### ACTUARIAL RESEARCH CLEARING HOUSE 1998 VOL. 1

### Challenge of an Aging Society

Presented by Anna M. Rappaport

To 1997 Research Conference

August 6-8, 1997

### Agenda

- Introduction
- Some key facts
- What are the problems
- Challenges to actuaries

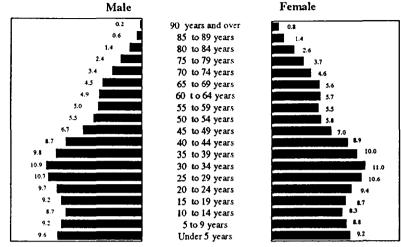
#### Introduction

- Some key facts
  - · Population is aging
  - · Elderly are heavily female
  - · Many need assistance with ADLs or IADLs
  - Females are not as well off as males
  - Social Security has facilitated early retirement

#### Introduction - continued

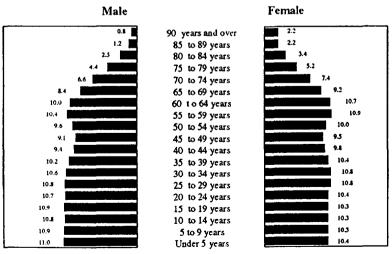
- U.S. perspective, but
  - Similar issues in Western countries
  - High level of awareness of the issues
  - Disagreement about how to address
  - · Reluctance to make tough decisions

# Population by Age and Sex: 1990 (Millions)



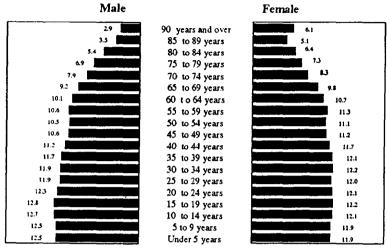
Source: Bureau of the Cennus September 1993. We the American ... Elderly, pg. 1

# Population by Age and Sex: 2020 (Millions)



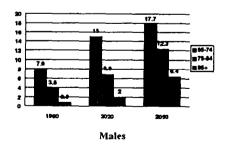
Source: Bureau of the Cerous, September 1993, We the American ... Ederly, pg. 3

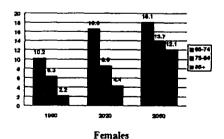
# Population by Age and Sex: 2050 (Millions)



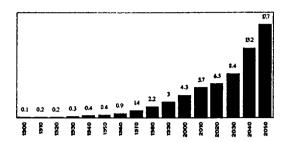
Source: Bureou of the Census. September 1993. We the American ... Elderly, pg. 3

#### **Number of Persons (Millions)**



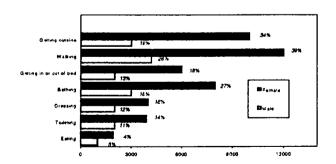


# Population 85 Years Old and Over: 1900 to 2050 (Millions)



Source: Bureau of the Census, September 1993, We the American ... Elderly, pg. 4

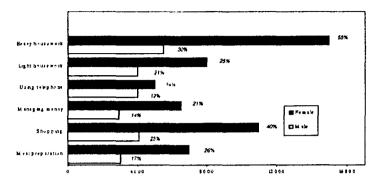
Estimated Number of Arizonans Aged 85+ Who Have Difficulty Performing One or More Activities of Daily Living, by Gender and Activity, Arizona, 1992



Total Number of Persons in Age 85+ Age Group: Male - 13,000; Female - 27,000

Source: Angona Department of Herlih Services, May 1995, Health Status Profile of Angona's Older Adults, pg. 14

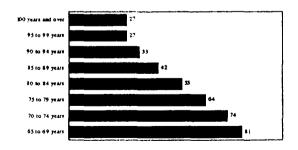
Estimated Number of Arizonans Aged 85+ Who Have Difficulty Performing One or More Instrumental Activities of Daily Living, By Gender and Activity, Arizona, 1992



Total Number of Persons in Age 85+ Age Group: Male - 13,000; Female - 27,000

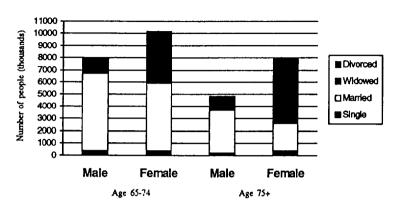
Source: Aragona Department of Health Services, May 1995, Health Status Profile of Aragona's Older Adults, pg. 15

### Number of Elderly Men Per 100 Women by Age: 1990



Source: Bureou of the Centus, September 1993, We the American ... Elderly, pg. 7

### Marital Status By Age and Sex, 1994



Source: U.S. Bureau of the Census, Statistical Abstract of the United States: 1995 (115th edition.) Washington, DC. 1995, p55

### Annual Median Income Age 55 and Over, 1992

	<u>Male</u>	Female	
Individuals			
Married	\$19,100	\$ 7,000	
Widowed	12,600	9,400	
Divorced	16,100	11,400	
Never married	12,200	11,500	
Family Income 1990 age 65 and over			
Married	\$25,700		
Unmarried individual	12,600		

Source: EBRI, Retirement in the 21st Century...Ready or Not...(1994), T2.2, p.54 and T2.3, p.55

U.S. Male Labor Force Participation Rate by Age, 1940 to 1994 (Percentages)

	v.gc						
Year	55	60	61	63	65	68	70
1940	90.9	82.9	79.2	78.2	66.1	54.9	43.4
1950	87.8	82.1	78.4	77.6	67.7	54.2	44.3
1960	89.9	83.2	79.4	75.7	53.6	39.4	33.2
1970	91.8	83.9	80.1	69.4	49.9	39.4	30.1
1980	84.9	74.0	69.6	52.3	35.2	24.1	21.3
1982	86.4	72.1	67.1	45.2	30.6	24.8	21.1
1983	85.7	71.5	67.7	46.5	31.0	22.7	19.2
1984	84.3	70.2	66.1	48.2	30.4	21.3	18.3
1985	83.7	71.0	66.5	44.7	30.5	20.5	15.9
1986	84.1	69.2	66.2	44.3	30.7	20.7	17.1
1987	83.9	69.8	65.2	45.6	31.7	22.9	17.1
1988	82.5	68.8	65.0	45.0	31.1	22.5	18.1
1989	83.7	70.7	66.4	44.5	31.4	22.2	17.9
1990	85.3	70.5	67.0	45.5	31.9	23.4	17.1
1991	82.5	70.6	66.4	44.6	30.6	21.2	16.9
1992	83.9	68.6	65.7	45.7	32.0	20.7	16.8
1993	83.4	68.3	63.9	45.8	30.5	22.2	17.3
1994	80.9	65.9	63.6	45.1	33.0	22.7	18.6

Source: Presentation by Richard Burkhauser at 1996 Bowles Symposium, "The Old Age Crisis: Actuarial Opportunities." Labor force participation rates for 1940, 1950 and 1960 are based on decennial U.S. census data. They are from unpublished Department of Labor statistics, based on annual Consumer Population Surrey labor force participation questions.

## Percent of Population Needing Care in Great Britain

Estimated Number of

OPCS Category	Likely Care Need	Disabled Li in 1985 (ti	ves in G.B.	Estimated Prevalence Rate (%)	
		16 - 59	60+	16 - 59	60+
1 - 2	Low-occasional	667	1,371	2.1	12-0
3 - 5	Moderate, probably less than daily	716	1,446	2.2	12-6
6 - 8	Regular, probably daily	422	1,005	1.3	8.8
9 - 10	Continuous	121	454	0.4	4.0

#### What Are the Problems?

- Social Security and Medicare funding won't cover benefits
- Other public programs also will cost more
- Individuals are not saving enough, and don't have authoritative information
- Employers not ready to increase role
- No rational long-term care system

### Long-Term Care

- Spectrum of needs
- Long-term care -- most extreme cases only
- Most care -- informal at home
- No integrated system -- provide care
- No integrated system -- finance care
- Potential for Medicaid cuts

### Challenges to Actuaries

- Better information for all stakeholders
- Participate in public debates
- Help invent a better long-term care system
- Help invent financing for it
- Create authority for retirement planning framework