Muay Thai Ontario

Medical Handbook

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INTRODUCTION

The following document details the medical rules and regulations to be followed at each Muay Thai Ontario (MTO) sanctioned event. During, and outside of Muaythai (the Sport) competition, the health and welfare of the amateur athlete is of the utmost priority and the procedures described in this handbook are to be followed without exception.

1: ATTENDANCE OF MEDICAL PRACTITIONER AT MTO EVENTS

A qualified medical practitioner so approved shall be in attendance throughout the competition and shall not leave the place where it is held before the end of the last contest and after he/she has seen the last two athletes who participated.

The attending medical practitioner has the right to temporarily stop a contest during the round to determine whether or not the contest should be terminated because of the athlete's injuries or condition. He/she shall do this by blowing a whistle. The doctor having made his/her decision, the referee must follow his/her advice.

If multiple practitioners are present at a given time, one such practitioner shall be designated the Chief Physician.

1.1: ABUSE OF MEDICAL DOCTORS Any verbal and/or physicals abuse of medical doctors directed toward ring physicians in the line of the responsibilities is to be dealt with by the Chief Official and MTO Board of Directors in the form of a suspension.

2: ANNUAL MEDICAL DECLARATION

The annual medical must be completed prior to any athlete competing in the sports of amateur Muaythai. It should be submitted with an athlete's membership application and must be renewed each year with membership.

It is recommended that each athlete secure the following:

- Absorbed tetanus toxoid once every five years;
- Hemoglobin and white blood count every 6 months;
- Urinalysis once every 6 months;
- Annual chest x-ray;
- Annual electrocardiogram;
- Recombinant HEPATITIS B vaccine, initially three injections over a two month period with another dose one year after the initial injection. Booster hepatitis vaccine should be administered every 5 years. The above is particularly applicable to those athletes involved in tournament competitions;
- For tournament competitions, it is recommended that an EKG or EEG be secured in addition to the above.

The components of the annual medical declaration are as follows:

2.1: FAMILY HISTORY Special attention is paid to hereditary or familial diseases such as history of epilepsy, tuberculosis, diabetes mellitus, blood disorders, and early coronary heart disease.

2.2: PERSONAL HISTORY Is to entail the history of previous surgical procedures, systemic illnesses, concurrent maintenance medications (be they chronic or temporary), allergies, and deformities.

2.3: EYES Athletes with a visual acuity of less than 20/200 in the worse eye and less than 20/120 in the better eye may be precluded from competition. Any variant of optic nerve degeneration cannot compete in Muaythai. Any (pre) retinal detachment, hemorrhages, or gross optic fundal pathology precludes from competition. Color blindness does not

preclude nor does squint (strabismus) provided there is no double vision complaint. A certificate of approval for amateur Muaythai competition should be obtained from an ophthalmologist in the case of squint. Previous retinal detachment having been corrected or previous hyphema shall preclude the athlete from competition.

2.4: EARS Athletes with recurrent ear discharge and persistent tinnitus are not to compete. Unilateral deafness of chronic duration does not preclude from competition. Bilateral deafness of chronic duration does not preclude from competition. Deafness of recent onset warrants investigation and until that investigation is complete, the athlete is precluded from competition. It is inadvisable to compete with Deaf-mutism (but not mutism alone).

2.5: FACIAL MALFORMATION Athletes with any facial bony configuration resulting in impaired breathing or inadequate retention of the mouthpiece are precluded from competition.

2.6: HEART An athlete with the following cardiac pathology is not permitted to compete in Muaythai:

- Ischemic heart disease
- Rheumatic heart disease (active) with valvular or pathology
- Cardiac arrhythmia (not benign);
- Right or left heart failure;
- Thyrotoxic heart disease;
- Recurrent pericarditis; and
- Congenital heart disease **unless** the defect has been rectified and **in addition the athlete is certified fit to compete in Muaythai** by his own attending cardiologist.
    - This note must state fit to fight in Muaythai, not athletics. Here, the practicing cardiologist must be certain that the athlete who has undergone congenital surgical heart correction is able to withstand the cardiopulmonic demands of the Sport, not just athletics.

Mitral value prolapse, per se, if asymptomatic, does NOT preclude an athlete from competition.

2.7: PULMONARY The following pulmonary conditions preclude an athlete from competition:

- History of emphysema;
- Recurrent bronchitis or bronchiectasis;
- Active T.B. or any lung neoplasm; and
- History of recurrent pulmonary fulminating infections and/or hemoptysis.

Neither controlled bronchial asthma nor inactive cured tuberculosis preclude from competition.

2.8: CENTRAL NERVOUS SYSTEM The following neurological medical states make it inadvisable for an athlete to participate in Muaythai competition:

- Epilepsy, whether grand mal, petit mal or temporal lobe, or variant thereof;
- Documented migraine;
- Recurrent headaches;
- Recurrent dizzy spells (vertigo);
- Known space occupying lesions of brain e.g. cysts, tumors, hematomas, pneumatoceles;
- Cerebrovascular disease, cerebrovascular insufficiencies, arterio-venous malformations;
- Focal persistent leg and/or arm tremors;

- Focal seizures;
- Degenerative spinal cord disorders e.g. ALS, multiple sclerosis; and
- Spinal cord tumors, vascular malformations.

2.9: MUSCULOSKELETAL & JOINT DISORDERS The following preclude an athlete from competition:

- Degenerative disc disease of the spinal column-active;
- Bony tumors of the spinal column;
- Ankylosing spondylitis;
- Diffuse or multifocal arthritic involvement of the joints including the spinal column, hands, forearms, shoulders, and legs;
- Phocomelia, absence of a natural lower limb, presence of a partial lower limb;
- Myasthenia gravis;
- Muscular dystrophy;
- Active peripheral neuropathies;
- Osteomalacia and osteoporosis;
- Agenesis of a hand or hypogenesis of a hand so a boxing glove cannot be fitted and/or maintained on that hand; and
- Presence of an artificial prosthesis (metallic, wooden, plastic, synthetic) fitted to an upper or lower limb.

Poliomyelitis does not preclude an athlete from competition if the resultant muscular involvement does not give disabling limb deformity or paralysis.

2.10: INGUINAL HERNIA The hernia, per se, does not preclude and athlete from competition provided that there is no element of tenderness, incarceration or strangulation. It is advised that the protective cup cover the hernia. If the element of tenderness exists, the boy/girl is precluded from competition, and should consult his/her physician RE: Surgical correction. Presence of an umbilical hernia does not preclude from competing in Muaythai unless there exists overlying tenderness, incarceration or strangulation.

2.11: ABDOMINAL The following preclude an athlete from competition:

- Organomegaly e.g. enlarged liver or spleen; active inflammatory visceral states e.g. colitis, gastritis, pancreatitis;
- Active acute hepatitis A, B, C, D, or E precludes from competing;
    - When clinical, biochemical and serological parameters indicate resolution of the hepatitis process, then that athlete may be allowed to compete again.
- Active gastric or duodenal ulcers;
- Persistent recurrent rectal bleeding;
- Jaundiced states;
- Acute surgical abdomen; and
- Cholemia.

Controlled, healed, inactive gastric/duodenal ulcers and inactive Crohn's disease (ulcerative colitis) do not preclude an athlete from competition.

2.12: GENITO-URINARY The following conditions preclude an athlete from Muaythai competition:

- An undescended testicle;

    - It is advised that an individual with such an affliction see a urologist for immediate assessment and treatment.
- Uremia; and
- Cystitis, prostatitis, urethritis including non-specific urethritis.
    - If controlled, do not preclude from competition.

The following conditions make it inadvisable for an athlete to participate in Muaythai competition:

- Chronic renal inflammations;
- Renal and/or urinary bladder neoplasms;
- Testicular neoplasms;
- Scrotal neoplasms; and
- Presence of only one kidney.

2.13: VENEREAL DISEASE History of active syphilis, be it primary, secondary, or tertiary, shall preclude from competition. History of active gonorrhea with or without its distant complications (arthritis, uveitis) shall preclude from competition; only resolved controlled gonorrhea **without distant complications** shall be considered when one so afflicted applies for (re)entry to amateur competition. Active herpes simplex venereal disease precludes from competition.

2.14: ENDOCRINE The following preclude an athlete from competition:

- Thyroid dysfunction, if untreated;
- Hypoglycemic attacks;
- Pituitary and adrenal gland dysfunctions, if uncorrected; and

Diabetes mellitus, corrected, does not preclude from competition.

2.14: DERMATOLOGICAL The following preclude an athlete from competition:

- Systemic skin allergies and/or systemic skin infective;
- All tinea (ringworm), scabietic, and diffuse skin rashes of undetermined origin, until resolved; and
- All rashes of systemic exanthems (measles, rubella) until the rash resolves.

2.15: HEMATOLOGICAL AND LYMPHATIC The following preclude an athlete from competition:

- History of persistent anemias, leukemias not in remission, thrombocytopenias, Hemophilia, Cristmas disease, or any other allied blood clotting disorders;
- History of lymphomas; and
- History of AIDS and AIDS-complex related illnesses.

2.16: BLOOD PRESSURE For an athlete who wishes to compete, it is essential to have a diastolic value less than 90 mmHg; the systolic component is more variable, but should remain less than 150 mmHg in the resting state.

Preferably readings should be taken in both arms at the end of the examination.

2.17: FEMALE ATHLETES Pregnancy, painful pelvic diseases states such as symptomatic endometriosis, and abnormal vaginal bleeding of undetermined etiology preclude the female athlete from competition.

History of breast surgery, breast masses or breast dysfunction must be made known to the examiner.

History of any gynecological dysfunction, gynecological surgery, or menstrual abnormality such as a suspect or confirmed pregnancy may yield, and any other disorder of the gynecological tract, must be made know to the examiner.

History of oral contraceptive medication, other hormonal medication, or intrauterine device utilization must be made known to the examiner.

3: MEDICAL INSPECTION PRIOR TO COMPETITION

This refers to the mini history asked to the athlete and to the physical examination undertaken no more than 24 hours prior to the scheduled competition.

Optimally, this should be done in a single room drawn off or isolated from the mainstream of activity; noise and chattering hamper a good physical examination. One coach, preferably the head coach, should accompany his athlete to the examining area.

The coach and the athlete must have completed the Pre-Competition Medical Questionnaire, and submit it to the presiding physician prior to the physical examination.

The physical examination prior to a contest should dwell on the following systems:

- Central Nervous System;
    - Note size of pupils relative to each other and do mini-memory, calculation, etc.;
    - Always ask regarding headaches, nausea/vomitus and any visual symptoms e.g. diplopia, blurred vision;
- Cardiovascular and blood pressure;
- Respiratory System;
- Abdomen: rule out enlarged spleen as complication or previous infectious mononucleosis;
- Hands;
- Facial bones including nasal bones;
- Eyes with funduscopic, visual acuity and visual fields;
- Ear canals and eardrums;
- Oral cavity; and
- Kidney areas.

The athlete must be medically examined at each weigh-in.

The athlete's medical record passbook must be present at the physical examination and signed by the presiding physician. If it is not producible, that athlete shall not be allowed to compete.

3.1: FEMALE ATHLETES

Three additional questions are to be posed on the questionnaire:

- Are you pregnant?
- Have you noticed any breast masses, bleeding, or any other breast dysfunction?
- Have you noticed any menstrual abnormality recently such as an absent menses, abnormal vaginal bleeding with or without pelvic pain (tenderness) not consistent with your normal menstrual cycle and pattern?

Neither a pelvic examination nor a breast examination shall be done in the routine pre-competition physical examination. If the verbal history points to an abnormality in these areas, the personal physician / gynecologist shall conduct said examination of these areas at the discretion of the female athlete.

3.2: MASTERS ATHLETES (AGE 40-55) Athletes ages 40 and older are required to meet the following additional requirements:

- Have a complete physical examination, with emphasis on the heart and lungs, prior to competing in each tournament or competition;
- Submit a medical certificate of fitness to compete to the pre-competition medical inspection of each competition; and
- Pass each pre-competition physical examination with specific emphasis on the pulmonary, cardiovascular, and neurological systems.

The upper age limit of athletes to compete is 55 years of age.

4: CONDITION OF THE ATHLETES AT WEIGH-IN

The following physical conditions or symptoms shall dismiss the athlete from participating in a scheduled contest:

4.1: NEUROLOGICAL DYSFUNCTION Complaints of persistent headache, vomitus of undetermined origin, and persistent visual complaints or a combination of these symptoms. The physician must inquire about these symptoms particularly in tournament contests. Convulsions, paresis of arm or leg, incoordination of limb(s), tremor, gait imbalance, slurred speech, dizziness not previously seen shall result in dismissal of the athlete. It is to be noted that the physician must ask the athlete about some of the above symptoms; indeed, the athlete's coach may be called upon to give the objective answers. Any of the above neurological symptoms warrants a thorough physical examination with suspension of the athlete.

4.2: FEVER Fever due to any cause results in dismissal.

4.3: ILLNESS An athlete in the convalescent phase of any illness shall not compete.

4.4: ALCOHOL Suspect alcohol ingestion resulting in impaired gait, speech, and reflexes, and impaired alertness.

4.5: MEDICATIONS Suspect over-ingestion of **licit** medication (such as tranquillizers, sedatives, hypnotics) or **illicit** medication (such as marijuana, LSD) resulting in impaired gait, speech and reflexes. Athletes exhibiting signs of electrolyte-metabolic imbalance with consequent weakness (owing to diuretics, hot weather, prolonged diarrhea, aspirin intoxication) are not permitted to compete.

4.6: CARDIOVASCULAR Persistent chest pains with or without shortness of breath results in dismissal. Finding of any diastolic heart murmur, or systolic murmur accompanied by palpable thrill results in dismissal. Optimally, diastolic blood pressure should be less than 90 mm mercury; the systolic component is allowed more latitude owing to dressing room anxiety of the athlete and to that end it is allowed up to 140 mm mercury. Preferably the blood pressure taken at the end of the physical examination, should be taken in both arms in confirm a suspect reading, but more emphasis should be placed on the diastolic component.

4.7: RESPIRATORY Persistent cough with or without sputum results in dismissal. Persistent nasal drip results in dismissal. Signs pointing to active parenchymal or pleural or periocardial disease result in dismissal. Fractured ribs or ribs in the process of healing. Bruised ribs and/or cartilages with tenderness result in dismissal. Persistent chest pain resulting in impaired respiration results in dismissal.

4.8: ABDOMEN Persistent abdominal pain and tenderness. Persistent vomitus and/or diarrhea results in dismissal. Organomegaly such as enlarged liver and/or spleen (such as infectious mononucleosis) result in dismissal. Inguinal hernia, per se, does not result in dismissal unless there is a sign of:

- Incarceration;
- Strangulation;
- Marked tenderness; or
- Signs of bowel obstruction.

If any if the above signs exist, the patient should be advised to see his/her own physician with a view for surgical correction.

4.9: LIMBS Abscesses or boils, particularly if multiple, shall preclude the athlete from competition. Vaccination scabs shall result in dismissal. Tendonitis, bursitis, arthralgias and arthritis processes which impair the use of said limb shall result in dismissal. Ligament strains or tears which impair the use of said limb shall result in dismissal. Systemic skin rashes which are infective in origin, or have an allergy basis shall result in dismissal. The absence of a lower or upper limb, in whole or in part, shall result in dismissal. The presence of an artificial limb prosthesis (metallic, wooden, plastic, synthetic) attached to an upper or lower limb shall result in dismissal. A fused hand in the clenched fistic posture is not permitted resulting in dismissal.

4.10: HANDS Ligament or tendon strain or tears shall result in dismissal. If there is impaired use of the hand or marked pain. Soft tissue contusions of the hand which result in impaired use of the hand shall dismiss the athlete. New or healing fractures of the hand, lacerations (new or healing) or hematoma's of the hand which result in impaired use of the hand shall result in dismissal.

4.11: FACE A fractured nose (new or healing), fractured cheekbone (new or healing), fractured mandible (new or healing), fractured maxilla (new or healing), or periorbital fracture or periorbital soft tissue injury which yield inordinate pain or impaired use of eyes, nose and breathing movements, shall result in dismissal.

4.12: EYES Severe periorbital soft tissue injuries resulting in impaired vision yield a dismissal if a visual examination shows:

- Impaired visual activity;
- Myopia greater than 5 diopters;
- Defects in peripheral field vision;
- Signs of pre-retinal or retinal pathology;
- Double vision;
- Papilledema;
- Impaired conjugate gaze;
- Repaired detached retina;
- Resolved hyphema; or
- Repaired iris, ciliary body, cornea having been repaired.

4.13: EARS Draining discharge, tinnitus, pain and tenderness from one or both ears result in dismissal. Blood issuing from the ear canal or suspect blood lying on the inner aspect of the ear drum shall result in dismissal. A recent onset of

deafness shall result in dismissal. A documented history of chronic deafness does not result in dismissal. Old perforations of the drum (uni or bilateral) without drainage do not result in dismissal.

4.14: ORAL Any severe lacerations (new or healing) of the lips, inner mouth, tongue, gums which result in impaired breathing, incapacitating pain and air way obstruction shall result in dismissal. Growths which are new in onset situated on tongue or within the oral cavity or lips shall dismiss from competition. Severe gingival disease and dental disease which impairs breathing or gives incapacitating pain shall result in dismissal. Severely infected throats, buccal mucosal infections or acute tonsillar attacks shall result in dismissal.

4.15: HIV Positive HIV Antibody states as in AIDS precludes from competition.

4.16: HEPATITIS Active infectious hepatitis states as in Hepatitis A, B, C, D, E preclude from competition.

Herpes genitalis lesions, treated or being treated do not preclude from competition.

4.17: FEMALE ATHLETES In the female athlete, the following states preclude from competition:

- Pregnancy;
- Abnormal vaginal bleeding of undetermined cause;
- Painful symptomatic pelvic states such as endometriosis;
- Recent secondary amenorrhea of undetermined cause;
- Recent breast bleeding;
- Recently discovered breast masses; and
- Recent breast dysfunction hitherto not present.

It is to be stated that the above provide the main guidelines along which to formulate the medical decision as to whether or not an athlete may compete in Muaythai. With borderline cases concerning the physical condition of the athlete, the final decision as to whether an athlete fights shall be at the discretion of the Chief Attending Physician.

5: EXAMINATION OF REFEREES

The referees are to be examined once every six months, and must pass the physical requirements as pertains to:

- Blood pressure;
- Cardiovascular system;
- Respiratory system;
- Eyes and ears;
- Neurological systems; and
- Musculo-skeletal system.

If the referee fails to pass physical requirements, he/she may be dismissed from officiating for a period as determined by the examining physician. If a tournament requires several days, each official referee must be examined daily prior to the competition.

A referee should make known to the Chief Physician for the meet any:

- Pertinent medical states;
- Pertinent meds and allergies;

- Medic-Alert states;
- Previous major surgery;
- Uncorrected hypertensive vascular disease; and
- Musculo-skeletal disorders.

A history of:

- Ischemic heart disease;
- Cardiac conduction defects;
- Pulmonary impairment;
- Visual and/or hearing deficits; and
- Uncorrected hypertensive vascular disease constitutes direct contraindications to refereeing.

It is recommended that the referees at all levels of competition secure:

- Annual physical examination/family physician;
- Annual chest x-ray;
- Annual electrocardiogram;
- Annual visual acuity/fields check; and
- Hearing check annually.

If the referee fails to do so, the attending physician must suspend the referee until said physical deficiency is rectified to the satisfaction of the presiding ring physician. The doctor must notify Muay Thai Ontario of the suspension.

It is also recommended that referees be vaccinated with Hepatitis B vaccine (full course of 3 shots over 6 months), and wear disposable gloves during the refereeing of a match. This is a preventative measure to militate the spread of viral diseases such as Hepatitis B.

6: ATHLETES DRESS IN RELATION TO WEIGH IN AND MEDICAL

6.1: WEIGH-IN An athlete shall be required to weigh in each day that he is scheduled to fight. For this a time will be appointed between 8 am and 10 pm. The Board of Directors or Chief Official may relax those timings slightly, for existent extenuating circumstances. All athletes must weigh in wearing Muaythai shorts, with female athletes also wearing a bra or tight fitted crop-top. The weigh-in must occur prior to the athlete pre-competition medical.

It is during the weigh-in that the athlete remove the following articles which are articles not to be worn during the contest.

- Contact lenses;
- Glasses (spectacles);
- Dentures;
- Individual false teeth;
- Rings;
- Watches, charm bracelets of any description;
- Head bands;
- Ear rings;
- Hearing aids;

- Any plastic or metallic attachments to the vest, sash, or trunks are forbidden;
- Caps, hats, necklaces; and
- Artificial stick-on tattoos.

In the case of cultural traditions, some latitude is to be given such that the athlete or opponent shall not be rendered susceptible to injury which may result from article of dress, hair style, skin jewel carried by a given athlete. The final decision will be rendered by the Chief Official after discussion with the Chief Physician.

The following rules are to be observed at the weigh in:

- Any gauze, band aids, dressing to facial, scalp, neck, arm, back or chest area are to be removed prior to the physical examination- they are not to be worn during a contest;
- An athlete is allowed to compete if an abrasion is covered with collodion or Steri-Strip. The decision should be made by the doctor examining the athlete on the day of competition;
- Neither plaster casts nor fiberglass casts nor slabs are to be worn at weigh in; they are not to be worn during competition;
- No butterfly or steri-strip suture is to be on the face, neck, scalp, ear, chest, arm or back area at the weigh; no steri-strip is to be worn during competition;
- No suture material (silk, cat gut, nylon, mersilene or allied materials) or wire suture is to be present in the face, neck, ear or chest area of the athlete at the weigh in as this is also prohibited during competition;
- Subcuticular suture is not permitted to be present in the face, neck, ear or chest of the athlete during a match;
- No garlic, liniments, lotions, ointments, oils, balms, greases, creams, embrocations are to be applied to the face, neck, scalp, headhair at the weigh-in, prior to, or during competition;
- Short beard or stubble in the chin or lower face area is permissible: the athlete must be trimmed to 1.5 cm in length or face disqualification;
- A moustache is permitted insofar as its terminal ends do NOT extend the angle of the mouth, the moustache hairs themselves, must be less than 2 cm and not extend downwards into the upper lip and mouth area: In this case it must be trimmed to regulation;
- Facial sideburns are permitted insofar as the sideburn hairs themselves, must be less than 2 cm; in this case it must be trimmed to regulation;
- Hair length of the frontal scalp area should see no interference with the vision of the athlete. Hair may be secured with rubber bands or allied banding devices. Hair must be secured so as not to obscure the face of the athlete and prevent risk to either athlete from its movement. In the case of long frontal hair sported by an athlete, the hair may be lifted up so as to expose any hidden frontal skin lacerations, infections, hematomas hidden by said hair. This should be carried out by the official physician.

6.2: PRE-COMPETITION MEDICAL EXAMINATION The athlete may wear Muaythai shorts and shoes during the examination, but no shirt. One coach must accompany the athlete at the medical.

7: DURING THE CONTEST

7.1: THE REFEREE has the power to inspect the corners for any illicit meds or articles which he deems are used illegally; he should ask the doctor to enter the ring at which point time is called and both the referee and the doctor shall approach the corner inspecting it for use of illicit meds; the doctor can confiscate the illegal meds or order its immediate discontinuance; therefore, the referee disqualifies the athlete. The Chief Official may then dispense disciplinary action against the coach.

7.2: COACHES/CORNERS must keep the corner area clean of water, resin and debris. They must use water and ice in the corner during a contest. They are not to use medical agents in the corner during a contest, such as:

- Amyl nitrite, also called 'smelling salts';
- Silver nitrate;
- Camphor;
- Adrenalin; and
- Neosynephrine.

Coaches/Corners are to be clean and properly dressed while in the corner of their athlete; they are not to smoke or drink while in the corner of their athlete. It is recommended that all coaches cornering athletes:

- Secure vaccination with the hepatitis B vaccine;
- Wear disposable gloves during the match whilst cornering their athlete;
- Do not place the athletes mouth guard inside their own mouths in between rounds; and
- Assume some responsibility in ensuring that the given athlete brings his or her own towel, squeeze bottle, sponge, and water to the ring corner.

7.3: THE ATHLETE must be clean and properly dressed and must not appear with gauze, dressings, bandages, band aids, steri– strips, interrupted or running skin suture, or subcuticular suture on the face, neck or hands during about. The athlete may sit or stand between rounds of a contest; however, he/she must face the referee at all times during the inter-round period. The athlete is not to chew gum or tobacco during a contest. The athlete is not to spit on the ring floor or venue floor during the full course of any contest (this includes the rest period in between round).

8: THE ATTENDING PHYSICIAN(S) AT RINGSIDE

At minimum, one physician must be in attendance for each contest; if an event has multiple rings operating at the same time, multiple physicians must be present. In addition, it is desirable that a qualified emergency medical team be available to assist the physician(s) in the performance of their duties. In the case of multiple physicians per ring, one corner of the ring should be delegated as the jurisdiction of each ringside physician.

It is recommended that ringside physicians secure full vaccination with hepatitis B vaccine. It is also recommended that ringside physicians wear disposable gloves while presiding medically over a given match.

The attending physicians have the right and the privilege of entering the dressing rooms of the athletes before, during and after the competition.

It is recommended that the presiding ringside physician fills out, completes and signs a Medical Flow Sheet which in effect documents the medical events of a given amateur contest. This provides an on-site medical legal record of a contest with notation of K.O.'s. knock-downs if any, standing eight counts, use of illegal blows, tell-tale blows, injuries sustained, etc.

The ringside physician has the power to confiscate illicit meds used in the corner between rounds; he shall alert the referee regarding this, have time called and both referee and doctor should approach corner for the medication involved.

8.1: WHEN TO EXAMINE AN ATHLETE DURING A CONTEST

8.1.1: IN BETWEEN COMPETITION ROUNDS In the case of a physician wishing to examine an athlete whom he/she suspects has sustained an injury, the physician may instruct the referee in the 1 minute inter round rest interval to stop the

contest after the bell has sounded starting the round and bring the suspect athlete to a corner adjacent to the physician who then may examine the athlete.

8.1.2: DURING COMPETITION ROUNDS The referee may call for an examination of the given athlete at any time during the round at which point the referee calls for time and brings the athlete to the doctor.

The presiding physician may use a whistle to halt a given contest so as to examine a given athlete; this temporary halting of a contest during a round permits the physician to examine an athlete and thereafter, the physician can indicate whether to stop the contest or resume it.

8.2: IN THE CASE OF A SUDDEN COMPLETE KNOCK OUT The referee should not count to ten but shall call the physician(s) immediately into the ring to minister the fallen athlete. In the case of two physicians:

- With the sudden complete knock out, both physicians are to enter the ring to minister to the fallen athlete;
- With an injured athlete taken to the dressing room, the doctor in his/her corner should follow that athlete to the dressing room, whilst the remaining physician stays at ringside for remaining competition.

In the case of the one (sole) physician, an injured athlete may be assessed:

- In the ring after the referee has stopped the action;
- At the end of the contest in the ring;
- At ringside (after the athlete has showered) in the interval between rounds, at the end of a contest, at the intermission interval, if any; and
- In the dressing room at the conclusion of the card.

8.3: ATTENDING INJURED ATHLETES It is to be noted that the physician, if alone, shall remain at ringside while the competition is in progress. If injured, an athlete is to be brought to the physician. Injured athletes are to receive the physician's notes detailing the date, nature, and treatment of injuries, which may be given to the athlete's personal family doctor. Here, a prescription pad note aptly suffices for the attending ring physician. If an athlete is so stricken such that he cannot return to ringside for examination, the sole physician must leave ringside to tend to him immediately in which event time is called. The card must be halted while the doctor attends this athlete. The attending physicians have the privilege of entering the dressing rooms of the athletes before, during and after the contests. With 3 physicians at hand, two tends their respective corners whilst their third tends to casualties in the ring infirmary; casualties are treated by the doctor who attended that particular corner. With 4 doctors, two pairs of doctors do every contest, thus leaving two physicians to tend injuries.

9: THE DOCTOR'S PARAPHENALIA

The attending physician sits next to the accessory steps optimally on one side and the timekeeper in charge of the bell on the other. The doctor should have within immediate reach the following items:

- Oropharyngeal Airway and Laerdahl Mask or Oropharyngeal airway and Ambu Bag;
- Sterile gauze pads for examination of bleeding areas;
- Scissors;
- Note pads;
- Whistle (hockey type); and
- Penlight

Equipment at ringside:

- Armslings;
- Rolls of tape;
- Tensor bandages preferably of 3 inch width;
- Steri-strip suture;
- Eye spud and eye patches;
- Surgical suture kit (disposable) with appropriate suture material of nylon, mersilene, etc;
- Sandbags for neck immobilization;
- Hard back stretcher; and
- Philadelphia neck collar.

Medications suggested for the doctor's bag at ringside:

- Parenteral: Local anesthetics, Aqueous adrenalin 1 : 1000 solution;
- Oral: Analgesics (Tylenol preferably without codeine), Proteolytic Enzymes (varidase), Antibiotics (Ampicillin / erythromycin derivatives); and
- Other meds: Silver nitrate sticks, Pontocaine eye local anesthetic. Ophtalmic / otic antibiotic ointment or drops, Neosynephrine nasal gel, Collodion.

The official program of the competition should be taped to the table of each physician.

A vehicle, preferably and ambulance or, barring that, a van, should be available for transport of injured athletes to hospital.

The nearest Hospital Emergency Room should be notified of any tournament of Muaythai contests during certain days thus anticipating and preparing for any severe injury that may occur.

The hospital to which the injured athlete is transported should be equipped with a CAT scanner and neurological facilities.

9.1: TOURNAMENT INFIRMARIES For Tournaments Format Events the venue should be equipped with a ring infirmary that is located away from the crowd. It should have within its confines:

- A telephone with outside line, if available;
- Examination table;
- Good overhead lamp source;
- Sink;
- Medications, both oral and injectable; and
- Non-medication materials.

When an athlete is rendered unconscious only the referee and doctor are allowed in the ring unless the doctor requires additional assistance. Coaches and/or seconds must be alert to provide this assistance if required. Non-medication materials optimally entail:

- Intubation kit with laryngoscope and endotracheal tube;
- Supplementary airways (oralpharyngeal, Brooks);
- One inch width tape;
- Arm slings;

- Three inch ACE bandages (several);
- Eye spud and eye patches;
- Scissors;
- Second stretcher and sand bags;
- Steri-strips;
- Bandages, band-aids;
- Suture tray with suture material and other necessary equipment;
- Nasal forceps and xylocaine spray; and
- Cleansing solutions.

Medication within the infirmary:

- Oral: Analgesics: Tylenol, oral enzymes: papase, varidase antibiotics, ampicillin, erythromycin;
- Topical: Aqueous adrenalin 1 : 1000, Collodion, Silver nitrate (sticks), local eye anesthetic and ocular anti-biotic, neosynpehrine nasal gel 1/2 per cent; and
- Injectable: Intravenous kit with bottles, glucose/saline solution, intravenous steroids (decadron, solu-medrol), intravenous calcium channel blockers (verapamil, adalat), mannitol solution, injectable anti-biotic (ampicillin), intravenous thiamine, Demerol or codeine.

10: POST CONTEST VERDICTS

The verdicts are to be entered specifically into the pass book and RSCH denotes a contest stopped by referee owing the head blows; this entails a 30 day suspension.

A notation for contest s stopped owing to the “Defenseless State” and “Out Classed” should be made for these may or may not result in a 30 day suspension.

A 30 day suspension means no competition **nor sparring** for the immediate ensuing period (30 days) following the contest. Note: The duration of a suspension depends on the gravity of the knockout. For acute (severe) KO’S the athlete is to be suspended for 60 days.

An athlete stopped owing to head blows should not have to wait in the ring for the official final verdict, but should be taken to the dressing room for neurological assessment.

Two knockouts with a three month period will result in a three month suspension; these knockouts **need not be consecutive**.

Three knockouts within a twelve month period result in a 12 month suspension; these three knockouts **need not be consecutive**. Here, there is only relative significance to an EEG and CAT scan both of which should be done after multiple knockouts or a devastating stoppage sustained by an athlete. CAT scan of the athlete should definitely be done. Moreover, a neurological examination conducted preferably by a certified neurologist, or a competent physician, must be done to ascertain whether some form of cerebral injury, however small, has been sustained by the athlete. Therefore, the neurological examination is of most importance in determining whether an athlete, having sustained multiple knockouts, or having sustained a marked stoppage in his/her contest(s), may return to Muaythai. The CAT scan of the skull and EEG are of ancillary aid in helping to formulate the final decision regarding the athletes return to Muaythai. It is recommended that the CAT scan of the skull be done in the above circumstances. If available, a MMR scan would be optimal.

Following all suspensions, a written certificate from the neurologist (or if not available from the appropriate examining physician) permitting the individual to compete in Muaythai is required before the athlete can return to the amateur ring.

The attending physician must tour the dressing room at the end of the card to ensure that no injuries have gone unchecked, to assess athletes who have been stopped owing to head blows, and to ensure that the last two athletes on the card have sustained no major injury.

11: PROCEDURE AFTER A KNOCK OUT AS UNDERTAKEN BY THE MEDICAL OFFICER

The athlete should be examined immediately in the infirmary located away from eye shot of the crowds. If only one physician is available, the athlete is to return to ringside to be seen by the physician between contests or at the intermission. The athlete **must be examined at the conclusion of the show**; if, at this time, he/she shows a neurological deficit, he/she is to be sent with a note detailing his deficit and with another individual to the nearest emergency room of the closest hospital. This is to be done as soon as the neurological deficit is detected, and not the next morning.

All athletes who sustain a lapse of consciousness **must** be hospitalized for at least 24 hours for monitoring of neurological function. If, however, the athlete shows a stable mental state with no neurological deficit, he/she may be sent home in the company of a companion; the athlete is not to drive a car or motorbike or bike. The athlete is the passenger in this case. The athlete goes home with "Head Injury Sheet" detailing the signs to watch for indicating neurological deficit as explained below.

At home the athlete is not to ingest sedatives, tranquillizers, or sleeping pills. His/her diet should remain clear fluids for 8 to 12 hours after his/her injury. Simple ASA or Tylenol may be used to relieve a headache. The athlete must be seen the next day by a companion to ensure that the athlete has not shown a deterioration in his/her condition. The injured athlete is suspended for a thirty period at least. The duration of the suspension depends on the gravity of the knockout.

All coaches and referees and other Muaythai officials should familiarize themselves with the medical signs of the "Head Injury Routine" so that they remain vigilant with respect to serious cerebral injury in a given athlete.

12: HEAD INJURY OBSERVATION SIGN LIST WHICH CAN DENOTE CEREBRAL INJURY

Although no evidence of any serious injury may be found at the time, careful attention for the next 24-48 hours is advised. Patients should return to Emergency Department at once, day or night, if there is:

- Increased drowsiness;
- Difficulty in rousing the patient (the patient should be awakened every two hours the first night);
- Vomiting;
- Slowing of pulse;
- Continued headache;
- Stiffness of neck;
- Bleeding or clear fluid dripping from the ear or nose;
- Weakness of either leg or arm; or
- Convulsions (fits).

13: NOTES ON COMMONLY USED MEDICATION IN AMATEUR MUAYTHAI

Athletes on maintenance daily medications (e.g. Insulin, Intal) must have said medications detailed in the athlete's competitive passbook.

In tournaments where there is drug testing, the maintenance medications of the athlete must be made known to the officials directing the doping tests. This notification must be made well in advance of the beginning of the particular tournament. Coaches and team physicians must know all the prescribed and over-the-counter medications that a particular athlete is taking; the team physician must make an extra special effort to ascertain every detail of the athlete's medication history.

Coaches are to use water and/or ice in the corner of the athlete; no other meds are to be used such as the following which are prohibited: Aqueous adrenalin, Smelling salts, Collodion, oral proteolyptic enzymes, approved analgesics may be used before and after, **but not during**, contests.

13.1: MINERALS Iron, calcium, magnesium, selenium may be used by athletes prior to contests. There is however the danger of toxic effects whenever these minerals are used to excess.

13.2: VITAMINS Vitamins A, B, C, D, E, vitamin B12 and vitamin B15 (calcium pangamate) are permissible prior to a contest and during training. Toxic effects are seen with excessive use of vitamins A, D, K, E.

It is to be noted that some of the 'advertising claims' for vitamin B15 have been disputed by medical authority. Octacosanol, choline, and lecithin, bone meal and dolomite remain licit substances.

There is no medical or legal contraindication to the use of ginseng used during the training period of athletes.

13.3: CAFFEINE In small amounts, caffeine is permissible; however in large amounts, caffeine is not permissible and forms grounds for disqualification in drug testing. A level above 12 mg/ml is termed illegal.

Caffeinism results in a state marked by tremor, agitation, muscle twitching, palpations, tachycardia and rapid breathing.

13.4: ANALGESICS It is suggested that the analgesic of choice for musculo-skeletal pain of the athlete be Tylenol without codeine as first line therapy.

Aspirin usage bodes caution owing to its gastric irritation and ability to alter blood coagulation process.

Codeine usage is to be discouraged owing to its habit forming potential. It is a banned substance.

13.5: SKELETAL MUSCLE RELAXANTS These meds with the trade names of Norflex, Flexeril, Robaxisal etc. are to be used with extreme caution in the athlete owing to their sleep inducing effects which in turn leads to impaired reflexes and concentration. Their usage immediately prior to a contest is to be condemned.

13.6: ANTI-ASTHMATIC MEDICATION The following anti-asthmatic medications are banned: Adrenalin, Bertoec Inhaler, Ventolin Tablets, Medihaler—ISO, Bricanyl.

A number of common inhalers contain also banned substances for dope testing, therefore athletes requiring anti-asthmatic medication must have them carefully checked if they are on the banned substance list.

14: MEDICATIONS PROHIBITED FOR USAGE BY ATHLETES

14.1: AT ALL TIMES The following medications are prohibited during training, prior to competition, and during competition:

- Amphetamines, including Ritalin;
- Cocaine;
- Caffeine, in excess of 12 mcg./ml;
- Anabolic Steroids;
- Camphor;
- Oral Corticosteroids or Steroid injections parenterally;
- Local Anesthetics pre-contest;
- Combination Steroid-Local Anesthetic pre-contest;
- Beta Adrenergic Blockers;
- Tranquillizers, Sedatives, Hypnotics;
- Codeine and all derivatives thereof;
- Narcotic Analgesics, Morphine, Demerol, Methadone, Codeine and derivatives;
- Diazepan;
- Diuretics;
- Growth hormones;
- Erythropoietin;
- Hallucinogenic drugs, marijuana, LSD, and illicit so called 'street drugs';
- Sympathomimetic Amines, i.e. Ephedrine and derivatives;
- Certain antihistamines;
- Certain decongestants;
- Certain cough syrups;
- Certain anti-asthmatic; and
- Anti-Diarrheal (Diban, Donnegel-PG, Lomotil).

In addition to the substances listed above, any items found in section S0 to S5 of the World Anti-Doping Agency's Prohibited List are also banned at all times.

14.2: DURING COMPETITION The following medications are prohibited during competition:

- Stimulants;
- Narcotics;
- Cannabinoids;
- Glucocorticoids; and
- Alcohol.

In addition to the substances listed above, any items found in section S6 to S9 of the World Anti-Doping Agency's Prohibited List are also banned at all times.

15: PROCEDURES PROHIBITED PRIOR TO COMPETITION:

- The administration or reintroduction of blood in to the circulatory system;

- Artificially enhancing the uptake, transport, or delivery of oxygen;
- Intravascular manipulation of the blood or blood components by physical or chemical means;
- Intravenous infusions or injections of more than 50 mL per hour;
- Gene doping; and
- Hypnosis.

15.1: PROCEDURES NOT RECOMMENDED

- Use of the sauna or steam bath or sweatbox to induce fluid loss and thus weight reduction; this results in electrolyte imbalance and consequently reduces the athlete's stamina and endurance. Improper rehydration can increase the likelihood of severe head trauma or other injury;
- Crash starvation diets are to be condemned;
- Water restriction to achieve weight loss is condemned. There is no contraindication to the use of the whirlpool; and
- Acupuncture as a means for weight loss.

Safety is everyone's responsibility. Please report any perceived health and safety violations to the Chief Official.