

MEDCHI, THE MARYLAND STATE MEDICAL SOCIETY  
HOUSE OF DELEGATES

Resolution 20-20

INTRODUCED BY: Medical Student Section  
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Medicine)

SUBJECT: Climate Change and Patient Health

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1 Whereas, Climate change driven by excess heat, chemicals, and methane emissions increases  
2 ground-level ozone, a component of smog, while wildfires and air stagnation increase particulate  
3 air pollution. These changes can reduce lung function in healthy patients and exacerbate  
4 conditions for those with preexisting lung conditions, leading to 1,000 to 4,300 additional  
5 premature deaths within the U.S. per year and health-related costs of \$6.5 billion<sup>1</sup>; and,  
6

7 Whereas, Warmer temperatures, more greenhouse gas emissions, and shifts in precipitation  
8 patterns increase pollen counts and the length of the pollen season, causing more complications  
9 for those with pollen allergies and with respiratory conditions like asthma. Pollen-related  
10 medical costs are more than \$3 billion per year. Warmer weather with heavier rainfall can  
11 increase the likelihood of mold growth indoors, causing respiratory issues as well<sup>2</sup>; and,  
12

13 Whereas, Warmer average temperatures increase exposure to extreme heat. This increases the  
14 risk of heat stroke, dehydration, vascular and respiratory disease, and heat-related deaths, which  
15 are not offset by a reduction in cold-related deaths during winter months<sup>3</sup>; and  
16

17 Whereas, Climate change impacts weather patterns, resulting in increased rainfall, storm  
18 severity, and storm surge. Damaged infrastructure, or infrastructure whose capacity is exceeded,  
19 increases risk of exposure to waterborne pathogens, toxins produced by algae and cyanobacteria  
20 in the water, and contaminants from human activities. Climate change also affects the geographic  
21 distribution of vectors that spread illness-causing pathogens, such as fleas, ticks, and mosquitoes.  
22 Spreading habitats for these vectors increases risk of vector-human interactions and puts patients  
23 at risk of domestically-acquired infectious diseases<sup>4</sup>; and,  
24

25 Whereas, Floods have the second-highest mortality rates of all weather-related hazards in the  
26 United States. Climate change increases the frequency of heavy precipitation events that  
27 contributes to flooding. This also raises the likelihood of water-borne diseases, indoor air quality  
28 issues, and respiratory conditions that result from living in damp environments<sup>5</sup>; and,  
29

30 Whereas, Natural disasters, which become more frequent and dangerous with climate change,  
31 can cause distress, anxiety, and post-traumatic stress disorder in afflicted individuals. Some with  
32 mental illness are especially affected by heat: suicide rates increase with temperature,  
33 schizophrenic medication interferes with temperature regulation and can lead to hyperthermia,  
34 and dementia is a risk factor for hospitalization and death during heat waves<sup>6</sup>; and,

35  
36 Whereas, Climate change will continue to threaten agriculture more and reduce crop yields,  
37 raising food prices. More people, especially those with low socioeconomic status, will need to  
38 resort to calorie-rich, nutrient-poor food, which can lead to micronutrient deficiency and/or  
39 obesity. There are further concerns of the nutrient density of crops declining and more farmers  
40 using pesticides to combat increased pests and weeds<sup>7</sup>; and,

41  
42 Whereas, Climate change negatively impacts health care delivery and access with extreme  
43 weather events disrupting utilities, transportation, communication systems, and supply chains<sup>8</sup>;  
44 and,

45  
46 Whereas, Vulnerable populations, such as low-income, colored, elderly, children, and those with  
47 preexisting health conditions, are disproportionately affected by climate change<sup>9</sup>; and,

48  
49 Whereas, The United States, with the Climate Action Tracker’s categorizing the country’s efforts  
50 as “critically insufficient”, is behind many other countries globally on climate change policies  
51 and reduction in carbon emissions, producing 4 times what is necessary to limit global warming  
52 to 1.5 degrees C<sup>10</sup>; and,

53  
54 Whereas, When the states were analyzed in a study in 2019 looking at various environmental  
55 metrics including environmental quality, eco-friendly behaviors, and climate change  
56 contributions, Maryland had twelve states ranked ahead overall, indicating room for  
57 improvement to establish itself as a green state<sup>11</sup>; therefore be it

58  
59 Resolved, that the appropriate MedChi committee consider taking a stance or action on climate  
60 change-related initiatives and policies with the goal of reducing negative environmental impacts  
61 to improve patient health.

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64 Fiscal Note: Included in existing legislative advocacy and committee budgets.

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