

Supplemental Materials

Table S1. Analysis of open-ended question, “Please describe sources of information on health impacts from climate change that you already rely on or that you would recommend to other healthcare providers” N=510

Category	Frequency	Percentage
Scientific research or journal articles	109	21.4
News articles or media (New York Times, CNN, NPR)	98	19.2
Internet or webpage	61	12.0
Professional organizations or other organizations (Alliance of Nurses for Healthy Environments, American Lung Association, American Heart Association, American Public Health Association, etc.)	58	11.4
Centers for Disease Control and Prevention	49	9.6
Minnesota Department of Health	31	6.1
World Health Organization	14	2.7
National Institute of Health	7	1.4
Continuing education	6	1.2
Documentaries or podcasts	5	1.0
I don’t have any or I don’t know of any resources	27	5.3

Table S2. Analysis of open-ended question, "Please provide one or more examples of conversations you have had with patients related to climate change and health." N=929

Category	Subcategory	Frequency	Percentage
Impacts on respiratory health		355	38.2
	Allergies	154	16.6
	Asthma	122	13.1
	COPD	48	5.2
	Mold	10	1.1
Impacts from temperature changes		276	29.7

	Heat related	134	14.4
	Sun/UV	53	5.7
	Cold related	50	5.4
	Warming winters	17	1.8
Air quality/air pollution		112	12.1
Mental health impacts		84	9.0
	Seasonal affective disorder	23	2.5
	Mental health impacts directly related to climate change	12	1.3
Extreme weather/natural disasters		56	6.0
	Storms	15	1.6
	Flooding	8	0.9
	Disaster preparedness	15	1.6
	Wildfires	30	3.2
Impacts on underlying chronic illnesses (non-respiratory)		46	5.0
COVID		34	3.7
General/Other convo about climate change		34	3.7
Other environmental health issues		32	3.4
Vectorborne diseases		31	3.3
Nutrition/food insecurity		29	3.1
Climate change mitigation actions		21	2.3
Infectious diseases (non vectorborne)		13	1.4
Economic impacts		11	1.2
Healthcare sustainability		2	0.2
Have not had conversations with patients about climate change		110	11.8

Table S3. Analysis of open-ended question, "What else, if anything, are you doing to address climate change with patients or clients? N=439

Category	Frequency	Percentage
Educating patients about climate change and health	111	25.3
Discussing ways patients can protect themselves from health impacts	86	19.6
Taking/recommending individual actions for climate change mitigation	62	14.1
Educating self and/or colleagues	32	7.3
Advocating for/engaging in climate smart healthcare strategies	23	5.2
Policy advocacy	10	2.3
Engaging in/recommending self-care	2	0.5
Nothing	137	31.2

Table S4. Analysis of open-ended question, "What other thoughts do you have regarding the health impacts from climate change?" N=856

Perception of health impacts of climate change	Category	Subcategory	Frequency	Percentage
Agree/Strongly Agree that climate change is impacting health			373	43.5
	Climate change is having real health impacts		163	43.7
	Resources and education are needed		74	19.8
		Recommendations regarding education/communication	24	6.4
	Challenges to talking about/addressing climate change		72	19.3

		Lack of time in patient care setting		17	4.6
		Politicization/climate denial		37	9.9
		Other health/socioeconomic issues take priority		16	4.3
		Lack of support from healthcare leadership		2	0.5
	Recommendations for addressing climate change			59	15.8
		Individual mitigation actions		11	2.9
		Healthcare sustainability/climate smart healthcare		19	5.1
		Recognize socioeconomic factors cause disproportionate impacts (climate justice)		6	1.6
		Support policies addressing climate change		9	2.4
	Health professionals should be involved in addressing health impacts of climate change and/or educating patients			29	7.8
	New to this topic but inspired to learn more			22	5.9
	This issue is not relevant or appropriate to their practice, patient population, or geographical region			11	2.9
	Talking about and/or taking action on climate change may do more harm than good			5	1.3
	We can't do anything about climate change			3	0.8

Uncertain/neutral about whether climate change impacts health			100	11.7
	Need more evidence/information/education		21	21.0
	Other health/healthcare problems/health behaviors are more important		21	21.0
	Climate change is a political issue/tactic		16	16.0
	Not relevant or appropriate to their practice, patient population, or geographical region		14	14.0
	Climate change is a natural phenomenon (non-anthropogenic)		13	13.0
	Haven't thought much about it or formed an opinion		7	7.0
	Talking about and/or taking action on climate change may do more harm than good		6	6.0
	Recommendations for addressing climate change		6	6.0
	Unaware/unconvinced that climate change impacts health		5	5.0
	Other social/environmental issues are more important		5	5.0
	Recommendations regarding education/communication		3	3.0
	Climate change isn't happening		3	3.0
	Waste of time/resources		2	2.0
	Climate change is God's will		1	1.0
Disagree/Strongly Disagree that climate change impacts health			383	44.7

	Climate change is a political issue/tactic		118	30.8
	Climate change is a natural phenomenon (non-anthropogenic)		82	21.4
	Climate change isn't happening		74	19.3
	Other health/healthcare problems/health behaviors are more important		71	18.5
		COVID-19 pandemic is more important	16	4.2
	Climate change doesn't impact health		58	15.1
	Waste of time/resources		46	12.0
	We don't need to do anything, we will adapt		19	5.0
	Other social/environmental issues are more important		18	4.7
	Climate change is God's will		12	3.1
	Not relevant or appropriate to their practice, patient population, or geographical region		11	2.9
	Hadh't thought about it before/need more evidence to form opinion		10	2.6
	There is nothing we can do about climate change		6	1.6
	Recommendations for communicating/addressing climate change		6	1.6
	Other countries besides the U.S. are the problem and need to do more		3	0.8