

MEDICAL COMMISSION
OF THE INTERNATIONAL
BOXING ASSOCIATION (AIBA)

**MEDICAL
HANDBOOK
FOR
BOXING**

EIGHTH EDITION
2013
Electronic adaptation

CONTENTS:

1	The Medical Commission and the Medical Jury	4
2	Disqualifying Conditions.....	5
3	Medical Examinations.....	6
4	Responsibilities and Duties of the AIBA Medical Jury:	9
5	Tips for the Individual Ringside Physician	16
6	Minimal Suspension Periods after Knockout and RSCH.....	22
7	Boxing Injuries.....	23
8	Physical Fitness of Referees and Judges.....	26
9	Ringside Physician Management System for International Licensing	27
10	All Federations must.....	30
11	Antidoping Regulations and Issues	31
12	Normal Practices of the AIBA Medical Commission	31
13	Appendix I: Boxing Hygiene.....	32
14	Appendix II: Competition Rules for Female Boxers	34
15	Appendix III: Training curriculum for international ring side physician license.	34
16	Appendix IV: Illustrations	37

Editor's Note

This year is 2012. In AIBA, as with just about everything else, our handbook must change to reflect new polices and new trends.

This year also marks a major change for us with the establishment of the World Boxing Academy. Dr. C. K. Wu, President of AIBA, has charged Dr. Charles Butler, Chairman of the Medical Commission of AIBA, and the members of the Medical Commission with the development of a Medical Curriculum to be used as a body of knowledge for ringside physicians. This has come to fruition with a teaching course for AIBA Ringside Doctors including WSB physicians.

With that in mind, the Handbook now represents a condensed version of the knowledge expected of an AIBA Ringside Physician. This, in the form of extended lectures, practical ringside drills and individual evaluation has now become the curriculum for our AIBA physicians. It is hoped that this will be passed on down by the National Federations to all ringside doctors.

With the Handbook now published on-line, it is meant to be a work in progress which can change as rules and policies change. As changes occur, they can be announced on-line and the information disseminated in a more timely fashion.

You will note that this edition now contains only the information specific to Medicine. There remains much general information that the doctors should know which is contained in the AIBA Rules and Regulations. Physicians should become familiar with that information which pertains to them as well.

Many thanks to all of those who have helped develop this Handbook.

Robin I. Goodfellow, M.D.

1 The Medical Commission and the Medical Jury

- 1.1.** The Medical Commission of the International Boxing Association (AIBA) is composed of qualified doctors of medicine who are appointed by the Executive Committee from among those proposed by their federations. The President of AIBA “appoints” and “removes” the Chair and Vice Chair of all commissions.
- 1.2.** Usually the Chair of a permanent commission will be a member of the Executive Committee and must be an expert in the field.
- 1.3.** The President of AIBA may attend all Commission meetings, but cannot vote. The Executive Director of AIBA may attend all meetings, but cannot vote. The Executive Director is responsible for the relationship of AIBA with its Commissions.
- 1.4.** At all AIBA-sanctioned competitions including, but not limited to, the Olympic Games, all World Championships, the World Cup Championships and the President’s Cup Championships, members function as the Medical Jury. Their task is to assist the referee in deciding whether a boxer is fit to continue and to provide an initial evaluation and first aid if a boxer sustains a serious injury or loses consciousness.
- 1.5.** The Medical Commission is responsible for enforcing the doping regulations at these championships. A Medical Commission doctor, qualified in Doping Control, shall be present at the tests and shall ensure that the specimen are properly taken and handled.
- 1.6.** Members of the Medical Commission or physicians appointed by them shall be present at the initial medical examinations and the examinations that take place each morning at international competitions. When necessary, they assist the medical officers from the individual countries and express their opinion on injuries the boxers have sustained in previous bouts. In such cases, the decision of the Medical Commission member is final.
- 1.7.** The Medical Commission shall meet at least once a year. Opinions on various questions and problems related to Olympic style boxing are exchanged. These meetings are often accompanied by highly informative medical symposia on various subjects. On the basis of these discussions, the Medical Commission submits recommendations and motions, in the interest of the physical and mental welfare of boxers, to the Executive Committee and the Congress.
- 1.8.** Doctors working in the field of Olympic style boxing must always have up-to-date information and be in a position to provide information for others.

2 Disqualifying Conditions

- 2.1.** The examining physician at the annual exam or an appointed medical commission member at a tournament may declare a boxer unfit to box for any condition which would endanger that boxer, his opponent or the officials.
- 2.2.** AIBA Medical Commission Guidelines for disqualifying conditions are “evidence of or disclosed history of the following conditions in an annual and/or pre-bout examination”:
 - 2.3.** Acute and chronic infections
 - 2.4.** Severe blood dyscrasias
 - 2.5.** Sickle cell disease or trait
 - 2.6.** History of Hepatitis B, Hepatitis C or HIV infection
 - 2.7.** Refractive and intraocular surgery, cataract, retinal detachment
 - 2.8.** Myopia of more than -3.50 dioptres
 - 2.9.** Recorded visual acuity in each eye of:
 - 2.10.** uncorrected worse than 20/200
 - 2.11.** corrected worse than 20/60
 - 2.12.** Exposed open infected skin lesions
 - 2.13.** Significant congenital or acquired cardiovascular and pulmonary abnormalities
 - 2.14.** Significant congenital or acquired musculoskeletal deficiencies
 - 2.15.** Unresolved post-concussion symptoms, which will need clearance from a neurologist
 - 2.16.** Significant psychiatric disturbances or drug abuse
 - 2.17.** Significant congenital or acquired intracranial mass lesions or bleeding
 - 2.18.** Any seizure activity within the last 3 years
 - 2.19.** Hepatomegaly, splenomegaly, ascites
 - 2.20.** Pregnancy
 - 2.21.** Uncontrolled diabetes mellitus or uncontrolled thyroid disease
 - 2.22.** Any implantable device which can alter any physiologic process
 - 2.23.** Women’s breast protector which protects any thing other than the breast protuberance itself

2.24. Conditions that are not Disqualifying to Box:

2.24.1. Deafness (but Competition jury must be made aware)

3 Medical Examinations

3.1. Initial Medical Examination

- 3.1.1.** A boxer should undergo a thorough medical examination when he first joins a club. This may be performed by any licensed or registered medical doctor. The exam must be adequate to evaluate the boxer for any disqualifying conditions.
- 3.1.2.** Family History. Determine health of family members, emphasis on the presence of inheritable diseases
- 3.1.3.** Past Medical History and Review of Systems. Attention should be paid to notable symptoms, abnormalities of the pupils, previous operations and deformities. Current medications and allergies should be noted. In female boxers, a menstrual history (LMP) should be obtained.
- 3.1.4.** Biometrics. Height and weight, looking for disparities.
- 3.1.5.** Urinalysis to include at least sugar and protein.
- 3.1.6.** Complete Clinical Exam to include: Vital signs. General appearance – looking for deformities, general well-being, signs of Marfan's syndrome. Eyes – including fundoscopic exam and test of acuity such as the Snellen eye chart. Ears, Nose and Throat – including otoscopic exam. Cardiovascular Exam – attention should be paid to any cardiac abnormalities, especially tachycardia, dysrhythmia, systolic and diastolic murmurs or cardiac enlargement. Respiratory system – looking for signs of acute or chronic infection or dyspnea. Back and Chest – looking for deformities, tenderness, scars. Abdomen – looking for hernias, masses, organ enlargement. Genito-urinary system – a formal exam is generally not required. In a doctor's office further evaluation is appropriate if a large hernia is suspected. Although a unilateral testis is not disqualifying in itself, it could prompt discussion; the same is true for one kidney or for breast implants. Musculo-skeletal system – looking for congenital or acquired deformities, range of motion, joint stiffness or laxity, signs of inflammation. Neurological Examination – includes exam of the cranial nerves, as well as evaluation for tremors, locomotor impairment, dysarthria, gait /balance/posture disorders, reflexes. Evaluation of mental status by observation or testing; likewise, for mental retardation and psychiatric disorders.

3.1.7. If the history or physical examination suggests the presence of a disqualifying condition or other problem that requires further evaluation for diagnosis, the doctor shall require the boxer to undergo the appropriate testing and/or referral. These could include, but are not limited to, blood work, ECG or stress ECG, X-Rays, CT, MRI, ophthalmologic referral, etc. The physical exam and any test results shall be recorded in the manner prescribed by each federation.

3.1.8. We encourage the initial examining physician and examiners at pre-bout physicals to advise the boxer: to compete only when he is in good condition and has been training in order to reduce the risk of injuries; not to compete or train when ill. Always have injuries treated, always compete in a weight class which corresponds to his natural weight, since forced weight loss can damage the health and reduce physical performance. Always be honest with the doctor and to report any injuries, including head injuries sustained out of competition. Always abide by the rules and recommendations laid down to safeguard his health.

3.2. Annual Medical Examination

3.2.1. A medical examination should be conducted annually by a medical doctor.

3.2.2. Update of the family history, past medical history, review of systems with special attention to any medical suspensions

3.2.3. Up-date of medications and allergies

3.2.4. Complete physical examination with vital signs

3.2.5. Biometrics (height and weight)

3.2.6. Neurological examination

3.2.7. Indicated tests

3.3. Pre Bout Medical Examination prior to an AIBA Boxing Tournament

3.3.1. At the medical examination and weigh-in, the boxer shall produce the AIBA International Competition Record Book (the passbook) which contains the medical certificate.

3.3.2. The initial Annual Examination and any annual up-dates, along with the determination of fitness to box, must be completed prior to appearing for the pre-bout exam. This is done by medical doctors.

3.3.3. At a minimum, all changes from previous examinations should be recorded, as well as the determination of fitness to box.

- 3.3.4.** The boxing records must also accompany the boxer.
- 3.3.5.** The object of the pre-competition exam is to be sure the boxer is fully capable of boxing that day.
- 3.3.5.1.** He should be questioned about any extraordinary head blows and be free of any post-concussion symptoms and have a normal neurological survey.
- 3.3.5.2.** He should not be ill with a febrile illness.
- 3.3.5.3.** Medications should be discussed with regard to potential doping violations.
- 3.3.6. Purpose:** The Pre Bout Exam is an opportunity to avoid injuries that would occur in competition if the Boxer is impaired. The exam can be accomplished in a few minutes.
- 3.3.7. Verbal Communication** may limit the examiner's ability to ask pertinent questions in international competitions when there is no common language. Use hand motions to mimic questions/ask for help.
- 3.3.8.** Ask about concussions, etc. when possible
- 3.3.8.1.** The boxer's responses to these questions will verify orientation and level of conscious.
- 3.3.9. Form of Pre-bout Exam**
- 3.3.9.1.** Inspection of the head, eyes, ears, nose and throat for injuries can also be performed with attention to cranial nerve function.
- 3.3.9.2.** Examination of the neck for motion and tenderness.
- 3.3.9.3.** Check symmetry and tone of paracervical, shoulder, biceps, triceps, forearm muscles, interosseous and grip muscles
- 3.3.9.4.** Check the cervical nerves and coordination.
- 3.3.9.5.** Examine the elbow, wrist and metacarpal joints. Have the boxer make a fist and palpate for possible metacarpal fractures or tendon injuries. Have him open the fist and recheck motion and for deformities.
- 3.3.9.6.** Do a heart and lung exam.
- 3.3.9.7.** Check for pain with rib compression.
- 3.3.9.8.** Perform the abdominal exam looking for organomegaly, masses or tenderness.
- 3.3.9.9.** A demonstration of heel and toe walking and tandem walking checks for lower extremity strength, balance and lumbar/sacral nerve function.

- 3.3.10.** Each physician can develop his own particular routine as long as it covers the same basic functions and can be done quickly and comfortably.

4 Responsibilities and Duties of the AIBA Medical Jury:

4.1. Pre-Competition

- 4.1.1.** It is the responsibility of the Chair of the AIBA Medical Jury to go over the plans for the medical aspects of the tournament with a representative of the Local Organizing Committee (LOC), preferably the Chief Medical Officer (CMO).

- 4.1.2.** The Medical Jury Chair checks the food plan for all tournament participants to ensure appropriate nutrition, choice of dishes, and labeling of food that is not Halal.

- 4.1.3.** The Medical Jury Chairman checks that the CMO (or LOC) has arrangements with a hospital to receive transported boxers.

- 4.1.4.** Boxers with head injuries should be transported to a facility with neurosurgery.

- 4.1.5.** The Medical Jury Chairman inspects the area designated for physical examinations:

- 4.1.5.1.** adequate light for examinations

- 4.1.5.2.** adequate in regards to comfortable temperature with sufficient tables and chairs for doctors and athletes to be examined; safe floor plan and sufficient waiting area for athletes to be examined

- 4.1.6.** The Medical Jury Chairman inspects the venue, including :

- 4.1.6.1. Medical Equipment** Minimum available for ringside use shall include:

- 4.1.6.1.1.** Stretcher

- 4.1.6.1.2.** Oxygen

- 4.1.6.1.3.** Cervical collar

- 4.1.6.2. Treatment Room**

4.1.6.2.1. Sufficient area to examine and treat boxers who would not to be transported to a medical facility

4.1.6.2.2. Examination table appropriate light to allow the physician to see and treat injuries

4.1.6.2.3. Proper equipment and medication for any planned suturing or of the treatments to be administered on-site

4.1.6.3. Planned Staffing – Number and Location

4.1.6.3.1. LOC Physician Staffing

4.1.6.3.2. EMT's, Paramedics

4.1.6.3.3. DCO

4.1.6.4. The Evacuation Route to the Ambulance

4.1.6.4.1. No Elevators between Ring and Ambulance

4.1.6.4.2. No Staircase between Ring and Ambulance

4.1.6.4.3. No obstruction that would prevent stretcher, EMT's or Physician from moving Boxer to ambulance

4.1.6.4.4. Security should be instructed to provide crowd control and secure the evacuation rout in case of emergency evacuation

4.1.6.5. The planned placement of the Emergency Medical Support Personnel with respect to the FOP for the tournament

4.1.6.5.1. Lead EMT must have clear view of Ring so EMT Team can be summoned by hand signal in case of emergency evacuation.

4.1.6.5.2. Proper placement of the medical jury table in the neutral corner next to the physician's table for emergency ring access

4.1.6.5.3. Availability of gloves, gauze and penlights

4.1.7. A Medical Commission doping control doctor, qualified in Doping Control, shall be present at the tests and shall observe that the specimens are properly taken and handled.

4.1.8. The Medical Commission is responsible for enforcing the doping regulations at these championships

4.1.9. The Doping Control Doctor inspects the areas assigned for doping control procedures:

4.1.9.1. The intake and registration area

- 4.1.9.2.** The area with doping control kits, sealed fluids for athlete consumption and refrigeration
- 4.1.9.3.** The private area where specimens are to be collected
- 4.1.9.4.** The **doping control area** must be capable of being locked

4.1.10. Pre-Competition Physical Examinations

- 4.1.10.1.** On the first day of physical examinations, a member of the medical jury or an experienced CMO will instruct assigned local and team physicians in the nature and content of the normal pre-bout physical examination.
- 4.1.10.2.** Local doctors and physicians traveling with their teams may assist with these physicals as assigned by the AIBA Jury.
- 4.1.10.3.** On the first day physical examinations, the chairman of the medical jury makes the schedule of team physicians, assigned local physicians, and medical jury member(s) to be present each subsequent day of the tournament depending upon the number of boxers to be examined
- 4.1.10.4.** The Chairman of the Medical Jury accommodates in the best manner possible requests of the technical delegate with respect to the appropriate physician to be present at the time of pre-bout physical examinations
- 4.1.10.5.** Members of the Medical Commission or physicians appointed by them shall be present at the initial medical examinations and the examinations that take place each morning at international competitions.
- 4.1.10.6.** The object of the pre-competition exam is to be sure the boxer is fully capable of boxing that day
- 4.1.10.7.** All changes from previous examinations should be recorded. The examining Physician recommends fitness to box in the Boxer's Passbook
- 4.1.10.8.** The Examining Physician will Sign each athlete's Passbook certifying that the athlete is fit to box
- 4.1.10.9.** Only the AIBA Medical Commission member in charge of the pre-competition physical examinations may declare a boxer unfit to box
- 4.1.10.10.** AIBA Medical Jury members may assist the medical officers from the individual countries and express their opinion on injuries the boxers have sustained in previous bouts. In such cases, the decision of the Medical Commission is final
- 4.1.10.11.** On the first day of physical examinations, the referees and Judges are also examined

- 4.1.10.12.** The AIBA Medical Jury Member examining each referee and judges will certify and the R/J's passbook that they are fit to officiate
- 4.1.10.13.** R/J's with disqualifying conditions as specified in the Medical Handbook will be reported to the technical delegate as unfit to serve at the tournament and the reason for disqualification clearly stated
- 4.1.10.14.** Once a boxer has been declared unfit, the boxer with his passbook is taken to the responsible International Technical Official (ITO) for disqualification.
- 4.1.10.15.** AIBA Medical Commission members present, acting as a team physicians, may direct morning Physical Examinations but may not serve on the Medical Jury at ringside or in any other Jury capacity, unless specially credentialed to do so
- 4.1.10.16.** The Chairman of the Medical Jury should meet with the paramedic team prior to the start of the first bout to be certain of that placement on the field of play and establish what signal would be given when they are needed to come to evacuate a boxer. He advises the referee on whether a boxer is medically fit to continue in competition

4.2. The Day of Competition

4.2.1. The Medical jury provides an initial evaluation of injured boxers.

4.2.2. The Medical Jury administers first aid if a boxer sustains a serious injury or loses consciousness until the boxer can be turned over to the medical treatment team provided by the organizer.

4.2.3. Suggested items for medical jury members:

- 4.2.3.1.** Penlight
- 4.2.3.2.** gauze
- 4.2.3.3.** clean disposable gloves
- 4.2.3.4.** Other items that may be useful
 - 4.2.3.4.1.** Airway
 - 4.2.3.4.2.** Sanitizer
 - 4.2.3.4.3.** blood pressure cuff
 - 4.2.3.4.4.** stethoscope
 - 4.2.3.4.5.** tongue depressors
 - 4.2.3.4.6.** adhesive tape
 - 4.2.3.4.7.** ophthalmoscope

4.2.3.4.8. otoscope

4.2.4. Guidelines for entering the ring

- 4.2.4.1.** The physician will enter the ring when the referee requests the physician's evaluation of and/or aid for a dropped boxer or serious injury.
- 4.2.4.2.** The Physician should enter the ring for a seriously injured "down boxer"
- 4.2.4.3.** Only the chief physician and referee will be the in the ring with the injured boxer unless the chief physician requests assistance from another member of the medical jury or medical personnel
- 4.2.4.4.** The physician may, at his own discretion, between rounds indicate to the referee or Competition Jury that he wants to examine a boxer.
- 4.2.4.4.1.** The referee or competition Jury will then signal "stop" at the beginning of the next round and the boxer will be escorted to ringside for the physician's evaluation.
- 4.2.4.4.2.** If there is a risk of physical injury, he shall notify the Competition Jury to terminate the bout. This decision shall take precedence over all other considerations.
- 4.2.4.4.3.** Advice for the physician entering the ring:
- 4.2.4.4.4.** Enter quickly, but calmly and with authority. Remember, everyone else in the ring is not sophisticated medically and tends to become overly excited.
- 4.2.4.4.5.** When entering the ring, take clean gauze pads and a penlight
- 4.2.4.5.** Corner personnel and other persons not allowed in the ring
- 4.2.4.5.1.** Do not permit the boxer's corner personnel to dictate your evaluation, management or the time you take.
- 4.2.4.6.** For "down boxers":
- 4.2.4.6.1.** Make sure the boxer has an adequate airway.
- 4.2.4.6.2.** Remove the mouthpiece.
- 4.2.4.6.3.** Exercise cervical precautions.
- 4.2.4.6.4.** Assess breathing.
- 4.2.4.6.5.** Watch for vomiting or aspiration.
- 4.2.4.6.6.** Keep the boxer down until fully reactive, then permit him to sit up.
- 4.2.4.6.7.** When stable the boxer may be escorted to the corner with assistance.

4.2.5. The medical jury should communicate with local medical team to assure appropriate post bout follow-up for injuries noted at ringside

- 4.2.5.1.** If a boxer receives excessive blows to the head or laceration or other significant injury observed by the medical jury during a bout, a member of the medical jury briefly communicate the nature of the injury to the CMO or assigned local physician to be sure appropriate post bout examination will be carried out and appropriate treatment given
- 4.2.5.2.** The chief medical officer or medical team of the local organizer must examine the boxer after a period of unconsciousness or other serious injury.
- 4.2.5.3.** Anti-doping. The DCO is in charge anti-doping.
- 4.2.5.4.** The Doping Control Doctor is observes all testing procedures and insists that no violation of WADA procedure and protocol are violated while testing the athletes.
- 4.2.5.5.** The Doping Control Doctor makes records of any breach of Wada protocol or procedure which occurs during the tournament.
- 4.2.5.6.** The Doping Control Doctor signs the DCO/Doping forms as a witness.
- 4.2.5.7.** The Doping Control Doctor will be prepared to testify on behalf of AIBA should any subsequent legal challenge to adverse findings occur
- 4.2.5.7.1.** if procedure and protocol were properly carried out the Doctor will defend AIBA in support appropriate penalties imposed.
- 4.2.5.7.2.** if procedure and protocol were violated during the anti-doping testing, the Doctor will protect the rights of the athlete tested.
- 4.2.5.8.** Either the Doping Control Doctor or the chairman of the medical jury will request the Technical Delegate to provide transportation for the Doping Control Doctor to return to the hotel when the last test finished. This is necessary as the Doping Control Doctor will often be present in the arena many hours after the and competition and it may be almost impossible to get transport to the hotel otherwise

4.2.6. Members of the Medical Jury

- 4.2.6.1.** Members of the Medical Jury are present to Facilitate Smooth Function of the Medical Aspects of AIBA Tournaments.
- 4.2.6.2.** The Chairman of the AIBA Medical Jury will designate members of the medical jury to assist him in performing the tasks for which the chairman is responsible

- 4.2.6.3.** Members of the Medical Jury will keep Chairman of the Medical Jury informed of all significant medical events. The Chairman of the Medical Jury will have the responsibility to inform the Technical Delegate, Executive Director AIBA, or the President of AIBA of such events according to their seriousness or importance.
- 4.2.6.4.** The Medical Jury will be asked to care for sick or injured members of the AIBA family attending sanctioned tournaments.
- 4.2.6.5.** The Chairman of the Medical Jury more than the members can expect to be called upon at night if and ITO. R/J, or member of the AIBA Office Staff has a medical problem.
- 4.2.6.6.** Members of the Medical Jury often carry a few basic medications for pain, sleep, diarrhea, constipation, and several antibiotics for such situations.
- 4.2.6.7.** If a member of the AIBA family requires hospitalization, the member of the medical jury (usually the chairman) will try to facilitate transport to the hospital and arrange for visits to check the hospitalized AIBA family member.

4.3. Post Competition

- 4.3.1.** The Medical Jury checks with the CMO or local physician team that post bout examinations were properly conducted
- 4.3.2.** The Chairman of Medical Jury checks with the chief medical officer or assigned local physician team for the health status of injured boxers
- 4.3.3.** The Chairman of Medical Jury requests the CMO or assigned local physician team to provide him with the list of all injuries discovered on post bout examination
 - 4.3.3.1.** The list of injured boxers will include name, weight, country, nature of injury, any treatment administered, any follow-up recommendations
- 4.3.4.** The Medical Jury checks transportation, physical exam and competition times for the next day
- 4.3.5.** The Chairman of the Medical Jury reviews the medical statistics of the day and prepares for the next day
- 4.3.6.** The Chairman of the Medical Jury will at the end of the tournament provide a "Medical Report on the Competition" to the Chairman of the

Medical Commission, the Vice Chairman of the Medical Commission, the Secretary the Medical Commission, and the Executive Director of AIBA. It is usually a courtesy to send a copy to all Commission Members.

4.3.7. The Post competition report will contain the name, place, number of days, number of boxers, means of transportation provided, quality of the food, any sanitary concerns, any concerns with respect to housing, any unusual occurrences or risks to athletes involved, all statistical data collected during the competition in tabulated form (recommended use of standard Excel program) and recommendations with respect to safety, tournament conditions, or medical concern.

4.3.8. The Doping Control Doctor will submit a Doping Control Report on each tournament to the AIBA office, to the Chairperson of Anti-Doping and maintain a copy for his records

4.3.9. The Doping Control Doctor will be prepared to testify on behalf of AIBA as requested by AIBA's legal counsel should any legal challenge to adverse analytical findings occur

4.4. Conclusion

4.4.1. All Members of the AIBA Medical Jury must be members of the AIBA Medical Commission

4.4.2. In urgent circumstances the technical delegate in consultation with the chairman of the medical jury may appoint nonmembers the AIBA Medical Commission to serve as members of the medical jury.

4.4.3. In such circumstances a member of a Confederation Medical Commission or the most experienced available ringside physician will be sought out to serve as medical jury

4.4.4. The Chairman of the Medical Jury routinely makes work assignments, schedules and locations for the members of the Medical Jury

4.4.5. The Chairman of the Medical Jury will delegate tasks to the members of the Medical Jury to facilitate smooth running of each tournament

5 Tips for the Individual Ringside Physician

- 5.1.** When entering the ring, take clean gauze pads and a penlight, but have airways, emergency medical technical support and resuscitation equipment readily available
- 5.2.** The assigned physician must examine the boxer after a period of unconsciousness or other serious injury. Therefore, facilities should be available for continued, close observation under the direct supervision of the appropriate physician.

5.3. The “Down Boxer” regaining Consciousness

- 5.3.1.** Make sure the boxer has an adequate airway. Remove the mouthpiece.
- 5.3.2.** Watch for vomiting or aspiration.
- 5.3.3.** Insist that the boxer lie down until fully reactive. Then permit him to sit up
- 5.3.4.** When stable he may be escorted to the corner with assistance.
- 5.3.5.** When recovery permits, follow the steps mentioned elsewhere in this section to evaluate the boxer’s neurological status. In this instance, the neurological evaluation is done to establish a baseline for further reference because the boxer will require observation.
- 5.3.6.** If rapid recovery is not as expected, expedite transfer via stretcher and ambulance to the prearranged referral hospital.
- 5.3.7.** If the injury is serious, the Medical Jury will suggest an LOC Physician will accompany the athlete in the ambulance
- 5.3.8.** If recovery progresses satisfactorily, without evidence to suspect a progressive intracranial process, the boxer is released to the care of his coach, family or other responsible adults. This individual should be given Head Injury instructions as much as language permits. For national federations a printed “Head Sheet” and Follow-Up Form is appropriate. See Appendix IV for an

example. Additional pertinent information should be provided to facilitate continued observation and to assure proper follow-up care.

5.4. How to handle cuts at ringside

5.4.1. Since the advent of the headguard, few cuts are seen.

Nonetheless, the physician must be prepared to handle cuts at ringside. The basic principle of handling cuts around the eye is that, if a cut causes enough bleeding to impair vision, the bout should be stopped. Most cuts will NOT require that the bout be stopped.

5.4.2. Occasionally a cut will be in an area where deep structures may be injured. In boxing, as these are blunt injuries and not sharp injuries, it is still unusual to have to stop a bout unless these lacerations are quite deep and severe. However, the following lacerations should be evaluated with this in mind.

5.4.2.1. Generally most cuts, with the following exceptions, do not impair vision or damage underlying structures:

5.4.2.1.1. Cuts over the supraorbital nerve or the supratrochlear nerve, if they are deep enough, may damage the nerve.

5.4.2.1.2. Cuts medially over the lacrimal duct area may extend into the nasal lachrymal duct.

5.4.2.1.3. Cuts over the infraorbital nerve, if deep enough, could damage the nerve.

5.4.2.1.4. Cuts on the eyelid itself could damage the tarsal plate or the globe itself may have been injured.

5.4.2.1.5. Vertical cuts through the vermillion border of the lip should stop the bout because of the potential for further tearing of the lip from subsequent trauma.

5.4.2.1.6. Cuts around or on the bridge of the nose must be carefully checked for evidence of a compound nasal fracture. If no fracture is present, the bout may be allowed to continue.

5.4.2.1.7. The fairly common cuts on the lateral aspect of the eyebrow may usually be allowed to continue even when quite long.

5.4.3. Consideration should be given to stopping the bout for cuts in the above specified areas.

5.4.4. No dressing of cuts is allowed except for collodion, skin glue or steri-strips. Subcuticular closure of certain cuts with a covering of collodion may allow boxers to continue in a tournament. If they choose this approach, they should be made aware that there is a risk that the wound may re-open during the bout and need further repair.

5.4.5. See Appendix IV for illustration.

5.5. How to handle nosebleeds

5.5.1. The initial evaluation should determine the presence of a fracture. Gentle handling of a nose bleed is necessary so as not to further aggravate or compound a fracture.

5.5.2. If no fracture is felt, the physician must then evaluate the character of the bleeding (i.e. venous vs. brisk arterial gushing). Bouts are stopped for arterial bleeding (rare in this location).

5.5.3. Determination of posterior bleeding should also be done by tongue depression and pen light observation. If there are clots in the posterior pharynx or the boxer is spitting clots, the bout should be stopped.

5.5.4. Massive venous bleeding may be cause to stop a bout

5.5.5. Nosebleeds should stop bouts for medical reasons. Most nosebleeds will stop on their own or with external pressure. A messy nosebleed is not necessarily a serious nosebleed.

5.6. Evaluation of Concussion in the ring

5.6.1. A boxer temporarily stunned or knocked down and unconscious is a stricken boxer and a medical emergency. This indicates that a concussion has occurred.

5.6.1.1. A concussion is a temporarily altered state of motor hypotonus, helplessness and disturbed consciousness.

5.6.1.2. This includes any one or more of the following:

- Disorientation
- Memory deficit – antegrade and retrograde amnesia
- Altered or slow speech
- Difficulty processing new information
- Impaired motor function – slow, uncoordinated

5.6.1.3. The following questions are helpful for evaluating the mental status of a boxer whose ability to protect himself is questioned (i.e. in the corner or when brought to ringside by referee):

- What is your name?
- Where are you?
- What day and year is it?
- What is your opponent's name? What round is it?
- Ask the boxer to repeat four numbers, i.e. 7-3-8-2 after 5 minutes.
- Note speech – altered, slow or repetitive?

5.6.1.4. Observe the eyes

- Pupils equal, reactive?
- Is there spontaneous nystagmus? The presence of spontaneous horizontal nystagmus indicates that the boxer is very vulnerable and should definitely not be permitted to continue.
- Look for facial weakness, hemiparesis or other focal signs.

5.6.2. The match should be stopped for any of the following. If the boxer:

- Was clearly stunned
- Was unconscious
- Fails to answer the questions correctly
- Fails to perform the motor tests
- Shows any abnormal focal signs

5.6.3. Much appraisal is subjective, but the conscientious application of these guidelines will produce decisions that minimize injury and protect the injured boxer.

5.7. How to handle the unconscious boxer

5.7.1. A boxer knocked down and unconscious is considered a stricken boxer and emergency attention by the ringside physician is mandatory.

- 5.7.1.1.** The referee should immediately signal the doctor to enter the ring. A cervical (neck) fracture must always be a consideration in the initial evaluation. The physician needs to promptly secure the airway and check for signs of hand and foot movement that will indicate an intact spinal cord. If the boxer fails to regain consciousness, make full use of supplemental oxygen, even if respiration seems adequate. Increasing oxygen concentration to the brain may prevent further injury. Continue airway management. With the help of the EMT service, immobilize the neck in a cervical collar and place the boxer on a stretcher. The boxer should then be removed expeditiously from the ring and transferred via ambulance to the designated hospital in full emergency mode.
- 5.7.1.2.** If the boxer regains consciousness and demonstrates full use of his extremities, he may be allowed to sit up. Don't allow him to stand immediately. When satisfied that he has full use of his extremities, assist him in standing and move to the corner where he should sit down on the stool until fully capable of being assisted from the ring. Make sure he does not attempt to engage the ropes or maneuver down the ringside stairs unassisted. On returning to the locker room or designated examination area, the physician should perform a thorough medical examination to determine the need and nature of further medical observation and/or hospitalization.
- 5.7.1.3.** If the boxer regains consciousness, but does not have full use of his extremities, with the help of the EMT service, he should be placed very carefully in a cervical collar, removed from the ring on a stretcher and transported to the designated hospital.
- 5.7.1.4.** Remember an unconscious boxer is an emergency of the first magnitude.

5.8. The Post-Bout Examination

- 5.8.1.** Each boxer must be examined after the bout. Ideally there should be an examination area some distance away from the ring on the way to the locker room where the boxer can be stopped and briefly examined for mental status, head, neck or extremity injury. This can be done rapidly by asking questions as to mental orientation and status while a quick survey of head, face, neck and upper extremities is made.

5.8.2. A focused exam is performed of any area suspected of possible injury that may have been noted during the bout.

5.8.3. Under current rules, Post bout exams are not done on the field of play. For this reason, the Local Organizing Committee supplies CMO or a team of Physicians to do Post Bout Exams off the field of play. A list is made of all boxers---name, weight, country, injuries. A copy of this list is given to the Chairman of the Medical Jury who records all injuries

5.8.4. In the rare circumstance when there are no physicians to help and there are two physicians at ringside, one should be designated to do the exams while the other remains at ringside. The task may be alternated at Chairman's discretion.

5.8.4.1. If only one physician is at ringside, he must do the exams expeditiously and return to ringside as soon as possible so that the boxing may resume.

5.8.5. In Non-AIBA Tournaments often it is more convenient to do the post-bout evaluations at the ringside. This is acceptable if there are no objections from the Competition Jury.

5.8.5.1. In this case each of the two doctors may see one of the boxers, making the process faster.

5.8.5.2. If a boxer is going to require further evaluation, go to a separate area or, to the locker room, if there is no other designated site.

5.8.5.3. Always the boxer's safety is the primary concern.

6 Minimal Suspension Periods after Knockout and RSCH

6.1. Single occurrence of knockout or RSCH (Referee Stops Contest--Head)

6.1.1. No Loss of Consciousness: If a boxer suffers a knockout with as a result of blows to the head or if the bout is stopped by the referee because the boxer has received heavy blows to the head, then the boxer may not take part in boxing or sparring for a period of at least 30 days afterward.

6.1.2. Loss of consciousness less than one Minute: the boxer may not take part in boxing or sparring for a period of at least 90 days afterward.

6.1.3. Loss of consciousness more than one Minute: the boxer may not take part in boxing or sparring for a period of at least 180 days afterward

6.2. Double occurrence of knockout or RSCH

6.2.1. If during a period of 90 days after a boxer's suspension for KO, the boxer is knocked out a second time by the referee due to the boxer having received heavy blows to the head then the boxer may not take part in boxing or sparring for a period of 90 days after the second occurrence. If the first Suspension was 90 days, the repeat suspension will be 180 days. If the first suspension was 180 days, the new suspension will be 365 days.

6.3. Triple occurrence of knockout or RSCH

6.3.1. If during a period of 365 days the boxer suffers a third knockout from head blows, then he may not take part in boxing or sparring for a period of 365 days after the third occurrence. Any combination of knockouts or RSCHs that equal three under these circumstances qualifies for the 365 day suspension.

6.4. Other

6.4.1. Any boxer who loses a difficult bout as a result of many blows to the head or who is knocked down in several successive competitions may be barred from taking part in boxing or sparring for a period of 30 days after the last contest on the advice of the Medical Jury.

6.4.2. All these protective regulations apply when the knockout or severe head trauma occurs in training or in any other activity (sports, auto accidents, etc.).

6.5. Medical certification after the end of the suspension period

6.5.1. Before a boxer is allowed to fight after the aforementioned periods have elapsed, he must be passed as fit by his physician or a neurologist, if possible after a specialist examination has been conducted and computerized tomography or MRI of the brain has been carried out.

7 Boxing Injuries

7.1. See above for the discussion of Nosebleeds.

7.2. See above for the discussion of Head Injuries.

7.3. Eyes

Serious eye injuries are very rare. Corneal abrasions, tearing of the iris and dislocation of the lens may occur. Some cases of retinal detachment have been observed. In the case of an eye injury, the bout must be stopped and the boxer is referred to an ophthalmologist.

7.4. Abrasions

Such injuries often occur to the face and skull and elsewhere. Bleeding should be halted by pressure, then cleaned and a local antiseptic applied.

7.5. Lacerations

There is no doubt that most cuts in the region of the eyes are caused by blows to the head. When the wound has been thoroughly cleaned, it can be stitched meticulously in layers. Smaller cuts can be held together at the edges and taped with a steri-strip or closed with skin glue. However, it is recommended that all facial cuts through the cutis be sutured with fine sutures in layers. If a wound is stitched, the stitches should be removed within five days. To guarantee healing of the wound, a sufficiently long suspension period should be imposed. Lacerations of the scalp may be closed with heavier sutures in a through-and-through fashion.

7.6. Hematomas

The "black eye", as it is commonly known, rarely requires treatment, but cold applications and light compression limit the extravasation of blood.

7.7. Hematoma of the Auricle

This injury requires prompt incision and a pressure bandage with the application of topical antibiotics. If done late, this should be done by a doctor familiar with the condition.

7.8. Nose

Fractures of the nasal bones are rare. Reduction at an early stage is indicated and a suspension of three months should be imposed. The procedure may be done after the boxer has returned home and the swelling has subsided.

7.9. Septal Hematoma of the Nose

This should be drained on an emergency basis to prevent formation of a hole in the septum later. When the nose is packed, antibiotics and decongestants are used. This should be done by someone familiar with the procedure, but is not usually difficult.

7.10. Jaw

Fractures of the jaw are also rare. The symptoms are pain, tenderness, trismus and speech difficulties. The patient should be referred for repair. A six month suspension is usual

7.11. Hands

The most common fractures are those of the first metacarpal. They are primarily caused by a poor punching technique, where the thumb is not correctly positioned opposite to the index and middle fingers. If such a fracture is suspected as indicated by localized tenderness, bruising or swelling, the boxer should be immediately sent for an X-ray. All suspected hand and wrist fractures should be splinted and sent for X-ray. Referral is made on the basis of these findings. Suspected dislocations are handled in the same fashion.

7.12. Limbs

Injuries of the upper and lower limb are uncommon in boxing.

7.13. Shoulder dislocations

are seen and are best relocated immediately in the ring before spasm sets in. A sling is of benefit, but the boxer needs referral when he returns home.

7.14. Abdomen

Ruptures of the organs in the abdomen (spleen, liver) are uncommon, but should be borne in mind due to their serious consequences. Pain in the abdomen and/or shoulder may signify bleeding.

7.15. Kidney Contusions

Contusions may lead to massive hematuria even when no anatomic defect appears. In most cases conservative treatment in hospital with confinement to bed should suffice.

8 Physical Fitness of Referees and Judges

8.1. The Medical Commission does not consider age to be an absolute factor in one's health and physical fitness. Therefore, the medical examination is designed for and recommended to be administered to referees and judges of all ages.

8.2. The examination shall consist of two parts.

8.2.1. The annual examination is done at the local level by the National Federation. This shall be documented and presented to the Medical Jury in charge of any International, Continental or World competition.

8.2.2. The referee/ judge will then be subjected to the second brief, but thorough, exam done prior to the event at the time of the official weigh-in. These exams shall consist of the following:

8.2.3. Annual Examination – once per year

8.2.4. This shall include a history of past and recent illnesses, surgical procedures, allergies, medications, disabilities and family history.

8.2.5. The following conditions render the R/J unfit:

1. coronary artery insufficiency, with angina
2. congestive heart failure
3. aortic stenosis
4. left ventricular outflow tract obstructive disease
5. aneurysm
6. myocarditis
7. active thrombophlebitis
8. uncontrolled arrhythmias
9. untreated or poorly controlled hypertension
10. uncontrolled metabolic disease (diabetes mellitus, thyrotoxicosis, myxedema)
11. excessive medication
12. renal, hepatic or other metabolic insufficiency
13. uncontrolled psychoneurotic disturbances requiring Therapy
14. intermittent claudication
15. moderate to severe pulmonary disease
16. physical disability from neuromuscular, orthopedic or arthritic disorders
17. myopia (long distance vision with or without corrective lenses of less than 20/80 (British/ American), 2.5/10 (European) in both

eyes. The wearing of glasses in the ring is prohibited, although the wearing of contact lenses is permitted.

8.2.6. The Clinical Examination will consist of:

1. Age, height, weight, and neurological review to include cranial nerve survey, deep tendon reflexes, Romberg and Babinski responses.
2. Blood pressure (uncontrolled hypertension is disqualifying).
3. Resting heart rate not to exceed 100 min.
4. Ophthalmologic exam: Visual acuity (Snellen chart) and fundoscopic exam.
5. Internationally standardized-graded exercise electrocardiogram (ECG), annually for those age 40 and above and every 3 years of those under 40.
6. Laboratory tests at the discretion of the examiner.

8.2.7. In addition to having the examination performed and documented, the referee and/or judge must produce the completed AIBA Medical Commission's Certificate of Examination, signed by his or her respective National Federation's Medical Office, certifying his or her physical fitness to officiate as a referee and/or judge.

8.2.8. The second examination, done at each AIBA competition, prior to or at the time of the initial weigh-ins, shall include the following:

1. Blood pressure reading to rule-out uncontrolled hypertension.
2. Resting pulse rate between 50 and 100.
3. A normal auscultation of the chest.
5. A temperature to rule-out febrile illness.
6. Conditioning tests as determined and described by the examiner.

8.3. The members of the AIBA Medical Jury shall use their best judgment, taking into account all of the above in evaluating the total fitness of each individual referee/judge. The object being to diminish the risk of coronary heart disease and to promote the semblance of good health and conditioning of those officials in and about the ring during AIBA events.

9 Ringside Physician Management System for International Licensing

9.1. Objectives:

- 9.1.1.** To introduce a program for assessing and educating Ringside Physicians
- 9.1.2.** To Conduct Ringside Physician Training Courses to grade existing members and to train new ringside physicians for

International license, to provide medical jury members and chairpersons.

9.2. Ringside Physician Training Course :

9.2.1. A workshop on Ringside Medical Knowledge will be given

9.2.1.1. This will be based on the Medical Handbook

9.2.1.2. Pertinent sections of the Technical Rules

9.2.1.3. Anything Medically related from the Articles and Bylaws of AIBA

9.2.1.4. All course attendees will have to take an MCQ test at the end of the course.

9.2.1.5. Passing grade will be 50%.

9.3. An Obligatory Practical Session will be given

9.3.1. To help evaluate Ringside Competence, practical training will be composed of "set up" scenarios using volunteers to portray injuries

9.3.2. Commission Members will be observed and evaluated on the way they manage these scenarios

9.3.2.1. Decision to treat or not treat

9.3.2.2. Appropriateness of treatment

9.3.2.3. Timeliness of treatment

9.4. An Oral exam will also be given on practical Ringside and Boxing matters

9.5. Most but not all Medical Juries will have a "Physician Evaluator", occasionally a Medical Jury may have 2 evaluators

9.5.1. The Evaluator will grade, criticize, evaluate each member of the Jury (Except themselves)

9.5.2. The Evaluator's Report will be Confidential

9.5.3. The Evaluator's report will be sent directly to the Chairman of the AIBA Medical Commission

9.5.4. 9.5.4 Members of the Jury are asked not to discuss or try to determine who the evaluator is:

9.5.4.1. There may be none

9.5.4.2. There may be one

9.5.4.3. There may be 2

9.6. In cases where the same Jury members receive widely differing grades from different evaluators, the Commission Chairman will privately discuss this with each evaluator

9.7. Jury Members will be evaluated on

- 9.7.1. Work output
- 9.7.2. Morning Physicals
- 9.7.3. Attendance at Ringside
- 9.7.4. Contribution to the tournament running smoothly
- 9.7.5. Ability to get along with other Jury Members
- 9.7.6. **JUDGEMENT, INTERVENTION and BEHAVIOR at RINGSIDE******
- 9.7.6.1. This last is the single most important evaluation factor

9.8. Certification system:

- 9.8.1. Members of the AIBA Medical Commission will be given an "International License"
- 9.8.2. * ---Indicates that a Physician is a Member of the AIBA Medical Commission
- 9.8.3. ** ---Indicates that a Physician is qualified to be a Member of an AIBA Jury
- 9.8.4. *** ---Indicates that a Physician is eligible to serve as Chairman of an AIBA Jury
- 9.8.5. In urgent circumstances Physicians of each level may perform the duties one level above them
- 9.8.6. * ---Physicians may be appointed to a tournament for evaluation for advancement if they perform well on the initial evaluations above
- 9.8.7. Physicians consistently receiving excellent evaluations may be advanced to the next level
- 9.8.8. Physicians performing below expectations may move to a lower level
- 9.8.9. Physicians at the level where they may serve as Jury Chairperson must before actually being appointed as Chairperson
 - 9.8.9.1. Know the document on Duties of the Medical Jury
 - 9.8.9.2. Know how to record the required Medical Statistical Data (Excel Program Provided---but you must be able to fix it if it malfunctions)
 - 9.8.9.3. Send a tournament Report to the Executive Director, The Chair, Vice Chair and Secretary of the Medical Commission
 - 9.8.9.4. It is customary to send a copy to all fellow Medical Commission Members

9.9. *--- Physicians will make up the Jury for the Olympic games**

- 9.9.1. Continental Representation may alter this

9.9.2. Unusual Circumstances may alter this

9.10. Confederation Medical Commission Members who are excellent may with the recommendation of the Chair of the Confederation Medical Commission be invited to attend AMC training courses and evaluation sessions. Those completing the program satisfactorily may be issued an International AIBA License with privileges appropriate to the level they attain.

9.11. Costs for evaluation of Confederation Commission Members must be borne by the Confederation or their National Federation

9.12. In General:

9.12.1. * 3 Star Physicians, International license, being able to be Chair of Competition Medical Jury and participate as Ringside Physicians at World Championships, Olympic Games etc.

9.12.2. * 2 Star Physicians being able to participate at WC, WSB, APB as member of medical jury

9.12.3. * 1 Star Physicians: having attended and passed the training course, the physician will be obliged to attend 3 major tournaments) where he/she will be evaluated. If the physician is adjudged to have been competent by the senior tutor present, then the physician will be awarded One Star.

9.13. To start several Senior Members of the AMC will start at *** or **

9.14. These Physicians will be chosen by the known quality of their work over many years

9.15. They will be subject to moving up and down levels just like all other members of the Commission based on their evaluations and decide by the Chairman of the Medical Commission

9.16. The International License may be kept in for life but “Star Ranking” must be maintained by continuous re-evaluation

10 All Federations must

have at least one physician with an International License to ,be present at their national Championship by 2016.

10.1. The Physician may be certified by attending the AMC Course (as above)

10.2. The Physician may be invited from another federation

11 Antidoping Regulations and Issues

11.1. AIBA conforms to the World Anti-Doping Agency (WADA) doping code. See the AIBA website for the AIBA Anti-Doping Rules. Also see the AIBA website for information on Therapeutic Use Exemption Forms.

www.aiba.org

12 Normal Practices of the AIBA Medical Commission

12.1. Medical Juries. At all AIBA-sanctioned events including, but not limited to, all World Championships, the Olympic Games, the World Cup Championships and the President's Cup Championships, there shall be a Medical Jury made up of members of the Medical Commission. The number will depend on the number of rings, with a minimum of three.

12.2. The decisions of this Commission shall be final and without appeal. A member of the Medical Commission of AIBA may act as a member of the Medical Jury in any Championship under the auspices of AIBA.

12.2.1. Continental Bureaus shall nominate similar Commissions for Continental Championships.

12.3. Meetings. The Medical Commission shall arrange its own meetings (working group) usually twice each year. The Federations shall undertake to ensure the participation of their Commission members in the meetings. Those core and new members who do not attend meetings without a very strong reason will be excluded from the Commission.

12.4. Defense and Promotion of AIBA Boxing. The Medical Commission organizes scientific conferences and symposia on the medical aspects of boxing. Members of the Medical Commission take part in these events and publish articles in medical journals in the defense and promotion AIBA of boxing.

12.5. The Medical Commission coordinates and initiates medical research projects for the better understanding of the physiological and medical aspects of boxing.

12.6. The Medical Commission makes recommendations to the Executive Committee with regard to the physical well-being of AIBA boxers and collects information on medical matters relating to AIBA boxing.

13 Appendix I: Boxing Hygiene

13.1. Sports hygiene is an important component of sports medicine. In this appendix we present a synopsis of boxing hygiene regulations for doctors, coaches and referees.

13.2. Dehydration. A reduction in fluid intake for the purposes of weight loss is dangerous to the health and reduces the boxer's performance. Dehydration can lead to liver and kidney damage and diminishes the boxer's aerobic capacity. Reduction in fluid intake and sweating before the bout are inadvisable and should be avoided.

13.3. Vaseline. The use of a small amount of Vaseline on the forehead and eyebrow to help prevent injury is permitted.

13.4. Embrocation. The use of scents, oils or rubbing alcohol immediately prior to the contest is forbidden. When the body warms up during clinches, there is the danger that this, mixed with sweat, may get into the boxer's eyes and cause damage. There are also people to whom the smell is offensive or for whom these concoctions cause breathing difficulties.

13.5. Gum shields. A boxer should never use a borrowed gum shield. The gum shield should fit exactly and comfortably. A poorly fitting gum shield is useless and can cause buccal irritation or nausea. A shield knocked out of the mouth should be thoroughly washed before replacing. No boxer should be permitted to wear dentures during a contest. Boxers wearing braces should have the written consent of their orthodontist and have a gum shield that is fitted to their own braces.

13.6. Headgear. It is advisable that each boxer has his own headguard. In this way it can be properly fitted. Also a borrowed headguard can be a cause of infection.

13.7. When headgear is supplied to the participants at a tournament, it is to be thoroughly cleaned with 10% bleach solution by the tournament personnel between uses.

13.8. Sponges and towels. Each boxer must have his own sponge, towel and clean water. The practice of wiping the opponent's face after a bout should be discontinued. It is not only unhygienic, but can also lead to serious infections, including hepatitis and HIV. Sponges which have been immersed in dirty water or have been on the floor should never be used to wipe the boxer's face.

13.9. The coaches who are at the ringside should have a supply of clean gauze to examine and apply to a cut or abrasion.

13.10. Bleeding

The most frequent boxing injuries are cuts and abrasions. Since the wearing of head guards became compulsory, the number of such injuries has gone down. On the other hand, bleeding noses are more common. It must always be emphasized that the immunodeficiency disease **AIDS** is primarily transmitted through the exchange of infected blood. It is therefore theoretically possible that the disease could be passed on via open wounds if both boxers are bleeding. For this reason the following infection control guidelines should be adhered to:

13.10.1. Coaches and referees must use clean gauze when examining cuts or abrasions. The used gauze should be disposed of in sacks designated for that purpose at the ringside.

13.11. In the case of bleeding it is recommended that the referee consult the Medical Jury.

13.12. The use of disposable gloves is advisable when examining an injured boxer.

13.13. Splashes of blood on the skin should immediately be washed away with soap and water.

13.14. Splashes of blood in the eyes or mouth should immediately be rinsed away with plenty of water.

13.15. If other surfaces are accidentally contaminated, they should be cleaned with a fresh 10% solution of household bleach in water. If this comes in contact with the skin, it should be immediately washed off.

13.16. Stimulants

AIBA forbids the use of stimulants apart from water. Smelling salts contain ammonia, which is a stimulant and can worsen nasal hemorrhaging and for this reason it must not be applied between rounds.

14 Appendix II: Competition Rules for Female Boxers

14.1. Principle: The Articles and Rules of AIBA shall apply to the training and competition of female boxers in lieu of or in addition to the special provisions contained in this document.

14.2. MEDICAL, EXAMINATION AND WEIGH-IN FOR COMPETITION

14.2.1. In addition to their international passbook, female boxers shall furnish, prior to any competition, all the information required as to their physical condition and confirm with their signature that they are not pregnant. In the event of incorrect statements being made, the female boxer shall be held responsible for any consequences resulting therefrom.

14.2.2. The organizers of mixed events where both males and females compete shall arrange for separate rooms for the medical examination and weigh-in for males and females. If the situation dictates that the same room must be used, the males and females must occupy the room at separate times.

14.2.3. Female boxers shall have weightmistresses attending the scales at weigh-in.

15 Appendix III: Training curriculum for international ring side physician license

1. Basics of emergency care at ringside
2. Injuries recognition and treatment
3. Control of Bleeding including nose bleeding
4. Neck, Spinal, extremity injuries :
5. Practical recognition at ringside, immobilization, lifting techniques
6. 5-Injuries to the Face, Eyes ,Nose Oral and Dental Injuries
7. Head Injuries, Concussion prevention and management guidelines.
8. Dislocations in Boxing : Shoulder, Elbow, Hand, wrist, Patella ...
9. Acute muscle, tendon injuries, diagnosis, treatment

10. Ankle, knee and shoulder injuries - treatment
11. Hand injuries in boxing
12. Wound Care, sutures versus other means
13. Unconscious boxer (assessment ,CPR management)
14. Entering the ring ;The downed boxer
15. Disqualifying conditions in Boxing ; Annual medical examination , Pre-bout examination ,Post-bout examination
16. Suspension periods and Medical – Legal issues
17. Female boxing
18. Referees and judges examination
19. Doping control
20. Boxing hygiene
21. WSB medical rules
22. APB medical rules

15.1. CHART 1 - Entering the ring Boxer Down, Prone, Unconscious, No Pulse

1. Recognition of referee signal
2. Ring entry
 - 2.1. Mouthguard Removal
3. Response time from referee signal to mouthguard removal
4. Check for Verbal response
5. Request for paramedic/ medical assistance
6. Check for Carotid pulse
7. Log Roll
8. Initiate cardiac massage
9. Instruction of paramedics re airways and equipment
10. Change of cardiac massager
11. Application of collar
12. Use of backboard, scoop
13. Transport out of ring
14. Transport to medical room/ ambulance
 - 14.1. Boxers Still Unconscious should not be transported to the Medical Room---
They must be transported directly to the Ambulance/Neurosurgical Hospital

15.2. Evaluation CHART 2 - Entering the ring Boxer Down, Supine, Unconscious. No Pulse

1. Recognition of referee's signal
2. Ring Entry
3. Mouthguard Removal

4. Response time from referee signal to mouthguard removal
5. Check for Verbal response
6. Request for paramedic/ medical assistance
 1. Check for Carotid pulse
 2. Initiate cardiac massage
 3. Instruction of paramedics re airways and equipment
 4. Change of cardiac massager
 5. Application of collar
 6. Use of backboard, scoop
 7. Transport out of ring
 8. Transfer to medical room/ ambulance

15.3. Evaluation CHART 3 – Doctors corner evaluation, Nosebleed

1. Recognition of referee signal
2. Going to correct corner
3. Picking up Gloves , Gauze, Penlight
4. Pick nose between two fingers of left hand and wipe with right hand (drying of nose with tissue)
5. Searching pain when drying nose
6. Open mouth signal to boxer
7. Lamp inspection of mouth searching massive bleeding in the throat
8. Lamp inspection of nose
9. Signal to referee – Box, No Box

15.4. Evaluation CHART 4 – Doctors corner evaluation, Jaw, Mouth, dental injury

1. Recognition of referee signal
2. Going to Correct corner
3. Picking gloves gauzes, penlight
4. Signal boxer to open mouth and show teeth
5. Signal to boxer to open his mouth... (if you can pass two fingers, no jaw dislocation...)
6. lamp inspection of mouth... face for fracture,
7. Signal to referee – Box, No Box

15.5. Evaluation CHART 5 – Doctors corner evaluation of joint injury

1. Recognition of referee signal
2. going to the correct corner
3. Inspection of athlete while moving to doctors corner
4. Question regarding pain , Test of joint
5. Signal to referee – Box, No Box

15.6. Chart 6 – Overall performance

Will be Judged by the Result MCQ + Result Ring Practical Test +Oral Exam+ Tournament Performance

16 Appendix IV: Illustrations

See the following pages for an example of a Head Injury Follow-Up Sheet, a Facial Lacerations Illustration.