

# HOUSE . . . . . No. 1894

---

## The Commonwealth of Massachusetts

---

PRESENTED BY:

*Carlo Basile*

---

*To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:*

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act relative to the practice of medical physics.

---

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Carlo Basile</i>	<i>1st Suffolk</i>	<i>1/11/2013</i>

# HOUSE . . . . . No. 1894

---

By Mr. Basile of Boston, a petition (accompanied by bill, House, No. 1894) of Carlo Basile relative to the practice of medical physics and the harmful effects of excessive and unnecessary radiation. Public Health.

---

[SIMILAR MATTER FILED IN PREVIOUS SESSION  
SEE HOUSE, NO. 3515 OF 2011-2012.]

## The Commonwealth of Massachusetts

\_\_\_\_\_  
In the Year Two Thousand Thirteen  
\_\_\_\_\_

An Act relative to the practice of medical physics.

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:*

1           Section 1. Purpose and Scope.

2           The Massachusetts Legislature finds that the practice of medical physics by incompetent  
3 persons is a threat to the public health and safety. It is, therefore, the responsibility of this state to  
4 protect the public health and safety from the harmful effects of excessive and unnecessary  
5 radiation by ensuring that the practice of medical physics is entrusted only to persons who are  
6 licensed under this section.

7           Section 2. Definitions.

8           As used in this article:

9           1. "Clinical" shall mean activities directly relating to the treatment or diagnosis of human  
10 ailments.

11           2. "Specialty" or "specialty area" shall mean the following branch or branches of special  
12 competence within medical physics:

13           (a) "Diagnostic radiological physics" shall mean the branch of medical physics relating to  
14 the diagnostic applications of x rays, gamma rays from sealed sources, ultrasonic radiation, radio

frequency radiation and magnetic fields; the equipment associated with their production, use, measurement and evaluation; the quality of images resulting from their production and the use of medical health physics associated with this subfield;

(b) "Medical health physics" shall mean the branch of medical physics pertaining to the safe use of x rays, gamma rays, electron and other charged particle beams [or] neutrons or radionuclides and of radiation from sealed radionuclide sources for both diagnostic and therapeutic purposes, except with regard to the application of radiation to patients for diagnostic or therapeutic purposes and the instrumentation required to perform appropriate radiation surveys;

(c) "Medical nuclear physics" shall mean the branch of medical physics pertaining to the therapeutic and diagnostic applications of radionuclides, except those used in sealed sources for therapeutic purposes; the equipment associated with their production, use, measurement and evaluation; the quality of images resulting from their production and use and the medical health physics associated with this subfield; and

(d) "Therapeutic radiological physics" or "radiation oncology physics" shall mean the branch of medical physics relating to the therapeutic applications of x-rays, gamma rays, electron and charged particle beams, neutrons and radiations from sealed radionuclide sources; the equipment associated with their production, use, measurement and evaluation; the quality of images resulting from their production and use; and the medical health physics associated with this subfield.

3. "Medical physics" shall mean the branch of physics that is associated with the practice of medicine

4. "Radiation" means ionizing or non-ionizing radiation above background levels which is used to perform a diagnostic or therapeutic medical or dental radiological procedure.

5. "Radiological physics" shall mean diagnostic radiological physics, therapeutic radiological physics or radiation oncology physics, medical nuclear physics and medical health physics.

6. "Radiological procedure" shall mean a test, measurement, calculation, or radiation exposure used in the diagnosis or treatment of diseases or other medical or dental conditions in human beings that includes therapeutic radiation, diagnostic radiation, nuclear magnetic resonance, or nuclear medicine procedures.

7. "General Supervision" means a procedure is performed under a Qualified Medical Physicist's (QMP) overall direction and control but the QMP's presence is not required during the performance of the procedure. The training of the personnel who actually perform the

49 procedure and the maintenance of the necessary equipment and supplies are the continuing  
50 responsibility of the QMP.

51 8. "Direct Supervision" means a Qualified Medical Physicist must exercise General  
52 Supervision and be present in the facility and immediately available to furnish assistance and  
53 direction throughout the performance of the procedure but is not required to be present in the  
54 room when the procedure is being performed.

55 9. "Personal Supervision" means a Qualified Medical Physicist must exercise General  
56 Supervision and be present in the room during the performance of the procedure.

### 57 Section 3. Definition of "practice of medical physics".

58 1. The "practice of the profession of medical physics" shall mean the use of principles  
59 and accepted protocols of physics to provide the quality, quantity, and placement of radiation  
60 during the performance of a radiological procedure.

61 2. A license to practice medical physics shall be issued with special competency in one  
62 or more specialty areas in which the licensee has satisfied the requirements of section 6 of this  
63 article.

64 3. The practice in any specialty by a person whose license is not issued with special  
65 competency for such specialty shall be deemed the unauthorized practice of the profession of  
66 medical physics.

67 4. Only a person licensed under this article shall practice the profession of medical  
68 physics.

### 69 Section 4. Use of the title "licensed medical physicist".

70 Only a person licensed under this article shall use the title "licensed medical physicist".

### 71 Section 5. State Board for medical physics.

72 1. A state board for medical physics shall be appointed by the Department of Public  
73 Health upon the recommendation of the commissioner and shall assist on matters of licensure  
74 and professional conduct in accordance with provisions of existing physician licensure laws.  
75 Notwithstanding these provisions, the state board shall assist the board for medicine solely in  
76 medical physics matters and shall also function as the state board for medical physics. The  
77 licensure requirements for licensed medical physicists shall be waived for the initial state board  
78 appointees, provided that such appointees shall have received national certification in their  
79 specialty.

80 2. The state board shall consist of eight individuals, to be composed of the following:

(a) Four licensed medical physicists represented by each of the following specialties:

(i) diagnostic radiological physics,

(ii) therapeutic radiological or radiation oncology physics,

(iii) medical nuclear physics, and

(iv) medical health physics;

(b) Three licensed physicians represented by each of the following specialties:

(i) diagnostic radiology,

(ii) radiation therapy or radiation oncology, and

(iii) nuclear medicine; and

(c) A representative of the public at large.

3. The state board must meet at least twice a year to provide administrative review of the licensure program to include review of applications, continuing education requirements and enforcement actions.

#### Section 6. Requirements and procedures for professional licensure.

To qualify for a license as a professional medical physicist, an applicant shall fulfill the following requirements:

1. Application: file an application with the state;

2. Education: have received an education including a graduate degree from an accredited college or university in accordance with state regulations. Such person shall have completed such courses as defined by the state board to practice in the medical physics specialty in which the applicant has applied for a license;

3. Experience: have experience in his or her medical physics specialty satisfactory to the board and in accordance with the state regulations; and

4. Board Certification: receive and maintain board certification in his or her medical physics specialty satisfactory to the board; and

5. Fee. The fees collected will be handled in the following manner:

(a) Payment and distribution.

(i) The state board shall pay all fees collected under the provisions of this subtitle to the Massachusetts Comptroller.

(ii) The Comptroller shall distribute all fees to the state board established under Section five in this article.

(b) Use. The fees shall be used to cover the actual documented direct and indirect costs of fulfilling the statutory and regulatory duties of the state board as provided by the provisions of this subtitle.

Section 7. Provisional Licenses. Provisional Licenses shall be issued by the Department of Public health to eligible applicants, as follows:

1. Eligibility. The following persons shall be eligible for a provisional license:

(a) a person who fulfills all requirements for a licensed medical physicist except those relating to board certification or experience; or

(b) a medical physics student enrolled in a graduate or post-graduate program approved by the state board; or

(c) a person has been licensed or certified in good standing as a practitioner of one the subspecialties of medical physics for at least two years in another jurisdiction, including a foreign country, that has licensing or certification requirements substantially equivalent to the requirements of this article as determined by the state board and

(i) has passed a national or other examination recognized by the state board relating to the subspecialties of medical physics; and

(ii) is sponsored by a person licensed under this article with whom the provisional license holder will practice during the time the person holds a provisional license.

2. Limit of practice. An individual with a provisional license shall be authorized to practice medical physics only under the direct supervision of a licensed medical physicist and only in the sub-specialty of such licensed medical physicist;

3. Duration. A provisional license permit shall be valid for two years. It may be renewed at the discretion of the state ;

4. Fee. The fees collected will be handled in the following manner:

(a) Payment and distribution.

(i) The state board shall pay all fees collected under the provisions of this subtitle to the Massachusetts Comptroller.

(ii) The Comptroller shall distribute all fees to the state board established under Section five in this article.

(b) Use. The fees shall be used to cover the actual documented direct and indirect costs of fulfilling the statutory and regulatory duties of the state board as provided by the provisions of this subtitle.

5. Experience. Medical physics experience obtained in this state to be credited towards the experience requirement for licensure must be obtained under a provisional license.

Section 8. Exemptions. Nothing in this article shall be construed to:

1. Affect, prevent or in any manner expand or limit the authority of any person otherwise authorized by law or regulation to practice any function of a medical physicist, or any department or agency authorized by law or regulation to regulate the use of radiation, nor

2. Prohibit the repair or calibration of any test equipment used by licensed medical physicists by any person otherwise allowed to do so under state or federal law, nor

3. Serve to limit radiologic and/or imaging technologists or any individual otherwise authorized by law or regulation from performing quality control measurements or obtaining quality control data under the supervision of a licensed medical physicist, nor

4. Serve to limit neither a service engineer in the repair of radiation producing equipment nor an installation engineer in the installation of radiation producing equipment.

Section 9. Licensure without board certification

Within time frame determined by state of the effective date of regulations implementing the provisions of this article, the state board may issue a license to practice medical physics within one or more specialties in this state, without board certification, to a person who meets the requirements of subdivisions one, two, three and five of Section Six of this article and who in addition has earned a bachelor's, master's or doctoral degree from an accredited college or university that signifies the completion of a course of study acceptable to the state board, and has demonstrated to the state board's satisfaction, in the case of an earned bachelor's degree, the completion of at least fifteen years of full-time work experience in the medical physics specialty for which application is made, or, in the case of an earned master's or doctoral degree, the completion of at least two years of full-time work experience in the seven years preceding the date of application in the medical physics specialty for which application is made and the equivalent of one year or more of full-time work experience in the ten years preceding the date of application for each additional specialty for which application is made.

Section 10. Continuing Education Requirements

172 The state shall require continuing education sufficient to maintain professional  
173 certification as defined by the state board by regulation.

#### 174 Section 11. License Term and Renewal

175 1. A license is valid for two years from the date granted and shall be renewed every two  
176 years.

177 2. The state board by rule may adopt a system under which licenses expire on various  
178 dates during the year.

179 3. A person may renew an unexpired license by paying the required renewal fee to the  
180 state board before the expiration date of the license.

181 4. The state board shall require documentation of continuing education be submitted with  
182 the renewal.

183 5. If a person's license has been expired for 90 days or less, the person may renew the  
184 license by paying to the state board the required renewal fee and a penalty fee in an amount equal  
185 to one-half of the amount of the renewal fee.

186 6. If a person's license has been expired for longer than 90 days but less than two years,  
187 the person may renew the license by paying to the state board the renewal fee that was due at  
188 expiration and a penalty fee in an amount equal to the amount of the renewal fee.

189 7. If a person's license has been expired for two years or longer, the person may not  
190 renew the license. To obtain a new license, a person must comply with the application  
191 requirements of this article and must submit to the state board:

192 (a) a supplemental experience record as required by the state board;

193 (b) a description of professional activities undertaken during the expiration period;

194 (c) a list of current professional references; and

195 (d) a transcript for any degree or college credit earned since the person's previous license  
196 application.

#### 197 Section 12. Enforcement

198 1. In general. Subject to the hearing provisions of Department of Public Health, the state  
199 board, on the affirmative vote of a majority of the quorum, may reprimand any licensee, place  
200 any licensee on probation, or suspend or revoke a license if the licensee:

201 (a) Fraudulently or deceptively obtains or attempts to obtain a license for the applicant or  
202 licensee or for another;



203 (b) Fraudulently or deceptively uses a license;

204 (c) Is guilty of:

205 (i) Immoral conduct in the practice of medical physics; or

206 (ii) Unprofessional conduct in the practice of medical physics;

207 (d) Is professionally, physically, or mentally incompetent;

208 (e) Habitually is intoxicated;

209 (f) Is addicted to, or habitually abuses, any narcotic or controlled dangerous substance as  
210 defined in Massachusetts criminal law article;

211 (g) Provides professional services:

212 (i) While under the influence of alcohol; or

213 (ii) While using any narcotic or controlled dangerous substance, as defined in  
214 Massachusetts criminal law article or other drug that is in excess of therapeutic amounts or  
215 without valid medical indication;

216 (h) Promotes the sale of drugs, devices, appliances, or goods to a patient so as to exploit  
217 the patient for financial gain;

218 (i) Willfully makes or files a false report or record in the practice of medical physics;

219 (j) Willfully fails to file or record any medical report as required under law, willfully  
220 impedes or obstructs the filing or recording of the report, or induces another to fail to file or  
221 record the report;

222 (k) On proper request, and in accordance with the provisions of state confidentiality of  
223 medical records article, fails to provide details of a patient's medical record to the patient,  
224 another physician, or hospital;

225 (l) Makes a willful misrepresentation in treatment;

226 (m) Practices medical physics with an unauthorized person or aids an unauthorized  
227 person in the practice of medical physics;

228 (n) Grossly overutilizes health care services;

229 (o) Is disciplined by a licensing or disciplinary authority or convicted or disciplined by a  
230 court of any state or country or disciplined by any branch of the United States uniformed services  
231 or the Veterans' Administration for an act that would be grounds for disciplinary action under  
232 this section;

(p) Fails to meet appropriate standards as determined by appropriate peer review for the delivery of quality medical care performed in an outpatient facility, office, hospital, or any other location in this State;

(q) Willfully submits false statements to collect fees for which services are not provided;

(r) Was subject to investigation or disciplinary action by a licensing or disciplinary authority or by a court of any state or country for an act that would be grounds for disciplinary action under this section and the licensee:

(i) Surrendered the license issued by the state or country to the state or country; or

(ii) Allowed the license issued by the state or country to expire or lapse;

(s) Gives away or administers drugs for illegal or illegitimate medical purposes;

(t) Refuses, withholds from, denies, or discriminates against an individual with regard to the provision of professional services for which the licensee is licensed and qualified to render because the individual is HIV positive;

(u) Except in an emergency life-threatening situation where it is not feasible or practicable, fails to comply with the Centers for Disease Control's guidelines on universal precautions;

(v) Fails to display the notice required under notice of CDC guidelines on universal precaution.

(w) Fails to cooperate with a lawful investigation conducted by the state board;

(x) Is convicted of insurance fraud as defined in state insurance article;

(y) Willfully makes a false representation when seeking or making application for licensure or any other application related to the practice of medical physics;

(z) By corrupt means, threats, or force, intimidates or influences, or attempts to intimidate or influence, for the purpose of causing any person to withhold or change testimony in hearings or proceedings before the state board or those otherwise delegated to the state office of administrative hearings;

(aa) By corrupt means, threats, or force, hinders, prevents, or otherwise delays any person from making information available to the state board in furtherance of any investigation of the state board;

(bb) Intentionally misrepresents credentials for the purpose of testifying or rendering an expert opinion in hearings or proceedings before the state board or those otherwise delegated to state office of administrative hearings; or

(cc) Fails to keep adequate medical records as determined by appropriate peer review.

## 2. Crimes involving moral turpitude.

(a) On the filing of certified docket entries with the state board by the Office of the Attorney General, the state board shall order the suspension of a license if the licensee is convicted of or pleads guilty or nolo contendere with respect to a crime involving moral turpitude, whether or not any appeal or other proceeding is pending to have the conviction or plea set aside.

(b) After completion of the appellate process if the conviction has not been reversed or the plea has not been set aside with respect to a crime involving moral turpitude, the state board shall order the revocation of a license on the certification by the Office of the Attorney General.

3. Imposition of penalty. If after a hearing the state board finds that there are grounds under this article to suspend or revoke a license to practice medical physics, or to reprimand a licensed medical physicist, the state board may impose a fine subject to the state board's regulations:

(a) Instead of suspending the license; or

(b) In addition to suspending or revoking the license or reprimanding the licensee.

4. Disposition of funds. The state board shall pay any fines collected under this article into the general fund.

## 5. Conditions for surrender of license.

(a) Agreement of state board required. Unless the state board agrees to accept the surrender of a license of an individual the state board regulates, the individual may not surrender the license nor may the license lapse by operation of law while the individual is under investigation or while charges are pending.

(b) Conditions on agreement. The state board may set conditions on its agreement to accept surrender of a license.

## Section 13. Ethical Guidelines

Recommend practice standards for the practice of medical physics which are consistent with the Code of Ethics prepared by the American Association of Physicists in Medicine and American College of Medical Physics and disciplinary guidelines adopted under current applicable state law.

297           Section 14. Separability.

298           If any section of this article, or part thereof, shall be adjudged by any court of competent  
299 jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder of  
300 any other section or part thereof.

301           This act shall take effect eighteen months after the date on which it shall have become a  
302 law; provided however, that any actions necessary for the implementation of the provisions of  
303 this act on its effective date are authorized and directed to be completed on or before such  
304 effective date.