

Skin Cancer Epidemiology and Prevention

Directions: Read the following media reports and then proceed to the exercise that follows.

PHOENIX (Reuters) — Republican Sen. John McCain was released from a Phoenix hospital Wednesday, emerging cancer-free from his latest bout with a deadly form of skin disease, a spokeswoman said. McCain, Arizona's senior senator and a former presidential candidate, was given a clean bill of health after an overnight stay at the Mayo Clinic Hospital to treat an early melanoma on the left side of his nose, said Nancy Ives, a McCain spokeswoman. "He was in good spirits and was joking with staff," Ives told Reuters. "He plans to take it easy for the rest of the week before returning to Washington." McCain, 65, left the hospital with a gauze bandage on his face and would have some stitches for about one week, she said. His activities are not restricted.

Skin Cancer Epidemiology and Prevention Part I Doctors took about an hour Tuesday covering the scar left when the tumor was removed the previous day during outpatient surgery. A pathology report confirmed the melanoma discovered during a checkup on Jan. 17 had been totally removed, she said. It was the third time the fair-skinned McCain has been diagnosed with skin cancer, but Ives said the new tumor was not related to any melanoma he had previously. McCain had surgery to remove melanomas from his left temple and left arm after his 2000 campaign for the Republican presidential nomination, which he lost to then-Texas Gov. George W. Bush. He also had a melanoma removed in 1993.

Melanomas are the most deadly form of skin cancer, affecting more than 53,000 Americans and killing more than 7,000 annually. Doctors consider early detection a key, catching it before the cancer invades the skin deeply. People who have had them are cautioned to watch for lesions that have uneven or irregular borders and contain multiple shades of brown or black.

It is early February 2002, and news media around the country are reporting that Senator John McCain has been diagnosed with a recurring melanoma. Successful surgery follows, but the report has come on the heels of the death from melanoma of former President Reagan's daughter, Maureen Reagan. These high-profile cases focus attention on skin cancer, and you, as Chief Disease Detective for the State of Delaware, are asked to prepare a briefing for the governor on the problem nationally and in your state, and how to prevent it.

A quick search of the data tells you that in 2001 doctors diagnosed approximately 51,400 new cases of melanoma, and about 7,800 people died of the disease. You locate data indicating that the incidence of melanoma has been on the rise since the early 1970s.

The Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute collects and publishes cancer incidence and survival data from registries covering approximately 14% of the U.S. population. Using the SEER data in the table on the next page, answer the questions that follow.

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1. According to the above article, melanoma relates to what type of cancer?
 - a. lung
 - b. heart
 - c. skin

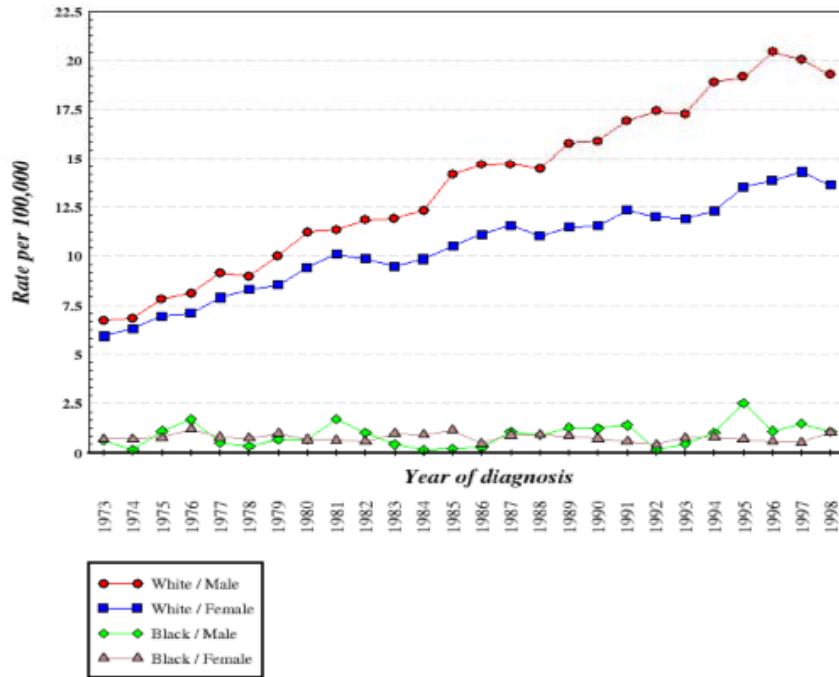
2. What year did Senator John McCain first have melanoma removed?
 - a. 2000
 - b. 2001
 - c. 1993

3. Approximately, how many people were diagnosed with melanoma in 2001?
 - a. 40,000
 - b. 50,000
 - c. 60,000

4. If 7,000 Americans die from melanoma per year, how many Americans will die from melanoma in 5 years?
 - a. 28,000
 - b. 35,000
 - c. 40,000

5. What type of cancer did Senator John McCain get?
 - a. sarcoma
 - b. melanoma
 - c. carcinoma

Figure 1. Age-adjusted incidence of melanoma by race and gender; SEER data, 1973–1998.
 (Source: National Cancer Institute)



According to Figure 1 above, give the 1998 incidence rate for the following groups:

White Male _____

White Female _____

Black Male _____

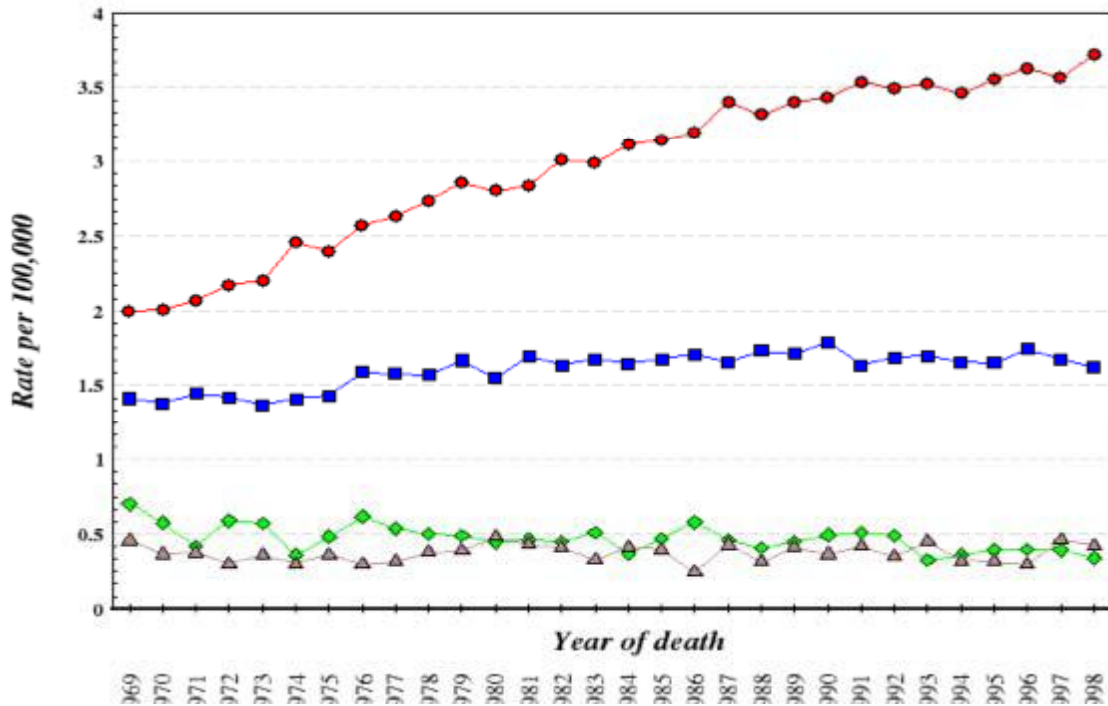
Black Female _____

What gender and ethnicity had the highest incidence of melanoma?

- a. White Male b. White Female c. Black Male d. Black Female

Figure 2. Age-adjusted melanoma mortality rates by race and gender, 1969–1998.

(Source: National Center for Health Statistics, CDC)



Referring to Figure 2, give the 1998 mortality rates for the following groups:

Black Men _____

White Women _____

Black Men _____

Black Women _____

What year had the highest mortality rate for white males?

- a. 1995 b. 1996 c. 1997 d. 1999