#### Alaska Health Status Indicators

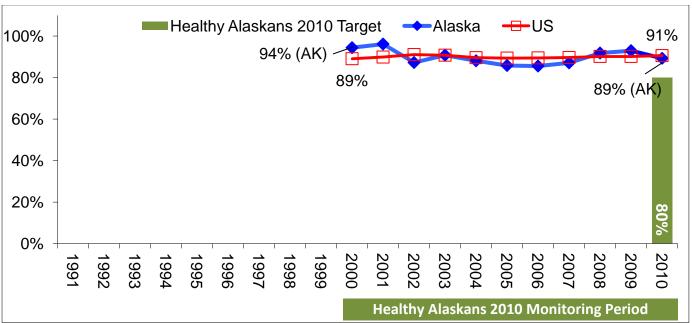
## Indicator: A1C Tests for Adults with Diabetes

## Why is this important?

Results from a glycosylated hemoglobin blood test (A1c) indicate average blood glucose levels over the previous two to three months. This is vital information because blood glucose management by people with diabetes is key to their long-term health. "In general, every percentage point drop in A1c blood test results (e.g., from 8.0% to 7.0%) can reduce the risk of microvascular complications (eye, kidney, and nerve diseases) by 40%."<sup>1</sup>

### How are we doing?

#### Percentage of Adults with Diabetes Who Have Annual A1C Tests: Alaska and the U.S.



This indicator has been measured reliably as of 2000. The percentage of Alaska adults with diabetes who receive annual A1C tests has remained relatively stable at about 90% over the past decade.

#### **❖** How is Alaska Doing Relative to the *Healthy Alaskans 2010* Target?

The *Healthy Alaskans 2010* target for the prevalence of obtaining A1C test (among adults with diabetes) is 80% or higher. The percentage of adult Alaskans with diabetes who receive annual A1C tests has remained fairly stable during the *Healthy Alaskans 2010* monitoring period, from 94% in 2000 to 89% in 2010. **The** *Healthy Alaskans 2010* **target of 80% has been met.** 

Health care recommendations for people with diabetes are *twice* yearly A1c testing.<sup>2</sup> The average annual percentage of Alaskans with diabetes that reported having had at least two A1c tests in the previous year was slightly higher in 2008-2010 (70%) than it had been in 2000-2002 (67%).

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#### **\( \text{How does AK compare with the US?} \)**

The AK and US rates for annual A1C tests are similar.

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#### **\*** How are different populations affected?

There are no significant differences in prevalence of obtaining at least one A1C test annually by sex, age, race, region, education, or income level. Note that the small sample size for this indicator may limit the ability to detect significant differences between groups. (Source: 2008-2010 BRFSS)

# What is the Alaska Department of Health and Social Services doing to improve this indicator?

1) Biennially, the Diabetes Program publishes *Recommendations for the Management of Diabetes Type 2 in Adults*<sup>2</sup>, and distributes this highly condensed set of information to primary care providers across the state. (2) The AK Diabetes Program sponsors Living Well Alaska, through which Alaskans with diabetes, their caregivers and family members can participate in Diabetes Self-Management Program (DSMP) workshops. Stanford University developed DSMP, which has an evolving evidence base demonstrating its positive impact in being engaged in their self-management of their disease. Studies by Stanford have shown decreases in A1c among DSMP participants.<sup>3</sup> (3) The Diabetes Program advocates for formal diabetes self-management education coverage by health care insurers, including the Alaska Medicaid Program. Research has shown a strong correlation between receiving diabetes self-management education and improved health status.<sup>4</sup>

#### **Indicator Definition and Notes**

Percentage of adults aged 18 years and older with diabetes who respond with a number greater than 0 to the following question: A test for "A one C" measures the average level of blood sugar over the past three months. About how many times in the past 12 months has a doctor, nurse, or other health professional check you for "A one C"? Diabetes status is indicated by a respondent answering "Yes" to the following question: Have you ever been told by a doctor that you have diabetes?

#### **Data Sources**

Alaska: Alaska Behavioral Risk Factor Surveillance System, Alaska Department of Health and Social Services; US: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention. Alaska data were obtained from the Standard AK BRFSS from 2000 through 2003, and from the Standard and Supplemental AK BRFSS surveys combined from 2004 through 2010. The Supplemental BRFSS survey is conducted using identical methodology as the Standard BRFSS and allows a doubling of the BRFSS sample size for those measures included on both surveys.

#### References

- Centers for Disease Control and Prevention. National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2011. (http://www.cdc.gov/diabetes/pubs/pdf/ndfs 2011.pdf downloaded 4/6/2011)
- 2. State of Alaska: 2010 Recommendations for the Management of Diabetes Type 2 in Adults. Alaska Department of Health and Social Services, Division of Public Health, 2010 (http://www.hss.state.ak.us/dph/chronic/diabetes/data/DiabetesRecs 2010.pdf).
- 3. Lorig K, Ritter P, et al. Community-based peer-led diabetes self-management: A randomized trial. Diabetes Educator July/August 2009; 35(4); 641-651.
- 4. Balamurugan A, Ohsfeldt R, et al. Diabetes Self-Management Education Program for Medicaid Recipients. *Diabetes Educator* Nov/Dec 2006; 32(6); 893-900.

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Available at: http://www.hss.state.ak.us/dph/chronic/

