

# AK Diabetes Coalition Strategic Planning

Background slides for selecting 5-year  
objectives –

3<sup>rd</sup> Step in the process toward a 2010-  
2015 AK Diabetes Strategic Plan

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## AK Diabetes Coalition Mission

The Alaska Diabetes Coalition works together to prevent diabetes and its complications, to support Alaskans living with diabetes and to leave the legacy of a healthier (healthy?) lifestyle to future generations.

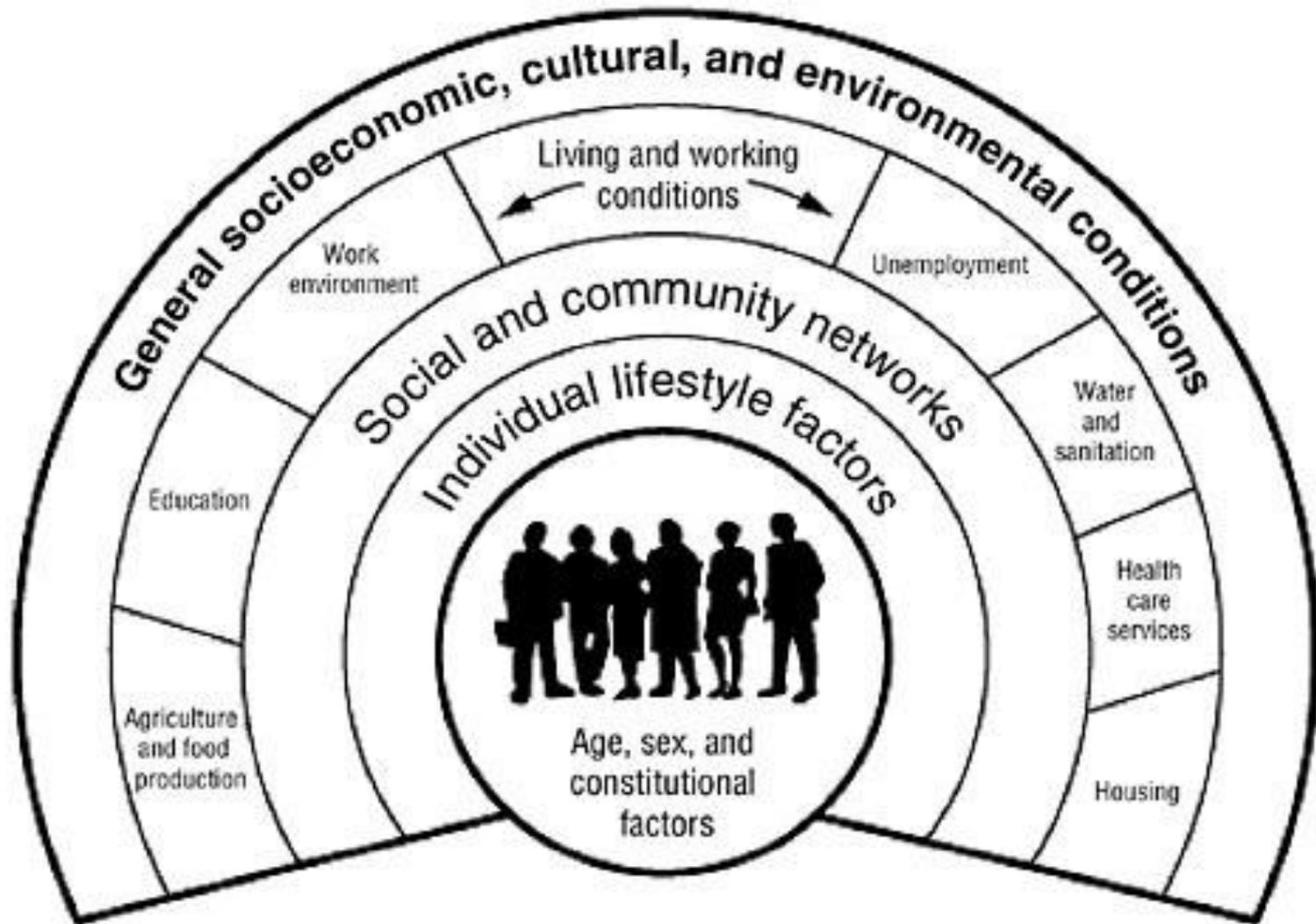
### Values statements

- Be relevant to, respectful of and appropriate for our intended audience(s)
- Integrate evidence-based practices, building on others' successful work and ideas
- Use creative, non-traditional approaches to reach our intended audience(s)
- Collaborate, advocate and educate
- Always evaluate outcomes and impact (and share results)
- Promote social equity
- Provide tools to support individuals striving toward behavior change

# Public health models

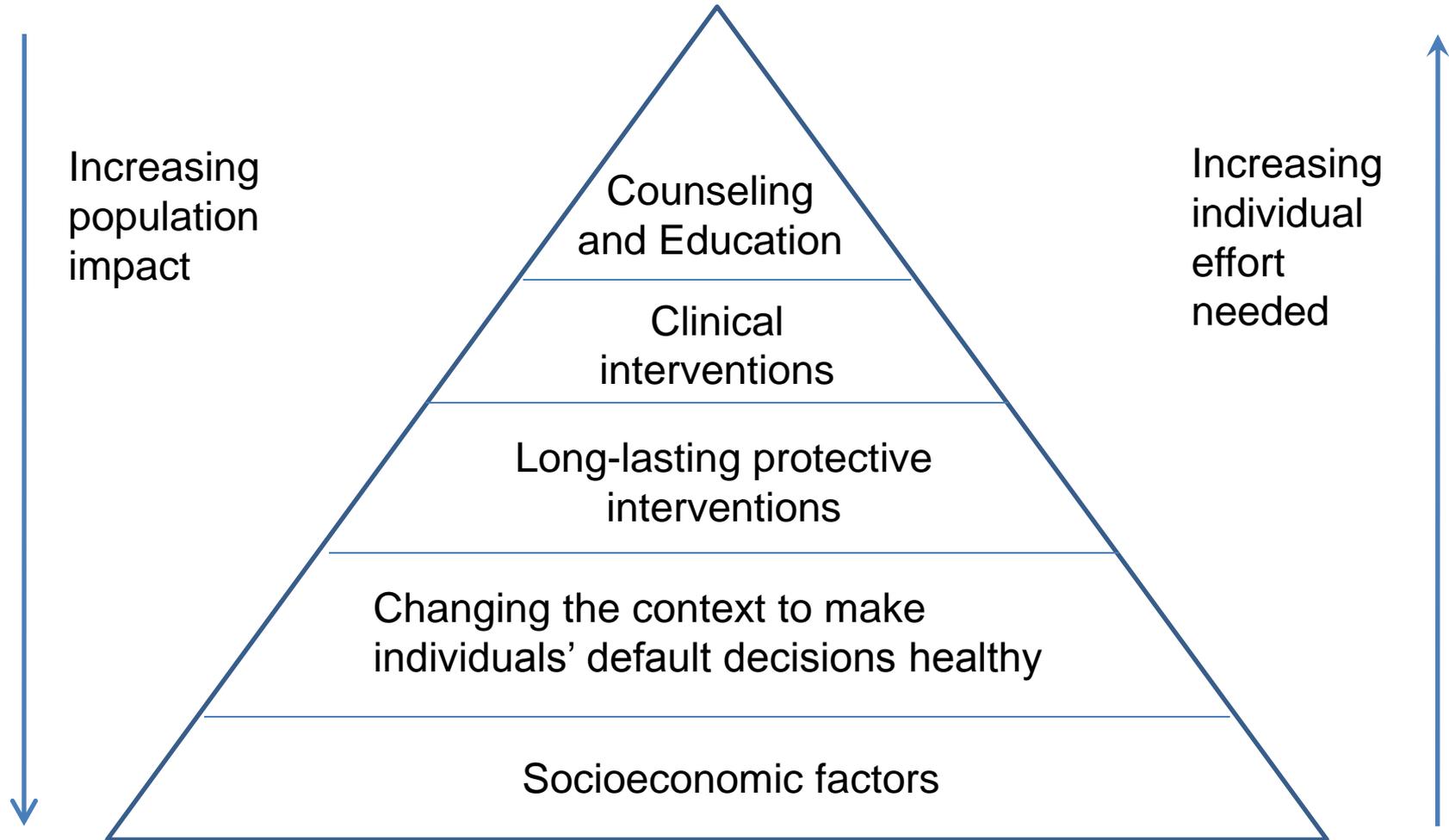
- Socio-ecological model
- Health impact pyramid
- Diabetes prevention pyramid
- Diabetes systems dynamics model

# Socio-ecological model



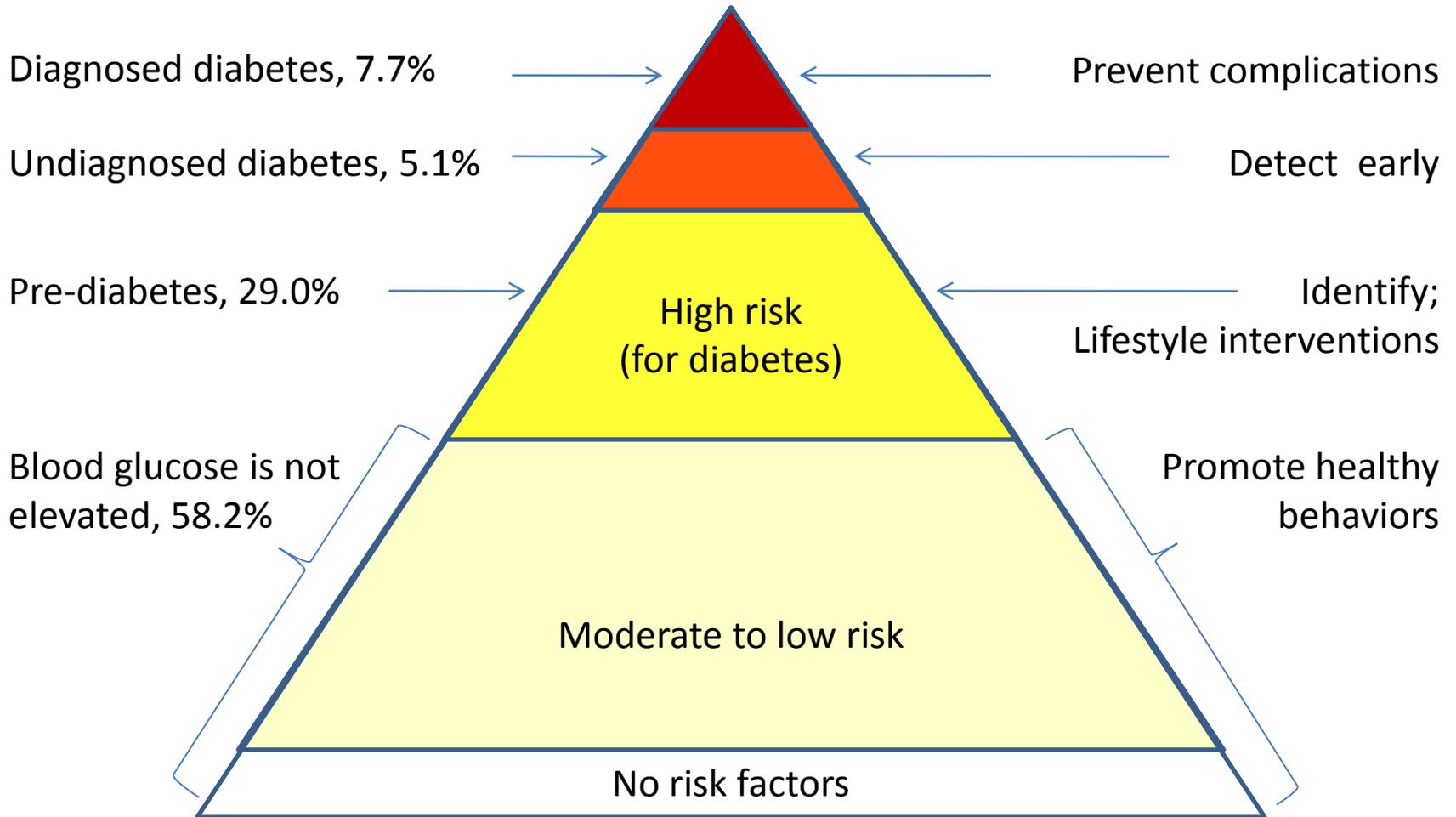
Source: Dahlgren and Whitehead (1991). Policies and strategies to promote social equity in health. Stockholm, Sweden: Institute for Futures Studies

# Health Impact Pyramid

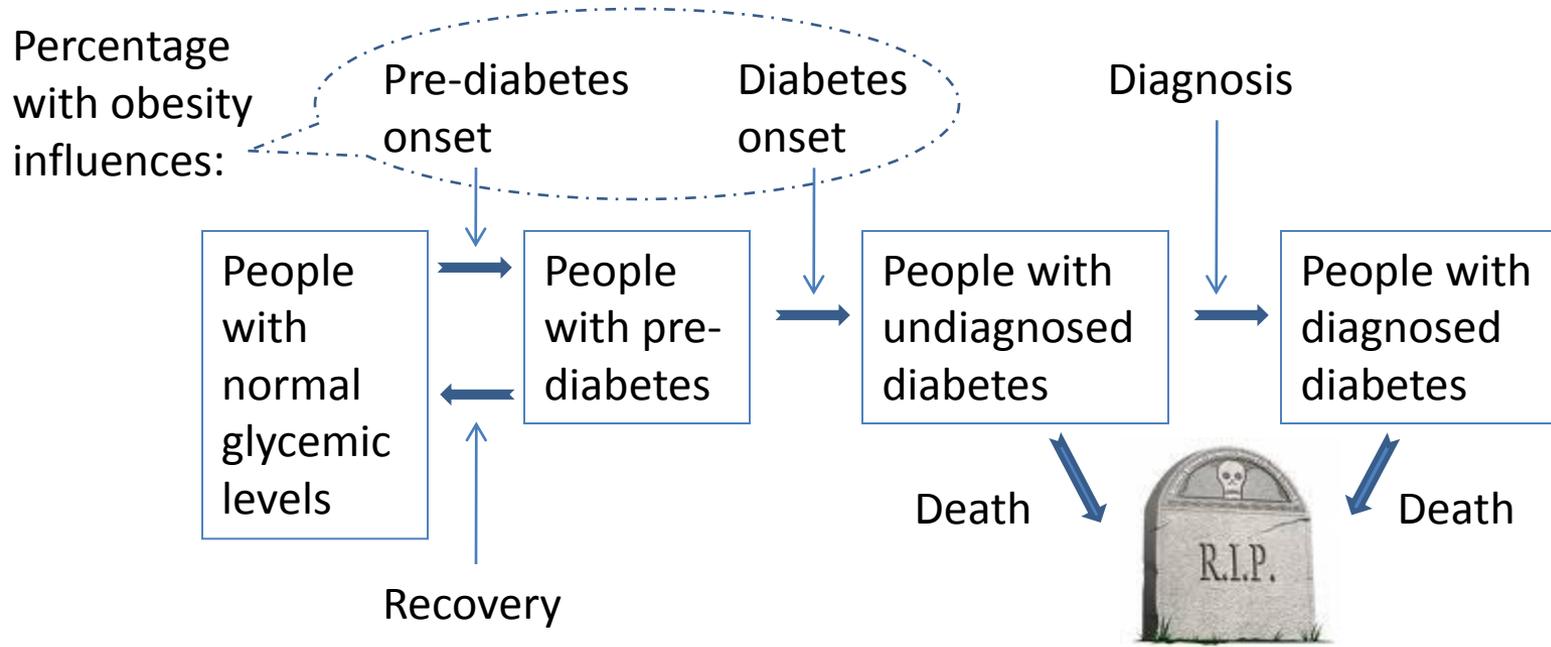


Frieden TR, A framework for public health action: the Health Impact Pyramid. *AJPH* 4/2010; 100(4); 590-595.

# Diabetes prevention pyramid



# Diabetes systems dynamics model



Reported percentage with diabetes **diminishes** with:

- Reduced pre-diabetes to diabetes conversion
- Increased mortality

Reported percentage with diabetes **increases** with:

- Increased diabetes onset
- Increased percentage diagnosed of all with diabetes (diagnosed and undiagnosed)
- Improved self-management by people with diabetes (reduced mortality)

# Data

- Diabetes prevalence and mortality
- Healthy Alaskans 2010 objectives
- Changing demographics

# Alaska percentage with pre-diabetes

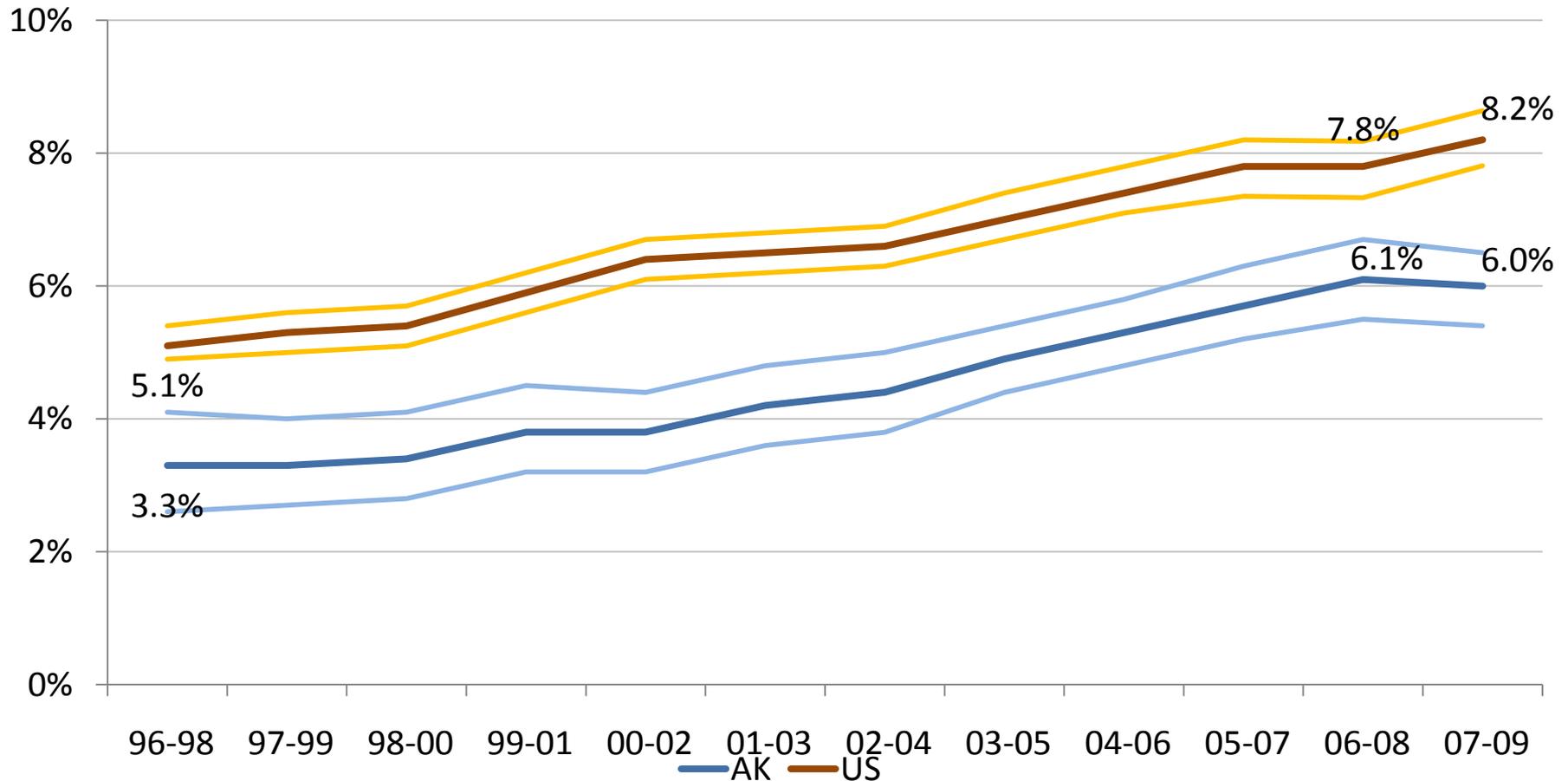
In 2008, 7.9% of adult Alaskans had pre-diabetes

- Knowing one's pre-diabetes status depends on a reasonably current blood glucose test; in 2008, 53.8% of adult Alaskans reported that they had been tested in the previous three years.
- The percentage tested increased significantly with each body mass index (BMI) category increase, but one-third of obese adults had not been tested in the last three years.

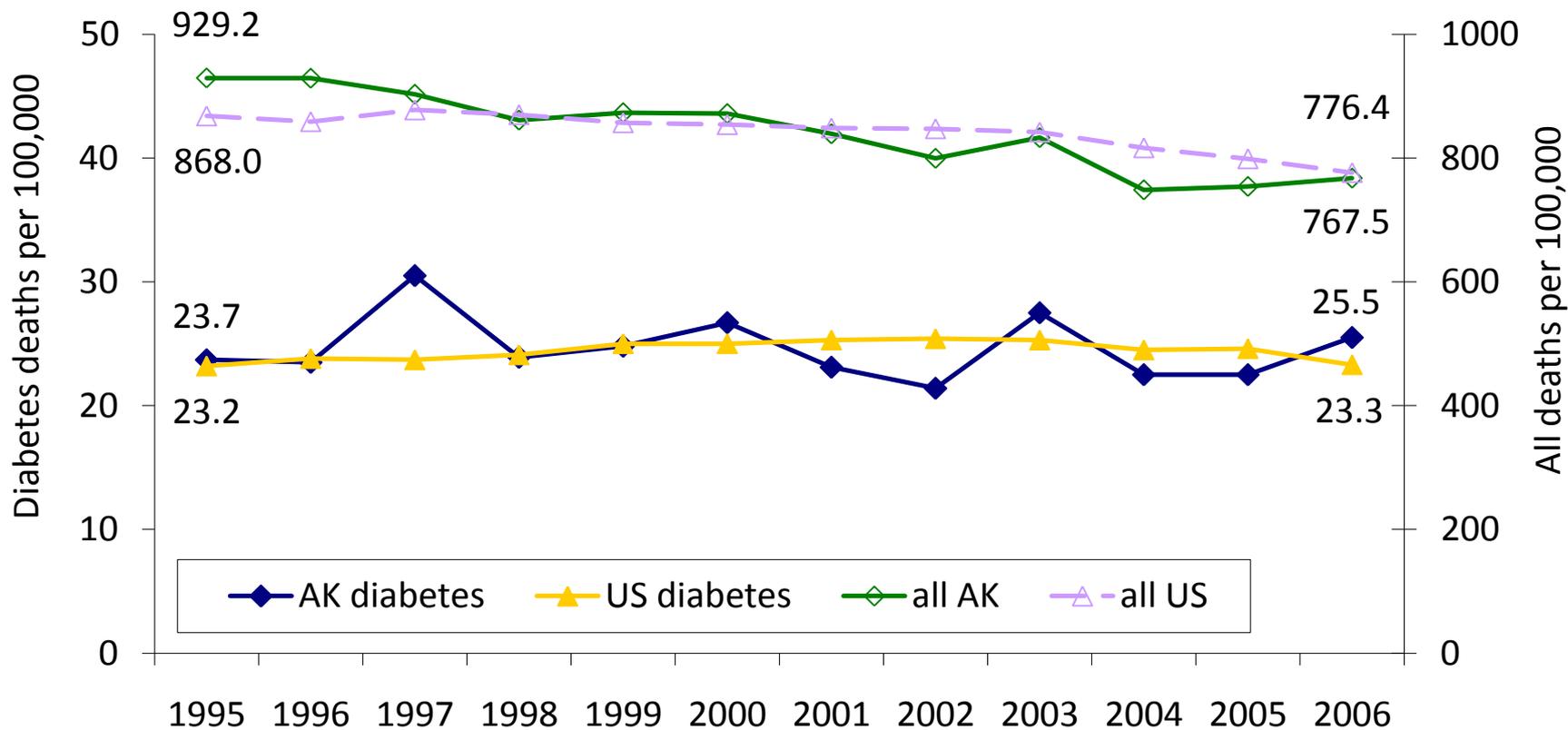
Tested in the last three years	Not overweight and not obese	Overweight	Obese
	43.9% (39.9%-48%)	55.8% (52.1%-59.5%)	64.9% (60.7%-68.9%)

# Observed diabetes prevalence in Alaska and the US

In 2007-2009, 6.0% of adult Alaskans had diabetes



# Age-adjusted diabetes mortality in Alaska and the US



# Healthy Alaskans 2010 Objectives:

	AK baseline	Target	2000-2002	2006-2008	% Change
Prevent <b>diabetes incidence</b> (new cases/1,000 persons/year)	developmental	2.5	3.9	6.0	+52.4%
Increase the proportion of adults with diabetes whose condition has been diagnosed	developmental	80%	No data for this objective are available; there is no statewide mechanism for identifying Alaskans with <u>undiagnosed</u> diabetes.		

The next group of slides is based on the eleven diabetes-specific Healthy Alaskans 2010 objectives. Shaded areas are quotes from the Healthy Alaskan 2010 document; the other data points and comments were collected and/or published since it was produced.

## Healthy Alaskans objectives, 2

	AK Baseline	Target
Maintain the proportion of adults aged 18 or older with diabetes who have a <b>glycosylated hemoglobin measurement</b> (A1c test) at least once per year	80%	80%

<u>At least 2 A1c's</u> in previous year	2000-2002	2006-2008	% change
18 - 44	69% (52%-82%)	54% (40%-66%)	-23%
45 - 64	65% (54%-75%)	69% (62%-75%)	6%
≥65	72% (57%-83%)	63% (54%-71%)	-12%
<b>Total</b>	<b>67% (59%-75%)</b>	<b>64% (59%-69%)</b>	<b>-5%</b>
<b>White</b>	<b>71% (61%-79%)</b>	<b>64% (58%-69%)</b>	<b>-10%</b>

In 2000-2002, 93% of Alaskans with diabetes that reported that they had received at least one A1c test during the previous year; this percentage had slipped to 89% by 2006-2008.

# Healthy Alaskans objectives, 3

	AK Baseline	Target
Increase the proportion of adults aged 18 or older with diabetes who have at least an <b>annual foot examination</b>	79%	80%

Foot exam	2000-2002	2006-2008	% change
18 - 44	DSU	66% (54%-76%)	
45 - 64	70% (59%-79%)	71% (63%-77%)	1%
≥65	DSU	75% (67%-81%)	
<b>Total</b>	<b>70% (62%-76%)</b>	<b>71% (66%-75%)</b>	<b>2%</b>
White	68% (59%-75%)	69% (63%-74%)	1%

In 2004-2006, the Alaska hospital discharge rate for lower extremity amputations among people with diabetes was 2.2/10,000 general population.

Reduce the rate of <b>lower extremity amputation</b> in persons with diabetes	developmental	50% decrease from baseline
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In 2003, the ANTHC Diabetes Program published an article which demonstrated that their high-risk foot program had produced a significant decline in the number of amputations in the Alaska Natives it served (from 7.6 per 1,000 in 1996-1998 to 2.7 in 1999-2001). Schraer CD, Weaver D, et al. Reduction of Amputation Rates among Alaska Natives with diabetes following the development of a high-risk foot program. *Int J Circumpolar Health*. 2004;63 Suppl 2:114-9.

# Healthy Alaskans objectives, 4

	AK Baseline	Target
Increase the proportion of adults with diabetes who have an <b>annual dilated eye examination</b>	65%	80%

Eye exam	2000-2002	2006-2008	% change
18 – 44	DSU	55% (43%-68%)	
45 - 64	73% (63%-82%)	60% (53%-67%)	-18%
≥65	79% (66%-88%)	76% (69%-82%)	-4%
<b>Total</b>	<b>74% (67%-88%)</b>	<b>64% (59%-69%)</b>	<b>-14%</b>
White	74% (66%-81%)	63% (57%-69%)	-15%

	AK Baseline	Target
Increase the proportion of persons over 2 years of age with diabetes who have <b>visited a dentist</b> or dental clinic within the past year	70%	75%

The BRFSS dental exam question is included in the survey on alternate years. Even with two years combined (such as 2005 and 2007), there weren't enough respondents with diabetes to provide reliable diabetes-specific results for this indicator. There was no change in the percentage of all adult Alaskans reporting a dental visit in the previous year (66%) between 2000-2002 and 2006-2008.

# Healthy Alaskans objectives, 5

	AK Baseline	Target
Increase the proportion of people with diabetes who receive <b>formal diabetes education</b>	52%	60%

Diabetes education	2000-2002	2006-2008	% change
18 - 44		57% (45%-69%)	
45 - 64		58% (51%-65%)	
≥65		56% (48%-63%)	
<b>Total</b>	<b>51% (43%-59%)</b>	<b>57% (52%-62%)</b>	<b>13%</b>
White	54% (45%-63%)	57% (51%-62%)	6%

This is the **ONLY** Healthy Alaskans objective that we have met!

# Healthy Alaskans objectives, 6

	AK Baseline	Target
Increase the proportion of adults aged 18 or older with diabetes who perform <b>self blood glucose monitoring</b> at least once daily	65%	75%

Self blood glucose monitoring	2000-2002	2006-2008	% change
18 - 44		57% (45%-69%)	
45 - 64		58% (51%-65%)	
≥65		56% (48%-63%)	
<b>Total</b>	<b>51% (43%-59%)</b>	<b>57% (52%-62%)</b>	<b>13%</b>
White	54% (45%-63%)	57% (51%-62%)	6%

# Healthy Alaskans objectives, 7

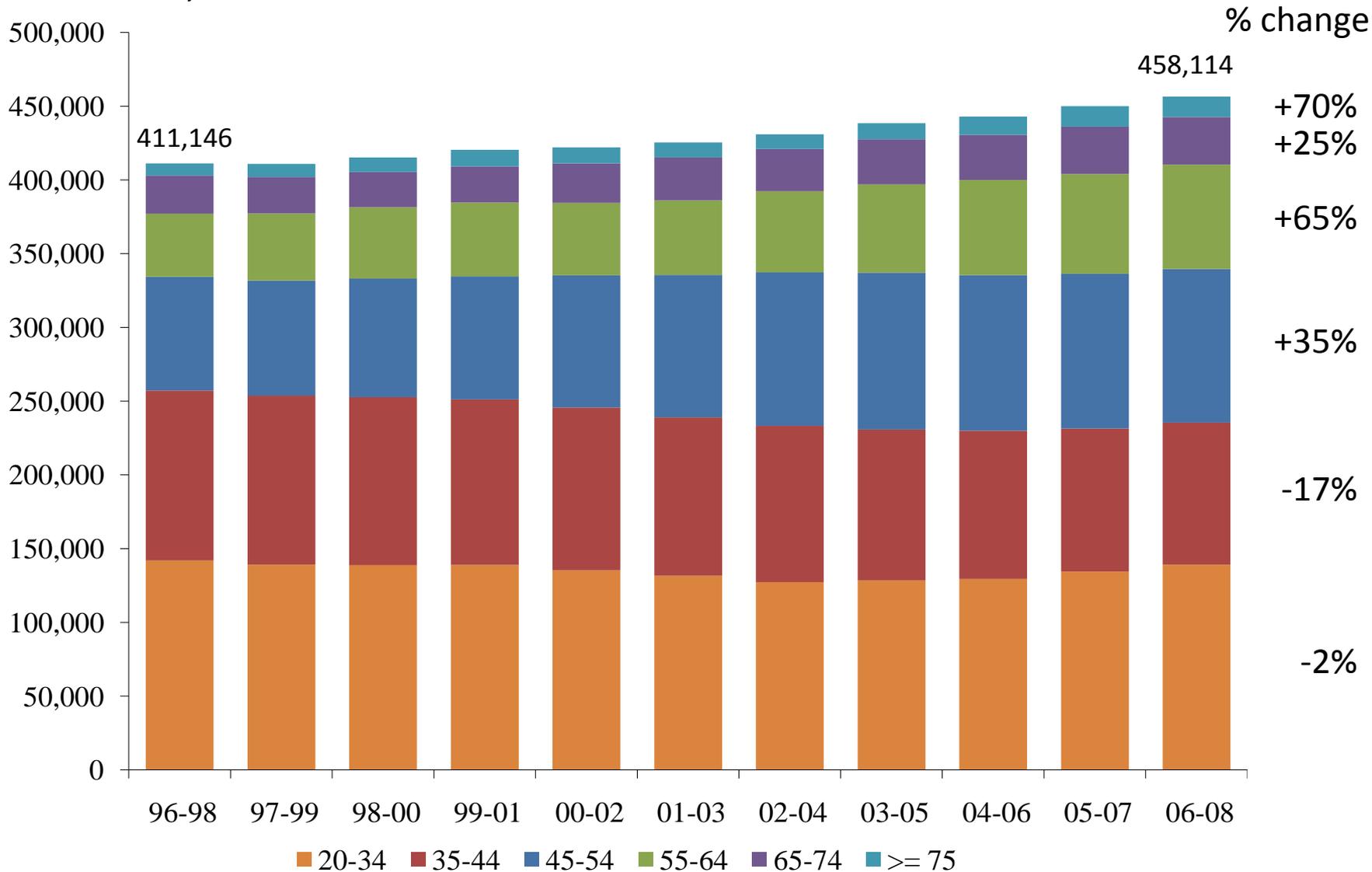
	AK Baseline	Target	2000	2008	% change
Reduce <b>deaths due to diabetes</b> as any cause of death	73.7	62	78.1	64.4	-17.5%
Alaska Native	63.2	62			
Reduce <b>deaths from cardiovascular disease in persons with diabetes</b> as a cause of death	24.6	17			
Alaska Native	17.3	17			

\* Age-adjusted rate per 100,000 population

<b>Deaths with diabetes</b> as a leading cause of death			
	91-95	01-05	% change
White	25.2	26.7	6.0%
Alaska Native	26.2	9.9	-62.2%*
<b>Cardiovascular disease in persons with diabetes</b> as a cause of death			
White	23.7	22.5	-5.2%
Alaska Native	8.5	11.1	+30.9%

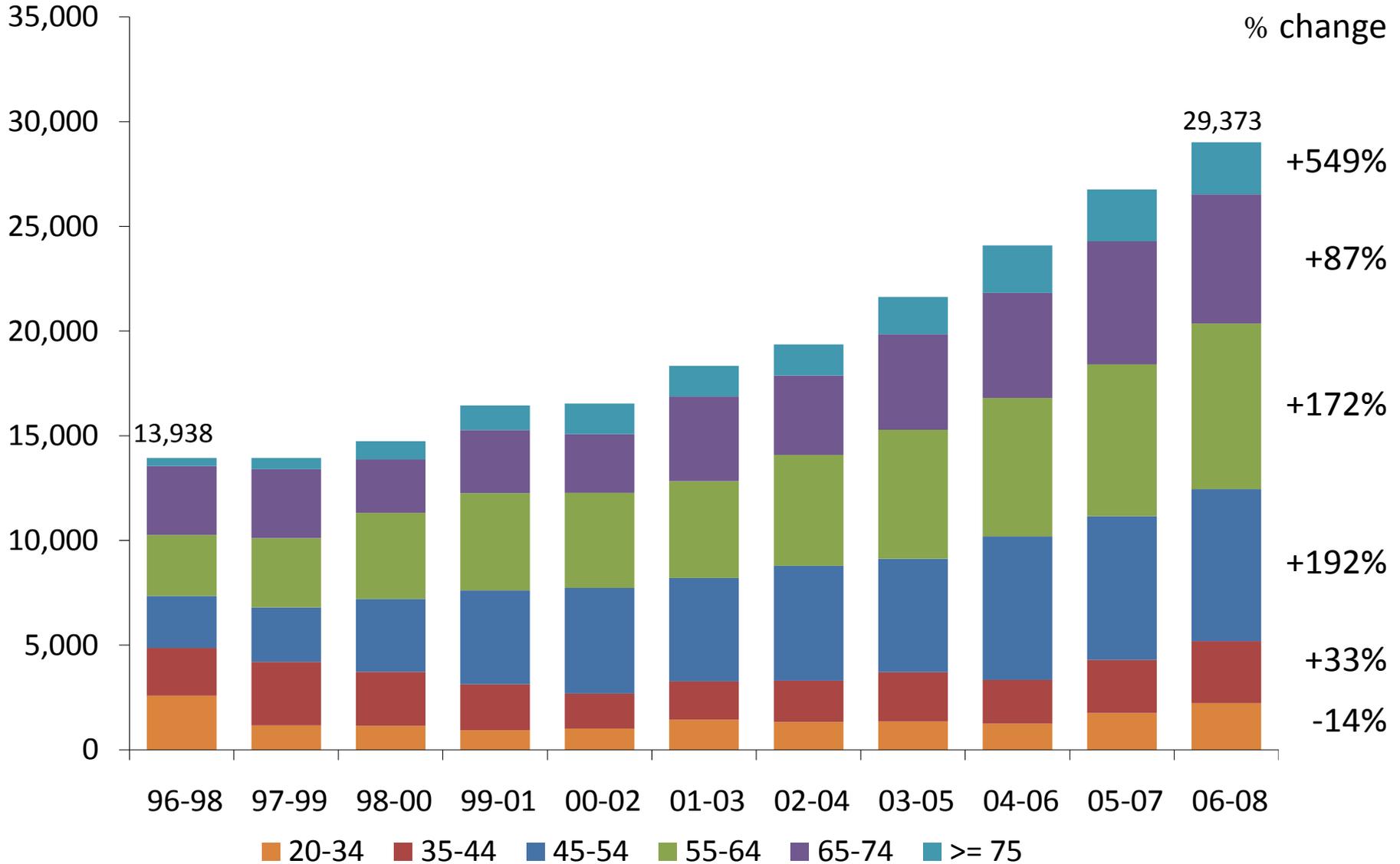
\* From 2000 to 2007, the age-adjusted mortality rate for diabetes as a leading cause of death among AK Natives diminished by more than 60%; this result should be used with caution because there were fewer than 20 diabetes deaths annually throughout this period. Among Whites, this diabetes mortality rate increased by 6%.

# Estimated number of *all* Alaska adults by age group, 1996-2008, AK BRFSS



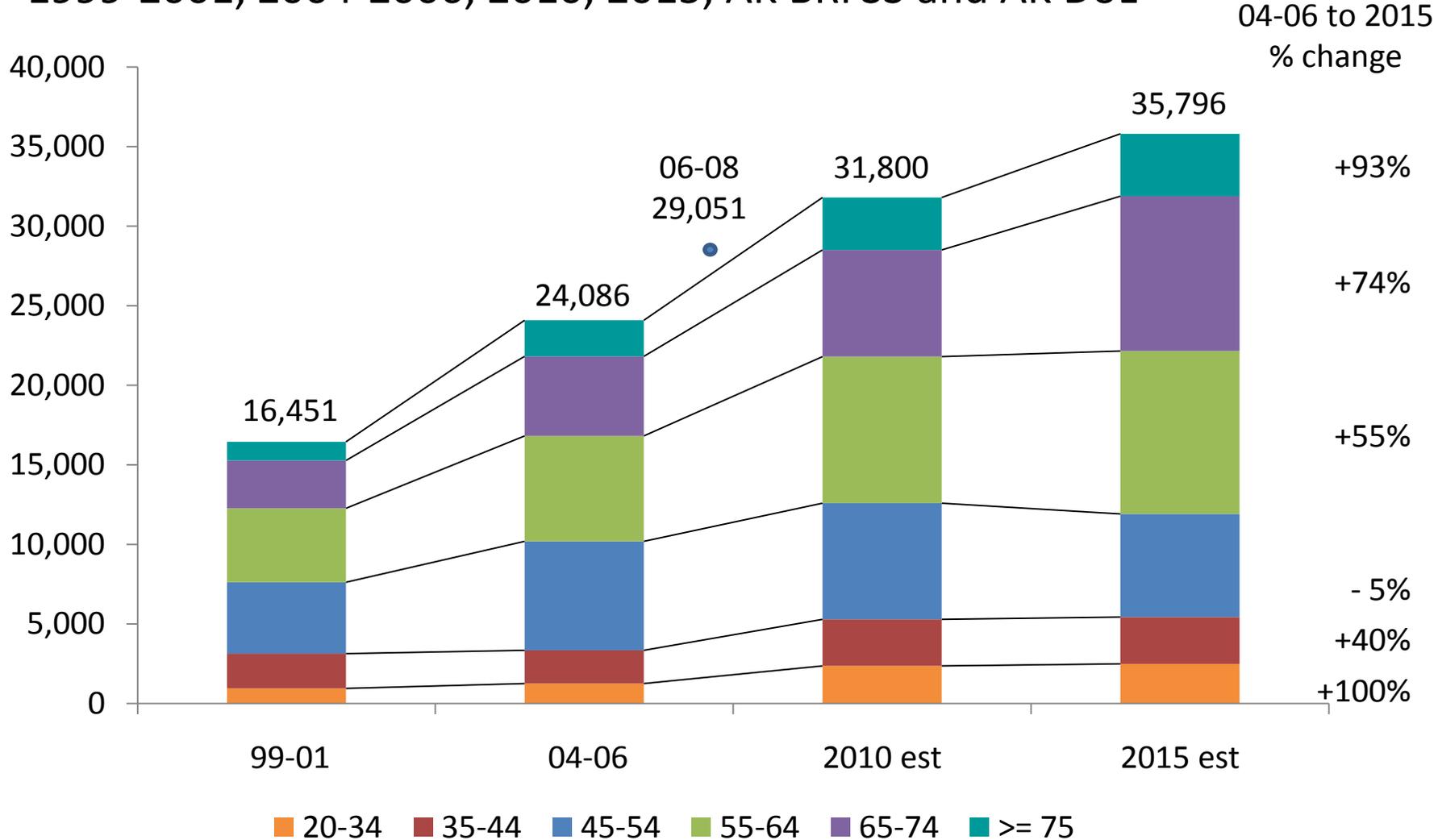
11% increase overall

# Estimated number of Alaska adults with diabetes by age group, 1996-2008, AK BRFSS



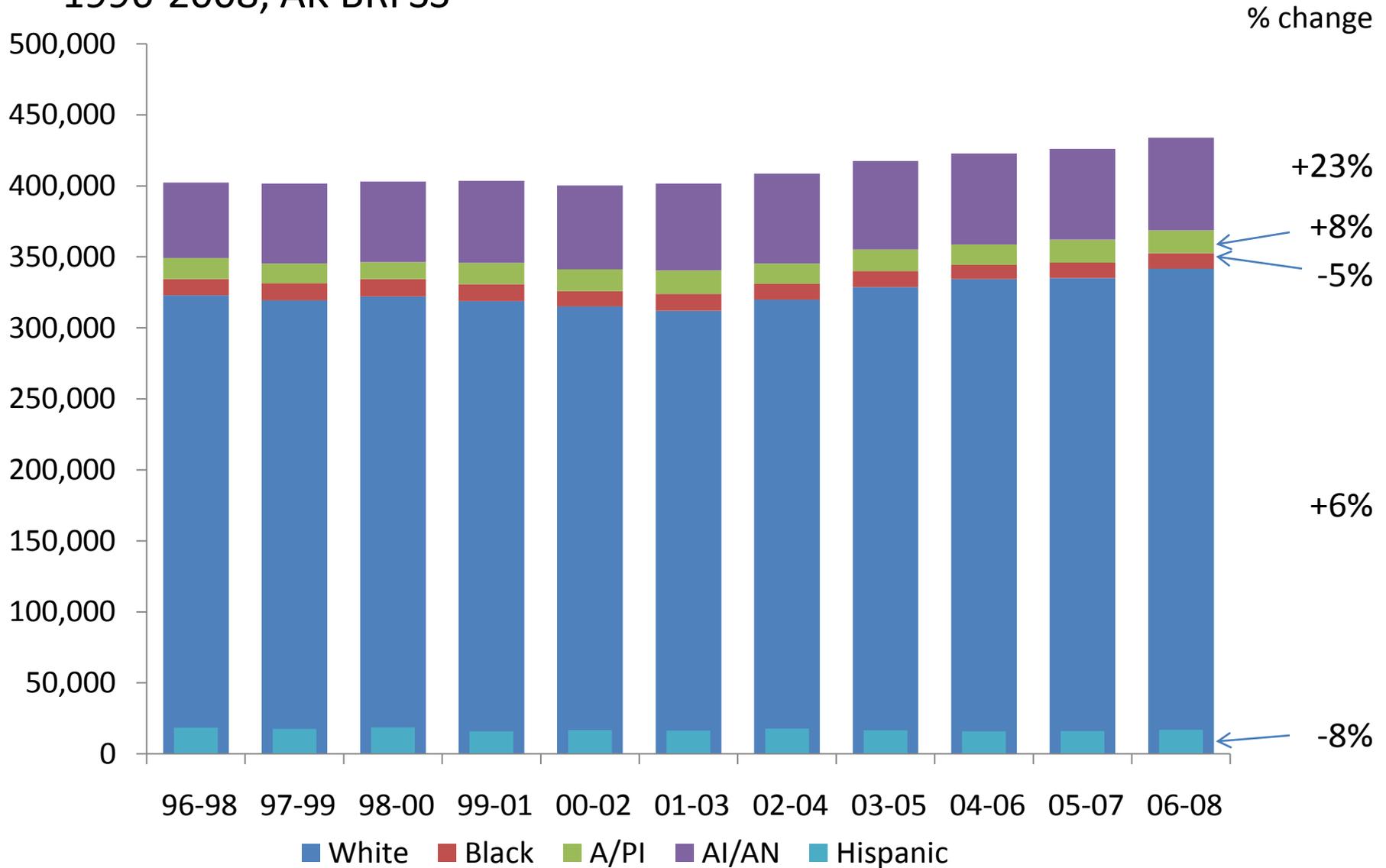
111% increase overall

# Estimated and projected numbers of Alaska adults with diabetes, 1999-2001, 2004-2006, 2010, 2015, AK BRFSS and AK DoL

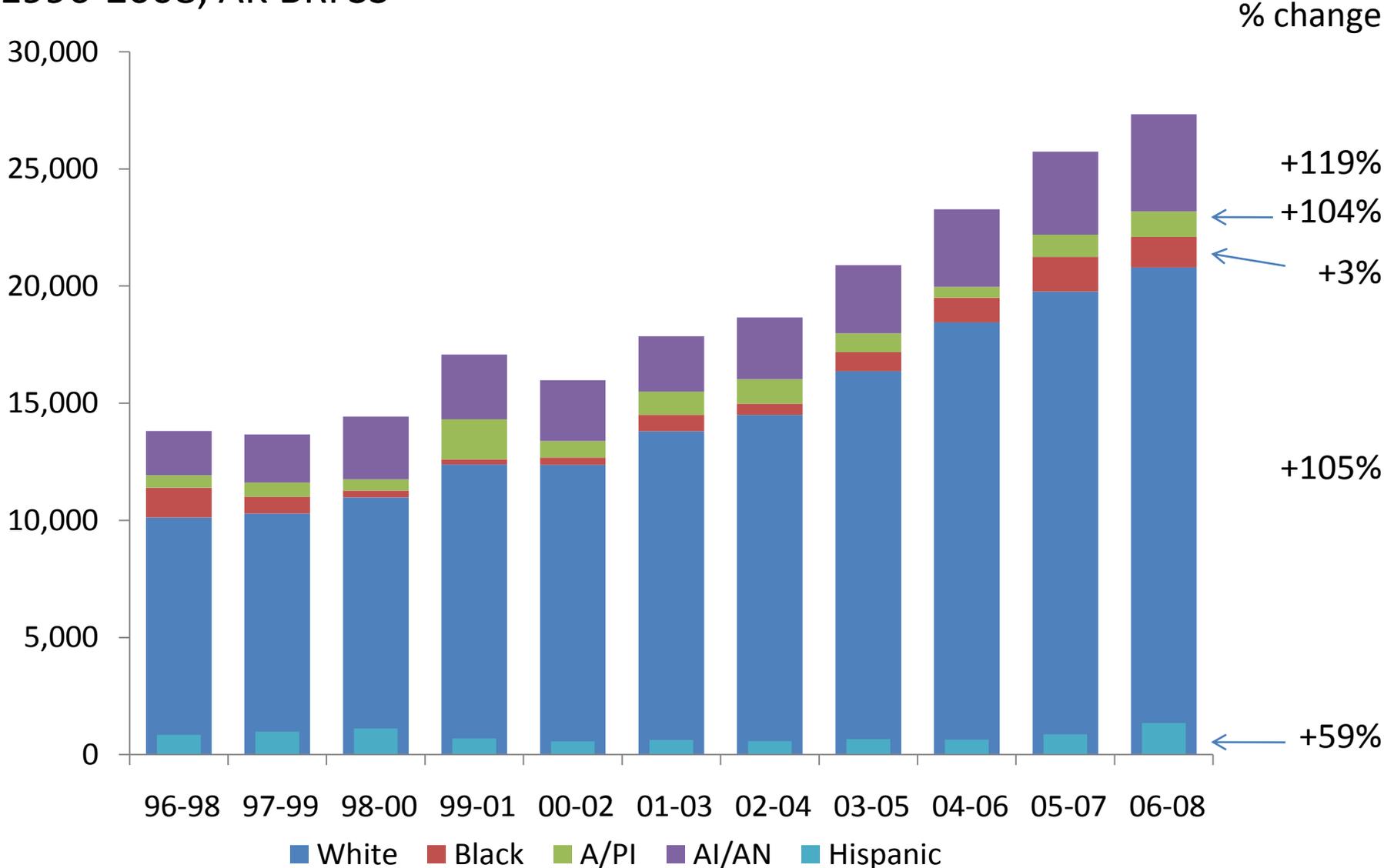


The all Alaska adult population has a projected 15% increase from 2004-2006 to 2015; using age group estimates and current diabetes prevalence, the projected number with diabetes will rise **46%**.

# Estimated numbers of *all* Alaska adults by race or ethnicity, 1996-2008, AK BRFSS

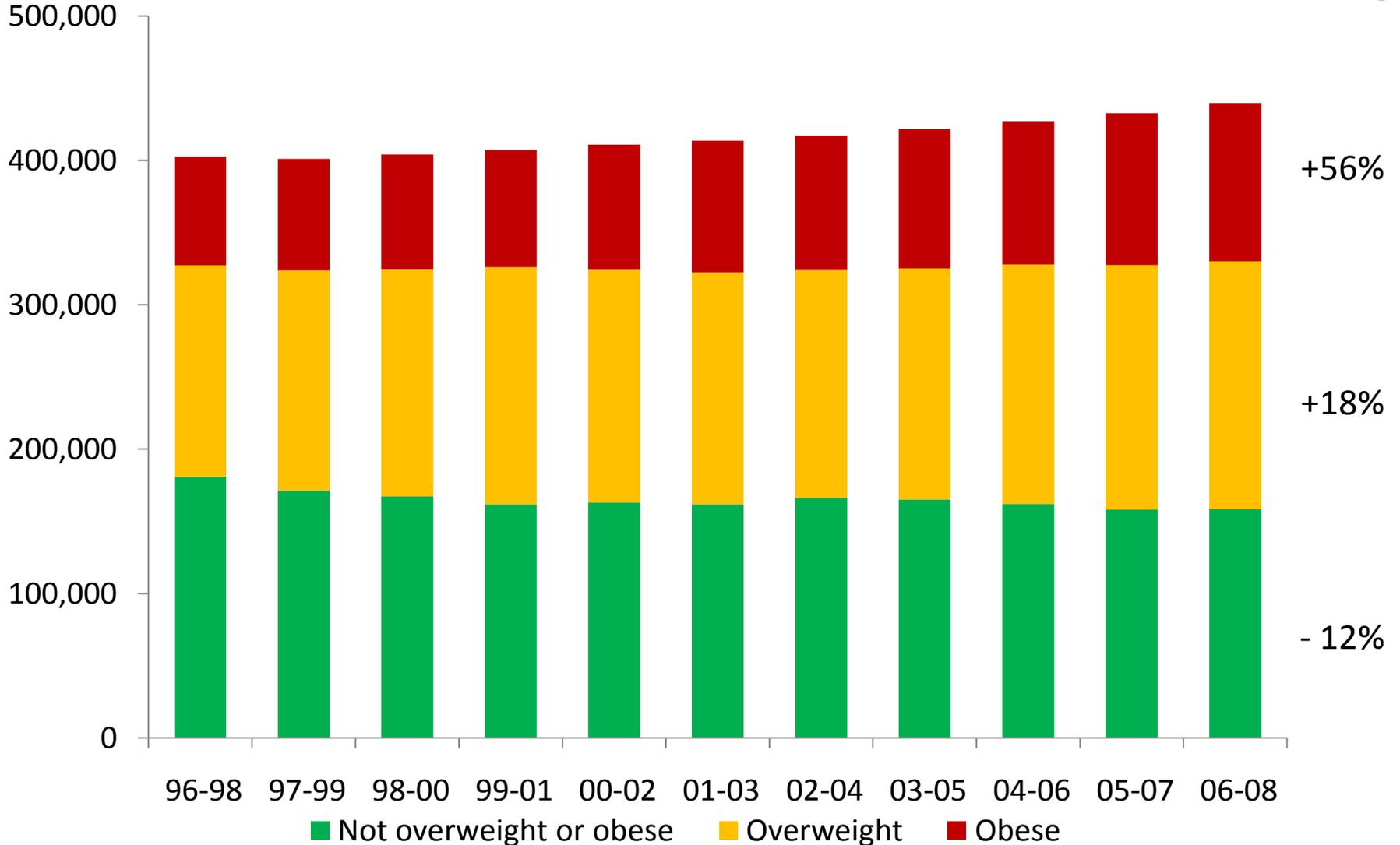


# Estimated numbers of Alaska adults with diabetes by race or ethnicity, 1996-2008, AK BRFSS

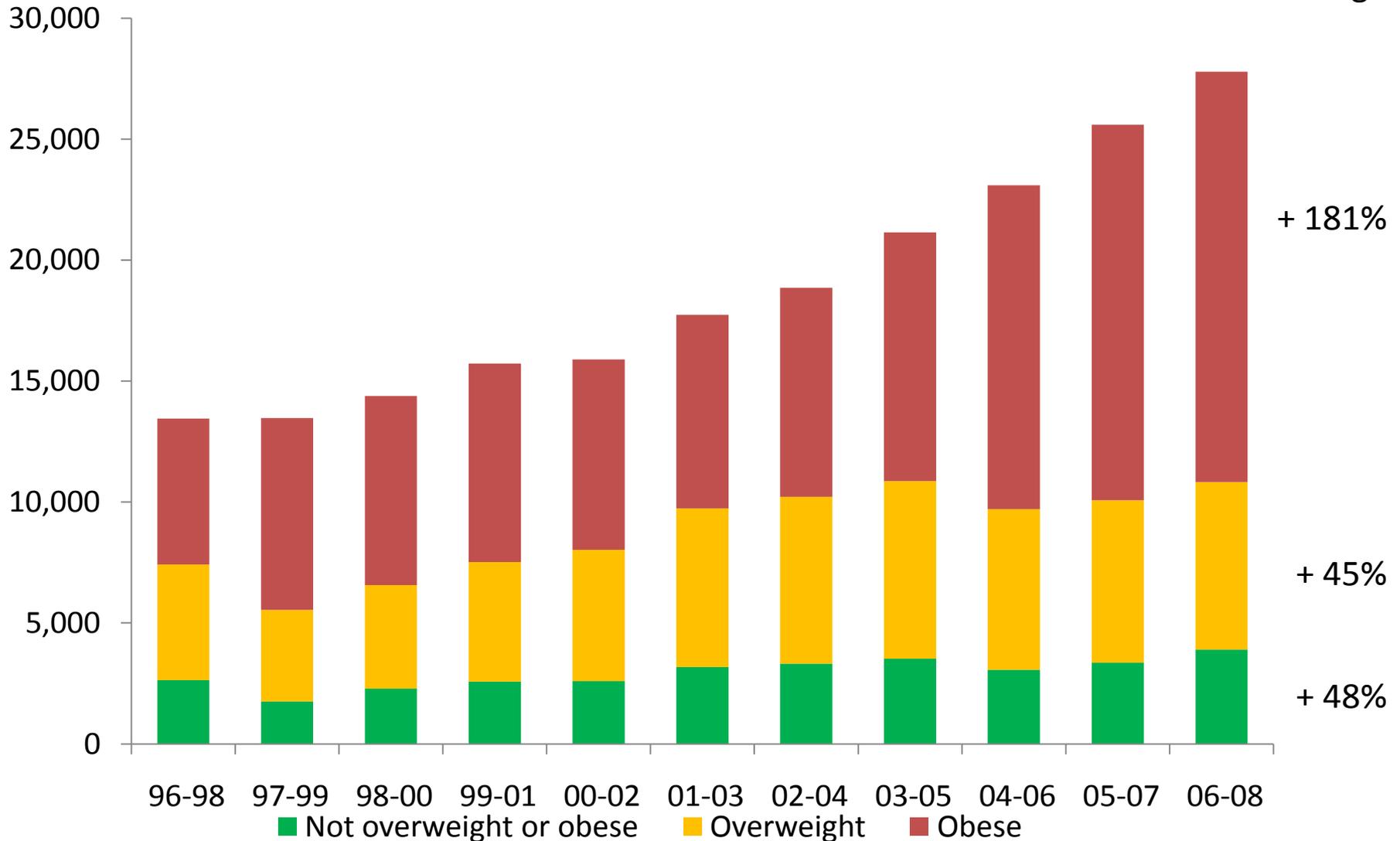


# Estimated numbers of *all* Alaska adults by body mass index category, 1996-2008, AK BRFSS

% change



# Estimated numbers of Alaska adults with diabetes by body mass index category, 2000-2008, AK BRFSS



# Context

- Strengths, Weaknesses, Opportunities and Threats analysis results
- More on:
  - Living Well AK
  - Recognized diabetes education programs
  - AK Native Education Programs
  - AK Native Diabetes Prevention Programs
  - Kidney disease resources in AK
  - Health Care Reform

# Diabetes Coalition strengths

- Evidence-based – recommendations reflect scientifically proven standards of care
- Access to data – the Coalition has access to and disseminates current data
- Some dollars – stable CDC support
- Information sharing- (1) the Coalition uses its networks to share information, (2) ANMC has done a great job of bringing people together in the state, (3) the ADA is an excellent resource, and (4) professional organizations offer excellent opportunities
- Diversity – (1) We all come from very different places, (2) the Coalition benefits from its members' expertise, experience and resources, (3) we represent diverse populations for greater outreach and influence, (4) we're increasing statewide coverage of the Coalition
- Passion – (1) We have a passion for people, (2) our advocates are passionate people, (3) our efforts are worthwhile and we stand to have a huge statewide impact.
- Leadership – Strong and focused leadership with concern for the patient.

# Diabetes Coalition weaknesses

- Competing demands – (1) We work for disparate organizations and have different mandates, (2) limited time, money and space in our schedules for collaboration.
- Diversity – (1) Lack cohesiveness, (2) our strengths are our weaknesses – diversity is hard to corral.
- Lack of face-to-face meetings – (1) Feel disconnected, (2) We need time together to develop relationships, get work done, collaborate, (3) don't have the chance to pull energy from the room to move forward.
- Lack of support for prevention – (1) Lack of funding, (2) lack of policy-maker understanding of and support for prevention or policy changes that can make a difference, (3) need to demonstrate the impact and importance of prevention.
- Marketing – We have a challenge marketing ourselves to the public and other professionals.
- Limited resources – (1) Lack of funding, (2) time has been wasted adapting and redeveloping resources that already exist, (3) we don't have the people to implement the great ideas and strategies.
- Evaluation – Need to (but have not yet) demonstrate the cost-saving impact
- New – We lack a history of sharing responsibility for our work; members had limited authority when we were an advisory group – being a coalition means all members contribute.

# External opportunities for the Diabetes Coalition, 1

- Increasing support for chronic disease prevention – (1) Childhood obesity, (2) importance of the built environment – the Anchorage Bike Plan has a lot of support.
- Advocacy with and by others – (1) Medicaid reimbursement for DSME, (2) health care reform included comprehensive coverage requirements, (3) AADE is lobbying to give RN CDEs direct reimbursement authority.
- Evidence supporting DSME – Alabama study for Medicaid with clinical outcomes, lots of other publications too
- Funding possibilities – (1) ARRA (2009 stimulus funding), (2) health care reform prevention and wellness funding (terms not yet defined)
- Leadership opportunity – Alaska doesn't need to be a follower, could be a leader in (a) preventative research, (b) effective advocacy at the state and federal levels, or (c) multi-disciplinary collaboration (e.g., pharmacists provide and reinforce standards of care – Fred Meyer, Target and Walgreens pharmacies have consult rooms which could expand to in-store clinics).
- New communications vehicles – Social networking (twitter and Facebook) and viral messaging; the ADA has started a couple of social networking initiatives.

# External opportunities for the Diabetes Coalition, 2

- Partnerships – (1) Alaska, being a smaller pop. state, has the opportunity to develop good partnerships/collaboration faster than larger states (maybe reach consensus and support sooner). (2) Need to develop or enrich partnerships with (a) community-based clinics (AK PCA), (b) recognized diabetes education programs and CDEs (although many in AK are not AK ADE members), (c) Anchorage Daily News, which has published lots on diabetes and obesity, (d) providers such as family docs (AK Family Care Association), social services agencies, ANPs and PAs and pharmacists (e) schools, (f) worksite wellness programs, (g) community centers (boys & girls clubs, YMCA), (h) faith communities.
- Advances in research on the impact of diet on diabetes -- such as evidence for plant-based diets.
- Diabetes is recognized as a public health problem in Alaska with prevention components to reduce trends.

# External threats for the Diabetes Coalition, 1

- Competing demands – (1) Health professionals have limited resources for continuing education, (2) Recommended diabetes care competes with other competes with other recommended health care services during health care visits and with problems presented by patients, (3) The built environment interferes with healthy lifestyles.
- Competition for funds – (1) Those that already have great programs get the grants, (2) CDC funding priorities are changing, instead of giving to state programs, shifting to communities and local programs, (3) Key community resources face private competition which could threaten their viability.
- Economic hard times – The economy will not bounce back soon, which means a long-term impact on funding and individuals ability to be healthy, increased stress, etc.
- Information does not equal action – (1) As information becomes more available and commonplace – people think they know something, but don't act on it, (2) Even though it's easy and inexpensive to distribute information electronically (e.g., via the internet or email), messages received from these methods are also easy to postpone or ignore, (3) Old fears from 20 years ago influence people's expectations for their own well-being.

# External threats to the Diabetes Coalition, 2

- Access to diabetes education – (1) Diabetes education is not reaching certain groups (health fair participants), (2) People with diabetes don't know about their medications or lifestyle opportunities, (3) Family docs don't have time to provide education/information, (4) Diabetes information is not provided routinely or, if provided, has been forgotten.
- Diet is a hard message – (1) Tobacco has been so successful – but you don't need to smoke to live. You do need to eat to live. (2) Questions from people with diabetes always comes back to what they can eat.
- Physical Activity is a hard message – The connection between physical activity and feeling healthy needs to be experienced to be valued; physical activity is often the first to go when life gets busy or stressful.
- Lack of information about positive results – (1) Lack of policy-maker understanding of prevention; (2) Need to influence funders, (3) Need to evaluate the use of resources (materials) that are produced.
- Lack of connection – (1) Many diabetes educators in AK do not belong to AK ADE, which has had an impact on diabetes education, care standards, care standards, etc., (2) Need capacity for keeping people focused.

# Living Well AK

- 2 T-trainers
- 40 Trainers
- 166 Course leaders
- 35 course sites
- >550 participants since 2006
- 32 % of participants had diabetes

# Recognized diabetes education programs

- **ADA:** Providence (Anchorage)  
Bristol Bay Area Health Corporation  
Fairbanks Memorial Hospital  
Bartlett Regional Hospital (Juneau)  
Ketchikan General Hospital  
Central Peninsula General Hospital (Soldotna)
- **IHS:** ANTHC
- **AADE:** South Peninsula Hospital (Homer)

# AK Native diabetes programs

- Aleutian/Pribilof Islands Association
- Bristol Bay Area Health Corporation
- Chugachmiut
- Copper River Native Association
- Council of Athabascan Tribes
- Eastern Aleutian Tribes, Inc.
- Kenaitze Indian Tribe
- Ketchikan Indian Community
- Kodiak Area Native Association
- Maniilaq
- Metlakatla Indian Community
- Mt. Sanford Tribal Consortium
- Native Village of Eklutna
- Ninilchik Traditional Council
- Norton Sound Health Corporation
- Oonalaska Wellness Center
- Samuel Simmonds Memorial Hospital
- South East Regional Health Corporation
- Seldovia Village Tribe
- South Central Foundation
- Tanana Chiefs Conference
- Yakutat Community Health Center
- Yukon-Kuskokwim Health Corporation

# Diabetes prevention programs

- Kenaitze Indian Tribe
- South East AK Regional Health Consortium
- South Central Foundation
- Norton Sound Health Corporation

# Kidney disease screening & dialysis centers

- KEEP events may reduce the number of Alaskans with undiagnosed kidney disease
- New dialysis centers provide added treatment choice and locations for Alaskans with kidney disease, including home-based treatment for some
- The percentage of Alaskans with kidney disease will increase due to our aging population, percentages with diabetes and/or high blood pressure, and so on
- The certificate of need process will slow the speed that new dialysis centers open

# “Scaling up” the DPP

*(aka the National Diabetes Prevention Program)*

The CDC, YMCA and GroupHealth, Inc are teaming together to prevent diabetes

- CDC will provide training for master trainers and certify programs
- YMCA will offer certified programs
- GroupHealth will reimburse YMCA for providing lifestyle services (by certified programs) in a community setting

# Health care reform

- All adults (not just parents) meeting income criteria now eligible for Medicaid -> increased access to care for some; most Alaskans with diabetes (82%) have health insurance.
- Incentives for worksite health promotion programs
- Chronic disease management grants to Medicaid programs
- National Diabetes Prevention Program

Where can the  
Diabetes Coalition  
make a difference?

# 'Impactful' approaches

## Planned Care Model elements:

- 1) Self-management (e.g., CDSMP),
- 2) Decision support (e.g., provider check-lists),
- 3) Delivery system design (e.g., group visits),
- 4) Community (e.g., referrals to effective community programs),
- 5) Organization of healthcare (e.g., executive support, multi-disciplinary teams),
- 6) Clinical information systems (e.g., registries)

## Evidence-based approaches by strategy focus

Health Systems	Health Communications	Policy, systems & environmental change
<ul style="list-style-type: none"><li>• Six elements of the Planned Care Model</li><li>• Reimbursement for diagnosis and DSME</li><li>• Identification of high risk people</li><li>• Referral to effective community programs</li><li>• Copayment reduction</li><li>• Medical homes</li></ul>	<ul style="list-style-type: none"><li>• Community-wide campaigns</li><li>• Self-management education in community gatherings</li></ul>	<ul style="list-style-type: none"><li>• Advocate for increased benefits</li><li>• Legislation</li><li>• Reimbursement for lifestyle interventions</li><li>• Establish effective structured community programs</li></ul>

# Evidence-based approaches to prevent or control diabetes

Group	Prevention	Control
Integrated management of chronic disease		Six elements of the planned care model Reimbursement for diagnosis and DSME
Community mobilization	Advocate for increased benefits Legislation	Medical homes Advocate for increased benefits
Diabetes self-management education (DSME)		Self-management education in community gatherings Reimbursement for diagnosis and DSME
Lifestyle interventions	Reimbursement for lifestyle interventions Identification of high risk people Establish effective structured community programs Referral to effective community programs	Reimbursement for lifestyle interventions
Health promotion and awareness	Community-wide campaigns	Community-wide campaigns Self-management education in community gatherings