Population-Level Patient Perspectives on Environmental Threats and Environmentally Sustainable Cancer Care in a Rural NCI Catchment Area

Abstract #442

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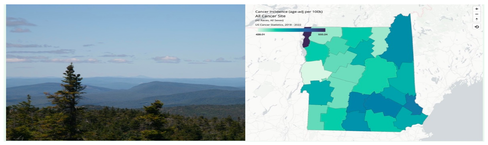
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Background

Extreme weather and environmental exposure can interrupt time-sensitive cancer care and widen access gaps.[1,3] Patients' own views on these risks remain largely unmeasured, particularly in rural regions.[4]

With the DCC Community Outreach & Engagement (COE) Program, we added a cancer, climate, and environment module to the 2026 Population Health Needs Assessment (PHNA).[5]

Aim: Characterize NH/VT adults' environmental concerns, trusted information sources, weather-related care disruption, and openness to lower-impact cancer care.



NH/VT catchment area; Cancer InFocus all-cancer incidence map, 2018–2022.

Methods

Module

Seventeen questions in four domains were added to the 2026 DCC PHNA:

1. Environmental concern (air/water quality, climate)
2. Information sources and trust
3. Extreme weather and care disruption
4. Openness to lower-impact care

Sample

UNH Survey Center fielded the NH/VT panel survey, February 5–13, 2026.

5,739	1,848	32.2%
invited	completed	response

Weighting

UNH weighted the panel — older and more educated than the population — to targets for sex, age, education, and region in NH and VT.

Analysis & Limitations

No significance testing; weighted descriptive estimates and subgroup comparisons only.

Dartmouth CPHS #STUDY00033479; Category 2 exemption.

1. **71%** are concerned about environmental threats to health — and concern is uneven.
2. Patients trust **their own doctor** most for information on environmental risk and cancer.
3. **Winter storms** are the barrier patients most expect to disrupt cancer care (73%).
4. **7 in 10 say it matters** that health systems cut environmental impact — and **81% would accept lower-impact care** that is just as safe.

Environmental concern varies by group

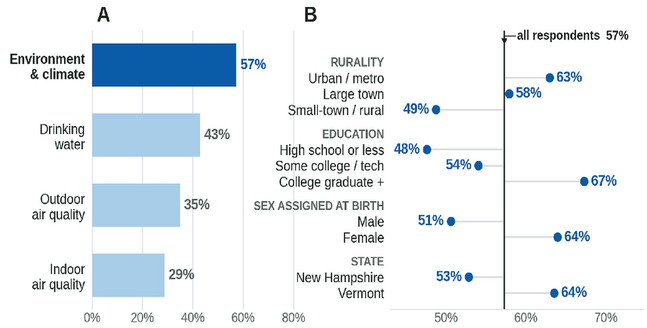


Figure 1. (A) Percentage very or somewhat concerned, by threat (all respondents, weighted). (B) Percentage concerned about environment and climate — the leading threat in (A) — by subgroup.

71% are concerned about at least one of four environmental threats, led by environment and climate (57%). Concern is lowest in rural (49%), male (51%), and less-educated (48%) respondents — those facing the longest travel to care.

Clinicians: most trusted source on environmental risk and cancer

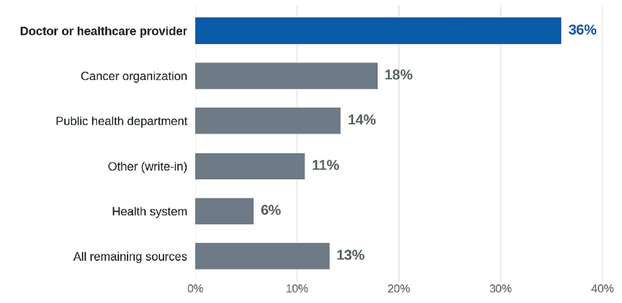


Figure 2. Source ranked #1 most trusted for information on environmental health risks and cancer (% of all respondents, weighted).

Asked whom they trust most on **environmental risk and cancer**, respondents named **their doctor or care team (36%)** — ahead of cancer organizations (18%) and public health departments (14%). The clinic visit, not the internet, is the channel.

Weather is a widely expected barrier; winter dominates

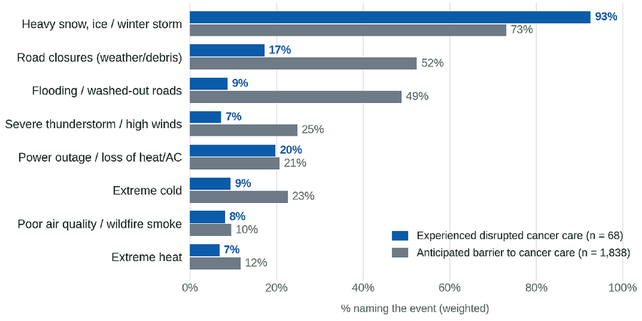


Figure 3. Weather events named as anticipated barriers to cancer care (n = 1,838) or as causes of past disruption (n = 68); weighted.

73% named winter storms as an anticipated barrier. Among the 68 reporting **actual disruption**, 93% named winter weather; diagnostic testing and procedures were most often affected.

Patients value sustainable cancer care — and are open to it

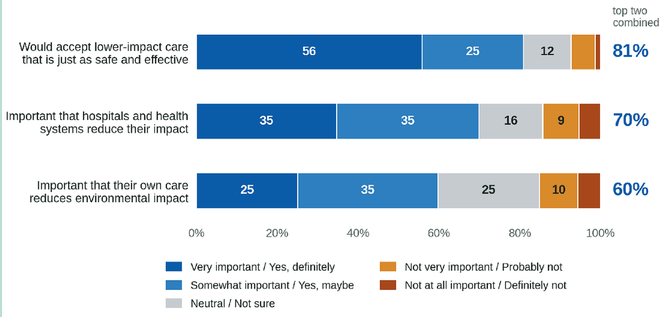


Figure 4. Importance of reducing environmental impact and openness to lower-impact care; top two responses combined at right (weighted).

Sustainability is a patient priority, not only an institutional one: **70% want health systems to cut their environmental impact** and **60% want the same of their own care**. They will act on it — **81% would accept lower-impact care that is just as safe and effective**, especially when it also cuts travel: combined visits, telehealth, mail-order supplies.

Future Directions

1. **Equip the trusted channel.** Build and test plain-language environmental-risk counseling for oncology visits — patients name clinicians their top source of information, but few are equipped for these discussions.
2. **Protect timeliness in severe weather.** Pilot winter-weather outreach and rescheduling for screening and diagnostic appointments; measure effects on time to treatment.
3. **Reach the least concerned, most burdened.** Concern was lowest among rural, male, and less-educated adults — the same groups traveling farthest for care. Future outreach can be targeted.
4. **Treat sustainability as a quality domain.** Evaluate bundled visits, telehealth, and shorter equally effective courses as interventions that improve access and cut impact together.
5. **Scale beyond one catchment area.** This module fits the catchment-area assessments NCI-designated centers already field. Embedding it across centers would build the multi-site evidence that oncology currently lacks.

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