



*ABC Medical Committee Recommendations  
for the Improvement of Health and Safety of  
Combat Sports Participants- 2013*

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**THE ABC MEDICAL COMMITTEE MISSION**  
**STATEMENT/FOREWORD – 2013**

*The ABC Medical Committee is committed to providing recommendations to all participating member jurisdictions based on our collective clinical experience as well as review of the most relevant evidence based medicine. We will consistently strive to find, and to refine, new and innovative ways to research, develop, access and share knowledge about issues affecting combat sports athletes. In that way, we hope to ensure, as best as possible, the health and safety of all combat sports participants.*

*There has been a sharp increase in the number of participating ABC jurisdictions who have used the Medical Committee as a resource this past year. We hope that you continue to find our recommendations helpful in addressing your medical questions and conundra.*

*Respectfully,*

*Sheryl Wulkan, M.D.*

*ABC Medical Chair*

***ABC Medical Committee  
Participants***

**ABC MEDICAL COMMITTEE PARTICIPANTS – 2013**

**Dr. Julian Bailes**

**Dr. Wendell Becton**

**Dr. Mark Belafsky**

**Dr. Edgar Ballenas**

**Dr. Johnny Benjamin**

**Dr. Robert Boltuch**

**Dr. Alan Brackup**

**Dr. Dominic Coletta**

**Dr. Anthony Curreri**

**Dr. Mariel Eliza**

**Dr. Joseph Estwanick**

**Dr. Alan Freedman**

**Dr. Kathleen Finzel**

**Dr. Angela Gagliardi**

**Dr. Jorge Guerrero**

**Dr. Vincent Guida**

**Dr. Michael Haas**

**Jan Hubbard**

**Dr. Richard Istrico**

**Rebecca Johnson**

**Dr. Barry Jordan**

**Dr. Shelby Karpman**

**Dr. Michael Kelly**

**Dr. William Lathan**

**Dr. Wayne Lee**

**Dr. Charles Melone**

**Dr. Jim McGinnis**

**Dr. Ivan Melendez**

**Dr. Steven Oxler**

**Dr. Jonathan Peters**

**Dr. Charles Prestigiacomio**

**Joan Pierce, R.N.**

**Dr. Vern Reynolds**

**Dr. Patricia Roche**

**Dr. Vinmarie Rodriguez**

**Dr. Sheldon Segal**

**Dr. Robert Smick**

**Dr. Johnathan Stiller**

**Dr. Peter Q. Warriner**

**Dr. James Weber**

**Dr. Sheryl Wulkan**

**Dr. Eric Wurmser**

**Dr. Bruce Zagelbaum**

## **ABC MEDICAL COMMITTEE REQUEST TO PARTICIPATING JURISDICTIONS REGARDING MEDICAL RELEASE FORMS**

The ABC Medical Committee requests that an addenda be made to contracts with both amateur and professional combat sports participants that permit the Chief Medical Officer for a given jurisdiction HIPAA release of post-fight medical records. In that way, statistics of ringside vs. actual diagnoses and appropriate use of requested diagnostic testing can be monitored. More importantly, improvement of injured athlete follow-up and care can be more easily achieved.

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***ABC Medical Committee Consensus  
Statement Regarding Necessity of  
Ambulances On-Site at Events***

**THE ABC MEDICAL COMMITTEE POSITION REGARDING THE NECESSITY OF  
AMBULANCES ON SITE AT AN EVENT**

It is the position of the ABC Medical Committee that an ambulance be **ON SITE** at every event. This is because brain death begins to take place two–three minutes post insult. A delay in disposition can potentially make the difference in an athlete’s quality of life after recovery, or possibly, life and death.

It is strongly suggested that a second ambulance be retained for every show.

**THE EVENT MUST BE STOPPED UNTIL THE AMBULANCE TRANSPORTING AN INJURED FIGHTER RETURNS TO THE VENUE**in the event that **only one ambulance** has been secured for a show.

Should a show be scheduled a significant distance from a Level 1 Trauma facility, the event should either be rescheduled at a different venue or, alternatively, arrangements for helicopter evacuation should be secured.

***ABC Medical Committee Consensus  
Statement Regarding Mouth Guards***

**ABC MEDICAL COMMITTEE CONSENSUS STATEMENT REGARDING  
MOUTH GUARDS**

The ABC Medical Committee recommends the following policy concerning mouth guards:

1. All competitors must wear a mouth guard.
2. Competitors with braces must wear mouth guards to cover all braces.
3. Competitors should consider using either a mouth guard customized by a dentist with knowledge of contact sports, or a dual arch mouth guard. In general, these afford better protection than do generic guards.
4. The decision as to which type of mouth guard to use should be left to the individual athlete.

<b>TYPE OF MOUTH GUARD</b>	<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
Basic	Cheap	Least Protection
Molded	Moderate protection	Expensive
Dual-Arch	Most TMJ protection, moderate price	Difficult to Acclimate to Use

***ABC Medical Committee Consensus  
Statement Regarding Tournament  
Style Mixed Martial Arts Events***

## ABC MEDICAL COMMITTEE STANCE ON TOURNAMENT -STYLE MIXED MARTIAL ARTS EVENTS

It is the stance of the ABC Medical Committee that **single event**, tournament style mixed martial arts shows stand in contradistinction to all efforts of its participating physicians to provide the best possible safety regulations and healthcare for combat sports participants.

Tournament style MMA will not be endorsed for the following reasons:

- There is minimal to no time for athletes to recover between bouts
- There is no guarantee that second round opponents will have had similar experiences in their first rounds. For example, one second round participant may have submitted his opponent in the first round due to disparate skill sets while the other opponent may have had a grueling stand up fight for three rounds. This makes the second round “playing field” unequal.
- Fatigued and dehydrated participants are at increased risk of injury to every organ system.
- In the case of MMA, orthopedic injuries are more likely to occur.
- Competitors may be exposed to a greater number of head blows for an extended period of time with no chance for adequate rehydration or recovery, thus potentially increasing the risk and severity of concussions, cerebral bleeding, or second impact syndrome.
- Repetitive chokes may occur in a time period extending over multiple match-ups, theoretically increasing the risk of blood vessel clots, dissections and brain injury.

***ABC Medical Committee Consensus  
Statement Regarding Amateur  
Combat Sports Participants***

## **SUGGESTED MEDICAL GUIDELINES FOR AMATEUR FIGHTERS**

The ABC Medical Committee suggests the following medical guidelines for amateurs:

1. Amateur events should be regulated by State Athletic Commissions/participating Jurisdictions, since amateur combat sports participants have fewer skill sets, but run the same or greater risk of injury as do professional combat sports competitors.

2. **MINIMUM** medical requirements for participation in any amateur event **WITH MODIFIED** rules (no elbow striking to the head on the ground in MMA) should include:

- Annual history and physical examination
- Baseline CBC, blood chemistries, lipid profile, clotting times
- Communicable disease testing (HIV1/2, Hepatitis BsAg, hepatitis C Ab) (every six months)
- Annual ophthalmologic examination
- Baseline neurologic testing
- The reviewing Commission/jurisdiction physician may require further testing depending on the results of those submitted prior to licensure/fight clearance.
- Participating Commissions and Jurisdictions should consider revisiting amateur boxing pre-fight testing regulations with the change to AIBA rules.
- Suspensions of amateurs post-fight should be submitted to the appropriate national website (Fight-Fax, ABCMixedMartialArts.com).

3. Amateur combat sports participants who compete in a jurisdiction following **PROFESSIONAL RULES** should be required to fulfill **ALL** of the professional medical clearance requirements prior to clearance for participation.

The committee recommends that the following be considered the **MINIMUM** medical clearance requirements:

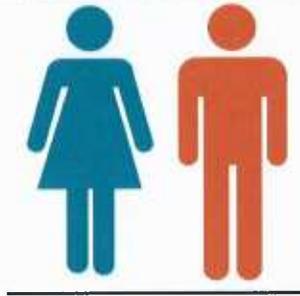
- History and physical examination
- Baseline CBC, blood chemistries, lipid profile, clotting times
- Communicable disease panel (HIV1/2, Hepatitis BsAg, hepatitis C Ab)
- EKG
- CT or MRI or MRA of the head
- Ophthalmologic examination

The suggested intervals for testing can be found in the *ABC Handbook of Ringside Medicine*.

4. Amateur competitors over the age of 40 should submit the additional medical tests required of over 40 professional participants.

***Combat Sports and the Transgender  
Athlete***

## ABC MEDICAL COMMITTEE SUGGESTED TRANSGENDER POLICY



The purpose of developing this policy was to allow combat sports athletes the opportunity to participate in competition in accordance with their gender identity while maintaining the relative balance of competitive equity among competitors.

This document is based on review of current medical literature, review of NCAA and IOC policy, and has been co-authored by one of the world's leading authorities on this topic, Dr. Eric Villain, M.D., PhD., chair of :

Medical Genetics Clinic  
Director, Center for Gender-Based Biology  
Professor, Pediatrics  
Urology  
Human Genetics  
at UCLA.

This document is a starting point. It will need to be revised as greater bodies of evidence based medicine become available.

### **MALE TO FEMALE (MTF)**

- Individuals undergoing sex reassignment **PRIOR** to puberty should be regarded as females.
- Individuals undergoing sex reassignment **AFTER** puberty should be eligible for participation in female competition under the following conditions:

- Surgical anatomical changes have been completed including gonadectomy and external genitalia
- Hormone therapy appropriate for the assigned sex (female) administered by a board certified endocrinologist or any specialist in good standing with his/her licensing jurisdiction known to have significant knowledge and experience with transsexual and transgender individuals for a **MINIMUM** of **TWO** years **AFTER** gonadectomy.
- A letter from a board certified physician responsible for the care of the athlete should be submitted to the athletic commission being petitioned for licensure and to the ABC Medical Review Board.
- TUEs will not be granted for hormone replacement therapy (HRT).
- The transsexual competitor (as with all competitors) should be subject to random drug testing

### **FEMALE TO MALE (FTM)**

- Individuals undergoing sex re-assignment from female to male **AFTER** puberty should be eligible I male competitions under the following conditions:

- Hormone therapy for the assigned sex (male) has been administered by a board certified endocrinologist or any specialist in good standing with his/her licensing jurisdiction known to have significant knowledge and experience with transsexual and transgender individuals.
- A letter from a board certified physician responsible for the care of the patient will need to be submitted to the medical review panel of the athletic commission being petitioned for licensure and to the ABC Medical Review Board
- TUEs **WILL** be granted for FTM.
- The athlete may be subject to drug testing before, during and/or after competitions.

### **TRANS MALES (FTM)**

- A trans male (**FTM**) athlete who is on testosterone replacement therapy may compete **ONLY AS A MALE**.
- TUEs **WILL** be granted at the discretion of the licensing commission provided appropriate documentation has been submitted
- Athletes will be subject to random drug testing

## **TRANS FEMALES (MTF)**

- TUEs need **NOT** be granted for HRT. A full disclosure of prescribed medications is required for each applicant
- Athletes may be subject to random drug testing

## **RECOMMENDED MINIMUM PAPERWORK FOR SUBMISSION TO THE LICENSING JURISDICTION**

- History, physical examination, baseline blood work (CBC, thyroid function tests, blood chemistries, clotting times, lipid profile), EKG, ophthalmologic examination CT or MRI/MRA of the head (These guidelines can be found in the ABC Medical Handbook edition 1)
- A declaration letter from the treating physician.
  - The physician must be board certified in his/her specialty and in good standing with his/her jurisdiction. The physician must have extensive experience with transgender patients and the administration of related medications, if required.
  - The physician should:
    - State the length of time the athlete has been in his/her care
    - Submit a complete history and physical examination

- Include mandated blood work, as required by the licensing jurisdiction
- Include mandated tests, as required by the licensing jurisdiction
- Include the medications prescribed
- Document therapeutic hormone levels, and the intervals between testing of levels
- Submit an appropriate request for TUE, if applicable

***ABC Medical Committee Consensus  
Statement Regarding Marijuana***

## ABC MEDICAL COMMITTEE CONSENSUS STATEMENT REGARDING MARIJUANA

The ABC Medical Committee Consensus Statement regarding **MEDICAL MARIJUANA** is as follows:

Based on current standards of care, the current diagnoses for which medical marijuana could be indicated as treatment would most probably preclude a combatant from participation in combat sports. Nevertheless, the committee recommends that each request be reviewed on a case-by-case basis.

Should the athlete be deemed healthy enough for participation, an explanation from the treating board certified physician, who must be in good standing in his/her state(s) of licensure, should be submitted to the jurisdiction sanctioning the bout. It is recommended that the letter include the following:

1. The length of time the contestant has been under the physician's care
2. The complete work-up and diagnosis of the patient
3. A clear explanation as to why other treatment modalities deemed acceptable in competition have not been suggested to the contestant.
4. Follow-up plan for the contestant including the means for objective assessment of improvement with this treatment modality.

The ABC Medical Committee Consensus Statement regarding **RECREATIONAL MARIJUANA IS AS FOLLOWS:**

1. The purpose of drug testing is to deter performance-enhancing drug use, to protect the health and safety of athletes to the best of our current understanding and abilities, and to protect the integrity of sport.
2. The NCAA has just LOWERED its testing threshold to 5ng/ml(urine) in an effort to deter college age athletes from illicit drug use. (this is the threshold at which active use vs second hand smoke can currently be differentiated). WADA has recently RAISED the threshold to 150ng/ml. Levels detected in that range would most likely preclude an individual from proper training and attainment of elite athlete status.

To date, most U.S. based professional leagues utilize 15ng/ml (urine) detection as the testing threshold. ( This was the threshold that could differentiate between passive and active exposure in 1986).

3. There are no good data at present to suggest that marijuana acts directly as a performance -enhancing drug.

4. The most relevant clinical studies for purposes of competition and health and safety issues of combat sports participants have to do with effects on reaction time. The threshold for changes in reaction time is approximately 50ng/ml, the levels considered acceptable in work environments and adopted for truck drivers.

5. Given the international nature of combat sports, it is the recommendation of the ABC medical committee that levels exceed no more than 50ng/ml (urine) until such time as better studies have been completed.

6. It may be prudent to consider switching to saliva testing in the future since use of recreational drugs within 24 hours of competition belies the spirit of competition.

***ABC Medical Committee Consensus  
Statement Regarding the Use of  
Advanced Practice Nurses as  
Ring/Cage-Side Medical Personnel***

**ABC MEDICAL COMMITTEE POSITION STATEMENT REGARDING USE  
OF ADVANCED PRACTICE NURSES (APNS) WORKING  
INDEPENDENTLY RING/CAGESIDE**

The ABC Medical Committee is comprised of 43 practicing physicians in varying specialties and subspecialties. It is the consensus of the committee that, based on current standards and practices, advanced practice nurses should not be used as ringside medical personnel.

In most jurisdictions, the term "APN" refers to certified registered nurse anesthetists, clinical nurse specialists, certified nurse-midwives, or certified nurse practitioners.

The law varies from state to state, but, for the most part, advanced nurses are allowed to work independently as long as they enter into a standard care arrangement with a physician. Part of that agreement mandates that the physician be continuously available to communicate with the clinical nurse practitioner either in person, or by other form of communication. The collaborating physician is usually required to sign and date the review of the nurse practitioner's work, making the doctor ultimately responsible for any diagnostic or treatment decisions.

The committee concedes that while there are many excellent nurse practitioners, perhaps a portion with clinical skill sets that may exceed those of some physicians, the requirement for physician supervision in many jurisdictions places unnecessary pressure and liability on the supervising ringside doctor(s) in an out of office setting.

Other reasons given for the decision of the committee are as follows:

- The doctor may not have an established relationship with the assigned nurse practitioner (may be meeting the individual for the first time at an event assignment), but would ultimately be responsible for his/her medical decisions, sometimes in situations requiring seconds for critical care response.
- The use of APNs will most likely not be cost-effective, since a physician would either need to be on site to supervise the work, or would need to be available by one or more means of communication during the event. The advantage of having medical personnel ring/cageside is so that experienced medical practitioners can see the mechanism of injury, thereby facilitating appropriate split second diagnostic and therapeutic decisions. Tele-medicine has no place ring/cageside.
- Health and safety of combat sports participants may theoretically be compromised either because of split-second delays in the relay of information from the nurse practitioner to the physician ultimately

responsible for diagnosis and treatment or because of misinterpretation of information relayed through another practitioner.

***ABC Medical Committee Consensus  
Statement Regarding Qwick-Aid***

## ABC MEDICAL COMMITTEE REVIEW OF QWICK -AID BANDAGES

### DISCLAIMER:

*Members of The ABC Medical Committee have no financial ties to any of the products we are asked to review. Our sole purpose for reviewing new combat sports inventions is to determine whether:*

- *they are USADA and WADA compliant, if applicable*
- *whether there are any potential health and safety risks/advantages/disadvantages to either the athlete or his/her opponent from product use.*

*The ABC Medical Committee will only comment on a product regarding findings based on literature review and/or clinical trial with volunteers.*

*The Committee cannot endorse, nor will it promote the use of, any commercial product line.*

### Summary of Findings Regarding Qwick -Aid Bandages

- Quick Aid is an **over the counter (non-prescription)** bandage that claims to promote clotting and healing without sticking to the wound
- ABC Medical Committee physician volunteers tested this product on athletes obtaining lacerations during training sessions (n=27)
  - No adverse effects noted
  - Bandage did not stick to wound
- The present compounding of this product meets USADA and WADA criteria.

<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
Over-the counter	Expensive
Does not stick to wound	
Re-usable	May spread infection if used improperly

- At present, the ABC Medical Committee finds no contra-indication for use of this product at events.
- The permission for use of this product should come from the jurisdiction licensing the event.
- Should a jurisdiction decide to allow the use of Qwick –Aid based on the findings of the medical committee, the Committee recommends that only NEW, SEALED BOXES of the product be used by corners at an event, and that the seal for each individually wrapped bandage be inspected for compromise prior to use.
-