

Measuring the Occurrence of Disease



- Incidence
- Prevalence
- Surveillance

Frequency Measures

- Count - # of cases, # of deaths

- Ratio

- divide one quantity by another

- no specified relationship between numerator and denominator

- ie. 1000 motorcycle fatalities 950 are men, 50 women $950/50 = 19:1$ male to female

- Ie. # stillbirths per thousand live births

- general term includes specific measures such as proportion, percentage and rate

Frequency Measures

Proportion

- Numerator is part of the denominator, may be expressed as percentage
- Fraction implying relative size of group
 - ie. Proportion of women over age of 50 who've had hysterectomy
 - ie. # of fetal deaths out of total # of births (live births + fetal deaths)
 - ie. Proportion of African-American male deaths among A.A. and Caucasian boys aged 5 to 14 years:

a. Deaths among A.A. males	5-14 =	1,150
b. Deaths among C. males	5-14 =	3,810
	total	4,960

$$a/(a+b) \times 100 = (1,150/4,960) \times 100 = 23.2\%$$