State of Alaska
2006 Recommendations for the Management of Diabetes Type 2 in Adults

Criteria for the Diagnosis of Diabetes Type 2 in Adults

1. Symptoms of diabetes (polyuria, polydipsia, unexplained weight loss) plus casual* plasma glucose concentration ≥ 200 mg/dl

* Casual is defined as any time of day without regard to time of last meal.

or

2. FPG ≥ 126 mg/dl

or

3. 2-hour postload glucose ≥ 200 mg/dl during an OGTT using a glucose load equivalent to 75 g anhydrous glucose dissolved in H20.

Note: In the absence of unequivocal hyperglycemia, these criteria should be confirmed by repeat testing on a different day.

Criteria for Screening Asymptomatic Adults

1. Testing should be considered for all adults ≥ 45 years of age, particularly in those with BMI ≥ 25 kg/m^2. If testing is normal, it should be repeated in 3-year intervals.
2. Testing should be considered at a younger age or be done more frequently in individuals with BMI ≥ 25 kg/m^2 and who have additional risk factors:
   is physically inactive; has a first degree relative with diabetes; is a member of a high-risk ethnic population (e.g., African American, Asian American, Hispanic/Latino, Native American, Pacific Islander); has delivered a baby > 9 lb; has been diagnosed with GDM; is hypertensive; has an HDL-C level ≤ 35 and/or a triglyceride level ≥ 250; has polycystic ovary syndrome; has been diagnosed with IGT or IFG on previous testing; has a history of vascular disease; or has other clinical conditions associated with insulin resistance (e.g., dyslipidemia, PCOS or acanthosis nigricans).

Criteria for the Diagnosis of Pre-diabetes*

Definitions	Values	Comments
IFG Impaired Fasting Glucose	100-125 mg/dl	Fasting is defined as no caloric intake for at least 8 hours.
IGT Impaired Glucose Tolerance	140-199 mg/dl (2-hour postload)	Test uses a glucose load equivalent to 75 g anhydrous glucose dissolved in H20.

* Diagnosis is made on one abnormal value.

Therapeutic Goals for (non-pregnant) Adults with Diabetes Type 2

Test	Goal Values
A1c	< 7 %*
BP	< 130/80**
Lipids:	
LDL-C	< 100 mg/dl***
HDL-C	> 40 mg/dl (men) > 50 mg/dl (women)
Triglycerides	< 150 mg/dl
Total Cholesterol	< 200 mg/dl****
SBGM:	
FBS	80-120 mg/dl
2-hr. post prandial	< 160 mg/dl
Antiplatelet Therapy	ASA 75-162 mg/day

Note: Goals should account for individual patient circumstances.

* A more stringent goal, i.e., <6%, can be considered for some patients.

** The ADA recommendation for BP is <130/80, except for patients with renal dysfunction, in which the goal is 120/75.

*** In patients with overt CVD, an LDL <70mg/dl is an option.

**** In patients over 40 years of age with a TC ≥ 135 mg/dl, statin therapy to achieve an LDL reduction of 30%, regardless of baseline LDL levels, may be appropriate.

Components of the Initial Comprehensive Evaluation of Adults with Diabetes Type 2

History	Medical and family history; assessment of lifestyle, risk factors, activity level, cultural/psychosocial issues.
Physical Exam	Height, weight, BMI, fundoscopic, oral, thyroid palpation, cardiac, abdominal, pulses, extremities, skin, neurological; check sensation with 10 g microfilament
Labs/Tests	A1C, fasting lipid profile, ALT, AST, lytes, BUN, creatinine, TSH (if indicated), UA, microalbuminuria/creatinine, ECG
Referrals	Ophthalmologist for eye exam, dietician/nutritionist, diabetes educator, foot specialist

Components of Each Clinic Visit for Adults with Diabetes Type 2

Test	Comments
BP	Monitor and adjust therapy to keep BP ≤ 120/80.
Weight	Compare with previous weights to monitor trends.
BMI	Monitor trends.
Blood Glucose	Check A1c. Review log of patient's SBGM results. Adjust therapy to attain glycemic goals.
Foot Check	Inspect feet for lesions, ingrown nails, infection, pressure points, calluses, and etc.
Education	Make referrals as indicated.

Patient Education for Adults with Diabetes Type 2

Topic	Content/Goals	Frequency
General Diabetes Education	Patients and their families should receive diabetes self-management information. This forms the basis for the plan of care and promotes mutually set goals and strategies.	Every visit
Smoking Cessation	Advise all patients not to smoke or use tobacco products. Refer to tobacco cessation program as indicated. Nicotine replacement therapy recommended.	Initial visit; ongoing as indicated
Exercise	Regular physical activity program should be adjusted to the presence of complications. Instruction should address recreational and leisure activities as well as patient's ability to adjust therapy and nutrition to facilitate safe participation. Before beginning a physical activity program, patient should be screened for macro-and micro-vascular complications that may be worsened with physical activity. Consider graded exercise tolerance test in patients with known or suspected CHD.	Every visit
Nutrition	Plan should include assessment of patient's intake, lifestyle, cultural preferences, metabolic states, readiness to make changes, goal setting, dietary instruction, & evaluation. Recommend that protein intake should be limited to the RDA (0.8g/kg) in those pts. with any degree of chronic kidney disease.	Every visit; q 6-12 mos. w/RD or nutritionist
SMBG	Instruct patients in self-monitoring of blood glucose (SMBG); routinely review patient's technique and ability to use data to adjust therapy as indicated.	Every visit

Yearly Exams and Tests for Adults with Diabetes Type 2

Test	Comments
A1c	Twice yearly in patients who are meeting tx goals; quarterly in patients whose therapy has changed or who are not meeting tx goals; point-of-care testing for A1c allows for timely decisions on therapy changes.
Fasting Lipid Panel	Consider pharmacological tx if lifestyle and dietary modifications are ineffective in lowering LDL-C. Re-evaluate lipid profiles 6-12 weeks after new therapies are initiated.
Serum Creatinine	Measure to estimate GFR to assess presence of chronic kidney disease.
UA/ Microalbuminuria	Dipstick urine for protein. If trace or negative for protein, obtain spot urine for microalbuminurea/ creatinine ratio.
Dilated Eye Exam	Retinal exam either through dilated pupils or stereofundus photos. Consider less frequent exams of low-risk patients based on the advice of an eye care professional.
Dental Exam	Screen for periodontal disease and examine gums and oral cavity for lesions.
Foot Exam	Neurovascular foot exam w/ pulse check, ROM, and 10 g monofilament sensation in 7-9 areas per foot. Also check for ingrown nails, lesions, and any deformities.
Flu Vaccine	Vaccinate yearly.
Tetanus (Td)	Vaccinate every 10 years.
Pneumovac	Immunize at time of diagnosis if needed. Re-immunize q 6 years.

Routine Health Maintenance for Adults with Diabetes Type 2

Test/Exam	Frequency
Physical Exam	Yearly.
Pap Smear/Pelvic Exam	Yearly or as per guidelines.
Breast Exam	Yearly.
Mammogram	In women 40-49, q 1-2 years; yearly for women ≥ 50.
Rectal Exam & PSA	In men ≥ 50 for prostate evaluation.
CRC Screening	For average risk pt., flexible sigmoidoscopy should begin at age 50 and then q 5 yrs. If pt. at risk for earlier onset CRC, screening should begin earlier with colonoscopy and be done more frequently.

Based on the American Diabetes Association 2006 Clinical Practice Recommendations
Additional copies can be downloaded from: http://www.hss.ak.us/dph/chronic/diabetes