



Center for  
Rural Health

University of North Dakota  
School of Medicine & Health Sciences

<http://medicine.nodak.edu/crh>

## Elder Issues: Obstacles to Health Facing Our Elders



Leander R. McDonald, PhD & Richard L. Ludtke, PhD  
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the health of people in rural communities.*



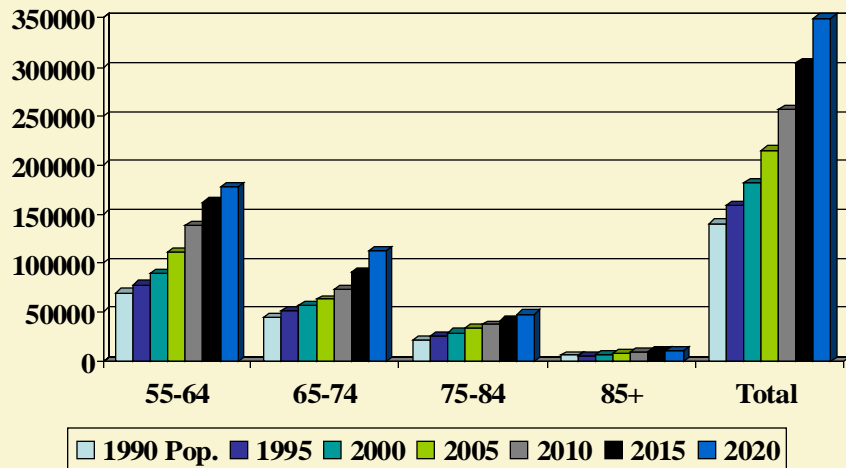
## National Resource Center on Native American Aging

- Established in 1994, at the Center for Rural Health, University of North Dakota School of Medicine and Health Sciences
- Focuses on:
  - Education, Training, and Research
  - Community Development & Technical Assistance
  - Native Elder Health, Workforce, & Policy
- Web site: <http://medicine.nodak.edu/crh/nrcnaa>





## Native Elder Population Projections 1990-2020



## Regional Variances

- One size does not fit all
- Variation in regard to life expectancy and chronic disease
  - Ex. California Area life expectancy is close to the nations; however, Aberdeen Area is 64.3, a difference of 12.5 years.
  - Ex. Alaska Area has diabetes rate close to the general population at 16%; whereas, the majority of other regions average 37% or higher.
- Once you seen one tribe you've only seen one tribe





## Life Expectancy at Birth, ages 55, 65 and 75 by IHS Area

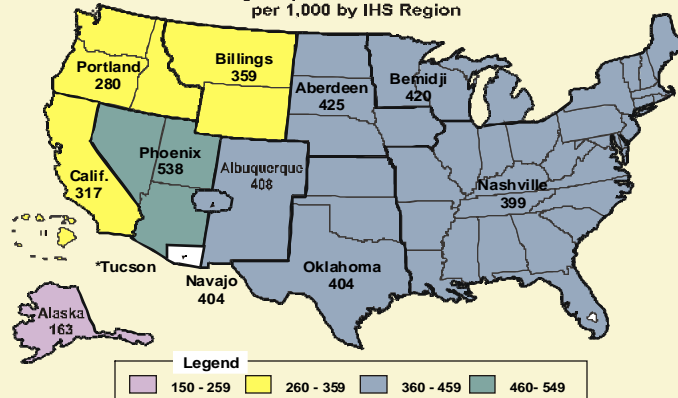
IHS Area	At Birth	At Age 55	At Age 65	At Age 75
Aberdeen	64.3	18.9	13.2	8.5
Benidji	65.7	18.7	12.7	10.1
Billings	67.0	20.2	13.9	8.9
Alaska	68.0	21.3	14.7	9.2
Tucson	68.4	22.2	15.8	10.0
Phoenix	69.8	22.6	16.1	10.6
Portland	71.7	23.1	16.0	10.1
Navajo	71.9	24.9	17.7	11.7
Nashville	72.2	22.8	16.3	10.5
Albuquerque	72.7	25.4	19.6	12.2
Oklahoma	74.2	25.7	18.2	13.1
California	76.3	26.9	19.4	13.3
All Indians	71.1	23.5	16.7	11.2
**U.S. All Races	76.8			

Source: I.H.S. Division of Statistics (1998); \*\*National Center for Health Statistics (2000)



## Diabetes Rates by Region

Native Elders 55 and Over  
Age Adjusted Diabetes Rates  
per 1,000 by IHS Region



Source: NRCNAA Needs Assessment Data, UND Center for Rural Health.  
\* No data are available.





## Population

- Native American elders residing primarily on reservations
- Individuals age 55 and over living on or around Indian areas.
- Age 55 is considered comparable to 65 and over in the general population



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### *Identifying Our Needs: A Survey of Elders* Highlights Between Cycle I & II



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## Data Used for This Analysis

- Two Cycles of Matched Survey Data
- 38 IHS Service Areas have collected data in both cycles. These survey results are employed as replication studies.
- 4,148 Respondents in Cycle I
- 4,008 Respondents in Cycle II



## Cycle I Chronic Diseases Native Elders (N=9,296)

	Native Elders (55+)	U.S. (55+)
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## Chronic Disease: Change from Cycle I to Cycle II

- Hypertension\*\*\*\*(Higher)
- Arthritis\*\*\*\*(Higher)
- Asthma\*\*\*\*(Higher)
- Cataract\*\*\*\*(Higher)
- Prostate Cancer\*\*\*\*(Down!) BUT When age was controlled there was no difference

\*\*\*\*All represent statistically significant changes.



## The Times – They are A Changing: Demographic Shifts

- Baby Boomers are changing the age distribution for elders
- Length of last residence is shorter
- Educational levels are improving
- More people age within marriages
- Incomes are gradually improving





## Component Changes in Functional Limitations: IADLs AND ADLs

- Instrumental Activities of Daily Living (IADLs) declined significantly for all age groups – an across the board gain
- Activities of Daily Living (ADLs) declined significantly **only** for the 65-74 cohort



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## Health Risk Behaviors: Are they changing?



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## Smoking

- No significant change in the proportion of elders who smoke
- The volume (number of cigarettes smoked) dropped significantly overall, but the decline was not present when age was controlled. The overall drop was a function of the mix by age – not behavior.



## Chewing Tobacco

- Smokeless tobacco use was up significantly
- The increase was due to more use among the young elders – the older elders use did not change







## Drinking Behavior

- A slight increase in the proportion who had consumed alcohol in the past 30 days.
- This appears due to increased use among the younger elders.
- Aging appears to diminish drinking behavior with higher proportions indicating no alcohol in the past three years (abstinence).



## Binge Drinking

- Overall no significant change was reported in binge drinking
- Aging did produce a significant decline in binge drinking. 19.1% of those 55 to 64 reported binge drinking in past 30 days compared with only 6% of those 85 and over.





## Exercise Change and Age

- Weight Lifting – Down for 55–64 age group
- Powwow – Down for 55-64 & 65-74 age groups
- Biking - Down for 55-64 & 65-74 age groups
- Jogging - Down for 55-64 & 65-74 age groups
- Walking – **Up dramatically for all ages!!**
- Gardening – Down for 55-64 & 65-74 age groups



## Conclusions

- Native elder populations are **now** dramatically growing.
- Tribal recognition of age 55 for elder status includes those elders from the boom generation.
- Education and incomes are improving over time with new cohorts bringing new advantages.
- With the demographic shift, more elders live with a spouse – fewer are widowed.





## Conclusions cont.

- Chronic diseases prevalence is mixed with several increasing and others steady. Declining rates were not found.
- Increases may well relate to risk factors.
  - Exercise – Walking increased dramatically, but nearly all other exercises decreased.
  - Weight issues increased – young old are heaviest.
  - Smoking and drinking were unchanged.



## Recommendations

- Recognize the demographic shift in the interpretation of results – may produce statistical artifacts that exaggerate the health and functionality of the elders.
- Lifestyle modification continues to merit attention. Positive results for walking provide a major source of encouragement.
- Chronic disease self management will be essential to avoiding future functional limitations as this population grows older.





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