



# Community Health Needs Assessment Survey Results for American Indian Residents of the Greater F-M Area:

A Step Toward the Development of Culturally Appropriate  
Health Care

Presentation to the Fargo Native American Commission


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# Acknowledgements

- ▶ Research Team:
  - ▶ Donna Grandbois (Turtle Mountain), RN, Ph.D., NDSU Assistant Professor of Nursing and MPH Faculty Member
  - ▶ Jaclynn Davis-Wallette (Turtle Mountain), NDSU Assistant Vice President of Equity, Diversity, and Global Outreach
  - ▶ Willard Yellow Bird, Jr. (Three Affiliated Tribes), City of Fargo Cultural Planner
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  - ▶ Sharon Cobb (Fargo Resident), former Director of the NDSU Group Decision Center
- ▶ Fargo Native American Commission
- ▶ Greater Fargo-Moorhead Community Health Needs Assessment Collaborative
- ▶ Thank you to community members who took the time to complete the survey!




# Stark health disparities for ND American Indians (AI)

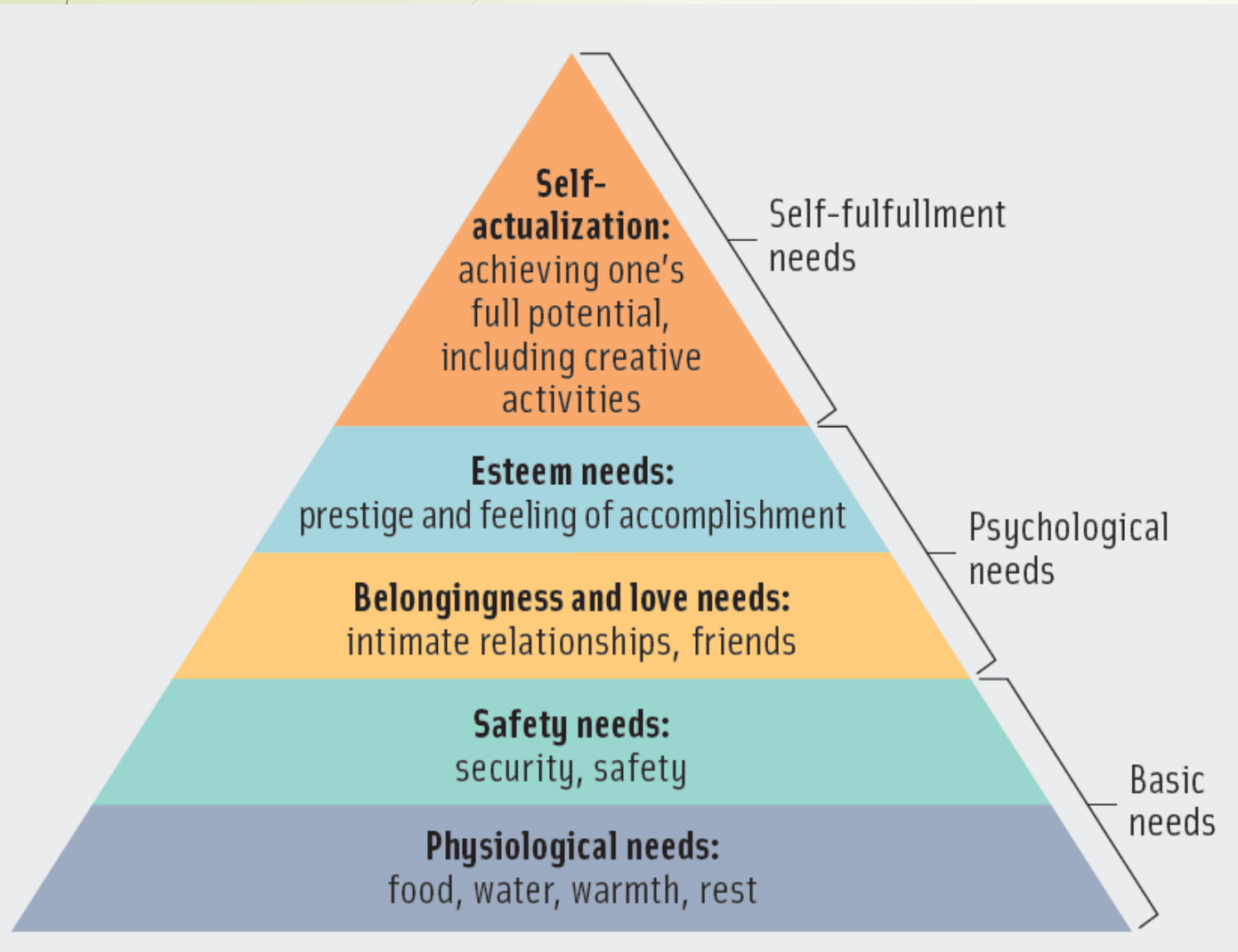
- ▶ Largest minority population:<sup>1</sup>
  - ▶ 6.4% of state population, 2.1% of F-M Metro Area
- ▶ On average, AI in ND die 20 years younger than whites:<sup>2</sup>
  - ▶ 57.4 years vs. 77.4 years from 2007-2012
- ▶ Disparities cross a broad spectrum of issues<sup>3</sup>
  - ▶ infant mortality, substance use, injuries, chronic disease (diabetes)
- ▶ AI are challenged to access health services, and to find culturally appropriate health care when they do<sup>4</sup>
  - ▶ Providers trained in patients' culture, culturally-specific healthcare setting, images used, readability of materials



# Disparities in broad context

- Inter-generational impacts of historical trauma
  - Adverse Childhood Experiences (ACEs)<sup>5</sup>
    - Abuse, neglect, household dysfunction as a child → increased risk for health problems as an adult
  - Need for trauma-informed care<sup>6</sup>
  - Social determinants of health<sup>7</sup>
    - Economic stability, education, social & community context, health & health care, neighborhood & built environment
- 

# Context for prioritizing “community needs”



- Maslow's Hierarchy of Needs<sup>8</sup>
  - First 4 are “deficit” needs
  - Expect different priorities based on where person is at in the pyramid
  - Doesn't mean other needs aren't important



# Assessing community health needs

- Look systematically at health of community<sup>9</sup>
  - Ensure services are provided effectively/efficiently
  - Identify health inequalities, unequal access to services
  - Prioritize resources
- Greater F-M Community Health Needs Assessment Collaborative (GFMCHNAC) process on-going
  - Want urban Indians to be included in larger community process

# Assessing needs

- ▶ Collaborative collected data Spring 2012
  - ▶ Generalizable community survey (N=236) and community leaders (N=58)
  - ▶ Only 2 American Indian participants
- ▶ Survey tool
  - ▶ Assess opinions and concerns about a broad array of community issues
    - ▶ 88 Qs across 12 topics
  - ▶ 1 to 5 scales, where larger value → greater concern
- ▶ Overall priorities chosen by GFMCHNAC:
  - ❖ *Mental Health*
  - ❖ *Obesity*
  - ❖ *Aging Issues*

## General Concerns about Your Community

Using a 1 to 5 scale, with one being "not at all" and 5 being "a great deal," please tell us the level of concern you have about your community in each of the following areas: ECONOMIC ISSUES, TRANSPORTATION, ENVIRONMENT, CHILDREN AND YOUTH, THE AGING POPULATION, and SAFETY.

Considering your community, what is your level of concern with...	Level of concern (1=not at all; 5= a great deal)				
	Not at All	←	→	A Great Deal	
<b>Q5. ECONOMIC ISSUES</b>					
a. Availability of affordable housing	1	2	3	4	5
b. Availability of employment opportunities	1	2	3	4	5
c. Wage levels	1	2	3	4	5
d. Poverty	1	2	3	4	5
e. Homelessness	1	2	3	4	5
f. Cost of living	1	2	3	4	5
g. Economic disparities between higher and lower classes	1	2	3	4	5
h. Hunger	1	2	3	4	5

- ▶ **Statements about the community (19 Qs)**
  - ▶ the people, services & resources, quality of life
- ▶ **General community concerns (36 Qs)**
  - ▶ transportation, environment, children & youth, aging population, safety, economic issues
- ▶ **Health-related community concerns (33 Qs)**
  - ▶ access to health care, physical & mental health, substance use & abuse




# Critical need to address health disparities for urban Indians → special survey effort

- Spearheaded by Urban Indian Health & Wellness Center of F-M and supported by Fargo Native American Commission
- Seek to:
  - Demonstrate the unique needs of American Indian residents
  - Inform policy-making
  - Improve access
  - Promote culturally appropriate, trauma-informed health care





# American Indian survey

- Important to use same tool (not designed with American Indians in mind)
    - Compare among 3 survey groups
    - Add voice to on-going conversation
    - Assess over time
  - Utilized community-based participatory research principles
    - Convenience sampling (e.g., community events, Native American Center) → 97 surveys completed (summer 2012)
- 



# Analysis

- ▶ “Cleaned” the data
- ▶ Created composite indices (i.e., “factors”) of Qs for the 12 topic areas
- ▶ Looked at average responses to each question (and index)
  - ▶ “ Among respondents to the American Indian survey effort, the average level of concern for that question was X”
- ▶ Looked at how individual concerns (and indices) ranked relative to one another
- ▶ Examined significant differences among concerns by survey group

# Demographics → Reflect Distinct Experiences

## ▶ American Indian survey respondents (N=97):

- ▶ Mostly American Indian
- ▶ Younger overall; no elders
- ▶ Lower education levels
- ▶ Even split for gender
- ▶ ~Half work/volunteer outside home
- ▶ Low homeownership
- ▶ Lower income levels
- ▶ More who are parenting a child 18 or younger (2 in 5)

## ▶ Generalizable community survey respondents (N=232):

- ▶ Mostly white
- ▶ \*Older (*skews older*)
- ▶ \*Half with at least a 4-year degree (*skews high*)
- ▶ \*More females
- ▶  $\frac{3}{4}$  work/volunteer outside home
- ▶ \*High homeownership level (*skews high*)
- ▶ \*Middle to upper-middle income (*skews high*)
- ▶ Fewer who are parenting a child 18 or younger (1 in 4)

## ▶ Community leader survey respondents (N=58):

- ▶ Mostly white
- ▶ Older, but fewer elders
- ▶ Very highly educated
- ▶ More females
- ▶ (~100% work/volunteer outside home)
- ▶ Nearly universal homeownership
- ▶ Upper-middle to high income
- ▶ Fewer who are parenting a child 18 or younger (1 in 3)

\*Not representative of overall community

# Top Individual Areas of Concern for American Indian Residents

Factor	Community Concern	American Indian survey	
		Rank* (of 88)	Mean** (1 to 5)
<i>physical &amp; mental health</i>	Stress	1	4.06
<i>physical &amp; mental health</i>	Depression	2	4.03
<i>substance use &amp; abuse</i>	Alcohol use and abuse	2	4.03
<i>economic issues</i>	Homelessness	4	3.97
<i>access to health care</i>	Cost of health care	5	3.94
<i>substance use &amp; abuse</i>	Smoking and tobacco use	6	3.90
<i>physical &amp; mental health</i>	Poor nutrition/eating habits	7	3.86
<i>safety</i>	Domestic violence	8	3.79
<i>physical &amp; mental health</i>	Chronic disease	8	3.79
<i>access to health care</i>	Cost of health insurance	10	3.78
<i>physical &amp; mental health</i>	Inactivity, lack of exercise	10	3.78

\*Ranking is of all 88 questions, where 1 is greatest concern, across all of the 12 factors in the survey. \*\*Mean reflects average level of concern among respondents for that question, on a scale from 1 to 5 where 1=no concern at all and 5=a great deal of concern (so a higher average indicates greater concern).

# Top 11 Ranked Community Concerns Among All 88 for American Indian Respondents

Factor	Community Concern	American Indian survey		Generalizable community survey		Community leaders survey	
		Rank* (of 88)	Mean** (1 to 5)	Rank* (of 88)	Mean** (1 to 5)	Rank* (of 88)	Mean** (1 to 5)
<i>physical &amp; mental health</i>	Stress	1	4.06	➔ 11	3.66	➔ 12	4.09
<i>physical &amp; mental health</i>	Depression	2	4.03	➔ 15	3.54	➔ 9	4.16
<i>substance use &amp; abuse</i>	Alcohol use and abuse	2	4.03	➔ 19	3.52	➔ 11	4.12
<i>economic issues</i>	Homelessness	4	3.97	➔ 52	3.01	➔ 36	3.64
<i>access to health care</i>	Cost of health care	5	3.94	2	4.25	2	4.48
<i>substance use &amp; abuse</i>	Smoking and tobacco use	6	3.90	➔ 23	3.46	➔ 19	3.98
<i>physical &amp; mental health</i>	Poor nutrition/eating habits	7	3.86	13	3.59	5	4.28
<i>safety</i>	Domestic violence	8	3.79	➔ 23	3.46	➔ 21	3.97
<i>physical &amp; mental health</i>	Chronic disease	8	3.79	9	3.70	7	4.24
<i>access to health care</i>	Cost of health insurance	10	3.78	1	4.33	1	4.57
<i>physical &amp; mental health</i>	Inactivity, lack of exercise	10	3.78	14	3.58	5	4.28

\*Ranking is of all 88 questions, where 1 is greatest concern, across all of the 12 factors in the survey. \*\*Mean reflects average level of concern among respondents for that question, on a scale from 1 to 5 where 1=no concern at all and 5=a great deal of concern (so a higher average indicates greater concern).

# Comparative Rankings of Top Individual Areas of Concern for American Indian Residents

- ➔ Stress
  - ➔ Ranked 11<sup>th</sup> / 12<sup>th</sup>
- ➔ Depression
  - ➔ Ranked 15<sup>th</sup> / 9<sup>th</sup>
- ➔ Alcohol use, abuse
  - ➔ Ranked 19<sup>th</sup> / 11<sup>th</sup>
- ➔ Homelessness
  - ➔ Ranked 52<sup>nd</sup> / 36<sup>th</sup>
- ➔ Smoking/tobacco use
  - ➔ Ranked 23<sup>rd</sup> / 19<sup>th</sup>
- ➔ Domestic violence
  - ➔ Ranked 23<sup>rd</sup> / 21<sup>st</sup>

# Top 11 Ranked Community Concerns Among All 88 for Each Survey Group

Rank* (of 88)	American Indian survey		Generalizable community survey		Community leaders survey	
	Community Concern	Mean** (1 to 5)	Community Concern	Mean** (1 to 5)	Community Concern	Mean** (1 to 5)
1	Stress	4.06	Cost of health insurance	4.33	Cost of health insurance	4.57
2	Depression	4.03	Cost of health care	4.25	Cost of health care	4.48
3	Alcohol use and abuse	4.03	Cost of prescription drugs	4.07	Obesity	4.36
4	Homelessness	3.97	Adequacy of health insurance	3.96	Cost of prescription drugs	4.34
5	Cost of health care	3.94	Access to health insurance coverage	3.78	Poor nutrition/eating habits	4.28
6	Smoking and tobacco use	3.90	Availability, cost of dental, vision insurance	3.76	Inactivity, lack of exercise	4.28
7	Poor nutrition/eating habits	3.86	Availability, cost of dental, vision care	3.76	Adequacy of health insurance	4.24
8	Domestic violence	3.79	Cancer	3.76	Chronic disease	4.24
9	Chronic disease	3.79	Chronic disease	3.70	Access to health insurance coverage	4.16
10	Cost of health insurance	3.78	Obesity	3.69	Depression	4.16
11	Inactivity, lack of exercise	3.78	Stress	3.66	Alcohol use and abuse	4.12

## Top Individual Areas of Concern for the Other 2 Survey Groups

- *Generalizable community* focused strongly on cost/access to health care
- *Community leaders* focused on cost/access to health care AND obesity, poor nutrition, lack of exercise

\*Ranking is of all 88 questions, where 1 is greatest concern, across all of the 12 factors in the survey. \*\*Mean reflects average level of concern among respondents for that question, on a scale from 1 to 5 where 1=no concern at all and 5=a great deal of concern (so a higher average indicates greater concern).

## Comparisons of Estimated Marginal Means Among Factors

Factor	Estimated marginal means, compared to American Indian Survey Respondents*			
	Generalizable community survey		Community leaders survey	
	Mean Diff.	SE	Mean Diff.	SE
Substance use and abuse**	.656 <sup>#</sup>	.259	-.235	.342
Physical and mental health**	.546 <sup>#</sup>	.206	-.604 <sup>#</sup>	.273
Economic issues**	.785 <sup>#</sup>	.187	.288	.247
Safety	.490 <sup>#</sup>	.237	.164	.313
Children and youth**	.666 <sup>#</sup>	.218	-.261	.287
Access to health care**	.424 <sup>#</sup>	.200	-.557 <sup>#</sup>	.264
The aging population	.131	.244	-.518	.323
Transportation	.242	.179	.069	.236
Environment**	.843 <sup>#</sup>	.254	1.258 <sup>#</sup>	.335
The people**	.550 <sup>#</sup>	.173	1.032 <sup>#</sup>	.229
Quality of life**	1.181 <sup>#</sup>	.151	1.281 <sup>#</sup>	.199
Services and resources**	1.101 <sup>#</sup>	.169	.995 <sup>#</sup>	.224

\*Multivariate Analysis of Variance omnibus test shows differences between survey groups are significant: Pillai's Trace=.381, F(24,646)=6.334, p=.000, Partial Eta Squared=.191.

\*\*Univariate tests show that the mean differences for the individual survey question are significant at p<.05.

<sup>#</sup>Comparing two groups only, there are significant differences between estimated marginal means at p<.05.

Comparative Index Rankings:

- #1: SUBSTANCE USE & ABUSE generalizable 2<sup>nd</sup> / leaders 2<sup>nd</sup>
- #2: PHYSICAL & MENTAL HEALTH 1<sup>st</sup> / 1<sup>st</sup>
- #3: ECONOMIC ISSUES 6<sup>th</sup> / 6<sup>th</sup>
- #4: SAFETY 4<sup>th</sup> / 7<sup>th</sup>
- #5: CHILDREN & YOUTH 8<sup>th</sup> / 5<sup>th</sup>

## Significant Differences on Indices

*Compared to generalizable community:*

- AI have MORE concern
  - Substance use and abuse
  - Physical and mental health
  - Economic issues
  - Children and youth
  - Access to health care
  - Environment
  - People, quality of life, and services and resources

*Compared to community leaders:*

- AI have MORE concern
  - Environment
  - People, quality of life, services and resources
- AI have LOWER LEVELS of concern
  - Physical and mental health
  - Access to health care

# General PATTERN in responses:

- **Community leaders** answered across the board with higher values than the other two groups (more likely to give 4 or 5)
- **Generalizable community** survey respondents answered across the board with lower values than the other two groups (less likely to give 4 or 5)

Survey Group:	Substance use and abuse	Physical and mental health
American Indian	3.85 (1)	3.73 (2)
Generalizable community	3.47 (2)	3.49 (1)
Community leaders	3.97 (2)	4.04 (1)



Comparisons of Estimated Marginal Means for Questions Relating to SAFETY

Question relating to SAFETY	Estimated marginal means, compared to American Indian Survey Respondents*			
	Generalizable community survey		Community leaders survey	
	Mean Diff.	SE	Mean Diff.	SE
Child abuse and neglect	.182	.141	-.169	.190
Elder abuse**	.351#	.142	.180	.191
Domestic violence**	.334#	.136	-.178	.183
Presence and influence of drug dealers in the community	.059	.140	.080	.189
Property crimes	.084	.134	.409#	.180
Violent crimes**	.578#	.144	.614#	.194

Note: Higher means indicate "concern" (i.e., less agreement with the statement).

\*Multivariate Analysis of Variance omnibus test shows differences between survey groups are significant: Wilks' Lambda=.813, F(12,688)=6.270, p=.000, Partial Eta Squared=.099.

\*\*Univariate tests show that the mean differences for the individual survey question are significant at p<.05.

#Comparing two groups only, there are significant differences between estimated marginal means at p<.05.

Significant Differences on Qs within Safety

*Compared to generalizable community:*

- AI have MORE concern
  - Elder abuse
  - Domestic violence
  - Violent crimes

*Compared to community leaders:*

- AI have MORE concern
  - Violent crimes



## Comparisons of Estimated Marginal Means for Questions Relating to THE PEOPLE

Question relating to THE PEOPLE	Estimated marginal means, compared to American Indian Survey Respondents*			
	Generalizable community survey		Community leaders survey	
	Mean Diff.	SE	Mean Diff.	SE
People are friendly, helpful, and supportive**	.504 <sup>#</sup>	.100	.630 <sup>#</sup>	.134
There is a sense of community/feeling connected to people who live here**	.380 <sup>#</sup>	.115	.734 <sup>#</sup>	.153
People who live here are aware of/engaged in social, civic, or political issues**	.286 <sup>#</sup>	.113	.298 <sup>#</sup>	.150
The community is socially and culturally diverse	.159	.133	.049	.177
There is an engaged government**	.632 <sup>#</sup>	.119	1.075 <sup>#</sup>	.159
There is tolerance, inclusion, and open-mindedness	.104	.121	.261	.161
There is a sense that you can make a difference**	-.176	.122	.331 <sup>#</sup>	.163

Note: Higher means indicate “concern” (i.e., less agreement with the statement).

\*Multivariate Analysis of Variance omnibus test shows differences between survey groups are significant: Pillai’s Trace=.283,  $F(14,686)=8.067$ ,  $p=.000$ , Partial Eta Squared=.141.

\*\*Univariate tests show that the mean differences for the individual survey question are significant at  $p<.05$ .

<sup>#</sup>Comparing two groups only, there are significant differences between estimated marginal means at  $p<.05$ .

## Significant Differences on Qs related to the People

*Compared to generalizable community and community leaders:*

- AI have MORE concern
  - Supportiveness
  - Sense of community
  - Civic engagement
  - Engaged government

## Comparisons of Estimated Marginal Means for Selected Questions Relating to ACCESS TO HEALTH CARE

Question relating to ACCESS TO HEALTH CARE	Estimated marginal means, compared to American Indian Survey Respondents*			
	Generalizable community survey		Community leaders survey	
	Mean Diff.	SE	Mean Diff.	SE
Availability of doctors, nurses, and/or specialists	.324 <sup>#</sup>	.153	.072	.202
Availability of bilingual providers and/or translators**	.796 <sup>#</sup>	.155	.073	.204
Distance to health care services**	1.110 <sup>#</sup>	.159	.834 <sup>#</sup>	.210
Availability of/access to transportation**	.830 <sup>#</sup>	.163	.186	.215
Providers not taking new patients**	.699 <sup>#</sup>	.164	.217	.216
Time it takes to get an appointment**	.425 <sup>#</sup>	.158	.020	.208
Availability of non-traditional hours**	.534 <sup>#</sup>	.149	.108	.196
Patient confidentiality**	.651 <sup>#</sup>	.178	.767 <sup>#</sup>	.235
Use of ER services for primary health care**	.393 <sup>#</sup>	.156	-.170	.206
Availability of mental health services and providers**	.529 <sup>#</sup>	.152	-.511 <sup>#</sup>	.201
Coordination of care**	.469 <sup>#</sup>	.146	-.494 <sup>#</sup>	.193

Note: Higher means indicate "concern" (i.e., less agreement with the statement).

\*Multivariate Analysis of Variance omnibus test shows differences between survey groups are significant: Pillai's

Trace=.323, F(22,648)=5.682, p=.000, Partial Eta Squared=.162.

\*\*Univariate tests show that the mean differences for the individual survey question are significant at p<.05.

<sup>#</sup>Comparing two groups only, there are significant differences between estimated marginal means at p<.05.

## Significant Differences on Selected Qs related to Access to Health Care

*Compared to generalizable community:*

- AI have MORE concern
  - All of these access issues!

*Compared to community leaders:*

- AI have MORE concern
  - Distance to health care services
  - Patient confidentiality
- AI have LOWER LEVELS of concern
  - Availability of mental health services and providers
  - Coordination of care



# For Urban Indians in the Fargo-Moorhead Metro Area

Different experiences/reality than the “mainstream” community

- ▶ Reflected in attitudes about “the people”
- ▶ Differences in safety concerns (elder abuse, domestic violence, violent crimes\*)

Differences in which concerns ranked highest

- ▶ Top concerns: stress, depression, alcohol use/abuse, homelessness

Significantly greater concern regarding key access to care issues\*

- ▶ Language, distance/transportation, getting in to see a provider (taking new patients, time to get an appt., non-traditional hours)

\*Significantly greater concern compared to generalizable community



# Next Steps

- ▶ Share results with the community
  - ▶ Compile a public report
  - ▶ Will be available on the Collaborative's page on the ND Compass website
- ▶ Additional research
  - ▶ Focus groups about how to address these disparities
  - ▶ Repeat survey in 2015 (may revise Qs)

*Search online for "ND Compass Health Collaborative" or go directly to:  
<http://www.ndcompass.org/health/greater-fm-community-health-collaborative.php>*



# Addressing Health Disparities


- ▶ Survey results offer a wealth of information to help inform decision-making
- ▶ Different concerns are on urban Indian's "radar," real concerns about access
  - ▶ Work with stakeholders to ensure that we create culturally appropriate services in the F-M area
  - ▶ MPH can provide technical assistance: help with grant-writing, program design, business plans, students to work on projects
  - ▶ American Indian Public Health Resource Center (by end of the summer)



# MPH Program at NDSU

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