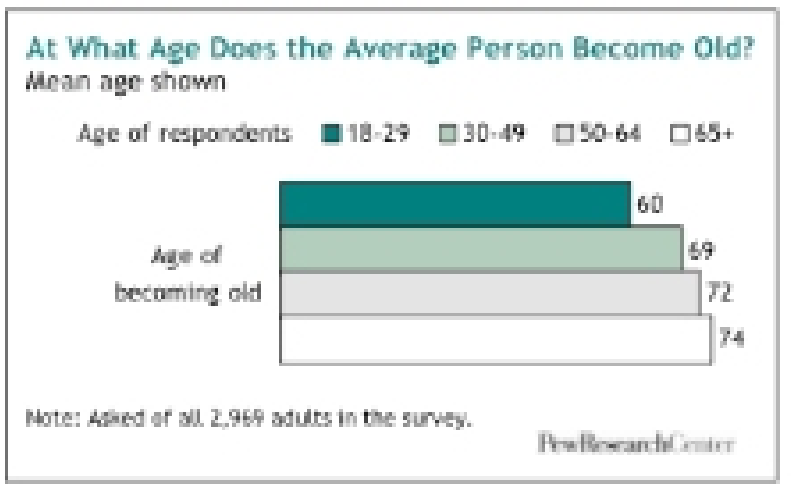
2. The Demography of Aging: Challenges & Opportunities

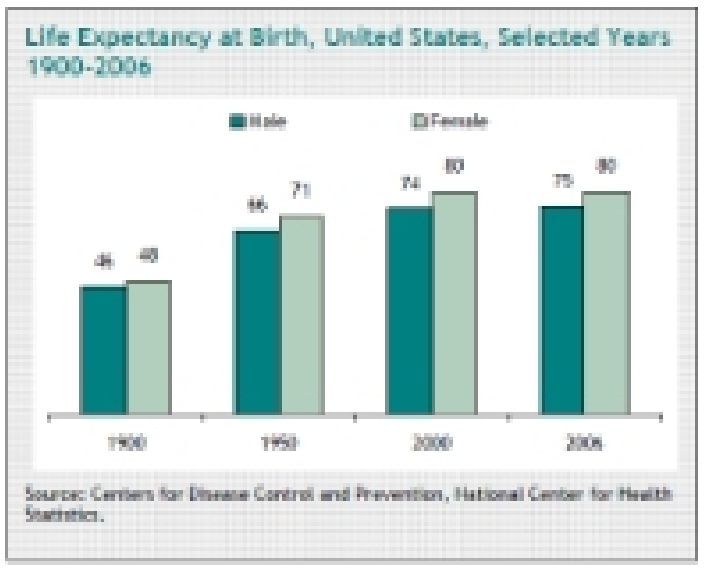
- **What is Gerontology?**
  - Definition of **Gerontology**
    - Interdisciplinary scientific study of aging and the aging process
  - Relatively new discipline
    - Due to people previously in 1800 lived only up to 40 years old, scientists needed to wait for older adults
  - Definition of Geriatrics
    - Study of the diseases of the elderly
- **How old is "OLD" ?**



- **Older Adults**
  - Young-Old:
    - 55-85 years old
  - Oldest-Old:
    - 85 and older
  - Centenarians:
    - 100 years old and over
- **The Meaning of Age**
  - How old do you feel today?
  - Chronological Age
    - Calendar age (ex.22)
  - Perceived Age
    - Age you think of yourself as (ex. 18 or 49)
  - Biological Age
    - Functioning of vital systems
      - EX. Biological functions
  - Psychological Age
    - Functioning of Psychological Abilities
      - EX. Are you doing what we expect at that age?

- **Limits of the Human Life Span?**
  - Are there limits to the human lifespan?
    - Current human lifespan is ***about 120 years***
      - Believed by some scientist to be the limit of the human life span
      - Jeanne Calment
        - From France, was one of the only two human beings known to have lived to age 120
          - Calmen is shown on her 122th birthday in February 1997

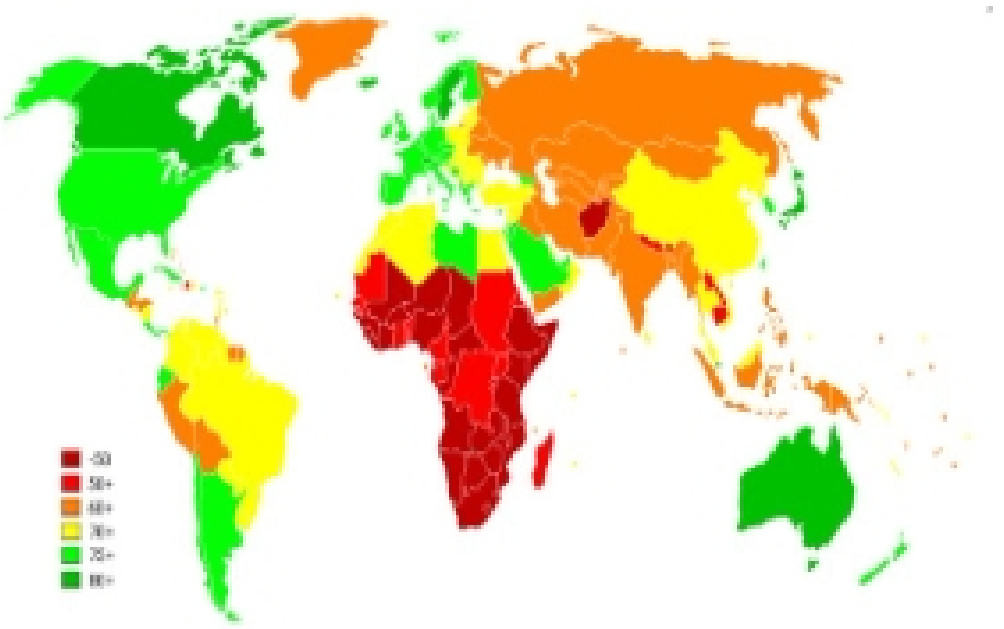
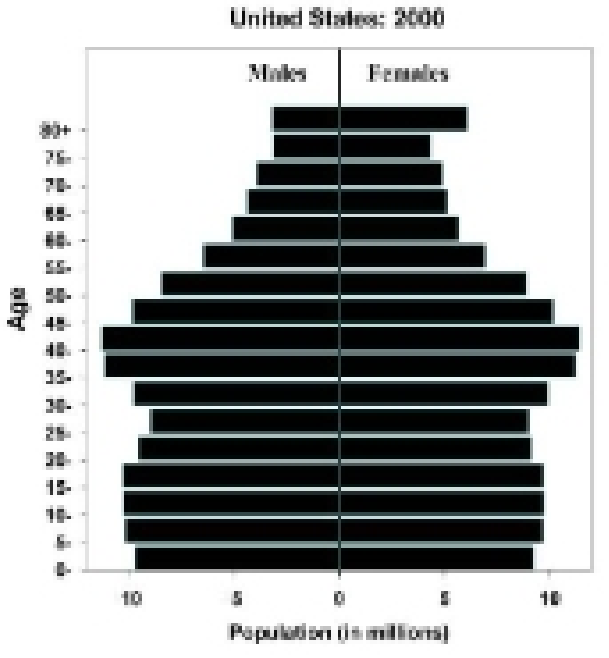
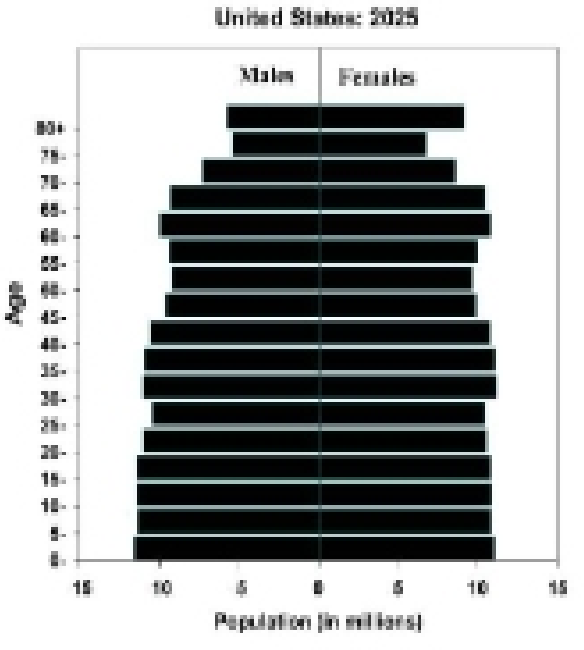
  - How old is the oldest living person?
    - Misao Okawa 117 years old from Japan



- **Increased Life Expectancy Due to:**
  - Change in medicine
    - Preventative Medicine (Vaccines)
    - Surgeries
    - Chemo/Radiation
    - MRI/X-Rays
  - Changes in Technology
    - Reduction in Acute Disease
      - Medical and Public Health Advances
    - Reduction in infant mortality
    - Reduction in female mortality at childbirth
    - Treatment advances in Chronic Disease
      - Medical and Lifestyle
- **Life Expectancy**
  - The number of years that will probably be lived by the average person born in a given year
  - Average life expectancy is ***about 78 years***
    - Women: ***about 80 years***
    - Men: ***about 75 years***
      - Due to:
        - Taking more risky behaviors,
        - More stress through life to provide for family
        - Less doctor visits
        - Prone to Heart Disease
        - One less chromosome them women

- Related to
  - Gender
  - Genetics
  - Lifestyle (Exercise, diet …)

- **Life Expectancy World Map**



- **Crash Course in Demography**
  - **<u>Population Aging</u>**
    - Terms for shifts in the age distribution of the population toward older ages
  - **<u>Cohort</u>**
    - Group of people born in the same year (1992)
  - Why do you care?
    - Population changes affects:
      - Families
      - Social Policy
      - Economics
      - Well-being
  - Change from Pyramid to Rectangle
    - ***2000*** – TRIANGLE
    - ***2025*** – RECTANGLE