

Research Methods

Chapter Two

Pages 25-56

Chapter Two: Tasks

1. Take quiz on Blackboard

(Available under “Content”)

You will have 75 minutes to complete this 10 item quiz in one setting.

2. Assigned reading on Open Lab titled “Bad Blood”

(Available on Main Page)

Please answer 2 of 5 questions after reading by leaving a “Comment”

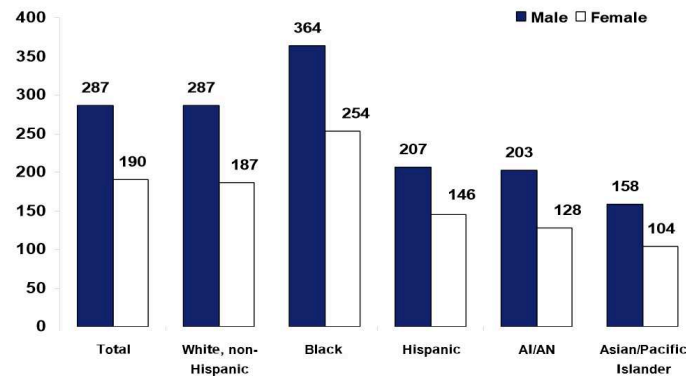
Measuring Health

- What is an epidemiologist?
- “Calculating Rates” (page 28)
 - **Mortality:** number of deaths caused by specific illness per population
 - **Morbidity:** number of specific illnesses per population
 - **Incidence:** number of *new* cases of specific illness per population (for a specific time)
 - **Prevalence:** number of *all* current cases of specific illness per population (for a specific time)
 - **Relative risk:** number of cases of specific illness in one population relative to another population

Mortality

Chart 3-11. Black men and women are more likely to die from heart disease than all other racial/ethnic groups.

Heart disease deaths per 100,000 resident population (all ages), 2003



AI/AN = American Indian/Alaska Native.

Note: Data are age adjusted.

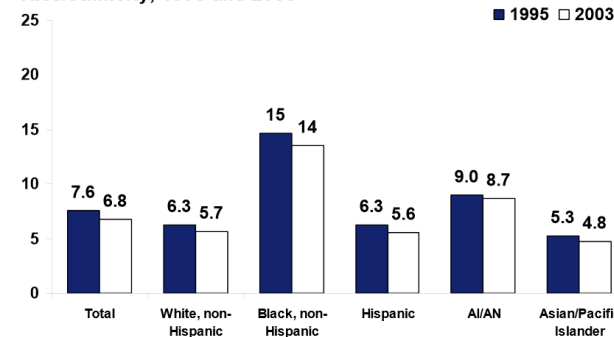
Source: National Center for Health Statistics. *Health, United States, 2006: With Chartbook on Trends in the Health of Americans*. 2006.



Chart 3-5. Infant mortality rates are still more than two times higher for blacks than for whites, despite a slight decline for all groups in the past eight years.

28

Deaths per 1,000 live births by maternal race/ethnicity, 1995 and 2003



AI/AN = American Indian/Alaska Native.

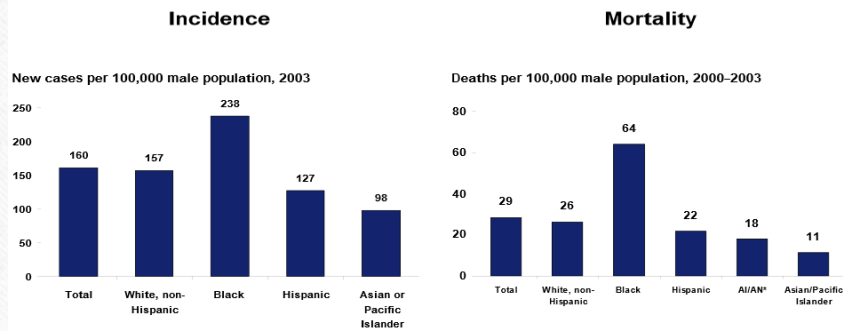
Note: Infant is defined as a child under one year of age.

Source: T. J. Matthews and M. F. MacDorman, "Infant Mortality Statistics from the 2003 Period Linked Birth/Infant Death Data Set," *National Vital Statistics Reports*, May 3, 2006 54(16):1-29.



Incidence and Mortality*

Chart 3-14. Black men are 50 percent more likely to have prostate cancer than whites but are more than twice as likely to die from it.



AI/AN = American Indian/Alaska Native.

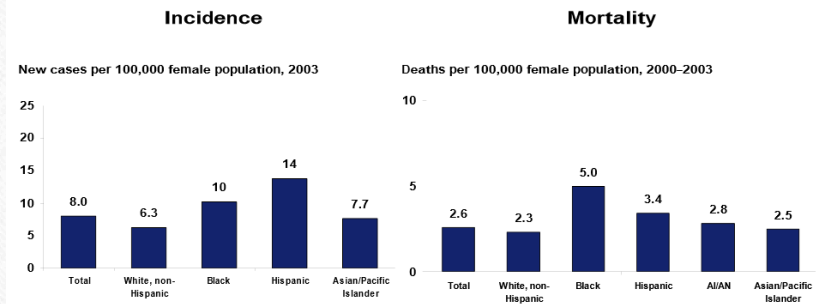
Note: Data are age adjusted.

Source: National Center for Health Statistics. *Health, United States, 2006: With Chartbook on Trends in the Health of Americans*. 2006.



Chart 3-15. Hispanic women are twice as likely to have cervical cancer than whites; black women are twice as likely to die from the disease.

38



AI/AN = American Indian/Alaska Native.

Note: Data are age adjusted.

Source: National Cancer Institute, *Surveillance Epidemiology and End Results (SEER) Cancer Statistics Review, 1975-2003*.

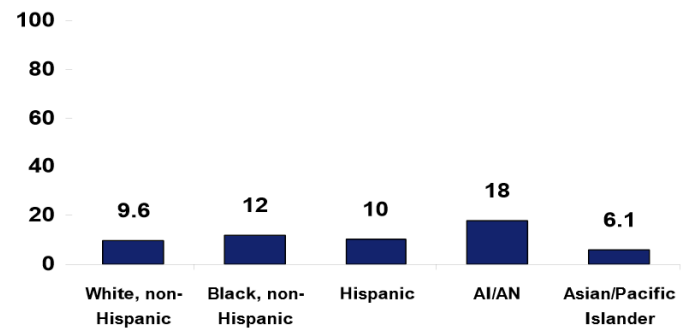


Morbidity

Chart 3-20. American Indians/Alaska Natives are nearly twice as likely as whites to have frequent mental distress.

43

Percentage of noninstitutionalized adults over 18 with frequent mental distress, 2005



AI/AN = American Indian/Alaska Native.

Note: Frequent mental distress is defined as having 14 or more mentally unhealthy days in the year.

Source: Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. 2005.

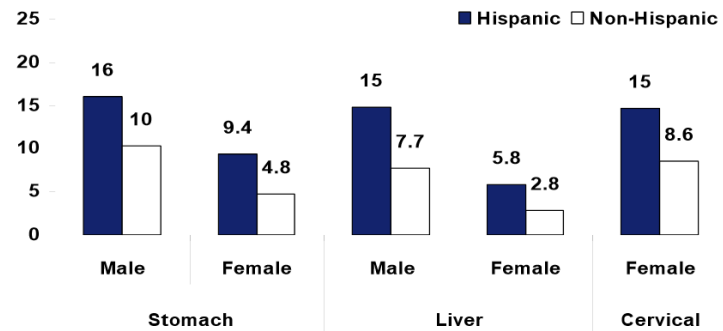


Prevalence

Chart 3-16. Hispanics are more likely to suffer from infection-related cancers than non-Hispanics.

39

Incidence of selected infection-related cancers per 100,000 population, 1999–2003



Note: Data are age adjusted to the 2000 U.S. standard population.

Source: H. L. Howe et al., "Annual Report to the Nation on the Status of Cancer, 1975–2003. Featuring Cancer Among U.S. Hispanic/Latino Populations," *Cancer*, Oct. 15, 2006 107(8):1711–42.

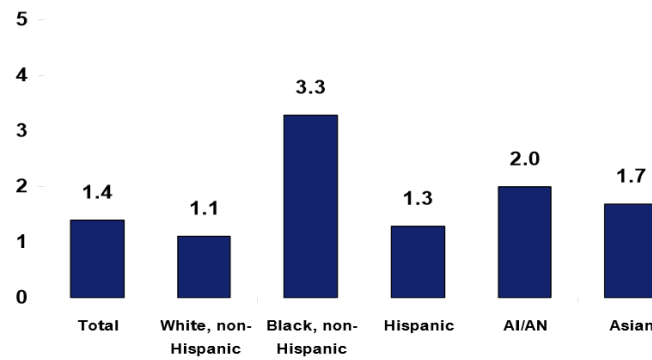


Relative Risk

Chart 3-19. Blacks are three times more likely to die from asthma than whites.

42

Number of asthma deaths per 100,000 people, 2003



AI/AN = American Indian/Alaska Native.

Note: Data are age adjusted to the 2000 United States standard population.

Source: L. Akinbami, *Asthma Prevalence, Health Care Use and Mortality: United States, 2003-05*.
National Center for Health Statistics.



Questions:

- *What* do these charts tell us?
- How do you *feel* about the usefulness of these charts after hearing Dr. Jaffe's thoughts?
- How *should* these charts be used?
- How might these charts *inform research* done by health psychologists?

See more at [The Common Wealth Fund](#)

Methodology

- Qualitative vs Quantitative
- Experimental vs Non-experimental
- Relationships vs Cause & Effect

Experiments are the ONLY research method capable of revealing Cause & Effect

Methodology

Qualitative (non-experimental)

- Case study
- Focus groups
- Interviews

Quantitative (non-experimental)

- Correlational studies
- Quasi-experimental
- Interventions
- Longitudinal versus cross-sectional

Methodology

- Experimental research
 - Referred to as the “Gold Standard” of science
 - Independent variable(s)
 - Dependent variable(s)
 - Confounding variables
 - Random sampling
 - Grouping (control vs experimental)

Health Research and Ethics

- Open Lab assignment “Bad Blood”
- Stay tuned... guest lecturer coming soon!

Great Example of Current Research

- Rick Gibbons

- Longitudinal
- Gene x Environment interactions
- Family context
- Neighborhood context
- Behavior change
- Race= Identity (Black identity) and Experiences (history of discrimination)

Next:

1. Take ONLINE quiz on Research Methods
2. Read “Bad Blood” and post response
3. Thursday– health behavior change theory
4. Thursday- extra credit opportunity (requires Instagram)
5. Stay tuned for Live Well updates!