Diabetes Characteristics and the Regional Epidemic

Ann Albright, PhD, RD
Director, Division of Diabetes Translation
Centers for Disease Control and Prevention

The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the CDC.
25.8 million people (8.5%) in the U.S. have diabetes
- 17.8 million are diagnosed
- 8.0 million are undiagnosed
- 11.3% of those ≥20 years old
- 26.9% of those ≥65 years old

79 million people in the U.S. have prediabetes

Source: *Diabetes Fact Sheet, 2011*
www.cdc.gov/diabetes
If current trends continue

- Americans are living longer
- People with diabetes also are living longer
- Increases in minority groups at high risk for type 2 diabetes
- New cases of diabetes

1 in 10 U.S. adults have diabetes now

Boyle, Thompson, Gregg, Barker, Williamson. Population Health Metrics 2010
Diabetes Fact Sheet, 2011
Health burden

- The 7th leading cause of death in the U.S.
  - Underlying cause on 71,382 death certificates
  - Contributing cause on 231,404 death certificates

- The leading cause of kidney disease

- The leading cause of nontraumatic lower-limb amputations

- The leading cause of new cases of blindness

- Significant contributor to heart disease and stroke

County-level Estimates of Diagnosed Diabetes among Adults Aged ≥20 Years: United States 2004–2010

Percent

www.cdc.gov/diabetes
Diabetes Belt

- Counties with high prevalence of diabetes are concentrated in the Southeast region.
- Counties in close proximity in the Southeast region and that had an 11.0% or higher prevalence of diabetes were considered to be in the diabetes belt.
- This method defined a congruent, although not necessarily continuous geographic area.

Diabetes Belt
Compared to the rest of the Country

- Greater percentage of non-Hispanic African Americans
- Greater prevalence of obesity & sedentary lifestyle
- Smaller proportion of people with college degree
- Everyone in the diabetes belt (including those with few risk factors) was at greater risk of diabetes than similar people outside the belt - likely associated with social and cultural factors

 Counties in persistent poverty and diabetes prevalence > 11.1 percent
Appalachian Counties in the Diabetes Belt
Appalachian Counties

- People in distressed counties in Appalachia are diagnosed with diabetes 2.8 years younger than in non-Appalachian counties.
- People in distressed counties in Appalachia are 1.3 times as likely to have diabetes as people in non-Appalachian counties.

Barker L. Gerzoff R. Popul Health Metr 2011
County-level Estimates of Obesity among Adults Aged ≥20 Years: United States 2004‒2010

Percent
CDC Strategic Goals

Prevent diabetes

Prevent diabetes complications and disabilities

Eliminate diabetes-related health disparities

www.cdc.gov/diabetes
Division of Diabetes Translation

- Tracking the disease burden
- Conducting applied translation research to prioritize effective interventions
- Economic analyses
- Developing and maintaining state-based diabetes/chronic disease programs
- Implementing National and Regional Program Initiatives:
  - National Diabetes Prevention Program
  - Native Diabetes Wellness Program
  - Appalachian Coalitions
CDC Partners with and Provides Funding for Diabetes Prevention and Control to...

- State/Local Governments
- U.S. Territories and Tribes
- Community Organizations
- Academic Institutions
- Professional Organizations/Coalitions

*** We partner often with other CDC divisions/centers and other Federal Agencies
The health of individuals is inseparable from the health of communities
(Healthy People 2010)
The Community – Clinic Partnership Model

Community

- Informed Population
- Strong Community Organizations
- Healthy Public Policy
- Supportive Environments

Clinic

- Insurers
- Employers

Partnership Zone

- Screening for High Risk
- Diagnosis of Prediabetes and Diabetes
- Structured Lifestyle Programs
- Regular Glucose Monitoring
- Proactive Practice Team
- Decision Support
- Information Systems
- Informed, Activated Patients

Total Population

- Pre-diabetes
- Diabetes
- Complications
National Diabetes Prevention Program

COMPONENTS

Training: Increase Workforce
Train the workforce that can implement the program cost effectively.

Recognition Program: Assure Quality
Implement a recognition program that will:
- Assure quality.
- Lead to reimbursement.
- Allow CDC to develop a program registry.

Intervention Sites: Deliver Program
Develop intervention sites that will build infrastructure and provide the program.

Health Marketing: Support Program Uptake
Increase referrals to and use of the prevention program.
Diabetes Prevention in Appalachia

- Kentucky – Four state agencies in KY Cabinet for Health and Family Services created a biennial KY Diabetes Report that generated momentum to include coverage for diabetes prevention program in state employee health plan
- W. Virginia – Developed and implemented a diabetes prevention referral system that includes prediabetes identification and referral to program sites
Medical Management

Self-Management

Ongoing Support

Critical Elements of Diabetes Management
Diabetes Management in Appalachia

- AppaPhil works in 10 economically distressed counties – Scioto in OH, Elliott, Lewis, Morgan, and Wolfe in KY, Russell and Wise in VA, and Kemper, Noxubee and Winston in MS
- Provides training and support to build capacity of other non-profits and coalitions
- Incubates new approaches, small businesses and provides opportunities for philanthropic investments
Summary

• More people have diabetes and more are developing it – Diabetes Belt
• Future projections underscore prevention is critical
• Diabetes management remains a priority
• Eliminating disparities is key
• There are effective diabetes prevention and management interventions that must be scaled-up and sustained