



MEDICAL SOCIETY OF THE STATE OF NEW YORK

Resolution 2014-154

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As Individuals

Subject: Protecting Public Health from Elevated Radon Exposure

Referred to: Reference Committee on Public Health and Education

1 Whereas, Radon and its decay products (known as "progeny") are radioactive materials which
2 are known to be the number one cause of primary lung cancer in non-smokers¹; and
3
4 Whereas, Inhalational exposure to radon and its radioactive progeny is the second leading
5 cause of primary lung cancer among smokers (after tobacco)^{1,2}; and
6
7 Whereas, Radon and its progeny work synergistically with tobacco products to increase the
8 likelihood of developing lung cancer among smokers² and second-hand tobacco-exposed
9 individuals^{3,4}; and
10
11 Whereas, Lung cancer is the leading cause of cancer mortality in both men and women in the
12 United States⁵; and
13
14 Whereas, The US Environmental Protection Agency estimates that there are approximately
15 21,000 deaths per year due to human exposure to radon and its radioactive decay
16 products⁶;and
17
18 Whereas, There is no safe exposure level of radon for public health protection⁷;and
19
20 Whereas, Radon, which originates naturally in bedrock and shale, is inextricably combined with
21 other natural gases sequestered into these subterranean reserves, and is therefore extracted in
22 combination with natural gas; and
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24 Whereas, There is no current technology to remove or separate radon and its progeny from
25 natural gas or to inactivate it following emission; and
26
27 Whereas, Marcellus Shale gas is higher in radium, and therefore produces more radon, a
28 radioactive decay product of radium, than gas from the western and southern states^{7,8}; and
29
30 Whereas, when radon-laced natural gas is delivered to residential and industrial consumers in
31 New York State from distant sources (e.g. Texas, Louisiana, approximately 1800 miles/7.5
32 days) through long pipeline networks, there is a longer transit time which allows for a greater
33 degree of natural decay of radon and its radioactive progeny⁸; and
34
35 Whereas, due to geographic proximity of New York State to the Marcellus Shale region, there is
36 significantly shorter transit time through local regional pipeline networks transporting radon-
37 laced natural gas to NYS natural gas consumers (approximately 400 miles/1.5 days) thus
38 resulting in the delivery of natural gas containing much higher concentrations of radon⁸; and
39

40 Whereas, the delivery of higher concentrations of radon and radioactive breakdown products
41 will expose many more New York citizens to radioactive exposure, including especially
42 vulnerable groups such as children and chronically ill persons; therefore be it

43

44 **RESOLVED**, That the Medical Society of the State of New York support policy that limits
45 exposure to radon and its decay products which are known to cause primary lung cancer in non-
46 smokers and to potentiate the likelihood of lung cancer in smokers; and be it further

47

48 **RESOLVED**, That the Medical Society of the State of New York support legislation that protects
49 the public health by ensuring that New York State is committed to reducing sources of excess
50 radon emissions, and monitoring radon gas exposure levels to confirm that these radon gas
51 levels do not exceed the recommended levels set by the Environmental Protection Agency.

References:

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<http://www.cdc.gov/cancer/lung/statistics/index.htm>

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6. A Citizen's Guide to Radon: US. EPA

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