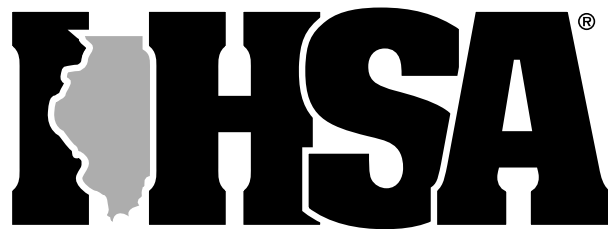
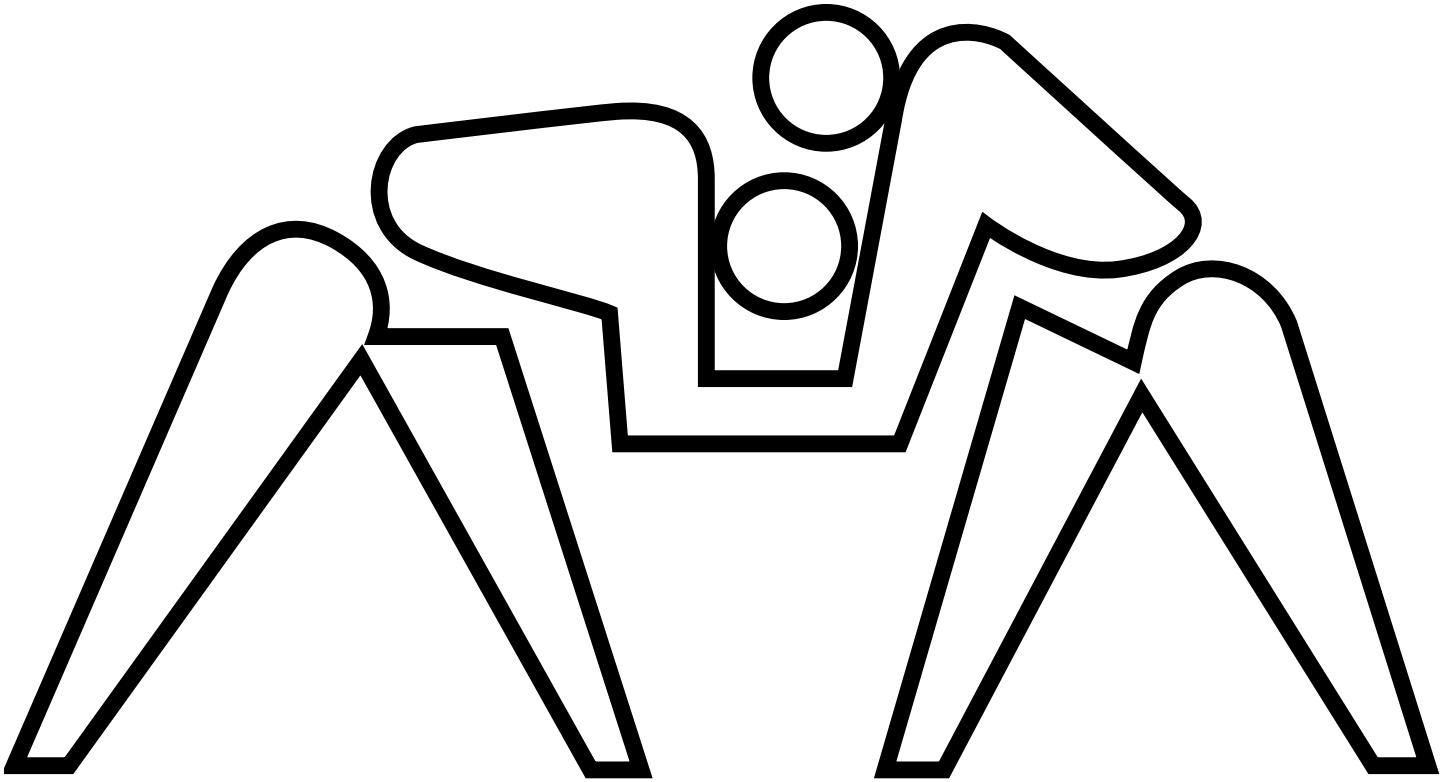


Wrestling



Illinois High School Association

2018-19

Weight Control Manual

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Revision History

Weight Control Program



INTRODUCTION

The IHSA will implement its weight control program that includes body fat testing again for the 2018-19 school year. The program is designed to determine the minimum weight class a wrestler may participate in throughout the season. The establishment of a minimum weight class is based on a body fat measurement of 7% for male wrestlers and 12% for female wrestlers.

The IHSA is concerned for the safety of the young people who participate in our wrestling program. The establishment of minimum weight classes along with a maximum weight loss per week allows high school wrestlers to participate in a most healthy manner.

SECTION 1: THE REGULATION

The establishment of a minimum wrestling weight based on 7% body fat for males and 12% for females is required for all high school wrestlers. The IHSA does not advocate that a wrestler's established minimum weight is the athlete's best weight, but simply the minimum weight at which the athlete will be allowed to compete.

I. Establishing Minimum Wrestling Weight

- A. Skinfold measurements will be utilized by all schools to determine each wrestler's body fat percentage. Only measurements taken by IHSA Certified Skinfold Measurers will be accepted. Schools may obtain a list of approved measurers on the IHSA website. This list will be posted each September. It is the responsibility of the school to contact a certified skinfold measurer from this list to conduct the skinfold test on their wrestlers. Schools may elect to have a person certified as a body fat tester by the principal submitting the name of the person to be certified to the IHSA. Information about the body fat certification session will be included in the All School Mailing each August. The training will begin by the end of September each year. The school may sign someone up for the training through the "Body Fat Workshops" link on the wrestling page of the IHSA website.
- B. The lowest weight class a wrestler may compete at will be determined as follows:
 - 1. If the predicted weight, at 7% male or 12% female, is exactly that of one of the weight classes, that weight class shall be the wrestler's minimum weight class. Ie.: 7% body fat is 132, then that wrestler may wrestle 132 or above.
 - 2. If the weight class falls between two weight classes, he/she must wrestle at the higher weight class. Ie. The 7% body fat is 129, then that wrestler may wrestle at 132 or above.
 - 3. Any male or female wrestler, whose body fat percentage at the time of measurement falls below 7% male or 12% female, must wrestle at the weight class that he/she is at. No weight loss will be allowed. Ie. When the wrestler is body fat tested he/she is hydrated and has only 6% body fat. The wrestler at a hydrated 6% body fat and weighs 128 pounds may wrestle at 132 or above.

- C. The school must have all wrestlers body fat tested prior to the wrestlers competing in inter-scholastic matches. The school will print the results of the body fat testing from the school center. Each coach must carry a copy of this with him to all meets. **A wrestler may not wrestle until the appeal is complete/final and posted in the school center.** Each coach must provide each school with a copy of their Certified Body Fat Test Result Form for all dual meets and one copy to the meet manager in tournaments.

II. Time Periods for Measurements

- A. Skinfold measuring may begin on Monday of Week 19 of the IHSA calendar (November 5, 2018). All wrestlers, including those coming out late, must have their minimum weight established prior to any competition.
- B. Skinfold measuring must be completed by Friday, of Week 30 (January 25, 2019).
- C. Results of measurements will be posted in the Schools Center. A wrestler **may not wrestle** until his/her name appears on this result sheet.

III. Weight Loss Per Week

- A. A weight loss of 1.5% of a wrestler's total body weight per week on the descent, has been established by the IHSA. A wrestler will not be allowed to wrestle at the established minimum weight until the date specified on the body fat result sheet provided by the IHSA. These dates allow for a descent of 1.5% weight loss per week from the date of the body fat testing.
- B. A wrestler must make weight at the next lowest weight class on his/her descent down to his/her certified weight class on the first weigh in for that wrestler on or after the target date listed on the weight control certification form listed in the schools center for each school. If a wrestler has an issue with making the target date, the Principal of that school may submit an appeal to the IHSA to review the reasons why that wrestler was not able to make the target deadline. The IHSA would then supply to the school written documentation to allow for a different weigh in date to meet that wrestler's certified weight class.
- C. **A wrestler may not weigh in more than one weight class above the certified weight class that he/she has ever weighed in at. If the wrestler does weigh in higher than one weight class above the lowest weight he/she has weighed in at, then the weight class that is one weight class above his lowest weight class becomes the lowest weight that the wrestler can wrestle for the remainder of the season. Ie. A wrestler weighs in at 136 for the 138 weight class and wrestles, then that wrestler may weigh in the next time at 138 or 145. Two weeks later the same wrestler weighs in at 131 for the 132 pound weight class. The same wrestler may now only weigh in at 132 or 138 for the remainder of the year. If this same wrestler weighs in at the 145 lb. weight class anytime during the remainder of the year, this wrestler would not be allowed to weigh in below the 138 pound weight class for the remainder of that year.**
- D. After December 25th, a wrestler may only get growth allowance for the lowest weight class that he/she has made scratch weight at or one weight class above that scratch weight. This is true, even if the wrestler plans to go down one more weight class. Before a wrestler can get the growth

allowance at that next lower weight, he/she must make scratch weight the first time down to that weight class after December 25th.

Note: A wrestler may not take consecutive day weight allowance at any time during the year until he/she has made scratch weight at that weight class.

SECTION 2: QUALIFICATIONS

I. Certifying for Body Fat Testing

- A. Each school will have the opportunity to certify a person that will be responsible for the body fat testing of each member of the wrestling team. **This person cannot be connected with the coaching staff or related to a coach or wrestler in your school district.**
- B. Suggestions for Body Fat Tester:
 - ▶ Individuals educated and experienced in the fields of health, sport, and/or fitness. This includes but not limited to: Exercise Physiologists, Team Physicians, Physical Therapists, Athletic Trainers, Personal Trainers, Nurses, Physical Education and/or Health Education teachers.
 - ▶ Qualified individuals enthusiastic to participate in the program. It does neither the athletes nor the sport any good if the certified assessors are reluctant, forced and/or not committed to the IHSA Wrestling Weight Control Program.
 - ▶ Individuals that are color-blind or have challenges distinguishing colors SHOULD NOT be certified.
- C. The IHSA implemented a new body fat testing program during the 2017-18 school year. All IHSA Body Fat Assessors certified prior to the fall of 2015, and any new Body Fat Assessors will be required to attend a “live” body fat training course. (Body fat assessors who attended a class in the fall of 2015 were trained on the new protocol, therefore they do not need to attend another “live” body fat training course until 2019.). The classes for this year are listed below. We intend to offer classes again in the fall of 2019. If you do not take a class in 2018 you will still have access to the Officials Center to enter body fat data. You will be on probation and will have one year to take the class or not have access to the Officials Center in the fall of 2019.
- D. The cost of the initial training is \$35, payable at the site of the training. Checks are payable to the IHSA. As a part of the new body fat testing program, all Athletic Trainers will receive Continuing Education Units (CEUs) from the Board of Certification (BOC). Teachers can now receive Continuing Professional Development Units (CPDUs).
- E. Starting in the 2017-18 school year, all certified Body Fat Assessors must annually renew their certification by watching an online video and completing an online exam in the IHSA Officials Center. The cost for the course is \$10.
- F. We need to know the number of people attending each training session as classes are limited to 30 students per class, so you must register for a class. You can do that by clicking the “Body Fat Workshops” link located on the Wrestling page of the IHSA website.

- G. The dates of the classes are:
- | | |
|--|-------------------------------|
| Tuesday, September 18, 2018 at 10:00am | Normal (West Community) |
| Wednesday, September 19, 2018 at 10:00am | Marion High School |
| Wednesday, September 19, 2018 at 6:00pm | Belleville (Althoff Catholic) |
| Thursday, September 20, 2018 at 10:00am | Effingham High School |
| Wednesday, September 26, 2018 at 10:00am | Sterling High School |
| Thursday, September 27, 2018 at 10:00am | Minooka High School |
| Tuesday, October 2, 2018 at 10:00am | St. Rita High School |
| Thursday, October 4, 2018 at 10:00am | Wheeling High School |
| Monday, October 8, 2018 at 6:00pm | Wauconda High School |
- H. Your ID number and password are the same as last year and will allow you to log on to the IHSA website and enter body fat data.
- I. Schools will receive all the results of the Body Fat Testing on-line in the Schools Center.

SECTION 3: ETHICS & CODE OF CONDUCT

I. Professional Responsibilities

- A. All individual “Assessors” registered with the IHSA Wrestling Weight Monitoring Program will respect the athletes “right to privacy” and the confidentiality of all the data collected during the assessment. Assessors are expected to provide the highest professional and ethical conduct relative to performing assessments on the student athletes. Independent circumstances may require assessors to make professional judgments to further validate the assessment process; therefore, mastering assessment skills and understanding the nature of the Wrestling Weight Monitoring Program is essential for the success of the program.

II. School Responsibilities in the Measurement Process

- A. It is the school’s responsibility to ensure that an approved IHSA skinfold measurer conducts the body fat testing for your school. The list of approved measurers can be obtained from the IHSA website in the Schools Center on the wrestling tracker.
- B. The school must have available at the time of the skinfold measuring: 1) a scale (recommendation that scales be certified once every two years), 2) skinfold data sheets (on pages 17-18 of this manual), 3) school officials (nurse, teacher, A.D.) who will assist in obtaining the weight of each wrestler and with the recording of data.
- C. The school shall see that all charges for skinfold measuring are paid. IHSA certified skinfold measurers may charge up to \$5.00 per wrestler measured. (Most schools are certifying people in their District so that no fee is paid).
- D. **First Appeal:** The school may file and complete an appeal within 7 calendar days of the data appearing on the school’s body fat result sheet, which is located in the Schools Center. Appeal forms must be faxed to the IHSA office (309/663-7479) OR e-mailed to Lauren Matson (lmatson@ihsa.org). **(A form is provided by the IHSA in the Schools Center under downloadable forms).**

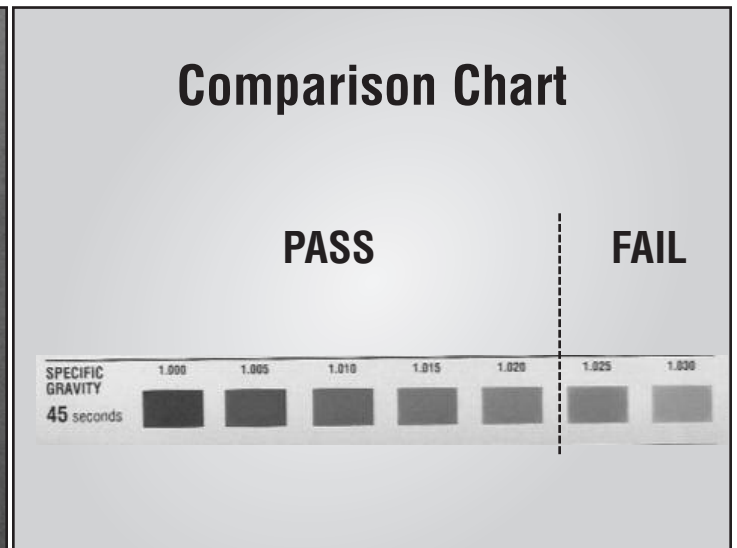
- E. **Final Appeal:** The school may file a final appeal for weight certification after their first certification date and on or before Friday of week 24 on the IHSA Standardized calendar with approval of the IHSA administrator. A final appeal can only occur if the athlete wishing to appeal has not exceeded 1.5% weight loss per week each week from the date of the athlete's first certification. This appeal would allow the wrestler to drop no more than one weight class from the original minimum result from the first test.

SECTION 4: SPECIFIC GRAVITY ASSESSMENT

Dehydration compromises the accuracy of body composition assessments; therefore, all athletes are required to pass a urine specific gravity test in order to be eligible for the body composition assessment. Dehydration increases the concentration of particles in the urine thereby, increasing the urine's specific gravity. The specific gravity of water is 1.000g/ml and the specific gravity of a hydrated individual is established at 1.020g/ml or lower. This test is simply a pass/fail assessment based on the specific gravity level equal to or lower than 1.020g/ml. If an athlete fails the specific gravity test, the assessment process is ended and the athlete will not be eligible for reassessment for 24 hours.

I. Equipment Needed

- A. Latex-free Exam Gloves
- B. Urine Collection Cups
- C. Reagent Strips (Bayer Multistix SG 10) or a refractometer
- D. Copies of Specific Gravity Color Chart
- E. Biohazard Waste Bags for Urine Collection Cups and Reagent Strips



II. Procedures

- A. The following procedures have been developed in order to minimize dishonest techniques to bypass the urine test and to maximize the athlete's right to privacy.
- B. Mark each urine collection cup to identify the athlete being tested.
- C. Instruct each wrestler to enter the toilet or urinal one at a time with nothing but the urine collection cup.
- D. Allow reasonable time for the athlete to provide a sample of urine.
- E. After collection of the urine by the athlete, appropriate personnel should ensure that the urine is warm by feel on the outside of the collection cup. If the urine is cold or suspect, reject that sample and require the athlete to provide another sample under closer supervision.

III. How the Test is Performed

- A. Instruct the athlete to collect a "clean-catch" (midstream) urine sample. To obtain a clean-catch sample, males should wipe clean the head of the penis and females should clean the area between the lips of the vagina.
- B. Instruct the athlete to begin urinating, allowing a small amount to fall into the toilet bowl (this clears the urethra of contaminants). Then, in the urine collection cup, catch approximately 1 to 2 ounces of urine and remove the collection cup from the urine stream.
- C. Once completed, the athlete will give the sample immediately to the proper authority.

IV. Determining Specific Gravity

- A. Specific gravity will be determined using IHSA approved Reagent Strips (Bayer Multistix 10SG).
- B. Assessors will use latex-free exam gloves when measuring specific gravity.
- C. The specific gravity test should be administered as soon as possible after the urine is collected.
- D. Remove one strip from bottle and replace cap immediately and tightly. Do not remove strip from the bottle until immediately before it is to be used for testing.
- E. Completely immerse the Reagent strip in the fresh urine (make sure the Reagent patches are completely moistened) and remove immediately to avoid dissolving out the reagents.
- F. While removing, run the edge of the strip along the urine collection cup to remove excess urine.
- G. Hold the reagent strip in a horizontal position (to prevent possible mixing of chemicals from adjacent reagent areas and/or contaminating the exam area with urine) for 45 seconds.

- H. Visually compare the reagent area to the specific gravity color chart on the bottle or supplied chart. **HOLD STRIP CLOSE TO COLOR BLOCKS AND MATCH CAREFULLY.** Avoid laying the strip directly on the Color Chart, as this will result in the urine soiling the chart.
- I. Record the results of the test. **REMEMBER**, if the specific gravity is equal to or greater than 1.020g/ml, testing will be discontinued and a retest will need to be rescheduled.
- J. Discard urine in toilet or urinal.
- K. Discard collection container and reagent strip in a biohazard waste bag.

V. How to Prepare for the Test

- A. Eat a normal balanced diet emphasizing foods with high water content such as fruits and vegetables.
- B. Avoid foods and/or supplements that may contribute to water loss such as: chocolate, soft drinks, coffee and creatine for at least 24-48 hours.
- C. Avoid vigorous physical activities that cause excessive sweating for at least 24 hours.
- D. Consume plenty of fluids; at least eight to twelve 8-ounce glasses per day for several days prior to testing.
- E. Avoid early morning assessment, if possible, due to the effect of not consuming fluids during sleep.

SECTION 5: BODY WEIGHT ASSESSMENT

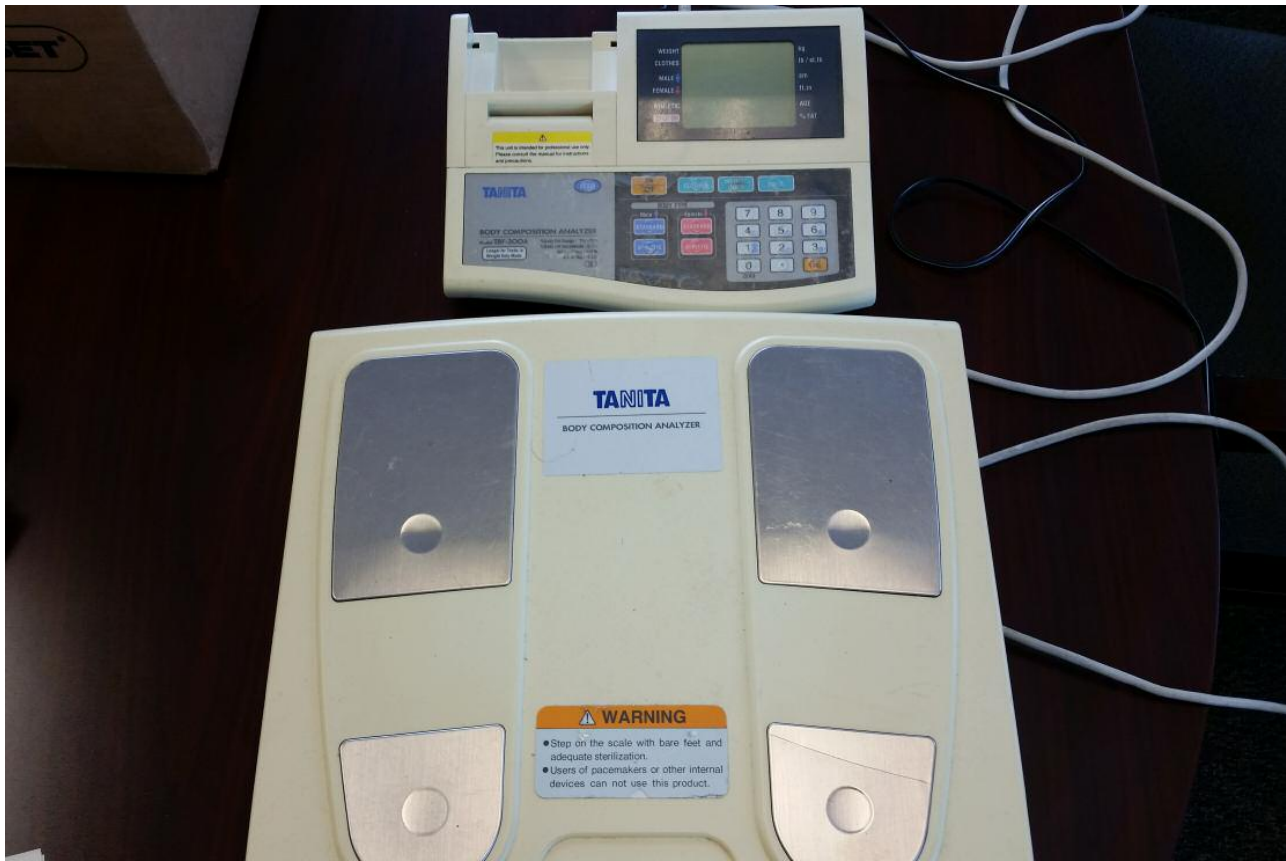
Each athlete's body weight will be obtained using a certified/calibrated scale to the nearest 0.2lb..

I. Equipment Needed

- A. Certified/calibrated scale
- B. Assessment Procedures Manual & Tanita Instruction Manual
- C. Tanita TBF-300WA or 300A
- D. Stadiometer (for measuring stature)
- E. Towels for wiping underside of athletes' feet
- F. Disinfectant (for cleaning Tanita)

II. Tanita Scale

A TANITA TBF-300-A or 300-WA Body Composition Analyzer/Scale may be used by the certified body fat tester to establish the body fat percentage for wrestlers, but **schools are required to receive approval from the IHSA Wrestling Administrator to use this scale.** Only certified body fat testers can use this method after confirming the wrestler is hydrated through testing.



A. Tanita Scale Set Up

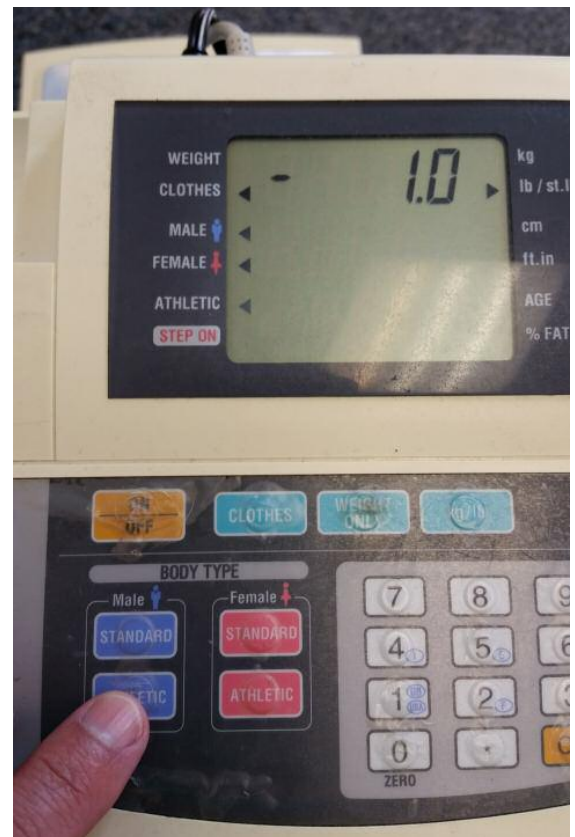
Prior to scheduling body fat assessments follow steps 1-3 to ensure the body fat scale is properly set up. In order to insure optimum performance of the Tanita body fat scale, read the Maintenance Instructions on pg. 7 in the Tanita Instruction Manual

1. SETTING THE NUMBER OF PRINTOUTS AND PRINTING LANGUAGE (pg. 25 Tanita Instruction Manual)
 - i. While holding the “0” key, press the “on/off” key. Release the “0” key after “Prt-1” is displayed on the screen
 - ii. Select the number of printouts for **TWO** printouts (if “0” printouts is selected it will not be possible to pre-set the wrestler mode print-out). The IHSA requires that assessors print a minimum of one tape printout for each wrestler per assessment and one printout for the assessor’s records. Once the number of printouts has been selected the LCD will automatically advance to the Language Selection Screen.
 - iii. The language selection will be displayed as a numerical value (LNG-1) denotes English as the selected language.
 - iv. Be sure there is ample tape in the machine and that you have back up if needed.

2. SETTING TO WRESTLER MODE (pg. 21 Tanita Instruction Manual).
 - i. While holding down the 9 key, press the on/off button to turn the control box on.
 - ii. The screen should show “rse” on the screen. This is your confirmation that you are in Wrestler mode.
 - iii. “rse” will flash off and you should see the arrow pointing to “clothes” flashing and a 0.0 next to Kg.
 - iv. If the 0.0 is next to Kg, push the blue kg/lb. button immediately below the screen. This should move that 0.0 to lbs. on the screen.

3. SETTING THE MINIMUM BODY FAT “GOAL” MODE-7% (pg. 22 Tanita Instruction Manual)
 - i. While holding down the “7” key, press the on/off button to turn on the control box. Holding the “7” key sets the minimum BF% to the automatic calculation value of 7%.
 - ii. The screen should now display “rse” goal 07” This shows that you are in the high school mode for the lowest % of body fat (7%).
 - iii. Once this input has been completed, the unit will automatically continue to the measurement screen

Once the Tanita scale is properly set up the Assessor can schedule body fat testing.



It is essential to carefully follow these standardized procedures to maximize the accuracy and reliability of this test.

Stature (Height)

- a. Set up Stadiometer in body fat station
- b. Athlete must be barefoot for this measurement
- c. Instruct athlete to stand erect with heels together, and arms hanging naturally
- d. The measurement is taken as the maximum vertical distance from the floor to the vertex of the head (vertex is the highest point on the skull when head is held in the Frankfort plane). This position is achieved when the line joining the orbitale to the tragion is horizontal or at right angles to the long axis of the body. The orbitale is located on the lower or most inferior position on the margin of the eye socket. Tragion is the notch above or superior to the flap of the ear (tragus), at the superior aspect of the zygomatic bone.
- e. Instruct athlete to look straight ahead and take a deep breath. Be sure athlete's heels don't elevate
- f. Bring the stadiometer headpiece firmly down and making firm contact with the vertex.
- g. Measurement must be taken before the athlete exhales.
- h. Measurement is taken and rounded to the nearest $\frac{1}{2}$ (half) inch. For example, if wrestler is exactly 6 feet tall you must enter "6.00". $\frac{1}{4}$ inch and below you must round down; above $\frac{1}{4}$ inch and below $\frac{3}{4}$ inch should be entered as $\frac{1}{2}$ inch; $\frac{3}{4}$ and over should be rounded up to the next inch.
From 6' to < 6' $\frac{1}{4}$ " = 6'0" entered 6.00
Between 6' $\frac{1}{4}$ "and < 6' $\frac{3}{4}$ " = 6' $\frac{1}{2}$ "entered as 6.05
From 6' $\frac{3}{4}$ "to 6' 1" = 6' 1" entered as 6.10

Bioelectrical Impedance Procedures

- a. Athletes attire
- b. Prior to stepping on the Tanita scale make sure the soles of the feet are free of excess dirt, as this may act as a barrier to the mild current. NOTE: Large calluses on the soles of the feet can produce an error message. To remedy this you may try placing 0.5cc of saline or water in the center of each electrode. This will act as a conductive material, and may allow the current to pass freely through the callus.
- c. After turning on the Tanita scale, the control panel will show flashing arrows next to male/female. It is extremely important that the scale is in STANDARD mode. Once you have confirmed the scale is in STANDARD mode, select the appropriate gender.
- d. Wrestler's age arrow will flash- enter the two digit age of the wrestler
- e. Wrestler's height arrow will flash next to ft.in (if flashing next to "cm" press the blue kg/lb. button) enter the height of the athlete to the nearest $\frac{1}{2}$ inch. The scale will wait for you to enter the height to the $\frac{1}{2}$ inch.
- f. The screen will now flash "Goal". This is in no way related to the wrestling mode and by entering 0.0 you can bypass this
- g. The screen will now flash "Step on". The athlete should be dressed properly and be barefoot
- h. Have the athlete wipe their feet prior to stepping on the scale
- i. Instruct the wrestler to remain still on the scale until you hear a beeping sound, after which the wrestler can then step off the scale
- j. The scale will automatically provide both tape printout profile of the wrestler
- k. After testing each wrestler wipe the scale surface with cleaning disinfectant

- l. Record Tanita body fat % and weight on the individual profile form. An additional person can be used to record the measurements on the individual profile form
- m. Staple the thermal paper assessment printout to the individual profile form
- n. Sign and date the individual profile form

CAUTIONS REGARDING SAFETY OF TANITA

The use of the bio-electrical impedance (Tanita Body Fat Scale) may not be safe for the following circumstances and an alternative body fat test will be required.

- ▶ Pregnancy
- ▶ Implanted Defibrillators or pace makers

I. Athlete's Attire

Under no circumstances, may a wrestler be weighed-in, in the nude. Males must be in shorts and will be required to remove their shirt during the skinfold measurement; females must be in shorts and halter or sports bra.

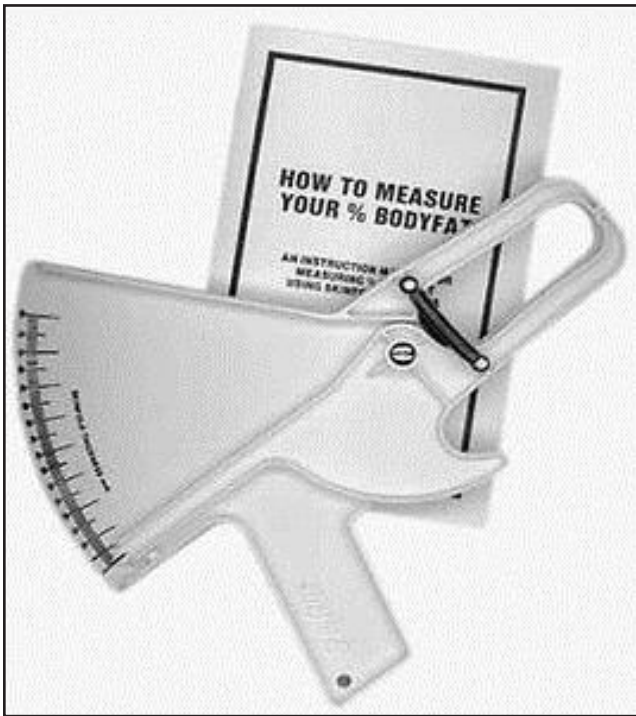
SECTION 6: SKINFOLD ASSESSMENT

Athletes that passed the specific gravity test will proceed immediately to the area where the skinfold assessment is conducted. This area should be controlled to allow privacy for the athletes and confidentiality of the recorded information. The key to the success of this program will be our ability to standardize the assessment procedures.

Skinfold measurements shall be taken **only** with either the Slim Guide or Lange Caliper. This is a low and medium-priced caliper and can be obtained from most health care product suppliers. Measurements taken with the Slim Guide or Lange caliper must be taken by an IHSA certified body fat tester. The IHSA recommends the Lange Caliper be calibrated once every two years.

I. Equipment Needed

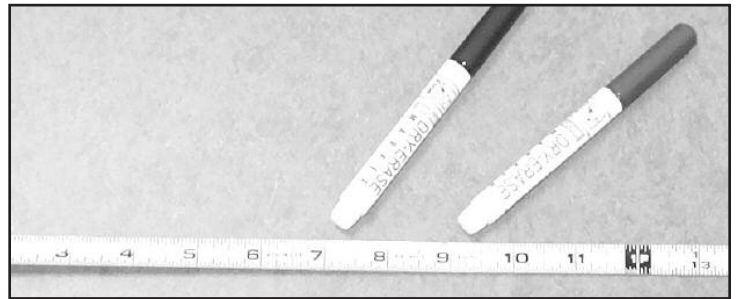
- A. Assessment Procedures Manual
- B. Slim Guide or Lange Skin-fold Calipers with calibration block
- C. Tape measure preferably made with flexible material
- D. Water-soluble markers



Slim Guide



Lange Skin-fold Calipers



Tape Measure and Water-soluble Markers

II. Skinfold Techniques

It requires a great deal of time and practice to develop your skill as a professional skinfold assessor. Therefore, it is essential to carefully follow these standardized procedures to maximize the accuracy and reliability of your measurements.

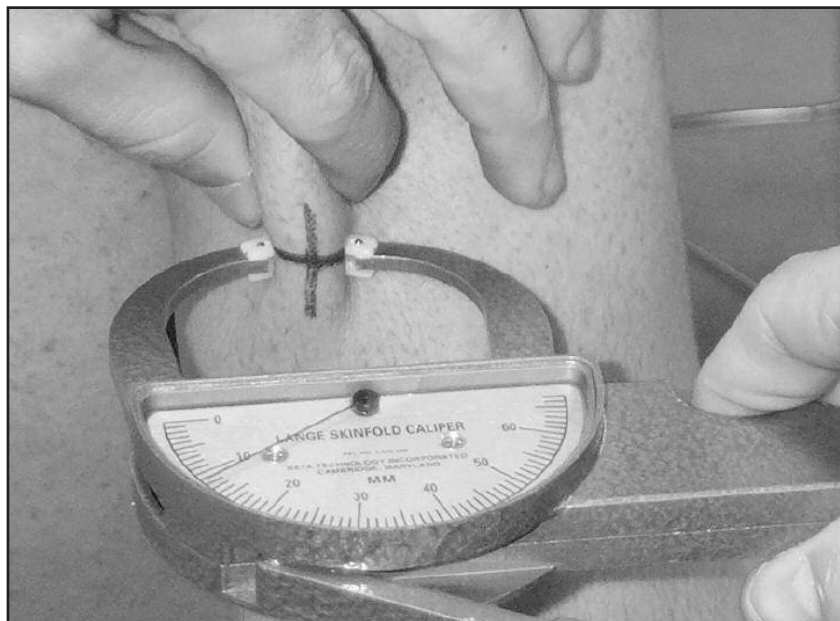
- A. Athlete should be standing in the anatomical position with the skin for skinfold sites exposed.
- B. Take all skinfold measurements on the right side of the body. An exception might be made where a deformity or missing limb would necessitate using the left side.
- C. Make sure the athlete's skin is dry and lotion-free.
- D. Do not measure skinfolds immediately after exercise because the sweaty skin is difficult to grasp; it may cause the skin to partially roll out of the caliper tips and thereby give an underestimate of skin folds and body fat. Additionally, exercise causes increase blood flow to the skin, creating a larger skin fold.

- E. Carefully identify, measure, and mark each skinfold site (triceps, sub scapular, abdominal for males; triceps and sub scapular for females).
- F. Palpate the site to familiarize both you and the athlete with the area being measured.
- G. Hold the skinfold caliper in the right hand while raising the skinfold with the thumb and index finger of the left hand. Position yourself so you are looking directly at the caliper dial to avoid errors from viewing from the caliper dial from a disadvantaged angle.
- H. The skinfold should be grasped one centimeter above or adjacent to the measurement site. Practice is essential to feel the underlying adipose tissue separate from the muscle. Hold the skinfold firmly, but do not pinch to the point of pain.
- I. Measure midway between the surface and the crest of the fold. Allow the caliper jaws to gently come in contact with the skinfold. Release the caliper so that the thumb, index finger, and caliper spring tension is supporting the skinfold.
- J. Leave the caliper jaws in contact with the skin for two to four seconds. Longer contact may decrease the skinfold value due to fluid being forced from the tissue.
- K. Read the dial of the caliper to the nearest .5mm.
- L. Record three measurements at each site in rotation order. If the difference between the three values is more than 1mm for a single site, the subject will need to wait 20 minutes for additional skinfold reading (this allows the skin to return to normal condition).
- M. In certain cases, even the most highly skilled assessor will be unable to precisely measure the skinfold thicknesses to the nearest 1mm of extremely obese or heavily muscled individuals. In such cases, an alternative method may be assigned.

III. Skinfold Locations

A. Triceps

1. The triceps skinfold is measured vertically on the midline of the posterior aspect of the upper arm, over the triceps muscle.
2. The fold is measured midway between the posterior-lateral aspect of the acromion process of the scapula and the olecranon process of the ulna.
3. The elbow should be flexed to 90 degrees to identify the landmark. Use a tape measure and mark the location.
4. The arm should then be extended and fully relaxed at the side to raise the skinfold.



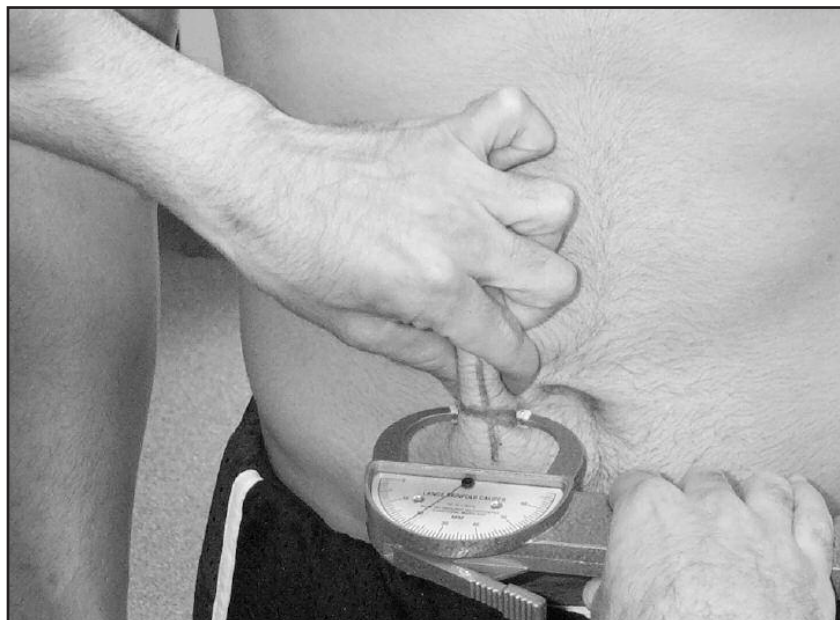
B. Subscapular

1. The sub scapular skinfold is raised on a diagonal one centimeter below the inferior angle of the scapula.
2. With the arms comfortably at their side, palpate the vertebral border with the fingers until the inferior angle is identified. The inferior angle is the lowest point of the scapula. To aid identification of the site, have the athlete place their arm behind their back to make the anatomical features more prominent.
3. Return the arm to their side and be sure the shoulders are level and relaxed while raising the skinfold.



C. Abdominal

1. The skinfold is raised vertically on the right side of the subject's abdomen three centimeters from the midpoint of the umbilicus.
2. The athlete should stand with their weight equally distributed on each foot.
3. Encourage the athlete to breathe normally and relax the abdominal wall.



SECTION 7: HYDROSTATIC WEIGHING PROCEDURES

Hydrostatic weighing involves determining an individual's residual lung volume and land weight calculation. While dressed in a swimsuit, the participant will then be seated on a submerged platform/chair that is suspended in shoulder deep water from a weighing scale above. The participant exhales completely and then is instructed to immerse themselves under the water briefly, while an underwater weight is measured. Several trials are performed and recorded.

THE FOLLOWING ARE CERTIFIED APPEAL TESTERS FOR HYDROSTATIC WEIGHING:

KELLEY ALTOM - PH. (847) 525-3369
Gold Standards System (by appointment)

Please review the following instructions:

- ▶ Do not schedule if you have any lung or pulmonary disorders.
- ▶ Avoid vigorous activity 8 – 12 hours prior to testing.
- ▶ Fast for at least 4 hours before the test. (drink water during this time)
- ▶ Drink plenty of water to ensure that the athlete is hydrated.
- ▶ Swim attire is needed for the test.
- ▶ Report for testing free of jewelry.
- ▶ Try to avoid gaseous foods at least two days prior to test date. (carbonated beverage - high fiber foods such as beans)
- ▶ Practice expelling all your air and holding your breath. This will make the test much easier.

SECTION 8: APPEALS PROCESS

1. A school may appeal the results of the body fat testing one time within seven (7) days per wrestler or in a final appeal on or before Friday of week 24 of the IHSA standardized calendar.
2. Schools must fax a copy of the completed appeal form to the IHSA Office to start the appeal process. No wrestler will be allowed to complete an appeal if they have lost more than 1.5% of weight per week prior to the appeal.
3. No wrestler may wrestle interscholastically without being body fat tested. If a wrestler's body fat test results are being appealed within the first 7 days, the wrestler may not wrestle in interscholastic competition until the appeal results are posted on the School Center. The final appeal is open to wrestlers who have wrestled previously.
4. The appealing school shall assume all cost for any appeals it makes.

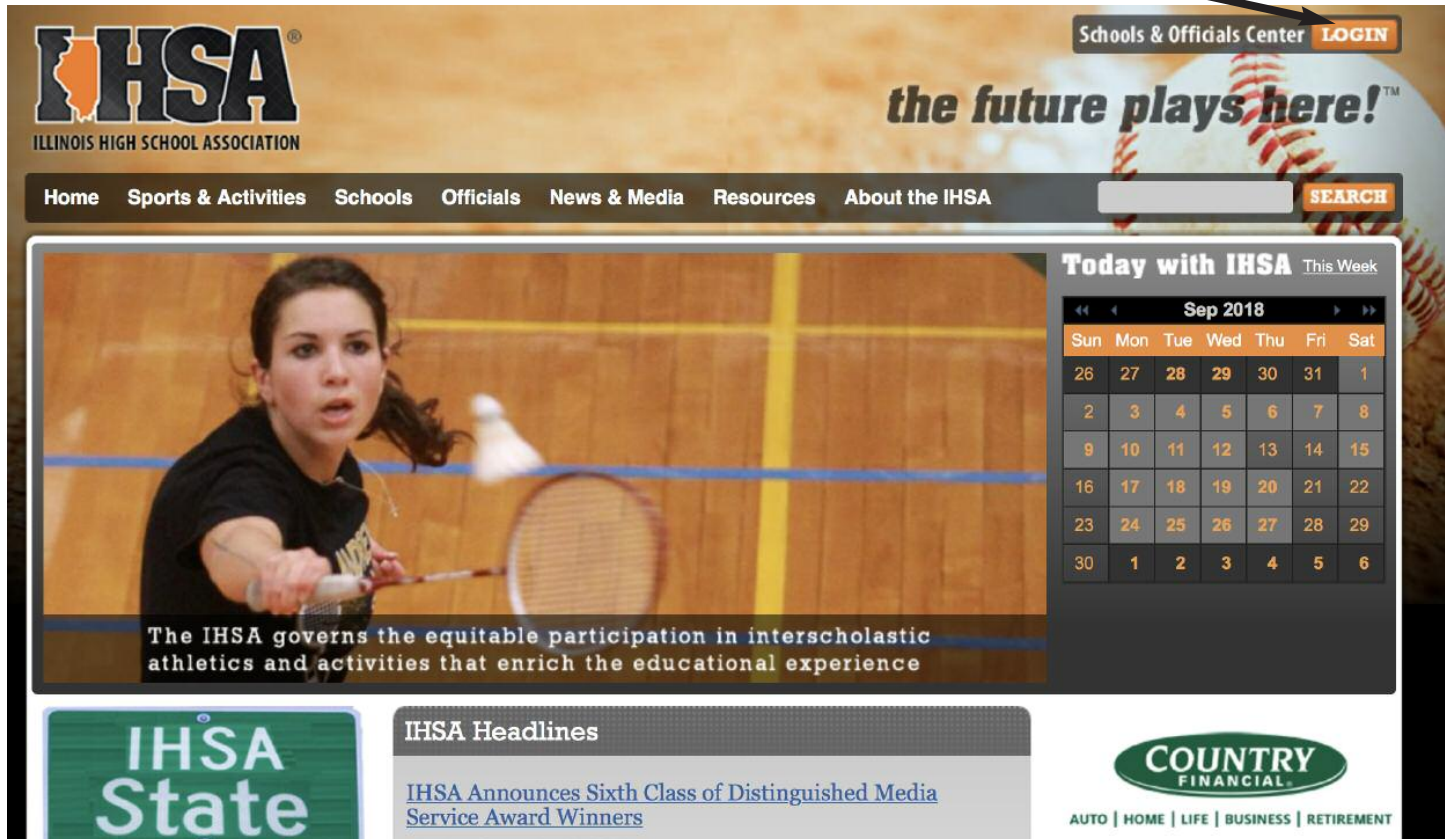
5. The wrestler has the following options for the appeal:
 - ▶ Have another skin fold test by any of the approved certified Body Fat Testers.
OR
 - ▶ Be hydrostatic weighed by one of the certified hydrostatic weighing testers in the State of Illinois. **The school will be responsible to call and set up the appeal.** The date of the appeal must appear on the appeal form that is faxed to the IHSA office.
OR
 - ▶ Use Bio-Impedance measurement from the TANITA TBF-300-A or 300-WA Body Composition Analyzer/Scale with IHSA administrator approval.
6. The **wrestler must** take the results of the second or final test.
7. The results of the appeal will be faxed or e-mailed to the IHSA Office, where the results will be posted in the Schools Center.
8. No other appeals will be granted.

ONLINE WEB ENTRIES

Body Fat Tester Online Instructions

Go to the IHSA website

Click on the “Officials Center” link



IHSA
ILLINOIS HIGH SCHOOL ASSOCIATION

Schools & Officials Center **LOGIN**

the future plays here!

Home Sports & Activities Schools **Officials** News & Media Resources About the IHSA **SEARCH**

Today with IHSA This Week

« < **Sep 2018** > »

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

The IHSA governs the equitable participation in interscholastic athletics and activities that enrich the educational experience

IHSA State

IHSA Headlines

[IHSA Announces Sixth Class of Distinguished Media Service Award Winners](#)

COUNTRY FINANCIAL

AUTO | HOME | LIFE | BUSINESS | RETIREMENT

Enter your ID number and password, then click the “Log in” button

The new Schools Center passwords are now in effect.

Welcome to the IHSA Schools & Officials Center.

To log in, please type your ID number in the upper box and your password in the lower box, then click the button.

Forgot your password?
OFFICIALS: You should [request your password](#) to be sent via email. If all else fails, you may call the [Officials Department](#) and a new password will be generated for you.
SCHOOLS: Please call the IHSA Office at 309-663-6377.

Have a question about clinic or rules meeting attendance or other information in the Officials Center? E-mail [IHSA Officials Department](#).

The Schools & Officials Center is closed every morning between 3 and 4 am, Central Time, for maintenance.

Please report other problems to [Scott Johnson](#).

This is the screen that will appear.

To take the test to become recertified click this link.

OFFICIALS CENTER IHSAs
ILLINOIS HIGH SCHOOL ASSOCIATION

Admin Schools Officials

Enter new selection: Find

YOUR PHOTO
Upload an image

PERSONAL DATA
Password
Personal information
Membership card
Association memberships
Affiliated schools
Daily availability calendar
Licensing center
License & promotion details
Officials insurance (PDF)

FORMS AND REPORTS
Top 15 lists
Reports index
Special Report
Yellow Card Report
SAWA Report
Advisory committee survey
Official Evaluation Form (PDF)
Official Evaluation Recording Form (PDF)
Boys basketball tickets
IESA Sportsmanship Report

MEETINGS, CLINICS & EDUCATION
2012-13 Officials Handbook (PDF)
Officials Education Center
Rules meetings
Clinics
Clinicians
Case situations

ONLINE RESOURCES
Find an official
Officials directory
2012-13 Officials Calendar (PDF)
Frequently Asked Questions

MESSAGES more >>
8/13 August 16, Dance Clinic Cancelled
The dance clinic to be held at Downers Grove on August 16th has been cancelled. There will be no clinic on that date.

STATE SERIES ASSIGNMENTS
No recent assignments.

LICENSE STATUS & AVAILABILITY SUMMARY

Sport	Level, Years & Promotion Status	License Status	Last Licensed	Last Part 1 Exam & Score	Last Rules Meeting	Last Clinic	State Series Availability	Ratings
Body Fat Tester	X--Registered (1)	--	8/30/11	8/30/11 (6) ↓ take Part 1 exam until 11/6	--	--	--	--
Soccer	X--Registered (1)	probation	8/7/12	never ↓ take Part 1 exam until 9/6	never ↓ view rules video	never ↓ find clinic redeem credit	UNKNOWN ↓ edit availability	Power Rating & other ratings info

In addition, you should regularly monitor and update your [daily availability calendar](#).

RECENT SPECIAL REPORTS (on you) more >>
No recent special reports.

This is the screen that will appear next.

Click on the “Take the Part 1 Body Fat Testing Examination” link.



The screenshot shows a Microsoft Internet Explorer browser window. The title bar reads "Officials Center -- Part 1 Examination - Microsoft Internet Explorer". The address bar shows the URL "https://go.ihsa.org/go/officials-center/take-exam-1.asp?Exam=OBF-07-1". The page header includes a "Log out" button and the "IHSA Officials Center" logo with the Illinois High School Association emblem. Below the header, the page is titled "Part 1 Examination". The main content area contains the following text:

You are about to take the Part 1 examination in Body Fat Testing.

The Part 1 examination consists of 50 open-book questions. You will be presented 5 pages of 10 questions each. If you have received the exam in the mail, it may be easier and faster to mark your answers on the printed sheet first and then transcribe them here.

Read each question carefully and mark your answer when you are ready. You should try to complete all the questions on one page before moving to the next page.

You may choose to have the exam graded at any time, making sure you have answered all 50 questions. You will be given the opportunity to review your answers before the exam is graded.

When you are satisfied with your answers, you must then submit your exam. Your score will be displayed on the screen immediately. It will also be stored in the Officials Center. The correct answers will be provided at a later date.

Take the Part 1 Body Fat Testing Examination now.

To view this screen, click on the “Personal Information” link.

Log out

IHSA Officials Center
Illinois High School Association

Main menu

PERSONAL DATA
Password
Personal information

FORMS AND REPORTS
Submit body fat data

ONLINE RESOURCES

MESSAGES more >>

9/16 GIRLS GYMNASTICS RULES BOOKS
The rules books for Girls Gymnastics were mailed on September 15th. Please wait to take your test until you receive your book.

8/25 Special Notice Regarding "Running Sleeves"
Cross country and track officials are directed to a new rule interpretation regarding "running sleeves."

LICENSE STATUS & AVAILABILITY SUMMARY

Sport	Level & Promotion Status	License Status	Last Licensed	Last Part 1 Exam & Score	Last Rules Mtg.	Last Clinic	State Series Availability
Body Fat Tester	—	—	9/11/08	9/11/08 (48) ↓ take exam until 12/1	—	—	—

Log out

IHSA Officials Center
Illinois High School Association

Main menu

Personal Information

Make sure to keep your personal information up to date. It's especially important to let the IHSA know about changes to your phone number and E-mail address.

ID number	27639	<i>You cannot change your ID number.</i>
Name	David Gannaway	<i>If you wish to change your name, address, or date of birth, you must call the IHSA Officials Department at 309-663-6377. You cannot make these changes online or via E-mail.</i>
Address	IHSA, 2715 McGraw Drive	
City, state & ZIP	Bloomington, IL 61704	
Gender	M	
Date of birth	1/1/50	
Home phone	<input type="text" value="309-222-3333"/>	
Business phone	<input type="text" value="847-742-7777"/>	
Cell phone	<input type="text" value="888-888-3333"/>	
E-mail	<input type="text" value="dgannaway@ihsa.org"/>	

If you wish to make changes to any of the information on this page, please call the IHSA Office at 309-663-6377. This allows the body fat tester to view the information that is on file at the IHSA and keep it current.

**Make sure you have an accurate and up-to-date email address as reminders will only be e-mailed.

To go to the school page to enter data on the wrestlers click on “Submit body fat data” link.

Enter the school ID to get to school page.



The screenshot shows the IHSA Officials Center interface. At the top left, there is a "Log out" button and a "Main menu" link. The main header features the IHSA logo (Illinois High School Association) and the text "Officials Center" in a large, stylized font, accompanied by a cartoon referee character. Below the header, the section is titled "Select a School". A grey instruction bar reads: "Choose a school from the list below and click the button at the bottom of the page." Below this is a form with a "School" label and a dropdown menu. At the bottom of the form is a "Select school" button. A black arrow points from the text "Enter the school ID to get to school page." to the dropdown menu.

To add a wrestler type in the name, gender and grade and click on “Add to roster”.

Team Roster - Abingdon

Your changes were saved.

To add a student to the roster, enter the information below and click the button.

First Name	Last Name	Year in School	Gender (M/F)
<input type="text"/>	<input type="text"/>	<input type="text" value="▼"/>	M <input type="text" value="▼"/>

To delete a student from the roster, check the box next to the name and click the button. You cannot delete a wrestler for whom data has already been entered. To input body fat data, click on the wrestler's name.

Del?	Name	Year	Gender	Date Tested	Weight	% Body Fat	7 (or 12)% Weight	First Date at Target Class(es)	Tester	Appeal Tester
<input type="checkbox"/>	Doe, John	Sr.	M							
<input type="checkbox"/>	Roe, Raymond	Jr.	M							

Each school should have the roster entered online prior to the test date. A school or certified tester can add wrestlers by entering the name, gender, and school, then click the button to enter the data.

At any time, you may click a name on the roster to input that wrestler's skinfold data.

On the skinfold data page for each individual wrestler, you must enter the following information:

- The date the test took place
- Passed or failed specific gravity test
- Wrestler’s body weight
- Skinfold measurements
 - 9 measurements for males
 - 6 measurements for females

Enter date, specific gravity test, body weight and measurements.

Body Fat Data

Please enter the body fat data in the fields below, then click the button to store the data.

Name	John Dough ()	
Date tested	<input type="text" value=""/>	
Urine specific gravity	<input type="text" value=""/>	
Body weight	<input type="text" value=""/>	
Skinfold measurements		
Triceps	<input type="text" value=""/>	<input type="text" value=""/>
Subscapular	<input type="text" value=""/>	<input type="text" value=""/>
Hydrostatic weighing		
Percentage of body fat	<input type="text" value=""/>	<i>Complete this item ONLY if you are using the hydrostatic weighing method. Otherwise this figure will be calculated from the skinfold measurements.</i>
Bioimpedance method		
Percentage of body fat	<input type="text" value=""/>	<i>Complete this item ONLY if you are using the Bioimpedance method. Otherwise this figure will be calculated from the skinfold measurements.</i>

Once finished with entering the data on an individual wrestler, click on the “Save changes” button. **Before you click on the button make sure that all information on that wrestler is correct. You will not be able to edit once you have sent the information to the IHSA.**

The data will be sent electronically to the IHSA where the calculations will be conducted and the results posted in the Schools Center.

Note: If you make a mistake on an individual’s data, you must e-mail the mistake to Sam Knox at sknox@ihsa.org. Do not re-enter the athlete—only one name per athlete per school. We need the following information: Student athlete’s name, school and all data to be entered.

Wrestler Weight Certification

You may add a new wrestler to this list at any time by typing the name and pressing the button below.

LAST NAME	First Name	Sex	Year in School
<input style="width: 95%;" type="text"/>	<input style="width: 95%;" type="text"/>	Male <input type="button" value="v"/>	<input style="width: 95%;" type="text"/>

If you make a mistake, you may delete a name and start over by clicking the "Delete" link in the rightmost column. You may not delete a name after data has been entered.

School: Argenta (A.-Oreana)

Date Printed: 8/17/2005

Wrestler's Name	Sex	Date Tested	Wt.	% Body Fat	7 (or 12)% Weight	First Date at Target Class(es)	Tester	Appeal Tester	Del?
Agee, Andrew	Male	11/29	129.2	13.74	119	130 ... 11/29 125 ... 12/14 119 ... 1/06	50728		
Bowman, Bryce	Male	11/17	163.4	12.98	152	171 ... 11/17 160 ... 11/26 152 ... 12/20	50728		
Brewer, Jesse	Male								
Bruckner, Jake	Male								
Cobstill, Tim	Male	1/28	151.2	18.37	132	152 ... 1/28 145 ... 2/16 140 ... 3/04 135 ... 3/21	50732		
Force, Luke	Male	11/9	205.5	15.39	186	215 ... 11/09 189 ... 12/17	50728		
Gogolin, Chad	Male	12/1	140.5	11.77	133	145 ... 12/01 140 ... 12/02 135 ... 12/19	50728		
Halford, Nick	Male	12/2	108.5	7.66	107	112 ... 12/02	50728		
Hilburn, Bryce	Male	11/30	135.6	13.89	125	140 ... 11/30 135 ... 12/02 130 ... 12/19 125 ... 1/06	50728		

SUMMARIES & RECOMMENDATIONS



I. INSTRUCTIONS FOR BODY FAT TESTER SUMMARY SHEET

- A. Have wrestlers being tested take the test for Urine Specific Gravity. NOTE: Follow directions for administering this test.
- B. Wrestlers that do not pass the Urine Specific Gravity Test will not be body fat tested on this date. They only get one opportunity on any given date to pass the Urine Specific Gravity Test. Wrestlers that do not pass the Specific Gravity Test **must wait 24 hours to be re-tested**.
- C. Once a wrestler has passed the Urine Specific Gravity test, he/she must be body fat tested immediately **on that date only. Wrestlers should not be allowed to workout between the Urine Specific Gravity Testing, being weighed and the skin fold test.**
- D. Proceed with the body fat testing of each wrestler.
- E. Each body fat tester will have a secured site on the IHSA website. To enter the site, the certified body fat tester will enter his/her ID number and Password.
- F. Follow the instructions in the manual to log on and enter data on wrestlers.
- G. On the data entry screen, the certified body fat tester must enter the following data on each wrestler:
 - ▶ Date of body fat testing
 - ▶ Name of wrestler –(Note: schools may enter the wrestler’s name prior to the test date by accessing the school center and going to the body fat testing center)
 - ▶ Weight the day of testing
 - ▶ The three (3) measurements taken at each designated area on the wrestler.
- H. Once all data is recorded for each wrestler, send information electronically to the IHSA. Remember that once you click on the bottom to send information to the IHSA you will not be able to change any of the data on that page. Please make sure that everything is correct prior to sending the information on each wrestler.
- I. Body Fat Tester must keep a hard copy of all data in case electronic submission does not work properly or tampering has occurred.
- J. Schools will get results from their schools center. **The IHSA reserves the right to have any wrestler re-tested.**

II. FITNESS ASSESSMENT: BODY COMPOSITION SUMMARY SHEET

- A. Description of Skinfold Procedures

Equipment: Skinfold Calipers (Slim Guide or Lange Skinfold Calipers with calibration block)
Flexible tape and erasable markers to mark the proper sites

Procedures:

1. All measurements should be made on the right side of the body.
2. A caliper should be placed 1cm away from the thumb and finger perpendicular to the skinfold and halfway between the crest and the base of the fold.
3. Pinch should be maintained while reading the caliper.
4. Wait two (2) to four (4) seconds (and not any longer) before reading the caliper.
5. Take triplicate measurements at each site and retest if triplicate measurements are not within 1 to 2 mm.
6. Rotate through measurement sites or allow time for skin to regain normal texture and thickness.
7. Take three (3) measurements at each testing point on the body.

Test Selection: Very lean and very obese people pose special measurement problems: there may be limitations in equipment placement and reproducible outcomes. In addition, there may be a psychological “drawback” to performing this test on individuals who are somewhat sensitive to such information.

B. Standardized Descriptions of Skinfold Sites**Skinfold Sites:**

Abdominal: Vertical fold; 3cm to the right side of the umbilicus

Triceps: Vertical fold; on the posterior midline of the upper arm, halfway between the acromion and olecranon processes, with the arm held freely to the side of the body.

Subscapular: Diagonal fold (at a 45 degree angle); one (1) cm below the inferior angle of the scapula

Male test sites: Abdominal, Triceps, Subscapular

Female test sites: Triceps, Subscapular

IHSA Wrestling Weight Control Data Worksheet

School Name _____ IHSA School ID Number _____

Wrestler Name	Gender M or F	Urine Specific Gravity Test P=Pass, F=Fail	Alpha Weight	Abdominal	Triceps	Sub Scapula	Date
1.							
2.							
3.							
4.							
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42.							
43.							
44.							
45.							
46.							
47.							
48.							
49.							

Wrestler Name	Gender M or F	Urine Specific Gravity Test P=Pass, F=Fail	Alpha Weight	Abdominal	Triceps	Sub Scapula	Date
50.							
51.							
52.							
53.							
54.							
55.							
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96.							
97.							
98.							
99.							
100.							

Signature Certified Body Fat Tester _____ Date _____



Wrestling Weight Control Appeal Form

Date: _____

School: _____

Wrestler's Name: _____ Year In School: 9 10 11 12

Date of the appeal test: _____

Name of the person conducting the appeal test: _____ ID #: _____

Location of the appeal test: _____

Principal's Signature: _____ Date _____

Parent's Signature: _____ Date _____

We understand that the results of the appeal test will replace the previous skinfold results, that they cannot be appealed and that the wrestler may not wrestle until the results of the appeal are posted in the IHSA Schools Center.

Note: If the person weighs less than 1 1/2 percent of the first test, this appeal is void and must take the results of the first test.

1. Fax a copy of this appeal form to the IHSA office within 7 calendar days of the date of the first body fat test.
IHSA FAX: 309-663-7479 or email to imatson@ihsa.org. (Note: Completion of the Appeal must be within 7 calendar days of the date of the first body fat test).
2. Take a copy of this form with you and give it to the person doing the appeal test.
3. Confirm receipt of Appeal Form by the IHSA.

To be filled out and faxed back to the IHSA office by the person doing the appeal test.

_____ ID Number: _____

Appeal Date: _____ Tester's Signature: _____

Alpha Weight: _____ (Must not be less than 1.5% of first test weight)

Passed Urine Specific Gravity Test : _____ yes (If no, the person may not test on this date.)

<u>Hydrostatic Weighing</u>	<u>Skin Fold Test</u>
% Body Fat _____	Triceps _____
<u>Bio-Impedance Measurement</u>	Abdominal _____
% Body Fat _____	Subscapula _____



Wrestling Weight Control FINAL Appeal Form

Date: _____

School: _____

Wrestler's Name: _____ Year In School: 9 10 11 12

Date of the appeal test: _____

Name of the person conducting the appeal test: _____ ID #: _____

Location of the appeal test: _____

Principal's Signature: _____ Date _____

Parent's Signature: _____ Date _____

We understand that the results of the appeal test will replace the previous skinfold results, that they cannot be appealed and that the wrestler may not wrestle until the results of the appeal are posted in the IHSA Schools Center.

Note: If the person weights less that 1½ percent per week from the first test, this appeal is void and must take the results of the first test.

1. Take a copy of this form with you and give it to the person doing the appeal test.
2. Fax a copy of this appeal form to the IHSA office by Friday of week 24 of the IHSA standardized calendar.
3. IHSA Fax: 309-663-7479 or E-Mail: lmatson@ihsa.org along with a copy of all weigh-in sheets to date.
4. Confirm receipt of Appeal Form by the IHSA.

**To be filled out and faxed back to the
IHSA office by the person doing the appeal test.**

_____ ID Number: _____

Appeal Date: _____ Tester's Signature: _____

Alpha Weight: _____

Passed Urine Specific Gravity Test : _____ yes (If no, the person may not test on this date.)

Hydrostatic Weighing

% Body Fat _____

Bio-Impedance Measurement

% Body Fat _____

Skin Fold Test

Triceps _____

Abdominal _____

Subscapula _____

FORMULA FOR CALCULATING BODY COMPOSITION & MINIMUM WRESTLING WEIGHT CLASS

To determine a wrestler's body composition the IHSA will be using the Lohman Equation-Calculation for body density and the Brozek Equation-Calculation for % body fat.

Step 1. Determine the wrestler's body density using the Lohman Equation-Calculation.

$$BD = [1.0973 - (\text{sum SF} \times .000815)] + [(\text{sum SF})^2 \times \underline{.00000084}]$$

$$\text{Sum of SF} = \text{Triceps SF} + \text{Subscapula SF} + \text{Abdominal SF}$$

Step 2. Use the Brozek Equation-Calculation to determine % body fat from body density

$$\% \text{ BF} = (457/BD) - (4.142) \times 100$$

Step 3. To calculate a wrestler's minimum weight based on 7% body fat you can use either of the following calculations.

$$\text{Minimum wrestling weight (MWW)} = ([1 - (\%BF/100)] \times \text{TBW}) / (.93)$$

or

$$\text{Fat weight (FW)} = \text{TBW} \times (\%BF / 100)$$

$$\text{Lean Body Mass (LBM)} = \text{TBW} - \text{FW}$$

$$\text{MWW} = (\text{LBM}) / .93$$

NOTE: The IHSA will be using the Boileau Equation-Calculation for determining % body fat for female wrestlers.

$$\%BF = 1.35 \times (\text{sum SF}) - 0.012 \times (\text{sum SF})^2 - 3.4$$

$$\text{Sum of SF} = \text{Triceps SF} + \text{Subscapula SF}$$

$$\text{MWW (Females)} = (\text{LBM}) / .88$$

Any female with a body fat percentage greater than 30% will have her descent hand calculated at the IHSA Office. Body Fat Testers should contact Sam Knox at the IHSA Office to notify him of the female wrestler needing this to be done. An e-mail can be sent with the following details: name, school, and testing measurements.