

[rdabbagh@ksu.edu.sa](mailto:rdabbagh@ksu.edu.sa)

Exercise 1:

B

C

A

Exercise 2:

Incidence of prostate cancer:

$20,734 / 13,963,753 = 0.00148 \Rightarrow 148 \text{ cases per } 100,000 \text{ population} \Rightarrow 148 \times 10^{-5}$

Incidence of breast cancer:

133 cases per 100,000 population

Exercise 3:

Homicide related deaths in males :

$15,555 / 139,813,000 = 11.1 \text{ deaths per } 100,000$

Homicide related deaths in females:

3.3 deaths per 100,000

Ratio of mortality rate between men and women:  $11.1 / 3.3 = 3.2:1$

Exercise 4:

Proportionate mortality for age 24-44 years = 12.6%

Proportionate mortality from homicide = 5.7%

Exercise 5:

Case fatality ratio for H5N1 =

number of deaths due to a specific disease / the total number of cases from that disease =

$6 / 18 = 33\%$

Exercise 6:

Incidence rate of bronchitis among those exposed:

Number of new cases among those exposed / the total at risk exposed population during the 5 years

$$(268-30) / (6000-60) = 40.1$$

Incidence of bronchitis among the unexposed:

Number of new cases unexposed / total unexposed population at risk during the 5 years

$$30 / (3000-30) = 10.1$$

Incidence rate of chronic bronchitis for the 5 years in total:

$$268 / (9000 - 90) = 30.1$$