Screening and Detection in Cancer Survivors

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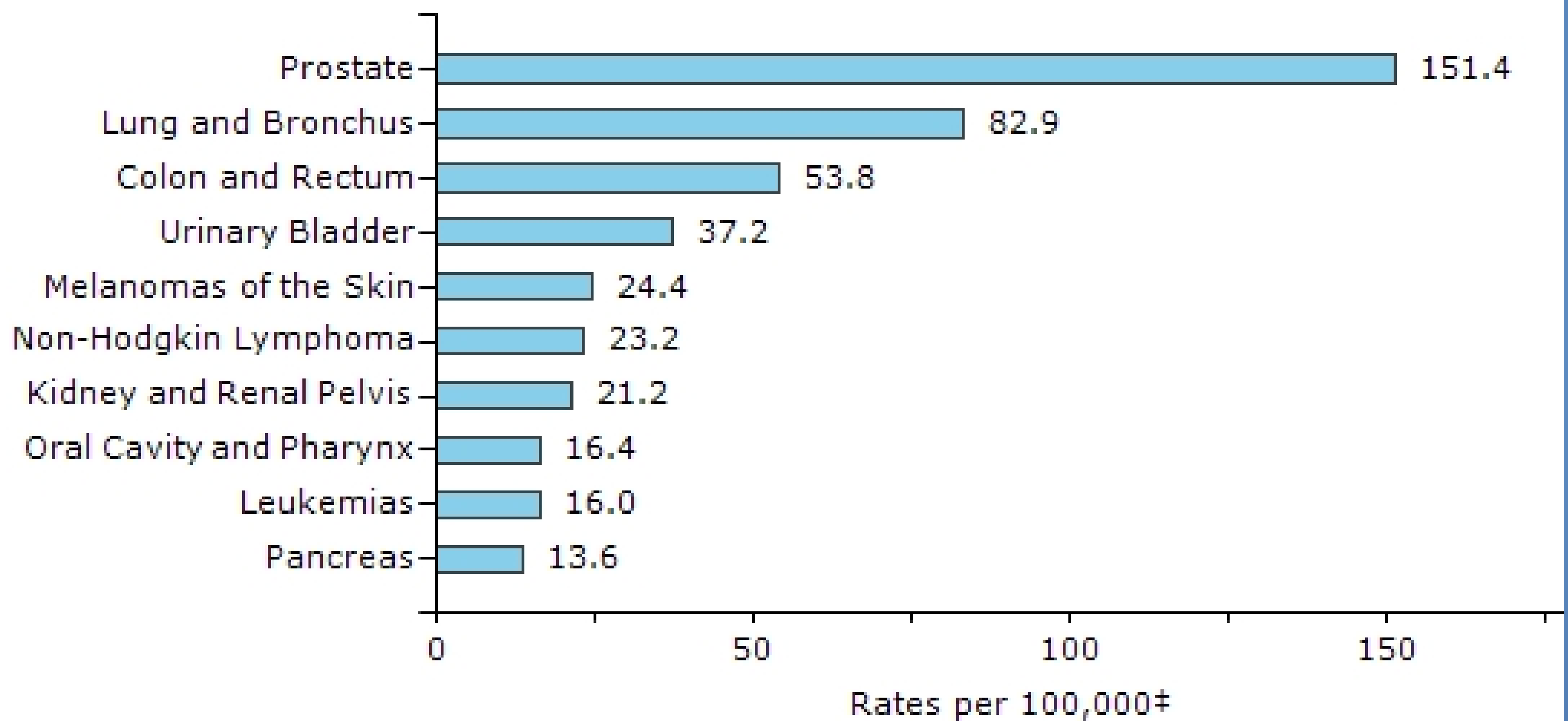
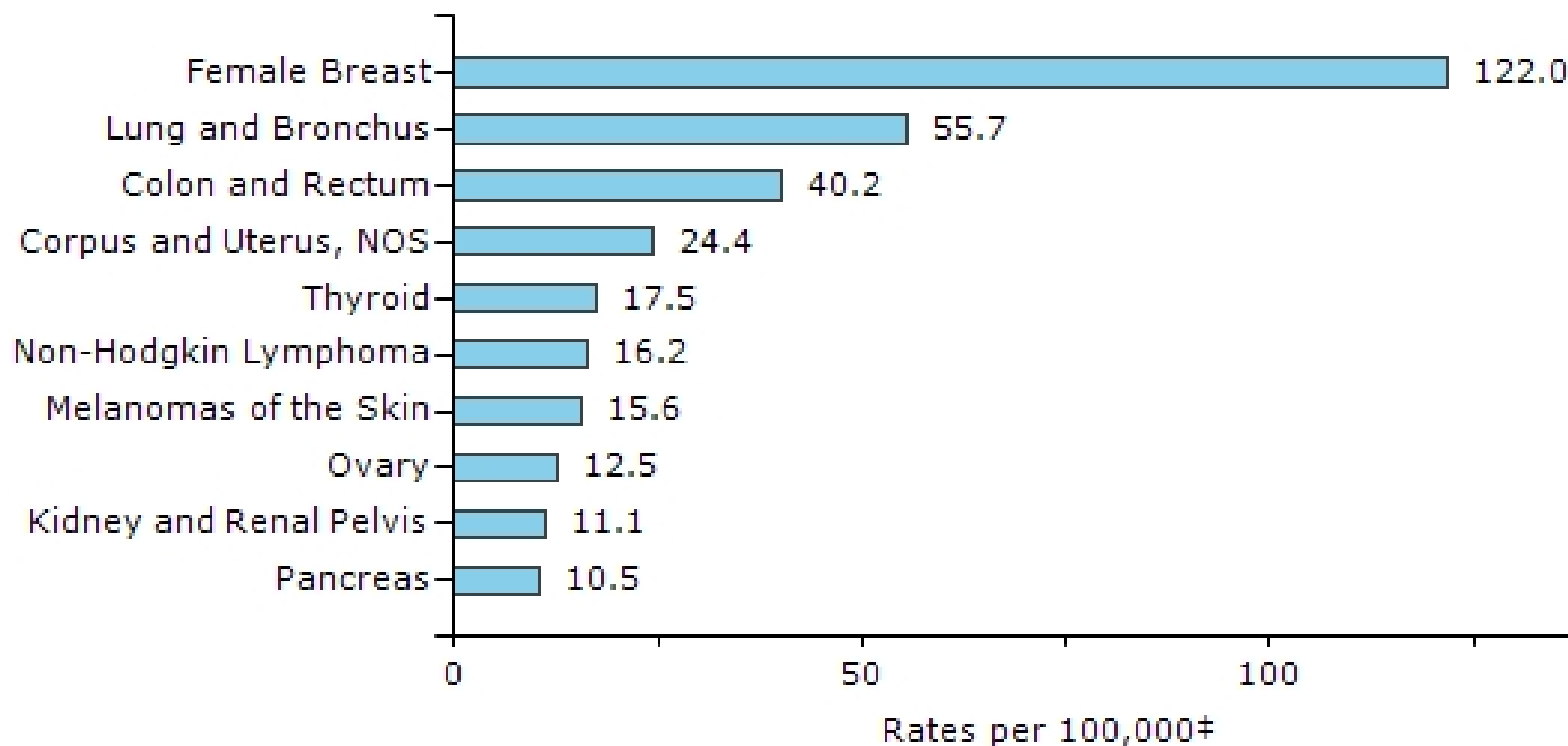
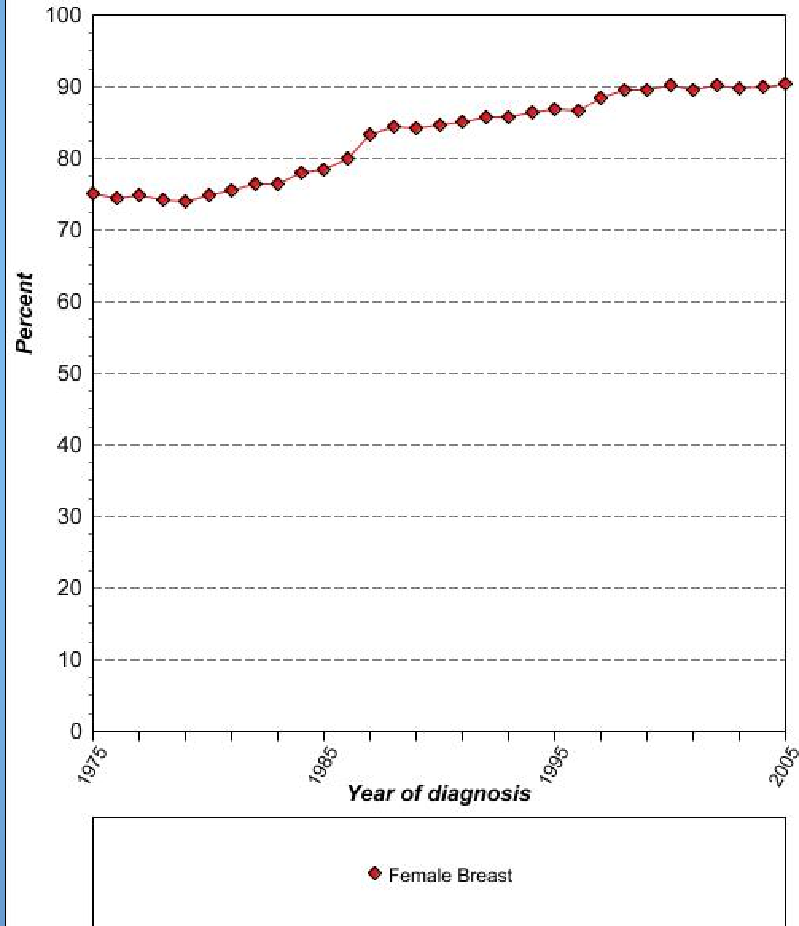

Top 10 Cancer Sites: 2005-2009, Male, United States—All Races
Prostate
151.4
Lung and Bronchus
82.9
Colon and Rectum
53.8
Urinary Bladder
37.2
Melanomas of the Skin
24.4
Non-Hodgkin Lymphoma
23.2
Kidney and Renal Pelvis
21.2
Oral Cavity and Pharynx
16.4
Leukemias
16.0
Pancreas
13.6
0
50
100
150
Rates per 100,000‡

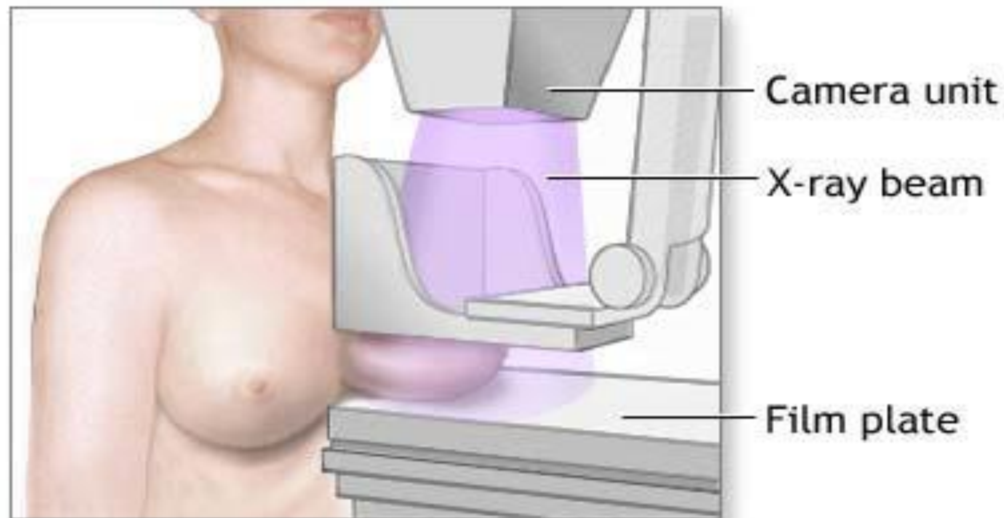

Top 10 Cancer Sites: 2005-2009, Female, United States—All Races
Female Breast
122.0
Lung and Bronchus
55.7
Colon and Rectum
40.2
Corpus and Uterus, NOS
24.4
Thyroid
17.5
Non-Hodgkin Lymphoma
16.2
Melanomas of the Skin
15.6
Ovary
12.5
Kidney and Renal Pelvis
11.1
Pancreas
10.5
0
50
100
Rates per 100,000‡

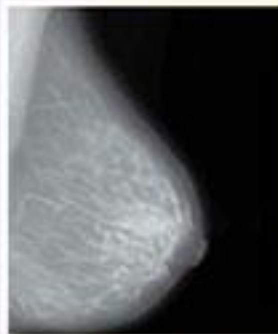
Breast Cancer



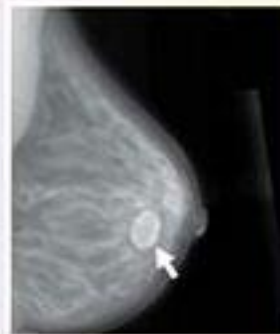
Summary of 2012 ASCO guideline recommendations for surveillance after breast cancer treatment

- History/physical examination: Every 3 to 6 months for the first three years after primary therapy, then every 6 to 12 months for the next two years, and then annually.
- Patient education regarding symptoms of recurrence
  - New lumps, bone pain, chest pain, dyspnea, abdominal pain, or persistent headaches.
- Referral for genetic counseling
  - Ashkenazi Jewish heritage; history of ovarian cancer at any age in the patient or any first- or second-degree relatives; any first-degree relative with a history of breast cancer diagnosed before the age of 50 years; two or more first- or second-degree relatives diagnosed with breast cancer at any age; patient or relative with diagnosis of bilateral breast cancer; and history of breast cancer in a male relative.
- Breast self-examination: Monthly

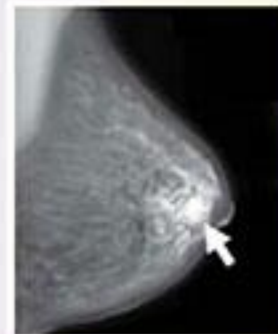




Normal mammogram



Benign cyst (not cancer)



Cancer

Summary of 2012 ASCO guideline recommendations for surveillance after breast cancer treatment

- Mammography:
  - Women treated with breast-conserving therapy should have their first posttreatment mammogram no earlier than six months after definitive radiation therapy.
  - Subsequent mammograms should be obtained every 6 to 12 months for surveillance of abnormalities.
  - Mammography should be performed yearly if stability of mammographic findings is achieved after completion of locoregional therapy.
- Pelvic examination: Tamoxifen therapy are at increased risk for developing endometrial cancer and should be advised to report any vaginal bleeding to their physicians. Yearly follow up with Gyn.

Not recommended by ASCO/NCCN

- Labs: CBC/CMP
  - However, screen for treatment related toxicities
- Imaging: NOT for surveillance
  - Chest X Ray, CT scan, PET scan, Bone scan, US, MRI Breast, etc
- Tumor markers: CA 15-3 or CA 27.29

NCCN Guidelines

- Women on an aromatase inhibitor or who experience ovarian failure secondary to treatment should have monitoring of bone health with a bone mineral density determination at baseline and periodically
- Evidence suggests that active lifestyle and achieving and maintaining an ideal body weight (20-25 BMI) may lead to optimal breast cancer outcomes

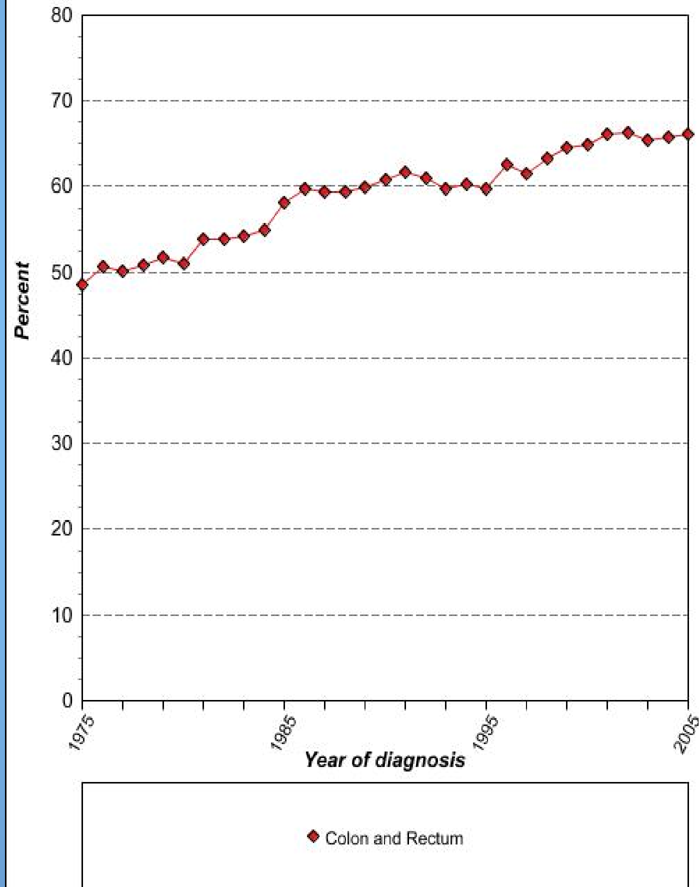
Lifestyle

- Observational data suggest that exercise, avoidance of obesity, and minimization of alcohol intake are associated with a decreased risk of breast cancer recurrence and death in survivor
- Soy: No convincing evidence that soy affects the risk of recurrence
  - Theoretical risk that phytoestrogens could stimulate the growth of hormonally sensitive cancers
  - Moderation of soy intake is suggested.
- Alcohol intake: Those who drank ≥6 grams of alcohol daily (3-4 drinks per week) had significantly higher rates of recurrence and death due to breast cancer than those who drank <0.5 grams daily.
  - Overweight and postmenopausal women seemed to experience the greatest harm

Societies	***Mammograms***
American Cancer Society	**40-70 yrs**
American College of Obstetrics and Gynecology	**40-70 yrs**
US Preventive Health Services Task force	**50-69 yrs**
National Cancer Institute	**40-**
American Academy of Family physicians	**50-69**

MRI Breast: Approved for high risk individuals

Colon Cancer



Colorectal Cancer: NCCN/ASCO guidelines

- History and Physical: Every 3-6 months for the first 2 years; then every 6 months for a total of five years.
- CEA: Every 3-6 months for the first two years, then every 6 months for a total of five years.
- CT scan:
  - Stage II-III: annual CT for 3 years.
  - Resected stage IV disease: CT every three to six months for two years then every six to 12 months for a total of five years.
- Colonoscopy: Full colonoscopy within 6 months of surgery. Repeat colonoscopy is recommended at three years, and if normal, every five years thereafter
  - Rectal Cancer: Proctosigmoidoscopy every six months for five years if status post low anterior resection

Lifestyle

- Physical Activity: Protective against CRC
- Diet: High in fruits and vegetables and protection from colorectal cancer. High Fiber uncertain.
- Aspirin: Protective in early stage CRC
- Smoking and Alcohol: Increased risk of CRC

Colorectal Cancer

- **American Cancer Society:**

"One of the following above the age of 50. FOBT yearly, Sigmoidoscopy every 5 yrs; colonoscopy every 10 ys; DCBE every 5-10 yrs. (DRE at the time of screening)

- **US Preventive Health Services Task Force:**

"FOBT and/or sigmoidoscopy yearly at age 50 and older."

- **National Cancer Institute:**

"FOBT either annually or biennially b/w 50-80 y decreases mortality for colorectal cancer. Regular screening by sigmoidoscopy may decrease mortality from colorectal cancer"

Recommended Tests (Start Age 50):

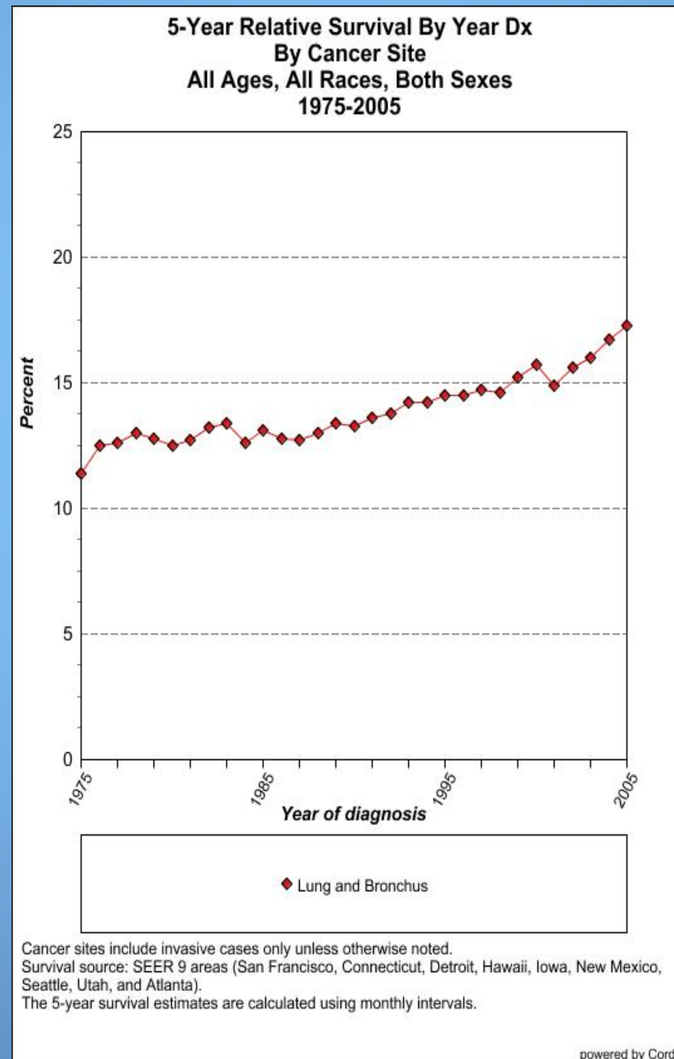
Check stools for blood,

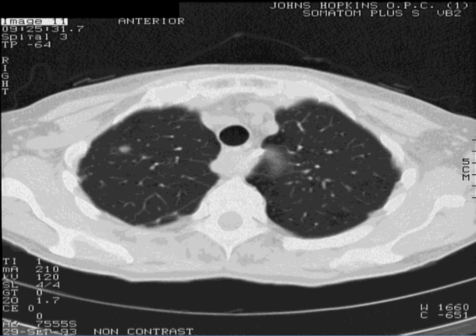
Rectal Exam

Colonoscopy

Virtual Colonoscopy (CT Scan of the bowels)

Lung Cancer

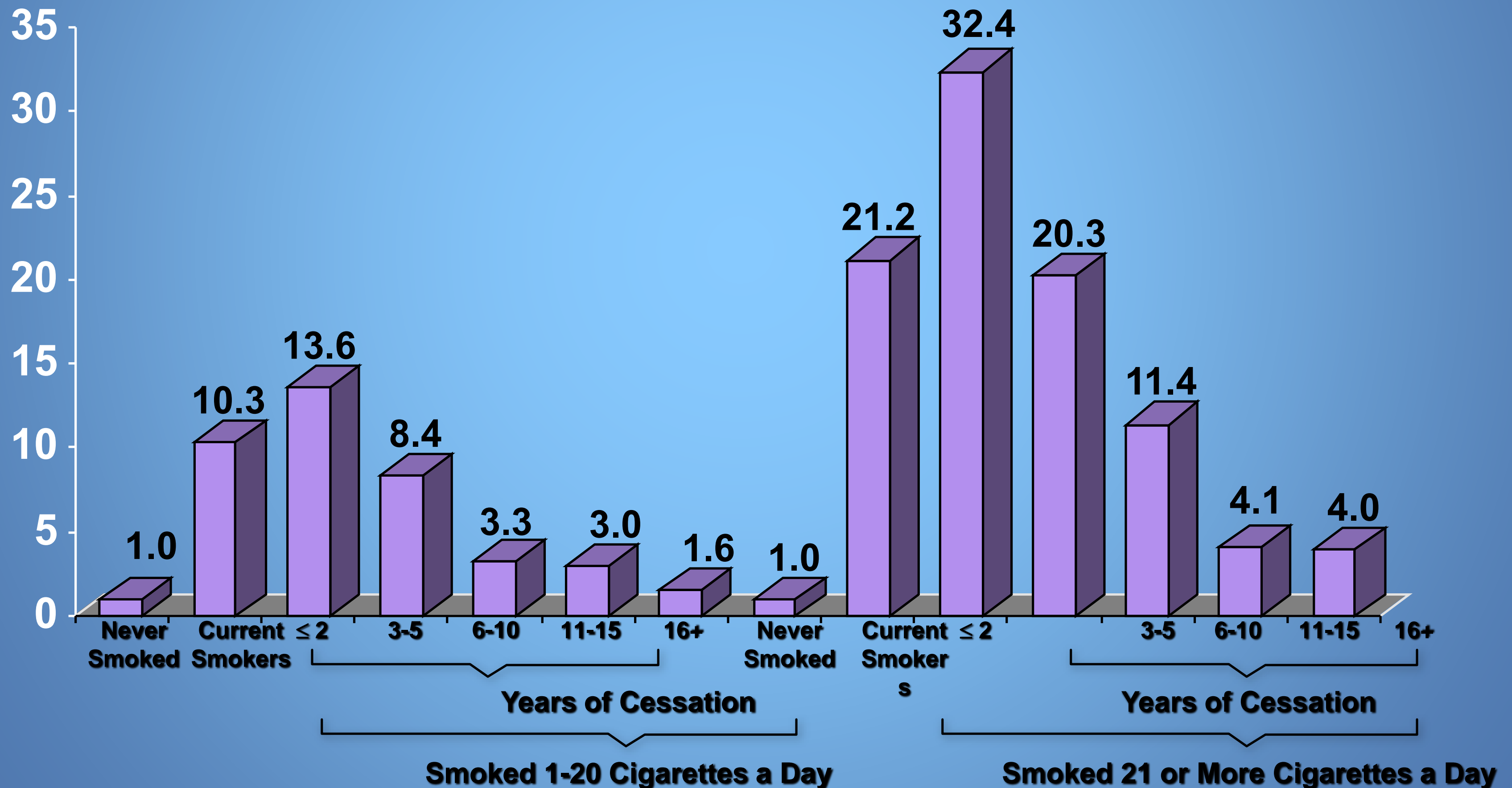




Lung Cancer Screening

- H&P: CT every 6-12 months for 2 years then annual for 5 years
- CXR/sputum: Not recommended for screening
- Low Dose CT: The National Lung Screening Trial
  - Reduced mortality in a high-risk population, compared to screening by x-ray
    - High risk was defined by the NCCN as age 55 to 74 years with a 30 pack-year history of smoking and, if no longer smoking, smoking cessation within 15 years
    - 20 pack-year history of smoking with one additional risk factor (other than secondhand smoke exposure)
    - Barriers: Cost/Insurance
- **Smoking cessation is a more proven and powerful intervention for preventing death and complications from lung cancer and other diseases than screening**

Lung Cancer Risk After Smoking Cessation*



* Garfinkel L, Silverberg E. *CA Cancer J Clin.* 1991;41:137-145.

Prostate Cancer

- Most common cancer
- PSA is detected in the blood
- Discuss with doctor PSA screening and prostate exam at the age of 50
  - High risk populuations
    - African Americans
    - Family history of Prostate cancer

QUESTIONS

- “An ounce of prevention is worth a pound of cure.”
- “Mas vale prevenir que lamentar”