

SENATE No. 2080

The Commonwealth of Massachusetts

PRESENTED BY:

Donald F. Humason, Jr., (BY REQUEST)

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 increasing medical awareness and insurance coverage of non-ionizing radiation injury and reliance upon credible independent medical research.

PETITION OF:

NAME:

Kristin Beatty

DISTRICT/ADDRESS:

149 Central Park Drive Holyoke, MA 01040

SENATE No. 2080

By Mr. Humason (by request), a petition (accompanied by bill, Senate, No. 2080) (subject to Joint Rule 12) of Kristin Beatty for legislation to increase medical awareness and insurance coverage of non-ionizing radiation injury and reliance upon credible independent medical research. Financial Services.

The Commonwealth of Massachusetts

**In the One Hundred and Ninetieth General Court
(2017-2018)**

An Act increasing medical awareness and insurance coverage of non-ionizing radiation injury and reliance upon credible independent medical research.

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. Section 2 of chapter 112 of the General Laws, as appearing the 2014
2 Official Edition, is hereby amended by adding before the first paragraph the following:-

3 (a) As used in this section, the following words shall have the following meanings:

4 “Reasonable interpretations from scientific knowledge” shall mean that medical risks
5 shall be acknowledged when logic, trends, and/or laboratory science indicate potential risk, and
6 assessments of risk shall consider the sum of clearly credible laboratory and epidemiological
7 studies. Reasonable interpretations shall mean recommendations of beneficial health practices,
8 foodstuffs, and nutrients shall be reasonable only when these practices are known to be safe and
9 free of harm based on traditional consumption or use, but not necessarily when extreme dosages
10 or unusual intake with unknown results are recommended. Reasonable interpretations shall not
11 apply to recommending novel medicines, non-traditional or extreme dosages, and novel or non-

12 traditional therapies unless certainty of safety exists based on common sense or until stringent
13 scientific testing is completed that insures toxicological safety.

14 “Clearly credible laboratory and epidemiological scientific studies” shall mean all
15 relevant scientific research that demonstrates sufficient control of subjects, time, and materials to
16 prevent corruption of data or false conclusions. The small size or short length of a study in itself
17 shall not necessarily mean lack of credibility, although small size or short length requires
18 acknowledgement that impacts on larger or more diverse populations or in the long term are
19 lacking. However, conflicts of interest in research funding or other financial interest shall, when
20 existing, need to be negligible to be considered moderately credible and shall be acknowledged
21 as lacking full independence and therefore lacking full credibility.

22 (b)

23 SECTION 2. The first sentence of section 2 of chapter 112 of the General Laws, as
24 appearing in the 2014 Official Edition, is hereby amended by inserting by inserting after the sixth
25 paragraph the following paragraph:-

26 The board shall require that any continuing education necessary for the renewal of a
27 physician’s certificate of registration shall include updated, current training and education on the
28 diagnosis, treatment, and care of patients impacted by non-ionizing radiation. This training shall
29 recognize Electrohypersensitivity (EHS) as a functional impairment. Training shall recognize
30 that non-ionizing radiation influences many other biological systems, thus impacting health and
31 disease conditions, and that exposure to man-made non-ionizing radiation should be avoided
32 unless proven medical benefit and patient approval is acquired.

33 The board shall require that medical science, practice, education, and treatment be based
34 not only on clinical experience and traditional medical practices, but also on the sum of current
35 knowledge and reasonable interpretations from scientific knowledge.

36 SECTION 3. Section 47CC of chapter 175 of the General Laws, as appearing in the 2014
37 Official Edition, is hereby amended by striking out subdivision 47CC and inserting in place
38 thereof the following subsection:-

39 (a) As used in this section, the following words shall have the following meanings:

40 “Actuary,” is a person who is a member of American Academy of Actuaries and meets
41 the academy's professional qualification standards for rendering an actuarial opinion related to
42 health insurance rate making.

43 “Electrohypersensitivity,” or “EHS,” is an aspect of Idiopathic Environmental Intolerance
44 (IEI) attributed to non-ionizing radiation from devices such as mobile phones or electrical
45 equipment. Persons with electromagnetic sensitivity experience discomfort, painful sensations,
46 or functional impairment at lower levels of non-ionizing radiation exposure than compared to
47 non-EHS individuals. Symptoms vary in character and magnitude depending on the individual,
48 electromagnetic frequencies, power level, and length of exposure. In the early stages removal of
49 non-ionizing radiation may lead to improvement, but intense or continuous exposure can lead to
50 permanent sensitization and disability. EHS is currently determined by clinical diagnosis,
51 laboratory testing in context, and history. Diagnosis may include an examination of nitric oxide
52 production, mitochondriopathy, oxidative stress-lipid peroxidation, melatonin status, and
53 inflammation. Additional diagnostic tests may include 24-hour ECG, 24-hour HRV, 24-hour
54 blood pressure monitoring, and sleep EEG.

55 “Relevant medical conditions,” are medical conditions that laboratory or epidemiological
56 studies indicate non-ionizing radiation influences a biological system that impacts on the medical
57 condition, regardless of whether the precise mechanism is understood. Laboratory studies
58 indicate that non-ionizing radiation can cause neurological, hormonal, protein, genetic, blood,
59 EEG, EKG, anatomical, and other biological system alterations. Therefore, relevant medical
60 conditions include but are not limited to leukemia, pregnancy, coronary heart disease,
61 pathological blood pressure conditions, multiple sclerosis, diabetes, Alzheimer’s disease, stroke,
62 and ADHD.

63 “Education regarding non-ionizing radiation risks and protective measures,” is providing
64 precautionary information on current science indicating potential harms, including risks to
65 reproduction and to future children, and includes recommendations for identifying and reducing
66 exposure to non-ionizing radiation.

67 “Non-ionizing radiation reduction guidance,” shall include personalized guidance on
68 reducing exposures as well as information on how to conduct measurements to avoid dangerous
69 exposures. Measurement instruction shall include information on finding equipment, consultants,
70 and assessing 60 hertz electrical and magnetic fields, harmonics, transients, and the range of
71 legal frequencies.

72 “Non-ionizing radiation reduction services,” shall include assessment of ELF magnetic
73 and electric fields in a patient’s residence as well as any assigned patient room used for the
74 patient’s rest and recovery, along with instruction or assistance with the aim to reduce chronic
75 exposure to 60 Hz fields equal to or less than 0.5 milligauss (mG) and 3 volts per metre (V/m),
76 where possible, and definitely below 3 mG and 10 V/m. Instruction or assistance in reducing

77 fields shall include providing the patient or guardian thereof with information on how to reduce
78 fields and, when desired, unplugging devices and turning off circuits. When necessary to reduce
79 fields that cannot be otherwise reasonably avoided, assistance shall include the services of an
80 electrician to reduce fields within the resting areas (bed and long-term seating areas). Similarly,
81 assessment of other non-ionizing frequencies including (from 10 Hz to 100 GHz) shall occur and
82 the patient or guardian thereof shall be informed of the risks and how to reduce exposures.
83 Chronic exposure to microwaves (300 MHz – 30 GHz) should ideally be below 0.1 V/m peak
84 and certainly below 1 V/m peak. Reports of the radiation reduction services with dated initial and
85 final measurements shall be provided and placed in the patient’s medical record.

86 “Pharmacy care,” are medications prescribed by a licensed physician and health-related
87 services deemed medically necessary to determine the need or effectiveness of the medications,
88 to the same extent that pharmacy care is provided by the policy for other medical conditions.

89 “Therapeutic care,” are services provided by licensed or certified speech therapists,
90 occupational therapists, physical therapists and other body work such as chiropractic care.

91 “Nutritional analysis and nutritional supplementation,” are clinical diagnoses and tests
92 that identify mineral, fat, and other nutritional imbalances caused by stress, genetic quirks, and
93 diet, which are then followed by nutritional dietary guidelines and non-genetically-modified
94 prescriptions as needed. In addition to pollution, mental stress, or dietary deficiencies, exposures
95 to non-ionizing radiation may trigger deficiencies and require supplementation. In addition, the
96 patient may provide evidence of a medical need for supplementation with genetic testing.

97 “Treatment of electrohypersensitivity,” includes the following care prescribed, provided
98 or ordered for an individual diagnosed by a licensed physician who determines the care to be

99 medically necessary: non-ionizing radiation reduction guidance; pharmacy care; nutritional
100 analysis and nutritional prescription; acupuncture; and therapeutic care.

101 (b) An individual policy of accident and sickness insurance issued under section 108 that
102 provides hospital expense and surgical expense insurance and any group blanket or general
103 policy of accident and sickness insurance issued under section 110 that provides hospital expense
104 and surgical expense insurance, which is issued or renewed within or without the
105 Commonwealth, shall provide benefits on a nondiscriminatory basis to residents of the
106 Commonwealth and to all policyholders having a principal place of employment in the
107 Commonwealth for non-ionizing radiation reduction guidance for relevant medical conditions;
108 for diagnosis and treatment of electrohypersensitivity; for nutritional analysis and nutritional
109 supplementation of relevant medical conditions; for non-ionizing reduction services for leukemia
110 and lymphoma; and for general patient education regarding non-ionizing radiation risks and
111 protective measures.

112 (c) Other than the limits set in subsections (g) and (h), such policy shall be in compliance
113 with subsection (b) if the policy does not contain annual or lifetime dollar or unit of service
114 limitation on coverage for either non-ionizing radiation reduction services for relevant medical
115 conditions or for the diagnosis and treatment of electrohypersensitivity which is less than an
116 annual or lifetime dollar or unit of service limitation imposed on coverage for the diagnosis and
117 treatment of physical conditions.

118 (d) This section shall not limit benefits that are otherwise available to an individual under
119 a health insurance policy.

120 (e) Coverage under this section shall not be subject to a limit on the number of visits an
121 individual may make to an electrosensitivity provider.

122 (f) This section shall not affect an obligation to provide services to an individual under an
123 individualized family service plan, an individualized education program or an individualized
124 service plan. Services related to electrosensitivity provided by school personnel under an
125 individualized education program are not subject to reimbursement under this section.

126 (g) An insurer, corporation or health maintenance organization may set an additional
127 reasonable limit on non-ionizing radiation reduction services for a period of 3 years from the
128 requirement to provide coverage under this section and not covered by the insurer, corporation or
129 health maintenance organization as of December 31, 2016, if:

130 (1) an actuary, affiliated with the insurer, corporation or health maintenance organization
131 certifies in writing to the commissioner of insurance that:

132 (i) based on an analysis to be completed not more than once annually by each insurer,
133 corporation or health maintenance organization for the most recent experience period of at least 1
134 year's duration, the annual costs associated with coverage of non-ionizing radiation reduction
135 services required under this section and not covered as of December 31, 2015, exceeded 1 per
136 cent of the premiums charged over the experience period by the insurer, corporation or health
137 maintenance organization;

138 (ii) those costs solely would lead to an increase in average premiums charged of more
139 than 1 per cent for all insurance policies, subscription contracts or health care plans commencing
140 on inception or the next renewal date, based on the premium rating methodology and practices
141 the insurer, corporation or health maintenance organization employs; and

142 (iii) the commissioner of insurance approves the certification of the actuary.

143 (2) An exemption allowed under paragraph (1) shall apply for a 3 year coverage period
144 following inception or next renewal date of all insurance policies, subscription contracts or
145 health care plans issued or renewed during the 1 year period following the date of the exemption,
146 after which the insurer, corporation or health maintenance organization shall again provide
147 coverage for non-ionizing reduction services required under this section.

148 (3) Notwithstanding the exemption allowed under paragraph (1), an insurer, corporation
149 or health maintenance organization may elect to continue to provide coverage for non-ionizing
150 radiation reduction services required under this section.

151 SECTION 4. Section 14 of said chapter 12C, as appearing in the 2014 Official Edition, is
152 hereby amended by adding after the third paragraph the following paragraph:-

153 The standard quality control sets shall include measures for assessing, tracking, and
154 reducing non-thermal non-ionizing radiation exposures which progressively strengthen non-
155 ionizing radiation reduction education and protection for patients and staff.

156 SECTION 5. Section 14 of chapter 6D of the General Laws, as appearing in the Official
157 2014 Edition, is hereby amended by inserting in paragraph five after the clause “health risks and
158 chronic conditions,” the following clause:-

159 and including attention to reducing non-ionizing radiation exposures.