



**Illinois High School Association** 

# 2013-14

# Weight Control Manual

**Revision History** 

# Weight Control Program



### **INTRODUCTION**

The IHSA will implement its weight control program that includes body fat testing again for the 2013-14 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.

## 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 Weights

- 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 call the IHSA and sign someone up for the training at (309) 663-6377.
- 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 interscholastic 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 11, 2013). 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 31, 2014).
- 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. Responsibilities of Schools 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, 2) skinfold data sheets (provided by the IHSA in the school center under downloadable forms), 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. The school <u>must file and complete an appeal</u> 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). (<u>A form is provided by the IHSA in the Schools Center under downloadable forms</u>).

#### IV. 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 lowest 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 this weight 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 140 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 135 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 145 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.

## EQUIPMENT

The IHSA will accept measurements using only skinfold testing for the initial test. Skinfold measurements shall be taken **only** with the Lange Caliper. This is a medium-priced caliper and can be obtained for less than \$250.00 from most health care product suppliers. Measurements taken with the Lange calipers must be taken by an IHSA certified body fat tester.

A Refractometer may be used to determine urine specific gravity.

The Specific Gravity Test strips may be purchased for 100 strips per bottle and under \$70.00 per bottle.

A TANITA TBF-300-A Body Composition Analyzer/Scale may be used by the certified body fat tester to establish the body fat percentage for wrestlers. Only certified body fat testers can use this method after confirming the wrestler is hydrated through testing.



# **CERTIFYING BODY FAT TESTER**

1. 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.

#### **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
- 2. Individuals wanting to become a Certified Body Fat Tester for the first time, must attend a Body Fat Training Workshop and pass a written exam. Once these requirements are completed the persons name will be added to the list of IHSA Certified Body Fat Testers posted on the IHSA web site.

## Note: All body fat testers certified during the 2012-13 season are eligible to renew their certification by passing an online exam on or before November 4, 2013. A failing score will require the person to re-take the training workshop. The fee for the workshop is \$15.00.

- 3. Each school should call the IHSA Office, (309/663-6377) to identify the person(s) that will be attending this seasons Body Fat Training Workshop. **Please sign up by September 30, 2013.**
- 4. The dates of the classes are: Wednesday, October 2, 2013 – Franklin Park-Northlake (Leyden H.S.) at 6:00 p.m. Tuesday, October 8, 2013 – Chicago (CPS Sports Department, 501 West 35th Street) at 10:00 a.m. Friday, October 11, 2013 – Minooka High School at 10:00 a.m. Tuesday, October 15, 2013 – Normal (Community West High School) at 6:00 p.m. Wednesday, October 16, 2013 – Effingham High School at 11:00 a.m.
- 5. The IHSA will conduct training sessions annually in the fall to certify body fat testers.
- 6. Only certified body fat testers for the 2013-14 school year will be allowed to conduct body fat testing and enter results of the testing on the IHSA web site.
- 7. There will be a \$15.00 fee for all people attending the training workshop of the body fat testers. This fee will be used to pay for the training of the Body Fat testers and the material used for handouts.
- 8. Schools will receive all the results of the Body Fat Testing on-line in the Schools Center.

# **Instructions For Body Fat Testing**

# **Professional Responsibility:**

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.

## **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 greater than 1.025g/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.

### Equipment:

- 1. Latex-free Exam Gloves
- 2. Urine Collection Cups
- 3. Reagent Strips (Bayer Multistix SG 10) or a refractometer
- 4. Copies of Specific Gravity Color Chart
- 5. Biohazard Waste Bags for Urine Collection Cups and Reagent Strips

## **Urine Sample Procedures:**

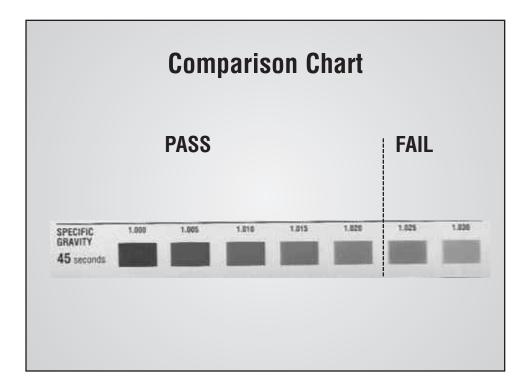
The following procedures have been developed in order to minimize dishonest techniques to bypass the urine test and to maximize the athlete's right to privacy.

- 1. Mark each urine collection cup to identify the athlete being tested.
- 2. Instruct each wrestler to enter the toilet or urinal one at a time with nothing but the urine collection cup.
- 3. Allow reasonable time for the athlete to provide a sample of urine.
- 4. 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.

SUPPLIES NEEDED FOR URINE SPECIFIC GRAVITY TESTING



**URINE SPECIFIC GRAVITY TEST STRIPS** 



# How the Test is Performed:

- 1. 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.
- 2. 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.
- 3. Once completed, the athlete will give the sample immediately to the proper authority.

# **Determining Specific Gravity:**

- 1. Specific gravity will be determined using IHSA approved Reagent Strips (Bayer Multistix 10SG).
- 2. Assessors will use latex-free exam gloves when measuring specific gravity.
- 3. The specific gravity test should be administered as soon as possible after the urine is collected.
- 4. 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.
- 5. 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.
- 6. While removing, run the edge of the strip along the urine collection cup to remove excess urine.
- 7. 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.
- 8. 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.
- 9. Record the results of the test. REMEMBER, if the specific gravity is equal to or greater than 1.025g/ml, testing will be discontinued and a retest will need to be rescheduled.
- 10. Discard urine in toilet or urinal.
- 11. Discard collection container and reagent strip in a biohazard waste bag.

# How to Prepare for the Test:

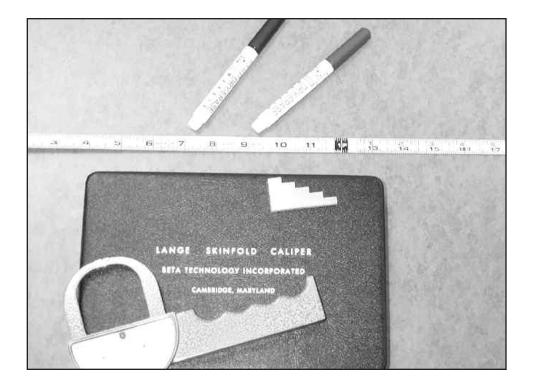
- 1. Eat a normal balanced diet emphasizing foods with high water content such as fruits and vegetables.
- 2. Avoid foods and/or supplements that may contribute to water loss such as: chocolate, soft drinks, coffee and creatine for at least 24-48 hours.
- 3. Avoid vigorous physical activities that cause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

# **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.

## **Equipment:**

- 1. Assessment Procedures Manual
- 2. Lange Skin-fold Calipers with calibration block
- 3. Tape measure preferably made with flexible material
- 4. Water-soluble markers
- 5. Certified/calibrated scale
- 6. TANITA TBF-300-A Body Composition Analyzer/Scale (if using the scale to do a Bio-Impedence Measurement)



# Athlete's Body Weight:

Each athlete's body weight will be obtained using a certified/calibrated scale to the nearest 0.2lb. If the situation is appropriate, athletes have the option of being weighed in the nude as long as the assessor is of the same gender.

# Athlete's Attire:

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.

# **Skinfold Technique:**

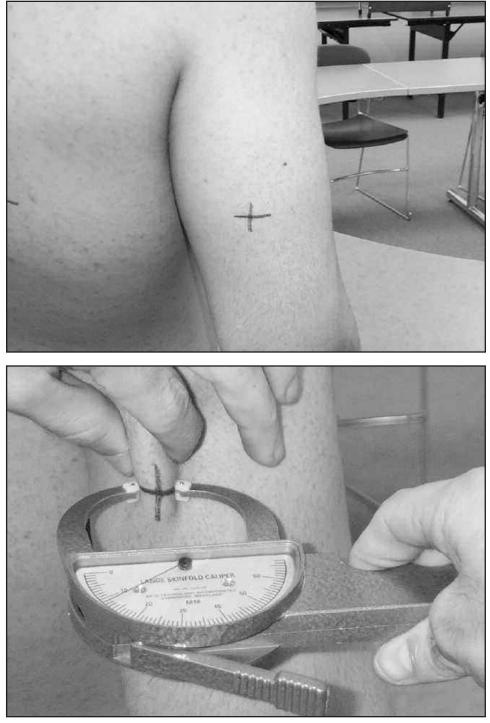
It requires a great deal of time and practice to develop your skill as a professional skinfold assessor. Therefore, it is essential to carefully follow these standardized procedures to maximize the accuracy and reliability of your measurements.

- 1. Athlete should be standing in the anatomical position with the skin for skinfold sites exposed.
- 2. 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.
- 3. Make sure the athlete's skin is dry and lotion-free.
- 4. 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.
- 5. Carefully identify, measure, and mark each skinfold site (triceps, sub scapular, abdominal for males; triceps and sub scapular for females).
- 6. Palpate the site to familiarize both you and the athlete with the area being measured.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. Read the dial of the caliper to the nearest .5mm.
- 12. 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).
- 13. 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.

# **SKINFOLD LOCATION**

# 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 olecrannon 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.



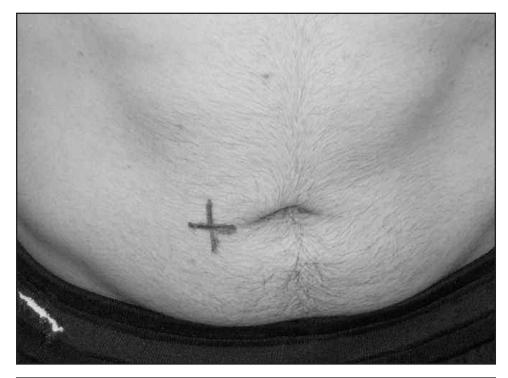
# Sub scapular:

- 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.



# 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.





# 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				
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Wrestler Name	Gender M or F	Urine Specific Gravity Test P=Pass, F=Fail	Alpha Weight	Abdominal	Triceps	Sub Scapula	Date
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# **INSTRUCTIONS FOR ONLINE ENTRY OF BODY FAT TESTING DATA**

# **BODY FAT TESTER ONLINE INSTRUCTIONS**

- ♦ Go to the IHSA web site
- ♦ Click on the "Officials Center" link
- Enter your ID number and password



CLICK ON "SCHOOL & OFFICIALS CENTER LOGIN" 4

Enter your ID and Password on this page, then click on the "Log in" button



# CLICK ON THE "LOG IN" BUTTON

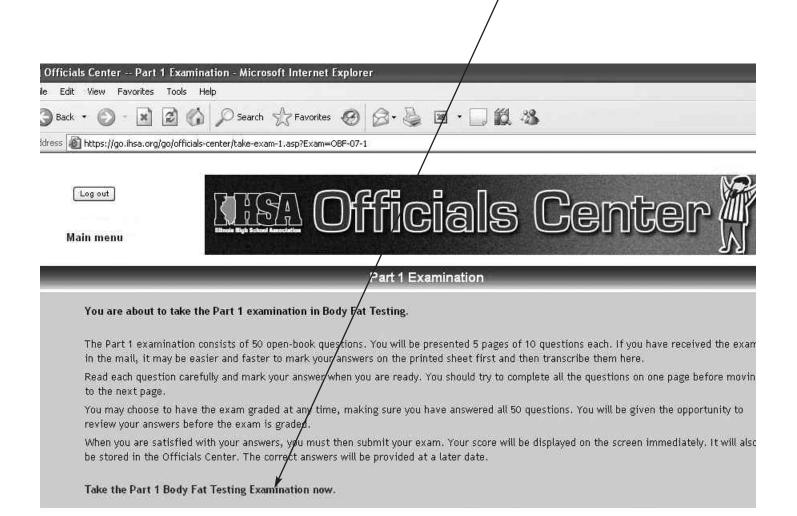
This is the screen that will appear.

# To take the test to become recertified click on this link.

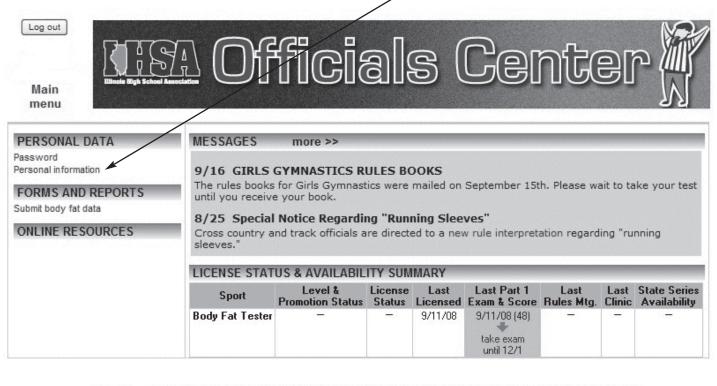
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PERSONAL DATA Password Personal information Membership card Association memberships	The dance	clinic to be held RIES ASSIGNI	at Downer		the start of the start	has been can	celled. There will t	se no clinic on	that date.
Affiliated schools Daily availability calendar		STATUS & AVA	ILABILIT	Y SUMM	ARY				
Licensing center License & promotion details Officials Insurance (PDF)	Sport	Level, Years & Promotion Status	License	Last Licensed	Last Part 1 Exam & Score	Last Rules Meeting	Last Clinic	State Series Availability	Ratings
FORMS AND REPORTS Top 15 lists Reports index Special Report	Body Fat Tester	X-Registered (1)	-	8/30/11	8/30/11 (v) take Part 1 exam until 11/6			F	
Yellow Card Report SAWA Report Advisory committee survey Official Evaluation Form (PDF) Official Evaluation Recording Form (PDF) Boys basketball tickets	Soccer	X-Registered (1)	probation	8/7/12	never take Part 1 exam until 9/6	never view rules video find meeting redeem credit	never find clinic redeem credit take Level 0 clinic	UNKNOWN odit availability	Power Rating & other ratings info
ESA Sportsmanship Report MEETINGS, CLINICS & EDUCATION 2012-13 Officials Handbook (PDF) Officials Education Center Rules meetings Clinics Clinicians Case situations	In addition, you should regularly monitor and update your daily availability calendar.  RECENT SPECIAL REPORTS (on you) more >> No recent special reports.								
ONLINE RESOURCES Find an official Officials directory 2012-13.Officials Calendar (PDF) Frequently Asked Questions									

This will be the screen that appears next.

# Click on the "Take the Part 1 Body Fat Testing Examination" link.



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





#### Personal Information

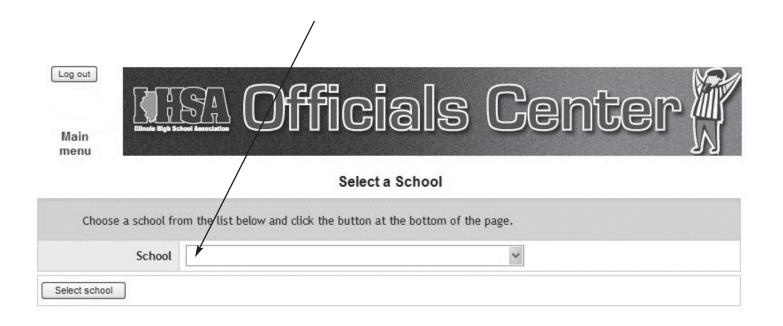
ID number	27639	You cannot change your ID number.
Name	David Gannaway	16 and the shares are started
Address	IHSA, 2715 McGraw Drive	If you wish to change your name, address, or date of birth, you must
City, state & ZIP	Bloomington, IL 61704	call the IH5A Officials Department a
Gender	Μ	309-663-6377. You cannot make these changes online or via E-mail.
Date of birth	1/1/50	anese enanges on the e man
Home phone	309-222-3333	
Business phone	847-742-7777	
Cell phone	888-888-3333	
E-mail	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 e-mail address as reminders will only be e-mailed beginning in 2013-14.

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



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

Main menu										
	Team Roster Abingdon									
Your c	hanges were s	saved.	/	//	//	//				
Add to roster To add a student to the roster, enter the information below and click the button.										
Fire	st Name	Last Na	ame Y	Year in School	Gender (M/F)					
				*	M					
Delete from roster       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
	Doe, John	Sr.	м							
	Roe, Raymond	Jr.	М							

• 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 year in 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 Skin fold 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 butt	on to store the data.
Name	John Dough ()	
Date tested		
Urine specific gravity	·	
Body weight		
	Skinfold measurements	
Triceps		
Subscapular		
	Hydrostatic weighing	
Percentage of body fat		Complete this item ONLY if you are using the hydrostatic weighi method. Otherwise this figure will be calculated from the skinfo measurements.
	Bioimpedance method	
Percentage of body fat		Complete this item ONLY if you are using the Bioimpedance met Otherwise this figure will be calculated from the skinfold measurements.

Once finished with entering the data on an individual wrestler, click on the "Save changes" button. <u>Before you</u> 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 Craig Anderson at <u>canderson@ihsa.org</u>. Do not re-enter the athlete—only one name per athlete per school. We need the follow-ing information: Student athlete's name, school and all data to be entered.





# **INSTRUCTIONS FOR BODY FAT TESTER SUMMARY SHEET**

- 1. Have wrestlers being tested take the test for Urine Specific Gravity. <u>NOTE</u>: Follow directions for administering this test.
- 2. Wrestlers that do not pass the Urine Specific Gravity Test <u>will not</u> 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 <u>must wait 24 hours to be re-tested.</u>
- 3. 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.
- 4. Proceed with the body fat testing of each wrestler.
- 5. 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.
- 6. Follow the instructions in the manual to log on and enter data on wrestlers.
- 7. 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.
- 8. 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.
- 9. Body Fat Tester must keep a hard copy of all data in case electronic submission does not work properly or tampering has occurred.
- 10. Schools will get results from their schools center. <u>The IHSA reserves the right to have any wrestler</u> <u>re-tested.</u>

### FITNESS ASSESSMENT: BODY COMPOSITION SUMMARY SHEET

# **Description of Skinfold Procedures**

Equipment: Skinfold Calipers (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.

## Standardized Description 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

#### Female test sites

Abdominal Triceps Subscapular Subscapular Triceps

# **IHSA WRESTLING WEIGHT CERTIFICATION**

# **MASTER REPORT**



		Wre	estle	r Weight	Certific	ation				
You may ad	d a new	wrestler to thi	s list a	it any time by	r typing the	name and	pressing	the but	ton belov	V.
	LAS	T NAME		First Name		Sex	Year în	School	6	
			1		М	ale 🗾		•		
10	en fransesse	4 4 P		Add this w	NOVICOA			< 1 x 11 P	-	
	he right	nistake, you n most column. <b>School: Arge</b>	You m	ay not delete	a name aff		been ei		nk in	
Wrestler's	Sex	Date Tested	wt.	% Body Fat	7 (or 12)%	First Da	ate at	Tester	Appeal	Dela
Name	JEA	Date Testeu	200.00	~ DUUy rat	Weight	Target Cl	Contraction of the Property of	Tester	Tester	Der
Agee, Andrew	Male	11/29	129.2	13.74	119	130 1 125 1 119	2/14	50728		
Bowman, Bryce	Male	11/17	163.4	12.98	152	171 1 160 1 152 1	1/26	50728		
Brewer, Jesse	Male					1				
Bruckner, Jake	Male									
Cobstill, Tim	Male	1/28	151.2	18.37	132	152 145 140 135	2/16 3/04	50732		
Force, Luke	Male	11/9	205.5	15.39	186	215 1 189 1		50728		
Gogolin, Chad	Male	12/1	140.5	11.77	133	1451 1401 1351	2/02	50728		
Halford, Nick	Male	12/2	108.5	7.66	107	1121	2/02	50728		
Hilburn, Bryce	Male	11/30	135.6	13.89	125	1401 1351 1301 125	2/02 2/19	50728		

This will be the page that shows up on the School Center. <u>It must be printed and taken to all wrestling</u> <u>meets.</u> A copy must be given to each coach at dual meets and to the tournament director only at tournaments.

# Formula for Calculating Body Composition And Minimum Wrestling Weight Class



To determine a wrestlers 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 wrestlers body density using the Lohman Equation-Calculation.

BD=[1.0973-(sum SF x .000815)] + [(sum SF)<sup>2</sup> x .0000084]

Sum of SF = Triceps SF + Subscapula SF + Abdominal SF

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

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

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

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

or

Fat weight (FW) = TBW x (%BF / 100)

Lean Body Mass (LBM) = TBW-FW

MWW = (LBM) / .93

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

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

Sum of SF = Triceps SF + Subscapula SF

MWW (Females) = (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 Craig Anderson 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.

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# Recommendations for Conducting a Successful Body Fat Testing Program



#### **Recommendations For Running A Successful Body Fat Assessment Schedule**

In order to develop a successful Body Fat Assessment schedule, it is essential to PREPARE IN ADVANCE. We have provided some recommendations that will help guide you through the assessment process.

#### **Considerations Prior To Certification**

#### I. Who Should Be Certified:

- **a.** 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, Nurses, Personal Trainers, Physical Education and/or Health Education Teachers.
- **b.** 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 100% to the IHSA Wrestling Weight Control Program.
- c. Individuals that are color-blind or have difficulty distinguishing colors SHOULD NOT be certified.

#### II. How Many Persons Should Each School Certify

- **a.** The size of the wrestling team(s) being tested determines the amount of time required to complete the assessment process. Keep in mind that it takes approximately 10 minutes per athlete to complete the entire test. For example, a team of 60 athletes will take one certified body fat tester approximately 10 hours to complete.
- **b.** Certifying more than one qualified person can provide back-up support for faster testing as well as an alternate in case one certified assessor is transferred or quits.
- **c.** Teaming with other certified testers from other schools allows for large groups of athletes to be tested at one time.

#### III. Ensure All Required Equipment is Available

- **a.** Obtain all required equipment and forms prior to scheduling the body fat testing (refer to equipment section).
- **b.** Ensure all required equipment is certified and/or calibrated prior to scheduling the body fat testing.
- c. Keep all required equipment and forms in a secure place so nothing gets lost.

#### IV. Reserve Facilities Necessary For The Body Fat Testing

- **a.** Reserve a washroom designated specifically for the urine specific gravity assessment. ONLY athletes participating in the test should be allowed in the washroom. Washroom faucets could then be taped and toilets discolored using fruit punch packets for example, to prevent dishonest practices.
- **b.** Reserve a classroom or private area, preferably near the reserved washroom, specifically for the skinfold assessment. This area should be set up to ensure the athletes rights to privacy.

#### V. Additional Recommendations

- **a.** Enter in all the wrestlers names online prior to the body fat testing. This makes you more familiar with the online data entry and provides the order in which you actually test the athletes.
- **b.** Make copies of "How to prepare for the hydration test" and distribute them to the athletes and their parents way in advance. Use the suggestions in the *Nutrition Education Presentation Notes* regarding "*developing a hydration protocol*" to ensure the athletes pass the urine specific gravity test the first time.
- **c.** Practice the skinfold technique on the wrestling team prior to the season to enhance your technique. This will prepare the athletes for the test and possibly identify any weight related issues in advance.



# **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
11	vill replace the previous skinfold results, that they cannot be he 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 ca	lendar days of the date of the first body fat test.
IHSA FAX: 309-663-7479. (Note: Completion of the Appe	al must be within the 7 calendar days).
2. Take a copy of this form with you and give it to the person of	loing the appeal test.
Г	

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 n	o, the person may not test on this date.)				
Hydrostatic Weighing	<u>Skin Fold Test</u>				
% Body Fat	Triceps				
<b><u>Bio-Impedence Measurement</u></b>	Abdominal				
% Body Fat	Subscapula				

# Weight Control Appeals



# **APPEAL PROCESS FOR BODY FAT TESTING**

- 1. A school may appeal the results of the body fat testing one time per wrestler.
- 2. The appeal must be filed and completed **within seven (7) calendar days** of the date of the first body fat test. Schools must fax a copy of the 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 for the appeal.
- 3. No wrestler may wrestle interscholastically without being body fat tested. If a wrestler's body fat test results are being appealed, the wrestler <u>may not</u> wrestle in interscholastic competition until the appeal results are posted on the School Center.
- 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. <u>The school will</u>
 <u>be responsible to call and set up the appeal</u>. The date of the appeal must appear on the appeal form that is faxed to the IHSA office.

OR

- Use Bio-Impedence measurement from the TANITA TBF-300-A Body Composition Analyzer/Scale.
- 6. The **wrestler must** take the results of the second test.
- 7. The results of the appeal will be faxed to the IHSA Office, where the results will be posted in the Schools Center.
- 8. No other appeals will be granted.

#### THE FOLLOWING ARE CERTIFIED APPEAL TESTERS FOR HYDROSTATIC WEIGHING:

#### DALE BROWN PH (309) 438-7547

Illinois State University (by appointment)

# **Information On Hydrostatic Weighing Procedures**

# HYDROSTATIC WEIGHING

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 trails are performed and recorded.

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.

# HYDRATION (PASSING THE URINE SPECIFIC GRAVITY TEST)

- Eat a normal balanced diet emphasizing foods with high water content such as fruits and vegetables.
- 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.
- Avoid vigorous physical activities that cause excessive sweating at least 24 hours.
- Consume plenty of fluids; at least eight to twelve (8) ounce glasses per day for several days prior to testing
- Avoid early morning assessment, if possible, due to the effect of not consuming liquids during your sleep.