

House Bill 39

Sectional

Section 1

This section includes legislative findings and intent language which states that we can prevent disease by lowering the incidence of disease, and that preventing disease will slow the rate of health care cost to the State.

Section 2

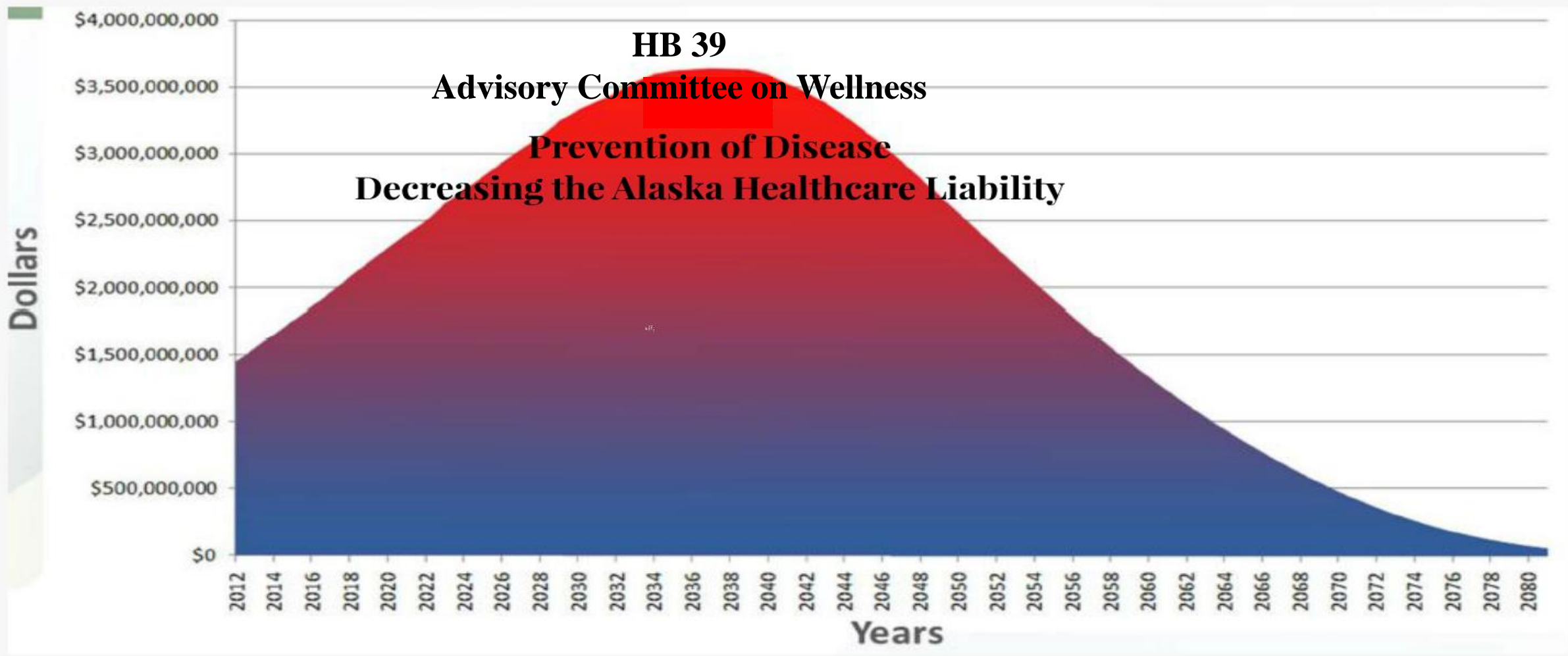
This section requires the Department of Administration, to the extent legally and reasonably practicable, to implement the recommendations of the Advisory Committee on Wellness and reduce the escalation of health care costs. This section of statute applies to state life and health insurance plans.

Section 3

This section requires the Department of Administration, to the extent legally and reasonably practicable, to implement the recommendations of the Advisory Committee on Wellness and reduce the escalation of health care costs. This section of statute applies to self-insurance and excess loss insurance.

Section 4

This section establishes the Advisory Committee on Wellness in the Department of Administration, outlines the appointment and roles of committee members, and requires the commissioner of administration to respond to the committee within six months.



\$3.8 BILLION

\$3.8 Billion is the amount of our PERS/TRS unfunded liability attributable to healthcare according to the Department of Administration.

The old estimate for a 2% annual, out-year, healthcare cost increase was used for setting the contribution rates to fully cover anticipated liabilities.

So this \$3.8 billion represents the healthcare cost inflation above 2%.



Why are we here?

The State of Alaska is a significant health care consumer.

Active plan	17,144 members (includes dependents)	\$111 million total spend in FY13
Retiree plan	64,237 members (includes dependents) 40% live outside Alaska	\$492 million total spend in FY13
Medicaid	145,279 Alaskans covered (2013) 58% children, 36% adults, 6% seniors	\$1.6 billion total spend in 2013

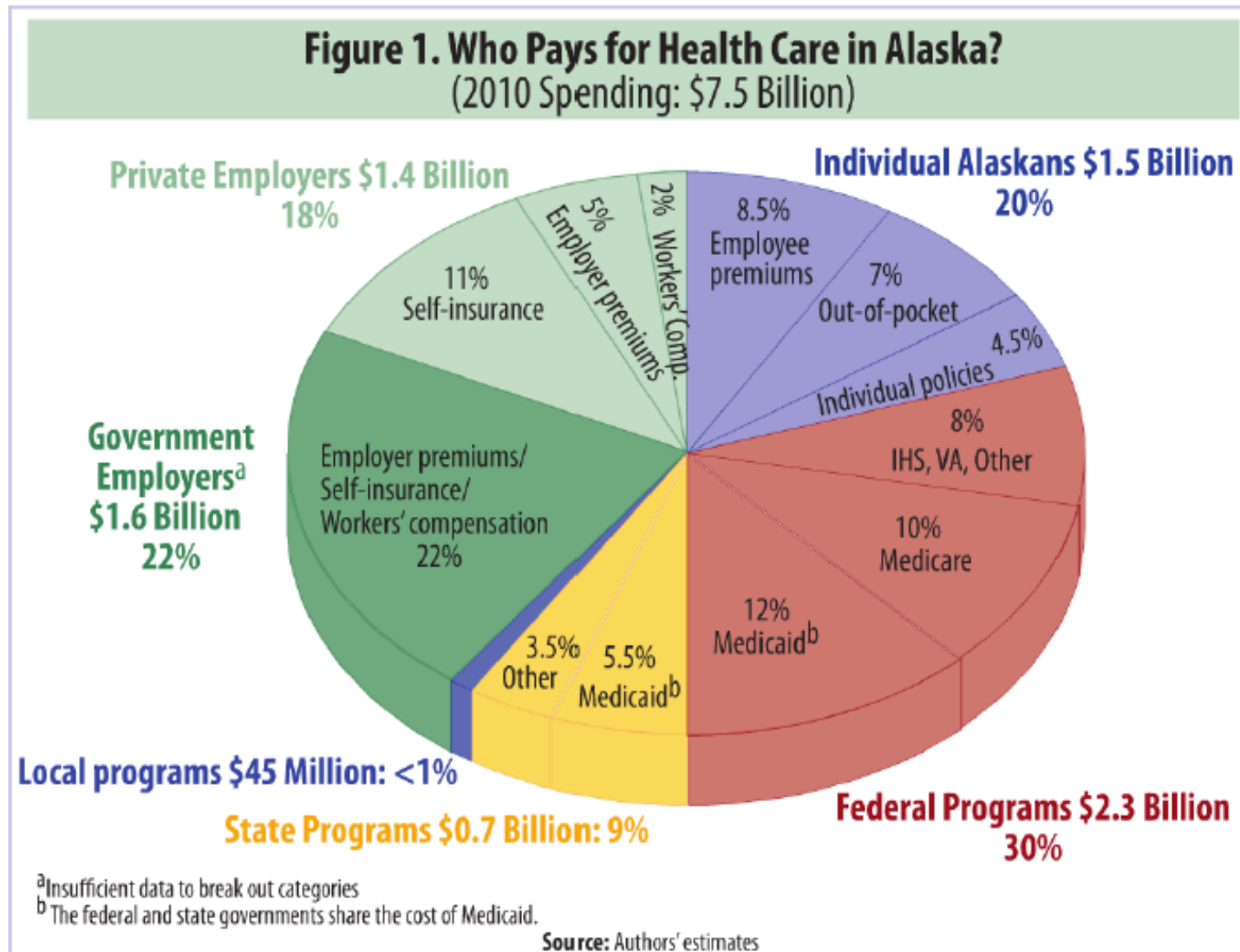
The state also spends money on health care for inmates, state employees who are members of union health trusts and for state workers' compensation claims.

Alaska's Health-Care Bill: \$7.5 Billion and Climbing

By Mark A. Foster and Scott Goldsmith

UA Research Summary No. 18 • August 2011

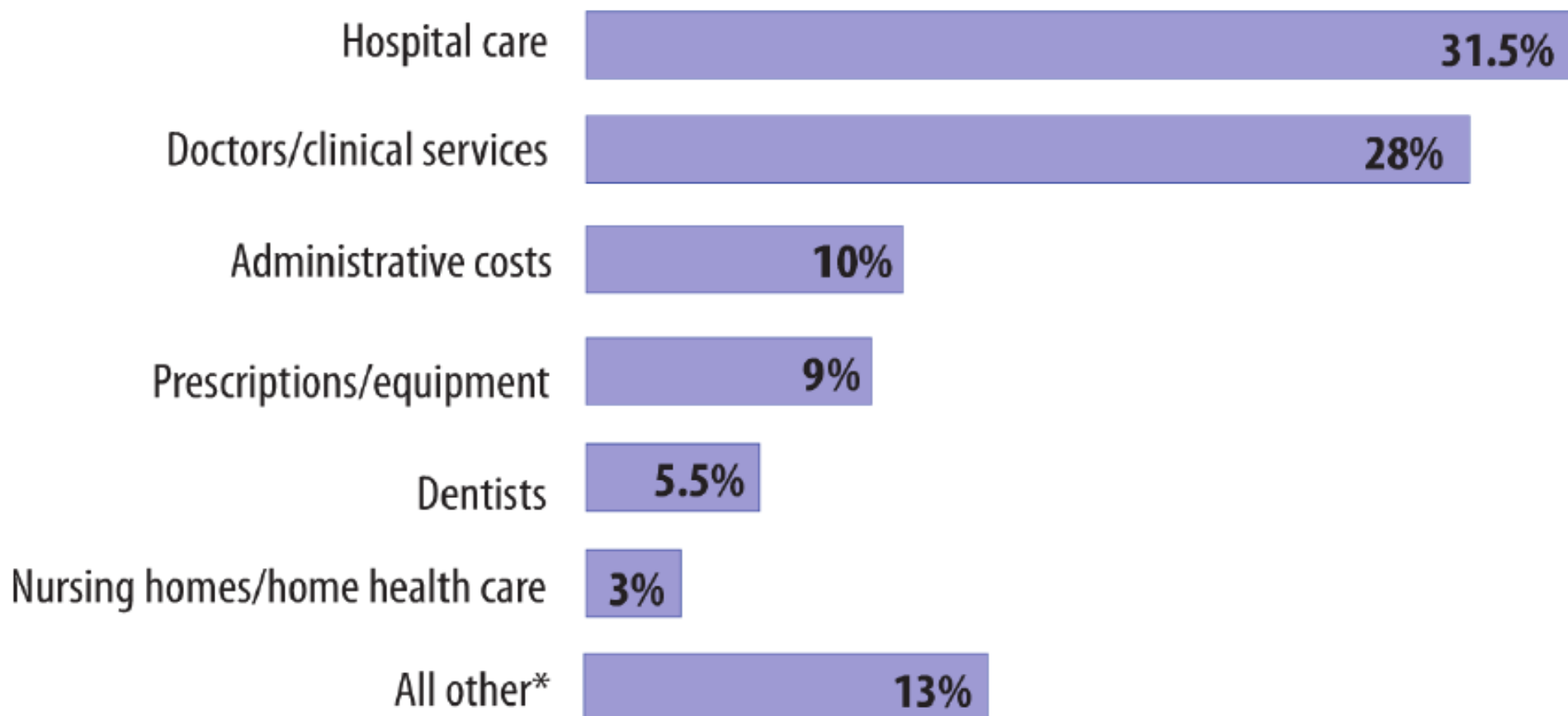
Institute of Social and Economic Research • University of Alaska Anchorage



Health-care spending for Alaskans reached about \$7.5 billion in 2010. For comparison, that's close to half the wellhead value of all the oil produced in Alaska that year. It's also roughly equal to half the wages Alaskans collected in 2010.

Figure 7. What Do Alaska's Health-Care Dollars Buy?

(2010 Spending: \$7.5 Billion)



*Other personal and professional care and public health activities.


Source: Mark A. Foster and Associates estimates, based on Centers for Medicare and Medicaid Services, National Health Expenditure accounts



The Question:

How CAN WE AVOID diseases and PREVENT illness instead of just reacting to and paying for SICKCARE?

The following slides demonstrate that we can reduce healthcare costs by initiating policies to avoid diseases with scientifically documented strategies, including vitamin D. The following is only an example of one the many wellness policies the committee might recommend.



4th Quarter Report 2013

ACTIVE PLAN

Aggregate Risk Profile

Member Information			
Member Count	17338	Avg Forecasted Cost	\$6,670
Avg Age	35	Avg Total Cost	\$6,774
Percent Female	51%	Avg Forecasted Risk Index	1.09
Avg Months Enrolled	11	%/w Acute Impact Score >= 95	1.06%
		%/w Chronic Impact Score >= 95	5.38%
		%/w Motivation Rank >= 95	4.83%

Aggregate Risk Summary					
Risk Drivers	# Members	Avg Risk Contribution	Contribution to Forecast	Risk Contribution	
Demographics	17338	SENIORS SKIN, FRACTURES, FALLS \$345	\$5,987,784	5.18%	X
Acute Respiratory Disorders	2880	TUBERCULOSIS \$1,129	\$3,251,578	2.81%	X
Arrhythmia Disorders	220		\$744,142	0.64%	
CHF Conditions	673	CHRONIC HEART FAILURE \$3,181	\$2,140,732	1.85%	X
Cerebral Vascular Disorder	247		\$1,037,177	0.90%	
Chronic Respiratory Disorders	1728	UPPER RESPIRATORY TRACT \$2,318	\$4,005,542	3.46%	X
Coronary Artery Related Conditions	1655	CORONARY HEART DISEASE \$2,958	\$4,895,538	4.23%	X
Dermatological Disorder	3075		\$3,911,805	3.38%	
Diabetic Disorders	882	TYPE 1 AND TYPE 2 \$5,932	\$5,231,998	4.52%	X
Female Reproductive Conditions	341	PRETERM BIRTHS \$2,510	\$856,045	0.74%	X
Gastrointestinal Disorders	2351	COLORECTAL CANCER \$2,011	\$4,728,854	4.09%	X
Heart Related Conditions	180		\$1,013,046	0.88%	
Hypertension	1527	BLOOD PRESSURE \$1,983	\$3,028,315	2.62%	X
Hypotensive Drugs	1784		\$3,937,924	3.41%	
Major Infection Related Conditions	2950	MRSA \$2,023	\$5,968,497	5.16%	X
Metabolic Conditions	3077	FIBROMYALGIA \$2,680	\$8,247,421	7.13%	X
Minor Infection Related Conditions	3704		\$4,965,037	4.29%	
Miscellaneous Conditions	4750		\$10,940,696	9.46%	
Musculo-skeletal Disorders	5173	INFANT MUSCLE, SENIOR FALLS \$2,206	\$11,409,047	9.87%	X
Myocardial Infarction Related Conditions	271		\$1,440,328	1.25%	
Neonatal Issues	255	AUTISM, HEART PROGRAMMING \$935	\$238,299	0.21%	X
Neoplastic Related Conditions	638		\$2,763,900	2.39%	
Neurological Disorder	3770	ALZHEIMER'S \$1,435	\$5,409,047	4.68%	X
Non-specific condition	5561		\$780,877	0.68%	
Pneumonia	243	UPPER RESPIRATORY TRACT \$3,822	\$928,744	0.80%	X
Psychological Disorder	2688	S.A.D. AND DEPRESSION \$2,771	\$7,447,883	6.44%	X
Renal Disorders	309		\$4,679,794	4.05%	
Trauma Related Condition	1822	TRAUMATIC BRAIN INJURY \$1,455	\$2,651,019	2.29%	X
Urinary Disorders	1381		\$2,996,360	2.59%	

% total diseases directly related to Vitamin D status = 66.08 %

RETIREE PLAN

4th Quarter Report 2013

Aggregate Risk Profile

Member Information				
Member Count	65376	Avg Forecasted Cost	\$15,666	
Avg Age	63	Avg Total Cost	\$17,726	
Percent Female	54%	Avg Forecasted Risk Index	2.56	
Avg Months Enrolled	12	% /w Acute Impact Score >= 95	5.47%	
		% /w Chronic Impact Score >= 95	16.63%	
		% /w Motivation Rank >= 95	9.70%	
Aggregate Risk Summary				
Risk Drivers	# Members	Avg Risk Contribution	Contribution to Forecast	Risk Contribution
Demographics	65376	SENIORS SKIN, FRACTURES, FALLS \$454	\$29,702,943	2.90% X
Acute Respiratory Disorders	9520	TUBERCULOSIS \$1,669	\$15,893,121	1.55% X
Arrhythmia Disorders	5170	\$2,860	\$14,786,038	1.44%
CHF Conditions	10658	CHRONIC HEART FAILURE \$2,758	\$29,389,999	2.87% X
Cerebral Vascular Disorder	5021	\$3,726	\$18,710,595	1.83%
Chronic Respiratory Disorders	11241	UPPER RESPIRATORY TRACT \$3,093	\$34,763,411	3.39% X
Coronary Artery Related Conditions	24057	CORONARY HEART DISEASE \$2,900	\$69,776,210	6.81% X
Dermatological Disorder	15979	\$1,958	\$31,281,265	3.05%
Diabetic Disorders	10689	TYPE 1 AND TYPE 2 \$5,966	\$63,771,119	6.23% X
Female Reproductive Conditions	103	PRETERM BIRTHS \$1,489	\$153,413	0.01% X
Gastrointestinal Disorders	18753	COLORECTAL CANCER \$2,146	\$40,246,314	3.93% X
Heart Related Conditions	4346	\$4,374	\$19,007,254	1.86%
Hypertension	21394	BLOOD PRESSURE \$1,623	\$34,713,887	3.39% X
Hypotensive Drugs	21282	\$1,869	\$39,772,355	3.88%
Major Infection Related Conditions	13879	MRSA \$3,007	\$41,731,745	4.07% X
Metabolic Conditions	28763	FIBROMYALGIA \$2,545	\$73,213,862	7.15% X
Minor Infection Related Conditions	14339	\$1,726	\$24,754,410	2.42%
Miscellaneous Conditions	32888	\$2,762	\$90,833,634	8.87%
Musculo-skeletal Disorders	32886	INFANT MUSCLE, SENIOR FALLS \$2,498	\$82,154,255	8.02% X
Myocardial Infarction Related Conditions	5796	\$3,424	\$19,844,208	1.94%
Neonatal Issues	63	AUTISM, HEART PROGRAMMING \$1,504	\$94,751	0.01% X
Neoplastic Related Conditions	7447	\$3,928	\$29,253,071	2.86%
Neurological Disorder	27775	ALZHEIMER'S \$1,561	\$43,366,164	4.23% X
Non-specific condition	12687	\$113	\$1,429,752	0.14%
Pneumonia	1619	UPPER RESPIRATORY TRACT \$5,098	\$8,254,358	0.81% X
Psychological Disorder	16031	S.A.D. AND DEPRESSION \$2,659	\$42,623,390	4.16% X
Renal Disorders	4750	\$16,668	\$79,174,484	7.73%
Trauma Related Condition	8749	TRAUMATIC BRAIN INJURY \$1,904	\$16,660,268	1.63% X
Urinary Disorders	11515	\$2,504	\$28,836,425	2.82%

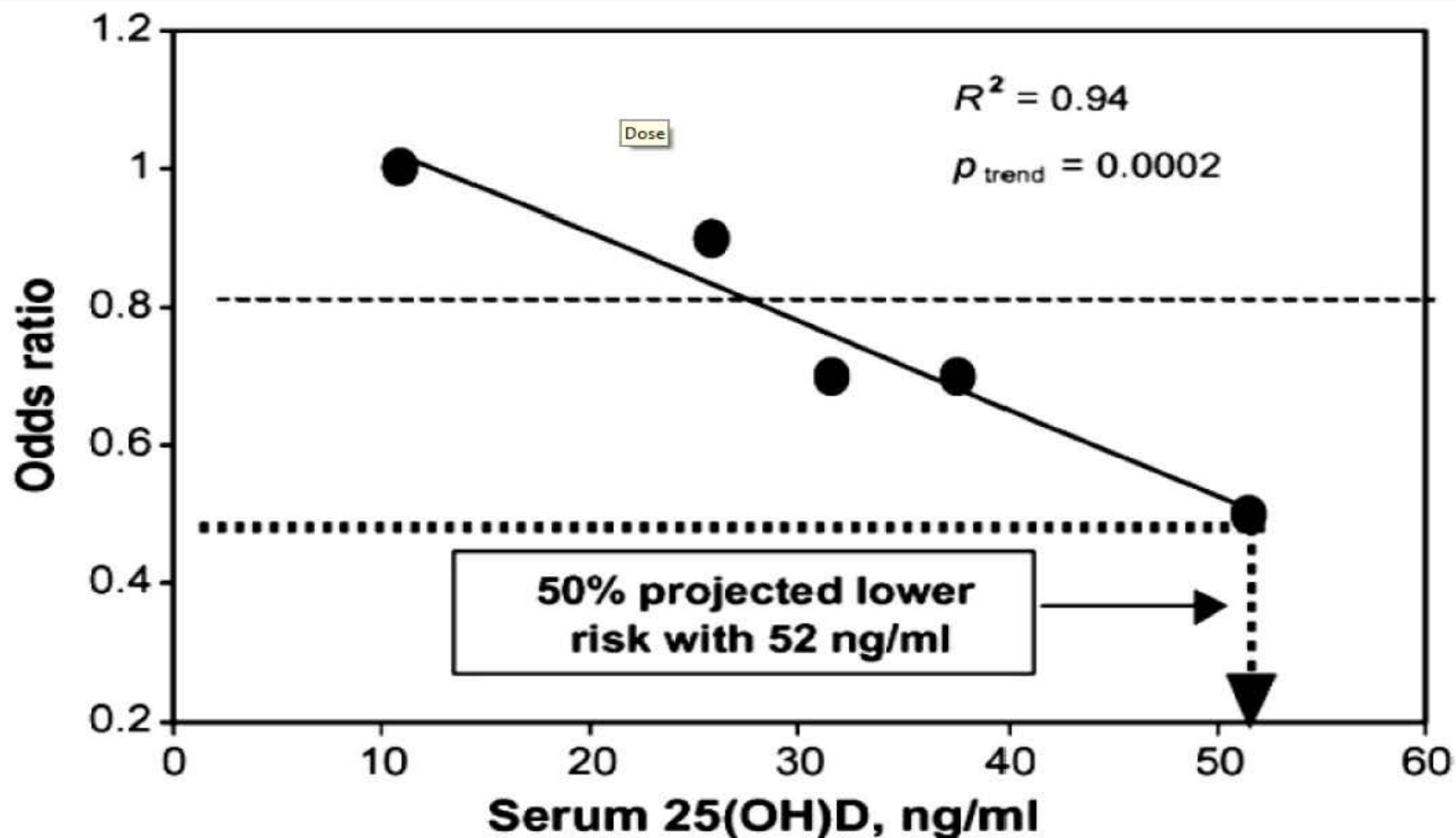
% total diseases directly related to Vitamin D status = 61.16%

AlaskaCare Retiree Plan - 4th Quarter Report 2013

Notes in red by office of Rep. Seaton

Meta-analysis of breast cancer risk

[Slide by Cedric F. Garland, et al. University of California San Diego]



Dose-response gradient of risk of breast cancer according to serum 25-hydroxyvitamin D concentration, pooled analysis.

Active State Of Alaska employees, Retirees and dependents - **83,000**

Female percentage of AK employees and retirees: 53% = 43,990

Incidence of Breast Cancer per year in AK - **125 per 100,000 (.0125)**

Average cost of annual medical expenditures directly attributable to Breast
Cancer - **\$11,000**

=

Per year AK State Cost for Breast Cancer: **\$6,048,625**

50% reduction with vitamin D
Per Year Savings with vitamin D:

\$3,024,312

72% reduction with vitamin D (2014 GRH study)

Per Year Savings with Vitamin D:

\$4,355,010

Meta-analysis

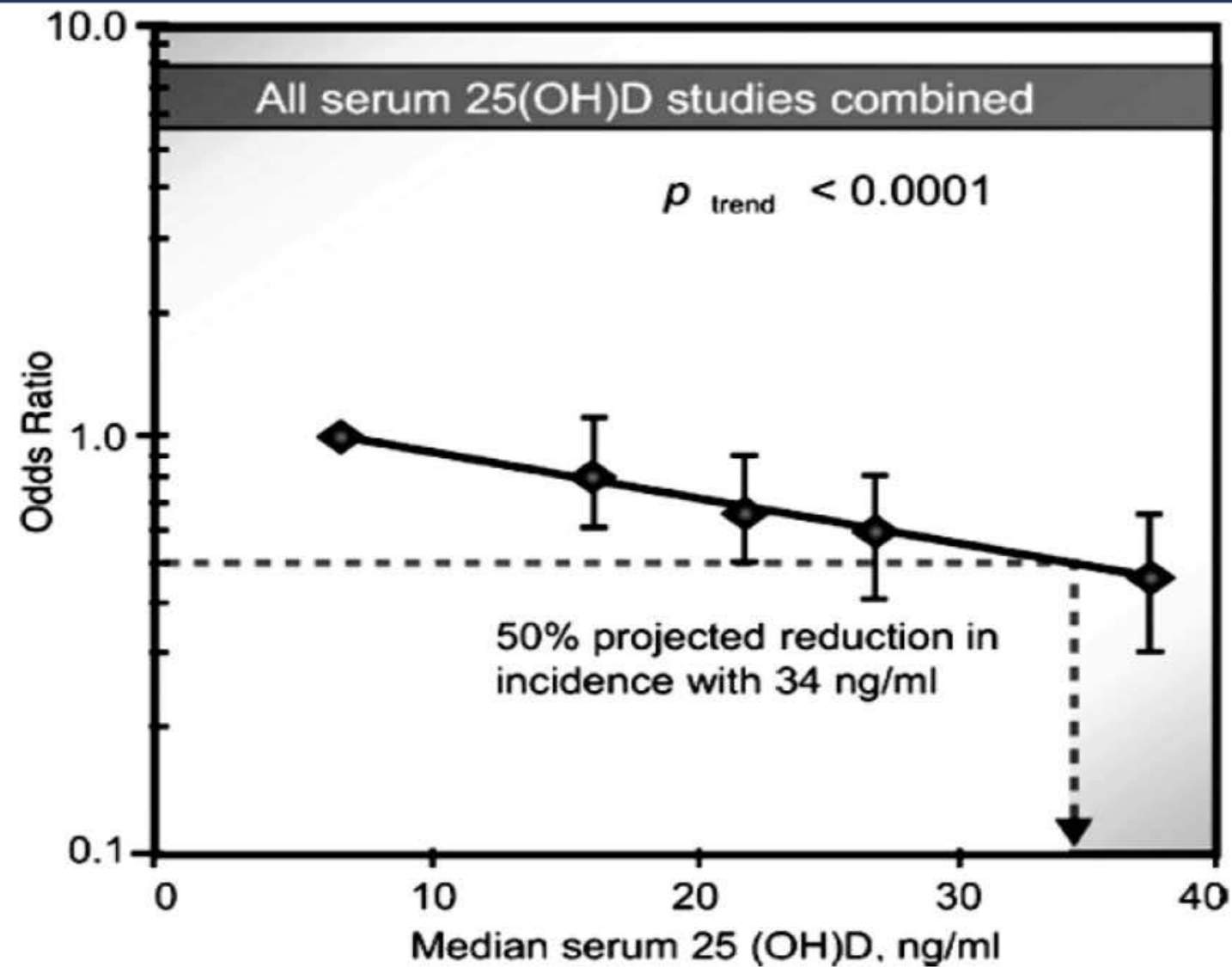


Figure 1. Dose–response gradient for colorectal cancer according to serum 25(OH)D concentration, all five studies combined.^{1,4–7} The five points are the odds ratios for each quintile of 25(OH)D based on combined data from the five studies.

Optimal Vitamin D Status for Colorectal Cancer Prevention
Edward D. Gorham, et al. Am J Prev Med; 2007

Active State Of Alaska employees, Retirees and dependents - **83,000**

Incidence of Colorectal Cancer per year in AK - **43 per 100,000 (.0043)**

Average cost of annual medical expenditures directly attributable to Colon Cancer
- **\$ 11,000**

AK State Cost for Colorectal Cancer per year **\$ 3,925,900**

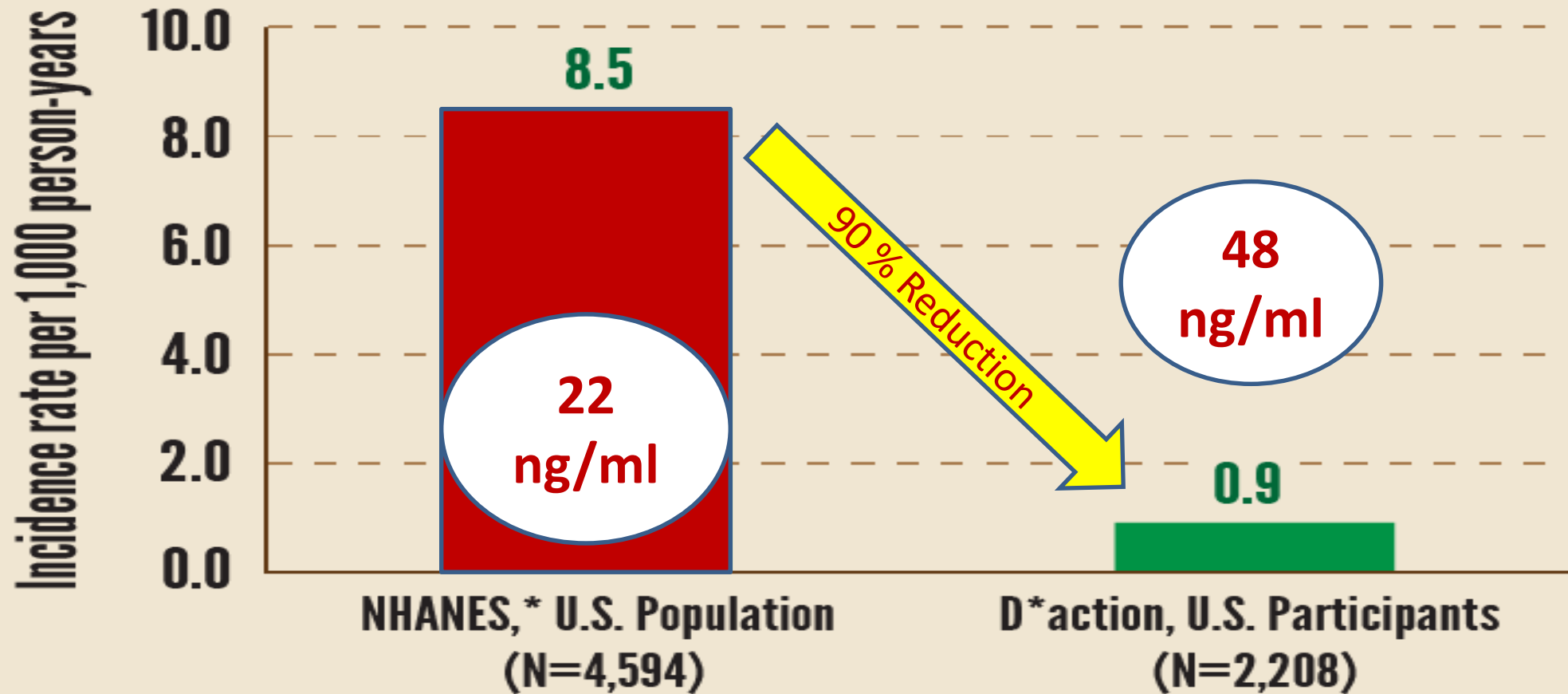
50% per year savings with vitamin D

\$1,962,950

(meta-analysis Gorham et . al.)

TYPE 2 DIABETES

Diabetes Incidence: Comparing NHANES* and D*action (18+ years)



Vitamin **D*action**



GrassrootsHealth
A Public Health Promotion Organization
www.grassrootshealth.net

*DATA SOURCE: NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES), 2005-2006

**RATE RATIO = 9.7 (P=0.0002)

(Notes by the office
of Rep Seaton)

Chart Date 8/6/13

© 2013 GrassrootsHealth
Preliminary data, not yet published.

Active State Of Alaska employees, Retirees and dependents – 83,000

Employees, Retirees and dependents minus those with Diabetes already – 71,143

New incidences of diabetes per year – 8.5 per 1,000 per year (.0085)

Average cost of annual medical expenditures directly attributable to diabetes – \$7,900

=

Current Diabetes Cost per year= **\$4,777,252**

Per year Savings at 90% reduction = **\$4,299,527**

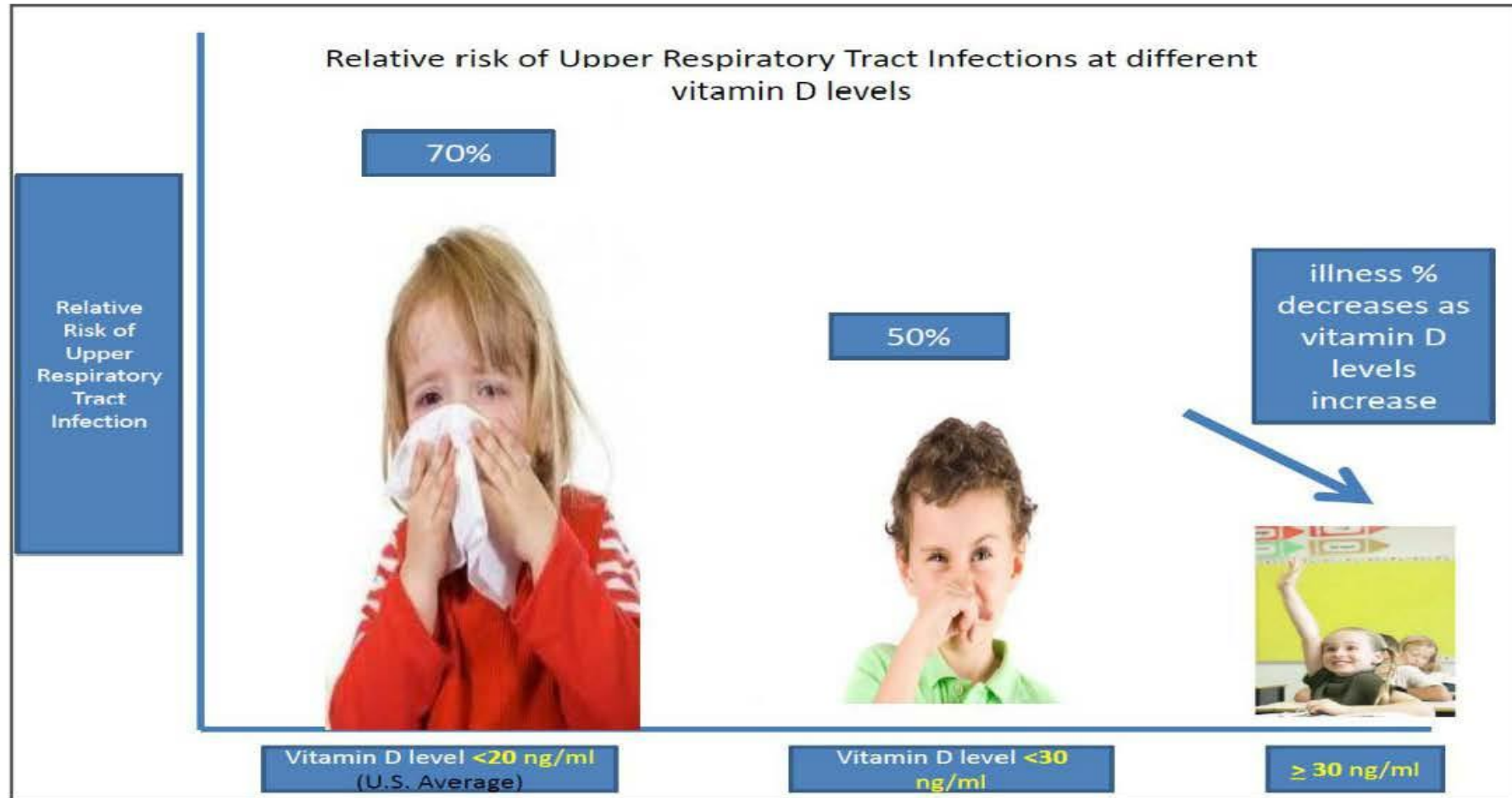
(GrassrootsHealth D*Action study)

Per year Savings at 38% reduction = **\$1,815,356**

(Meta-analysis of prospective studies - Song et.al.)

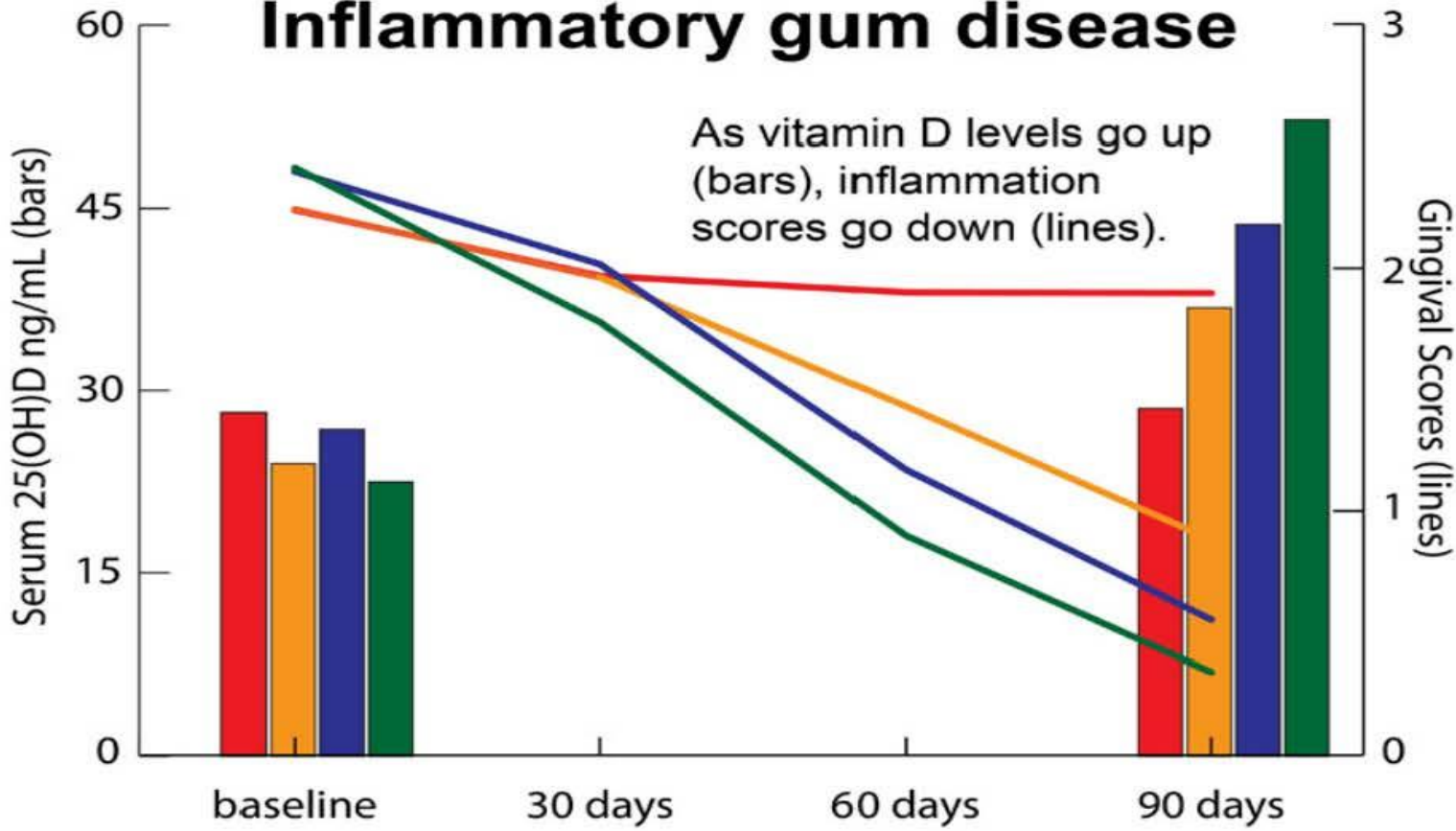
Upper Respiratory Tract Infections

Recently, a study was conducted with seven hundred forty-three children ages 3-15 in a Canadian Hutterite Community. **The findings of the study show that children with higher vitamin D blood levels had a 50% lower relative risk of contracting an Upper Respiratory Tract infection.** Those children at the United States national average of 21 ng/ml vitamin D levels were at a 70% greater risk of contracting respiratory infections. Illnesses such as RTI's are commonly a factor in children's absences from school. Making sure your child has sufficient vitamin D will not only increase their health, but will lead to less school absences due to illness.



Low Serum 25 Hydroxyvitamin D level and Risk of Upper Respiratory tract infection in Children and Adolescents Science et. al. Journal of Clinical Infectious Diseases, August 2013 volume 57.

Inflammatory gum disease



- 0 IU (placebo) After 3 months
- 500 IU/day More than 50% reduction
- 1000 IU/day More than 65% reduction
- 2000 IU/day More than 80% reduction

Hiremath VP, Rao CB, Naik V, Prasad KVV. Anti-inflammatory Effect of Vitamin D on Gingivitis: A Dose-Response Randomised Control Trial. Oral Health Prev. Dent. 2013; 11(1):61-69. (notes by Seaton)

Impact of Vitamin D Deficiency on the Productivity of a Health Care Workforce

Gregory A. Plotnikoff, MD, MTS, Michael D. Finch, PhD, and Jeffery A. Dusek, PhD

Objective: To define the relationship between vitamin D status and employee presenteeism in a large sample of health care employees. **Methods:** Prospective observation study of 10,646 employees of a Midwestern-integrated health care system who completed an on-line health risk appraisal questionnaire and were measured for 25-hydroxyvitamin D. **Results:** Measured differences in productivity due to presenteeism were 0.66, 0.91, and 0.75 when comparing employees above and below vitamin D levels of 20 ng/mL, 30 ng/mL, and 40 ng/mL, respectively. These productivity differences translate into potential productivity savings of 0.191%, 0.553%, and 0.625%, respectively, of total payroll costs. **Conclusions:** Low vitamin D status is associated with reduced employee work productivity. Employee vitamin D assessment and replenishment may represent a low-cost, high-return program to mitigate risk factors and health conditions that drive total employer health care costs.

Learning Objectives

- Discuss the reasoning behind the suggestion that vitamin D deficiency may be a “fundamental risk factor” for reduced work productivity.
- Summarize the newly reported associations between vitamin D status and productivity, including the potential productivity savings for employees at different vitamin D levels.
- Review the study implications for employee health risk assessments and efforts to address risk factors for presenteeism and high health costs.

Impact of Vitamin D Deficiency on the Productivity of a Health Care Workforce

Gregory A. Plotnikoff, MD, MTS, Michael D. Finch, PhD, and Jeffery A. Dusek, PhD

Midwestern Health Care System Employees in Study = **10,646 workers**

Estimated Employer Health Care Costs Due to Diminished Employee Productivity from Illness =
15% to 73%, or more than \$150 Billion Per Year

Active State Employees: **17,338**

Estimated Savings for Above 20 ng/mL of Vit. D Compared to Below 20
ng/mL

**= \$112 Per Employee Per Year or
total of \$1.9 Million Per Year**

Estimated Savings for Above 40 ng/mL of Vit. D Compared to Below

**= \$370 Per Employee Per Year or
total of \$6.4 Million Per Year**

FOR AN ACT ENTITLED

"An Act establishing the Advisory Committee on Wellness; and relating to the administration of state group health insurance policies."

13 percent annually.

14 * **Sec. 2.** AS 39.30.090(a) is amended by adding a new paragraph to read:

15 (13) To the greatest extent legally and reasonably practicable, the
16 Department of Administration shall work to hold the escalation of health care costs to
17 less than two percent annually by administering policies of group health insurance
18 obtained under this subsection in a manner that is likely to reduce the incidence of
19 disease in the state's population and that facilitates implementation of the
20 recommendations of the Advisory Committee on Wellness established under
21 AS 39.30.093.

22 * **Sec. 3.** AS 39.30.091 is amended by adding a new subsection to read: