MEDICAL RULES
GOVERNING AMATEUR BOXING IN CANADA

Official Text, 2012 Edition

Includes all Rules Changes and adopted 2012 AIBA Rule Changes.

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Published by the Canadian Amateur Boxing Association
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The Medical Rules

Medical Examinations

A. Initial Medical Examination.

A boxer should undergo a thorough medical examination when he joins a club. The examining doctor, should, if possible, have experience in examining boxers and treating boxing injuries. The doctor is to advise the boxer:

• only to compete when he is in good condition and has been in training, so that the risk of injury is thereby reduced;

• not to compete or train even when only mildly ill;

• always to box in a weight class which corresponds to his natural weight, since too great a weight loss can damage the health and reduce physical performance;

• always to abide by the rules and recommendations laid down to safeguard his health.

The actual form of the examination is up to the doctor, but the following guidelines should be adhered to as far as possible:

1. Family History

Determination of general state of health, in particular the noting of inherited and family diseases. An X-ray or an EEG is necessary if there is a history of tuberculosis or epilepsy respectively in the family.

2. Past Medical History

Attention should be paid to conspicuous symptoms, any operations undergone, and to deformities.

The following conditions render the subject unfit to box:

• convulsive seizures in childhood

• a recent history of asthma or migraine

• epilepsy, meningitis, encephalitis,
• diabetes mellitus (poor control)
• renal disease
• bronchial asthma, (poor control), recurrent ptx
• hemorrhagic disease: hemophilia, purpura or other bleeding tendencies, anemia(severe), sickle cell anemia (not the trait).
• retinal detachment
• a history of serious head trauma, craniotomy, subdural or epidural bleeds, hydrocephalus
• previous heart surgery for congenital or acquired heart disease, recent carditis
• malignant tumors
• acute infections
• jaundice
• positive HIV test, infection with Hepatitis B
• hyperthyroidism (not controlled)

3. **Complete clinical examination**

**Eyes**

The following conditions render the subject unfit to box:

• visual acuity less than 20/60 in either eye, blindness in one eye
• myopia more than 3.5D
• intra ocular and refractive surgery, glaucoma, cataract

The wearing of spectacles in the ring is prohibited, soft contact lenses are permitted.
Ears, nose, throat

Attention should be paid to evidence of chronic infection, perforated ear drum, particularly to the occurrence of deafness.

The following conditions render the subject unfit to box:

• deafness in both ears
• deaf-mutism
• untreated otitis media or external, perforated ear drum
• severe nasal obstruction (large polyp, septum)
• tonsillitis (until resolved)

Cardiovascular system

Attention should be paid to any cardiac abnormalities, particularly persistent tachycardia, dysrhythmia, systolic and diastolic murmurs or cardiac enlargement.

The following conditions render the subject unfit to box:

• any kind of valvular or septal defect, mitral valve prolapse (individualized)
• cardiomyopathy (HCM, DCM)
• aortic coarctation
• hypertension (blood pressure above 140mmHg systolic or 85 mmHG diastolic)
• any kind of obstructive disease.
• post thrombotic syndrome.

Respiratory system

Attention should be paid to chronic chest infections or abnormalities.
The following conditions render the subject unfit to box:

- tuberculosis (active or under treatment)
- restrictive or obstructive ventilatory insufficiency
- acute or chronic ventilatory insufficiency
- acute or chronic pharyngolaryngotracheobronchitis
- bronchiectasis
- chest deformity (e.g. pronounced kyphosis or scoliosis).

Abdomen

Attention should be paid to evidence of hernia, enlarged liver and/or spleen tenderness.

The following conditions render the subject unfit to box:

- hepatomegaly
- splenomegaly
- hernia
- gastroenteritis
- peptic ulcer (active)
- Chronic ulcerative colitis.
- Crohn disease

Genito-urinary system

Attention should be paid to evidence of undescended testicles, unilateral orchidectomy (males) and scars from renal operations. Surgical breast implants (females). Absence of one kidney renders the boxer unfit to box.
The following conditions render the subject unfit to box:

Males:

- absence of one testicle
- cryptorchidism
- hydrocele

Females:

- Pregnancy
- painful pelvic discomfort
- abnormal vaginal bleeding
- recently developed breast mass

Joints and muscles

Attention should be paid to any joint or muscle defect, symptomatic abnormalities or inflammations, congenital functional inadequacy of the musculoskeletal system (e.g. stiff joints or increased mobility). All of these conditions render the subject unfit to box.

4. Neurological examination

Attention should be paid to abnormalities of the reflexes or the spinal cord and to mental sub normality.

The following conditions render the subject unfit to box:

- any symptoms of neurological disorders or organic brain syndromes (e.g. tremors, loco motor impairment, dysbasis, dysarthria, gait, posture, balance disorders, disorder of deep reflexes, etc.)
- intellectual disability
- substance dependence

5. Biometrical examination

It must at least be ascertained that height and weight correspond to age and build. If the boxer’s weight lays more than twenty percent above or below the average then this merits special attention.
6. **Laboratory tests**

The laboratory test includes:

- urinalysis (excluding glycosuria and proteinuria)
- HIV test is recommended

7. **ECG**

ECG is obligatory even if there is no indication of cardiac abnormality. An exercise tolerance test may be advisable.

Disqualifying conditions:

- third degree heart/AV/block
- premature contractions (further evaluation)
- WPW and LGL syndrome (further evaluation)

Long QT syndrome

- atrial flutter or fibrillation
- ventricular arrhythmia

8. **EEG, cranial computerized tomography, MRI**

These examinations should be conducted at least annually

It should include:

- past medical history
- complete clinical examination
- biometrical examination
- neurological examination

If possible the laboratory tests and resting ECG.
B. Medical Examination prior to Boxing Tournament

At the medical examination and weigh-in the boxer shall produce his International Competition Record Book which contains the medical certificate. (For guidance on how to fill in the medical section of the Competition Record Book see Appendix II)

The boxer must be passed fit before weighing in every day on which he is to box by a qualified doctor of medicine.

The following examinations are recommended:

- Examinations of the eyes for subconjunctival hemorrhage.
- Examinations of the ears for recent onset of deafness or infection.
- Examination of the skin for impetigo, or other infections. After vaccination the boxer is unfit to box until the vaccination scab has fully healed. The wearing of dressings on the face, ear or neck is prohibited during a bout. A boxer with an abrasion is allowed to box provided it is covered by collodion or steri-strip.
- Checking of the heart and pulse for any recent irregularity.
- Examination of the throat and lungs for recent or current infection. The temperature should be taken if indicated.
- Examination of the central nervous system for signs of recent irregularities.
- Examination of the hands for recent injury. It is advisable in every case to ask the boxer if he has recently been ill and, of so, how long it is since he was confined to bed.
Medical Responsibilities of the Ringside Physician

Never before in the history of amateur boxing has so much emphasis been placed on the responsibility of the ringside physician. Prevention of injury in boxing is the responsibility of all involved: yet, the physician has the unique role of prevention as well as treatment of acute injury.

Amateur boxers are trained to be highly skilled in their sport. The skills are designed to prevent injury. Nonetheless, all exercise or sport activity bears a certain risk for injury. Athletes in all sports, no matter how skilled, are subject to sudden injury. Coaches, professionals, officials and athletes accept that risk. Therefore, prevention is crucial and must be based on a sound medical plan to cover all aspects of the sport, the facility, equipment and the athlete.

For the ringside physician, the best approach is to systematically and conscientiously prepare for the pre competition phase, the ringside management and the post-bout examination phase, the ringside management and the post-bout examination responsibility.

Pre-competition for National Championships

On first accepting the assignment, the physician must become familiar with the following points and areas.

1. Gymnasium or arena. A visit to the arena is mandatory. The area designated for the ring and its relationship to the fans must be visualized. The physician needs to make sure that ringside personnel are, safeguarded from fan activity so that 100 percent concentration on the bout is guaranteed. In addition, somewhat removed from the ring, as far back as the hallway to the dressing room, an observation areas needs to be identified. This can even be a portion of the locker room or a separate area where the boxer can be examined standing or placed on a bed, cot or stretcher with enough room to perform an adequate neurological test, suture a cut or perform a more thorough exam of the boxer’s neurological or physical status.

2. Identify the nearest emergency room or hospital to the arena. An evacuation route from ringside, through the arena and to the hospital should be mapped out. The hospital or emergency room staff should receive a call to inform them of the date and time of the event. They should be reminded of the same on the day of the event. The request should be made to have EMT personnel, ambulance or other emergency transportation immediately available or on hand. If it is impossible to have these services on hand, the physician should select the location of the nearest telephone and secure it either for his/her use or whoever is designated to make an emergency call. If phone numbers of the hospital and emergency service are not available, the local fire department personnel needs to be made aware and prepared for availability. Where possible, contact needs to be made prior to the event for available neurosurgical services. Ideally, pre-arrange backup on-call personnel to include neurosurgery, orthopedics, ophthalmology and oral surgery.
3. Equipment check. The promoter or designated area personnel responsible for any problems such as loose corner post, ropes or defect in the ringmat should be identified.

- The ring floor should consist of at least 1 one inch wooden base, covered by foam or an ensolite pad that is 1.3cm (half an inch) to 2.5cm (one inch) thick. A mat thicker than 2.5 cm may cause the foot of a heavy-weight boxer to sink and become immobilized, possibly causing an ankle or knee sprain and a possible fracture.

- The mat is covered by a tight fitting canvas cover.

- The ring posts are adequately padded, and the buckles covered so no sharp edges are exposed.

- There must be four covered ring ropes with proper tension. At least two spacer ties should be placed on each side of the ring to prevent laxity that might allow the boxer to fall through the ropes.

- A table big enough for at least two (three is ideal) physicians is placed adjacent to one of the neutral corners. In addition, a set of steps must be placed next to the table to enable the physician to quickly mount the apron without obstruction (Exhibit A).

In summary, all of the above can be reviewed hours or days before the match by simple meeting or phone call to those responsible. The physician only needs to make a quick check just prior to the match to make sure the official rules have been followed, and all safety precautions have been taken.

The pre-competition physical exam

On the day of the scheduled bouts, the physician needs to be available to do pre-competition physical exam. This should be coordinated with the officials and done in conjunction with the weigh-in.

The pre-competition physical is the physician’s most important activity and responsibility. This is the best opportunity the physician has to circumvent an acute injury in the ring.

The object of the pre-competition exam is to assure that the athlete is fully capable to box. That a complete neurological survey is normal, that there is no evidence of a possible subdural hematoma (history of headaches, previous head injuries or knockouts), no recent illness or fever in the last two weeks, that the boxer is not under any medications (prescribed or over-the-counter) and that he has no complaints of pain anywhere.

The exam can be accomplished in a few minutes. Start first with the above points. Visual inspection of the boxer’s responses to these questions will verify intact cranial nerves, level of consciousness and orientation.
Next the usual head, eyes, ears, nose and throat exam is made. This should include an otoscopic and a fundoscopic exam.

By checking on symmetry and tone of par-cervical, shoulder, biceps, triceps, forearm extensors, interosseous and grip muscles, an adequate examination of all cervical nerves and muscular condition is made. Examine the elbow, wrist and metacarpal joints. Afterward, have the boxer make a fist for and palpate for possible metacarpal fractures or tendon injuries. Relax hand and re-check condition of metacarpals and wrist movement.

Next do a thorough heart and lung exam. While doing so, check for rib pain and possible fractures by pressing on ribs and sternum.

Next perform an abdominal palpation for enlarged organs, masses or tenderness. Follow this with a check for hernia or testicular masses. Next ask the boxer to bend over and touch toes and remain bent over to allow for exam of the back and hamstring tightness. A quick look for a cyst or external hemorrhoids can be easily ascertained at this point without having to do a rectal. Rectal are not necessary unless pathology or history indicated the need.

Finally, a quick demonstration of heel and toe walking and tandem walking will indicate normal lower extremity strength, and functioning of the fourth and fifth lumbar and sacral nerves and cerebella function.

The physician can establish any modification of the above, whether routine is comfortable, provided all areas mentioned are screened. Once a routine is used, it can be done quickly and efficiently with the assurance the boxer is mentally and physically capable to box.

**Suggested list of items for the ringside physician at National Championships**

Obviously with emergency medical technician support and ambulance availability, little emergency equipment at ringside is necessary except for the following:

- Stretcher and headboard available under the ring.
- Oxygen tanks (make sure it is functional and full) also stored under the ring.
- A physician’s emergency bag containing at least an Amnu bag, oral and nasal airway and other supplies for cardio-pulmonary resuscitation and management of unconsciousness.
- The physician should also carry on his/her person or have laid out on the ringside table the following
  - sterile gauze sponges for wiping cuts and nosebleeds;
  - penlight for examining intraoral bleeding, cuts and eye reactions (papillary reflexes and horizontal nystagmus);
  - oral airway and oral screw to pry open mouth in case of uncontrolled seizure or trismus due to spasm and to manage the airway in case of an unconscious boxer.
Blood pressure cuff, stethoscope, cervical collar, otoscope and ophthalmoscope are perfectly acceptable to have handy, but basically items one through four are the essential items to handle a stricken or injured boxer in a ring emergency. These instruments are generally cumbersome and difficult to use effectively in a corner or ringside exam.

The physician needs to be assured of the following requirements, although the responsibility of assuring the following is that of the referee and judges. The physician must, however, be mindful and in so doing greatly add to strict observance of AIBA rules by all.

**Guidelines for entering the ring**

The physician will enter the ring under the following circumstances:

- Dropped boxer or serious injury, the referee requests the physician’s evaluation and/or aid.
- Referee’s request during a bout, as following a standing eight count.
- The physician may, at his own discretion, between rounds indicate to the jury/referee that he wants to examine the boxer. The jury/referee will then signal stop at the beginning of the next round and the boxer will be escorted to ringside for the physician’s evaluation.
- At his discretion the ringside physician may suspend the bout at anytime. If there is a risk of physical injury, he shall notify the jury to terminate the bout. The decision shall take precedence over all other considerations.

When entering the ring, the following advice is given:

- Enter quickly, but calmly and with authority. Remember, everyone else in the ring is not sophisticated medically and tends to become overly excited.
- Do not permit the boxer’s corner personnel to dictate your evaluation, management or the time you take. They will be escorted to the corner by the referee.
- Make sure the boxer has adequate airway. Remove the mouthpiece and watch for vomiting or aspiration.
- Insist that the boxer lie down until fully reactive; then permit him and only when able, may he walk to the corner.
- 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.
- When entering the ring, take sterile gauze pads and a penlight but have airways and resuscitation equipment readily available.
- The 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 ringside physician.
- If rapid recovery is not as expected, expedite transfer via stretcher and ambulance to the prearranged referral hospital. If recovery progresses satisfactorily, without evidence to suspect progressive intracranial process, the boxer is released to the care of his coach, family, or other responsible adults. This individual should be given a Head Injury Slip.

- Additional pertinent information should be provided to facilitate continued observation and to assure proper follow-up care. (Exhibits B and D)

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### Protocol for head injury follow-up

1. Keep the athlete at rest for 24 hours. No school, practice, competition or work.
2. Clear liquids for eight hours.
3. You may allow the athlete to sleep, but check his condition every hour while awake, and even, one to two hours while asleep. See that the athlete responds to a pinch or shake, and that his color, pulse and breathing are normal.
4. You may give the athlete one Tylenol tablet, but no aspirin, every four hours as needed for a headache: nothing stronger should be administered unless you are directed to do so by a physician.
5. Complications that should be brought to the immediate attention of a physician are:
   - Severe or prolonged headache that does not subside with a cool wet towel to the head or a Tylenol tablet.
   - If the athlete vomits more two or three times.
   - If there is a convulsion (fit or seizure) or involuntary movements of the across, face or legs.
   - If the athlete complains of weakness or is unable to move one or both of his arms or legs.
   - If there is difficulty with walking
   - If the athlete cannot be awakened easily or is lethargic.
   - If there are peculiar movements of the eyes, difficulty of focus, one pupil is much larger or different that the other or double vision.
   - If the athlete displays any kind of repetitive behavior, such as repeating the same word or phrase over and over again, or peculiar behavior.
How to handle cuts at ringside

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 if a cut causes enough bleeding to impair vision, the bout should be stopped.

Generally cuts, diagrammed “A”, rarely cause problems with vision or damage underlying structures. On the other hand, cuts diagrammed “B” (the supraorbital nerve) or “C” that may extent to the nasal lacrimal duct or infra-orbital nerve should indicate a need to stop the bout. Cuts “D” on the upper eyelid that might damage the tarsal plate should also indicate need to stop the bout.

Vertical cuts “E” through vermillion border of the lip should stop the bout because of potential further tearing the lip form subsequent trauma.

Cuts:”F” around or on bridge on the nose must carefully checked for evidence of compound vassal fracture (Exhibit C)

No dressing of cuts is allowed except for collodion, if it’s obvious in a tournament the cut will not pass a subsequent pre-competition exam, the bout should be stopped.
Nosebleeds

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. If no fracture is felt, the physician must then evaluate the character of the bleeding (i.e. venous vs brisk asterial gushing).

If the bleeding resembles hemorrhaging or cannot be stopped by simple compression at Ringside or by the beginning of the next round, it is best to stop the bout. 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. Further head blows could cause aspiration of clot and a respiratory emergency.

Evaluation of impaired boxer in the ring
A boxer temporarily stunned or knocked out and unconscious is a stricken boxer and a medical emergency. This indicates that a concussion has occurred. A concussion is a temporarily altered state of motor hypo tonus, helplessness and disturbed consciousness.

This includes any one or more of the following:

1. Disorientation,
2. Memory deficit –ante grade and retro grade amnesia,
3. Altered or slow speech,
4. Difficulty processing new information,
5. Impaired motor function –slow, in coordinate.

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.
6. Note speech – altered, slow repetitive?

7. Observe the eyes”
   - Pupils equal, reactive?
   - Is there spontaneous nystagmus? The presence of spontaneous horizontal nystagmus indicates the boxer is very vulnerable and should definitely not be permitted to continue.

8. Look for facial weakness, hemiparesis or other focal signs.

   The match should be stopped if the boxer fails to:

   1. Answer the questions correctly.
   2. Perform the motor tests, or
   3. Shows any abnormal focal signs.

   To be sure, much of the appraisal is subjective, but the conscientious application guidelines will produce decisions that minimize and protect the injured boxer.
How to handle the unconscious boxer

A boxer knocked down and unconscious is considered a stricken boxer and emergency attention by the ringside physician is mandatory. (Exhibit D)

The referee should signal the doctor to enter the ring immediately. If the mouthpiece is partially extruded, the referee can reach down and remove it but otherwise should not in anyway move the boxer. A cervical (neck) fracture must always be a consideration in the initial evaluation.

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<th>Guidelines for management of concussion</th>
<th>Exhibit D</th>
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<td><strong>Grade I</strong></td>
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<tr>
<td>1. Transient confusion</td>
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<tr>
<td>2. No loss of consciousness</td>
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<tr>
<td>3. Concussion: symptoms or mental status abnormalities on examination resolve in 15 minutes</td>
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<tr>
<td><strong>Symptoms and signs:</strong></td>
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<tr>
<td>Vacant stare, visual scotoma, tinnitus, delayed for responses.</td>
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<tr>
<td><strong>Management:</strong></td>
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<tr>
<td>a. remove boxer</td>
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<tr>
<td>b. Examine immediately and at 5-minutes interval for development of mental status abnormalities or post-concussion symptoms at rest.</td>
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<tr>
<td><strong>Grade II</strong></td>
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<tr>
<td>1. Transient confusion</td>
<td></td>
</tr>
<tr>
<td>2. No loss of consciousness</td>
<td></td>
</tr>
<tr>
<td>3. Concussion symptoms or mental status abnormalities (amnesia) on examination last 15 minutes.</td>
<td></td>
</tr>
<tr>
<td><strong>Symptoms and signs:</strong></td>
<td></td>
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<tr>
<td>Confusion, slurred speech, amnesia, nausea, vomiting, headaches, dizziness, photophobia, mental status change.</td>
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<tr>
<td><strong>Management</strong></td>
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<tr>
<td>1. Remove athlete</td>
<td></td>
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<tr>
<td>2. Examine often the signs of evolving in tracranial pathology</td>
<td></td>
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<tr>
<td>3. Transport boxer to hospital to perform neurologic examination.</td>
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<tr>
<td><strong>Grade III</strong></td>
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<tr>
<td>1. Any loss of consciousness, either brief (sec) or prolonged(min)</td>
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<tr>
<td><strong>Management</strong></td>
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<tr>
<td>Transport boxer immediately to nearest emergency department by ambulance</td>
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The physician needs to promptly secure airway and check for signs of hand and foot movement that will indicate an intact spinal cord. If boxer fails to regain consciousness, continue airway management, immobilize neck in cervical collar, place on stretcher (head board) and remove from ring. Make full use of supplemental oxygen, even if respiration seems adequate. Increasing oxygen concentration to the brain may prevent further injury.
Once the boxer regains consciousness and demonstrates full use of extremities, he may be allowed to sit up. Don’t allow him to stand immediately. When satisfied that he has full muscle tone, 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 reside stairs unassisted.

On returning to the locker room, the physician should perform a thorough medical exam to determine the need and nature of further medical observation and/or hospitalization. Remember an unconscious boxer is an emergency of the first magnitude.

**The post-bout exam**

Each boxer must be examined after the bout. The physician should identify an area some distance away from the ring on the way to the locker 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.

When two ringside physicians are in attendance, one should be designated to do the post-bout exam and to check, if necessary, any questionable injury in the locker room. The other must remain at ringside for supervision of the next bout.

If only one physician is in attendance, he/she must make the post-out exam expeditiously and return to ringside before the next bout is allowed to start.

A paramedic or athletic trainer’s assistance can be valuable partner in this circumstance. Under appropriate instruction/guidance from the physician and in the case of no obvious injury, the paramedic or athletic trainer may be allowed to do portions of the post-bout exam. In this event, the physician, after completion of all the bouts, must see each boxer to assure that he is responding normally. The boxer may be instructed to present himself at ringside for the exam after showering and dressing, in case he wished to leave before the ends of the bouts.

**Conclusion:** Following the above recommendations can safeguard the boxer from serious injury and provide confidence to the physician in mastering the responsibilities of all ringside doctors. Always keep first in your mind – boxing safety.
Suggested list of items for physicians:

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<td>Small flashlight or penlight</td>
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<td>Stethoscope</td>
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<td>Sphygmomanometer</td>
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<td>Thermometer</td>
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<td>Nasal speculum</td>
<td>Sterile gloves</td>
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<td>Orthopedic</td>
<td>(A sterile suture kit is preferred. Disposable kits are available and acceptable.)</td>
</tr>
<tr>
<td>Finger Splints</td>
<td></td>
</tr>
<tr>
<td>Adhesive tape</td>
<td></td>
</tr>
<tr>
<td>Ace bandage</td>
<td></td>
</tr>
<tr>
<td>Soft neck collar</td>
<td></td>
</tr>
<tr>
<td>An ankle splint is to have, but not necessary</td>
<td></td>
</tr>
</tbody>
</table>

4. Miscellaneous

Betadine and/or alcohol sponges
Syringes
Needles
Anesthetic (local), Xylocaine 1% or 2%
Airways, at least one large, one medium (adolescent size)
Oral screw
Tongue depressors
Dressings
Eye Patch
Band-Aids
Gauze sponge (4X4)
Roll-type gauze or Kling
Cotton-tip applicators, sterile and non sterile
 Razors (Boxers must be clean shaven)  
Plastic zip-loc bags (for ice bags)

Team physician’s responsibility

The doctor’s responsibility is to also care for the medical needs of the entire delegation during foreign trips. This group will include athletes, referees, coaches, trainers, wives, manager and doctor. It must be remembered that the athletes and referees cannot be given any substance that will alter their ability to compete or affect judgment. The choice of medication should take into consideration the geographic area that will be visited, i.e. intestinal parasites and sanitation considerations. It is recommended that the medication be carried in plastic containers with tamper-proof tops.

Strict adherence will lessen the likelihood of problems at the time of entrance or departure from each country. If it also advised that the doctor take copies of his medical and narcotic licenses as well as any other appropriate medical documents.
With the above points in mind, the following classes of medication are suggested:

**Analgesics** – Tylenol, oral and injectable narcotics (minimize). Narcotics should be safeguarded. Aspirin is not recommended just prior to or after a bout to minimize bleeding potential.

**Antihistamines** – straight antihistamines are not banned, but decongestants (ephedrine and derivatives) are banned. Oxymetazoline(Afrin) nasal sprays are acceptable.

**Antiasthma**-medication, i.e. Albuterol inhaler, epinephrine is banned

**Anticonvulsants**

**Antibiotics** – for URI’s and gastrointestinal infections

**Antidiarrheal** – Imodium is most effective and safe. Caution: do not use four hours prior to bout.

**Antacids and antiflatulants**

**Antiemetic**

**Topical antifungal and antibacterial ointments**

**Amyl nitrate or ammonia pearls** – should be used only if necessary and if prepared for laryngeal or tracheal spasm

**Antitussive** – Dextromethorphan products are accepted for use if drug testing is planned.

**Hemorrhoidal and sedatives** - suppositories or cream

**Soporifics and sedatives** Halcion (0.125) is acceptable for sleep, and benadryl is probably safest; Diazepam-type tranquilizers are acceptable.

**Muscle relaxants**

**Eye preparations**

**Ear preparations**

**Laxatives**

**Diuretics** - these drugs are banned for use in making weight.

**Anti-inflammatory medication** – e.g. Piroxicam
Minimum Suspension Periods after Knockout and RSCH

Single occurrence of knockout or RSCH. If a boxer suffers a knockout as a result of blows to the head or if the bout is stopped by the referee due to the boxer being incapable of defending himself or continuing the bout as a result of heavy blows to the head, then the boxer may not take part in boxing or sparring for a period of at least 30 days afterwards.

Double occurrence of knockout or RSCH
If during a period of three months a boxer is twice knocked out or if two bouts are stopped 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 three months after the second occurrence.

Triple occurrence of knockout or RSCH
If during a period of 12 months after the boxer suffers three knockouts or if three bouts are stopped by the referee due to the boxer having received heavy blows to the head, then he may not take part in boxing or sparring for a period of one year after the third occurrence. Any boxer, who loses a difficult bout as a result of many blows to the head of who is knocked down in several successive competitions may be barred from taking part in competitive boxing or sparring for a period of 30 days after the last contest if the Jury so decides on the advice of the medical officer. All these protective regulations also apply when the knockout occurs in training. Each KO or RSCH must be recorded by the Medical Jury in the boxer’s record book.

Medical certification after the end of the suspension period
Before a boxer is allowed to box after the aforementioned periods have elapsed, he must be passed fit by a neurologist, if possible after a special examination has been conducted, a computerized tomography of the brain carried out, or MRI.

Boxing Injuries

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 but it has not been proved that such injuries were sustained as a result of a blow to the eye with a boxing glove. In the case of an eye injury the bout must be stopped and the boxer be referred to an ophthalmologist.

Abrasions

Such injuries often occur to the face and skull. Bleeding should be halted by pressure. As a rule a compress with Fibrin foam (e.g. Spongostan is sufficient. Bathing with a warm saline solution followed by a local application of antiseptic is also effective.
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. Smaller cuts can be held together at the edges and taped with plastic material (e.g. Steri-Strip).

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.

Hematomas

The “black eye”, as it is commonly known, rarely requires treatment, but cold applications and light compression limit the extravasation of blood, a haematoma of the auricle, if detected early, and necessitates incision, pressure bandaging and the application of antibiotics. If a blood clot has to be removed then this should be done by a doctor experienced in such matters. Since the wearing of a headguard is compulsory such injuries are rare.

Nose

Fractures of nasal bones are rare. Elevation at an early stage is indicated and a suspension of three months should be imposed. Bleeding in the septum of the nose should be drained with a thick needle. A plug consisting of cotton and Vaseline should be applied together with a cold pressure bandage for a period of 30 minutes. Antibiotics should be prescribed.

Jaw

Fractures of the jaw are also rare. The symptoms are: pain, tenderness, and trismus and speech difficulties. The boxer should be sent to a specialist unit for facial and jaw surgery. A six-month suspension should be imposed.

Hands

The most common fractures are those of the metacarpal. They are primarily caused by a poor punching technique, where thumb is not correctly positioned opposite to the index and middle fingers. If such fracture is suspected, indicated by localized tenderness, bruises or swelling, the boxer should be immediately sent to the hospital for an X-ray.

The fracture should be temporarily supported by a splint. Depending of the nature of the fracture (Bennett’s fracture of the shaft, spiral fracture of the metacarpals) the period of immobilization should last from 3 to 6 weeks. If a carpal bone fracture is suspected the boxer should be sent to a specialist.
Other injuries apart from bone fracture include dislocation of the metacarpophalangeal, carpometacarpal and carpal joints. Articular and periaticular changes may occur in these joints. Local treatment and anti inflammatory drugs may be useful. Above all it is essential that the boxer improves his technique.

**Limbs**

Injuries of the upper and lower limb are uncommon in boxing

**Abdomen**

Ruptures of the organs in the abdomen (spleen, liver) are uncommon but should be borne in mind due to their serious consequences. Traumatic injury of the kidneys is more common. Contusions may lead to massive hematuria even when no anatomic defect appears. In most cases conservative treatment in hospital confinement to bed should suffice.

**Pre-bout Examination of Referees**

The referees must carry their own passbook, are to be examined before a boxing card and must pass the physical requirements as pertains to:

- blood pressure;
- cardiovascular system;
- respiratory system;
- eyes and ears;
- neurological systems;
- musculoskeletal system.

If the referee fails to pass physical requirements, he/she may be dismissed from refereeing. If a tournament requires several days, each official referee must be examined Daily prior to the bouts.

A referee should make known to the Chief Physician for the tournament any of the following:

1. pertinent medical states;
2. pertinent meds and allergies;
3. medic-alert states;
4. Previous major surgery;
5. Uncorrected hypertensive vascular disease;

A history of:

Ischemic heart disease:
2. Cardiac condition defects;
3. Pulmonary impairment;

Visual and/or hearing deficits

Uncorrected hypertensive vascular disease constitutes direct contraindications to refereeing

It is recommended that the referees at levels of competition secure:
1. Annual physical examination (family physician);
2. Annual chest X-ray;
3. Annual electrocardiogram;
4. Annual visual acuity/fields check;
5. 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 physician. The doctor must notify the respective provincial/national official body of the suspension.

It is also recommended that referees be vaccinated with hepatitis B vaccine (full course of three shots over 6 months) and wear disposable gloves during the referring of a match. This is a preventative measure to militate against the spread of viral diseases such as Hepatitis B.
Appendix I
Instructions for Filling in the Medical Section of
the International Competition Record Book for Boxers

General Medical Remarks and Medical Examinations to be filled in by the medical officer of
the national boxing association at the time of the issue of the International Competition Record
book.

The short but comprehensive physical examinations form is especially useful in assessing a
boxer physical fitness. The laboratory tests include a blood count, urinalysis (to exclude
glycosuria and proteinuria) and blood serology (complement fixation test for syphilis. A resting
ECG is compulsory and EEG, skull X-ray and CCT are recommended.

Medical Examination prior to Olympic Games, World Championship, World Cup and
Continental Championships. The “pre-game” passage is filled in by examining doctor
weighing-in on each day that the competitor boxes. The “game” passage is filled in by the
Medical Jury during the bout.

Annual Medical Examination

To be filled in by the examining doctor. A thorough medical examination is compulsory at
least once a year. This examination serves several purposes:

1. To check the physical fitness of the boxer.

2. To discover latent diseases and consequences of earlier injuries.

3. To obtain a basic view of the state of the boxer’s health.
   The examining doctor must indicate whether he considers the state of the boxer’s health
to have change since the first general examination and must declare the boxer either fit
or unfit to box.

Certification of Fitness to box before each bout. To be filled in by the examining doctor every
day that the competitor is to box, before weighing-in. The examining doctor declares whether
the boxer is fit to box or not.

Medical Examination following the expiry of the suspension period in the case of a knockout or
RSCH. To be filled in by the examining neurologist.

Before resuming boxing after the expiry of a recovery period as prescribed by AIBA rule
XXLC. The boxer must be declared fit to take part in competitive boxing after a neurological
examination, preparation of an EEG and, if possible, computerized tomography of the brain.
The neurologist must decide whether or not the boxer is fit to box.
APPENDIX II: CANADIAN AMATEUR BOXING ASSOCIATION

Medical Form – Part 1

Part I – (To be completed by athlete (male or female), or parent, or guardian if under legal age)

Name ____________________________________________
Date of Birth ________________________________
Address ____________________________________________________________________________________
Tel: ____________________________________
OHIP ____________________ Other (GMS, Blue Cross)___________________
Weight ______Height _________ Boxing Club __________________________________________________

If the applicant has or had any of the following illnesses, please give particulars in this space:

<table>
<thead>
<tr>
<th>No.</th>
<th>Illness Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eye or Ear impairment, infections or injuries:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rheumatic Fever, T.B. Pleurisy or Asthma:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Kidney or Urine Disorder, one Kidney:</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>Diabetes Mellitus:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Indigestion, Vomiting, Abdominal Cramps:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Nervous breakdown, Head injury, Fits:</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Acute Infections:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Fractures, Dislocations, Severe Sprains:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Epilepsy, of Applicant or in Family:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Any suspensions from Boxing?</td>
<td></td>
<td></td>
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</tbody>
</table>

Date
Signature of athlete
Signature of Parent or Guardian

Part II – to be completed by the Physician

NOTE: The following may preclude from boxing: (1) Impaired vision – worse eye less than 20/120 and better eye les than 20/60) (2) Squint (3) recurrent Chronic Suppurative Otitis Media (4) Chest Expansion kless than 2" (5) Total Deafness (6) Albuminuria (7) Hernia, Organomegaly or Undescended Testis (8) Heart Lesions.

Weight ____________________________________________
Height ____________________________________________
Expiration _______________________________________

Vision: Right Eye 20/ ____________________________ Left Eye 20/ ____________________________
Colour Vision: ________________________________________________ Field of Vision

Ears: (State of TM.S. and Degree of Deafness)________________________________________________

Teeth (Any Braces)____________________________________________________

Is there any abnormality in Chest, Heart, B.P. or C.N.S.?_____________________________________________________________________

Is there a Hernia, Undescended Testis, Organomegaly, Cryptorchidism?____________________________________

Urinalysis (Labetix): Sugar ____________________________ Protein ____________________________ Blood ____________________________

Chest X-Ray required only if there is a family history of T.B.

Additional for the Female Boxer: Note: Confirmed Pregnancy disqualifies from boxing.

Are there Breast lesions, bleeding, masses, other dysfunction, pain?______________________________

Abnormality in Menstrual Pattern?___________________________________________________________________

Amenorrhea?____________________________________________________________________________________

Lower Pelvic Pains?_____________________________________________________________________________

I certify that the applicant is/is not fit to engage in Boxing:

Physician’s Name and License Number:____________________________________________________________

Address:__________________________________________________________
Telephone No. ______________________________________________________

Signature ____________________________________________ Date ____________

______________________________________________________________________________________________