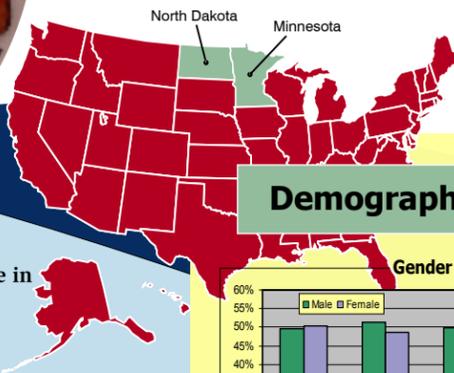




Fish Consumption Survey: Minnesota and North Dakota



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Goal

- To determine the fish-eating habits of people in North Dakota and Minnesota

Objectives

- Develop a fish consumption survey to gather information encompassing:
 - sociodemographic information for survey respondents
 - types and quantity of fish consumed
 - characteristics of fishing activities
 - awareness of fish consumption advisories
- Estimate fish consumption for surveyed population
- Compare survey results to other studies in the United States

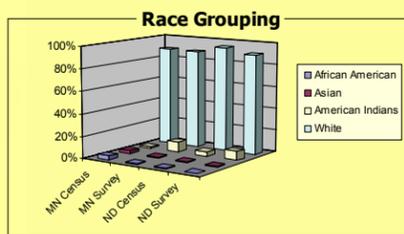
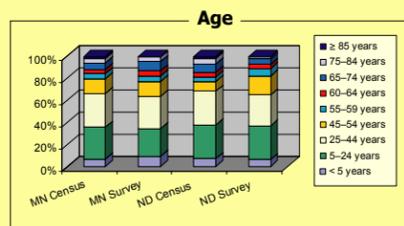
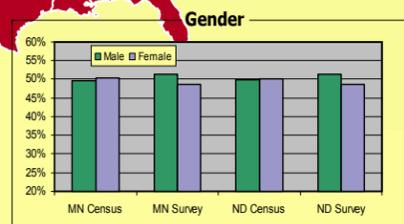
Target Populations

- Target groups were selected for various reasons:
 - Potential for high fish consumption (cultural)
 - Anglers
 - American Indians
 - Mercury exposure concerns (developmental)
 - Women of childbearing age 15-44 years
 - Children
 - General population (consumption rates)

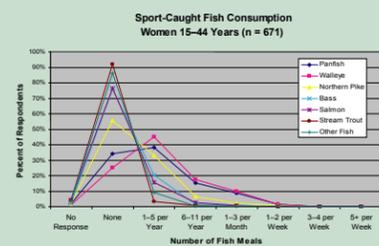
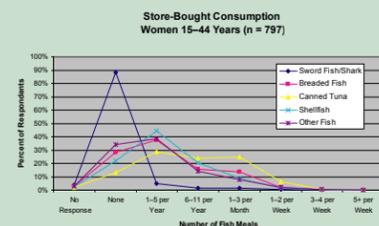
Survey Implementation and Response

- Two modes of implementation
 - Mail survey with follow-up reminders
 - Personal canvassing of American Indians on reservations
- 7835 household surveys distributed
- 1565 surveys containing data for 4273 household members returned

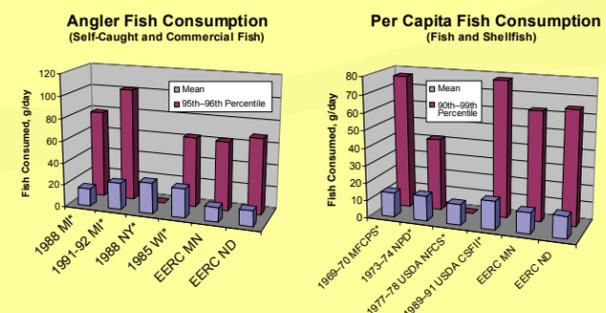
Demographics



Fish Consumption

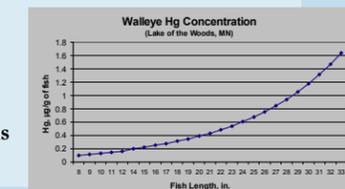
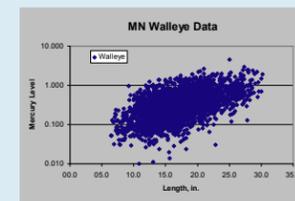


Fish Consumption Comparison with Other Studies in the United States



Mercury Concentrations in Fish

- Purchased fish mercury calculations were based on:
 - Values from *Mercury Study Report to Congress, Volume IV*
- Sport-caught fish mercury calculations were based on:
 - Data available on thousands of fish - by species, length, and body of water.
 - Data from each fish group analyzed by weighted least squares to find a linear regression equation that would provide mercury levels as a function of fish length for various bodies of water.



Conclusions

- Consumption rates were higher for purchased fish than for sport-caught fish in both MN and ND for all groups.
- Residents with fishing licenses had a higher rate of fish consumption compared to residents without fishing licenses.
- The estimated upper-level consumption (95th percentile) trend:
 - Minnesota: children, men, and then women
 - North Dakota: women, men, and then children
- The median fish consumption for MN and ND, as well as the upper-level consumption rates (95th percentile), were within the range indicated by other national surveys:

	Fish Consumption (g/day)	
	Median	95th Percentile
Other surveys	8.1-18.7	41-78
EERC MN	12.3	62.7
EERC ND	12.6	64.9

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