## Consensus Panel Recommendations:

Although the entire Missouri population is at risk for diabetes, current evidence is insufficient to recommend for or against routinely screening asymptomatic individuals for type 2 diabetes, impaired glucose tolerance, or impaired fasting glucose. The purpose of screening is to identify persons previously not diagnosed with pre-diabetes or diabetes. To effectively utilize resources, screening efforts should be directed to individuals exhibiting risks for diabetes as outlined below. Additional research is needed to determine effective approaches for screening in venues outside the medical setting.

### 1. Age

- **Children <10**
  - Routine screening NOT recommended unless onset of puberty has occurred. *IF SO,*

### 2. Overweight

- **Children/Adolescents 10-17 years AND**
  - BMI is: >85th percentile for age & gender or >85th percentile weight for height or Weight is >120% of ideal for height AND Two (2) Risk Factors

- **Adults 18-45 years**
  - BMI >25 kg/m² AND 1 risk factor below

- **Adults >45**
  - BMI >25 kg/m² OR 1 risk factor below

### 3. Other Risk Factors

- **TWO (2) OF THE FOLLOWING:**
  - Family history of type 2 diabetes (1st/2nd degree);
  - Race ethnicity (Native American, African American, Hispanic American, Asian/South Pacific Islander);
  - Signs of insulin resistance (acanthosis nigricans, hypertension, dyslipidemia, polycystic ovary syndrome)

### 4. Screening Tests

- **SCREENING TESTS**
  - Fasting Plasma Glucose (FPG).............100-125 mg/dL (may indicate pre-diabetes)
  - Fasting Plasma Glucose (FPG).............≥126 mg/dL (may indicate diabetes)
  - Impaired Glucose Tolerance (IGT)..........2 hrs. after 75g glucose, value is ≥140-199 (pre-diabetes); ≥200 (diabetes)

- **REQUIRES ADDITIONAL TESTING IF:**
  - Fasting Plasma Glucose (FPG).............126 mg/dL
  - Impaired Glucose Tolerance (IGT)..........2 hrs. after 75g glucose, value is ≥140-199 (pre-diabetes); ≥200 (diabetes)

### 5. Frequency

- **Normal weight AND No risk factors** (skip to step 4)
- **Normal weight AND 1 risk factor below**
  - Every 3 Years
- **Normal weight AND 2 or more risk factors**
  - Annually

### 6. Results/Action

- **Results Normal**
  - Screen as in 1 through 3

- **Results Abnormal**
  - 1. Repeat tests on subsequent day to diagnose
  - 2. Implement treatment plan including lifestyle modification
  - 3. Screen for other Cardiovascular Disease Risk Factors:
    - HDL ≤40 mg/dL
    - Fasting Triglycerides ≥150 mg/dL
    - Blood Pressure >130/85 mmHg

---

Reference: American Diabetes Association Standards of Medical Care in Diabetes, Diabetes Care 28:S5-S7, 2005.
Diabetes Screening Guidelines Work Group

**Work Group Chair**
John Seidenfeld, MD, Blue Cross/Blue Shield of Missouri, Chairman of Medical Directors Council, Missouri Association of Health Plans

**Missouri Association of Health Plans Education and Research Foundation**
Catherine Edwards, PhD, Executive Director
Sharon Hoffarth, MD, MPH, Blue Cross/Blue Shield of Missouri
Kathleen McDarby, RN, MPH, Blue Cross/Blue Shield of Missouri
Ma’ata Touslee, RN, MBA, CCM, Children’s Mercy Family Health Partners
Patty Ornce, Children’s Mercy Family Health Partners
Roland G. Ruiz, MD, Cigna
Stephanie Davis, Community Care Plus
April Smith, Community Health Plan
Mary Walter, Coventry Health Care of Kansas, Inc.
Jacqueline Jones, FirstGuard Health Plan
Maureen Dempsey, MD, Great West Healthcare
Colleen Cashner, RN, CCM, Group Health Plan
Deborah Fitzgerald, HealthCare USA
Pam Victor, HealthCare USA
Brenda Moore, RN, Missouri Care Health Plan
Jordan Ginsburg, MD, UnitedHealthcare
Marla Tobin, MD, UnitedHealthcare

**Missouri Association of Free Health Clinics**
Nancy Zaner, FNP, KC Free Clinic

**Missouri Consolidated Health Care Plan**
Linda Grotewiel, RN, Manager of Clinical Review
Grace Rogers

**Missouri Department of Health and Senior Services**
Deborah Markenson, MS, RD, Chronic Disease Prevention and Nutrition Services
Jo Anderson, Diabetes Prevention and Control Program
Bao-Ping Zhu, MD, MS, Office of Epidemiology
Shumei Yun, MD, PhD, Office of Epidemiology

**Missouri Academy of Family Physicians**
George D. Harris, MD, MS
Joseph LeMaster, MD

**Missouri Association of Osteopathic Physicians and Surgeons and Primaris**
Carl Bynum, DO, MPH

**Missouri Chapter of American Academy of Pediatrics**
Kurt Midyett, MD

**Missouri Chapter of American Association of Clinical Endocrinologists**
Charles Kilo, MD

**Missouri Primary Care Association**
Deepak Malhan, MD, People’s Health Centers St. Louis

**St. Louis Diabetes Coalition**
William Kincaid, MD

**Kansas City Quality Improvement Consortium**
Cathy Davis, RNCS, ANP, UAW-Ford

**Washington University School of Medicine**
Janet McGill, MD

**University of Missouri-Columbia School of Medicine**
David W. Gardner, MD

**Missouri Diabetes Prevention and Control Program Advisory Board**
Alan Rauba, MD
Erin Hutton, PA-C

**Missouri Department of Social Services**
Michael Wilson, DO, Division of Medical Services