HEALTH SERVICES
PROCEDURES FOR
TEXAS RISK ASSESSMENT FOR TYPE 2 DIABETES IN CHILDREN
(TRAT2DC) SCREENING

- Acanthosis nigricans (AN) is a hyperkeratinization of the skin and is associated with systemic disorders such as hyperinsulinemia and insulin-resistance. It may also be an indicator for Type 2 diabetes.

- Insulin resistance and hyperinsulinemia have been linked to hypertension, obesity, hyperlipidemia, stroke, and cardiovascular disease.

- Texas law (Section 95.001, Health and Safety Code) mandates acanthosis screening for students attending public school in Texas Education Agency Regions 1, 2, 3, 4, 10, 11, 13, 15, 18, 19, and 20.

- The prevalence of overweight (BMI – for – age values at or above the 95th percentile of the 2000 CDC growth charts) in children ages 6 – 11 increased from 4% in 1971 – 1974 to 17% in 2003-2006. The prevalence of overweight adolescents ages 12 – 19 increased from 6.1% to 17.6%. (NHANES and NCHS, April 14, 2006)

I. Purpose
The purpose of acanthosis nigricans screening is to identify students at risk for developing Type 2 diabetes and related co-morbid conditions and intervene to minimize the impact of this condition on the student’s physical and emotional well-being.

II. Target Group and Timeline
A. All students in 1st, 3rd, 5th, and 7th grades will be screened each school year for acanthosis nigricans.
B. All new students entering the District in 1st, 3rd, 5th, and 7th grades must be screened within 120 days of entry.
C. AN screening is to be done in conjunction with vision and hearing screening. AN screening may also be done during Growth Screening at the elementary level.

III. School Nurse Responsibilities
ONLY NEISD school nurses, Flex nurses, and substitute nurses who have successfully completed the University of Texas-Pan American Border Health Acanthosis Nigricans training in the past five years will perform Acanthosis Nigricans screening.
A. Prepare a Vision/Hearing/Acanthosis Nigricans screening program notice for the PTA/campus newsletter. This information should be published two weeks prior to screening. Post this information on the school nurse’s web page two weeks before the screening.

B. Two weeks before screening distribute the Acanthosis Nigricans Screening Notification to parents/guardians and the Dear Families letter to all students to be screened.

C. The day before the screenings contact teachers regarding any parent letters or religious exemptions they have received.

D. Exclusions: If a student is excluded from screening for any reason, have the reason for the exclusion documented.

E. Parent/Guardian Request: If a parent/guardian contacts you and requests that their child NOT be screened, ask the parent/guardian to submit their request in writing. When the written request is received, attach it to the Hearing/Vision/Acanthosis Nigricans Screening Card and file it in the students’ Cumulative Health Record. Document the parent request in the narrative section of the record. On the front of the health record, enter “Parent refused” and date in the AN screening column.

F. Religious Exemption: A student is exempt from screening if the screening conflicts with the tenets and practices of a recognized church or religious denomination of which the individual is an adherent or member. An Affidavit of Religious Exemption must be complete, notarized, and on file in the student’s Cumulative Health Record. Document the religious exemption in the narrative section of the health record. On the front of the record, enter “Religious Exemption” and the date in the AN column.

G. AN screening is done while the student is seated for hearing and vision screening.

H. The student should be seated in a well-lit area. The hair should be moved away from the nape of the neck. Shirt collar may be pulled back slightly to allow for good visualization of the area. The AN marker may appear as a “dirty neck” and may have a rough or velvety texture with increased skin thickness. The AN marker may also be noted in the axillae, elbows, knees, and soles of the feet.

I. Document findings on Vision/Hearing/Acanthosis Nigricans Screening Card or on the Class Health Data List.

J. Be extremely sensitive regarding findings and avoid singling out students with positive findings.

K. Re-screen all students with positive findings within two weeks.

IV. Re-Screening

A. All students who are positive for the AN skin marker should be re-screened within two weeks.

B. Provide privacy and confidentiality for the re-screening. Students are to be re-screened 1:1 and not a group.

C. Check for AN marker at nape of neck to re-confirm initial findings.

D. Measure and record height and weight. Shoes and any objects in pockets should be removed before the student is weighed.
E. After three - five minutes of rest, use the appropriate size cuff to measure the blood pressure in the right arm (unless use of the right arm is contraindicated). Two blood pressure readings should be obtained and recorded. Allow three – five minutes between readings.

F. Report data using the ANTES web site https://rfes.utrgv.edu This will take you to the Risk Factor Electronic System (RFES) Homepage. The student’s body mass index (BMI) and blood pressure status will self-calculate at this site.

*Note the Acanthosis Nigricans Screening data is not entered into the NEISD Mainframe.

G. All positive findings are also to be reported to Health Services on the Health Services Acanthosis Nigricans Screening form and the ANTES Consolidated Data Form.

H. Contact the parents/guardians by phone to discuss the findings and recommendations for medical follow-up, including a fasting glucose test to determine glycemic status. Discuss the risks of diabetes with the parents/guardians and explain the presence of the AN marker does not in and of itself indicate diabetes. This information must be discussed in a sensitive and professional manner. Document all parent contacts.

I. Verify the parents'/guardians’ mailing address. Complete and mail the Acanthosis Nigricans Referral Form. Include the ANTES Acanthosis Nigricans: A Sign of the Times brochure with the referral. These brochures are available from Health Services.

J. Contact the parents/guardians in four – six weeks to follow-up on the referral if it has not been returned. Offer assistance as needed.

K. Document all findings on the student’s Cumulative Health Record and note the status of the referral in a dated and signed narrative note.

L. Complete the TRAT2DC reporting on-line and send a copy of the final report to Health Services.

M. Enter screening results in NEISD Mainframe.

N. Document any treatments or follow-up.

V. Absentees and Exclusions
   A. Absentees: Schedule students who were absent on the original screening date for screening.

   B. Exclusions: If a student was excluded from screening for any reason, document the reason for exclusion in HealthCheck.