VHSL MEDICAL ADVISORY COMMITTEE WRESTLING WEIGHT CONTROL PROGRAM

MISSION

Since 1989, the Medical Advisory Committee to the VHSL has been studying the incidence and harmful effects of excessive and rapid weight loss among wrestlers. Close collaboration with states that have instituted programs and policy groups such as the National Federation of State High School Associations, American College of Sports Medicine, and the National Wrestling Coaches Association has been ongoing. Prior to 2001, three task forces composed of individuals very involved in wrestling at all levels met to establish preliminary protocols. In April of each year since 2002, a Wrestling Task Force Committee meeting is held to consider coaches' concerns and to fine-tune the Weight Control Program. Below are listed the Goals and Objectives that have existed from the beginning of this project.

GOALS AND OBJECTIVES

- 1. Improve the safety of wrestling by attempting to control the amount of weight loss over time, to limit weight cycling, and eliminate potentially dangerous methods of weight loss.
- 2. Improve the enjoyment of wrestling by minimizing the time, effort, and discomfort associated with making weight, including excessive weight loss.
- 3. Educate coaches, wrestlers, and parents on healthier methods of weight loss and the potential for enhanced performance, endurance, and strength if the athlete wrestles at a more "ideal body weight".
- 4. Educate coaches, wrestlers, and parents on basics of good nutrition for active sports participation in growing youngsters.
- 5. Maximize the chance for fair and equal participation of all wrestlers by standardizing methods for weight determination and by minimizing the opportunity for perceived or real inequality among participants. Keeping the mats level for all wrestlers is critical as competitive equity based on weight has long been one of the foundations of the sport of wrestling.
- 6. Create a more positive public image for the sport of wrestling by attempting to eliminate one of the major criticisms leveled against the sport, (i. e. unhealthy weight loss).
- 7. Accomplish these goals without detracting from the discipline, mental and physical toughness, and conditioning that are very positive aspects of the sport.

OVERVIEW

The VHSL Wrestling Weight Control Program involves the determination of the MINIMUM wrestling weight (MWW) at 7% body fat for males and 12% body fat for females. It is ill advised and frequently harmful for high school wrestlers to reduce body fat content below that level. Measurement of skin folds, baseline weight, and assessment of hydration are the ingredients utilized to determining the MWW. The program emphasizes that the MWW and the resultant Minimum Weight Class are not necessarily the optimal or most desirable target. However, the athlete will not be permitted to wrestle at a weight class below that MINIMUM weight class identified by this program. The program also calculates a schedule for safe weight loss to allow a wrestler to gradually reach his desired and allowable weight while wrestling his way down through weight classes during the season.

BASIC COMPONENTS FOR MINIMUM WEIGHT CLASS CERTIFICATION

- 1. **URINE SPECIFIC GRAVITY:** Hydration is a critical component in the calculation of minimum wrestling weight. Hydration is measured by urine specific gravity (Usg). The VHSL accepted method for determining Usg is a Refractometer, optical or digital. Athletes must be within acceptable levels of hydration for body fat testing to proceed. An extensive re-testing and appeals process has been established to assist those athletes experiencing problems achieving adequate hydration.
- 2. **BODY FAT DETERMINATION**: At the start of the wrestling season, every wrestler will be weighed and will have his/her body fat determined using VHSL approved skinfold assessment techniques and procedures. The VHSL program requires that the official body fat analysis be completed no earlier than 1 week prior to and no later than two weeks following the first VHSL official practice date for athletes trying out for and participating in practice during the first two weeks of the acceptable winter wrestling season as determined by the VHSL. Urine specific gravity is analyzed to verify normal hydration status, and baseline weight is determined. After establishing baseline weight, skinfold measurements are completed and current body fat is determined.
- 3. **MINIMUM WRESTLING WEIGHT**: Utilizing the wrestler's baseline weight and the body fat determination, the LOWEST weight class at which the wrestler is able to compete is calculated.
- 4. **SCHEDULE OF WEIGHT LOSS:** The VHSL Weight Control Program allows athletes, who have body fat above the 7% for males and 12% for females, to lose a maximum of 1.5% of their body weight per week, calculated on a daily basis. Coaches and athletes are provided with a schedule indicating an acceptable weight class for competition each day. This schedule of weight loss is updated each time the wrestler participates in an official match weigh-in and the values are uploaded into TrackWrestling's OPC.
- 5. STRATEGIES TO REDUCE UNHEALTHY WEIGHT FLUCTUATION (BOUNCING): Coaches shall maintain a weight chart recording each athlete's weight prior to each practice throughout the season. Weight fluctuation greater than 3% should initiate the coach evaluating the athlete's eating habits and weight loss schedule.
- **6. NUTRITIONAL PROGRAM:** High School wrestlers are very active and require a healthy balanced diet that provides an adequate amount of energy for healthy growth and development, activities of daily living, and wrestling. Even wrestlers that have an opportunity to lose some fat in order to reach a desired weight class need calories to satisfy the above-mentioned needs.

MOST FREQUENT CONCERNS AND/OR QUESTIONS

The VHSL Medical Advisory Committee has been studying and developing this program since 1992, which was first developed for use in the Fairfax County Public Schools in the late 1980's. Several task force meetings with coaches, administrators, and medical professionals have been held to consider specific issues and concerns of the entire wrestling community. Attempts have been made to address them in a manner to reassure all involved, while maintaining the premise that any proposed changes or modifications did not appear to compromise the health and well being of the wrestlers. Below are some of the concerns and how they have been addressed.

What is the VHSL Wrestling Weight Control Program?

*A program to help regulate and support safe and healthy weight management among wrestlers.

Why is there a need for this program?

- *National and Virginia studies showed excessive weight loss and "bouncing" practices among a significant number of wrestlers prior to implementation of this program, recent data show a reduction in dangerous weight loss and bouncing after WCP implementation.
- *Studies show practices of drastic, rapid weight loss and bouncing to be harmful.
- *All professional organizations and governing bodies in medicine and wrestling recommend a weight control program for wrestling.
- *The National Federation of High Schools require each state to implement a weight control program for wrestling.

What harmful effects have been shown to result from excessive weight loss?

- *Decrease in academic performance
- *Decrease in athletic endurance and performance
- *Decrease in bodily functions, especially poor temperature control mechanisms and decreased growth.
- *Increased incidence and vulnerability to eating disorders or disordered eating.
- * DEATH

What are the goals of the program?

- *Improve and protect the health, safety, and well-being of wrestlers as they compete.
- *Enhance the enjoyment and competitive equity of wrestling while protecting the discipline and character building found in this wonderful sport.

What are the main components of the weight management program?

- *Education of all in the medical, wrestling, and educational communities.
- *Determination of the percent body fat in a normally hydrated wrestler by skin fold measurements, using approved skin fold calipers and the Lohman-Brozek (male) equation adapted for high school age wresters, conducted by a trained licensed healthcare professional that has completed the VHSL Certified Measurer's Program.
- *Calculation of the MINIMUM wrestling weight based on 7% body fat for males and 12% for females.
- *Monitoring weight loss based on a maximum of 1.5% of body weight loss per week calculated daily.

Of the methods available to determine body fat, why has the skin fold measurement been selected as the method of choice?

- *The gold standard for the most accurate determination of body fat is the underwater displacement of water, "hydrostatic weigh-in". This is very expensive and not readily accessible to most youngsters in this state.
- *Repeated studies across the country have shown that, for high school age wrestlers, skin fold measurements by educated, trained and practiced testers is very close in accuracy to underwater weighing. It is also the least expensive method.
- *Methods such as DEXA, near-infrared, air displacement, and electrical impedance have not been validated as accurate measurements in this age group.

Why is there a limitation on weight loss per week?

- *There are three kinds of weight loss.
- *Loss of muscle occurs when not enough calories are eaten. This "starvation" is not beneficial.
- *Loss of fluid occurs when not enough water or other fluid is consumed. This "dehydration" accounts for nearly all "rapid weight loss" and can be harmful.
- *Loss of fat can be beneficial down to the above mentioned body fat levels. This, however, can only occur at the rate of about 2 pounds per week based on the amount of calories the human body is able to produce from fat metabolism given the amount of oxygen available.

Who can make the official skin fold measurements?

* These must be performed by a degree holding allied licensed healthcare professional that is certified by the VHSL WCP training program. These individuals undergo training by the VHSL, must accept monitoring of, and re-credentialing on an annual basis to obtain and maintain certification as a VHSL Certified Measurer.

What does the VHSL provide in this program?

- *Organizational oversight
- *Education and training of certified measurers.
- *Annual updating and distributing current information on all components of the program.
- *Access to the online program that will automatically calculate body fat & minimum weight.
- *Organizational structure for testers, and appeals process.

What are the school's responsibilities?

- *Contact and/or contract with a VHSL Certified Measurer to perform tests on wrestlers.
- *Provide a certified, accurately functioning scale to determine weight. This should be the same scale used for wrestling official weigh-ins and be re-calibrated and/or re-conditioned prior to the official testing window each year.
 - *Provide space, administrative support, and wrestlers in a timely fashion to be measured.
 - *Provide calipers and refractometer if not provided by tester.
 - *Provide verification to VHSL on the specified date that all wrestlers on the MEL have been tested according to WCP protocol and all wrestlers are adhering to the weight loss program.
- *Provide weight information on matches and upload data from official match weigh-in's to TrackWrestling within the designated time period.
 - *Verify compliance of all athletes participating in wrestling with the WCP as required by VHSL rules.

What is the cost to the school?

- *A onetime cost of \$200 \$300 for a set of calipers if one is not already owned or provided by tester.
- * A onetime cost of \$150 \$300 for an optical or digital Usg refractometer if one is not already owned or provided by tester.
- *Those schools who do not already have an ATC on staff, or a school nurse who is a VHSL Certified Measurer, may contract with a sports medicine group or local physician who is a VHSL Certified Measurer qualified and pay a minimum of \$5.00 per wrestler to have their wrestlers tested.

When do these measurements need to be done?

*Within 1 week prior to the VHSL starting practice date and two weeks after the VHSL starting practice date – A three week period. Athlete's joining team late must be tested within one week of the athlete starting practice. Special consideration for fall athletes participating in state playoff contests have been implemented since 2005.

Why is a urine test done prior to taking the skin fold measurements?

*In other states where similar programs have been implemented, athletes learned that by dehydrating prior to skin fold measurements they could obtain a minimum weight lower than they should. By requiring the urine specific gravity to show reasonable hydration, this potentially harmful result can be minimized.

Why can a 180# wrestler only lose the same amount of weight as a 125# wrestler?

*Regardless of size, a human metabolizes approximately two pounds of fat per week. Any greater decrease in weight is either loss of muscle or loss of water (dehydration). The committee recognizes that a small amount of water loss would be less dangerous the bigger you are and instituted the percent loss per week instead of the finite weight loss in pounds. This does allow the higher weight wrestlers to lose slightly more weight than the lighter wrestlers.

How do we deal with the unique athlete who is naturally below the 7% minimum for males and 12% minimum for females?

*The committee instituted an appeals process that allows these wrestlers to receive a waiver from a physician who states that their present weight (less than 7% BF for male, 12% female) is the natural one for this athlete. There should be no weight loss prior to this weighing. S/he will be allowed to participate at no more than 2% below present weight as measured when fully hydrated. It is important to point out that this is the MINIMUM weight for a wrestler and not necessarily the BEST weight for him/her. The physician must validate that the wrestler did not lose any weight to reach that body fat of below 7%.

Will what you eat or drink affect the urine specific gravity test?

*Certain items such as caffeine, many supplements and chocolate tend to act as diuretics and could result in excess water loss. These athletes might well not test within the acceptable range of the specific gravity test. It is recommended that athletes minimize intake of these substances prior to testing.

Could an athlete be fully hydrated and still have an unacceptable specific gravity test.?

*The only consequence of not having an acceptable urine test is to defer skin fold measurements to another time or accept a weight adjustment based on test.

Where did the minimum body fat per cent of 7% for males and 12% for females come from?

*Experts in sports medicine observed this to be the range for most elite athletes performing well with ideal oxygen consumption and exercise efficiency. Negative physiological changes, especially noticed in females with lack of menstruation and decrease in bone density are reported below these levels.

How accurate are these skin fold measurements and could different testers get different results on body fat determination?

*Multiple studies show that skin fold measurement using the Lohman-Brozek equation is most accurate and cost effective to determine body fat composition in 14 to 18 year old males.

*By using only certified measurers who have been trained to perform the procedure exactly the same, the variation has been negligible.

If an athlete is only slightly above his preferred weight s/he will be forced to move up a weight class.

*Each wrestler's weight at estimated 7% body fat will be rounded down to the whole number to determine lowest weight class allowed.

*If a wrestler is close (within a pound) of the lower weight class, it is recommended they request an appeal test be performed the following day in an attempt to reach the lower weight class desired.

What if a coach or athlete absolutely feels the measurement is inaccurate?

*The measurement can be appealed following the appeals procedures. At the first appeal, a retest may be performed by the original certified measurer which must retest within 4 days of conducting the original test. The second appeal, a Regional Master Tester shall be brought in to re-measure. The 1st appeal must be completed if the Usg is within acceptable limits and that data must be uploaded (posted) into the online program. The 2nd appeal test must be completed within 4 days of conducting the 1st appeal test. The 2nd appeal test is completed when the hydration test is completed. If the athlete is not hydrated, the appeal has been exhausted and the athlete must adhere to the results of the 1st appeal. Any repeat measurement will be the official one whether it is more or less favorable for the wrestler. Coaches and wrestlers must understand the importance of having the athlete prepare properly for the first assessment and if needed, the first appeal which can be performed by the Certified Measurer. The 2nd appeal requires a Regional Master Tester to be available within 4 days of the 1st appeal assessment. Plan ahead to secure an RMT in the event one might be needed. If an RMT is not available within the allowable time, the 1st appeal assessment prevails.

EXCERPTS FROM VHSL 2016-2017 HANDBOOK

SECTION 88: WRESTLING.

- 88-1-1 Schedules-Each school shall make its own playing schedule and allow practice within the dates published on the current year's VHSL Activities Calendar.
- 88-1-2 Each member school shall be limited to participation in 12 interscholastic meets.
- 88-1-3 Each individual team member may compete in three other sanctioned meets and each competition shall count as one of the 12 contests as permitted in 54-8-1 of this Handbook for that individual, but shall not count for the team.
- PM 88-1-3 WRESTLING/Match Limitations (3-83)-Wrestling teams may participate in tournaments as long as they do not exceed 5 matches per day in a 2-day tournament.
- 88-2-1 Minimum Practice Requirement-There is no minimum practice requirement for wrestling.
- 88-3-1 Suspended/Interrupted Match-Matches which are suspended or interrupted prior to completion shall be resumed from the point of interruption unless schools agree to accept the results at the time of the interruption as final.
- 88-4-1 Special Rules/State Association Adoptions
- 88-4-2 Weight Classes-Weight classes shall be 106, 113, 120, 126, 132, 138, 145, 152, 160, 170, 182, 195, 220, 285.
- 88-4-3 Weight Requirements:
- (1) Wrestlers will follow all provisions of the VHSL Weight Control Program (WCP). All coaches are cautioned that rapid reduction and exaggerated fluctuations in weight can endanger the health of a wrestler.
- (2) All wrestlers will establish a minimum weight using the procedures established under the VHSL WCP. This minimum weight must be established in a time period beginning one week prior to the VHSL practice start date and ending two weeks after the VHSL practice start date for a total of a three week period. Wrestlers weighing in at the official weigh in at a weight lower than permitted based on the allowable weight loss per week including buffer will be ineligible for that date event. Wrestlers competing in a weight class lower than their proper weight class as established by the VHSL WCP shall be considered an unsportsmanlike violation, shall be ineligible participants subject to the prescribed penalty of match forfeiture(s) and school fine for use of an ineligible. There will be no appeals in cases of VHSL WCP violations.
- (3) All wrestlers will receive a one-pound growth allowance on December 24 when WCP testing is completed on or before December 8 with the exception of wrestlers participating in fall season playoffs as outlined in Section 88. All wrestlers will receive an additional one-pound growth allowance on January 24 when WCP testing is completed on or before January 8 for a two-pound total allowance.
- (4) A wrestler's minimum weight class will be determined by the initial measurements of the VHSL WCP. The minimum weight class is not impacted by any proposed growth allowance.
- (5) Wrestlers must have at least one official competition weigh-in at scratch weight for a weight class and participate that day at that event at that weight class or one weight class above to be eligible for conference tournament participation at the weight class they weighed in at.
- (6) A wrestler eligible for competition in a weight class who makes that weight as the result of the 2% buffer may be eligible to wrestle at that lower weight class that day.
- (7) Forms for reporting original wrestling weights and for necessary supplements to the original list are available upon request to all schools participating in wrestling. If a wrestler fails to make his/her weight, or fails to have his/her exact weight shown on the scales when wrestling one weight above his/her certified weight, he/she shall be reclassified and placed in the proper weight

classification. The wrestler's weight classification for regional or state competition shall be that classification in which he/she entered the conference tournament.

- (8) A wrestler may wrestle one weight class above his/her current weight at weigh-in for that particular competition. (a) If the wrestler desires to return to his/her certified weight after wrestling up a weight class, he/she may do so at any time during the season pending compliance with the allowable weight loss per week as indicated by the VHSL WCP. At no time may a wrestler compete in a weight class lower than his/her lowest allowable weight class as indicated by the VHSL WCP. (b) The coach must provide proof of actual weight for all weigh-ins for each entry in the conference tournament. VHSL weight form with required signatures will be used for verification. (c) The conference tournament director will be responsible for checking verification of each conference entry prior to the conference tournament.
- (9) Principal or designee shall verify each wrestler's compliance with the VHSL WCP through verification comparing MELs with WCP Coach Official Team Reports and match weight sheets one time during the season, during the second week of January. Only the W-3 VIRGINIA HIGH SCHOOL LEAGUE HANDBOOK ATHLETIC ACTIVITIES forms needs to be completed and forwarded to the VHSL office during the second week of January. WCP Coach-Official Team Reports and MELs are used only by the local principal for verification.
- (10) Athletes participating in fall sport playoffs occurring after Dec. 1 are provided the option of being tested in the VHSL WCP within 8 days of participation in the athlete's last playoff contest and still be eligible for the first allowable growth allowance pound and appeals process. The eligibility for the growth allowance pound will not impact the athlete's eligibility to reach a lower weight class based on current testing results. If the athlete who competes in fall sport playoffs is not tested with 8 days of their last participation in a playoff contest, they may be tested within one week of the athlete's first wrestling practice date, and are not eligible for the growth allowance pound if the test is completed after Dec. 8.
- (11) Coaches are required to complete the W-1 form for all dual meets providing allowable weight loss per week and verification the weight class entered is permitted based on the WCP Coach Official Team Report for each athlete. The date and actual weight of the most recent weigh-in is also required on the W-1 form which must be reviewed for accuracy and compliance and signed by the principal or their designee (not a coach) within 24 hours from the time of weigh-in. The host school is responsible to confirm accuracy and compliance of both team W-1 forms.
- (12) Coaches are required to provide WCP Coach Official Team Report and all W-1 forms (to date) to opposing coaches for review, if requested, within 24 hours of a match or tournament. Coaches are to report any problems to match/tournament official.
- (13) Athletes should weigh prior to each practice and record the weight on a weight chart providing a tracking system that can be reviewed daily by coaches to monitor and discourage unhealthy weight bouncing.
- (14) In tournaments or matches conducted in a non-dual, multiple school open format, schools may enter more than one wrestler from the same weight class into the event.
- PM 88-4-3 (1) WRESTLING/Weights Requirements (7-11)-VHSL member schools will use the National Wrestling Coaches Association (NWCA) on-line Weight Loss Calculator. Use of this program will require:
- (1) School administrators to load wrestling schedules in the NWCA program by Nov. 1 each year.
- (2) Event weights to be loaded within 24 hours of each weigh-in. In order to determine ineligibility prior to a match this process must occur at the time of the weigh-in.
- (3) School administrators to access a program switch, when permission is received by the League office, to allow 1 pound allowances for inclement weather.

- (4) School administrators to access a program switch to allow consecutive-day- match pound allowances as allowed by rule.
- (5) The WCP program allows for one pound of weight allowance to be removed from the system, when multiple pounds are granted for an event, at the time a wrestler's data is entered for that event.

PM 88-4-3 (2) WRESTLING/Weights Requirements (7-11)-Using the NWCA program weight loss and weight loss allowance will be determined on a daily basis.

88-4-4 Determining Regional and State Championships:

- (1) Procedures for regional tournaments will be set by the appropriate Regional Council. Conference tournaments and the required regional and state tournaments shall be held no later than the deadline date specified on the current year's VHSL Activities Calendar. Where conference and/or sectional tournaments are held, a wrestler must participate and qualify through these meets to be eligible to participate in the regional tournament. A school must enter a regional meet to be eligible to enter the state tournament. Regions shall designate wrestlers placing 5th and 6th. Team points shall be scored for these places. Entering a wrestler in the regional tournament requires the wrestler who subsequently qualifies for the state tournament to compete. In the event a qualified wrestler cannot compete, his/her place shall be taken by the next placing contestant. Known scratches shall be reported to the State Wrestling Tournament meet director no later than the Thursday coaches meeting before the State Tournament with the name and school of the qualified replacement. The contestants who qualify in each weight class from the regional tournaments, four from each region, for the state tournament shall be bracketed for competition as designated under Section 88-5- 2. In the event a region or school fails to have its qualified wrestler contest his/her assigned match, the match shall be automatically forfeited.
- (2) No additions to, or changes in, the official list of entries (other than scratches and another school's replacement for scratches) shall be permitted after the entry form has been received by the meet director; however, it is mandatory that known scratches be reported to the director no later than the Thursday coaches meeting before the meet. Attention to this item will facilitate meet organization and permit all weight classes to be completely contested. When a competitor enters and subsequently withdraws from competition, no substitute may replace him/her. 88-4-5 Pairings-State wrestling pairings are drawn from one of three possible bracket options. The League office shall randomly select one of the three available brackets. This is a random draw and the same bracket may be used successive years. The release of this selection will take place after the conclusion of the last Region tournament and will be made available to the League schools immediately thereafter. When two regions from a classification make up the state championship bracket, the lowest seed/place finisher from one region will be paired against the highest seed/place finisher from the other region (W4 vs. E1), the next lowest remaining seed/place finisher from one region will be paired against the next highest remaining seed/place finisher from the other region (W3 vs. E2) and so on until bracketing is completed. 88-4-6 Penalty for Unsportsmanlike Forfeiture-Any competitor in an advancing bracket of district or regional tournament who fails to compete without a medical reason or extenuating emergency circumstances will forfeit their placement in that tournament and subsequent advancement to the next level of competition.

88-5-1 Other Wrestling Related Policy Manual References

PM 88-5-1 (1) WRESTLING/Videotaping (1-82)-Wrestling teams may videotape regular season wrestling matches as permitted by the National Federation Wrestling Rules book.

IMPLEMENTATION

- 1. MINIMUM WEIGHT CLASS CERTIFICATION: The baseline weight and body fat measurements are performed during a three week period beginning one week prior to the first VHSL allowed practice day and two weeks after the VHSL imposed official first day of practice. For wrestlers coming out for the team late, for whatever reason, s/he must be tested within one week of starting practice or before s/he is allowed to compete in a match. The athlete must be tested with the data uploaded (posted) into the online program before participation will be allowed. The earlier the measurements are completed, the more time the wrestler will have to safely reach their desired weight within the guidelines of the program. These results will remain online through the Optimal Performance Calculator powered by TrackWrestling.
- **2. CERTIFIED MEASURERS**: Only VHSL Certified Measurers and Regional Master Testers may perform measurements and upload the data into TrackWrestling. Health professionals with degrees as listed below are eligible to become official certified measurers upon completion of a VHSL sponsored educational workshop. Periodic re-certification of these measurers will be required. Criteria to become a certified VHSL Measurer are as follows:
 - Have a medically related professional degree (MD, DO, DC, RN, LPN, NP, PT, RD, ATC, PA). Exceptions will be evaluated on a case-by-case basis where such qualified professionals are not available.
 - Have a current professional license/ certificate and be in good standing with your professional governing body
 - Have attended, at minimum, one of the VHSL Certified Measurer official workshops since 2016
 - Have attended a refresher workshop if your last one attended was prior to January 2016
 - Must follow protocols set forth by the VHSL Weight Control Program and maintain certification standards

- 3. INSTRUMENTS USED FOR MEASURING SKIN FOLDS: Lange calipers or Baseline calipers. Precision calipers using the Lohman-Brozek formula and certified measurers have been shown to have the highest level of accuracy, greatest intra-tester reliability, and are reasonably priced.
- **4. SCALE CERTIFICATION:** Scale certification is strongly recommended and must be completed prior to the first testing date (one week prior to the first day of VHSL winter season practice). Official scale certification may be forgone if there are no intentions to certify the scale that season for weigh-ins.
 - Scale used for testing should be the same scale used for official match weigh-ins.

5. MONITORING WEIGHT:

- The goal of this program is to allow for healthy gradual weight loss in those individuals who have body fat to lose and a desire to achieve a lower weight class. Such weight loss can be accomplished most successfully if there is monitoring of progress along the way.
- The program will formulate a weight loss schedule calculated daily indicating the allowable weight class a wrestler may compete in based on 1.5% of the baseline weight loss per week.
- The responsibility for monitoring this weight loss falls to coach, wrestler, and family. Each official match weigh-in will incorporate a new weight loss schedule based on the latest actual (non-buffered) weight. This may cause a change in target dates.
- Understanding that body weight fluctuates daily depending on the time of day and time since the last meal, etc, it is recommended that this target weight be a steady progression of weight loss reflective of fat loss, not fluctuations in hydration. The monitoring of weight required by the VHSL WCP should be taken within the hour prior to the start of wrestling practice daily to maintain a consistent comparison from day to day. Weights taken at the end of practice will represent loss of water weight which may be an unhealthy representation of a wrestler's weight loss schedule.
- Daily monitoring of a weight fluctuation of greater than 3 % should be scrutinized by the coach and may lead to a recalculation of the weight loss schedule.

- The Weight Loss Plan (WLP) will have two defining sets of numbers for each athlete:
 - The lowest weight class allowed (Minimum Weight Class)- No wrestler is eligible to wrestle in a lower weight class, at any time.
 - The weight class eligibility on a given date Based on 1.5% weight loss per week calculated daily allowed by this plan, the weight class permitted for a given date is provided on the WLP.
- In accordance with present VHSL rules, no wrestler may compete more than one weight class above what their weight would allow. (i.e. A wrestler weighing in at 111 could wrestle 113 or 120, but not 125)

When the coach creates the match W-1 form, the program will validate the appropriate weight class has been chosen for each individual wrestler.

6. DAILY WEIGHT MONITORING:

• It is required that all wrestlers weigh in and record their weight before each practice. Weight charts shall be completed and retained for the season and be available for review by the VHSL upon request. The daily weight monitoring during a given week of practice should be within a 3% gain of the athlete's weight from one day to the next and over a period of a few days. If a wrestler does gain more than 3% of his/her body weight, the coach should take the proper steps to council the athlete. For example, if a wrestler has gained 4 -5% his/her body weight, the coach and/or medical professional, such as a licensed athletic trainer or school nurse, should have a discussion with the athlete regarding proper diet and eating habits that will help him/her to avoid "bouncing"** in the future. If the athlete has gained more than 5% of his/her body weight the coach should not only discuss proper diet and eating habits, but also consider not allowing the athlete to compete in that week's matches and adjust the weight loss schedule based upon the athlete's current weight.

** "Bouncing" is the act of a wrestler gaining weight by binge eating, usually after a meet, then losing the weight through unsafe techniques such as restriction of food and fluids to get back down to the weight before eating. The practice of eating large amounts of food followed by starving is unhealthy disordered eating. These extra calories taken in can impact the overall weight loss schedule and cause the wrestlers targeted date to reach a certain weight class to change from the Coach Official Team Report. The goal of the weight control program is to allow the wrestler to follow a normal, healthy diet and lose wanted weight (fat weight) through increased exercise that is normal in a wresting practice. A normal, healthy diet is one that is consistent and includes an appropriate balance of nutrients.

7. MATCH REQUIREMENTS:

- VHSL W-1 form <u>must be offered</u> to the opposing coach(es) at each match and weigh-in for reference and validation of a wrestlers allowable competitive weight.
- The coach and weigh-in administrator should verify the athlete's ability to wrestle at a given weight based on the completion of the W-1 Form.
- Actual weight recorded at the official weigh-in must be uploaded into TrackWrestling within 24 hours of the weigh-in.

• If the appropriateness of a wrestler's weight class is challenged, the match administrator will determine eligibility to wrestle at that weight based on W-1 Form and application of the buffer.

8. RULING ON ELIGIBILITY:

At a match: Administrator weighing in for a match is responsible and has the authority to declare the wrestler ineligible for participation based on above considerations.

- Completion of the W-1 form and uploading to TrackWrestling of the actual weigh-in weight for each athlete will provide the opportunity to verify the eligibility of all wrestlers.
- No MD, parent, coach, ATC, Certified Measurer, or administrator can overrule the W-1 Form results to allow participation below the wrestler's overall Minimum Weight Class Allowed
- If a wrestler is progressing to an allowable lower weight class, the buffer, growth pound allocation, or consecutive day weight allowance may allow the wrestler to complete at a lower weight class.
- A parent, MD, coach or other qualified person always has the option to choose a higher weight class than the program gives as the "MINIMUM".

WRESTLERS NATURALLY BELOW 7% BODYFAT

Occasionally, a wrestler's baseline and natural body fat is below 7%. This is the athlete's body fat prior to dieting or attempts to lose any weight or body fat, and measured while the athlete is in a normally hydrated state. In this situation, the athlete's physician must complete a verification form to document that the student athlete's medical record supports that the existing body fat is the athlete's natural and normal body fat. A physician may not otherwise overrule the parameters of this program by rendering an opinion that a student athlete may wrestle at a lower weight than provided for in this program. Although this wrestler would not be allowed to lose weight, s/he would be allowed to participate at a weight class no more than 2% below the baseline weight (allowing for safe hydration variation). For example, if a wrestler is 6% body fat and weighs 123 pounds in a normally hydrated state (Usg of 1.010 - 1.020), he would be allowed to weigh-in 2% below that ($123 \times 2\% = 123 - 2.44$ or 120.56lbs.). Because the VHSL allows the wrestler to round down, he would be permitted to wrestle in the 120-weight class.

APPEALS PROCESS

In an effort to provide the athlete an opportunity to wrestle at their desired weight class, an appeals process has been established. Beginning 2016-17 season, all appeals must be completed within 4 calendar days of the posting of the test. The posting of the test results should be completed within hours of the testing process, and no later than 18 hours following

If an athlete does not agree with the results of his/her minimum weight class determination:

- 1. First appeal is to the original certified measurer who can redo the entire assessment, or to another certified measurer if the original one is not available in a timely manner. This appeal test must be completed within 4 days of the date of the original test data was completed.
- 2. Second appeal is to a Regional Master Tester (RMT). The school is responsible for paying the mileage costs (at \$.50/mile) and a fee of \$10/wrestler or more to the tester for this appeal, as it requires a trip by the Regional Master Tester into the region. The Second Appeal must be completed within 4 days of the 1st appeal assessment.

The cost of any tests fall to the wrestler or the school

In all scenarios, the appealed results will be prevailing even if it is less desirable to the wrestler.

TIMING OF APPEALS

- Appeal must be completed within 4 days of the date the first assessment is completed.
- The initial testing and the first appeal must be completed during the three week designated window for testing for any athlete that has practiced during the first week of practice. Therefore, the coach should attempt to have the testing done as early in three-week window as feasible.
- Wrestlers coming out for the team late, for any reason other than participation in a fall sport post season state playoff event*, must be tested within one week of starting practice and before they are allowed to compete in a match. Any appeals must be requested and initiated so the retest can be completed within 4 days of the completion of the previous assessment. The athlete's weight control data must be uploaded into TrackWrestling within 18 hours, and before participation in VHSL competition will be allowed. If the athlete's final test is after December 8th, they are not eligible for the 1st growth allowance

- pound given on December 24th. If the athlete's final test is after January 8th, they are not eligible for the 1st OR 2nd growth allowances given on December 24th or January 24th.
- Transfer students from within Virginia and have been tested by the WCP, contact the VHSL for the test data to be transferred from the previous school to the new school in TrackWrestling.
- Out-of-State transfer students must be tested using the VHSL WCP regardless if they have been tested in their previous state's weight control program. The Out-of-State transfers are eligible for all growth pounds regardless of the date of testing in Virginia.

^{*} Athletes participating in a fall post season playoff event on or after December 8th must be tested within 8 days of the last contest date, and are eligible for the growth allowance pound given on January 1st.

REPEATED FAILURE TO ACHIEVE URINE SPECIFIC GRAVITY (Usg) OF 1.025 OR LESS

- Wrestlers with Usg > 1.025 cannot be measured and must return no sooner than 1 day later for retest.
- If a wrestler has not successfully been tested in the three week window because of failure to come in with Usg of 1.025 or below, the following procedure comes into play:
 - S/he must be tested by a Regional Master Tester, including Usg, weight and skinfold measurements, within 4 days of the end of the three-week testing window.
 - o The athlete is not eligible for an appeal.
 - o If s/he again falls above the 1.025 Usg, the athlete will be referred to a physician.
 - o S/he must then see a physician within one week of the last evaluation by the Regional Master Tester.
 - S/he must present a note from physician indicating the individual has no abnormality that would make it unsafe for him/her to wrestle and no discernable kidney or hydration disorder. This physician may not over-rule the parameters of the program.
 - Contact the VHSL with the information for a ruling to be made specific to the circumstances of that wrestler.

DEFINITIONS

CERTIFIED MEASURERS

Professionals holding a medically related degree (MD, DO, DC, RN, LPN, NP, PT, RD, ATC, PA) who have a current professional license/ certificate and are in good standing with their professional governing body. They must attend, at minimum, one of the VHSL Certified Measurer official workshops and complete all required documentation with the VHSL. Certified Measurers MUST complete an update annually to maintain their Certified Measurer status.

REGIONAL MASTER TESTERS

• Certified Measurers who have had a minimum of one-year experience and have completed the Regional Master Testers workshop sponsored by the VHSL.

MINIMUM WRESTLING WEIGHT

• When the wrestler is measured, their Minimum Wrestling Weight (MWW) is determined based on weight at HIS 7% body fat or HER 12% body fat. This represents the lowest weight at which a wrestler may compete.

MINIMUM WEIGHT CLASS CERTIFICATION

• The lowest weight class at which a wrestler can compete. This can occur whenever the wrestler has made weight at their desired and approved weight class. The wrestler must weigh in a "scratch weight" at one official match weighin to be eligible for post season participation. The Minimal Weight Class is not always the Optimal Weight Class for an individual. An athlete must weigh in and wrestle one match prior to post season competition at a weight class to qualify for post season competition at that weight class in addition to qualifying for that weight class based on the results of assessment.

TARGET WEIGHT or scratch weight

• The approved weight a wrestler has chosen as the goal weight for a specific date or competition.

TARGET WEIGHT CLASS

• The approved weight class a wrestler has chosen as the weight class they will compete at, which is shown on team W-1 and WLP.

WEIGHT LOSS ALLOWANCE

Based on extensive literature originating with nutritionists, the maximum amount of fat that can be burned in a week is considered to be approximately two pounds. The VHSL WCP will be consistent with recommendations from the National Federation of High Schools and will allow a maximum of 1.5% body weight loss per week. This does provide for somewhat larger weight loss by heavier wrestlers. For example, if a wrestler's minimum wrestling weight is 189# and on December 1st he weighs 200#, he could not wrestle at his desired weight (target weight or scratch weight) weight for 4 weeks. This example emphasizes the importance of weighing in and making this determination as early as possible. The schedule of 1.5% of bodyweight loss per week should be used as a guide for individual wrestlers and their coaches to assure the athlete is maintaining an adequate diet to support the steady loss of fat in order for the athlete to achieve his/her weight class goals. The program will provide the appropriate weight classes the athlete is permitted to compete in as they proceed with their weight loss to the target weight class using daily calculations based on the last recorded actual weight for the most recent official match weigh-in. It is important for athletes, coaches and parents to monitor weight loss daily, and monitoring of this weight is intended to represent actual body weight at a normally hydrated state, therefore should be taken prior to activity or practice at a consistent time each day. It is required for coaches to monitor weights within one hour prior to practice daily and maintain a log.

GROWTH ALLOWANCE

- Clarification of growth allowance: Over a four-month wrestling season, adolescents will grow. The Growth Allowance is provided to reflect this natural growth. In no way should this normal growth be suppressed. The VHSL will offer 2 pounds in growth allowance total, with 1 pound given on two different dates.
- All wrestlers will receive a one-pound growth allowance on December 24th when WCP testing is completed on or before Dec. 8th and an additional one-pound on January 24th when WCP testing is completed on or before January 8th for a two-pound total allowance, with the exception of wrestlers participating in fall season playoffs as outlined in 88-4-1 (3), and Out-of-State transfers.
- The growth allowance <u>cannot be used to allow a wrestler to reach a lower</u> <u>weight class than permitted without a growth allowance</u>. The original weight class weight must be greater than or equal to the athlete's minimum 7% body fat weight permitted.

HYDRATION HANDOUTS

• To be provided by the CM to the athletes prior to testing day. These handouts include tips to achieve normal hydration status for Usg assessment and to present at time of testing in the best condition for the test. Provide them with the 'Hydration Tip Sheet' handout.

DATA ENTRY CARD

• Data-card to be utilized by the CM to record data from the weight control program testing (Usg, weight, caliper measurements), which will then be entered into TrackWrestling though the online portal. A master of this card is available on the VHSL WCP website and it is recommended that the cards be maintained throughout the current season in a safe location.

WEIGHT LOSS PLAN (WLP)

• The report generated by TrackWrestling using the weight control program testing data and is re-defined following each official weigh-in for each wrestler. This report is to be reviewed by the coach. This report will be accessible 24/7 online by coaches and athletic administrators.

PHYSICIAN CERTIFICATION OF NATURAL WEIGHT

This form must be completed by the wrestler's family physician if the athlete's body
composition and weight assessment is found to be NATURALLY below 7% body fat
for males and 12% body fat for females. It should be returned to the CM upon
completion. The Certified Measurer then shall make the appropriate adjustment in
the athlete's record in TrackWrestling. This form is available on the VHSL WCP
Website.

W-1 FORM

• The W-1 form is created online within the TrackWrestling program by the coach prior to each match. The actual weight at the official match weigh-in must be uploaded into TrackWrestling within 24 hours. All uploads must be completed prior to the creation of another W-1 form.

DAILY WEIGHT CHARTS

• Charts to be utilized by the coaches and wrestlers on a daily basis to record and monitor each wrestler's weight at weigh in before practice. They must be completed and retained for the season and be available for review by the VHSL upon request.

MATERIALS AVAILABLE

1. WEIGHT CONTROL PROGRAM MANUAL: Available online

2. BODY FAT MEASUREMENT:

- a. Data collection worksheet to record skin fold measurements
- b. Lohman Equation to calculate Body Density
- c. Brozek Equation to calculate weight at 7% (or 12% females) Body Fat
- d. Access to online TrackWrestling program to record information
- e. Slaughter/Lohman/Boileau* equations for body fat on females

PURCHASE OF NEEDED EQUIPMENT:

VHSL provides information on the following items, indicate you are ordering for the VHSL program:

CALIPERS:

Lange Caliper Approx: \$199 Collins Sports Medicine 800 886-2825

REFRACTOMETER:

Economy model: Mannix Refractometer (Resolution .002) (REF312ATC) Approx: \$99

Collins Sports Medicine 800 886-2825

Preferred model: Atago (Uricon 2722) (Resolution .001) Approx: \$199

NSG Precision Cells, Inc. 631-249-7474

Deluxe model: MISCO Digital accurate, easy to use, quick. Bid price of \$499

Contact Kathy at MISCO products 800 358-1100

Deluxe model: Atago PAL-10S Cat. No. 4410 Call Noah Radford at 425-637-2107

Lange or Baseline Calipers – Approx cost: \$99-250. Available through most athletic training medical supply vendors. Lange calipers are the premium quality, Baseline are acceptable.

Collins Sports Medicine 800 886-2825 http://www.collinssurgical.com/

Seneca Medical (614) 4868645 Micro Bio-Medics 1 800 431-2743 Medco 800 556-3326 #88280

School Health 800 323-1305

Urine Refractometer – Approx cost \$99 - \$630. Advantages are only a drops of urine needed and one time cost. Models available range from economy (resolution at .002) to Digital. The recommended model is the Atago (aka: Uricon 2722) with a resolution of .001 for \$199 through NSG Precision Cells Inc.

NFHS WAIVER FOR STATES WITH WEIGHT MANAGEMENT PROGRAM:

The NFHS wrestling rules committee has granted a waiver on the 50% rule for matches at a given level to those states who have weight management programs with the following three components:

- 1. Determination of minimum wrestling weight based on 7% for males and 12% for females.
- 2. Maximum weight loss per week of 1.5%
- 3. Utilization of urine specific gravity in making minimum weight measurements. This means we will be in compliance with the NFHS as they are encouraging states to adopt

This means we will be in compliance with the NFHS as they are encouraging states to adopt these components of weight management.

NFHS MAKES RULE CHANGE REGARDING WEIGHT CONTROL

The revised rule includes a hydration level not to exceed 1.025, a body fat assessment no lower than 7 percent (males)/12 percent (females) and a monitored, weekly weight loss plan not to exceed 1.5 percent a week is to be implemented in each member state beginning 2006-07. More regarding rule changes can be viewed on the NFHS Press Release.

CERTIFIED MEASURERS PROCEDURES

The Virginia High School League's Wrestling Weight Control Program is designed to encourage student athletes to maintain a healthy, safe body weight, and to compete on a fair playing field.

Due to the nature of, and the criteria for participation in wrestling, all students participating in wrestling must participate in this weight control program.

The VHSL Wrestling Weight Control Program

The VHSL Wrestling Weight Control Program will include the evaluation of the athletes' body fat and the determination of a safe minimum weight based on the loss of body fat to a level of 7% for males, 12% for females. A VHSL Certified Measurer, after completing a VHSL training session on the measuring criteria, will evaluate body fat and hydration status following the procedures below.

Procedures:

- 1. Communicate with coaches and determine a method of communicating with athletes for briefing, scheduling of tests, and alternatives for retesting procedures.
- 2. Print off and provide hydration handouts-for each athlete.
- 3. Print off and make copies of the data collection card.
- 4. A Usg of greater than 1.025 will require the athlete to return no less than 1 day later to repeat baseline weight and hydration measuring and continue with skinfold testing if hydration is within acceptable limits. If Usg is greater than 1.025, no further assessments of skinfolds or weight should be conducted at that time.
- 5. Record actual weight
- 6. Record date
- 7. Conduct body fat analysis using skinfold measurements per the VHSL Certified Measurer guidelines. Import the data into the spreadsheet which uses the Lowman-Brozak equation (males) by VHSL certified measurers. (Slaughter, Lohman, Boileau equation for females)
- 8. A minimum body weight based on 7% (12% females) will be determined using spreadsheet provided.
- 9. Minimal weight class certification will be determined automatically through TrackWrestling program and will be identified on the WLP and Alpha Master
- 10. A schedule of weight loss consisting of 1.5% of baseline body weight is permitted, calculated on a daily basis.
- 11. Athletes initially measuring less than 7% body fat with hydration level within normal hydration limits may participate at a weight determined by the TrackWrestling program. No further weight loss will be permitted. Athletes initially measuring less than 7% body fat must have physician's form completed.
- 12. An athlete has the right to appeal following the appeals process outlined in this document. In any appeal, the latest measurement will remain official, regardless if it is more or less than the original.
- 13. Documentation of the baseline weight and percent body fat will be provided through the online TrackWrestling program.

14. Re-test resulting from appeals must be uploaded into TrackWrestling within 18 hours. Failure of the certified measurer to upload data into TrackWrestling may result in the certified measurer status to be revoked.

Official body composition analysis shall be assessed within a three-week period between one week prior to the official VHSL opening day of wrestling season, and two weeks after the first day of wrestling practice.

The earlier the athlete is evaluated, the more time the athlete will have to lose the weight necessary to reach their minimum weight. **During baseline measurements, the athlete should report to the testing area normally hydrated, at resting pulse, normal core body temperature, with minimal mass in stomach and bowels.**

Conducting measurements <u>prior to</u> one week before the 1st day of practice may be used as a "benchmark" to allow wrestlers, coaches and parents some information regarding potential for making a weight during wrestling season. Caution should be taken in this practice due to the growth the student-athlete may incur between the test and wrestling season. Growth of one-half inch in height can account for a 5 to 10 pound gain in mass. Be certain the coach, athlete and parents are aware that an athlete tested several weeks prior to the VHSL WCP testing window may grow and no longer be eligible for a lower weight class that has been previously acceptable.

RE-CERTIFICATION PROCEDURES FOR CERTIFIED MEASURERS

Certified Measurer's must maintain their certification status through VHSL by completing a web-based tutorial <u>OR</u> attend a workshop prior to the start of each wrestling season. VHSL SMAC will determine when and if mandatory attendance at a VHSL WCP workshop will be required by all Certified Measurer's.

Option 1:

VHSL WCP WORKSHOP

You may also attend a scheduled workshop during the fall of each year where all new components of the program will be presented and discussed. There is no charge for the workshops and a schedule can be found at the VHSL website (www.vhsl.org).

Attendance at a workshop will also provide you an opportunity to refresh your skills and ask questions of issues you may have faced in previous seasons.

Option 2:

WEB-BASED TUTORIAL available to veteran certified measurers if it is NOT a mandatory face-to-face workshop year as designated by the VHSL SMAC.

A web-based tutorial is available for completion by logging on to the VHSL website and following the links to Sports Medicine or Wrestling Weight Control Program.

Review the content and complete the questions at the end of the tutorial.

The tutorial can be completed at anytime, please allow time for your record to be updated into TrackWrestling following the online tutorial before needing to complete assessments.

SPECIFIC ASSESSMENT PROCEDURES

I. DETERMINATION OF STATE OF HYDRATION:

If one measures skin folds to determine percent body fat when the athlete is somewhat dehydrated, it will affect the calculation of the minimum wrestling weight. Urine specific gravity (Usg) is a reasonable method of determining an individual's state of hydration. Therefore, the official measurements for determining minimum wrestling weight cannot be obtained if the urine specific gravity is not within normal limits.

A. EQUIPMENT:

- ✓ Paper or plastic cups to collect urine
- ✓ Gloves
- ✓ VHSL data sheets to record information
- ✓ Pipets or suitable alternative such as coffee stirrers
- ✓ Method of measuring specific gravity.
 - ✓ Refractometer



B. PROCEDURE:

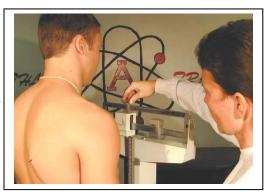
- ✓ Athlete takes cup, enters bathroom (in private) to minimize opportunities to exchange or mix urine samples
- ✓ Athlete brings urine to tester for testing, athlete should retain possession of the cup and dispose of contents and cup by appropriate means upon completion of the test
- ✓ Gloves should be used by tester following universal precautions of avoiding contact with bodily fluids of others
- ✓ Follow directions on the particular brand of refractometer you are using.
- ✓ Record the specific gravity on the recording form

II. BODY WEIGHT

A. EQUIPMENT

- ✓ Calibrated scale
- ✓ VHSL data sheets to record information

NOTE: Digital Wrestling Scale is now required



III. SKIN FOLD MEASUREMENTS

A. EQUIPMENT

- ✓ VHSL data sheets to record information
- ✓ Lange or Baseline calipers
- ✓ Tape measure
- ✓ Felt tip pen

B. PROCEDURE:

- 1. Determine and mark sites for skin fold measurement
- 2. Intersecting marks indicate caliper placement
- 3. Finger placement "pinch" should be 1 cm ABOVE caliper placement
- 4. Only the skin and subcutaneous tissue should be between the finger and thumb and no muscle mass should be included
- 5. Calipers should be applied at the intersecting marks perpendicular to the long axis of the skin folds
- 6. Calipers should be applied midway between the body skin surface and the bulbous crest of the skin fold
- 7. Calipers should be allowed to equilibrate for 2 4 seconds before recording measurement
- 8. Record measurement on data sheet to the nearest 0.5 mm
- 9. Three sets of measurements at each site should be taken. Rotate measurements from one site to the next (triceps subscapular abdominal triceps ...),
- 10. Skin should be dry to facilitate accurate measurement of skin folds
- 11. Avoid taking measurements immediately after a workout or then the athlete is overheated as this will create fluid shifts to the skin which will give falsely elevated readings
- 12. Look directly at caliper to avoid parallax resulting in an inaccurate reading
- 13. Arms should be relaxed and hanging down in the normal standing position with weight evenly distributed.
- 14. ALL MEASUREMENTS SHOULD BE TAKEN ON THE ATHLETE'S RIGHT SIDE

TRICEPS (Males and Females)

- ✓ Arm is relaxed by the side, palm facing up
- ✓ Flex elbow to 90 degrees
- ✓ Determine the midpoint between the acromium process of the shoulder and the olecranon of the elbow for a horizontal mark.
- ✓ Make a vertical mark to intersect the horizontal line over the triceps muscle in the midline of the posterior arm.
- ✓ The arm should be straightened and relaxed for actual caliper measurements
- ✓ A measurement of a vertical fold of the skin should be taken





SUBSCAPULAR (Males and Females)

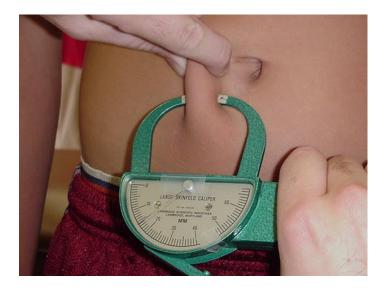
- ✓ Locate the inferior angle, lowest point of the scapula
- ✓ If this is not palpable with the arms at the side, ask the athlete to place their arm behind the back to palpate the inferior angle
- ✓ Place a mark on the tip of the inferior angle when the arm is relaxed at the
- ✓ Measure 1 centimeter directly down from the mark on the tip of the inferior angle of the scapula, place a second mark.
- ✓ Mark a diagonal line below the scapula that is an extension of the natural hollowing of the skin. This should be on an angle on an axis from the left shoulder to the right hip which is approximately 45 degrees
 ✓ Draw a line from the 2nd mark 1 cm below the tip of the inferior angle of the
- scapula perpendicular to and intersecting the diagonal line
- A measurement of an oblique fold of the skin should be taken with the arm relaxed at the side





ABDOMINAL (Males only)

- ✓ A vertical line should be marked 3 centimeters to the right of the midpoint of the umbilicus
- ✓ A horizontal line should be drawn to intersect the vertical line 1 centimeter below the midpoint of the umbilicus
- ✓ The athlete should be standing relaxed on both feet
- ✓ The athlete should relax the abdominal muscles
- ✓ A measurement of a vertical fold should be taken





IV ADMINISTRATIVE DUTIES

✓ Input first and last name, date, actual weight, Usg, weight-class, and skinfold measurements into TrackWrestling.



- ✓ Provide re-testing to those athletes requesting an appeal.
- ✓ Request VHSL Regional Master Tester to provide testing on athletes requesting 2nd level appeals



FORMULAS FOR CALCULATING MINIMUM WRESTLING WEIGHT USING SKINFOLD (SF) MEASUREMENTS

MALES ONLY

LOHMAN EQUATION FOR CALCULATING BODY DENSITY (BD)

SUM SF = TRICEPS SF + SUBSCAPULAR SF + ABDOMINAL SF

 $BD = [1.0973 - (SUM SF X .000815)] + [(SUM SF)^{2} X .00000084]$

BROZEK EQUATION FOR CALCULATING PERCENT BODY FAT (BF)

% BF = $(4.57/BD - 4.142) \times 100$

CALCULATING WEIGHT AT 7% BF

WEIGHT AT 7% BF = [1 - (%BF/100)] X CURRENT WEIGHT / .93

TO CALCULATE MINIMUM WRESTLING WEIGHT WITH 2% HYDRATION VARIANCE

MINIMUM SCRATCH WEIGHT ALLOWED = 7% WEIGHT X .98

FEMALES ONLY

SLAUGHTER, LOHMAN, BOILEAU, EQUATION FOR CALCULATING % OF BODY FAT (BF) (Sum SF<35)

Triceps SF _____ Subscapula SF ____ = Sum SF____ [(Sum SF) x 1.33] - [(Sum SF)² x 0.013] - 2.50 = % Body Fat ____ SLAUGHTER EQUATION Sum SF>=35mm: (0.546 x Sum SF) + 9.7

CALCULATING MINIMUM WEIGHT AT 12% BF

Minimum Weight at 12% = $[(1 - \%BF/100) \times weight] / 0.88 =$ ______

TrackWrestling Data Input Instructions

After completing and assessment you have 18 hours to enter data into the trackwrestling web site. The step to complete this task are as follows:

- 1. Go to www.trackwrestling.com
- 2. Click on OPC box in the upper right hand corner of the web page.
- 3. Select the "Season" (2016-17 High School Boys) by clicking on "Login" on that row
- **4.** Enter your user name (CM####) and your password (was given to you at the workshop) click on the arrow or press enter.
- **5.** The first time you log in you will be asked to verify your information. **DO NOT CHANGE YOUR USERNAME OR PASSWORD.**
- **6.** After the first time you log in, click skip on the "Verify your email" window.
- 7. You should be on the "Teams" tab. If not Click on Teams on the gray bar.
- **8.** Click on the team you are entering an assessments for.
- 9. Click on the "Add Transaction" box in the top center of the page
- **10.** Use the drop down and enter your name next to the assessor and make sure it reads Live in the transaction mode. Click ADD
- 11. You should now be in the "Assessments" tab, click "Add Assessment" box
- **12.** A Weight Certification window will open.
 - **a.** If your coach has entered the roster, in the drop down next the "wrestler" enter the wrestler you are adding an assessment for.
 - **b.** If you coach has not entered the roster or you are entering the data for a wrestler who is not on the roster, click the box that reads "New"
 - i. The next box that opens you can add a new individual wrestler, or import a previous season's roster
 - To add an individual new wrestler click the box that reads "New" next to wrestler
 - 2. In the next window, next to the row that reads "First Name", enter the wrestler's first name.
 - 3. Next to the row that reads "Last Name", enter the wrestler's last name
 - 4. Next to the row that reads "Gender", drop down the wrestler's gender
 - 5. Next to the row that reads "Grade", drop down what grade the wrestler is in then click "Next". Then go to step 13
 - **ii.** To import the previous season's roster, click on the bolded in yellow, and underlined, "New"
 - Next to the season drop down the previous season from which you
 would like to import a roster and drop down the team name and click
 next
 - 2. You can select and deselect the wrestlers from that roster you wish to import and then click "Next"
 - **3.** You will be back to the Weight Certification window to select a wrestler you are assessing.
- 13. In the drop down make sure you have selected the wrestler you are adding an assessment for
- **14.** Enter the date in which you did the assessment

- **15.** Enter the wrestler's specific gravity (USG) (must be no lower than 1.001 and no higher than 1.025), then click "Next"
 - **a.** If the USG is higher than 1.025 a window will open telling you "Wrestler's Name did not pass hydration and will not be able continue with this assessment. Yare are required to document failed hydrations by clicking 'Confirm' or 'Next Wrestler' to continue. If this is your last wrestler click "Confirm".
 - b. If you are adding another wrestler click "Next Wrestler", and go to step 16
 - i. If you clicked "Confirm"
- **16.** Use the drop down and enter the wrester you are adding an assessment for
- 17. Enter the date in which you did the assessment
- 18. Enter the wrestler's USG and click "Next"
- 19. Enter the wrestler's actual weight taken during the assessment
- 20. Enter the 9 skin fold assessment measurements in the appropriate boxes
- **21.** Add a comment if appropriate.
- 22. Confirm you entered the data correctly and click "Next"
- 23. A window will open and give you a preview of the calculations if it looks appropriate, make you next selection. If this is your last wrestler, click "Finish", if you have more wrestlers click "Next Wrestler" and return to step16.
- 24. If you clicked "Finish" you will need to "Commit" the transaction by clicking on "Commit"
- **25.** A window will open and ask you to confirm you will to commit the transaction, thus type Commit to continue, and click OK
- **26.** The assessments that were committed with show up on the Assessments tab with a green check mark next to the wrestler's name. If assessment was not committed you will see a red 'X' next to the wrestlers name.
- **27.** Once you are finished click on the Alpha Master tab and review the data with the coach and determine who needs to Appeal.
- **28.** To enter an appeal follow the same steps from the beginning and the window in which you add the assessment data in will inform you the assessment is an appeal.

WEIGHT LOSS SCHEDULE VIOLATIONS

Procedures to follow to determine an athlete's eligibility to compete if weight loss from previous week (or weeks) exceeds the recommended 1.5% body weight loss per week value. There must be an official weight sheet from a competition for this rule to apply.

BUFFER

If an athlete weighs in at a competition at a weight that exceeds the amount of weight loss per week allowed from a previous weight recorded at an official weigh-in, the following "BUFFER" has been established to offer some flexibility for minor infractions without penalizing the athlete. A "BUFFER" was created that allows a wrestler to present at weigh-in up to 2% less than their initial eligible weight as designated on the WLP and W-1 form pounds buffer for that match. Therefore, a wrestler who is permitted to weigh as low as 123.9 for the 126 lb weight class in the process of descending down to the 120 lb weight class in the future may actually weigh in as low as 121.4 and be eligible to compete. In addition, if the athlete were to weigh-in up to .5 lbs less than 121.4, they are permitted to step off the scale, drink at 8 ounces of water or more and then step back on the scale and be eligible to compete. If they athlete were to weigh-in less than 120.9, they would be ineligible to compete in that match and the next scheduled match.

STRATEGIES TO PREVENT FALSIFIED URINE TESTS

Athletes who present with a urine sample that has been altered in any way will be subject to a one-year suspension of VHSL participation.

- Athletes being tested should be in the "Suitable Undergarment", wear lightweight shorts, no shirts (males) and no shoes.
- Bathroom facilities should be arranged such that a sink is not accessible and no containers of urine can be hidden for future use.
- Only one athlete in the collection area at one time.
- Set up should not require athletes to pass each other during the collection process.
- Place food coloring in the toilet (blue or green), refrain from flushing between samples.
- Check for athlete's carrying any container.
- Usg test should be completed first, with weight immediately after, or during, but it is only recorded if the USG is within acceptable limits (1.001 1.025)

When in question, request a repeat sample

VHSL WEIGHT CONTROL PROGRAM REQUIRED FORMS

VHSL WRESTLING WEIGHT CONTROL PROGRAM Hydration Tip Sheet

Wrestlers:

The following are tips that will help wrestlers report to body fat testing properly hydrated. Please do not take nutritional supplements for one week prior to testing date (unless under specific direction from physician).

Two days prior to test day:

- Drink plenty of fluids throughout the day, (Water has no calories). Athletes should be drinking at least 8-10 glasses of water during the day
- Increase intake of foods high in fiber- this will help with removal of excess GI content from body. (salad, cereal with skim milk, vegetables, fruits, etc are examples of foods high in fiber)
- Eat smaller, more frequent meals
- AVOID foods high in fat (fried foods, meat, french fries, pizza, nuts, salad dressings, etc.)
- AVOID salty foods (potato chips, pretzels, pizza, tuna, crackers, soft drinks, sports drinks)
- Be sure that you eat and drink. Do not dehydrate! Do not starve!

One day before test:

- Continue drinking fluids, you should be urinating on a frequent basis. Urine should be clear if you are fully hydrated
- Eat smaller, but more frequent meals. Continue eating fibrous foods, to minimize GI content from body
- Fatty foods / snacks will stay in your body STAY AWAY
- Drink 16 ounces of fluid replacement beverage (Gatorade, Powerade)

Day of test:

- Eat small portions, eat a very light lunch (if afternoon testing)
- Eat lighter foods such as fruit, grains, etc.
- Continue to drink water
- Do not drink salty drinks such as Sodas
- Urinate as frequently as possible throughout the day until one-two hours prior to test time
- Use the bathroom (defecate) before the test
- Please be ready to urinate for hydration testing

PHYSICIAN CERTIFICATION OF WRESTLER'S NATURAL WEIGHT BELOW 7% (MALE) OR 12% (FEMALE)

Dear Physician:

the Virginia High School League, in con establishing a MINIMUM wrestling wei	weight loss practices frequently practiced by wrestlers, cert with many other states, has instituted a program ght based on 7% body fat for males and 12% body fat dividuals may have a body composition and weight that we do not want to penalize that athlete.
Your patient,	has been evaluated and their current body
fat is under 7%.	
The minimum competitive weight class lis	pased on the current body fat and weight for your patient
your patient and sign below if you feel a	s athlete's natural body fat composition. Please evaluate ppropriate. Our program would allow for this athlete to resent weight noted below as "Actual weight".
	e VHSL Weight Control Program protocols assessing of hydration. The results are as follows:
Date of assessment:	USG at time of test:
Actual weight:	Current percent body fat:
	ete, based on my records and examination, I certify that natural weight and would be safe for wrestling
Physician Signature	Print name
	Name of Practice
	Address
	Date

HISTORICAL INFORMATION ON WEIGHT LOSS CONCERNS

1. Is bouncing or cycling with frequent large amounts of weight loss below natural weight a common occurrence in the sport of wrestling?

There is very little denial in the wrestling community at this time that excessive weight loss occurs in a significant numbers of wrestlers. A few selected references are cited below.

- a. Virginia Survey in Virginia Pilot:
 - 93% utilized some strategy besides exercise to lose weight
 - 82% reported losing 5-10# EVERY WEEK
- b. Iowa (Tipton):
 - Average of 4.9% body weight loss in 17 days
 - Greatest amount in 10 days and the most dramatic and most dangerous in the lowest weight classes
- c. Scott and Horswill *Medical Science in Sports*:
 - Average of 8# weight gain in 20 hours after weigh-in for match
 - Only 3.3# difference weight between opponents.(We can conclude that most wrestlers are losing some amount of weight)
- d. Kessel Study of 20 Division I Schools Wrestling USA:
 - Average weight loss **Every Week** 10#
- e. VHSL 1999 State Tournament of A, AA, and AAA:

(no second day weigh-in required)

• 103# - 152# weight classes AAA

16% gained 10 - 15# on second day

46% gained 5 - 10# on second day

36% gained 5# or less on second day

WEIGHT LOSS METHODS USED BY WRESTLERS

ACTIVITY	PER-CENT USING
RUN OR JOG	73%
EXERCISE DEVICE (BIKE, JUMP ROPE, ETC)	59%
SWEAT IN SAUNA	14%
RUBBER SUITS/NYLON TOP	34%
SPIT	5%
"FAT BURNERS" LIKE BELTS, ETC.	2%
DIURETICS	2%
VOMITING	8%

2. Are these weight loss practices harmful to the wrestler?

In earlier years, although physicians recognized a theoretical or potential health hazard from excessive weight loss, little definitive proof was available to convince the wrestling community of these risks. However, now the sports medicine literature is filled with data about the harmful effects of frequent and excessive weight loss and identifies dehydration as the primary cause of the resulting health complications. Several deaths from dehydration and heat injury occur every fall during August football practice. Although "near-misses" have been reported in wrestling it wasn't until 1998 that reports from North Carolina, Wisconsin, and Michigan documented deaths of wrestlers secondary to dehydration. These deaths put the exclamation point on the volume of existing evidence that convincingly connects unhealthy weight loss practices to serious health problems.

THREE POSSIBLE KINDS OF WEIGHT LOSS EXIST:

- a. **Loss of fat:** This is a good and healthy kind of weight loss so long as it does not decrease body fat below 7% for males or 12% for females. This can occur physiologically at about 2 pounds per week. Comparison of individuals' off-season (8-11% BF) to in-season (5-7%) suggests that most of the large amounts of weight loss reported in the studies mentioned above is secondary to other weight loss and not to a large change in body fat.
- b. **Starvation:** Restricting calories excessively to lose weight results in loss of muscle weight, which decreases strength and endurance. This occurs because the body searches for energy or fuel for activity and when it is not available from current intake of calories and stored body fat, it seeks nutrients from other sources and muscle is the main available reservoir.
- c. **Dehydration:** Restricting fluid for quick weight loss leads to dehydration resulting in all of the metabolic disruptions that are now known to occur in the body. Nearly all of the large amounts of rapid weight loss reported in the studies above occurred because of water loss and not loss of fat.

CATEGORIES OF HARM TO WRESTLERS FROM EXCESSIVE WEIGHT LOSS:

a. Decrease in academic performance:

- Only sport where grades in season are lower than off season
- Testimonials on sleeping in classes and flunking (Riebel)
- Decrease in short term memory and cognition
- Decrease in attention and focus

b. Decrease in athletic performance:

- Lowered Testosterone
- Despite perception that wrestler performs better at lower weight, studies show lower stamina or endurance and lower strength in the depleted state that occurs from fluid and calorie restriction. These decreases in performance begin to occur to a significant degree at dehydration levels as low as 2-3%. (Horswell).

c. Decrease in bodily functions:

- Increased susceptibility to infection
- Decrease protein levels
- Damage to kidney and heart
- Lowered glycogen stores
- Poor temperature control
- DECREASED GROWTH
- DEATH

d. Eating disorders:

- 6% meet criteria for binge eating
- 11% meet profile for eating disorder on "EATS"

3. Are these weight loss issues harmful to the sport of wrestling?

- Sports Illustrated listing winners and losers: Losers: Wrestling with injury rate of 9.7/1000 exposures.
- Medical Society of some states voted to outlaw wrestling because of problems with weight loss
- Always listed in top two or three sports for injury incidence
- In Wisconsin decreasing participation until after the 7% weight management program and now participation increasing again.
- Decrease in number of schools participating in wrestling above and beyond what is explained by Title IX.

SUMMARY OF VHSL EFFORTS TO DATE

- 1. Developed an education program for coaches, wrestlers, and parents.
 - a. Presentations at rules clinics
 - b. Publication and distribution of booklet, "How Wrestlers Can Achieve Victory and Enjoyment While Maintaining a Healthy Diet"
- 2. Implemented pilot programs and voluntary programs to test the feasibility of the 7% body fat minimum weight level with maximum weight loss per week.
- 3. Performed some weight checks at state championship matches to collect data on weight deviations at match time.
- 4. A Task Force convenes each year made up of coaches, officials, physicians, athletic trainers and VHSL administrators to review the VHSL Weight Control Program and make adjustments to the program to enhance the safety of the VHSL wrestlers.

Resolution from the Joint Committee to Address Weight Management in Wrestling December 17, 1997

(Committee includes representatives from: National Federation of State High School Associations, National Wrestling Coaches Association, Amateur Athletic Union, USA Wrestling Coaches Council, USA Wrestling Sports Science Committee, NCAA, NCAA Competitive Safeguards and USA Wrestling)

As leaders in wrestling, we are dedicated to maximizing the safety of athletes who participate in the sport.

Traditionally, this sport has depended upon weight to assure competitive fairness. We resolve to consider both weight and other alternative measures to maintain competitive equity in the sport.

In order for this to be achieved in a fair, responsible and practical way, we resolve to:

- ✓ Promote safe and responsible weight control practices on every level of the sport;
- ✓ Eliminate from wrestling any weight control practices, which could potentially risk the health of the participants;
- ✓ Consistently monitor and evaluate rules and procedures to make sure they effectively achieve these goals;
- ✓ Educate coaches, athletes, parents and fans about proper weight management strategies; Stress technique, strength, fitness, skill, experience and strategy as the most effective methods to achieve success in wrestling.

✓ USA Wrestling Rapid Weight Reduction Rule

Whereas rapid weight reduction "cutting weight" through caloric restriction, dehydration, and excessive exercise in heated environments exposes wrestlers to decreased performance, heat related trauma, and hazard to health and life, USA Wrestling (USAW) has adopted the following rules:

With regard to the practice of dehydration, the use of hot rooms, hot showers, hot boxes, saunas, steam rooms, heating devices, diuretics, emetics, laxatives, excessive food and fluid restriction and self-induced vomiting is prohibited by USA Wrestling.

Regardless of purpose, the use of vapor-impermeable suits (e.g., rubber or rubberized nylon) is prohibited.

Violation of these rules at USAW sanctioned events shall cause the individual(s) in question to be suspended from the competition for which use of the prohibited methods were intended.

Enforcement for this rule shall be the responsibility of the tournament committee which is to be established prior to the competition. The decision of the tournament committee shall be final.

A second event violation will result in the suspension of the individual(s) from any USAW sanctioned event for one calendar year from time of suspension. All second violation cases shall be heard by the appropriate age group executive committee. USAW's By-laws shall be considered in all applicable cases.

Any individual assisting an athlete in prohibited weight reduction practices shall be held to the same rules and penalties as athletes.

USAW discourages rapid weight reduction methods under any circumstances. However, events excluded from these rules are Senior-level LILA calendar events and Senior-level FILA "world level championships" and those Senior-level competitions which are qualifying events for Senior-level FILA "world level championships".

Guidelines for Application of the Rule:

- 1. This rule shall be in effect for all USAW sanctioned events (except those excluded above)
- 2. The tournament committee of each event must put its decision in writing to both the offending party and the USA Wrestling National Office.
- 3. The rule will be posted/distributed at the competition venue(s), weigh-in site(s), practice venue(s), host hotel(s), training site(s), and official housing facilities. In addition, announcements will be made on the public address system throughout the weigh-ins, if possible, and during the competition.

NFHS RESOLUTION

The NFHS Sports Medicine Advisory Committee is aware that unhealthy and sometimes dangerous weight loss practices continue to be a significant problem in high school wrestling.

The SMAC is familiar with the growing body of information in the sports medicine literature that presents unequivocal evidence of the danger of excessive weight loss, too rapid of a weight loss, and repeated cycling of weight gain and loss. These health hazards are especially problematical for the physically immature body of the younger and lighter wrestlers, which is where the majority of excesses occur.

The SMAC has reviewed data from a number of states that show a decrease in these unhealthy practices where weight management programs have been utilized. A 10-year review of such a program by one "7% state" showed an increase in wrestling participation and a significant decrease in abusive weight loss practices. In two other states where such programs are utilized, analysis of data showed that over 80% of wrestlers who placed in State Championships were wrestling at weight above the 7% body fat minimum weight for males and the 12% body fat minimum weight for females.

The SMAC continues to monitor the literature for information that is relevant to our student athletes and is committed to ensuring the health and welfare of all student athletes. We want to do everything possible to prevent a repeat of the 3 deaths in college wrestlers that occurred in 1998 and that were directly attributed to weight loss abuses.

The SMAC would like to commend the Wrestling Rules Committee for recent actions to address this weight loss problem. The 1-hour weigh-in and the reference to the desirability of 7% weight management programs have been helpful.

At this time, the SMAC would like to emphasize to the Wrestling Rules Committee and State Associations our concern about the continued existence of unhealthy weight loss practices among wrestlers. We also would like to report the findings that healthier, safer, and still successful wrestlers exist in states using weight management programs. The latest data demonstrates very impressive benefits to wrestlers' health and well being in programs that determine body composition, establish a minimum wrestling weight, and that provide for a maximum safe weight loss per week.

The attached 1998 resolution from the "Joint Committee to address Weight Management in Wrestling", which represents the opinions of USA Wrestling, NFHS, NCAA, and National Wrestling Coaches Association, says in part "...we resolve... to eliminate from wrestling any and all weight control practices which could potentially risk the health of the participants." The 1996 ACSM position statement on "Weight Loss in Wrestling" is also attached and specifically references these behaviors and provides recommendations on how to address them.

These two statements provide a philosophy and specific recommendations that are strongly and unanimously endorsed by the SMAC. These recommendations reflect the opinions and expertise of the national governing body for the sport of wrestling and a consensus statement of some of the world's most prominent sports medicine organizations. They encourage and allow the participants to safely focus on the sport of wrestling and NOT on the sport of weight loss.

The SMAC committee recommends that all states develop weight certification programs for the sport of wrestling. The programs should minimally incorporate the ACSM recommendations as well as the recommendation of the Joint Committee to address weight management in wrestling and also included should be components of the successful programs presently functioning by a number of State Associations. The goal should be to achieve full implementation as soon as possible but no later than the year 2004.