Diabetes Surveillance System

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Surveillance

The ongoing systematic collection, analysis, and interpretation of health data essential to the planning, implementation, and evaluation of public health practice, as well as the timely dissemination of these data to those who need to know

Diabetes Surveillance System

- National Level
  - Behavioral Risk Factor Surveillance System (BRFSS)
    - Risk factors (e.g. obesity, physical inactivity)
    - Self-reported physician diagnosed diabetes
    - Diabetes preventive care practices

- National Health Interview Survey (NHIS)
  - Prevalence
  - Incidence
Diabetes Surveillance System

• National Level
  – National Health and Nutrition Examination Survey (NHANES)
  – National Hospital Discharge Survey
  – National Vital Statistic System
    • Birth Records
    • Death Records
  – U.S. Renal Data System (USRDS)
  – YRBS
Diabetes Surveillance System

- State Level data
  - BRFSS
  - Hospital Discharge Data
  - Emergency Room Visit Data
  - Vital Records
    - Death Records
    - Birth Records
  - YRBS
  - YTS
  - USRDS
Prevalence of Diabetes Among Adults in the US, 1980-2003
Incidence of Diabetes Among Adults in the US, 1997-2003

NHIS 1997-2003
Incidence of Diabetes Among Adults in The US, by Races

NHIS 1997-2003
What is the lifetime risk for diabetes for people born in the United States in 2000?

1 of 3 Americans

1 of 2 Hispanic females

2 of 5 African Americans and Hispanics

Control diabetes. For life.
Prevalence of Self-Reported Physician Diagnosed Diabetes in Missouri, 1988-2004

BRFSS 1998-2004
Diabetes Prevalence Among Adults in Missouri, by Races, 1990-2004

BRFSS 1998-2004
Diabetes Hospitalization Rates* in Missouri, 1993-2003

* Diabetes as the principal diagnosis; Rates are age adjusted to 2000 standard US population

DHSS - MICA
Diabetes Hospitalization Rates* in Missouri, by Races, 1993-2003

* Diabetes as the principal diagnosis; Rates are age adjusted to 2000 standard US population

DHSS-MICA
Diabetes Emergency Room Visit Rates* in Missouri, 1993-2003

* Diabetes as the principal diagnosis; Rates are age adjusted to 2000 standard US population

DHSS-MICA
Diabetes Emergency Room Visit Rates* in Missouri, by Races, 1993-2003

* Diabetes as the principal diagnosis; Rates are age adjusted to 2000 standard US population

DHSS-MICA
Diabetes Mortality Rates* in Missouri, 1990-2003

* Diabetes as the principal diagnosis; Rates are age adjusted to 2000 standard US population DHSS-MICA
Diabetes Mortality Rates* in Missouri, 1990-2003

* Diabetes as the principal diagnosis; Rates are age adjusted to 2000 standard US population

DHSS-MICA
The Leading Causes of Death in Missouri, 2003

- Heart disease: 16,310
- Cancer: 12,295
- Cerebrovascular disease: 3,556
- Chronic lower respiratory diseases: 2,942
- Unintentional injury: 2,643
- Diabetes: 1,653
- Pneumonia & influenza: 1,624
- Alzheimer's disease: 1,293
- Kidney disease: 1,092
- Septicemia: 734
Diabetes Inpatient Hospital Charges* in Missouri, 1993-2003

* Diabetes as the principal diagnosis
Diabetes Emergency Room Charges* in Missouri, 1993-2003

* Diabetes as the principal diagnosis
Twin Epidemics

Prevalence of self-reported obesity and diabetes among adults in Missouri, 1990-2004

Prevalence (%)


11.9 24.4

Diabetes

Obesity

BRFSS 1990 - 2004
Obesity Prevalence Among Adults in Missouri, by Sex and Race, 1990-2002

BRFSS 1990-2002
No Leisure Time Physical Activity Among Adults in Missouri, 1990-2002

Prevalence (%)
Not Adequate Fruit and Vegetable Consumption Among Adults in Missouri, 1990-2002
Not Adequate Fruit and Vegetable Consumption Among Adults in Missouri, by Race and Sex, 1990-2002
Diabetes Preventive Care Practices, 2003

- Annual dilated eye exam
- Annual foot exam
- Annual doctor visit
- 2+ A1c Tests in last year

Percent

Missouri
US
HP2010

BRFSS 2003
Diabetes Preventive Care Practices, 2003

Diabetes self-management class

Missouri
US
HP2010

Percent
0 10 20 30 40 50 60 70 80 90 100

Daily self-monitoring blood glucose
Daily self-exam of feet
Diabetes self-management class

BRFSS 2003
Diabetes Preventive Care Practices, 2003

- Annual influenza vaccine
- Ever had pneumococcal vaccine

BRFSS 2003