 1997. There were 10,027 cases reported in 1997 and almost 10,700 are expected in 2000. Deaths are projected to increase slightly, from 8,210 in 1998 to approximately 8,320 in 2000.

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**Signs and Symptoms:**

Earliest sign is an abnormality appearing on a mammogram. Symptoms that are physically detectable may include a lump, thickening, swelling, distortion or tenderness; skin irritation or dimpling; and nipple pain, scaliness or retraction. Breast pain is usually due to a benign condition and is rarely a first symptom of breast cancer.

**Risk Factors:**

Risk increases with age and for family history of breast cancer, long menstrual history, exposure to estrogens, recent use of oral contraceptives, never having children or having first child after age 30, daily alcohol use, and higher socioeconomic status.

**Early Detection:**

See Guidelines for Early Detection.

**Treatment:**

Lumpectomy or mastectomy and removal of lymph nodes under the arm, radiation therapy, chemotherapy or hormone therapy. Two or more methods are often used in combination. The patient’s condition and preferences are taken into account.

**Survival:**

The five-year relative survival rate for localized breast cancer is 96%. However, it decreases to 77% for regional stages of the disease and to 21% for distant metastases. Seventy-one percent of women with breast cancer survive 10 years, and 57% survive 15 years.

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**Signs and Symptoms:**

Persistent cough, sputum streaked with blood, chest pain, recurring pneumonia or bronchitis.

**Risk Factors:**

Cigarette smoking is by far the most important risk factor in the development of lung cancer. Other factors include exposure to certain industrial substances, such as arsenic; some organic chemicals and radon and asbestos, particularly for smokers; radiation exposure from occupational, medical and environmental sources; air pollution; tuberculosis; and second-hand tobacco smoke for nonsmokers.

**Early Detection:**

See Guidelines for Early Detection.

**Treatment:**

The options include surgery, radiation therapy and chemotherapy, determined by type and stage of the disease. Since the cancer has usually spread by the time it is diagnosed, radiation therapy and chemotherapy are often used in combination with surgery.

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**Risk Factors:**

Cigarette smoking is by far the most important risk factor in the development of lung cancer. Other factors include exposure to certain industrial substances, such as arsenic; some organic chemicals and radon and asbestos, particularly for smokers; radiation exposure from occupational, medical and environmental sources; air pollution; tuberculosis; and second-hand tobacco smoke for nonsmokers.

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**Survival:**

The one-year survival rate has increased from 32% in 1973 to 41% in 1995, largely due to improvements in surgical techniques. Five-year survival is only 14%. The survival rate for localized cases is 49%, but only 15% of lung cancers are discovered that early.
One-year and five-year survival rates are 80% and 61%, respectively. For early, localized stages, the five-year survival rate is 90%; however, only 37% are discovered then. Five-year survival for regional stages is 65% but drops to 8% for those diagnosed with distant metastases.

**Survival:**
Over 84% of the prostate cancers diagnosed among Pennsylvanians in 1997 were at the local stage. The five-year survival rate for these patients is 100%. The survival rate for all stages is 92%. Recent data also show that 67% of men with prostate cancer survive 10 years and 52% survive 15 years.

**Risk Factors:**
Over 75% of all prostate cancers are diagnosed in men over age 65. Blacks have the highest incidence rates in the world. There may be some familial tendency. Dietary fat may also be a factor.

**Early Detection:**
See Guides for Early Detection.

**Treatment:**
Surgery or radiation depending on patient’s age and stage of the cancer. Hormones and chemotherapy can also help reduce pain. “Watchful waiting” may be appropriate, too, especially for older persons and early stage diagnoses.

**Signs and Symptoms:**
Weak/interrupted urine flow; inability to urinate or difficulty starting or stopping flow; need to urinate frequently; blood in urine; pain or burning on urination; chronic pain in lower back, pelvis or upper thighs. Most of these symptoms can also be caused by other conditions such as infection or prostate enlargement.

**Prostate Cancer**

**Trends:**
As the area graph below shows, the state’s age-adjusted incidence rate for prostate cancer rose dramatically between 1987 and 1992. This increase was mainly due to more widespread use of a simple blood test (PSA) to detect this disease at its early stages. Rates declined from 1993 to 1995 but have begun to rise again. Projections for 2000 indicate that 9,000 new cases may be diagnosed, 900 less than in 1997. About 1,720 deaths are projected for 2000, slightly less than in 1998.

**Survival:**
Over 84% of the prostate cancers diagnosed among Pennsylvanians in 1997 were at the local stage. The five-year survival rate for these patients is 100%. The survival rate for all stages is 92%. Recent data also show that 67% of men with prostate cancer survive 10 years and 52% survive 15 years.

**Risk Factors:**
Over 75% of all prostate cancers are diagnosed in men over age 65. Blacks have the highest incidence rates in the world. There may be some familial tendency. Dietary fat may also be a factor.

**Early Detection:**
See Guides for Early Detection.

**Treatment:**
Surgery or radiation depending on patient’s age and stage of the cancer. Hormones and chemotherapy can also help reduce pain. “Watchful waiting” may be appropriate, too, especially for older persons and early stage diagnoses.

**Signs and Symptoms:**
Rectal bleeding, blood in the stool, a change in bowel habits.

**Colon Cancer**

**Trends:**
There has generally been a decline in the age-adjusted incidence rate for Pennsylvanians diagnosed with colon cancer between 1987 and 1997 (see graph below). The number of cases projected for 2000 is 6,815 which is slightly lower than the 6,853 reported to the Pennsylvania Cancer Registry for 1997. Among deaths, a slight decline is also expected in the number for 2000, compared to 1998. It is expected that just over 2,900 residents will die this year due to colon cancer.

**Survival:**
Over 84% of the prostate cancers diagnosed among Pennsylvanians in 1997 were at the local stage. The five-year survival rate for these patients is 100%. The survival rate for all stages is 92%. Recent data also show that 67% of men with prostate cancer survive 10 years and 52% survive 15 years.

**Risk Factors:**
Familial history of colon cancer or polyps and inflammatory bowel disease have been associated with increased colon cancer risk. Other possibilities include physical inactivity, high-fat and/or low-fiber diet, as well as inadequate consumption of fruits and vegetables.

**Early Detection:**
See Guidelines for Early Detection.

**Treatment:**
Surgery is the most common form of treatment and frequently results in a cure for cancers that have not spread. Chemotherapy or chemotherapy with radiation before or after surgery is recommended for patients whose cancer has significantly perforated the bowel wall or spread to the lymph nodes. Permanent colostomy (creation of an abdominal opening for elimination of body wastes) is seldom needed for colon cancer patients.

**Signs and Symptoms:**
Rectal bleeding, blood in the stool, a change in bowel habits.