

DIABETES OVERVIEW AND MULTIDISCIPLINARY MANAGEMENT

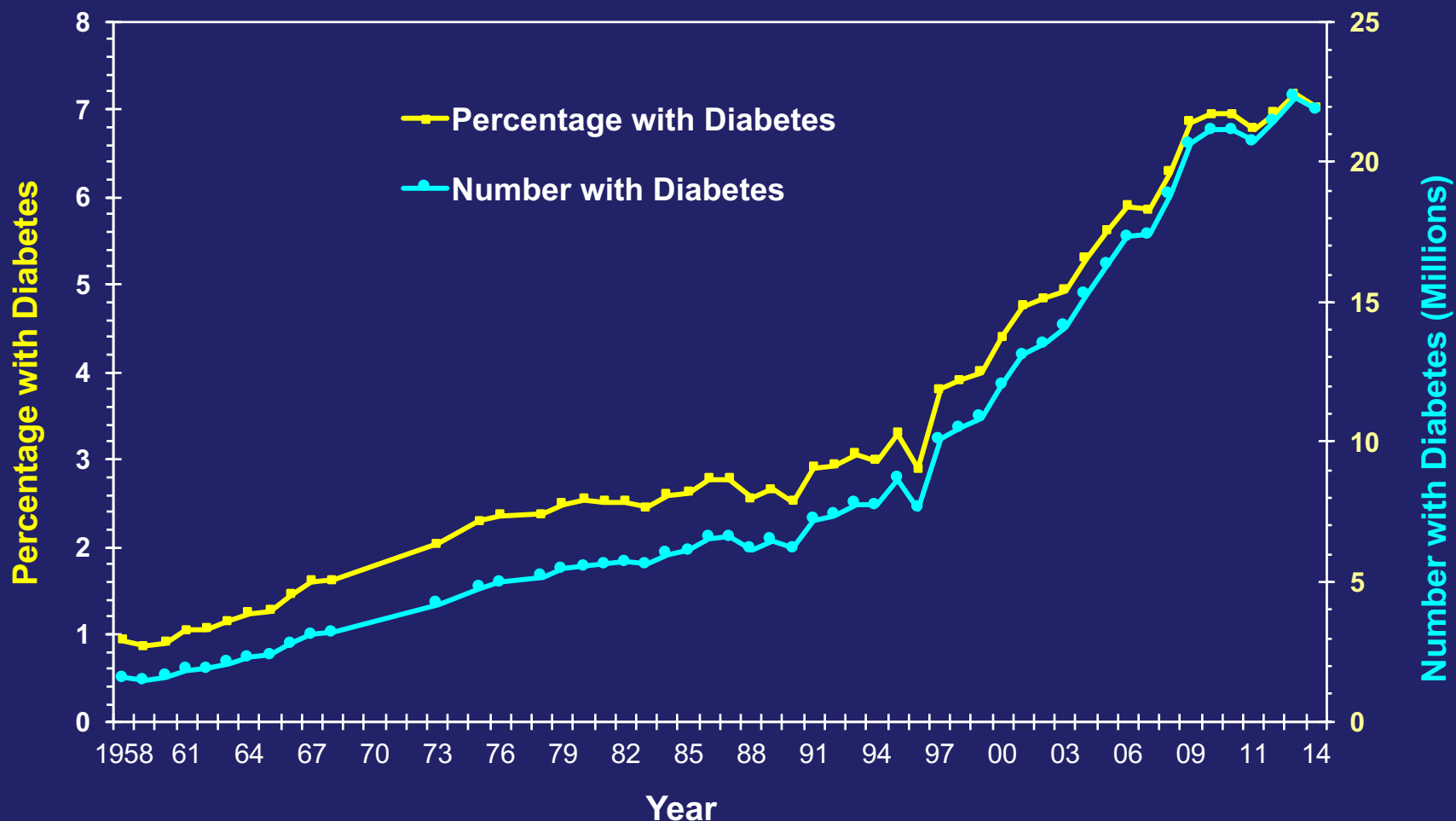
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Number and Percentage of U.S. Population with Diagnosed Diabetes, 1958-2014



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



MYTH: Diabetes is not a serious disease.



FACT: Diabetes is a growing epidemic with a devastating physical, emotional and financial toll on our country.

It kills more Americans each year
than AIDS and breast cancer
COMBINED.



STOP
DIABETES.

American Diabetes Association.

DID YOU KNOW?

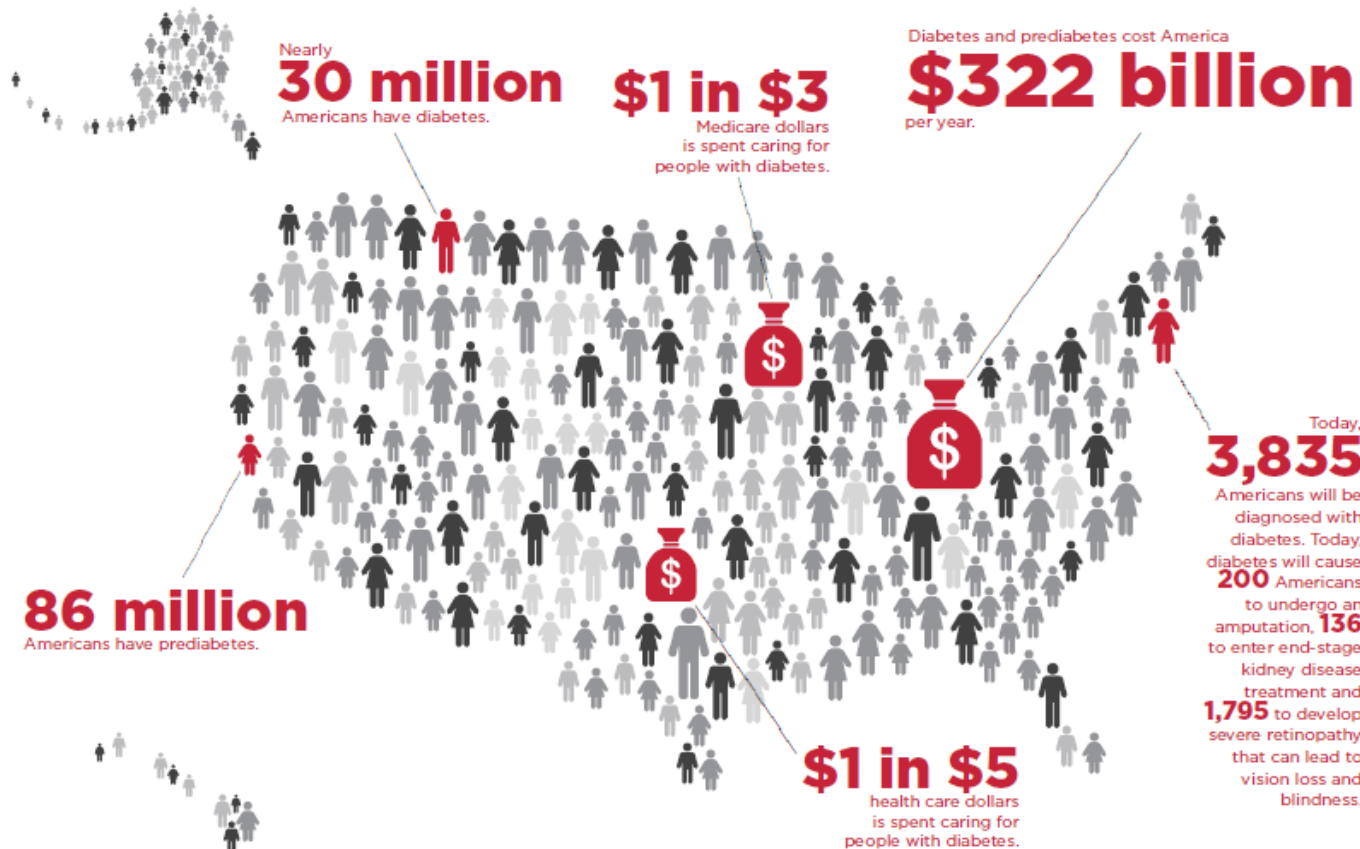
The economic cost of diagnosed diabetes in the
United States is

\$245 BILLION

per year.



THE STAGGERING COSTS OF DIABETES IN AMERICA

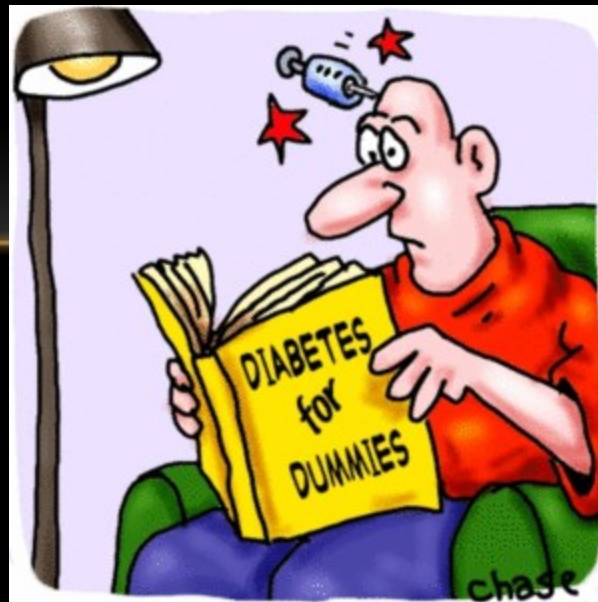


Learn how to fight this costly disease at diabetes.org/congress



The CDC estimates that if trends continue the way they have been, 1 in 3 adults will have diabetes by the year 2050

SO, WHAT IS DIABETES ANYWAY??



DIABETES IS A PROBLEM OF GLUCOSE METABOLISM



- All carbohydrates are digested into glucose by the GI tract

GLUCOSE TRAVELS TO ORGANS FOR UPTAKE AND UTILIZATION



INSULIN FACILITATES UPTAKE OF GLUCOSE INTO THE CELL



IF INSULIN IS DEFICIENT, GLUCOSE HAS NO
WHERE TO GO



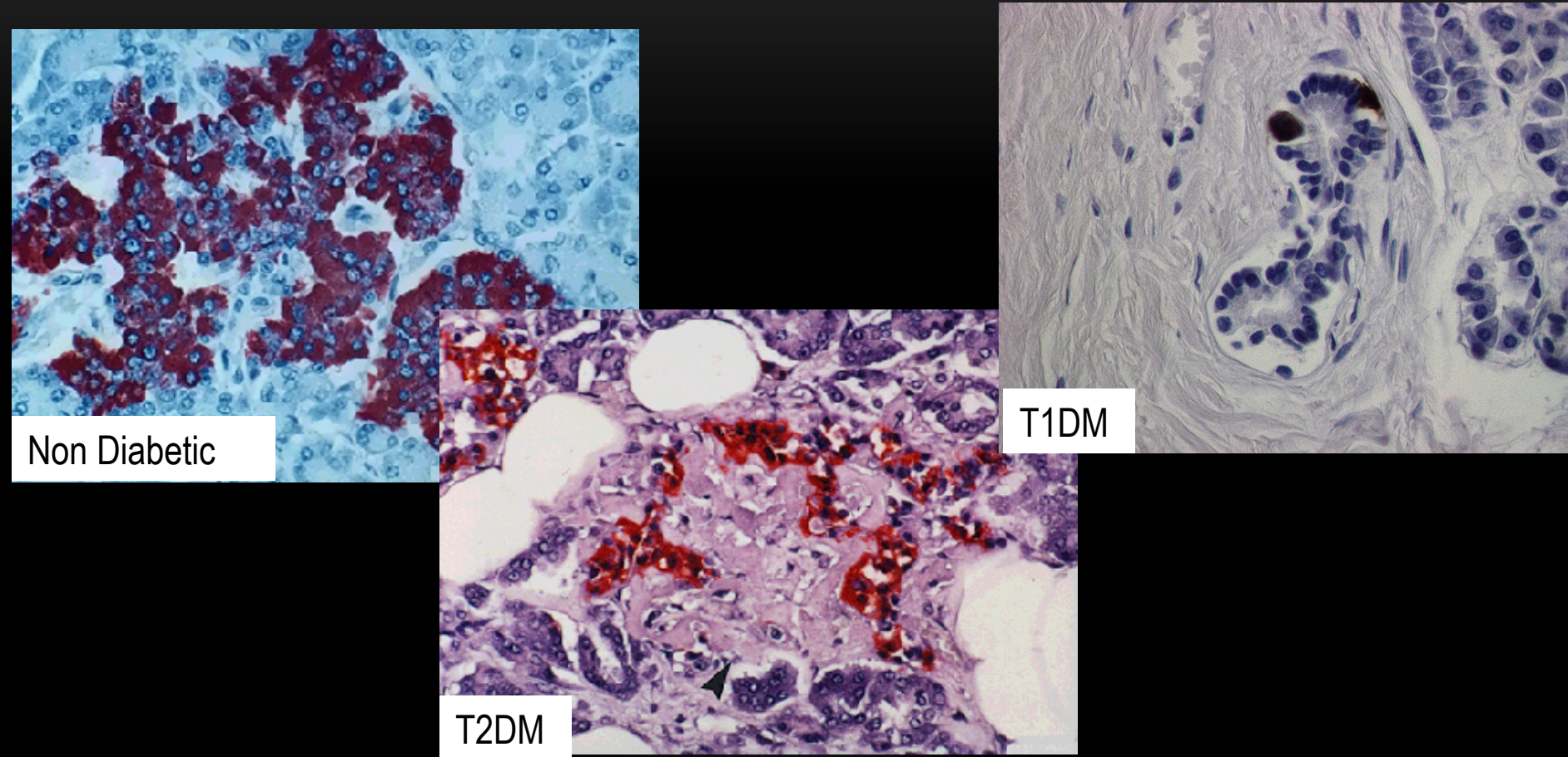
UNUTILIZED GLUCOSE CAUSES MICRO AND MACROVASCULAR DAMAGE

- Diabetes leads to:
 - Neuropathy
 - Retinopathy
 - Nephropathy
 - CAD
 - Strokes
- Diabetes also causes:
 - Dehydration
 - Infections
 - Poor wound healing

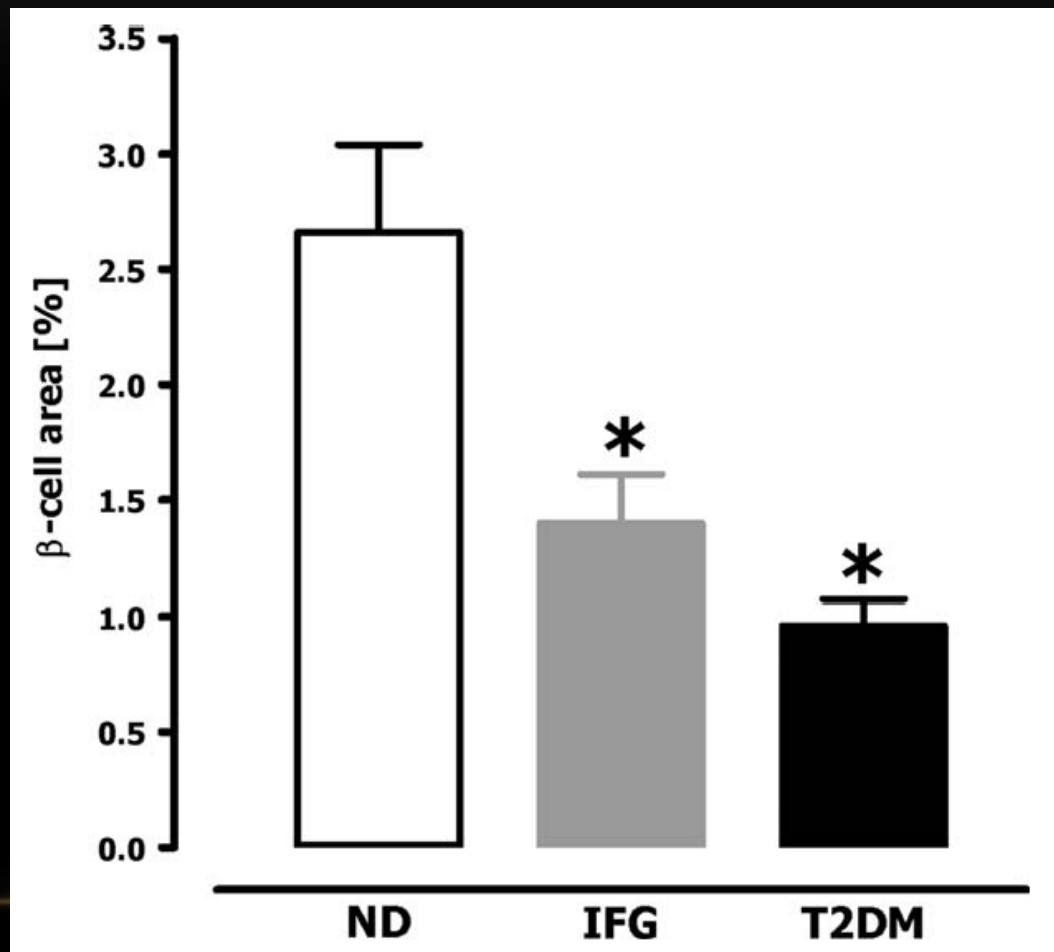
WHY DOES DIABETES HAPPEN?

- Type 1 diabetes
 - Autoimmune attack on insulin producing beta cells
- Type 2 diabetes
 - Insulin resistance
 - Beta Cell Dysfunction

Beta Cell Loss in Diabetes



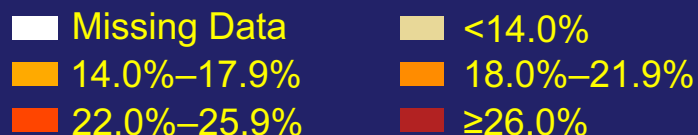
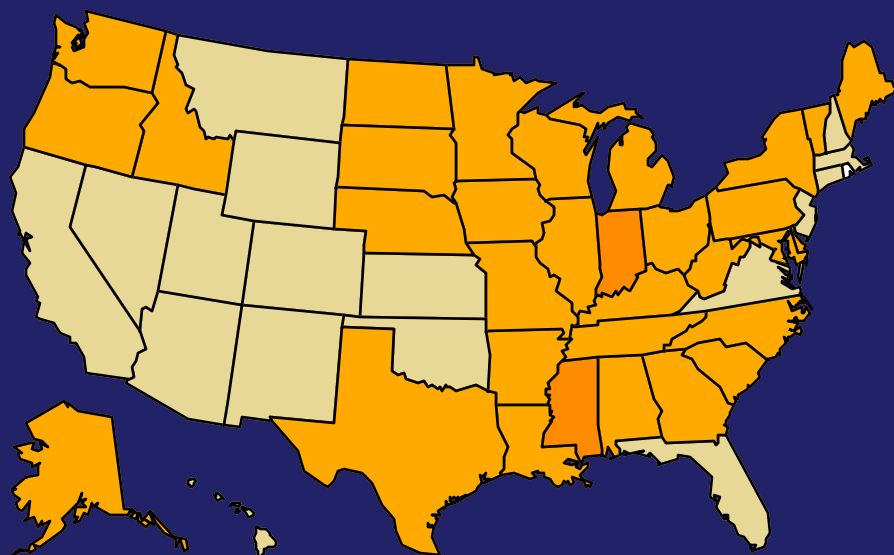
LOSS OF INSULIN PRODUCING BETA CELLS



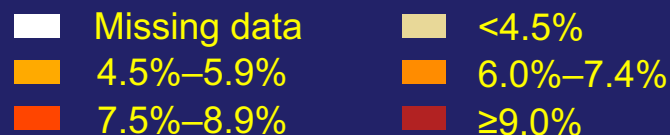
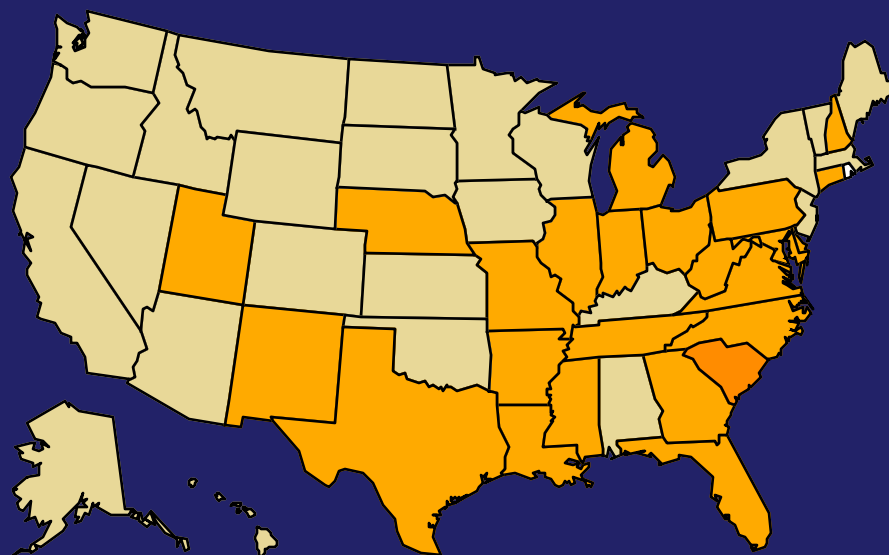
Age-Adjusted Prevalence of Obesity and Diagnosed Diabetes Among U.S. Adults

1994

Obesity (BMI $\geq$ 30 kg/m²)



Diabetes

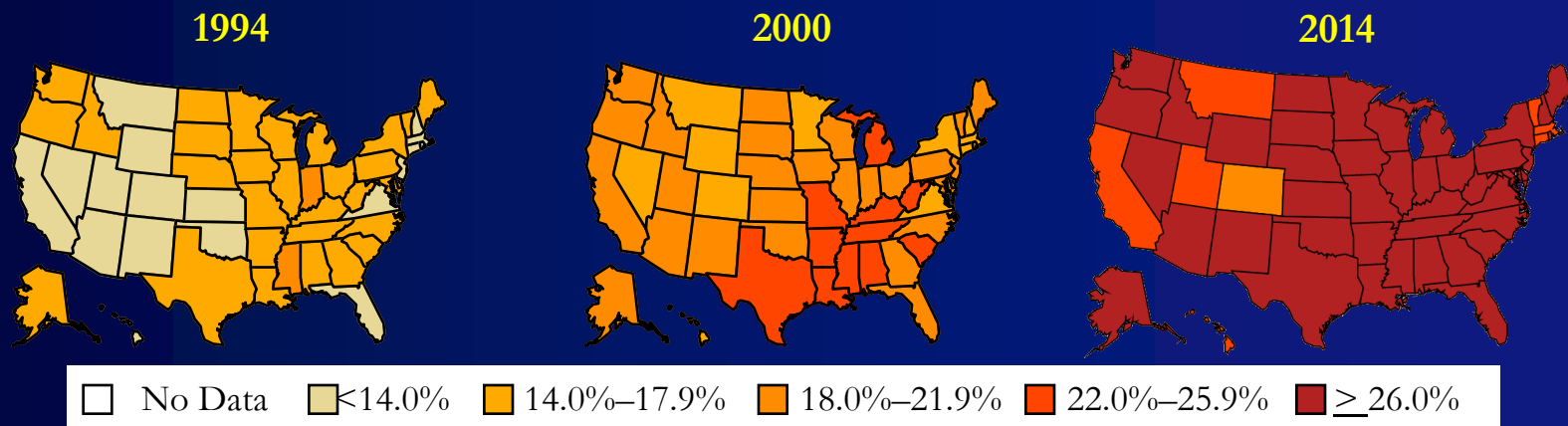


CDC's Division of Diabetes Translation. National Diabetes Surveillance System
available at <http://www.cdc.gov/diabetes/statistics>

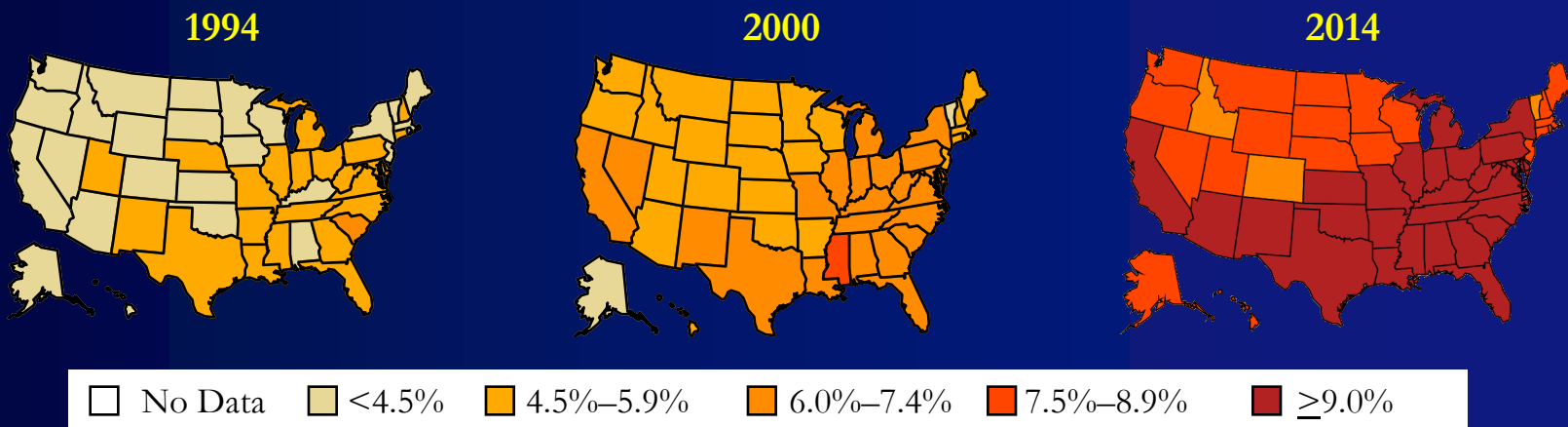


Age-adjusted Prevalence of Obesity and Diagnosed Diabetes Among US Adults

Obesity (BMI ≥ 30 kg/m²)



Diabetes



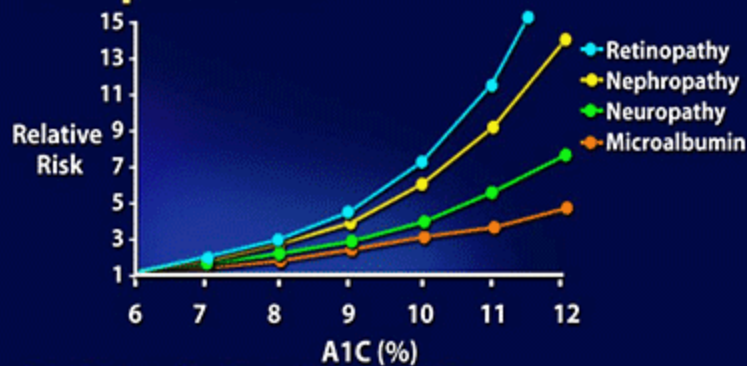
NOTE: Survey method changes in 2011 may impact trends <http://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html>
CDC's Division of Diabetes Translation. United States Diabetes Surveillance System available at
<http://www.cdc.gov/diabetes/data>

WHO IS AT HIGHER RISK FOR DIABETES?

- Overweight/Obese
 - Family history
 - Race
 - African Americans, Hispanics, South Asians, Pacific Islanders, Filipinos are at much higher risk
 - Asians get type 2 diabetes at lower BMIs
 - Less education
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TREATMENT GOALS OF DIABETES

DCCT: A1C and Microvascular Complications



Skyler JS. *Endocrinol Metab Clin North Am.* 1996;25:243-254.

- Glycemic control
- Blood pressure control
- Lipid control

PEOPLE WITH DIABETES NEED TO LEARN NEW SKILLS AND MAKE LIFESTYLE CHANGES



DIABETES CARE REQUIRES A MULTIDISCIPLINARY TEAM



https://www.ucsf.edu/sites/default/files/styles/300w/public/fields/field_insert_file/news/pharmstory1.jpg?itok=zCqW-TXm

CONCLUSIONS

- Diabetes is affecting more and more of the US (and world) population
 - Diabetes care is costly
 - Diabetes is a complex disease that requires multidisciplinary involvement
 - Diabetes can be controlled
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