



NICOA's  
*Monograph Series*

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Diabetes among Alaska Natives:  
An emerging epidemic

by Jane Kelly, M.D.

**D**iabetes in Alaska is a new phenomenon. Although the American Indian and Alaska Native population as a whole has a high rate of diabetes, until recently the rate of diabetes for Alaska Natives was far lower than for most of Indian country. But this is changing fast.

The prevalence of diabetes (number of diabetic patients per 1000 people) in the Anchorage Service Unit is about the same as the prevalence in the US all races. In some areas of Alaska, however, the prevalence is almost four times as high. In areas that traditionally have had very little diabetes (Y-K Delta, Norton Sound), the rate of increase in new cases is very rapid: over 150% in 12 years!

*National Indian Council on Aging*

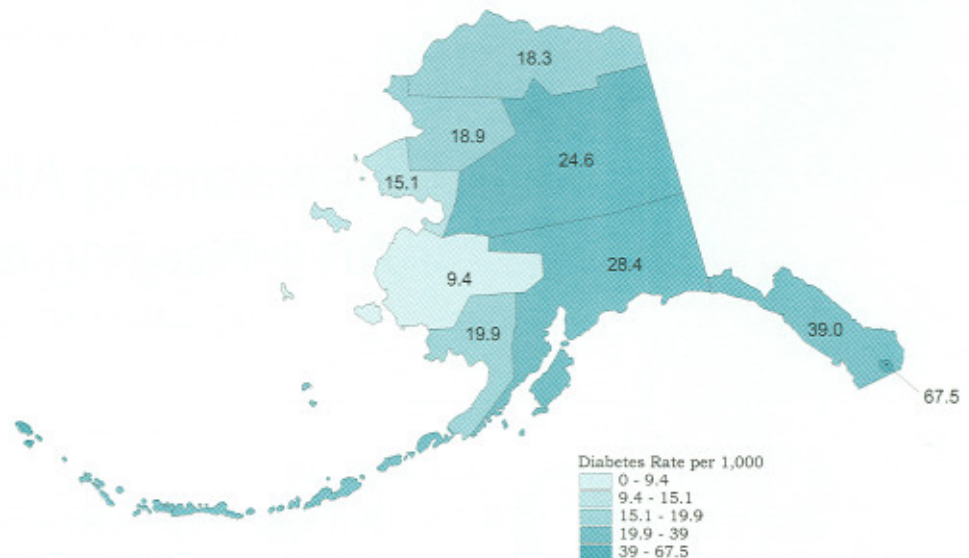


Perhaps we are finding more diabetes among Alaska Natives simply because we are looking harder for it. But most experts think that increased screening is only a small piece of the puzzle. More important factors relate to changes in lifestyle. As people move away from traditional hunting and fishing practices, becoming more sedentary and as a consequence becoming overweight, increases in obesity and diabetes rates seem to follow. Many traditional subsistence foods are healthier than store-bought “fast foods”. The physical activity required in hunting and fishing also helps to protect against diabetes by increasing metabolism and keeping weight down.

We are also beginning to see cases of Type 2 (what we used to call “adult onset”) in younger age groups. We are even seeing pre-teen Alaska Natives with Type 2 diabetes. This trend is especially frightening because the longer a person has diabetes, the greater chances of long-term complications (like kidney, eye and heart disease). There is no recovery from Type 2. The most that can be done is to delay further deterioration.

Improvements in diabetes care are being made all over Indian country. But *prevention* is the name of the game. Healthy lifestyles with balanced diets, increased physical activity, stress management, and community support are all-important.

Diabetes rate per 1,000 by IHS Service Unit



Check out the map of Alaska, broken-down by Service Unit. The rate of diabetes (age-adjusted prevalence) among Alaska Natives is defined by color coding for each area. The darker the area the highest the prevalence of diabetes.

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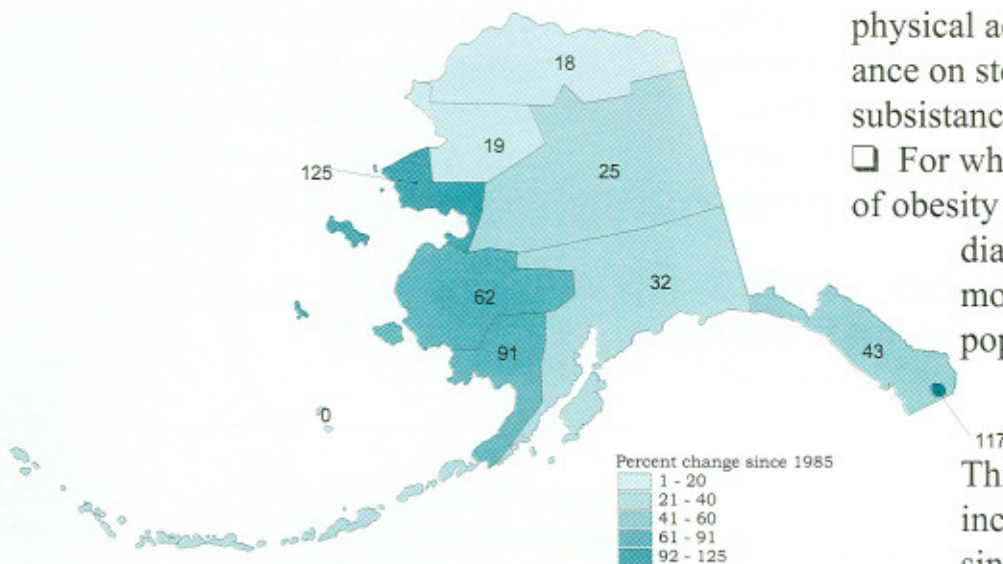
### *A few things are striking*

- The rate of diabetes varies in different parts of the state. For reference, the rate in the Anchorage Service Unit is about the same as the rate for the US all races.
- Some areas have rates of diabetes almost four times higher than the US in general.
- The rates are increasing in all areas of the state.
- Rates of increase vary from 30 to 152%.
- The areas where diabetes has been traditionally lowest (YK Delta, Bristol Bay, Norton Sound) are the areas where the rate of increase is the highest.

### *What's going on?*

- Maybe we are picking up more diabetes earlier by better screening. Most experts think this is only a small part of the picture.

**Percent Change in Diabetes since 1985**



- Rapid changes in lifestyle: less hunting and fishing, less physical activity, more reliance on store-bought than subsistence foods.

- For whatever reason, rates of obesity are increasing, and diabetes is more common in more obese populations.

This map shows the increase in diabetes since 1985.

### *What can we do about it?*

- Prevention is best: eat less fat and sugar, eat more vegetables and fiber, exercise more, and help our kids learn healthy lifestyle habits.
- Screen early: diabetes diagnosed early is easier to control with lifestyle changes rather than medicine.
- Be prepared: now is the time to set up systems of care for patients who will visit our clinics for prevention education, and diabetes care.



## What Is Diabetes?

Diabetes is a condition where sugar naturally occurring in the blood rises to abnormally high levels. Over months and years of high blood sugars, deposits begin to form in blood vessels and nerve that can lead to a wide range of complications.

Blood vessel blockages can lead to heart attacks and strokes. Damage to the membranes lining tiny arteries leads to diabetic kidney disease. Diabetes is the #1 cause of acquired blindness in the U.S. as fragile vessels leak blood in the back of the eye. Nerve damage leading to numb feet combines with poor circulation and the inability to fight infections to create diabetic foot ulcers, and may lead to gangrene, amputations and death from sepsis.

At the same time, diabetes is a "sneaky" disease. It is estimated that 50% of the people who have it don't know it yet.

Diabetes may damage blood vessels and nerves for years without producing any symptoms until a sudden heart attack or stroke. The only way to find diabetes early enough to prevent complications is to look for it. Yet many people never have a simple screening test for diabetes: a fingerstick blood sugar.

## What causes diabetes?

A combination of factors: genetic predisposition, diet, physical activity, and probably others medical science has not yet revealed. But much is known about prevention. Every community differs in its needs and priorities in this prevention program, and we need to work together to ensure that this epidemic is controlled.

### Sponsors:

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