

Diabetes and Tobacco Use:

What healthcare professionals need to know





Brought to you by:

- Nebraska Department of Health and Human Services (DHHS)
 - Tobacco Free Nebraska (TFN)
 - Nebraska Diabetes Prevention and Control Program (DPCP)
 - Every Woman Matters (EWM)

Tobacco Free Nebraska

Tobacco Free Nebraska (TFN) is the state's comprehensive tobacco prevention program that works to:

- Help people quit
- Eliminate exposure to secondhand smoke
- Keep youth from starting
- Reach underserved populations

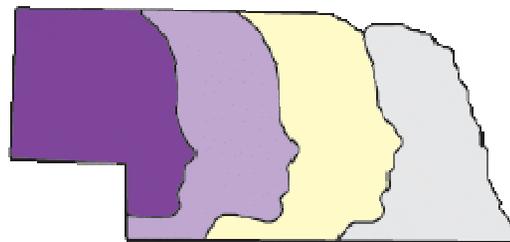


for a great state of health

Every Woman Matters (EWM)

- EWM is an annual breast and cervical cancer screening office visit that includes cardiovascular risk assessment.

Every Woman Matters



NEBRASKA OFFICE OF WOMEN'S HEALTH



Every Woman Matters

- Women 40-64 who meet income and insurance requirements are eligible for blood pressure and BMI screening, a cholesterol panel and blood glucose or A1c testing.



Every Woman Matters

- Women who have screening numbers that exceed recommended levels are offered “Pathways to Healthier Living” which is a four month program designed to address lifestyle change.

Nebraska Diabetes Prevention and Control Program (DPCP)

- *Our mission is to reduce the impact of diabetes in Nebraska by promoting and improving diabetes prevention, management, and education.*



NEBRASKA
Diabetes Prevention
and Control Program



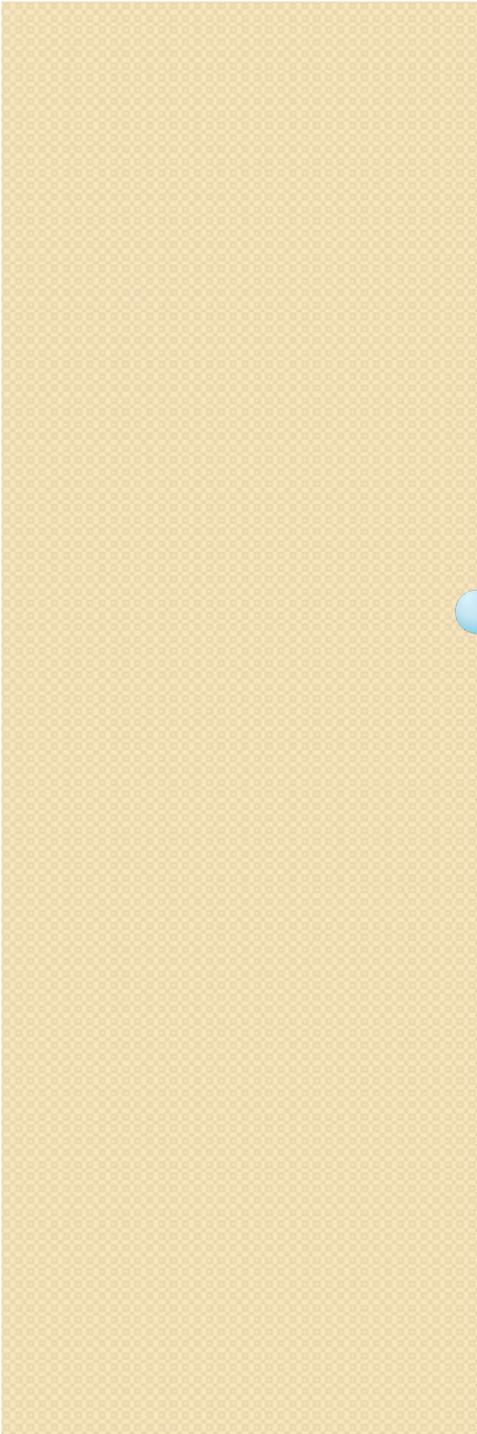
TFN, EWM, and Nebraska DPCP

- Working together to educate health professionals on
 - the dangers of tobacco and diabetes
 - the benefits of quitting
 - how to talk to patients about tobacco cessation
- Together we can reduce diabetes complications!



Objectives

- Describe the effects of tobacco on the body
- Identify complications in people with diabetes who smoke cigarettes
- State who is at risk for diabetes
- Identify common demographic characteristics of those who use tobacco and have diabetes
- List methods of talking to patients about reducing their tobacco use



**WHAT
TOBACCO DOES TO
THE BODY**



What Tobacco Does to the Body

- Harms nearly every organ
- Contributes to 1 of every 5 deaths in U.S.
- The most important modifiable cause of premature death



What Tobacco Does to the Body

Compared with nonsmokers, smoking is estimated to increase the risk of—

Cardiovascular Disease

- Coronary heart disease by 2 to 4 times
- Stroke by 2 to 4 times
- Cdc.gov/tobacco



What Tobacco Does to the Body

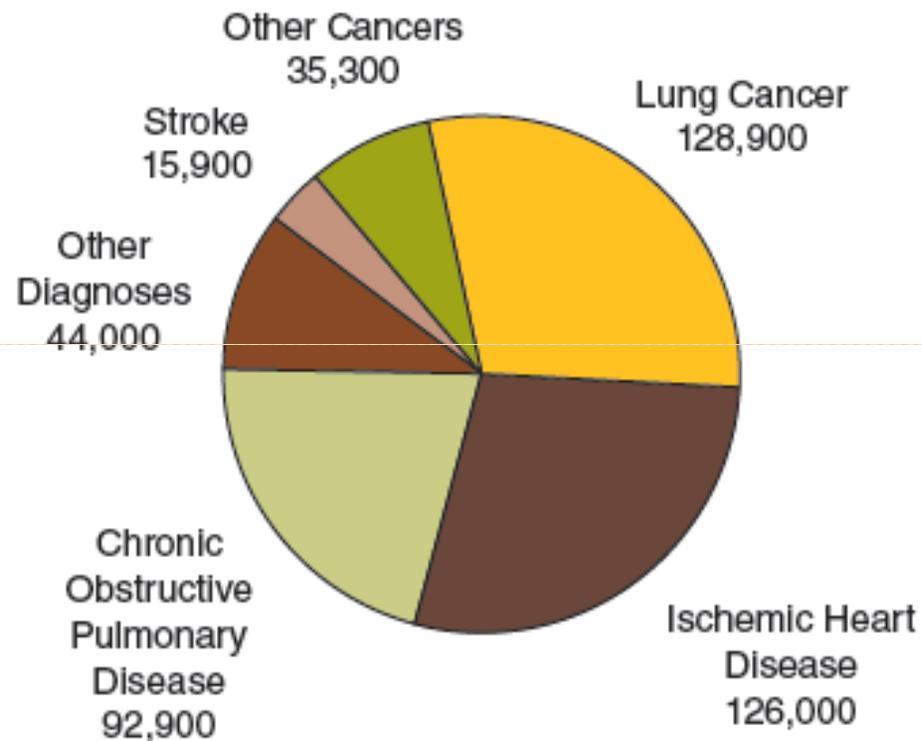
Compared with nonsmokers, smoking is estimated to increase the risk of—

Pulmonary Disease

- Men developing lung cancer by 23 times
- Women developing lung cancer by 13 times, and
- Dying from chronic obstructive lung diseases (such as chronic bronchitis and emphysema) by 12 to 13 times.

- Cdc.gov/tobacco

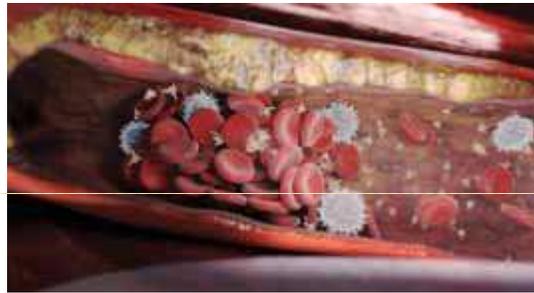
About 443,000 U.S. Deaths Attributable Each Year to Cigarette Smoking*



* Average annual number of deaths, 2000–2004.
Source: *MMWR* 2008;57(45):1226–1228.

Tobacco and the heart

- Smoking causes coronary heart disease, the leading cause of death in the United States.



- Cigarette smoking causes reduced circulation by narrowing the arteries and puts smokers at risk of developing peripheral vascular disease
- Smoking causes abdominal aortic aneurysm



Smoking deaths in Nebraska

- An estimated, 2,272 adult Nebraskans lost their lives because of cigarette smoking in 2006.
- That's like the entire population of Ord.

- Source: Nebraska Department of Health & Human Services (NDHHS), Vital Statistics
- <http://dhhs.ne.gov/publichealth/Documents/I0TFNDDataAndTrends.pdf>

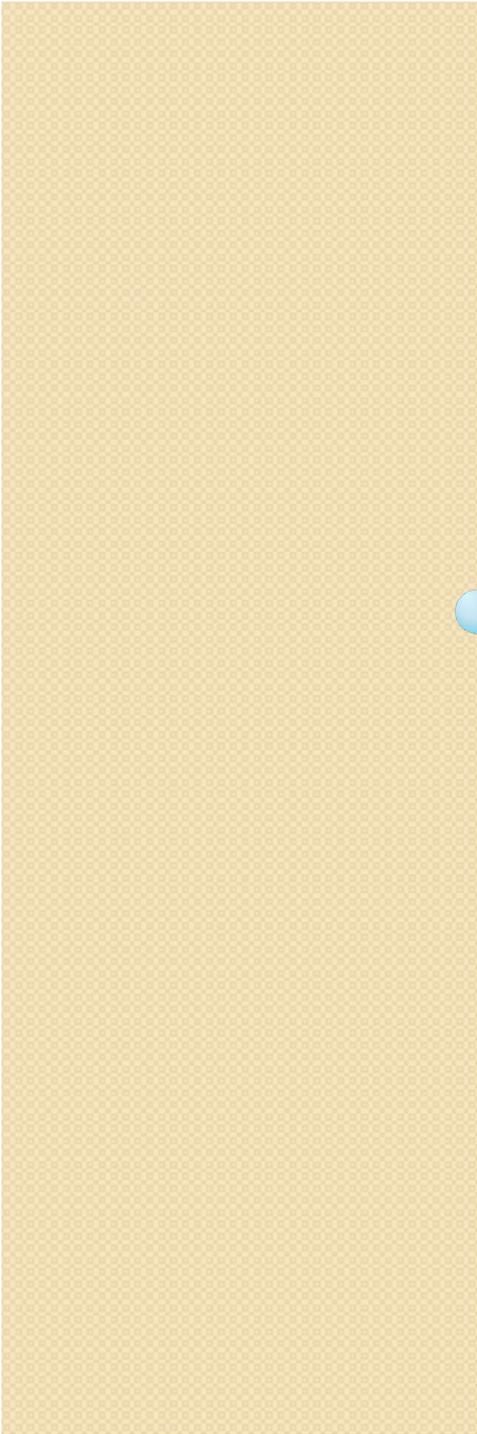
Leading Causes of Death - US

1. Heart disease: 616,067	25.4%
2. Cancer: 562,875	23.2%
3. Cerebrovascular diseases: 135,952	5.6%
4. Chronic lower respiratory diseases: 127,924	5.3%
5. Accidents (unintentional injuries): 123,706	5.1%
6. Alzheimer's disease: 74,632	3.1%
7. Diabetes: 71,382	2.9%
8. Influenza and Pneumonia: 52,717	2.2%
9. Nephritis and nephrosis: 46,448	1.9%
10. Septicemia: 34,828	1.4%

Leading Causes of Death - NE

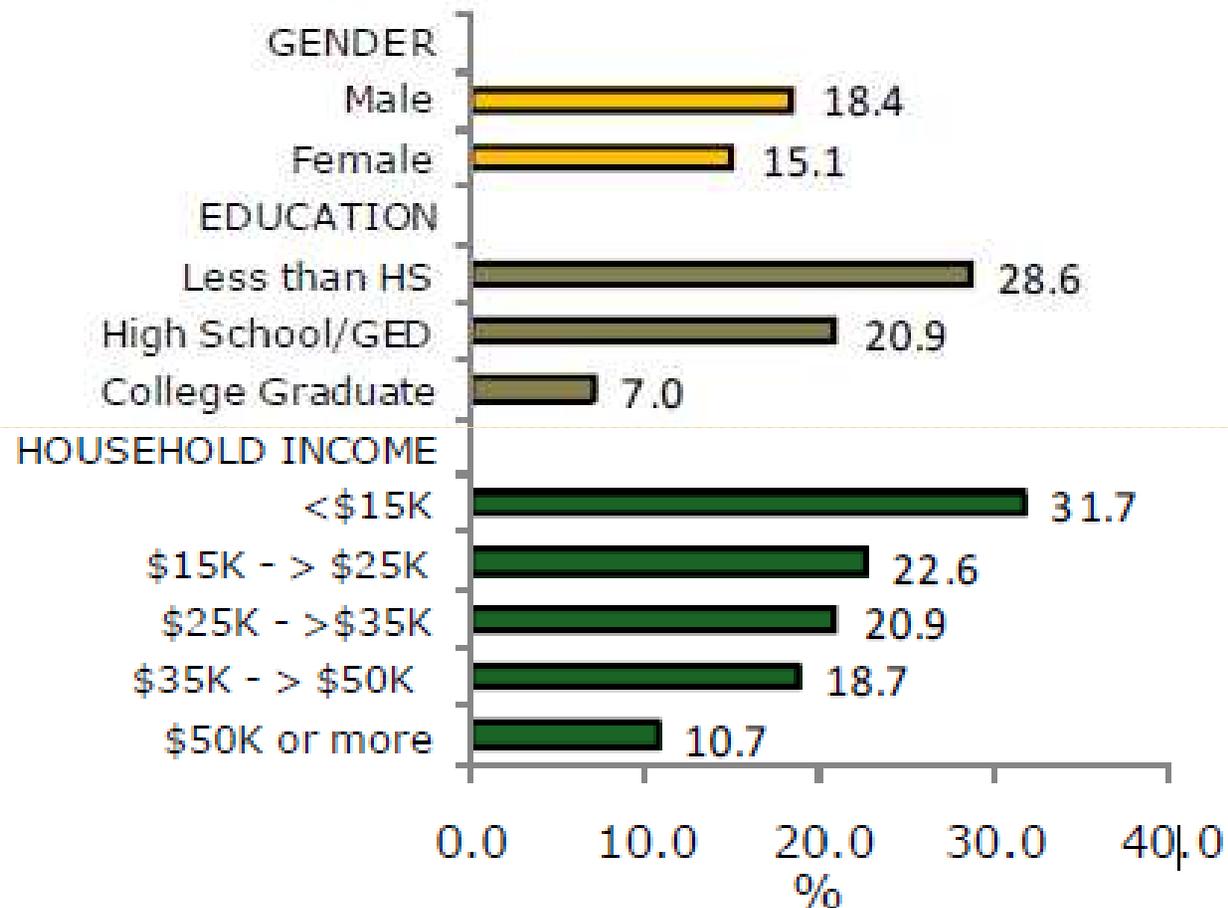
1.	Heart Disease	23.1%
2.	Cancer	22.8%
3.	Cerebrovascular Disease	6.0%
4.	Chronic Lung Disease	5.3%
5.	Accidents	4.4%
6.	Alzheimer's Disease	3.4%
7.	Diabetes Mellitus	3.1%
8.	Pneumonia	2.2%
9.	Nephritis & Nephrosis	1.8%
10.	Essential Hypertension	1.9%
	All Other Causes	26.2%

Source: Nebraska Health & Human Services System, Department of Regulation and Licensure, [2007 Vital Statistics Report](#), 2009



**WHO IS USING
TOBACCO IN
NEBRASKA?**

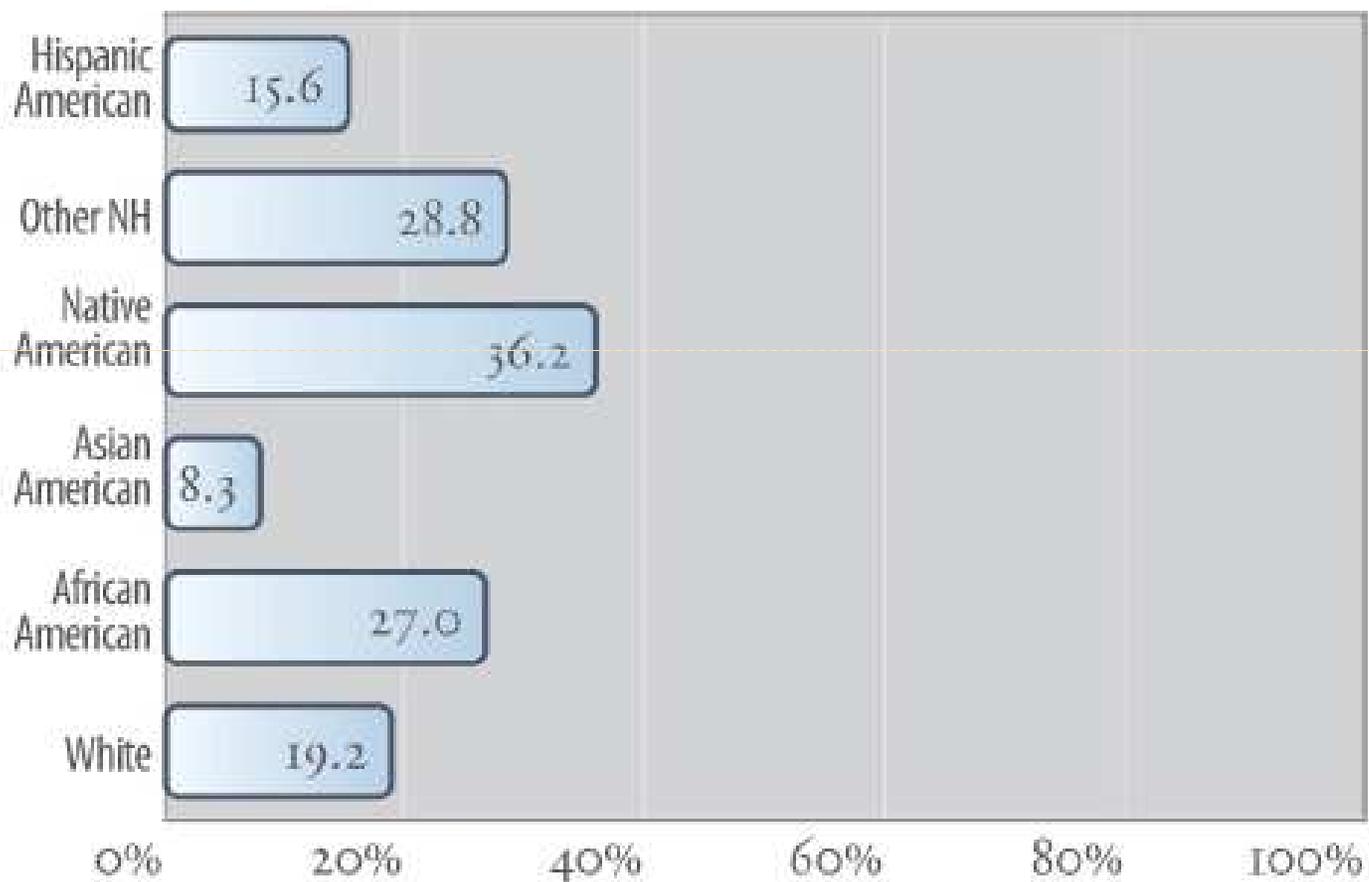
Figure 3: Smoking prevalence among Nebraska adults, by gender, education, and income, 2009



Data source: Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

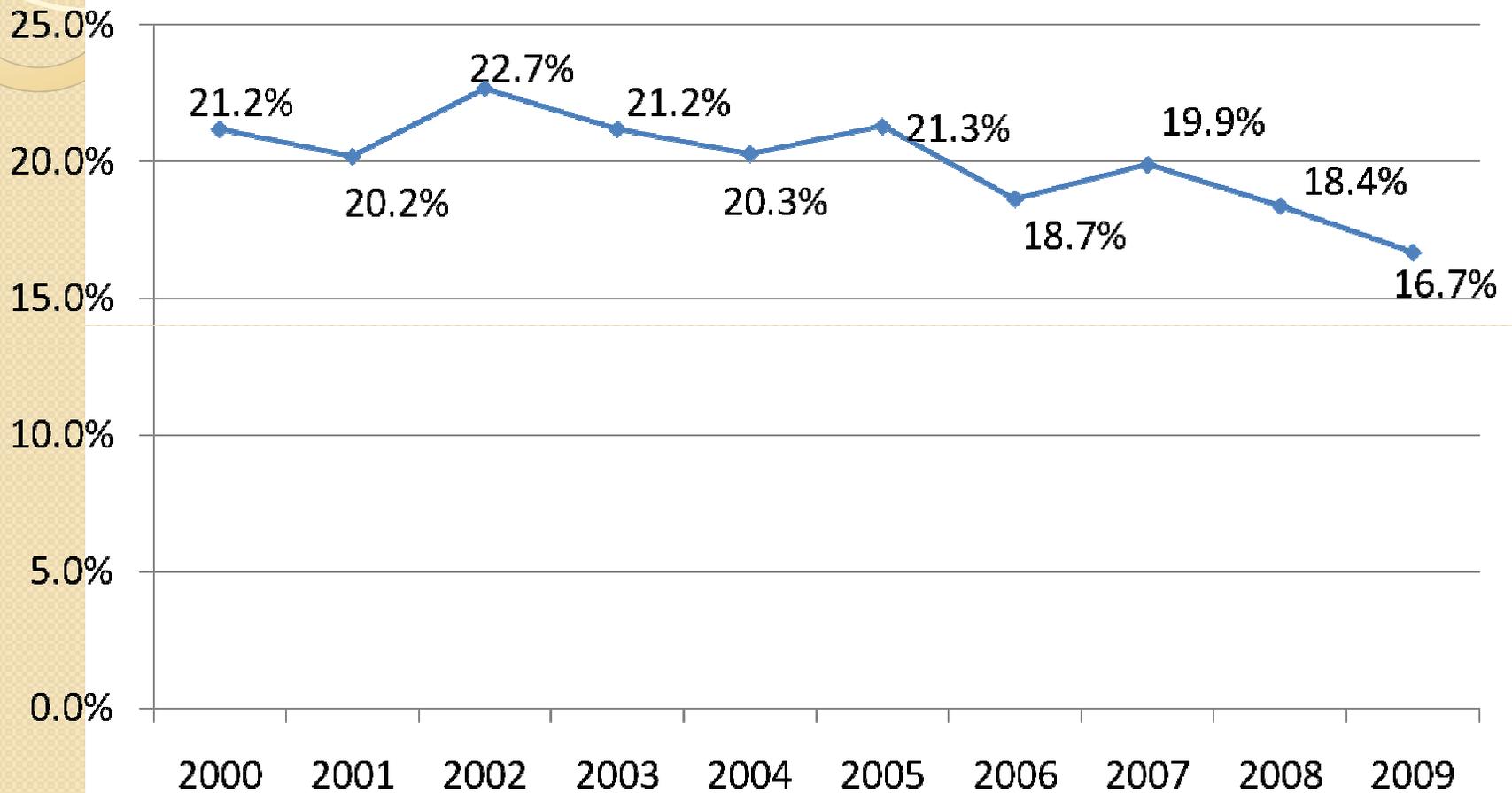
<http://dhhs.ne.gov/publichealth/Documents/Vol1-Issue5.pdf>

FIGURE 127. Cigarette Smoking Prevalence by Race/
Ethnicity (2007-2008)



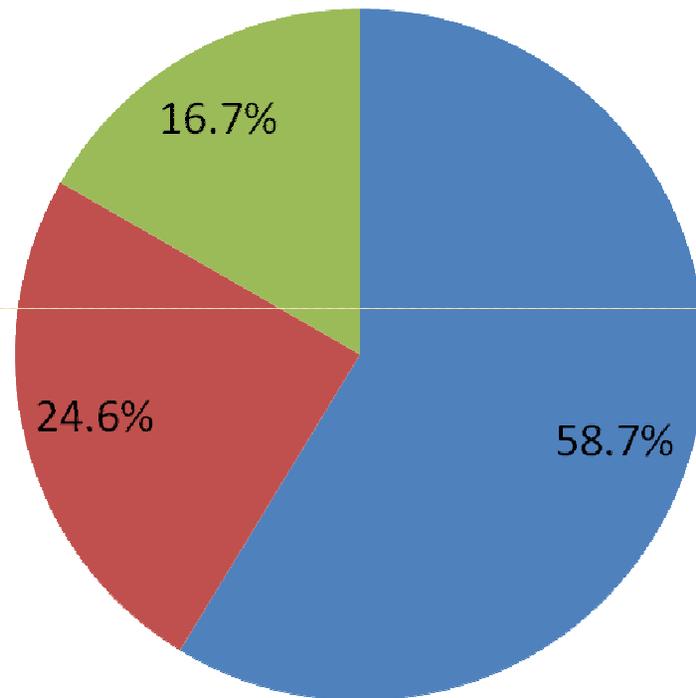
Data Source: Nebraska BRFSS Report 2007-2008

Nebraska Smoking Trends



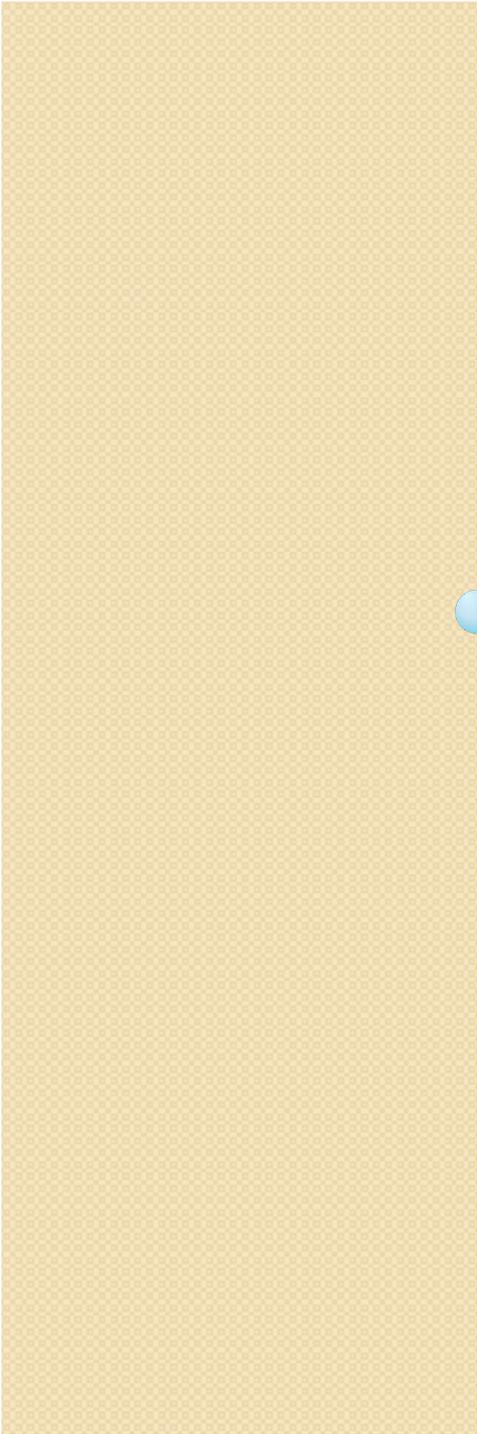
Data Source: BRFSS

Current Smoking Status 2009



■ Never smokers ■ Former smokers ■ Current smokers

Data Source: Nebraska BRFSS



DIABETES IN NEBRASKA

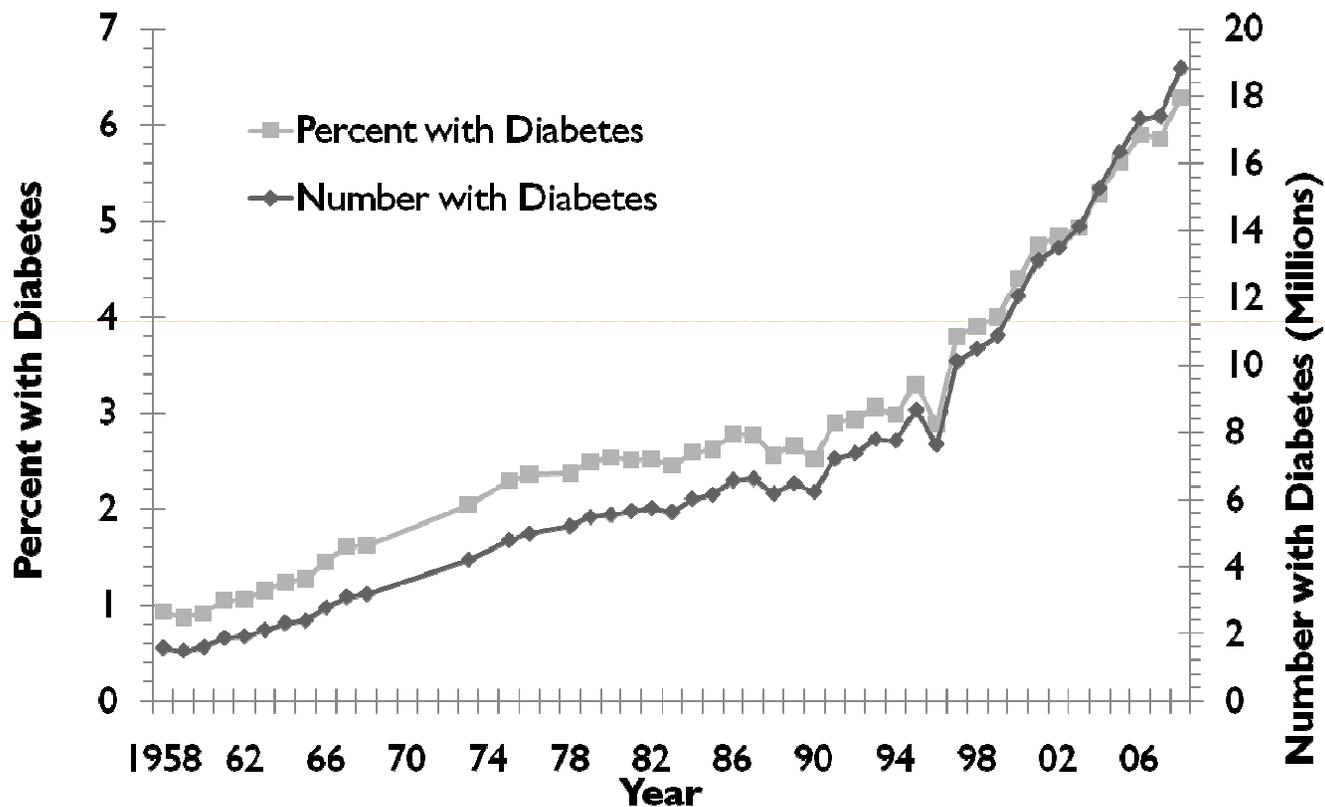


Diabetes

- 3 main types
 - Type 1 – autoimmune – 10-15% of diabetes
 - Type 2—tied to age, weight—85-90%
 - Gestational—occurs during pregnancy
- Type 2 diabetes rates skyrocketing in Nebraska and the nation
- Common and costly disease
- Many have it and don't know it
- Many more at risk for type 2
 - Overweight and obese
 - High BP
 - High cholesterol

Diabetes Rates in America

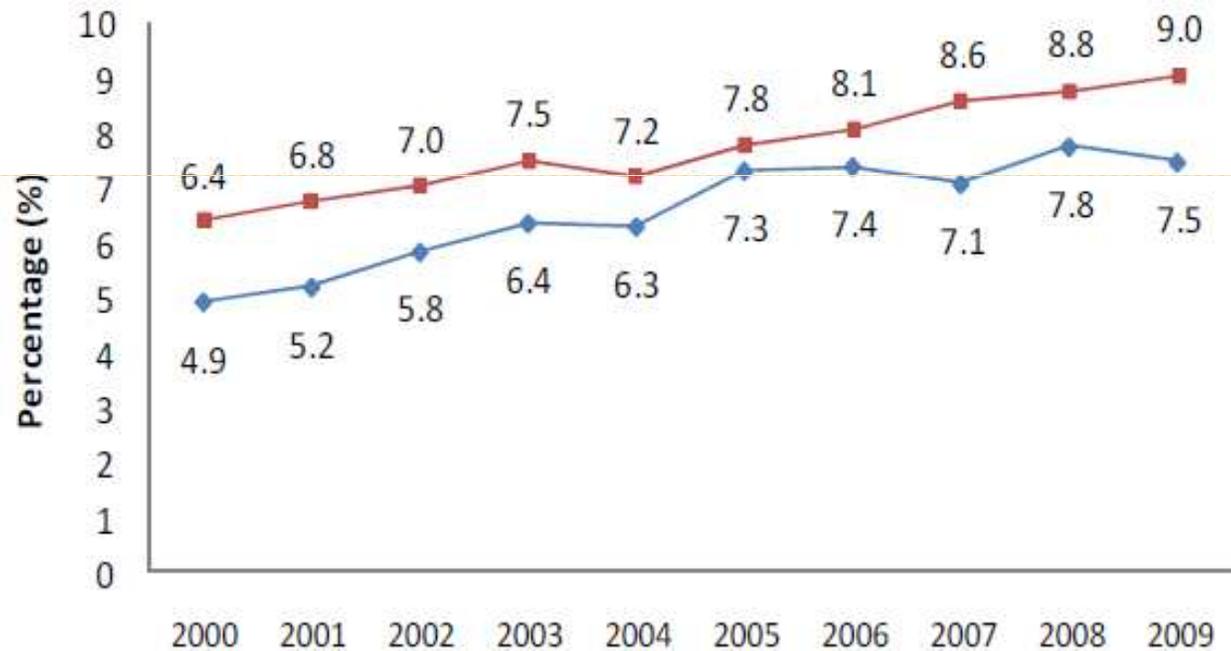
Number and Percentage of U.S. Population with Diagnosed Diabetes, 1958-2008



CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at <http://www.cdc.gov/diabetes/statistics>

Diabetes Rates in Nebraska

Figure 1: Percentage of Nebraska adults who have ever been diagnosed with diabetes, by year, 2000-2009



Source: NE BRFSS 2009

—◆— Nebraska —■— United States

Diabetes is Common and Costly

- More than 25.3 million Americans
 - (8.3% of population)
- More than 18.8 million diagnosed with diabetes
- 7 million have it and don't know it
- **79 million** have pre-diabetes
- Cost: \$174 billion/year
(direct and indirect)



Diabetes in Nebraska

- 103,000 Nebraska Adults (over 7%)
- An additional 20% have not been diagnosed.
- 7th leading cause of death
- Costs over 750 million \$ a year in direct and indirect costs

• Nebraska BRFSS 2007-2008





Many Have Diabetes and Don't Know It

- An estimated 7.0 million people do not know they have diabetes.
- Roughly 1 in every 4 persons with diabetes has it and doesn't know it
- Nebraska DPCP encourages people to know their risk for type 2 diabetes and get screened by going to their health care provider.
- Online type 2 diabetes risk test at www.defendagainstdiabetes.ne.gov



Many More Are At Risk

- People at the highest risk for developing type 2 diabetes:
 - Overweight and obese
 - High Blood Pressure
 - High cholesterol
- Type 1 diabetes not preventable

How Many Nebraskans Have Pre-diabetes?

- 81,067
 - Seats in Memorial Stadium
- 63,540
 - Nebraskans told they have pre-diabetes
- 78%
 - Seats in stadium that people with pre-diabetes could fill



How Many Are At Risk in Nebraska?

- 251,624
 - Population of Lincoln (2008 estimate)
- 269,000
 - Number of NE adults with:
 - Overweight/obesity
 - High blood pressure
 - High cholesterol

...who have **never** been diagnosed with diabetes, pre-diabetes, or gestational diabetes

Nebraska BRFSS



Diabetes in Nebraska

- Number of people age 45+ in Nebraska
 - 693,000
- How many of them have diabetes?
 - 1 in every 8
- How many of those 45+ *without diabetes* are overweight or obese?
 - Almost 2/3



What are the signs and symptoms of diabetes?

- Frequent urination
- Excessive thirst
- Unexplained weight loss
- Extreme hunger
- Extreme tiredness
- Irritability





What are the signs and symptoms of diabetes?

- Frequent infections
 - Blurred vision from time to time
 - Cuts or bruises that are slow to heal
 - Tingling or numbness in hands or feet
 - Recurring skin, gum, or bladder infections
- * Often people with type 2 diabetes have no symptoms.



What **problems** can diabetes cause?

- **Eye Problems** – blurred vision or blindness
- **Nerve Damage** – pain, tingling, or numbness
- **Foot Problems** – sores that won't heal, may lead to amputations
- **Dental Problems** – gum disease
- **Kidney Disease** – kidneys may fail, may need dialysis or transplant
- **Heart and blood vessel disease** – more likely to have heart attack or stroke



Basic Diabetes Management Tools

TYPE 1: HEALTHY EATING, PHYSICAL ACTIVITY,
TAKING INSULIN

TYPE 2: HEALTHY EATING, PHYSICAL ACTIVITY,
BLOOD GLUCOSE TESTING

- MANY ALSO NEED ORAL MEDICATION OR INSULIN

How do you manage diabetes?

- Check your blood sugar
- Know what your numbers should be
 - Blood glucose, cholesterol, blood pressure
- Take your medications
- Be at a healthy weight
 - BMI-Body Mass Index
 - Below 18.5 Underweight
 - **18.5 – 24.9 Normal**
 - 25.0 – 29.9 Overweight
 - 30.0 and Above Obese
 - http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html



How do you manage diabetes?

- Be active at least 150 minutes/wk
- Eat foods that are low in fat and sodium
- Keep your Blood Pressure <130/80
- Cholesterol:
 - LDL <100
 - HDL >40 men, >50 women
- Take aspirin if indicated
- Quit or reduce tobacco!

1-800-QUIT-NOW



How do you manage diabetes?

Blood Glucose—What Should Your Numbers Be?

- Hemoglobin A1c
 - < 7.0
- Preprandial (before meal) blood glucose (bg)
 - 70-130
- Postprandial bg (2 hours after a meal)
 - <180
- Fasting (8 hour fast) bg
 - 125+ diabetes
 - 100-124 prediabetes

How do you manage diabetes?

Healthy Eating and Physical Activity are keys to Success!

- Even a small weight loss may help to lower blood glucose
- For best results, work with a diabetes care team



How do you manage diabetes?

- Healthy Food Choices help keep blood glucose in target range
- Total Carbohydrates Count
 - Carbohydrates give energy
 - Too much carbohydrate can raise blood glucose above the target blood glucose



Keeping Blood Glucose on Target Is Key to Managing Diabetes

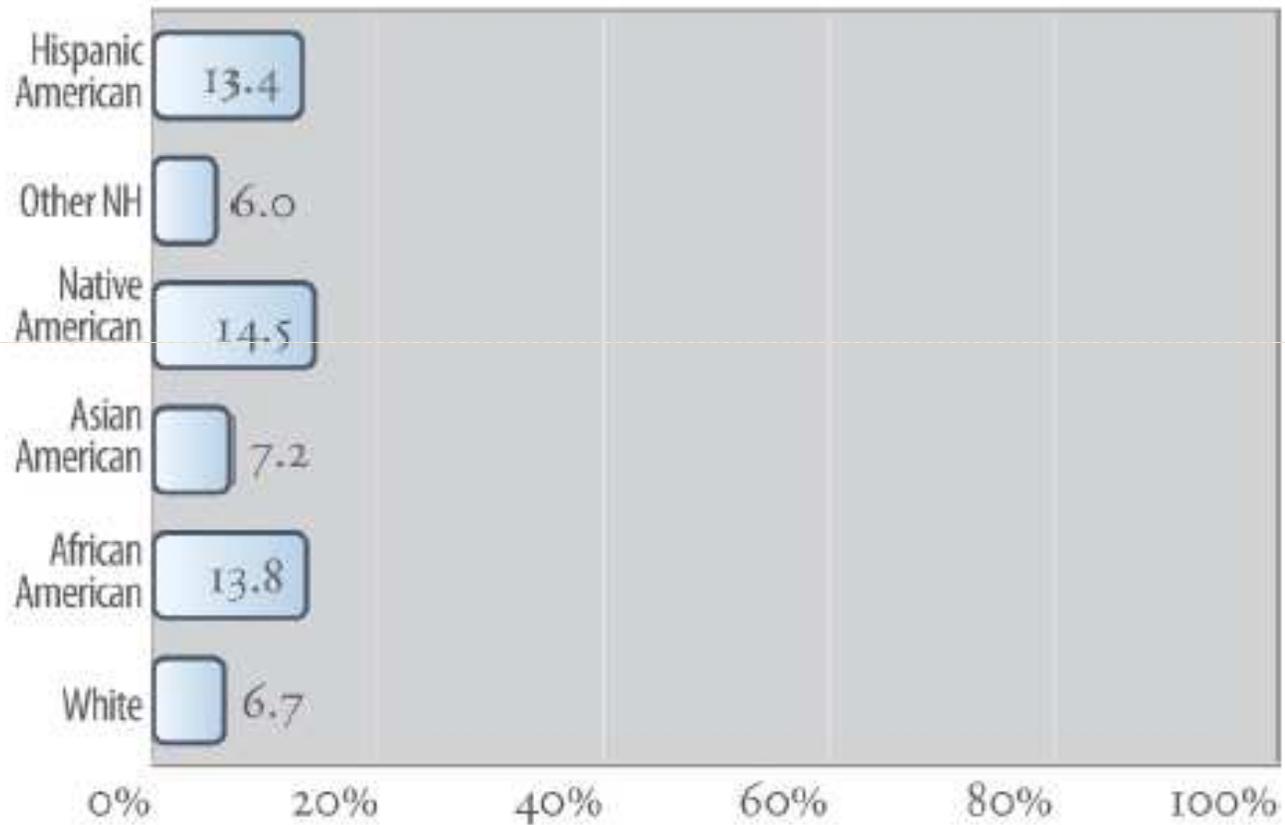
- Keeping blood glucose as near normal as possible can:
- Prevent symptoms
 - Reduce risk of short-term and long-term complications
 - Improve overall health



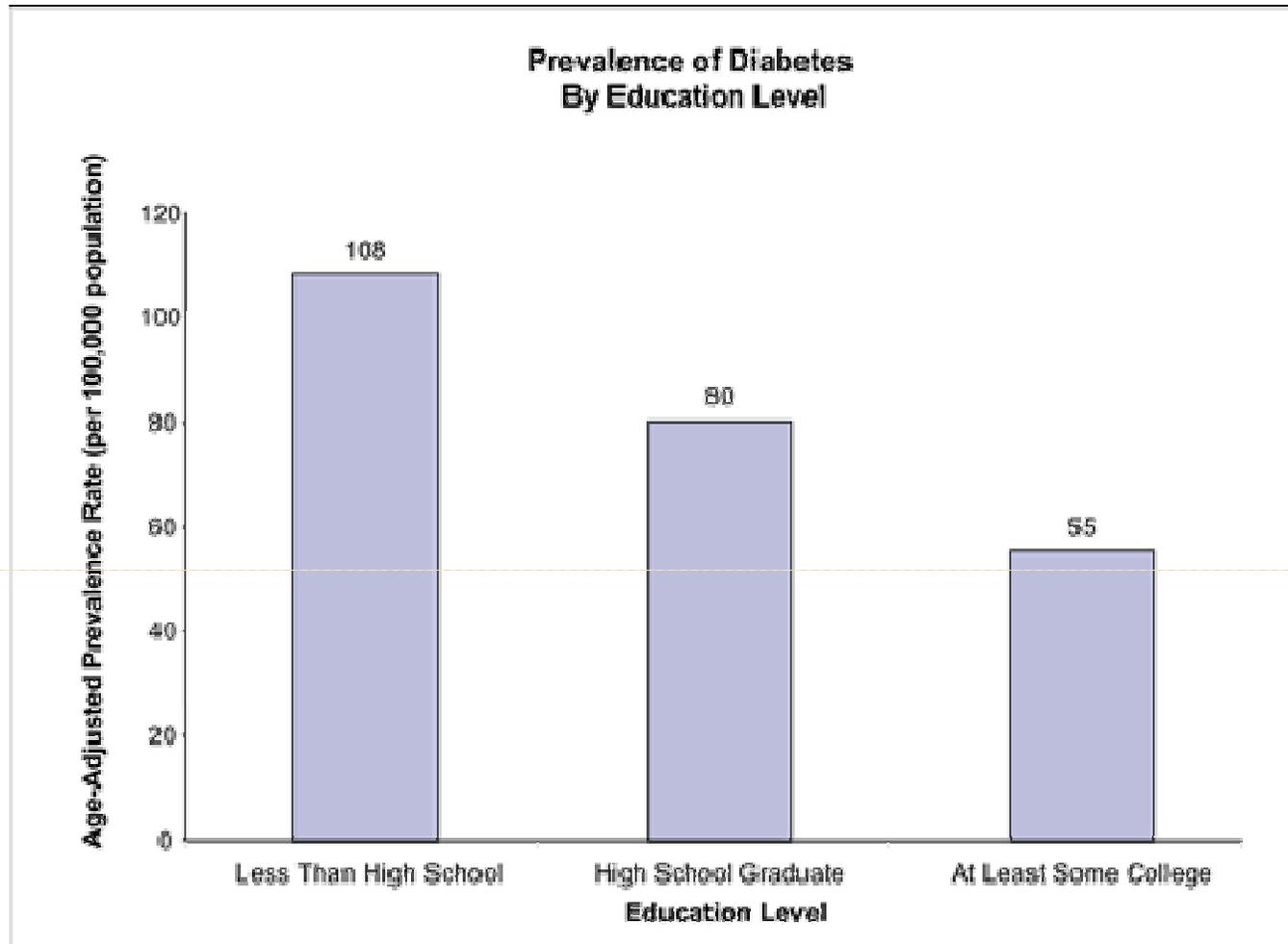


Who has diabetes?

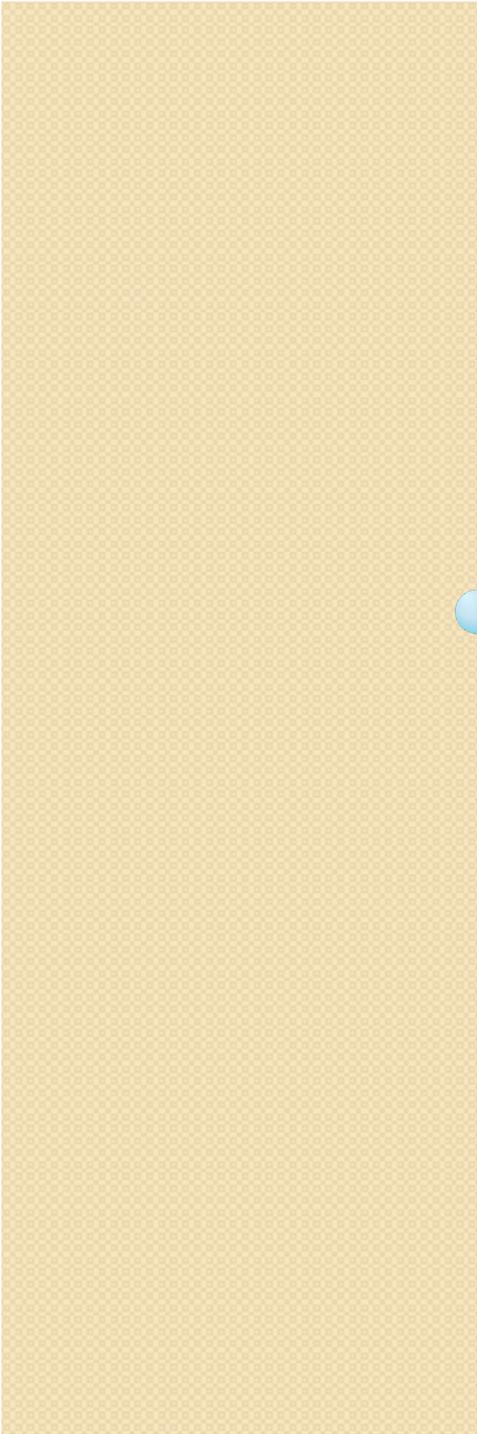
FIGURE 89. Prevalence of Diagnosed Diabetes by Race/
Ethnicity Nebraska (2007-2008)



Data Source: Nebraska BRFSS



- Source: CDC Wonder. *DATA2010...the Healthy People 2010 Database*. Centers for Disease Control and Prevention, January 2004



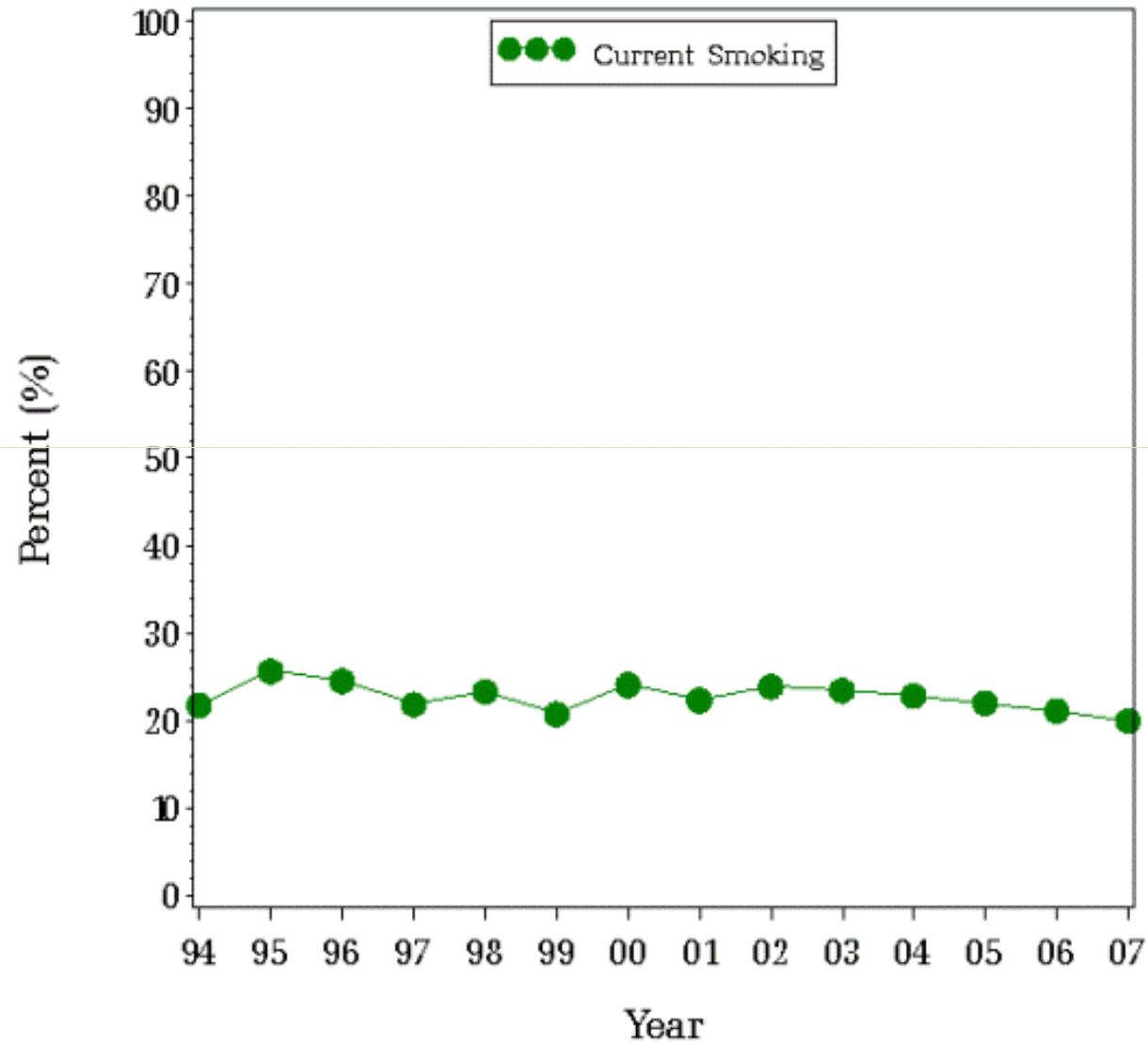
TOBACCO AND DIABETES COMPLICATIONS

Diabetes and Tobacco Use

- **American Diabetes Association:**
 - People with diabetes should all be screened for tobacco use and offered help for cessation.



Age-Adjusted percentages of Current Smoking for Adults with Diabetes, United States, 1994–2007





Smoking and diabetes complications

- Smoking impairs circulation, increases blood pressure
- Poor circulation in a person with diabetes increases risk of wounds not healing, nerve damage, leading to ulcers or amputation
- Quitting smoking lowers blood pressure, improves circulation, lowers risk of ulcers, amputation



Smoking and diabetes complications

Current smokers with diabetes have...

- Poorer glycemic control (higher A1c)
- More microalbuminuria
 - 2-3 times greater chance of kidney disease

Smoking and diabetes complications

- More retinopathy—one of the leading causes of blindness
- More nerve damage
- More difficulty recovering from surgery than non smokers or former smokers

N Chaturvedi, J M Stephenson, and J H Fuller The relationship between smoking and microvascular complications in the EURODIAB IDDM Complications Study. *Diabetes Care* June 1995 18:785-792; doi:10.2337/diacare.18.6.785

http://www.cdc.gov/tobacco/data_statistics/sgr/2010/clinician_sheet/pdfs/clinician.pdf



Smoking and diabetes complications

- Type I diabetes-- greater risk for microvascular complications
 - Nephropathy
 - Retinopathy
 - Neuropathy

Eliasson B. **Cigarette smoking and diabetes.** Prog Cardiovasc Dis. 2003 Mar-Apr;45(5):405-13



Smoking and diabetes complications

- Type 2 greater risk for macrovascular complications
 - Coronary heart disease
 - Stroke
 - Peripheral vascular disease
 - Eliasson B. **Cigarette smoking and diabetes.** Prog Cardiovasc Dis. 2003 Mar-Apr;45(5):405-13

Smoking and diabetes complications

People with Type 2 diabetes:

- Those who smoke have:
 - Higher triglycerides
 - Lower HDL
 - Less insulin sensitivity

Dose dependent response

Type 1 and 2—those who smoke have lower BMIs than nonsmokers

Smoking and diabetes complications

Heart Disease

Smoking causes

- Plaques to build up in the arteries
 - Narrow and clog arteries
- Damage to blood vessels
- Blood more likely to clot

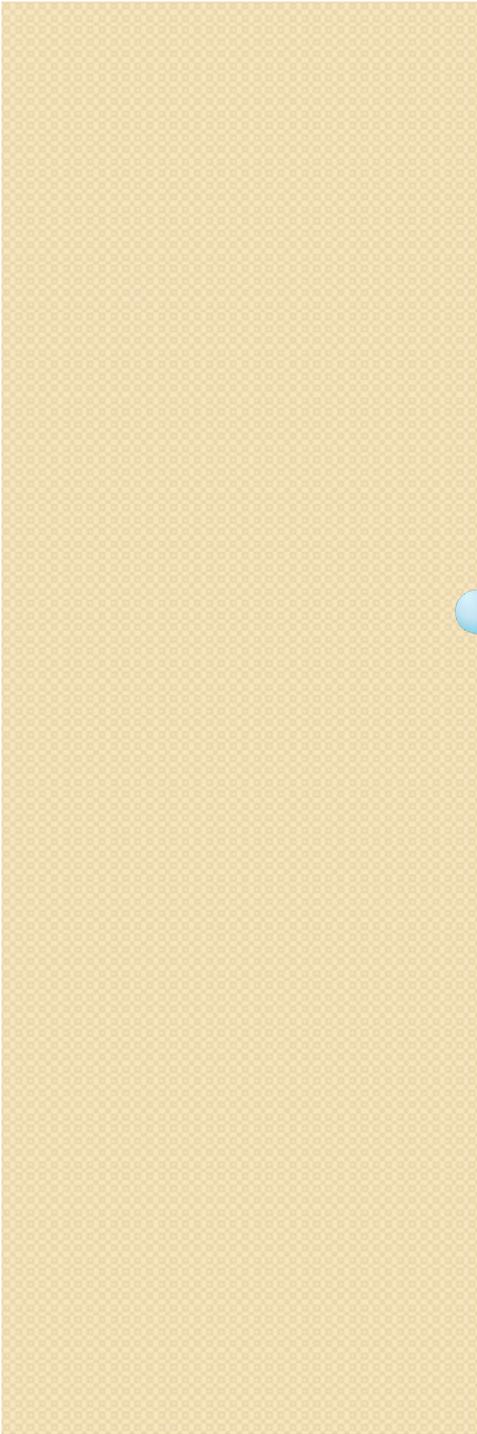




Smoking and diabetes complications

- This can lead to heart attack, stroke, or sudden death!
- This is compounded by the 2-4 times greater risk of heart attack and stroke that already exists for people with diabetes.

Quitting smoking can reduce cardiovascular risk for everyone!



**WHO IS AT RISK FOR
DIABETES?**



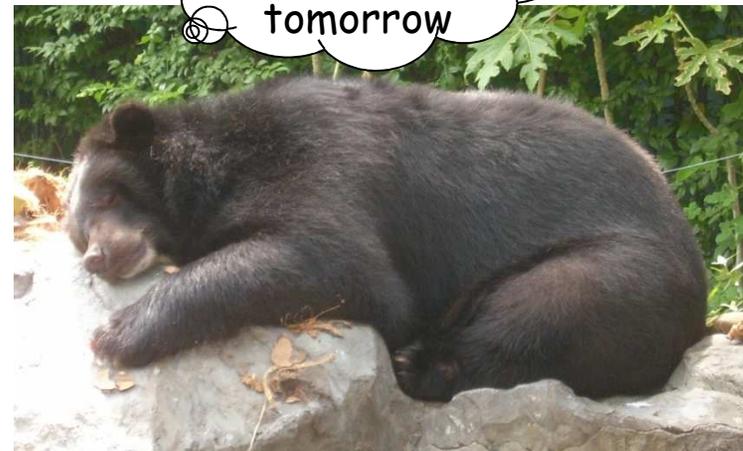
Who is **at risk** for type 2 diabetes?

You may be at risk if you...

- Have a family history of diabetes
- Have a history of gestational diabetes or had a baby weighing 9 pounds or more
- Are African American, Hispanic/Latino, American Indian, or Asian American

Who is **at risk** for type 2 diabetes?

- Are inactive or exercise less than three times a week
- Having high blood pressure
- Body Mass Index of 25+
- Being age 45 or older





Who is at risk for type 2 diabetes?

- Having previously been diagnosed with pre-diabetes
- Having impaired glucose tolerance (IGT) and/or impaired fasting glucose (IFG)
- Having low HDL cholesterol or high triglycerides



**TOBACCO AND
RISK FOR DEVELOPING
TYPE 2 DIABETES**



Smoking and risk for type 2 diabetes

Cigarette smoking associated with much greater risk of developing diabetes¹

Why?



Smoking and risk for type 2 diabetes

“Despite strong evidence of the epidemiological link between smoking and diabetes the causal basis of the association has not been explained”²

- 1. Eliasson B. **Cigarette smoking and diabetes.** Prog Cardiovasc Dis. 2003 Mar-Apr;45(5):405-13
- 2. Tziomalos K, Charsoulis F. Endocrine effects of tobacco smoking. Clin Endocrinol (Oxf). 2004 Dec;61(6):664-74. Review. PubMed PMID: 15579179.

Smoking and risk for type 2 diabetes

- Heavy smokers most likely to develop diabetes
≥20 cigarettes/day;
- Lighter smokers
 - also more likely than non smokers to develop diabetes
- Former smokers
 - Weaker association than for active smokers

[Carole Willi](#), MD; [Patrick Bodenmann](#), MD, MScPH; [William A. Ghali](#), MD, MPH; [Peter D. Faris](#), PhD; [Jacques Cornuz](#), MD, MPH **Active**
Smoking and the Risk of Type 2 Diabetes A Systematic Review and Meta-analysis *JAMA*. 2007;298(22):2654-2664. doi:
10.1001/jama.298.22.2654



Smoking is a **modifiable** risk factor for the development of type 2 diabetes!

- I: Hur NW, Kim HC, Nam CM, Jee SH, Lee HC, Suh I. **Smoking cessation and risk of type 2 diabetes mellitus: Korea Medical Insurance Corporation Study.** Eur J Cardiovasc Prev Rehabil. 2007 Apr;14(2):244-9. PubMed PMID: 17446803.
- I: Willi C, Bodenmann P, Ghali WA, Faris PD, Cornuz J. **Active smoking and the risk of type 2 diabetes: a systematic review and meta-analysis.** JAMA. 2007 Dec 12;298(22):2654-64. Review. PubMed PMID: 18073361.
- Eliasson B. **Cigarette smoking and diabetes.** Prog Cardiovasc Dis. 2003 Mar-Apr;45(5):405-13
- Tziomalos K, Charsoulis F. **Endocrine effects of tobacco smoking.** Clin Endocrinol (Oxf). 2004 Dec;61(6):664-74. Review. PubMed PMID: 15579179.
- [Yeh HC](#), [Duncan BB](#), [Schmidt MI](#), [Wang NY](#), [Brancati FL](#). **Smoking, smoking cessation, and risk for type 2 diabetes mellitus: a cohort study.** Ann Intern Med. 2010 Jan 5;152(1):10-7.
- S. Goya Wannamethee, A. Gerald Shaper, and Ivan J. Perry **Smoking as a Modifiable Risk Factor for Type 2 Diabetes in Middle-Aged Men** *Diabetes Care* September 2001 24:1590-1595; doi:10.2337/diacare.24.9.1590



Secondhand smoke and risk for heart disease

Exposure to secondhand smoke

- May increase the risk of heart disease by an estimated 25-30%
- Is thought to cause about 46,000 deaths from heart disease each year.



Secondhand smoke and risk for heart disease

Educate people with diabetes that even exposure to *secondhand* smoke may further increase their risk for heart disease!

U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006

Secondhand smoke and risk for type 2 diabetes

New S Korean study found

- If “never smokers” are exposed to secondhand smoke...they are more likely to develop type 2 diabetes!
- Dose dependent response: risk increases with hours per day of exposure
- [Ko KP, Min H, Ahn Y, Park SJ, Kim CS, Park JK, Kim SS](#). A prospective study investigating the association between environmental tobacco smoke exposure and the incidence of type 2 diabetes in never smokers. *Ann Epidemiol.* 2011 Jan;21(1):42-7.



Secondhand smoke and risk for type 2 diabetes

- This was just verified by study of 100,000 American nurses
- “Our study suggests that exposure to passive smoke and active smoking are positively and independently associated with the risk of type 2 diabetes”

- 1: Zhang L, Curhan GC, Hu FB, Rimm EB, Forman JP. **Association Between Passive and Active Smoking and Incident Type 2 Diabetes in Women.** Diabetes Care. 2011 Feb 25. [Epub ahead of print] PubMed PMID: 21355099.



Cessation and type 2 diabetes risk

- Smokers at greater risk for diabetes than nonsmokers
- Atherosclerosis Risk In Communities study (ARIC)
 - Studied 10,000+ middle-aged adults without diabetes
 - Monitored for diabetes, measured tobacco use and quit attempts

Cessation and type 2 diabetes risk

- Smoking cessation led to higher short-term risk of developing diabetes
 - Risk greatest in first 3 yrs after quitting
 - Weight gain most likely the cause
 - Risk went to zero at 12 years

[Yeh HC](#), [Duncan BB](#), [Schmidt MI](#), [Wang NY](#), [Brancati FL](#). Smoking, smoking cessation, and risk for type 2 diabetes mellitus: a cohort study. *Ann Intern Med.* 2010 Jan 5;152(1):10-7.

Cessation and type 2 diabetes risk

Why?

- Food may taste better
- Patients may substitute smoking with eating more
 - Remind patients that not everyone who quits will gain weight
 - Average weight gain is less than 10 lbs

- Smokefree.gov

Cessation and type 2 diabetes risk

Smoking cessation is still better
in the long run!

- For smokers at risk for diabetes:
 - Focus on strategies for diabetes **prevention** along with cessation
 - Increasing activity to 150 minutes per week
 - Healthy eating plan
 - Monitor for diabetes



Women with diabetes who smoke

Mortality:

- Cigarette smoking is associated with increased mortality
- The more cigarettes per day the greater the risk
- Quitting smoking decreases risk substantially

Wael K. Al-Delaimy, Walter C. Willett, JoAnn E. Manson, Frank E. Speizer, and Frank B. Hu Smoking and Mortality Among Women With Type 2 Diabetes: The Nurses' Health Study cohort *Diabetes Care* December 2001 24:2043-2048; doi:10.2337/diacare.24.12.2043



Women with diabetes who smoke

Heavy smokers (15 or more cigarettes per day) have 84% higher risk of developing stroke

Good news!

- Women who quit smoking for more than 10 years had a CHD risk similar to women who had never smoked.

Al-Delaimy WK, Manson JE, Solomon CG, Kawachi I, Stampfer MJ, Willett WC, Hu FB. Smoking and risk of coronary heart disease among women with type 2 diabetes mellitus. *Arch Intern Med.* 2002 Feb 11;162(3):273-9. PubMed PMID: 11822919.

Smoking in young people with diabetes

<u>Ages</u>	10-14	15-19	20+
Type 1:	2.7%	17.1%	34%
Type 2:	5.5%	16.4%	40.3%

- Analysis of SEARCH for diabetes in youth study (US)

- [Reynolds K, Liese AD, Anderson AM, Dabelea D, Standiford D, Daniels SR, Waitzfelder B, Case D, Loots B, Imperatore G, Lawrence JM. Prevalence of Tobacco Use and Association between Cardiometabolic Risk Factors and Cigarette Smoking in Youth with Type 1 or Type 2 Diabetes Mellitus. J Pediatr. 2010 Dec 1. \[Epub ahead of print\] doi:10.1016/j.jpeds.2010.10.011](#) |



Smoking in young people with diabetes

- Less than half of those 10-14 had been counseled to stop smoking or not to start
- Not too early to talk to a child with (or without) diabetes about using tobacco!
- Need to screen for and treat tobacco use in young people to prevent diabetes complications, heart disease

Tobacco in Rural Areas

Rural residents more likely to:

- Smoke cigarettes¹
 - 22.2% rural residents smoke vs
 - 17.3% suburban
 - 18.1% urban
- Use smokeless tobacco²
 - 17.2% rural
 - 8.2% urban
- Be exposed to secondhand smoke at work or at home¹

1: Vander Weg MW, Cunningham CL, Howren MB, Cai X. Tobacco use and exposure in rural areas: Findings from the Behavioral Risk Factor Surveillance System. *Addict Behav.* 2011 Mar;36(3):231-6. Epub 2010 Nov 10. PubMed PMID: 21146318.

2. Nebraska BRFSS



Rural Health Disparities

Those in rural areas have:

- slightly higher rates of diabetes than those in urban areas
- Fewer dilated eye exams and higher rates of diabetic retinopathy
- Fewer foot exams and higher rates of foot sores that take >1 mo to heal

- Hale NL, Bennett KJ, Probst JC. Diabetes Care and Outcomes: Disparities Across Rural America. *Journal of Community Health* [Volume 35, Number 4](#), 365-374, DOI: 10.1007/s10900-010-9259-0



Rural Health Disparities

Those in rural areas have: (cont'd)

- greater risk of tobacco-related health problems
- need for tobacco cessation education, especially for those with diabetes

Good news, the Nebraska Tobacco Quitline works just as well in rural areas! No need to travel to get help!

1-800-784-8669 quitnow.ne.gov



Tobacco and Diabetes

- Both smoking and diabetes are more prevalent in:
 - Minority populations
 - Native Americans especially high
 - People living in rural areas
 - Those with high school education or less
 - Low income
 - Unemployed or unable to work
 - People previously married

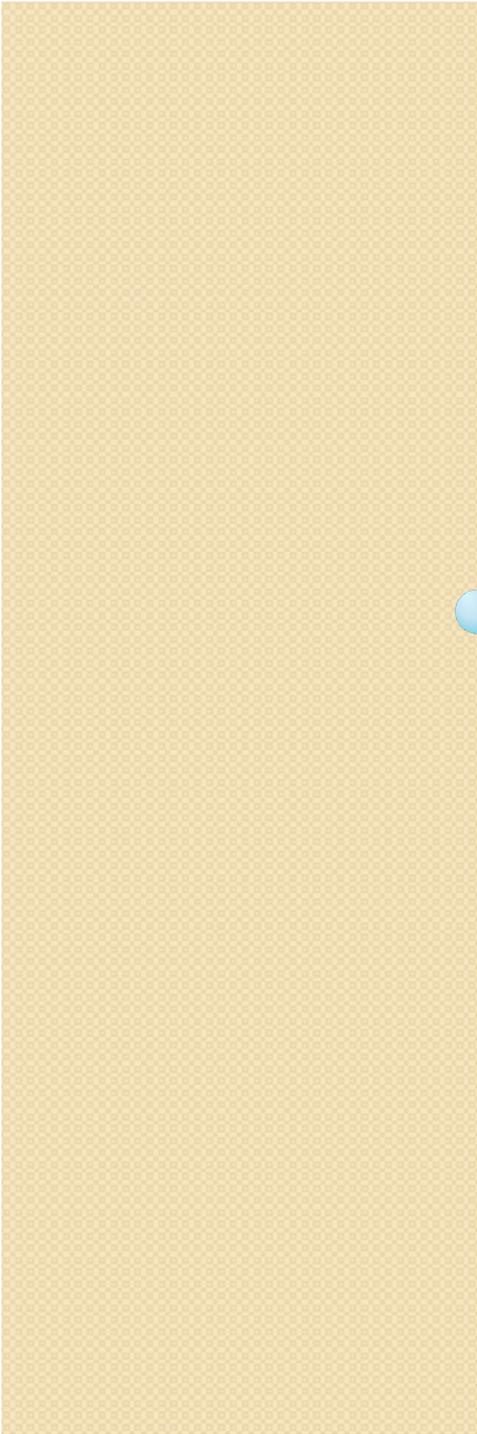
Data Source: Nebraska BRFSS



Tobacco and Diabetes

- Differences
 - Younger people more likely to smoke, less likely to have diabetes.
 - Older people less likely to smoke, more likely to have diabetes
 - Never married people have lowest prevalence of diabetes (3.5%), highest prevalence of smoking (28.9%)

Data Source: Nebraska BRFSS



 **TALK TO YOUR PATIENTS
ABOUT QUITTING
TOBACCO**



Smoking cessation is the most **cost-effective** way to prolong life in smoking patients **with or without diabetes**

- Yudkin JS. How can we best prolong life? Benefits of coronary risk factor reduction in non-diabetic and diabetic subjects. *BMJ*, 1993, 306, 1313-8.
- **PM Nilsson** ^[1], **S Gudbjörnsdottir** ^[2], **B Eliasson** ^[3], **J Cederholm** ^[4], for the **Steering Committee of the Swedish National Diabetes Register** Smoking is associated with increased HbA_{1c} values and microalbuminuria in patients with diabetes — data from the National Diabetes Register in Sweden *Diabetes & Metabolism* Vol 30, N° 3 - **juin 2004** pp. 261-268

Most cost effective diabetes interventions:

“Very cost effective”

- Intensive lifestyle interventions to prevent type 2 diabetes in those with pre-diabetes
- Screening for type 2 diabetes in African Americans between 45-54 years old
- Intensive glycemic control in those newly diagnosed with type 2
- Statin therapy
- **Counseling and treatment for smoking cessation**
- Annual screening for diabetic retinopathy
- Immediate vitrectomy to treat diabetic retinopathy
- Li R, Zhang P, Barker LE, Chowdhury FM, Zhang X. **Cost-effectiveness of interventions to prevent and control diabetes mellitus: a systematic review.** Diabetes Care. 2010 Aug;33(8):1872-94. PubMed PMID: 20668156; PubMed Central PMCID: PMC2909081.



Tobacco Cessation

- Quitting smoking reduces the risk of developing and dying from **cancer, heart attack and stroke**.
- It takes a number of years after quitting for these risks to start to decline.
- This benefit increases the longer a person remains smoke free.



Benefits of quitting

Many people who quit smoking are surprised by how good they feel!

They feel in charge

- They don't need to smoke
- They don't have to find places to smoke
- They don't have to worry about their smoke bothering others



Benefits of quitting

They feel more relaxed

- They don't have to make sure they always have cigarettes
- They have more money
- They are not as worried about their health



Benefits of quitting

They look and feel better

- They feel **good** about being able to quit
- Their skin looks healthier
- They have more energy when they walk, play with their kids, or do something active



Benefits of quitting

They smell good

- Their hair, clothes, and breath don't smell like smoke
- Their cars, homes, and kids don't smell like smoke
- They can better smell food and other good smells



Health Benefits of Quitting

20 minutes after quitting

- Your heart rate and blood pressure drop.

12 hours after quitting

- The carbon monoxide level in your blood drops to normal.

2 weeks to 3 months after quitting

- Your circulation improves and your lung function increases.

1 to 9 months after quitting

- Coughing and shortness of breath decrease



Health Benefits of Quitting

1 year after quitting

- The excess risk of coronary heart disease is half that of a continuing smoker's.

5 years after quitting

- Risk of cancer of the mouth, throat, esophagus, and bladder are cut in half. Cervical cancer risk falls to that of a non-smoker. Stroke risk can fall to that of a non-smoker after 2-5 years.



Health Benefits of Quitting

10 years after quitting

- The risk of dying from lung cancer is about half that of a person who is still smoking. The risk of cancer of the larynx and pancreas decreases.

15 years after quitting

- The risk of coronary heart disease is that of a non-smoker's.

- Source:

- <http://www.cancer.org/Healthy/StayAwayfromTobacco/GuidetoQuittingSmoking/guide-to-quitting-smoking-benefits>

Cessation

Brief advice from a clinician about smoking cessation yielded a **66% increase** in successful quit rates!

- Talk to your patients.
- Tell them that quitting smoking is the most important step they can take to improve their health.
- They will listen to you.

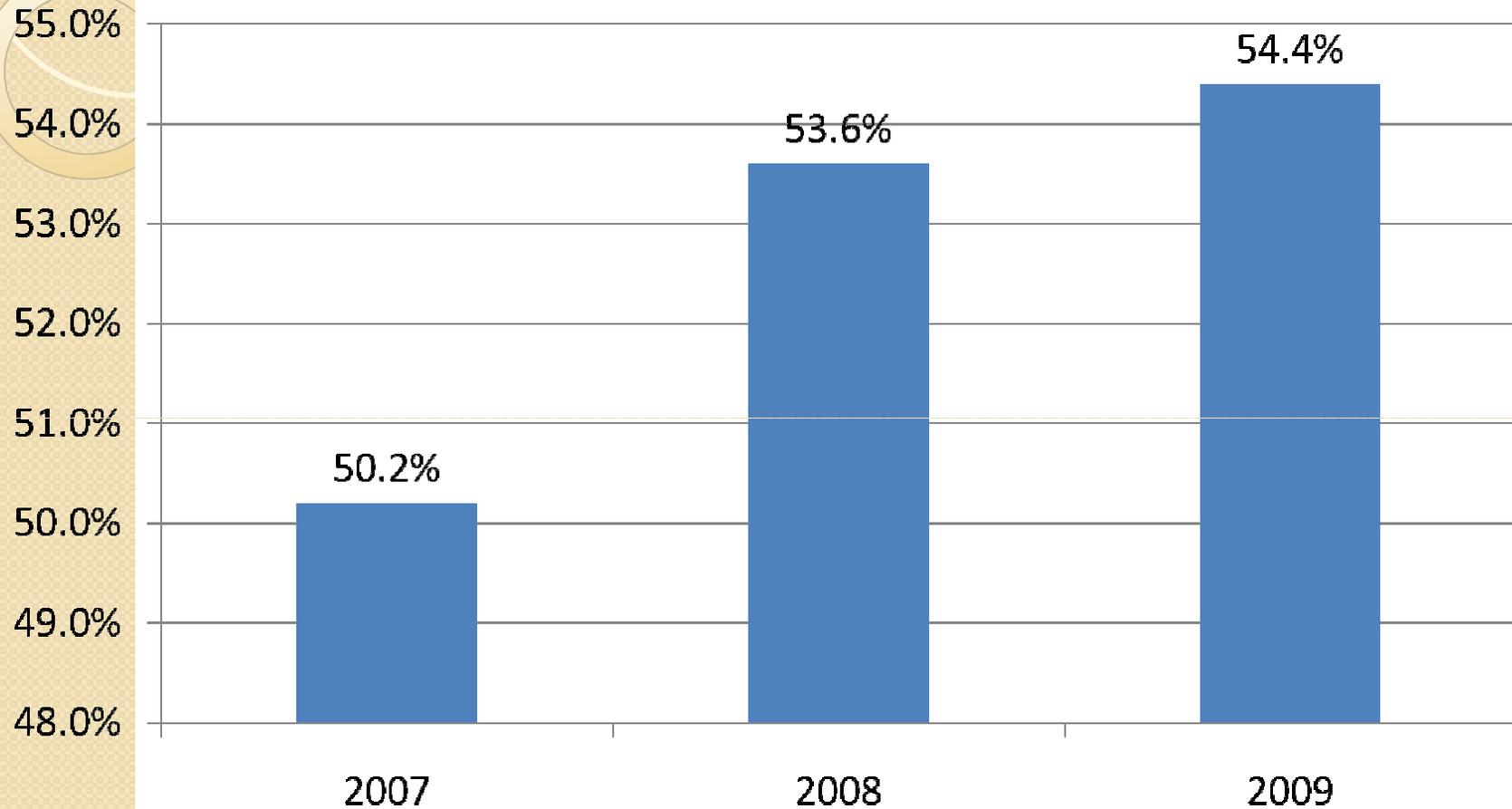
http://www.cdc.gov/tobacco/data_statistics/sgr/2010/clinician_sheet/pdfs/clinician.pdf

Willingness to quit

- People with diabetes who smoke may be more willing to quit.
- However, quitting is difficult and may take multiple attempts.
- Talk to your patients about quitting!

Scott Wilkes and Angela Evans A cross-sectional study comparing the motivation for smoking cessation in apparently healthy patients who smoke to those who smoke and have ischaemic heart disease, hypertension or diabetes *Family Practice* (1999) 16(6): 608-610 doi:10.1093/fampra/16.6.608

Nebraska Quit Attempts



Quit attempts – percent of current smokers who stopped smoking for one day or longer in an attempt to quit smoking.

Data Source: BRFSS

Nebraska Quitline Quit Rates for Clients Enrolled in Counseling by Completion

	Quit	Not Quit	Total	% Quit
Completed counseling	163	282	445	36.6%
Did not complete counseling	121	608	729	16.6%
Total	284	890	1,174	24.2%

Data Source: Nebraska Quitline. Quit rates for clients who completed an intake between 06/30/2006 and 12/16/2009.

Nebraska Quitline Quit Rates for Clients Completing Counseling

	Quit	Not Quit	Total	% Quit
Used NRT	41	112	153	26.8%
Did not use NRT	122	170	292	41.8%
Total	163	282	445	36.6%

NRT: Nicotine Replacement Therapy

Data Source: Nebraska Quitline. Quit rates for clients who completed an intake between 06/30/2006 and 12/16/2009.



What you can do

- Ask **all** patients and parents of pediatric patients whether they use tobacco, and advise those who do to quit.
- Advise everybody to make their homes and vehicles 100% smoke-free 24/7.
- Advise nonsmokers to avoid being exposed to secondhand smoke



How to get people to quit?

- 5A's method
 - Ask, Advise, Assess, Assist, Arrange
- Ask, Advise, Refer
- Nebraska Quitline Referral
 - I-800-QUIT-NOW
 - Quitnow.ne.gov



5 A's Method

- **ASK** about tobacco use at every visit.
- Identify all tobacco use
- Do you use tobacco?
 - How many cigarettes do you smoke every day?
 - How often do you dip?



5 A's Method

- **ADVISE** all tobacco users to quit.
- Use clear, strong and personalized language
 - “You should quit smoking (or chewing) and I can help you”
 - “You need to know that quitting smoking is the most important thing you can do to protect your health now and in the future”

5 A's Method

- **ASSESS** readiness to quit
 - Ask every tobacco user if he/she is willing to quit at this time
 - If they are willing to participate in intensive treatment, complete a fax referral form for the Nebraska Tobacco Quitline
 - Use Medicaid fax form for those on Medicaid
 - Regular fax form for all others
 - Both are available at:
http://dhhs.ne.gov/publichealth/Pages/tfn_ces_hcp.aspx



5 A's Method

ASSIST tobacco users with a quit plan

- Set a quit date with your patient
 - Ideally within 2 weeks
- Talk about the challenges s/he will face during the first few weeks
- Encourage them to tell family, friends, coworkers about quitting for extra support
- Suggest ways to cope with cravings
- Recommend pharmacotherapy if needed



5 A's Method

- **ARRANGE** follow-up visits
 - Schedule follow-up visits to review progress toward quitting.
 - Follow-up contact should occur soon after the quit date preferably during the first week
 - A second follow-up is recommended within the first month

You can access
“The Five A’s” and
other materials
here:

http://dhhs.ne.gov/publichealth/Pages/tfn_ces_hcp.aspx

(scroll down for 5 A’s)

+

LIFE CHANGING ADVICE

+

The Five A’s

As a health care provider you are an important resource to your patients and play a vital role in their health care decisions and choices. Quitting tobacco use is one of the most impactful health decisions a person can make. To help your patients make that decision, remember the “Five A’s” when counseling.

- ASK:**
- Ask your patient about his/her tobacco use at every visit.
 - Identify all tobacco use at every visit.
 - Ask: “How many cigarettes do you smoke every day?”
“How often do you dip?”
- ADVISE:**
- Strongly urge all tobacco users to quit.
 - Use clear, strong and personalized language:
 - “You should quit smoking (or chewing) and I can help you.”
 - “Cutting back when you’re sick isn’t enough.”
 - “You need to know that quitting smoking is the most important thing you can do to protect your health now and in the future.”
- ASSESS:**
- Determine your patient’s willingness to quit.
 - Ask every tobacco user if they are willing to quit at this time.
 - If the patient is willing to participate in an intensive treatment, complete a FAX Referral form for the Nebraska Tobacco Quitline.
 - Use either a Medicaid FAX referral form for those on Medicaid or the regular FAX referral form for all others.
- ASSIST:**
- Help your patient quit his/her tobacco use.
 - Help your patient develop a quit plan.
 - Set a quit date with your patient – ideally, within 2 weeks.
 - Talk with your patient about the challenges he/she will face during the first few weeks.
 - Encourage telling family, friends and co-workers about quitting for extra support.
 - Suggest ways to cope with cravings.
 - If available, refer to community cessation programs.
 - If needed, recommend the use of approved pharmacotherapy.
- ARRANGE:**
- Schedule follow-up visits to review progress toward quitting.
 - Follow-up contact should occur soon after the quit date, preferably during the first week.
 - A second follow-up contact is recommended within the first month.
 - Schedule further follow-up contacts as needed.

Talk with your patients about quitting tobacco.

Nebraska Tobacco Quitline
QuitNow.ne.gov | 1-800-QUIT-NOW



Quitline Resources

The Nebraska Tobacco Quitline can help you help your patients!

- Toll-free 1-800-QUIT-NOW
- (1-800-784-8669)
 - 24 hours a day
 - Counselors in Spanish and other languages
- QuitNow.Ne.gov
- Patients can call or enroll online
- Patients can text “IMREADY” to 39649 for texts to help keep them on track!



Nebraska Quitline FAX Referral

- Quitline FAX Referral
 - Referred by medical staff or by Behavioral Health or Substance Abuse counseling
 - Different forms for Medicaid and non-Medicaid
- FAX Referral allows people to be contacted by the quitline
- Allows Quitline to report back to referring party.
- Get FAX referral forms here:
 - http://dhhs.ne.gov/publichealth/Pages/tfn_ces_hcp.aspx

Or just go to quitnow.ne.gov and click on healthcare provider resources



Ask, Advise, Refer Method

- That's it! Just
 - **ask** patients if they use tobacco,
 - **advise** them not to, and
 - **refer** to the Tobacco Free Nebraska quitline!
- I-800-Quit-Now!

Other resources*

- Order “Diabetes and Tobacco” patient education brochures in English or in Spanish

<http://dhhs.ne.gov/publichealth/Documents/tobaceng.pdf>

by filling out an order form

http://dhhs.ne.gov/publichealth/Documents/order_form.pdf or emailing dhhs.diabetes@nebraska.gov or calling (402) 471-4411 or 1-800-745-9311 (ask for Diabetes Program)

- Browse Diabetes materials for your office

http://dhhs.ne.gov/publichealth/Pages/diabetes_material.aspx

- Browse Tobacco Free Nebraska materials for your office

http://dhhs.ne.gov/publichealth/Documents/QL_OrderForm.pdf

- See “What to tell your patients about smoking”

http://www.cdc.gov/tobacco/data_statistics/sgr/2010/clinician_sheet/pdfs/clinician.pdf

*All resources are free and may be copied and distributed.

These documents can be found at: http://dhhs.ne.gov/publichealth/Pages/diabetes_material.aspx and

http://dhhs.ne.gov/publichealth/Pages/tfn_ces_hcp.aspx



Diabetes and Tobacco Task Force

- If you are interested in being a part of a group focusing on how to educate Nebraskans with diabetes on the benefits of quitting tobacco, please email
- andrea.riley@nebraska.gov



Patient Resources

- www.Quitnow.ne.gov
- <http://smokefree.gov/>
- <http://www.cancer.gov/cancertopics/smoking>
- http://www.cdc.gov/tobacco/quit_smoking/how_to_quit/index.htm
- **I-800-QUIT-NOW**



Resources for Healthcare Professionals

- www.QuitNow.ne.gov
 - Resources for patients and professionals on quitting
 - Order free materials from Tobacco Free Nebraska for your clinic
- [Diabetes Prevention and Control Program](#)
 - Information on diabetes
 - Order diabetes patient education materials
 - Nebraska Diabetes Consensus guidelines
- <http://smokefree.gov/>
 - Wealth of information on quitting tobacco, great website to educate yourself
- <http://www.cdc.gov/tobacco/>



Resources for Healthcare Professionals

- **NEW!** Visit our Defend Against Diabetes website to:
 - Find out if you are at risk for type 2 diabetes—take the online risk assessment test
 - Get information on how best to prevent the disease
 - Check out our recipes and music
 - Refer your at-risk patients, too!

www.defendagainstdiabetes.ne.gov

Contact Information

Tobacco:

Shirley Deethardt

Community Health Educator

Tobacco Free Nebraska

shirley.deethardt@nebraska.gov

402-471-0101



for a great state of health

Contact Information

Diabetes:

Andrea Riley, RN BSN

Community Health Nurse

Diabetes Prevention and Control Program

DHHS - Public Health

301 Centennial Mall S. Box 95026

Lincoln, NE 68509-5026

402-471-0162

andrea.riley@nebraska.gov

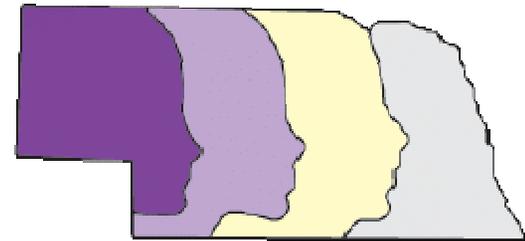


NEBRASKA
Diabetes Prevention
and Control Program

Contact Information

Every Woman Matters

Every Woman Matters



NEBRASKA OFFICE OF WOMEN'S HEALTH

Sue DeBoer, RN, BSN

Community Health Nurse

Nebraska Office of Men's and Women's Health

Every Woman Matters, WISEWOMAN
Program

301 Centennial Mall South, Lincoln, NE 68509

402 471-6549

susan.deboer@nebraska.gov



Post test

- Click on the following link to complete the Post test and evaluation.
- After completing those, you will have the opportunity to print your certificate of completion.

Thank you for participating!

- Post test link: <http://www.zoomerang.com/Survey/WEB22CZPLPFW7S/>