

Diabetes The Numbers

Presented by

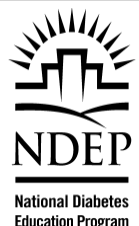
Renee Crichlow MD,FAAFP

University of Minnesota, School of Medicine, North
Memorial Family Medicine Residency Program

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Diabetes: The Numbers

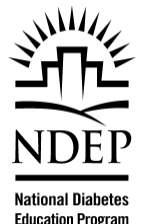


The National Diabetes Education Program
Changing the Way Diabetes is Treated.

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Diabetes Mellitus



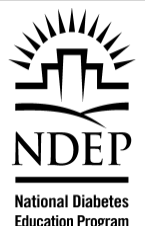
What is Diabetes?

- Diabetes is a group of diseases characterized by high levels of blood glucose (blood sugar)
- Diabetes can lead to serious health problems and premature death

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Diabetes & Cardiovascular Disease

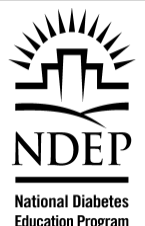
- Cardiovascular disease is the leading cause of death for people with diabetes
- In adults with diabetes:
 - 68% die of heart disease or stroke
 - the risk for stroke is two to four times higher
 - 67% have high blood pressure
 - smoking doubles the risk for heart disease

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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Diabetes Complications

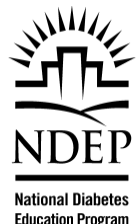
- Diabetes is the leading cause of:
 - kidney failure
 - 48,374 people with diabetes began treatment for end stage kidney disease in 2008
 - new cases of adult blindness
 - 4.2 million people with diabetes aged 40 and older had diabetic retinopathy in 2005-2008
 - nontraumatic lower-limb amputations
 - Over 65,000 nontraumatic lower-limb amputations were performed in people with diabetes in 2006

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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The risk of periodontal disease is two to three times higher in adults with diabetes

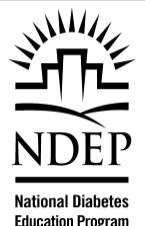
About one-third of people with diabetes have severe periodontal disease



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Diabetes Complications

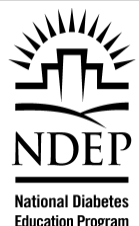
- 60% to 70% of people with diabetes have mild to severe nervous system damage
 - Almost 30% of people with diabetes aged 40 years and older have impaired sensation in the feet
- People with diabetes are twice as likely to have depression

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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Common Types of Diabetes

- Type 1 diabetes in adults
 - 5% of diagnosed cases of diabetes
- Type 2 diabetes in adults
 - 90% to 95% of diagnosed cases of diabetes

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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Common Types of Diabetes

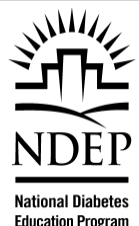
- **Gestational Diabetes (GDM)**
 - diagnosed during pregnancy
 - 5% to 10% of women with GDM are found to have diabetes, usually type 2, immediately following pregnancy
 - 35% to 60% of women with GDM will develop diabetes in the next 10 to 20 years
 - affects at least 7% of pregnancies

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

1994



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Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

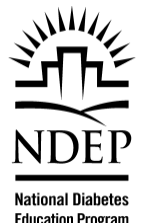
1995



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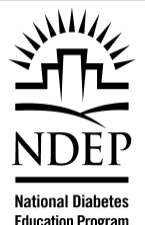
1996



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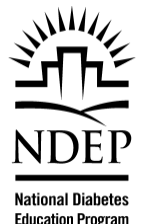
1997



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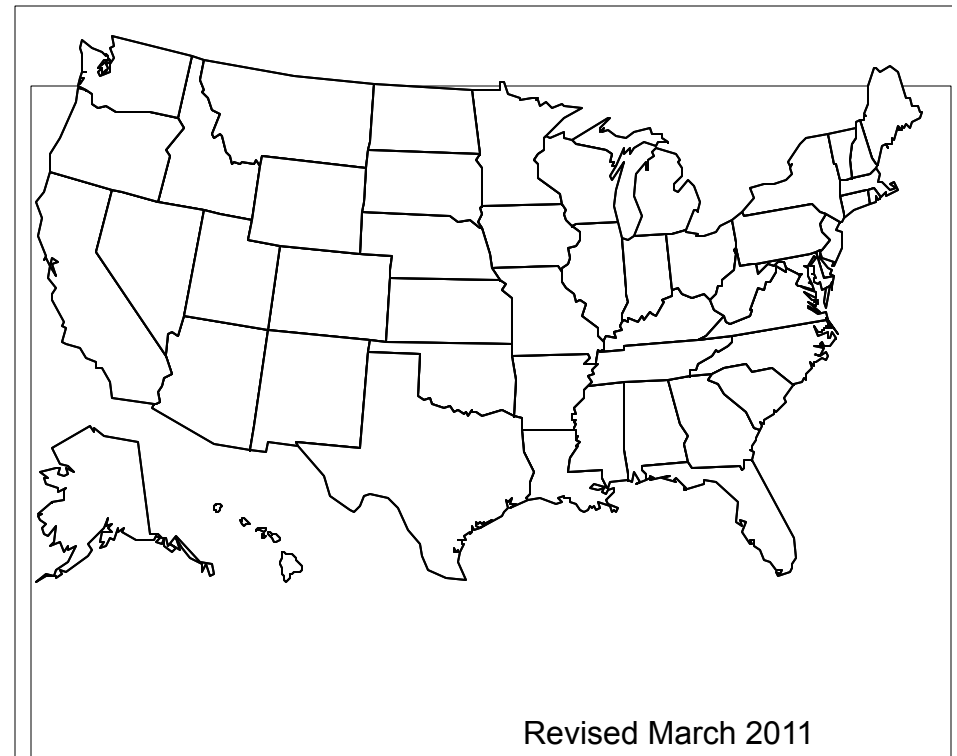


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Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

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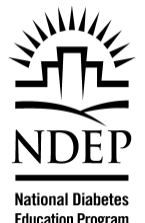
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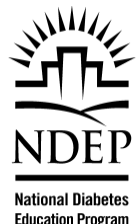
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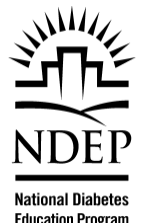
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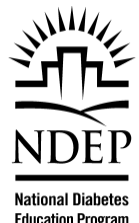
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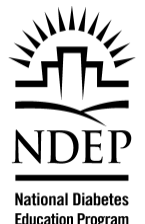
2003



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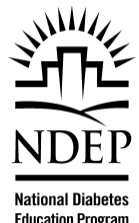
2004



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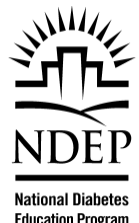
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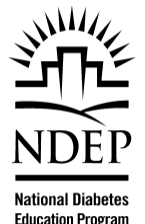
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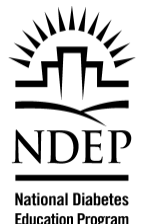
2007



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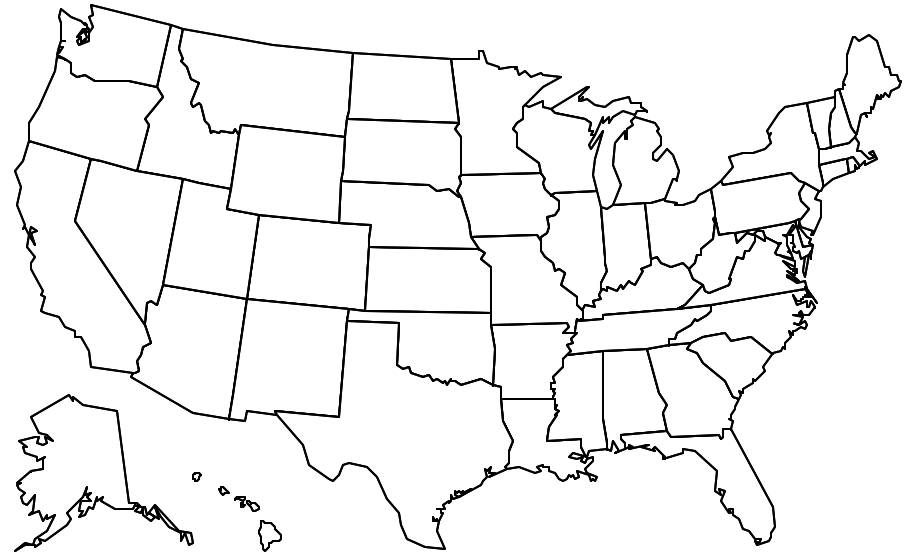
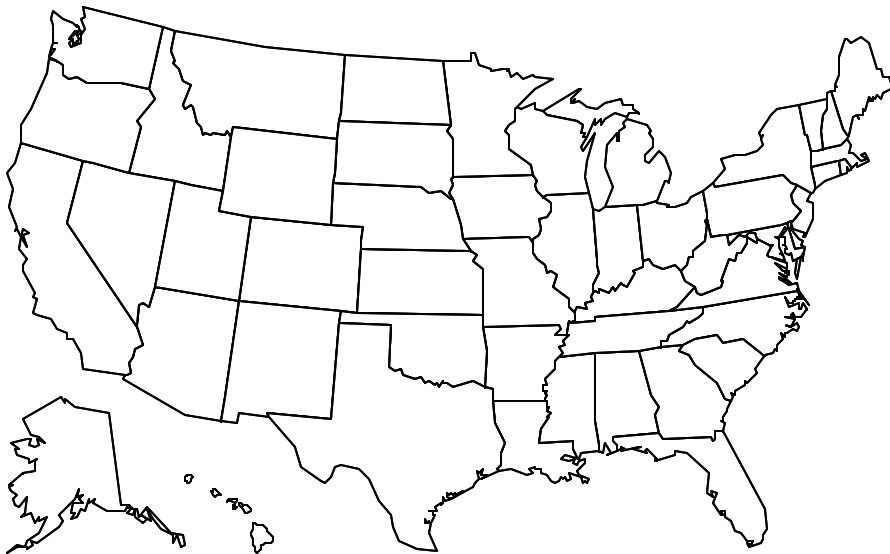


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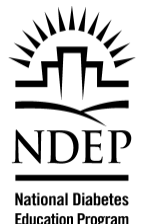
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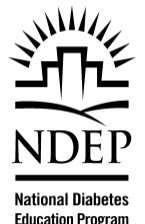
2009



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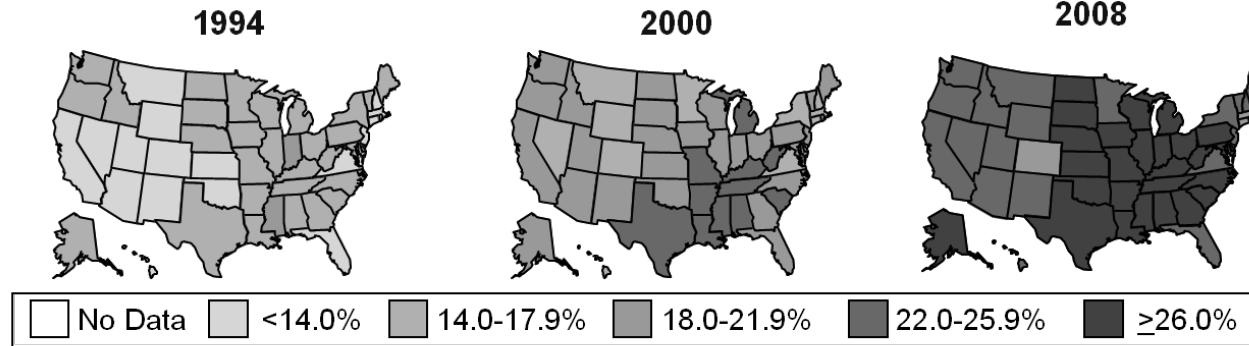


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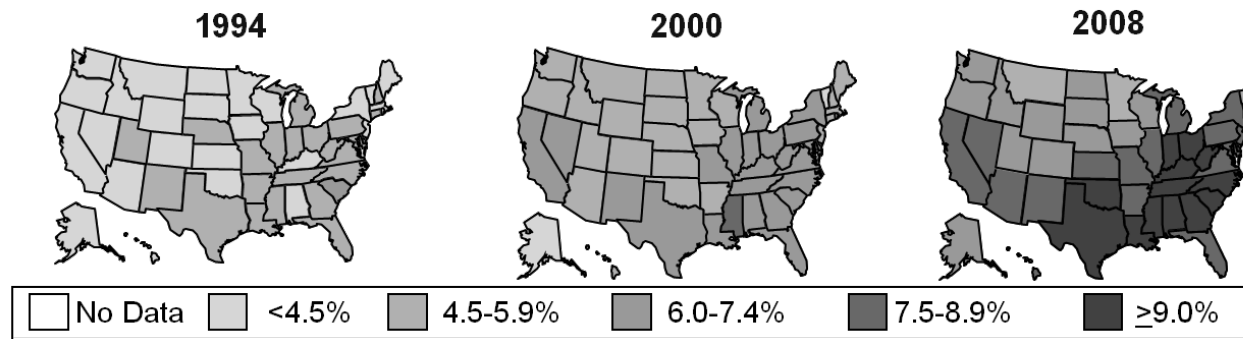


Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

Obesity (BMI ≥ 30 kg/m²)



Diabetes

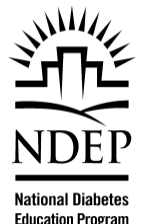


Centers for Disease Control and Prevention: National Diabetes Surveillance System
<http://www.cdc.gov/diabetes/statistics>

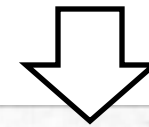
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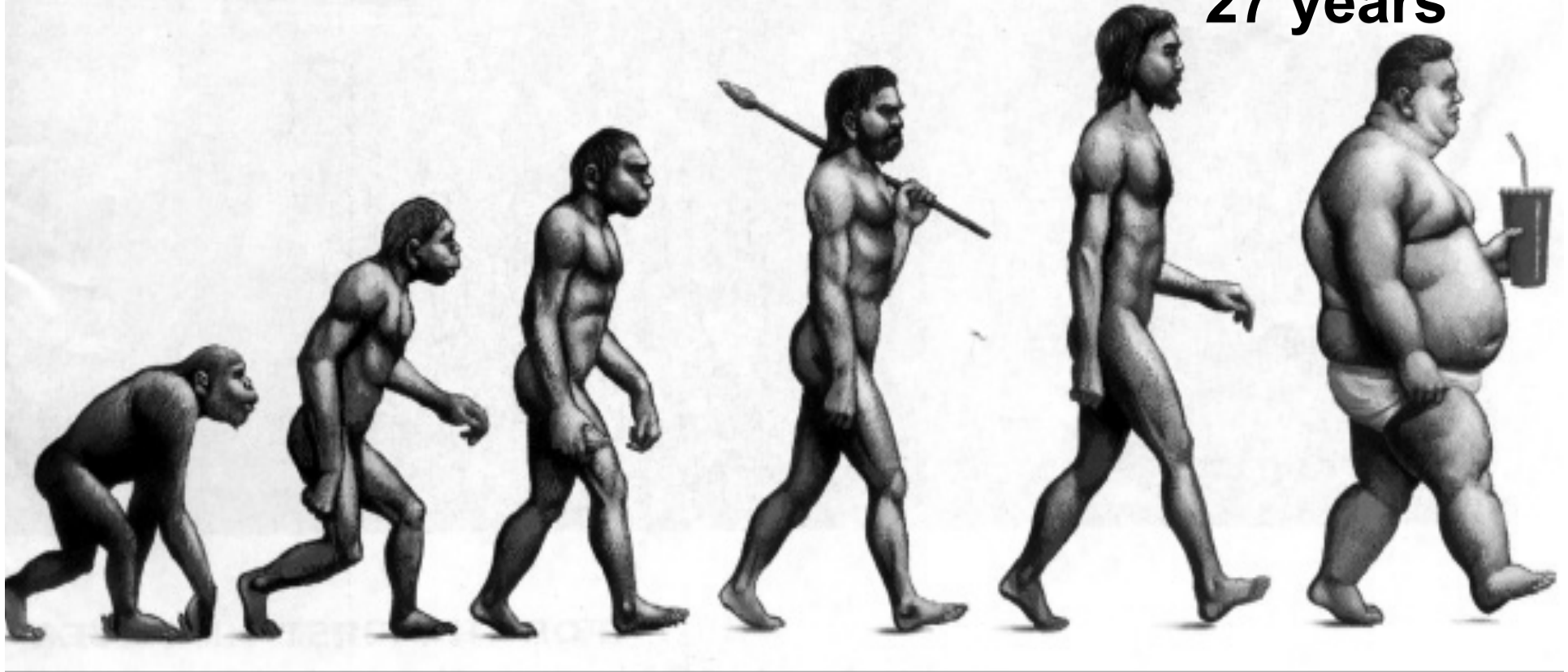
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Millions of years



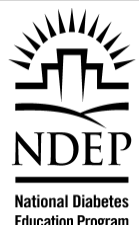
27 years



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U.S. Diabetes Prevalence

All Ages, 2010

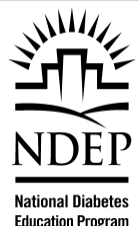
- 25.8 million people have diabetes
 - **Diagnosed:** 18.8 million people
 - **Undiagnosed:** 7.0 million people

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

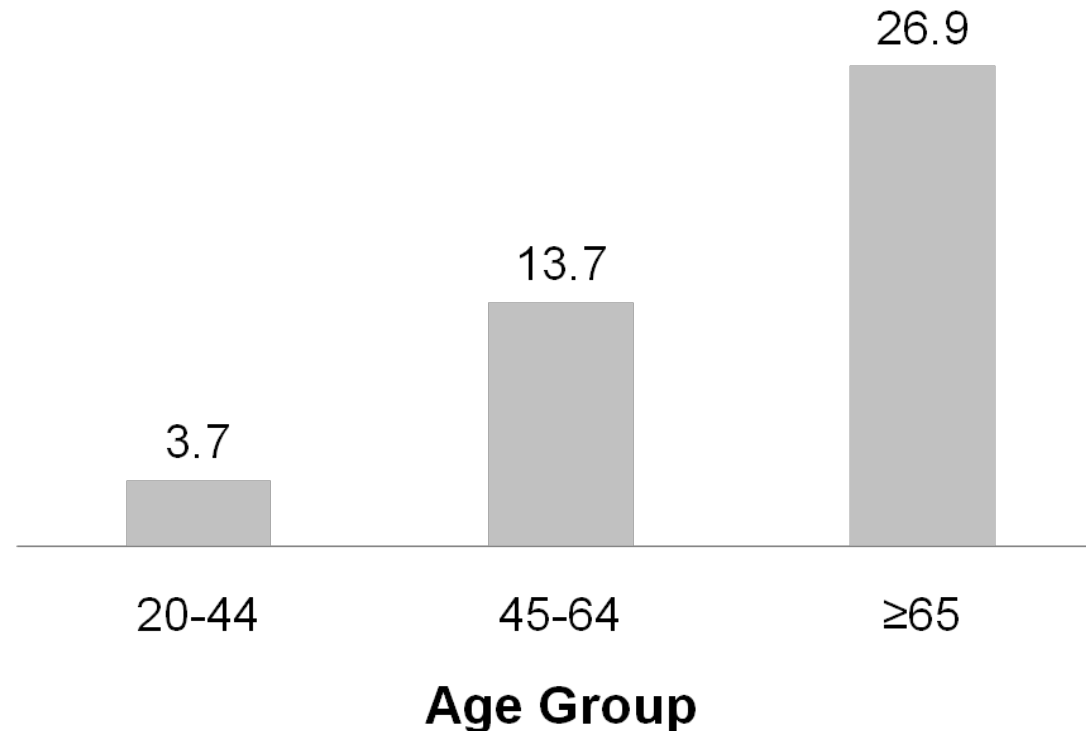
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Estimated percentage of people aged 20 years or older with diagnosed and undiagnosed diabetes, by age group, United States, 2005-2008

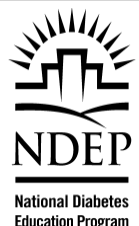


Source: 2005–2008 National Health and Nutrition Examination Survey

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Diabetes Incidence

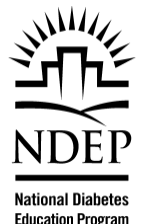
A total of **1.9 million** new cases of diabetes were diagnosed in 2010 in the United States among people aged 20 years and older.

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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American Indians and Alaska Natives & Diabetes

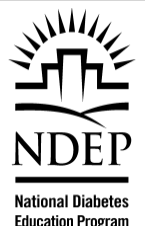
- About 16.1% aged 20 and older who are served by Indian Health Services have diagnosed diabetes
- Rates vary:
 - 5.5% of Alaska Native adults have diabetes
 - 33.5% of American Indian adults in southern Arizona have diabetes

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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African Americans & Diabetes

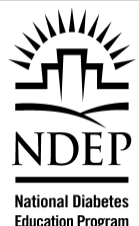
- 4.9 million; 18.7% of all African Americans aged 20 and older have diagnosed and undiagnosed diabetes
- Compared to non-Hispanic whites, the risk of diagnosed diabetes is 77% higher among African Americans

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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Hispanics/Latinos & Diabetes

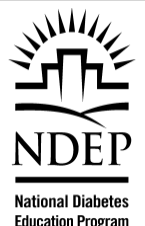
- 11.8% of all Hispanics/Latinos aged 20 years and over have diagnosed diabetes
- Rates vary among groups:
 - Cubans & Central and South Americans 7.6%
 - Mexican Americans 13.3%
 - Puerto Ricans 13.8%

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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Asian Americans and Pacific Islanders & Diabetes

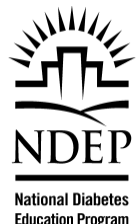
- 8.4% of all Asian Americans have diagnosed diabetes
- Prevalence data for diabetes among Pacific Islanders is limited

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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U.S. Diabetes Prevalence

People Younger than 20 Years of Age, 2010

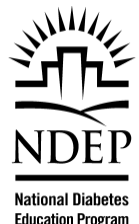
- 215,000 or 0.26% of young people have diabetes
- Type 1 diabetes is more common than type 2, except in American Indian youth
- Type 2 diabetes is extremely rare in youth under 10 years of age
- Type 2 diabetes rates are higher in youth aged 10 to 19 years with higher rates among minority populations compared to non-Hispanic whites

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

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U.S. Diabetes Prevalence

Young people aged 0-9

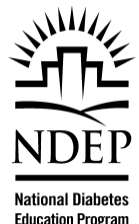
- Diabetes occurs in less than 1 in 1,000 young people aged 0 to 9 years
- Type 1 diabetes accounts for 97% of diagnosed cases of diabetes in this age group
- Non-Hispanic white youth have the highest rate of new cases of type 1 diabetes

(SEARCH) *Pediatrics*.2006; 118: 1510-1518.

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U.S. Diabetes Prevalence

Young people ages 10-19

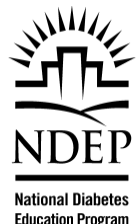
- Diabetes occurs in 1 in 357 young people aged 10 to 19 years
- Type 1 diabetes accounts for 81% of diagnosed cases in this age group
- Type 2 diabetes accounts for 6% (non-Hispanic white youth) to 76% (American Indian youth) of diagnosed diabetes in this age group

(SEARCH) *Pediatrics*.2006; 118: 1510-1518.

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Every 24 Hours...

- 5225 new cases of diabetes are diagnosed
- 180 non-traumatic lower limb amputations are performed
- 133 people begin treatment for end-stage renal disease
- 634 people die of diabetes or diabetes is a contributing cause of death

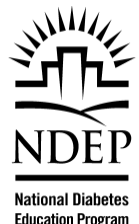


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Preventing Diabetes Complications

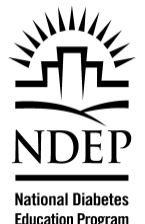
- Blood glucose control
- Blood pressure control
- Blood lipid control
- Preventive care practices for eyes, kidneys, feet, teeth, and gums

National Diabetes Fact Sheet, CDC, 2011.
<http://www.cdc.gov/diabetes/pubs/factsheet11.htm>

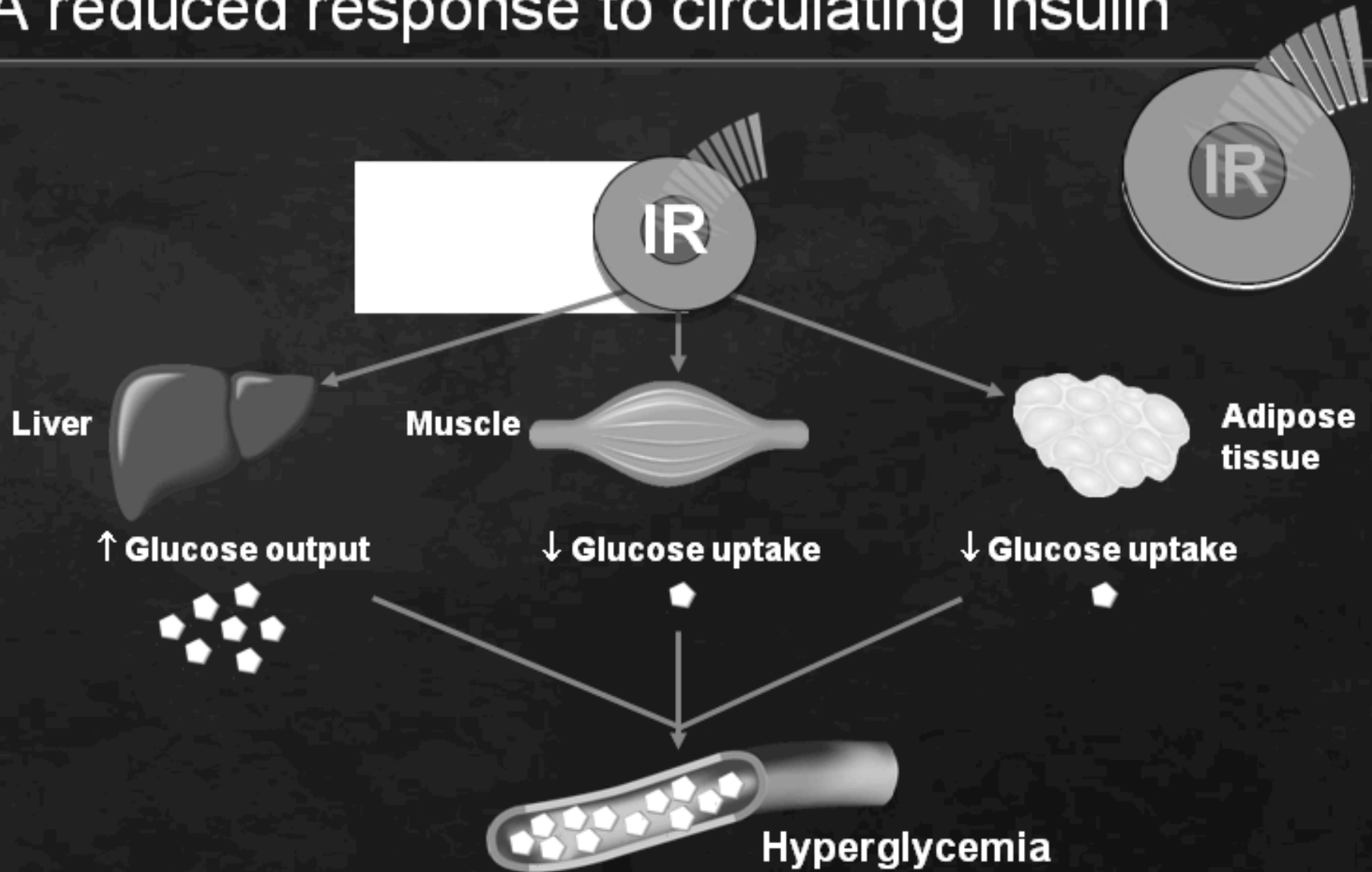
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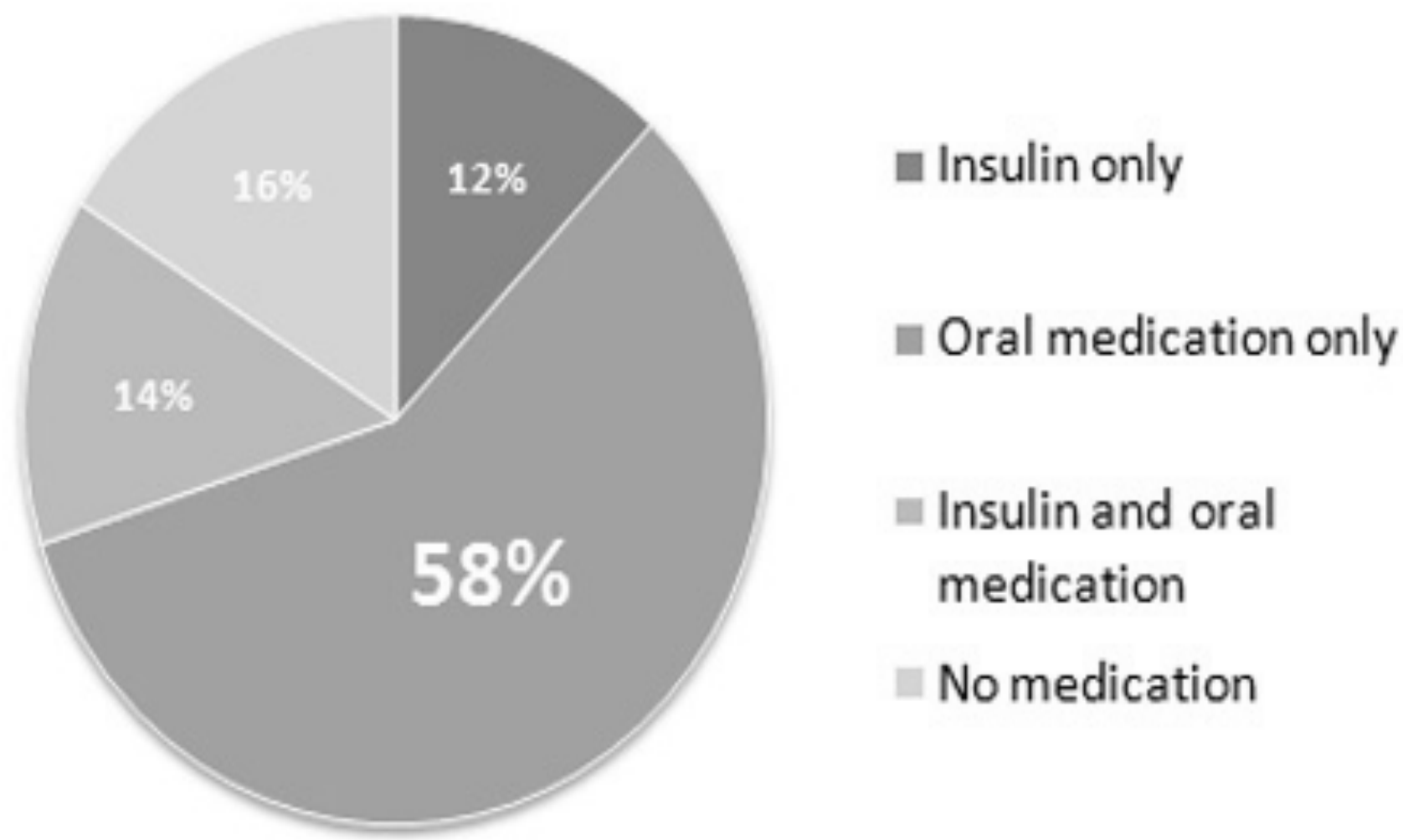
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What is insulin resistance ?
A reduced response to circulating insulin



Percentage of adults with diagnosed diabetes receiving treatment, United States 2007-2009



Source: 2007–2009 National Health Interview Survey

Diabetes: The Numbers



Questions?

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National Diabetes Education Program
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A joint program of NIH and CDC

